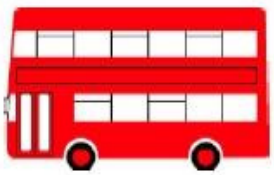
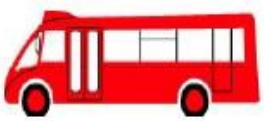
APPENDIX C

Traffic Survey Data

APPENDIX A
Vehicle Categories

COBA VEHICLE CATEGORIES

CAR	 SALOON  ESTATE  PEOPLE CARRIER  CAR TOWING CARAVAN / TRAILER
LIGHT GOODS VEHICLE (LGV)	 VAN  <3.5 TONNES – single rear tyres  PICK-UP
OTHER GOODS VEHICLE (OGV1)	 > 3.5 TONNES – twin rear tyres  2-AXLES RIGID  2-AXLES RIGID  3 AXLES-RIGID
OTHER GOODS VEHICLE (OGV2)	 4 OR MORE AXLES RIGID  3-AXLES ARTIC  4 OR MORE AXLES ARTIC  OTHER GOODS VEHICLE WITH TRAILER
BUSES & COACHES (PSV)	 DOUBLE DECK BUS  SINGLE DECK BUS OR COACH

COBA VEHICLE CATEGORIES

Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.

APPENDIX B
Classified Count Data

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	A to C									A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	07:30	10	1	0	0	2	0	0	13
07:45	8	0	0	0	0	0	0	8	07:45	18	1	0	0	0	0	0	19
H/TOT	10	0	0	0	0	0	0	10	H/TOT	28	2	0	0	2	0	0	32
08:00	3	0	0	0	0	0	0	3	08:00	13	1	0	0	0	0	0	14
08:15	8	2	0	0	0	0	0	10	08:15	12	0	0	0	1	0	0	13
08:30	8	0	0	0	0	0	0	8	08:30	19	3	0	0	0	0	0	22
08:45	5	1	0	0	0	0	0	6	08:45	12	1	1	0	0	0	1	15
H/TOT	24	3	0	0	0	0	0	27	H/TOT	56	5	1	0	1	0	1	64
09:00	2	0	1	0	0	0	0	3	09:00	11	1	0	0	1	0	0	13
09:15	0	0	0	0	0	0	0	0	09:15	9	1	0	0	1	0	1	12
H/TOT	2	0	1	0	0	0	0	3	H/TOT	20	2	0	0	2	0	1	25
P/TOT	36	3	1	0	0	0	0	40	H/TOT	104	9	1	0	5	0	2	121

	A to C									A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	2	1	0	0	0	0	0	3	16:30	10	0	0	0	1	0	0	11
16:45	3	4	0	0	0	0	0	7	16:45	4	0	0	0	0	0	1	5
H/TOT	5	5	0	0	0	0	0	10	H/TOT	14	0	0	0	1	0	1	16
17:00	3	0	0	0	0	0	0	3	17:00	7	1	0	0	1	0	0	9
17:15	4	0	0	0	0	0	0	4	17:15	10	1	0	0	0	0	0	11
17:30	9	0	0	0	0	0	0	9	17:30	9	0	0	0	1	0	0	10
17:45	3	0	0	0	0	0	0	3	17:45	11	0	0	0	0	0	0	11
H/TOT	19	0	0	0	0	0	0	19	H/TOT	37	2	0	0	2	0	0	41
18:00	5	1	0	0	0	0	0	6	18:00	18	1	0	0	0	0	0	19
18:15	3	1	0	0	0	0	0	4	18:15	13	0	0	0	1	0	0	14
H/TOT	8	2	0	0	0	0	0	10	H/TOT	31	1	0	0	1	0	0	33
P/TOT	32	7	0	0	0	0	0	39	H/TOT	82	3	0	0	4	0	1	90

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	4	0	0	0	2	0	0	6	07:30	1	0	0	0	0	0	0	1
07:45	2	1	0	0	0	0	0	3	07:45	3	0	0	0	0	0	0	3
H/TOT	6	1	0	0	2	0	0	9	**H/TOT**	4	0	0	0	0	0	0	4
08:00	5	0	0	0	1	0	0	6	08:00	0	0	0	0	0	0	0	0
08:15	8	0	0	0	0	0	0	8	08:15	1	0	0	0	0	0	0	1
08:30	7	3	1	0	0	0	0	11	08:30	3	0	0	0	0	0	0	3
08:45	10	0	1	0	1	0	0	12	08:45	1	0	0	0	0	0	0	1
H/TOT	30	3	2	0	2	0	0	37	**H/TOT**	5	0	0	0	0	0	0	5
09:00	16	1	0	0	0	0	0	17	09:00	2	0	0	0	0	0	1	3
09:15	3	2	0	0	1	0	0	6	09:15	2	0	0	0	0	0	0	2
H/TOT	19	3	0	0	1	0	0	23	**H/TOT**	4	0	0	0	0	0	1	5
P/TOT	55	7	2	0	5	0	0	69	**H/TOT**	13	0	0	0	0	0	1	14

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	10	3	0	0	1	0	0	14	16:30	2	0	0	0	0	0	0	2
16:45	16	2	0	0	0	0	0	18	16:45	2	0	0	0	0	0	0	2
H/TOT	26	5	0	0	1	0	0	32	**H/TOT**	4	0	0	0	0	0	0	4
17:00	16	1	0	0	1	0	0	18	17:00	2	0	1	0	0	0	1	4
17:15	15	2	0	0	0	0	0	17	17:15	1	0	0	0	0	0	0	1
17:30	18	2	1	0	1	0	0	22	17:30	4	0	0	0	0	0	0	4
17:45	18	1	0	0	0	1	0	20	17:45	1	0	0	0	0	0	0	1
H/TOT	67	6	1	0	2	1	0	77	**H/TOT**	8	0	1	0	0	0	1	10
18:00	19	0	0	0	0	0	0	19	18:00	2	0	0	0	0	0	0	2
18:15	28	1	0	0	1	0	0	30	18:15	0	0	0	0	0	0	0	0
H/TOT	47	1	0	0	1	0	0	49	**H/TOT**	2	0	0	0	0	0	0	2
P/TOT	140	12	1	0	4	1	0	158	**H/TOT**	14	0	1	0	0	0	1	16

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	1	0	0	0	0	0	0	1	07:30	0	0	0	0	0	0	0	0
07:45	2	0	0	0	0	0	0	2	07:45	1	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3	**H/TOT**	1	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	08:00	3	1	0	0	0	1	0	5
08:15	3	0	0	0	0	0	0	3	08:15	2	2	0	0	0	0	0	4
08:30	5	0	0	0	0	0	0	5	08:30	4	0	0	0	0	0	0	4
08:45	2	1	0	0	0	0	0	3	08:45	6	1	0	0	0	0	0	7
H/TOT	10	1	0	0	0	0	0	11	**H/TOT**	15	4	0	0	0	1	0	20
09:00	1	0	0	0	0	0	0	1	09:00	2	0	0	0	0	0	0	2
09:15	1	0	0	0	0	0	0	1	09:15	4	0	0	0	0	0	0	4
H/TOT	2	0	0	0	0	0	0	2	**H/TOT**	6	0	0	0	0	0	0	6
P/TOT	15	1	0	0	0	0	0	16	**H/TOT**	22	4	0	0	0	1	0	27

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	2	0	0	0	0	0	0	2	16:30	4	0	0	0	0	0	0	4
16:45	3	0	0	0	0	0	0	3	16:45	4	0	0	0	0	0	0	4
H/TOT	5	0	0	0	0	0	0	5	**H/TOT**	8	0	0	0	0	0	0	8
17:00	4	0	0	0	0	0	0	4	17:00	2	0	0	0	0	0	0	2
17:15	3	0	0	0	0	0	1	4	17:15	3	0	0	0	0	0	0	3
17:30	1	0	0	0	0	0	0	1	17:30	7	0	0	0	0	0	0	7
17:45	5	0	0	0	0	0	0	5	17:45	5	0	0	0	0	0	0	5
H/TOT	13	0	0	0	0	0	1	14	**H/TOT**	17	0	0	0	0	0	0	17
18:00	1	0	0	0	0	0	0	1	18:00	6	0	0	0	0	0	1	7
18:15	3	0	0	0	0	0	0	3	18:15	2	0	0	0	0	0	0	2
H/TOT	4	0	0	0	0	0	0	4	**H/TOT**	8	0	0	0	0	0	1	9
P/TOT	22	0	0	0	0	0	1	23	**H/TOT**	33	0	0	0	0	0	1	34

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	4	0	0	0	2	0	0	6	07:30	12	1	0	0	2	0	0	15
07:45	3	1	0	0	0	0	0	4	07:45	26	1	0	0	0	0	0	27
H/TOT	7	1	0	0	2	0	0	10	**H/TOT**	38	2	0	0	2	0	0	42
08:00	8	1	0	0	1	1	0	11	08:00	16	1	0	0	0	0	0	17
08:15	10	2	0	0	0	0	0	12	08:15	20	2	0	0	1	0	0	23
08:30	11	3	1	0	0	0	0	15	08:30	27	3	0	0	0	0	0	30
08:45	16	1	1	0	1	0	0	19	08:45	17	2	1	0	0	0	1	21
H/TOT	45	7	2	0	2	1	0	57	**H/TOT**	80	8	1	0	1	0	1	91
09:00	18	1	0	0	0	0	0	19	09:00	13	1	1	0	1	0	0	16
09:15	7	2	0	0	1	0	0	10	09:15	9	1	0	0	1	0	1	12
H/TOT	25	3	0	0	1	0	0	29	**H/TOT**	22	2	1	0	2	0	1	28
P/TOT	77	11	2	0	5	1	0	96	**H/TOT**	140	12	2	0	5	0	2	161

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	14	3	0	0	1	0	0	18	16:30	12	1	0	0	1	0	0	14
16:45	20	2	0	0	0	0	0	22	16:45	7	4	0	0	0	0	1	12
H/TOT	34	5	0	0	1	0	0	40	**H/TOT**	19	5	0	0	1	0	1	26
17:00	18	1	0	0	1	0	0	20	17:00	10	1	0	0	1	0	0	12
17:15	18	2	0	0	0	0	0	20	17:15	14	1	0	0	0	0	0	15
17:30	25	2	1	0	1	0	0	29	17:30	18	0	0	0	1	0	0	19
17:45	23	1	0	0	0	1	0	25	17:45	14	0	0	0	0	0	0	14
H/TOT	84	6	1	0	2	1	0	94	**H/TOT**	56	2	0	0	2	0	0	60
18:00	25	0	0	0	0	0	1	26	18:00	23	2	0	0	0	0	0	25
18:15	30	1	0	0	1	0	0	32	18:15	16	1	0	0	1	0	0	18
H/TOT	55	1	0	0	1	0	1	58	**H/TOT**	39	3	0	0	1	0	0	43
P/TOT	173	12	1	0	4	1	1	192	**H/TOT**	114	10	0	0	4	0	1	129

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	11	1	0	0	2	0	0	14	07:30	5	0	0	0	2	0	0	7
07:45	20	1	0	0	0	0	0	21	07:45	5	1	0	0	0	0	0	6
H/TOT	31	2	0	0	2	0	0	35	**H/TOT**	10	1	0	0	2	0	0	13
08:00	13	1	0	0	0	0	0	14	08:00	5	0	0	0	1	0	0	6
08:15	15	0	0	0	1	0	0	16	08:15	9	0	0	0	0	0	0	9
08:30	24	3	0	0	0	0	0	27	08:30	10	3	1	0	0	0	0	14
08:45	14	2	1	0	0	0	1	18	08:45	11	0	1	0	1	0	0	13
H/TOT	66	6	1	0	1	0	1	75	**H/TOT**	35	3	2	0	2	0	0	42
09:00	12	1	0	0	1	0	0	14	09:00	18	1	0	0	0	0	1	20
09:15	10	1	0	0	1	0	1	13	09:15	5	2	0	0	1	0	0	8
H/TOT	22	2	0	0	2	0	1	27	**H/TOT**	23	3	0	0	1	0	1	28
P/TOT	119	10	1	0	5	0	2	137	**H/TOT**	68	7	2	0	5	0	1	83

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	12	0	0	0	1	0	0	13	16:30	12	3	0	0	1	0	0	16
16:45	7	0	0	0	0	0	1	8	16:45	18	2	0	0	0	0	0	20
H/TOT	19	0	0	0	1	0	1	21	**H/TOT**	30	5	0	0	1	0	0	36
17:00	11	1	0	0	1	0	0	13	17:00	18	1	1	0	1	0	1	22
17:15	13	1	0	0	0	0	1	15	17:15	16	2	0	0	0	0	0	18
17:30	10	0	0	0	1	0	0	11	17:30	22	2	1	0	1	0	0	26
17:45	16	0	0	0	0	0	0	16	17:45	19	1	0	0	0	1	0	21
H/TOT	50	2	0	0	2	0	1	55	**H/TOT**	75	6	2	0	2	1	1	87
18:00	19	1	0	0	0	0	0	20	18:00	21	0	0	0	0	0	0	21
18:15	16	0	0	0	1	0	0	17	18:15	28	1	0	0	1	0	0	30
H/TOT	35	1	0	0	1	0	0	37	**H/TOT**	49	1	0	0	1	0	0	51
P/TOT	104	3	0	0	4	0	2	113	**H/TOT**	154	12	2	0	4	1	1	174

SITE: 1 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Woolley Colliery Rd DAY: THURSDAY

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	0	0	0	0	0	0	3	07:30	1	0	0	0	0	0	0	1
07:45	11	0	0	0	0	0	0	11	07:45	3	0	0	0	0	0	0	3
H/TOT	14	0	0	0	0	0	0	14	**H/TOT**	4	0	0	0	0	0	0	4
08:00	3	0	0	0	0	0	0	3	08:00	3	1	0	0	0	1	0	5
08:15	9	2	0	0	0	0	0	11	08:15	5	2	0	0	0	0	0	7
08:30	11	0	0	0	0	0	0	11	08:30	9	0	0	0	0	0	0	9
08:45	6	1	0	0	0	0	0	7	08:45	8	2	0	0	0	0	0	10
H/TOT	29	3	0	0	0	0	0	32	**H/TOT**	25	5	0	0	0	1	0	31
09:00	4	0	1	0	0	0	1	6	09:00	3	0	0	0	0	0	0	3
09:15	2	0	0	0	0	0	0	2	09:15	5	0	0	0	0	0	0	5
H/TOT	6	0	1	0	0	0	1	8	**H/TOT**	8	0	0	0	0	0	0	8
P/TOT	49	3	1	0	0	0	1	54	**H/TOT**	37	5	0	0	0	1	0	43

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	4	1	0	0	0	0	0	5	16:30	6	0	0	0	0	0	0	6
16:45	5	4	0	0	0	0	0	9	16:45	7	0	0	0	0	0	0	7
H/TOT	9	5	0	0	0	0	0	14	**H/TOT**	13	0	0	0	0	0	0	13
17:00	5	0	1	0	0	0	1	7	17:00	6	0	0	0	0	0	0	6
17:15	5	0	0	0	0	0	0	5	17:15	6	0	0	0	0	0	1	7
17:30	13	0	0	0	0	0	0	13	17:30	8	0	0	0	0	0	0	8
17:45	4	0	0	0	0	0	0	4	17:45	10	0	0	0	0	0	0	10
H/TOT	27	0	1	0	0	0	1	29	**H/TOT**	30	0	0	0	0	0	1	31
18:00	7	1	0	0	0	0	0	8	18:00	7	0	0	0	0	0	1	8
18:15	3	1	0	0	0	0	0	4	18:15	5	0	0	0	0	0	0	5
H/TOT	10	2	0	0	0	0	0	12	**H/TOT**	12	0	0	0	0	0	1	13
P/TOT	46	7	1	0	0	0	1	55	**H/TOT**	55	0	0	0	0	0	2	57

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	A to C								A to B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	25	5	2	0	0	0	0	32	07:30	4	1	0	0	0	0	0	5
07:45	40	6	2	0	0	0	0	48	07:45	4	2	0	0	1	0	0	7
H/TOT	65	11	4	0	0	0	0	80	**H/TOT**	8	3	0	0	1	0	0	12
08:00	35	9	1	0	0	2	0	47	08:00	2	0	0	0	0	0	0	2
08:15	29	13	0	1	0	0	0	43	08:15	3	0	0	0	0	0	0	3
08:30	38	9	1	2	0	0	0	50	08:30	2	0	0	0	0	0	0	2
08:45	33	5	2	0	0	0	0	40	08:45	8	0	0	0	0	0	0	8
H/TOT	135	36	4	3	0	2	0	180	**H/TOT**	15	0	0	0	0	0	0	15
09:00	39	4	1	1	0	0	0	45	09:00	8	0	0	0	0	0	0	8
09:15	19	5	2	1	0	0	1	28	09:15	4	0	0	0	0	0	0	4
H/TOT	58	9	3	2	0	0	1	73	**H/TOT**	12	0	0	0	0	0	0	12
P/TOT	258	56	11	5	0	2	1	333	**H/TOT**	35	3	0	0	1	0	0	39

	A to C								A to B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	109	18	3	1	1	0	1	133	16:30	16	0	0	0	0	0	1	17
16:45	96	21	1	0	0	1	0	119	16:45	20	2	0	0	0	1	0	23
H/TOT	205	39	4	1	1	1	1	252	**H/TOT**	36	2	0	0	0	1	1	40
17:00	127	27	1	1	0	0	0	156	17:00	20	1	0	0	0	0	0	21
17:15	124	21	2	0	1	1	1	150	17:15	15	1	1	0	0	0	0	17
17:30	113	18	2	0	0	0	0	133	17:30	22	1	0	0	0	0	0	23
17:45	109	12	1	0	0	0	0	122	17:45	21	0	0	0	0	0	1	22
H/TOT	473	78	6	1	1	1	1	561	**H/TOT**	78	3	1	0	0	0	1	83
18:00	101	10	0	0	0	1	0	112	18:00	25	2	1	0	0	0	0	28
18:15	86	5	1	1	0	0	0	93	18:15	20	0	0	0	0	0	0	20
H/TOT	187	15	1	1	0	1	0	205	**H/TOT**	45	2	1	0	0	0	0	48
P/TOT	865	132	11	3	2	3	2	1018	**H/TOT**	159	7	2	0	0	1	2	171

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	33	3	0	0	0	0	1	37	07:30	5	0	0	0	0	0	0	5
07:45	29	2	0	0	0	0	0	31	07:45	4	0	0	0	0	0	0	4
H/TOT	62	5	0	0	0	0	1	68	**H/TOT**	9	0	0	0	0	0	0	9
08:00	27	0	0	0	1	0	0	28	08:00	4	0	0	0	0	0	0	4
08:15	38	1	0	0	0	0	0	39	08:15	2	0	1	0	0	0	0	3
08:30	58	1	0	0	0	0	0	59	08:30	0	0	0	0	0	0	0	0
08:45	15	0	0	0	0	0	0	15	08:45	4	0	0	0	0	0	0	4
H/TOT	138	2	0	0	1	0	0	141	**H/TOT**	10	0	1	0	0	0	0	11
09:00	9	0	0	0	0	0	0	9	09:00	1	0	0	0	0	0	0	1
09:15	7	0	0	0	0	0	0	7	09:15	1	0	0	0	0	0	0	1
H/TOT	16	0	0	0	0	0	0	16	**H/TOT**	2	0	0	0	0	0	0	2
P/TOT	216	7	0	0	1	0	1	225	**H/TOT**	21	0	1	0	0	0	0	22

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	8	1	0	0	0	0	0	9	16:30	2	0	0	0	0	0	0	2
16:45	13	1	0	0	0	0	0	14	16:45	1	0	0	0	0	0	0	1
H/TOT	21	2	0	0	0	0	0	23	**H/TOT**	3	0	0	0	0	0	0	3
17:00	6	0	0	0	0	0	0	6	17:00	0	0	0	0	0	0	0	0
17:15	6	0	0	0	0	0	0	6	17:15	1	1	0	0	0	0	0	2
17:30	4	1	0	0	0	0	0	5	17:30	3	0	0	0	0	0	0	3
17:45	6	0	0	0	0	0	0	6	17:45	0	0	0	0	0	0	0	0
H/TOT	22	1	0	0	0	0	0	23	**H/TOT**	4	1	0	0	0	0	0	5
18:00	10	0	1	0	0	1	0	12	18:00	2	0	0	0	0	0	0	2
18:15	7	1	0	0	0	0	1	9	18:15	1	0	0	0	0	0	0	1
H/TOT	17	1	1	0	0	1	1	21	**H/TOT**	3	0	0	0	0	0	0	3
P/TOT	60	4	1	0	0	1	1	67	**H/TOT**	10	1	0	0	0	0	0	11

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	07:30	141	29	5	0	3	0	0	178
07:45	1	0	0	0	0	0	0	1	07:45	140	19	2	0	0	1	0	162
H/TOT	3	0	0	0	0	0	0	3	H/TOT	281	48	7	0	3	1	0	340
08:00	0	0	0	0	0	0	0	0	08:00	120	16	3	0	0	0	0	139
08:15	1	0	0	0	0	0	0	1	08:15	120	14	0	0	1	1	0	136
08:30	0	0	0	0	0	0	0	0	08:30	120	17	3	0	0	0	1	141
08:45	3	0	0	0	0	0	0	3	08:45	93	12	3	0	0	0	0	108
H/TOT	4	0	0	0	0	0	0	4	H/TOT	453	59	9	0	1	1	1	524
09:00	0	0	0	0	0	0	0	0	09:00	73	10	2	1	0	0	0	86
09:15	1	0	0	0	0	0	0	1	09:15	51	7	1	0	0	1	0	60
H/TOT	1	0	0	0	0	0	0	1	H/TOT	124	17	3	1	0	1	0	146
P/TOT	8	0	0	0	0	0	0	8	H/TOT	858	124	19	1	4	3	1	1010

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	3	0	0	0	0	0	0	3	16:30	48	7	2	2	0	0	0	59
16:45	1	0	0	0	0	0	0	1	16:45	47	8	1	1	0	1	1	59
H/TOT	4	0	0	0	0	0	0	4	H/TOT	95	15	3	3	0	1	1	118
17:00	3	0	0	0	0	0	0	3	17:00	48	15	1	0	0	0	0	64
17:15	3	0	0	0	0	0	0	3	17:15	48	3	1	0	0	0	0	52
17:30	3	0	0	0	0	0	0	3	17:30	45	4	0	0	0	0	0	49
17:45	5	0	0	0	0	0	0	5	17:45	45	5	1	0	0	0	0	51
H/TOT	14	0	0	0	0	0	0	14	H/TOT	186	27	3	0	0	0	0	216
18:00	3	0	0	0	0	0	0	3	18:00	43	2	2	0	0	0	0	47
18:15	4	0	0	0	0	0	0	4	18:15	36	6	0	0	0	0	0	42
H/TOT	7	0	0	0	0	0	0	7	H/TOT	79	8	2	0	0	0	0	89
P/TOT	25	0	0	0	0	0	0	25	H/TOT	360	50	8	3	0	1	1	423

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	174	32	5	0	3	0	1	215	07:30	29	6	2	0	0	0	0	37
07:45	169	21	2	0	0	1	0	193	07:45	44	8	2	0	1	0	0	55
H/TOT	343	53	7	0	3	1	1	408	**H/TOT**	73	14	4	0	1	0	0	92
08:00	147	16	3	0	1	0	0	167	08:00	37	9	1	0	0	2	0	49
08:15	158	15	0	0	1	1	0	175	08:15	32	13	0	1	0	0	0	46
08:30	178	18	3	0	0	0	1	200	08:30	40	9	1	2	0	0	0	52
08:45	108	12	3	0	0	0	0	123	08:45	41	5	2	0	0	0	0	48
H/TOT	591	61	9	0	2	1	1	665	**H/TOT**	150	36	4	3	0	2	0	195
09:00	82	10	2	1	0	0	0	95	09:00	47	4	1	1	0	0	0	53
09:15	58	7	1	0	0	1	0	67	09:15	23	5	2	1	0	0	1	32
H/TOT	140	17	3	1	0	1	0	162	**H/TOT**	70	9	3	2	0	0	1	85
P/TOT	1074	131	19	1	5	3	2	1235	**H/TOT**	293	59	11	5	1	2	1	372

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	56	8	2	2	0	0	0	68	16:30	125	18	3	1	1	0	2	150
16:45	60	9	1	1	0	1	1	73	16:45	116	23	1	0	0	2	0	142
H/TOT	116	17	3	3	0	1	1	141	**H/TOT**	241	41	4	1	1	2	2	292
17:00	54	15	1	0	0	0	0	70	17:00	147	28	1	1	0	0	0	177
17:15	54	3	1	0	0	0	0	58	17:15	139	22	3	0	1	1	1	167
17:30	49	5	0	0	0	0	0	54	17:30	135	19	2	0	0	0	0	156
17:45	51	5	1	0	0	0	0	57	17:45	130	12	1	0	0	0	1	144
H/TOT	208	28	3	0	0	0	0	239	**H/TOT**	551	81	7	1	1	1	2	644
18:00	53	2	3	0	0	1	0	59	18:00	126	12	1	0	0	1	0	140
18:15	43	7	0	0	0	0	1	51	18:15	106	5	1	1	0	0	0	113
H/TOT	96	9	3	0	0	1	1	110	**H/TOT**	232	17	2	1	0	1	0	253
P/TOT	420	54	9	3	0	2	2	490	**H/TOT**	1024	139	13	3	2	4	4	1189

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	6	1	0	0	0	0	0	7	07:30	38	3	0	0	0	0	1	42
07:45	5	2	0	0	1	0	0	8	07:45	33	2	0	0	0	0	0	35
H/TOT	11	3	0	0	1	0	0	15	**H/TOT**	71	5	0	0	0	0	1	77
08:00	2	0	0	0	0	0	0	2	08:00	31	0	0	0	1	0	0	32
08:15	4	0	0	0	0	0	0	4	08:15	40	1	1	0	0	0	0	42
08:30	2	0	0	0	0	0	0	2	08:30	58	1	0	0	0	0	0	59
08:45	11	0	0	0	0	0	0	11	08:45	19	0	0	0	0	0	0	19
H/TOT	19	0	0	0	0	0	0	19	**H/TOT**	148	2	1	0	1	0	0	152
09:00	8	0	0	0	0	0	0	8	09:00	10	0	0	0	0	0	0	10
09:15	5	0	0	0	0	0	0	5	09:15	8	0	0	0	0	0	0	8
H/TOT	13	0	0	0	0	0	0	13	**H/TOT**	18	0	0	0	0	0	0	18
P/TOT	43	3	0	0	1	0	0	47	**H/TOT**	237	7	1	0	1	0	1	247

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	19	0	0	0	0	0	1	20	16:30	10	1	0	0	0	0	0	11
16:45	21	2	0	0	0	1	0	24	16:45	14	1	0	0	0	0	0	15
H/TOT	40	2	0	0	0	1	1	44	**H/TOT**	24	2	0	0	0	0	0	26
17:00	23	1	0	0	0	0	0	24	17:00	6	0	0	0	0	0	0	6
17:15	18	1	1	0	0	0	0	20	17:15	7	1	0	0	0	0	0	8
17:30	25	1	0	0	0	0	0	26	17:30	7	1	0	0	0	0	0	8
17:45	26	0	0	0	0	0	1	27	17:45	6	0	0	0	0	0	0	6
H/TOT	92	3	1	0	0	0	1	97	**H/TOT**	26	2	0	0	0	0	0	28
18:00	28	2	1	0	0	0	0	31	18:00	12	0	1	0	0	1	0	14
18:15	24	0	0	0	0	0	0	24	18:15	8	1	0	0	0	0	1	10
H/TOT	52	2	1	0	0	0	0	55	**H/TOT**	20	1	1	0	0	1	1	24
P/TOT	184	7	2	0	0	1	2	196	**H/TOT**	70	5	1	0	0	1	1	78

SITE: 2 DATE: 30/06/2016

LOCATION: The Grange/Woolley Edge Lane DAY: THURSDAY

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	30	5	2	0	0	0	0	37	07:30	143	29	5	0	3	0	0	180
07:45	44	6	2	0	0	0	0	52	07:45	141	19	2	0	0	1	0	163
H/TOT	74	11	4	0	0	0	0	89	**H/TOT**	284	48	7	0	3	1	0	343
08:00	39	9	1	0	0	2	0	51	08:00	120	16	3	0	0	0	0	139
08:15	31	13	1	1	0	0	0	46	08:15	121	14	0	0	1	1	0	137
08:30	38	9	1	2	0	0	0	50	08:30	120	17	3	0	0	0	1	141
08:45	37	5	2	0	0	0	0	44	08:45	96	12	3	0	0	0	0	111
H/TOT	145	36	5	3	0	2	0	191	**H/TOT**	457	59	9	0	1	1	1	528
09:00	40	4	1	1	0	0	0	46	09:00	73	10	2	1	0	0	0	86
09:15	20	5	2	1	0	0	1	29	09:15	52	7	1	0	0	1	0	61
H/TOT	60	9	3	2	0	0	1	75	**H/TOT**	125	17	3	1	0	1	0	147
P/TOT	279	56	12	5	0	2	1	355	**H/TOT**	866	124	19	1	4	3	1	1018

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	111	18	3	1	1	0	1	135	16:30	51	7	2	2	0	0	0	62
16:45	97	21	1	0	0	1	0	120	16:45	48	8	1	1	0	1	1	60
H/TOT	208	39	4	1	1	1	1	255	**H/TOT**	99	15	3	3	0	1	1	122
17:00	127	27	1	1	0	0	0	156	17:00	51	15	1	0	0	0	0	67
17:15	125	22	2	0	1	1	1	152	17:15	51	3	1	0	0	0	0	55
17:30	116	18	2	0	0	0	0	136	17:30	48	4	0	0	0	0	0	52
17:45	109	12	1	0	0	0	0	122	17:45	50	5	1	0	0	0	0	56
H/TOT	477	79	6	1	1	1	1	566	**H/TOT**	200	27	3	0	0	0	0	230
18:00	103	10	0	0	0	1	0	114	18:00	46	2	2	0	0	0	0	50
18:15	87	5	1	1	0	0	0	94	18:15	40	6	0	0	0	0	0	46
H/TOT	190	15	1	1	0	1	0	208	**H/TOT**	86	8	2	0	0	0	0	96
P/TOT	875	133	11	3	2	3	2	1029	**H/TOT**	385	50	8	3	0	1	1	448

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	18	1	0	0	0	0	0	19	07:30	2	0	0	0	0	0	0	2
07:45	11	2	0	0	1	0	0	14	07:45	1	0	0	0	0	0	0	1
H/TOT	29	3	0	0	1	0	0	33	H/TOT	3	0	0	0	0	0	0	3
08:00	9	1	0	0	1	0	0	11	08:00	2	2	0	0	0	1	0	5
08:15	23	1	0	0	0	0	0	24	08:15	3	1	0	0	0	0	0	4
08:30	19	1	1	0	1	0	0	22	08:30	9	1	0	0	0	0	0	10
08:45	18	3	0	0	0	0	0	21	08:45	6	0	0	0	0	0	0	6
H/TOT	69	6	1	0	2	0	0	78	H/TOT	20	4	0	0	0	1	0	25
09:00	13	1	0	0	1	0	0	15	09:00	2	0	0	0	0	0	0	2
09:15	10	0	0	0	0	0	0	10	09:15	3	0	0	0	0	0	0	3
H/TOT	23	1	0	0	1	0	0	25	H/TOT	5	0	0	0	0	0	0	5
P/TOT	121	10	1	0	4	0	0	136	H/TOT	28	4	0	0	0	1	0	33

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	17	0	0	0	0	0	0	17	16:30	4	0	0	0	0	0	0	4
16:45	23	1	1	0	0	0	0	25	16:45	7	0	0	0	0	0	0	7
H/TOT	40	1	1	0	0	0	0	42	H/TOT	11	0	0	0	0	0	0	11
17:00	23	3	1	0	0	1	1	29	17:00	6	0	0	0	0	0	1	7
17:15	25	3	0	0	0	0	0	28	17:15	8	0	0	0	0	0	2	10
17:30	34	3	0	0	0	1	0	38	17:30	6	0	0	0	0	0	0	6
17:45	17	3	0	0	0	0	0	20	17:45	9	0	0	0	0	0	0	9
H/TOT	99	12	1	0	0	2	1	115	H/TOT	29	0	0	0	0	0	3	32
18:00	15	1	0	0	0	0	1	17	18:00	6	0	0	0	0	0	0	6
18:15	21	0	0	0	0	0	0	21	18:15	5	0	0	0	0	0	0	5
H/TOT	36	1	0	0	0	0	1	38	H/TOT	11	0	0	0	0	0	0	11
P/TOT	175	14	2	0	0	2	2	195	H/TOT	51	0	0	0	0	0	3	54

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	4	0	0	0	0	0	0	4	07:30	0	0	0	0	0	0	0	0
07:45	11	0	0	0	0	0	0	11	07:45	1	0	0	0	0	0	0	1
H/TOT	15	0	0	0	0	0	0	15	**H/TOT**	1	0	0	0	0	0	0	1
08:00	2	1	0	0	0	0	0	3	08:00	1	0	0	0	0	0	0	1
08:15	8	2	0	0	0	0	0	10	08:15	0	1	0	0	0	0	0	1
08:30	12	0	0	0	0	0	0	12	08:30	0	0	0	0	0	0	0	0
08:45	6	0	0	0	0	0	0	6	08:45	1	1	0	0	0	0	0	2
H/TOT	28	3	0	0	0	0	0	31	**H/TOT**	2	2	0	0	0	0	0	4
09:00	4	0	1	0	0	0	0	5	09:00	0	0	0	0	0	0	0	0
09:15	4	0	0	0	0	0	1	5	09:15	0	0	0	0	0	0	0	0
H/TOT	8	0	1	0	0	0	1	10	**H/TOT**	0	0	0	0	0	0	0	0
P/TOT	51	3	1	0	0	0	1	56	**H/TOT**	3	2	0	0	0	0	0	5

	B to A								B to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	2	1	0	0	0	0	0	3	16:30	1	0	0	0	0	0	0	1
16:45	5	2	0	0	0	0	0	7	16:45	0	1	0	0	0	0	0	1
H/TOT	7	3	0	0	0	0	0	10	**H/TOT**	1	1	0	0	0	0	0	2
17:00	5	1	0	0	0	0	1	7	17:00	0	0	0	0	0	0	0	0
17:15	4	0	0	0	0	0	0	4	17:15	1	0	0	0	0	0	0	1
17:30	10	0	0	0	0	0	0	10	17:30	3	0	0	0	0	0	0	3
17:45	4	0	0	0	0	0	0	4	17:45	1	0	0	0	0	0	0	1
H/TOT	23	1	0	0	0	0	1	25	**H/TOT**	5	0	0	0	0	0	0	5
18:00	9	1	0	0	0	0	0	10	18:00	1	0	0	0	0	0	0	1
18:15	3	1	0	0	0	0	0	4	18:15	1	0	0	0	0	0	0	1
H/TOT	12	2	0	0	0	0	0	14	**H/TOT**	2	0	0	0	0	0	0	2
P/TOT	42	6	0	0	0	0	1	49	**H/TOT**	8	1	0	0	0	0	0	9

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	07:30	16	3	0	0	2	0	0	21
07:45	1	0	0	0	0	0	0	1	07:45	20	1	0	0	0	0	0	21
H/TOT	2	0	0	0	0	0	0	2	H/TOT	36	4	0	0	2	0	0	42
08:00	1	1	0	0	0	0	0	2	08:00	18	3	0	0	3	0	0	24
08:15	1	0	0	0	0	0	0	1	08:15	20	3	0	0	1	0	0	24
08:30	1	0	0	0	0	0	0	1	08:30	24	3	1	0	1	0	0	29
08:45	2	1	0	0	0	0	0	3	08:45	20	2	1	0	2	0	0	25
H/TOT	5	2	0	0	0	0	0	7	H/TOT	82	11	2	0	7	0	0	102
09:00	0	0	0	0	0	0	0	0	09:00	26	1	0	0	1	0	0	28
09:15	2	0	0	0	0	0	0	2	09:15	13	1	0	0	2	0	0	16
H/TOT	2	0	0	0	0	0	0	2	H/TOT	39	2	0	0	3	0	0	44
P/TOT	9	2	0	0	0	0	0	11	H/TOT	157	17	2	0	12	0	0	188

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	1	0	0	0	0	0	0	1	16:30	21	6	0	0	0	0	0	27
16:45	0	0	0	0	0	0	0	0	16:45	23	3	1	0	2	0	0	29
H/TOT	1	0	0	0	0	0	0	1	H/TOT	44	9	1	0	2	0	0	56
17:00	1	0	0	0	0	0	0	1	17:00	36	1	0	0	2	0	0	39
17:15	1	1	0	0	0	0	0	2	17:15	21	3	1	0	1	1	0	27
17:30	3	0	0	0	0	0	0	3	17:30	29	2	0	0	2	0	0	33
17:45	0	0	0	0	0	0	0	0	17:45	35	2	0	0	1	0	0	38
H/TOT	5	1	0	0	0	0	0	6	H/TOT	121	8	1	0	6	1	0	137
18:00	0	0	0	0	0	0	1	1	18:00	20	2	0	0	1	0	0	23
18:15	0	0	0	0	0	0	0	0	18:15	21	4	0	0	0	0	1	26
H/TOT	0	0	0	0	0	0	1	1	H/TOT	41	6	0	0	1	0	1	49
P/TOT	6	1	0	0	0	0	1	8	H/TOT	206	23	2	0	9	1	1	242

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	20	3	0	0	2	0	0	25	07:30	20	1	0	0	0	0	0	21
07:45	31	1	0	0	0	0	0	32	07:45	12	2	0	0	1	0	0	15
H/TOT	51	4	0	0	2	0	0	57	H/TOT	32	3	0	0	1	0	0	36
08:00	20	4	0	0	3	0	0	27	08:00	11	3	0	0	1	1	0	16
08:15	28	5	0	0	1	0	0	34	08:15	26	2	0	0	0	0	0	28
08:30	36	3	1	0	1	0	0	41	08:30	28	2	1	0	1	0	0	32
08:45	26	2	1	0	2	0	0	31	08:45	24	3	0	0	0	0	0	27
H/TOT	110	14	2	0	7	0	0	133	H/TOT	89	10	1	0	2	1	0	103
09:00	30	1	1	0	1	0	0	33	09:00	15	1	0	0	1	0	0	17
09:15	17	1	0	0	2	0	1	21	09:15	13	0	0	0	0	0	0	13
H/TOT	47	2	1	0	3	0	1	54	H/TOT	28	1	0	0	1	0	0	30
P/TOT	208	20	3	0	12	0	1	244	H/TOT	149	14	1	0	4	1	0	169

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	23	7	0	0	0	0	0	30	16:30	21	0	0	0	0	0	0	21
16:45	28	5	1	0	2	0	0	36	16:45	30	1	1	0	0	0	0	32
H/TOT	51	12	1	0	2	0	0	66	H/TOT	51	1	1	0	0	0	0	53
17:00	41	2	0	0	2	0	1	46	17:00	29	3	1	0	0	1	2	36
17:15	25	3	1	0	1	1	0	31	17:15	33	3	0	0	0	0	2	38
17:30	39	2	0	0	2	0	0	43	17:30	40	3	0	0	0	1	0	44
17:45	39	2	0	0	1	0	0	42	17:45	26	3	0	0	0	0	0	29
H/TOT	144	9	1	0	6	1	1	162	H/TOT	128	12	1	0	0	2	4	147
18:00	29	3	0	0	1	0	0	33	18:00	21	1	0	0	0	0	1	23
18:15	24	5	0	0	0	0	1	30	18:15	26	0	0	0	0	0	0	26
H/TOT	53	8	0	0	1	0	1	63	H/TOT	47	1	0	0	0	0	1	49
P/TOT	248	29	2	0	9	1	2	291	H/TOT	226	14	2	0	0	2	5	249

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	3	0	0	0	0	0	0	3	07:30	4	0	0	0	0	0	0	4
07:45	2	0	0	0	0	0	0	2	07:45	12	0	0	0	0	0	0	12
H/TOT	5	0	0	0	0	0	0	5	**H/TOT**	16	0	0	0	0	0	0	16
08:00	3	3	0	0	0	1	0	7	08:00	3	1	0	0	0	0	0	4
08:15	4	1	0	0	0	0	0	5	08:15	8	3	0	0	0	0	0	11
08:30	10	1	0	0	0	0	0	11	08:30	12	0	0	0	0	0	0	12
08:45	8	1	0	0	0	0	0	9	08:45	7	1	0	0	0	0	0	8
H/TOT	25	6	0	0	0	1	0	32	**H/TOT**	30	5	0	0	0	0	0	35
09:00	2	0	0	0	0	0	0	2	09:00	4	0	1	0	0	0	0	5
09:15	5	0	0	0	0	0	0	5	09:15	4	0	0	0	0	0	1	5
H/TOT	7	0	0	0	0	0	0	7	**H/TOT**	8	0	1	0	0	0	1	10
P/TOT	37	6	0	0	0	1	0	44	**H/TOT**	54	5	1	0	0	0	1	61

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	5	0	0	0	0	0	0	5	16:30	3	1	0	0	0	0	0	4
16:45	7	0	0	0	0	0	0	7	16:45	5	3	0	0	0	0	0	8
H/TOT	12	0	0	0	0	0	0	12	**H/TOT**	8	4	0	0	0	0	0	12
17:00	7	0	0	0	0	0	1	8	17:00	5	1	0	0	0	0	1	7
17:15	9	1	0	0	0	0	2	12	17:15	5	0	0	0	0	0	0	5
17:30	9	0	0	0	0	0	0	9	17:30	13	0	0	0	0	0	0	13
17:45	9	0	0	0	0	0	0	9	17:45	5	0	0	0	0	0	0	5
H/TOT	34	1	0	0	0	0	3	38	**H/TOT**	28	1	0	0	0	0	1	30
18:00	6	0	0	0	0	0	1	7	18:00	10	1	0	0	0	0	0	11
18:15	5	0	0	0	0	0	0	5	18:15	4	1	0	0	0	0	0	5
H/TOT	11	0	0	0	0	0	1	12	**H/TOT**	14	2	0	0	0	0	0	16
P/TOT	57	1	0	0	0	0	4	62	**H/TOT**	50	7	0	0	0	0	1	58

SITE: 3 DATE: 30/06/2016

LOCATION: Bloomhouse Lane/Sackup Lane DAY: THURSDAY

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	18	1	0	0	0	0	0	19	07:30	17	3	0	0	2	0	0	22
07:45	12	2	0	0	1	0	0	15	07:45	21	1	0	0	0	0	0	22
H/TOT	30	3	0	0	1	0	0	34	**H/TOT**	38	4	0	0	2	0	0	44
08:00	10	1	0	0	1	0	0	12	08:00	19	4	0	0	3	0	0	26
08:15	23	2	0	0	0	0	0	25	08:15	21	3	0	0	1	0	0	25
08:30	19	1	1	0	1	0	0	22	08:30	25	3	1	0	1	0	0	30
08:45	19	4	0	0	0	0	0	23	08:45	22	3	1	0	2	0	0	28
H/TOT	71	8	1	0	2	0	0	82	**H/TOT**	87	13	2	0	7	0	0	109
09:00	13	1	0	0	1	0	0	15	09:00	26	1	0	0	1	0	0	28
09:15	10	0	0	0	0	0	0	10	09:15	15	1	0	0	2	0	0	18
H/TOT	23	1	0	0	1	0	0	25	**H/TOT**	41	2	0	0	3	0	0	46
P/TOT	124	12	1	0	4	0	0	141	**H/TOT**	166	19	2	0	12	0	0	199

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	18	0	0	0	0	0	0	18	16:30	22	6	0	0	0	0	0	28
16:45	23	2	1	0	0	0	0	26	16:45	23	3	1	0	2	0	0	29
H/TOT	41	2	1	0	0	0	0	44	**H/TOT**	45	9	1	0	2	0	0	57
17:00	23	3	1	0	0	1	1	29	17:00	37	1	0	0	2	0	0	40
17:15	26	3	0	0	0	0	0	29	17:15	22	4	1	0	1	1	0	29
17:30	37	3	0	0	0	1	0	41	17:30	32	2	0	0	2	0	0	36
17:45	18	3	0	0	0	0	0	21	17:45	35	2	0	0	1	0	0	38
H/TOT	104	12	1	0	0	2	1	120	**H/TOT**	126	9	1	0	6	1	0	143
18:00	16	1	0	0	0	0	1	18	18:00	20	2	0	0	1	0	1	24
18:15	22	0	0	0	0	0	0	22	18:15	21	4	0	0	0	0	1	26
H/TOT	38	1	0	0	0	0	1	40	**H/TOT**	41	6	0	0	1	0	2	50
P/TOT	183	15	2	0	0	2	2	204	**H/TOT**	212	24	2	0	9	1	2	250

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	A to D								A to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	10	1	0	0	0	0	0	11	50	11	3	0	1	0	0	65
07:45	6	1	1	0	0	0	0	8	38	6	2	0	2	1	0	49
HH/TOT	16	2	1	0	0	0	0	19	88	17	5	0	3	1	0	114
08:00	10	3	0	0	1	0	0	14	44	4	2	0	0	0	0	50
08:15	9	3	1	0	0	0	0	13	45	6	4	2	0	0	0	57
08:30	14	1	0	0	0	0	0	15	39	9	4	0	0	0	0	52
08:45	19	2	0	0	0	0	0	21	56	2	2	1	0	0	0	61
H/TOT	52	9	1	0	1	0	0	63	184	21	12	3	0	0	0	220
09:00	21	1	0	0	0	0	0	22	63	3	0	1	0	1	0	68
09:15	11	1	0	0	0	0	0	12	45	4	1	1	0	0	0	51
HH/TOT	32	2	0	0	0	0	0	34	108	7	1	2	0	1	0	119
P/TOT	100	13	2	0	1	0	0	116	380	45	18	5	3	2	0	453

	A to D								A to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	24	4	0	0	0	0	0	28	78	12	2	1	0	0	1	94
16:45	23	3	1	0	0	0	0	27	100	6	1	0	0	3	1	111
H/TOT	47	7	1	0	0	0	0	55	178	18	3	1	0	3	2	205
17:00	38	3	1	0	0	0	0	42	87	13	3	0	1	1	0	105
17:15	22	3	0	0	0	1	0	26	92	6	2	0	1	2	2	105
17:30	32	3	0	0	0	0	0	35	106	3	1	1	0	0	0	111
17:45	37	2	0	0	0	0	0	39	88	7	1	1	0	3	0	100
H/TOT	129	11	1	0	0	1	0	142	373	29	7	2	2	6	2	421
18:00	18	1	0	0	0	0	0	19	62	3	0	0	1	0	0	66
18:15	24	4	0	0	0	0	0	28	57	3	1	0	0	0	2	63
HH/TOT	42	5	0	0	0	0	0	47	119	6	1	0	1	0	2	129
P/TOT	218	23	2	0	0	1	0	244	670	53	11	3	3	9	6	755

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	A to B								B to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
HH/TOT	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
08:00	7	0	0	0	0	0	0	7	1	0	0	1	0	0	0	2
08:15	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
08:30	22	1	0	0	0	0	0	23	0	0	0	0	0	0	0	0
08:45	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	51	1	0	0	0	0	0	52	1	0	0	1	0	0	0	2
09:00	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
09:15	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
HH/TOT	4	0	0	0	0	0	0	4	2	0	0	0	0	0	0	2
P/TOT	61	1	0	0	0	0	0	62	3	0	0	1	0	0	0	4

	A to B								B to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	2
16:45	2	1	0	0	0	0	0	3	1	0	0	0	0	0	0	1
H/TOT	3	2	0	0	0	0	0	5	3	0	0	0	0	0	0	3
17:00	5	0	0	0	0	0	0	5	5	0	0	0	0	0	0	5
17:15	7	0	0	0	0	0	0	7	5	0	0	0	0	0	0	5
17:30	8	0	0	0	0	0	0	8	4	0	0	0	0	0	0	4
17:45	6	0	0	0	0	0	0	6	5	0	0	0	0	0	0	5
H/TOT	26	0	0	0	0	0	0	26	19	0	0	0	0	0	0	19
18:00	6	0	0	0	0	0	0	6	3	0	0	0	0	0	0	3
18:15	7	0	0	0	0	0	0	7	3	0	0	0	0	0	0	3
HH/TOT	13	0	0	0	0	0	0	13	6	0	0	0	0	0	0	6
P/TOT	42	2	0	0	0	0	0	44	28	0	0	0	0	0	0	28

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	B to D								B to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
07:45	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1
HH/TOT	4	0	0	0	0	0	0	4	3	0	0	0	0	0	0	3
08:00	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
08:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
09:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
09:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
HH/TOT	1	0	0	0	0	0	0	1	3	1	0	0	0	0	0	4
P/TOT	8	0	0	0	0	0	0	8	9	1	0	0	0	0	0	10

	B to D								B to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
16:45	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
H/TOT	4	0	0	0	0	0	0	4	2	0	0	0	0	0	0	2
17:00	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
17:15	2	0	0	0	0	0	0	2	8	0	0	0	0	0	0	8
17:30	2	1	0	0	0	0	0	3	6	0	0	0	0	0	0	6
17:45	1	0	0	0	0	0	0	1	6	0	0	0	0	0	0	6
H/TOT	6	1	0	0	0	0	0	7	22	0	0	0	0	0	0	22
18:00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
18:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
HH/TOT	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5
P/TOT	11	1	0	0	0	0	0	12	29	0	0	0	0	0	0	29

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	C to B								C to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	78	11	1	0	2	0	0	92
07:45	6	0	0	0	0	0	0	6	66	12	2	0	2	0	0	82
HH/TOT	8	0	0	0	0	0	0	8	144	23	3	0	4	0	0	174
08:00	4	1	0	0	0	0	0	5	52	11	1	0	0	0	0	64
08:15	6	0	0	0	0	0	0	6	76	8	1	0	0	0	0	85
08:30	12	0	0	0	0	0	0	12	55	4	4	1	2	0	0	66
08:45	5	1	0	0	0	0	0	6	49	5	0	1	1	0	0	56
H/TOT	27	2	0	0	0	0	0	29	232	28	6	2	3	0	0	271
09:00	2	0	0	0	0	0	0	2	48	4	2	0	0	1	0	55
09:15	1	0	0	0	0	0	0	1	45	9	2	1	0	0	0	57
HH/TOT	3	0	0	0	0	0	0	3	93	13	4	1	0	1	0	112
P/TOT	38	2	0	0	0	0	0	40	469	64	13	3	7	1	0	557

	C to B								C to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	1	1	0	0	0	0	0	2	38	1	2	0	0	0	0	41
16:45	1	0	0	0	0	0	0	1	47	6	0	0	0	1	0	54
H/TOT	2	1	0	0	0	0	0	3	85	7	2	0	0	1	0	95
17:00	2	0	0	0	0	0	0	2	54	7	3	0	0	0	1	65
17:15	10	1	0	0	0	0	0	11	64	6	0	0	0	1	0	71
17:30	9	1	0	0	0	0	0	10	76	6	0	0	0	0	0	82
17:45	6	0	0	0	0	0	0	6	52	10	0	0	0	1	0	63
H/TOT	27	2	0	0	0	0	0	29	246	29	3	0	0	2	1	281
18:00	8	0	0	0	0	0	0	8	55	3	0	0	1	0	0	59
18:15	3	0	0	0	0	0	0	3	48	4	0	0	0	0	0	52
HH/TOT	11	0	0	0	0	0	0	11	103	7	0	0	1	0	0	111
P/TOT	40	3	0	0	0	0	0	43	434	43	5	0	1	3	1	487

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	C to D								D to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	2	0	0	4	3	0	0	0	0	0	0	3
07:45	3	0	0	0	0	0	0	3	0	0	1	0	0	0	0	1
HH/TOT	5	0	0	0	2	0	0	7	3	0	1	0	0	0	0	4
08:00	3	0	0	0	2	0	0	5	4	0	0	0	0	0	0	4
08:15	4	0	0	0	1	0	0	5	4	0	0	0	0	0	0	4
08:30	6	2	0	0	2	0	0	10	3	1	0	0	0	0	0	4
08:45	1	1	0	1	1	0	0	4	1	2	0	0	0	0	0	3
H/TOT	14	3	0	1	6	0	0	24	12	3	0	0	0	0	0	15
09:00	3	0	0	0	1	0	0	4	1	1	0	0	0	0	0	2
09:15	2	0	0	0	2	0	0	4	1	0	0	0	0	0	0	1
HH/TOT	5	0	0	0	3	0	0	8	2	1	0	0	0	0	0	3
P/TOT	24	3	0	1	11	0	0	39	17	4	1	0	0	0	0	22

	C to D								D to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	7	1	0	0	1	0	0	9	4	1	0	0	0	0	0	5
16:45	1	0	0	0	2	0	0	3	3	0	0	0	0	0	0	3
H/TOT	8	1	0	0	3	0	0	12	7	1	0	0	0	0	0	8
17:00	3	0	0	0	1	0	0	4	5	1	0	0	0	0	0	6
17:15	8	0	0	0	0	0	0	8	5	1	0	0	0	0	0	6
17:30	4	0	0	0	2	0	0	6	10	1	0	0	0	0	0	11
17:45	3	0	0	0	1	0	0	4	3	0	0	0	0	0	0	3
H/TOT	18	0	0	0	4	0	0	22	23	3	0	0	0	0	0	26
18:00	7	0	0	0	1	0	0	8	4	0	0	0	0	0	0	4
18:15	2	1	0	0	1	0	0	4	7	0	0	0	0	0	0	7
HH/TOT	9	1	0	0	2	0	0	12	11	0	0	0	0	0	0	11
P/TOT	35	2	0	0	9	0	0	46	41	4	0	0	0	0	0	45

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	D to B								D to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	5	0	0	0	0	0	0	5	19	1	0	0	0	0	0	20
07:45	3	0	0	0	0	0	0	3	8	1	0	0	1	0	0	10
HH/TOT	8	0	0	0	0	0	0	8	27	2	0	0	1	0	0	30
08:00	1	0	0	1	0	0	0	2	11	1	0	0	1	0	0	13
08:15	6	0	0	0	0	0	0	6	23	1	0	0	0	0	0	24
08:30	8	0	0	0	0	0	0	8	22	1	0	0	1	0	0	24
08:45	4	1	0	0	0	0	0	5	12	2	0	0	0	0	0	14
H/TOT	19	1	0	1	0	0	0	21	68	5	0	0	2	0	0	75
09:00	1	0	0	0	0	0	0	1	16	0	0	0	1	0	0	17
09:15	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
HH/TOT	1	0	0	0	0	0	0	1	25	0	0	0	1	0	0	26
P/TOT	28	1	0	1	0	0	0	30	120	7	0	0	4	0	0	131

	D to B								D to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	2	0	0	0	0	0	0	2	16	0	0	0	0	0	0	16
16:45	1	0	0	0	0	0	0	1	18	4	0	0	0	0	0	22
H/TOT	3	0	0	0	0	0	0	3	34	4	0	0	0	0	0	38
17:00	0	0	0	0	0	0	0	0	18	1	1	0	0	1	1	22
17:15	6	0	0	0	0	0	0	6	17	2	0	0	0	0	0	19
17:30	2	1	0	0	0	0	0	3	22	1	0	0	0	1	0	24
17:45	1	0	0	0	0	0	0	1	19	2	0	0	0	0	0	21
H/TOT	9	1	0	0	0	0	0	10	76	6	1	0	0	2	1	86
18:00	2	0	0	0	0	0	0	2	10	1	0	0	0	0	0	11
18:15	1	0	0	0	0	0	0	1	14	2	0	0	0	0	0	16
HH/TOT	3	0	0	0	0	0	0	3	24	3	0	0	0	0	0	27
P/TOT	15	1	0	0	0	0	0	16	134	13	1	0	0	2	1	151

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	97	12	1	0	2	0	0	112	63	12	3	0	1	0	0	79
07:45	74	13	2	0	3	0	0	92	47	7	3	0	2	1	0	60
HH/TOT	171	25	3	0	5	0	0	204	110	19	6	0	3	1	0	139
08:00	64	12	1	1	1	0	0	79	61	7	2	0	1	0	0	71
08:15	99	9	1	0	0	0	0	109	63	9	5	2	0	0	0	79
08:30	77	5	4	1	3	0	0	90	75	11	4	0	0	0	0	90
08:45	61	7	0	1	1	0	0	70	88	4	2	1	0	0	0	95
H/TOT	301	33	6	3	5	0	0	348	287	31	13	3	1	0	0	335
09:00	65	4	2	0	1	1	0	73	86	4	0	1	0	1	0	92
09:15	55	9	2	1	0	0	0	67	58	5	1	1	0	0	0	65
HH/TOT	120	13	4	1	1	1	0	140	144	9	1	2	0	1	0	157
P/TOT	592	71	13	4	11	1	0	692	541	59	20	5	4	2	0	631

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	56	1	2	0	0	0	0	59	103	17	2	1	0	0	1	124
16:45	66	10	0	0	0	1	0	77	125	10	2	0	0	3	1	141
H/TOT	122	11	2	0	0	1	0	136	228	27	4	1	0	3	2	265
17:00	77	8	4	0	0	1	2	92	130	16	4	0	1	1	0	152
17:15	86	8	0	0	0	1	0	95	121	9	2	0	1	3	2	138
17:30	102	7	0	0	0	1	0	110	146	6	1	1	0	0	0	154
17:45	76	12	0	0	0	1	0	89	131	9	1	1	0	3	0	145
H/TOT	341	35	4	0	0	4	2	386	528	40	8	2	2	7	2	589
18:00	68	4	0	0	1	0	0	73	86	4	0	0	1	0	0	91
18:15	65	6	0	0	0	0	0	71	88	7	1	0	0	0	2	98
H/TOT	133	10	0	0	1	0	0	144	174	11	1	0	1	0	2	189
P/TOT	596	56	6	0	1	5	2	666	930	78	13	3	3	10	6	1043

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	10	0	0	0	0	0	0	10	3	0	0	0	0	0	0	3
07:45	12	0	0	0	0	0	0	12	4	0	0	0	0	0	0	4
HH/TOT	22	0	0	0	0	0	0	22	7	0	0	0	0	0	0	7
08:00	12	1	0	1	0	0	0	14	5	0	0	1	0	0	0	6
08:15	21	0	0	0	0	0	0	21	1	0	0	0	0	0	0	1
08:30	42	1	0	0	0	0	0	43	1	0	0	0	0	0	0	1
08:45	22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0
H/TOT	97	4	0	1	0	0	0	102	7	0	0	1	0	0	0	8
09:00	5	0	0	0	0	0	0	5	3	1	0	0	0	0	0	4
09:15	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
HH/TOT	8	0	0	0	0	0	0	8	6	1	0	0	0	0	0	7
P/TOT	127	4	0	1	0	0	0	132	20	1	0	1	0	0	0	22

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	4	2	0	0	0	0	0	6	5	0	0	0	0	0	0	5
16:45	4	1	0	0	0	0	0	5	4	0	0	0	0	0	0	4
H/TOT	8	3	0	0	0	0	0	11	9	0	0	0	0	0	0	9
17:00	7	0	0	0	0	0	0	7	8	0	0	0	0	0	0	8
17:15	23	1	0	0	0	0	0	24	15	0	0	0	0	0	0	15
17:30	19	2	0	0	0	0	0	21	12	1	0	0	0	0	0	13
17:45	13	0	0	0	0	0	0	13	12	0	0	0	0	0	0	12
H/TOT	62	3	0	0	0	0	0	65	47	1	0	0	0	0	0	48
18:00	16	0	0	0	0	0	0	16	7	0	0	0	0	0	0	7
18:15	11	0	0	0	0	0	0	11	5	0	0	0	0	0	0	5
HH/TOT	27	0	0	0	0	0	0	27	12	0	0	0	0	0	0	12
P/TOT	97	6	0	0	0	0	0	103	68	1	0	0	0	0	0	69

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	55	11	3	0	1	0	0	70	82	11	1	0	4	0	0	98
07:45	39	6	3	0	2	1	0	51	75	12	2	0	2	0	0	91
HH/TOT	94	17	6	0	3	1	0	121	157	23	3	0	6	0	0	189
08:00	51	4	2	0	0	0	0	57	59	12	1	0	2	0	0	74
08:15	49	6	4	2	0	0	0	61	86	8	1	0	1	0	0	96
08:30	42	10	4	0	0	0	0	56	73	6	4	1	4	0	0	88
08:45	57	4	2	1	0	0	0	64	55	7	0	2	2	0	0	66
H/TOT	199	24	12	3	0	0	0	238	273	33	6	3	9	0	0	324
09:00	65	5	0	1	0	1	0	72	53	4	2	0	1	1	0	61
09:15	48	4	1	1	0	0	0	54	48	9	2	1	2	0	0	62
HH/TOT	113	9	1	2	0	1	0	126	101	13	4	1	3	1	0	123
P/TOT	406	50	19	5	3	2	0	485	531	69	13	4	18	1	0	636

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	83	13	2	1	0	0	1	100	46	3	2	0	1	0	0	52
16:45	104	6	1	0	0	3	1	115	49	6	0	0	2	1	0	58
H/TOT	187	19	3	1	0	3	2	215	95	9	2	0	3	1	0	110
17:00	94	14	3	0	1	1	0	113	59	7	3	0	1	0	1	71
17:15	105	7	2	0	1	2	2	119	82	7	0	0	0	1	0	90
17:30	122	4	1	1	0	0	0	128	89	7	0	0	2	0	0	98
17:45	97	7	1	1	0	3	0	109	61	10	0	0	1	1	0	73
H/TOT	418	32	7	2	2	6	2	469	291	31	3	0	4	2	1	332
18:00	70	3	0	0	1	0	0	74	70	3	0	0	2	0	0	75
18:15	65	3	1	0	0	0	2	71	53	5	0	0	1	0	0	59
HH/TOT	135	6	1	0	1	0	2	145	123	8	0	0	3	0	0	134
P/TOT	740	57	11	3	3	9	6	829	509	48	5	0	10	3	1	576

SITE: 4 DATE: 30/06/2016

LOCATION: Sackup Lane/ Station Rd/School Access Rd DAY: Thursday

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	13	1	0	0	2	0	0	16	27	1	0	0	0	0	0	28
07:45	12	1	1	0	0	0	0	14	11	1	1	0	1	0	0	14
HH/TOT	25	2	1	0	2	0	0	30	38	2	1	0	1	0	0	42
08:00	14	3	0	0	3	0	0	20	16	1	0	1	1	0	0	19
08:15	14	3	1	0	1	0	0	19	33	1	0	0	0	0	0	34
08:30	21	3	0	0	2	0	0	26	33	2	0	0	1	0	0	36
08:45	20	3	0	1	1	0	0	25	17	5	0	0	0	0	0	22
H/TOT	69	12	1	1	7	0	0	90	99	9	0	1	2	0	0	111
09:00	25	1	0	0	1	0	0	27	18	1	0	0	1	0	0	20
09:15	13	1	0	0	2	0	0	16	10	0	0	0	0	0	0	10
HH/TOT	38	2	0	0	3	0	0	43	28	1	0	0	1	0	0	30
P/TOT	132	16	2	1	12	0	0	163	165	12	1	1	4	0	0	183

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	33	5	0	0	1	0	0	39	22	1	0	0	0	0	0	23
16:45	26	3	1	0	2	0	0	32	22	4	0	0	0	0	0	26
H/TOT	59	8	1	0	3	0	0	71	44	5	0	0	0	0	0	49
17:00	42	3	1	0	1	0	0	47	23	2	1	0	0	1	1	28
17:15	32	3	0	0	0	1	0	36	28	3	0	0	0	0	0	31
17:30	38	4	0	0	2	0	0	44	34	3	0	0	0	1	0	38
17:45	41	2	0	0	1	0	0	44	23	2	0	0	0	0	0	25
H/TOT	153	12	1	0	4	1	0	171	108	10	1	0	0	2	1	122
18:00	25	1	0	0	1	0	0	27	16	1	0	0	0	0	0	17
18:15	27	5	0	0	1	0	0	33	22	2	0	0	0	0	0	24
HH/TOT	52	6	0	0	2	0	0	60	38	3	0	0	0	0	0	41
P/TOT	264	26	2	0	9	1	0	302	190	18	1	0	0	2	1	212

SITE: 5 DATE: 30/06/2016

LOCATION: Station Rd/Church St DAY: THURSDAY

	A to C									A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	1	0	0	1	0	0	5	07:30	18	2	0	0	1	0	0	21
07:45	2	0	0	0	0	0	0	2	07:45	18	2	0	0	0	0	0	20
H/TOT	5	1	0	0	1	0	0	7	H/TOT	36	4	0	0	1	0	0	41
08:00	2	0	0	0	0	0	0	2	08:00	18	0	0	0	0	0	0	18
08:15	4	1	0	0	0	0	0	5	08:15	13	0	0	0	1	0	0	14
08:30	8	2	0	0	0	0	0	10	08:30	19	1	0	0	0	1	0	21
08:45	7	1	1	0	0	0	0	9	08:45	13	1	0	0	0	0	1	15
H/TOT	21	4	1	0	0	0	0	26	H/TOT	63	2	0	0	1	1	1	68
09:00	4	0	0	0	0	0	0	4	09:00	12	1	0	0	1	0	0	14
09:15	3	2	0	0	0	0	0	5	09:15	12	1	0	0	1	0	1	15
H/TOT	7	2	0	0	0	0	0	9	H/TOT	24	2	0	0	2	0	1	29
P/TOT	33	7	1	0	1	0	0	42	H/TOT	123	8	0	0	4	1	2	138

	A to C									A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	5	0	0	0	0	0	0	5	16:30	16	1	0	0	1	0	0	18
16:45	2	0	0	0	0	0	1	3	16:45	10	1	0	0	0	0	0	11
H/TOT	7	0	0	0	0	0	1	8	H/TOT	26	2	0	0	1	0	0	29
17:00	7	2	0	0	0	0	0	9	17:00	6	2	0	0	1	0	0	9
17:15	9	1	0	0	0	0	0	10	17:15	18	0	0	0	0	0	0	18
17:30	2	0	0	0	0	0	0	2	17:30	6	0	0	0	0	0	0	6
17:45	6	0	0	0	0	0	0	6	17:45	10	2	0	0	1	0	0	13
H/TOT	24	3	0	0	0	0	0	27	H/TOT	40	4	0	0	2	0	0	46
18:00	7	1	0	0	0	0	0	8	18:00	17	0	0	0	0	0	0	17
18:15	11	0	0	0	0	0	1	12	18:15	16	0	0	0	0	0	0	16
H/TOT	18	1	0	0	0	0	1	20	H/TOT	33	0	0	0	0	0	0	33
P/TOT	49	4	0	0	0	0	2	55	H/TOT	99	6	0	0	3	0	0	108

SITE: 5 DATE: 30/06/2016

LOCATION: Station Rd/Church St DAY: THURSDAY

	B to A								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	6	1	0	0	1	0	0	8	07:30	61	9	3	0	0	0	0	73
07:45	2	0	0	0	0	0	0	2	07:45	41	7	4	0	2	1	0	55
H/TOT	8	1	0	0	1	0	0	10	**H/TOT**	102	16	7	0	2	1	0	128
08:00	2	0	0	0	1	0	0	3	08:00	57	8	2	0	1	0	0	68
08:15	8	0	2	0	0	0	0	10	08:15	60	12	3	1	0	0	0	76
08:30	8	2	0	0	0	0	0	10	08:30	71	7	5	0	0	0	0	83
08:45	9	1	0	0	1	0	0	11	08:45	59	3	1	1	0	0	0	64
H/TOT	27	3	2	0	2	0	0	34	**H/TOT**	247	30	11	2	1	0	0	291
09:00	11	0	0	0	0	0	0	11	09:00	75	6	0	1	0	0	0	82
09:15	4	1	0	0	2	0	0	7	09:15	49	5	1	1	0	0	1	57
H/TOT	15	1	0	0	2	0	0	18	**H/TOT**	124	11	1	2	0	0	1	139
P/TOT	50	5	2	0	5	0	0	62	**H/TOT**	473	57	19	4	3	1	1	558

	B to A								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	12	3	0	0	1	0	1	17	16:30	97	18	2	0	0	1	3	121
16:45	19	2	1	0	1	0	0	23	16:45	130	9	2	0	0	3	0	144
H/TOT	31	5	1	0	2	0	1	40	**H/TOT**	227	27	4	0	0	4	3	265
17:00	18	2	0	0	0	1	0	21	17:00	127	13	3	0	1	1	0	145
17:15	17	1	1	0	0	0	0	19	17:15	108	9	4	0	1	2	0	124
17:30	15	1	0	0	1	0	0	17	17:30	151	4	1	0	0	0	0	156
17:45	19	1	0	0	0	0	0	20	17:45	135	9	2	1	0	4	0	151
H/TOT	69	5	1	0	1	1	0	77	**H/TOT**	521	35	10	1	2	7	0	576
18:00	19	0	0	0	0	0	0	19	18:00	92	3	0	0	1	0	0	96
18:15	32	1	0	0	1	0	0	34	18:15	81	7	1	0	0	0	1	90
H/TOT	51	1	0	0	1	0	0	53	**H/TOT**	173	10	1	0	1	0	1	186
P/TOT	151	11	2	0	4	1	1	170	**H/TOT**	921	72	15	1	3	11	4	1027

SITE: 5 DATE: 30/06/2016

LOCATION: Station Rd/Church St DAY: THURSDAY

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	112	8	2	0	2	0	0	124	07:30	0	0	0	0	0	0	0	0
07:45	88	10	2	0	3	0	0	103	07:45	3	2	0	0	0	0	0	5
H/TOT	200	18	4	0	5	0	0	227	**H/TOT**	3	2	0	0	0	0	0	5
08:00	76	8	1	0	1	0	0	86	08:00	3	0	0	0	0	0	0	3
08:15	110	7	0	0	0	0	0	117	08:15	1	0	0	0	0	0	0	1
08:30	88	5	6	1	3	0	0	103	08:30	2	1	0	0	0	0	0	3
08:45	93	5	0	1	1	1	0	101	08:45	6	0	0	0	0	0	0	6
H/TOT	367	25	7	2	5	1	0	407	**H/TOT**	12	1	0	0	0	0	0	13
09:00	69	4	2	0	1	1	0	77	09:00	4	1	0	0	0	0	0	5
09:15	56	7	2	1	0	0	0	66	09:15	2	0	0	0	0	0	0	2
H/TOT	125	11	4	1	1	1	0	143	**H/TOT**	6	1	0	0	0	0	0	7
P/TOT	692	54	15	3	11	2	0	777	**H/TOT**	21	4	0	0	0	0	0	25

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	69	2	1	0	0	0	0	72	16:30	2	0	0	0	0	0	0	2
16:45	62	7	0	0	0	0	0	69	16:45	2	3	1	0	0	0	0	6
H/TOT	131	9	1	0	0	0	0	141	**H/TOT**	4	3	1	0	0	0	0	8
17:00	75	5	4	0	0	1	1	86	17:00	4	1	0	0	0	0	1	6
17:15	76	7	0	0	0	0	0	83	17:15	3	1	0	0	0	0	0	4
17:30	95	6	0	0	0	1	1	103	17:30	6	0	0	0	0	1	0	7
17:45	71	9	0	0	0	1	0	81	17:45	4	0	0	0	0	0	0	4
H/TOT	317	27	4	0	0	3	2	353	**H/TOT**	17	2	0	0	0	1	1	21
18:00	55	7	0	0	1	0	0	63	18:00	6	0	0	0	1	0	0	7
18:15	55	5	0	0	0	0	0	60	18:15	4	0	0	0	0	0	0	4
H/TOT	110	12	0	0	1	0	0	123	**H/TOT**	10	0	0	0	1	0	0	11
P/TOT	558	48	5	0	1	3	2	617	**H/TOT**	31	5	1	0	1	1	1	40

SITE: 5 DATE: 30/06/2016

LOCATION: Station Rd/Church St DAY: THURSDAY

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	6	1	0	0	1	0	0	8	07:30	21	3	0	0	2	0	0	26
07:45	5	2	0	0	0	0	0	7	07:45	20	2	0	0	0	0	0	22
H/TOT	11	3	0	0	1	0	0	15	**H/TOT**	41	5	0	0	2	0	0	48
08:00	5	0	0	0	1	0	0	6	08:00	20	0	0	0	0	0	0	20
08:15	9	0	2	0	0	0	0	11	08:15	17	1	0	0	1	0	0	19
08:30	10	3	0	0	0	0	0	13	08:30	27	3	0	0	0	1	0	31
08:45	15	1	0	0	1	0	0	17	08:45	20	2	1	0	0	0	1	24
H/TOT	39	4	2	0	2	0	0	47	**H/TOT**	84	6	1	0	1	1	1	94
09:00	15	1	0	0	0	0	0	16	09:00	16	1	0	0	1	0	0	18
09:15	6	1	0	0	2	0	0	9	09:15	15	3	0	0	1	0	1	20
H/TOT	21	2	0	0	2	0	0	25	**H/TOT**	31	4	0	0	2	0	1	38
P/TOT	71	9	2	0	5	0	0	87	**H/TOT**	156	15	1	0	5	1	2	180

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	14	3	0	0	1	0	1	19	16:30	21	1	0	0	1	0	0	23
16:45	21	5	2	0	1	0	0	29	16:45	12	1	0	0	0	0	1	14
H/TOT	35	8	2	0	2	0	1	48	**H/TOT**	33	2	0	0	1	0	1	37
17:00	22	3	0	0	0	1	1	27	17:00	13	4	0	0	1	0	0	18
17:15	20	2	1	0	0	0	0	23	17:15	27	1	0	0	0	0	0	28
17:30	21	1	0	0	1	1	0	24	17:30	8	0	0	0	0	0	0	8
17:45	23	1	0	0	0	0	0	24	17:45	16	2	0	0	1	0	0	19
H/TOT	86	7	1	0	1	2	1	98	**H/TOT**	64	7	0	0	2	0	0	73
18:00	25	0	0	0	1	0	0	26	18:00	24	1	0	0	0	0	0	25
18:15	36	1	0	0	1	0	0	38	18:15	27	0	0	0	0	0	1	28
H/TOT	61	1	0	0	2	0	0	64	**H/TOT**	51	1	0	0	0	0	1	53
P/TOT	182	16	3	0	5	2	2	210	**H/TOT**	148	10	0	0	3	0	2	163

SITE: 5 DATE: 30/06/2016

LOCATION: Station Rd/Church St DAY: THURSDAY

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	130	10	2	0	3	0	0	145	07:30	67	10	3	0	1	0	0	81
07:45	106	12	2	0	3	0	0	123	07:45	43	7	4	0	2	1	0	57
H/TOT	236	22	4	0	6	0	0	268	**H/TOT**	110	17	7	0	3	1	0	138
08:00	94	8	1	0	1	0	0	104	08:00	59	8	2	0	2	0	0	71
08:15	123	7	0	0	1	0	0	131	08:15	68	12	5	1	0	0	0	86
08:30	107	6	6	1	3	1	0	124	08:30	79	9	5	0	0	0	0	93
08:45	106	6	0	1	1	1	1	116	08:45	68	4	1	1	1	0	0	75
H/TOT	430	27	7	2	6	2	1	475	**H/TOT**	274	33	13	2	3	0	0	325
09:00	81	5	2	0	2	1	0	91	09:00	86	6	0	1	0	0	0	93
09:15	68	8	2	1	1	0	1	81	09:15	53	6	1	1	2	0	1	64
H/TOT	149	13	4	1	3	1	1	172	**H/TOT**	139	12	1	2	2	0	1	157
P/TOT	815	62	15	3	15	3	2	915	**H/TOT**	523	62	21	4	8	1	1	620

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:30	85	3	1	0	1	0	0	90	16:30	109	21	2	0	1	1	4	138
16:45	72	8	0	0	0	0	0	80	16:45	149	11	3	0	1	3	0	167
H/TOT	157	11	1	0	1	0	0	170	**H/TOT**	258	32	5	0	2	4	4	305
17:00	81	7	4	0	1	1	1	95	17:00	145	15	3	0	1	2	0	166
17:15	94	7	0	0	0	0	0	101	17:15	125	10	5	0	1	2	0	143
17:30	101	6	0	0	0	1	1	109	17:30	166	5	1	0	1	0	0	173
17:45	81	11	0	0	1	1	0	94	17:45	154	10	2	1	0	4	0	171
H/TOT	357	31	4	0	2	3	2	399	**H/TOT**	590	40	11	1	3	8	0	653
18:00	72	7	0	0	1	0	0	80	18:00	111	3	0	0	1	0	0	115
18:15	71	5	0	0	0	0	0	76	18:15	113	8	1	0	1	0	1	124
H/TOT	143	12	0	0	1	0	0	156	**H/TOT**	224	11	1	0	2	0	1	239
P/TOT	657	54	5	0	4	3	2	725	**H/TOT**	1072	83	17	1	7	12	5	1197

SITE: 5 DATE: 30/06/2016

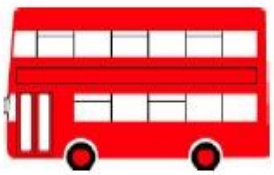
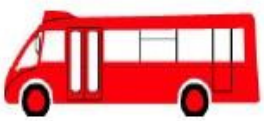
LOCATION: Station Rd/Church St DAY: THURSDAY

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	64	10	3	0	1	0	0	78	07:30	112	8	2	0	2	0	0	124
07:45	43	7	4	0	2	1	0	57	07:45	91	12	2	0	3	0	0	108
H/TOT	107	17	7	0	3	1	0	135	**H/TOT**	203	20	4	0	5	0	0	232
08:00	59	8	2	0	1	0	0	70	08:00	79	8	1	0	1	0	0	89
08:15	64	13	3	1	0	0	0	81	08:15	111	7	0	0	0	0	0	118
08:30	79	9	5	0	0	0	0	93	08:30	90	6	6	1	3	0	0	106
08:45	66	4	2	1	0	0	0	73	08:45	99	5	0	1	1	1	0	107
H/TOT	268	34	12	2	1	0	0	317	**H/TOT**	379	26	7	2	5	1	0	420
09:00	79	6	0	1	0	0	0	86	09:00	73	5	2	0	1	1	0	82
09:15	52	7	1	1	0	0	1	62	09:15	58	7	2	1	0	0	0	68
H/TOT	131	13	1	2	0	0	1	148	**H/TOT**	131	12	4	1	1	1	0	150
P/TOT	506	64	20	4	4	1	1	600	**H/TOT**	713	58	15	3	11	2	0	802

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**TIME**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	102	18	2	0	0	1	3	126	16:30	71	2	1	0	0	0	0	74
16:45	132	9	2	0	0	3	1	147	16:45	64	10	1	0	0	0	0	75
H/TOT	234	27	4	0	0	4	4	273	**H/TOT**	135	12	2	0	0	0	0	149
17:00	134	15	3	0	1	1	0	154	17:00	79	6	4	0	0	1	2	92
17:15	117	10	4	0	1	2	0	134	17:15	79	8	0	0	0	0	0	87
17:30	153	4	1	0	0	0	0	158	17:30	101	6	0	0	0	2	1	110
17:45	141	9	2	1	0	4	0	157	17:45	75	9	0	0	0	1	0	85
H/TOT	545	38	10	1	2	7	0	603	**H/TOT**	334	29	4	0	0	4	3	374
18:00	99	4	0	0	1	0	0	104	18:00	61	7	0	0	2	0	0	70
18:15	92	7	1	0	0	0	2	102	18:15	59	5	0	0	0	0	0	64
H/TOT	191	11	1	0	1	0	2	206	**H/TOT**	120	12	0	0	2	0	0	134
P/TOT	970	76	15	1	3	11	6	1082	**H/TOT**	589	53	6	0	2	4	3	657

APPENDIX A
Vehicle Categories

COBA VEHICLE CATEGORIES

CAR	 SALOON  ESTATE  PEOPLE CARRIER  CAR TOWING CARAVAN / TRAILER
LIGHT GOODS VEHICLE (LGV)	 VAN  <3.5 TONNES – single rear tyres  PICK-UP
OTHER GOODS VEHICLE (OGV1)	 > 3.5 TONNES – twin rear tyres  2-AXLES RIGID  2-AXLES RIGID  3 AXLES-RIGID
OTHER GOODS VEHICLE (OGV2)	 4 OR MORE AXLES RIGID  3-AXLES ARTIC  4 OR MORE AXLES ARTIC  OTHER GOODS VEHICLE WITH TRAILER
BUSES & COACHES (PSV)	 DOUBLE DECK BUS  SINGLE DECK BUS OR COACH

COBA VEHICLE CATEGORIES

Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.

APPENDIX B
Classified Count Data

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	19	4	2	1	0	0	0	26	55	7	6	2	1	0	0	71
07:45	10	3	1	1	0	0	0	15	64	0	5	2	0	0	0	71
HH/TOT	29	7	3	2	0	0	0	41	119	7	11	4	1	0	0	142
08:00	17	4	1	0	1	0	0	23	72	11	4	2	0	0	0	89
08:15	36	5	2	2	0	0	0	45	91	6	3	1	0	0	0	101
08:30	54	7	5	0	0	0	0	66	97	8	3	2	0	1	0	111
08:45	40	1	1	0	1	0	0	43	91	10	3	2	2	0	0	108
H/TOT	147	17	9	2	2	0	0	177	351	35	13	7	2	1	0	409
09:00	24	6	2	0	1	0	0	33	46	5	6	1	0	0	0	58
09:15	19	2	1	0	1	0	0	23	47	5	6	2	0	0	0	60
HH/TOT	43	8	3	0	2	0	0	56	93	10	12	3	0	0	0	118
P/TOT	219	32	15	4	4	0	0	274	563	52	36	14	3	1	0	669

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	70	7	1	0	0	0	0	78	84	9	0	3	1	0	0	97
16:45	65	7	1	0	0	0	0	73	70	11	4	2	0	0	0	87
H/TOT	135	14	2	0	0	0	0	151	154	20	4	5	1	0	0	184
17:00	79	4	1	0	0	0	1	85	90	9	5	3	0	1	0	108
17:15	62	2	1	0	1	0	0	66	71	10	4	2	0	0	0	87
17:30	45	1	1	2	0	0	0	49	60	8	2	1	0	0	0	71
17:45	52	6	0	0	0	0	0	58	64	4	1	4	0	0	0	73
H/TOT	238	13	3	2	1	0	1	258	285	31	12	10	0	1	0	339
18:00	50	3	0	0	0	0	0	53	79	2	1	2	0	0	0	84
18:15	43	4	0	0	0	0	0	47	50	4	3	0	0	0	0	57
HH/TOT	93	7	0	0	0	0	0	100	129	6	4	2	0	0	0	141
P/TOT	466	34	5	2	1	0	1	509	568	57	20	17	1	1	0	664

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	A to B								B to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HH/TOT	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	2	0	0	0	0	0	2	1	2	0	0	0	0	0	3
08:45	0	1	0	0	0	0	0	1	2	3	0	0	0	0	0	5
H/TOT	0	3	0	0	0	0	0	3	3	5	0	0	0	0	0	8
09:00	1	0	0	0	0	0	0	1	6	0	1	0	0	0	0	7
09:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
HH/TOT	1	0	0	0	0	0	0	1	7	1	1	0	0	0	0	9
P/TOT	2	3	0	0	0	0	0	5	13	6	1	0	0	0	0	20

	A to B								B to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	3
H/TOT	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	3
17:00	1	0	0	0	0	0	0	1	3	1	0	0	0	0	0	4
17:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	6	1	0	0	0	0	0	7
18:00	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
18:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
HH/TOT	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
P/TOT	4	0	0	0	0	0	0	4	17	3	0	0	0	0	0	20

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	B to D								B to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	16	4	0	0	0	0	0	20	7	2	0	0	0	0	0	9
07:45	16	3	1	0	0	0	0	20	8	1	0	0	2	0	0	11
HH/TOT	32	7	1	0	0	0	0	40	15	3	0	0	2	0	0	20
08:00	15	6	1	0	0	0	0	22	5	0	0	0	1	0	0	6
08:15	13	0	0	0	0	0	0	13	11	0	0	0	0	0	0	11
08:30	22	4	0	0	0	0	0	26	11	4	0	0	1	0	0	16
08:45	22	1	1	0	0	0	0	24	7	3	0	0	2	0	0	12
H/TOT	72	11	2	0	0	0	0	85	34	7	0	0	4	0	0	45
09:00	28	1	2	0	0	0	0	31	10	2	0	0	0	0	0	12
09:15	16	2	1	0	1	0	0	20	10	0	0	0	1	0	0	11
HH/TOT	44	3	3	0	1	0	0	51	20	2	0	0	1	0	0	23
P/TOT	148	21	6	0	1	0	0	176	69	12	0	0	7	0	0	88

	B to D								B to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	18	2	0	0	0	0	0	20	6	0	0	1	1	0	0	8
16:45	17	1	0	0	0	0	0	18	10	1	0	0	1	0	0	12
H/TOT	35	3	0	0	0	0	0	38	16	1	0	1	2	0	0	20
17:00	18	2	0	0	0	0	0	20	6	1	0	0	0	0	0	7
17:15	28	2	0	0	0	0	0	30	5	0	0	0	2	0	0	7
17:30	27	4	0	0	0	0	0	31	5	0	0	0	0	0	0	5
17:45	27	1	0	0	0	0	0	28	10	1	0	0	1	0	0	12
H/TOT	100	9	0	0	0	0	0	109	26	2	0	0	3	0	0	31
18:00	18	2	0	0	1	0	0	21	13	0	0	0	1	0	0	14
18:15	15	1	0	0	0	0	0	16	14	0	0	0	1	0	0	15
HH/TOT	33	3	0	0	1	0	0	37	27	0	0	0	2	0	0	29
P/TOT	168	15	0	0	1	0	0	184	69	3	0	1	7	0	0	80

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	C to B								C to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	3	0	0	0	1	0	0	4	75	14	2	1	0	1	0	93
07:45	8	0	0	0	2	0	0	10	91	10	5	0	0	0	1	107
HH/TOT	11	0	0	0	3	0	0	14	166	24	7	1	0	1	1	200
08:00	2	1	0	0	0	0	0	3	107	5	3	2	1	0	0	118
08:15	8	2	0	0	0	0	0	10	100	11	4	2	0	0	0	117
08:30	13	0	1	0	2	0	0	16	72	9	3	3	2	0	0	89
08:45	9	1	0	0	0	0	0	10	80	10	3	1	0	0	0	94
H/TOT	32	4	1	0	2	0	0	39	359	35	13	8	3	0	0	418
09:00	6	3	1	0	1	0	0	11	46	6	6	1	0	0	0	59
09:15	12	0	0	0	0	0	0	12	45	3	2	8	0	0	0	58
HH/TOT	18	3	1	0	1	0	0	23	91	9	8	9	0	0	0	117
P/TOT	61	7	2	0	6	0	0	76	616	68	28	18	3	1	1	735

	C to B								C to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	16	2	0	0	1	0	0	19	56	7	3	0	0	0	0	66
16:45	16	0	0	0	1	0	0	17	56	8	0	1	0	1	1	67
H/TOT	32	2	0	0	2	0	0	36	112	15	3	1	0	1	1	133
17:00	12	2	0	0	1	0	0	15	80	2	3	0	0	0	0	85
17:15	14	1	0	0	0	1	0	16	85	0	1	0	0	0	0	86
17:30	20	1	0	0	1	0	0	22	78	6	2	0	0	0	1	87
17:45	14	1	0	0	1	0	0	16	58	2	4	1	0	1	0	66
H/TOT	60	5	0	0	3	1	0	69	301	10	10	1	0	1	1	324
18:00	13	0	0	0	1	1	0	15	56	5	3	1	0	1	0	66
18:15	14	0	0	0	0	0	0	14	46	4	1	1	0	0	0	52
HH/TOT	27	0	0	0	1	1	0	29	102	9	4	2	0	1	0	118
P/TOT	119	7	0	0	6	2	0	134	515	34	17	4	0	3	2	575

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	C to D								D to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	11	1	0	0	1	0	0	13	38	4	0	0	1	0	0	43
07:45	18	1	0	0	2	0	0	21	39	3	1	0	0	0	0	43
HH/TOT	29	2	0	0	3	0	0	34	77	7	1	0	1	0	0	86
08:00	16	2	0	0	0	0	0	18	38	3	3	0	0	0	0	44
08:15	25	3	1	0	1	0	0	30	40	3	0	0	0	0	0	43
08:30	24	5	0	0	0	0	0	29	43	1	0	0	1	1	0	46
08:45	27	1	0	0	0	0	0	28	49	2	0	0	0	0	0	51
H/TOT	92	11	1	0	1	0	0	105	170	9	3	0	1	1	0	184
09:00	31	2	1	0	0	0	0	34	53	6	1	0	1	0	0	61
09:15	36	2	1	0	1	0	0	40	38	6	2	0	1	0	0	47
HH/TOT	67	4	2	0	1	0	0	74	91	12	3	0	2	0	0	108
P/TOT	188	17	3	0	5	0	0	213	338	28	7	0	4	1	0	378

	C to D								D to C							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	37	7	0	0	1	0	0	45	46	2	0	0	0	0	0	48
16:45	47	4	0	0	1	0	0	52	33	0	0	0	1	0	0	34
H/TOT	84	11	0	0	2	0	0	97	79	2	0	0	1	0	0	82
17:00	57	3	0	0	0	0	0	60	36	0	1	0	1	0	0	38
17:15	58	2	0	0	1	0	0	61	37	2	0	0	0	0	0	39
17:30	62	7	0	0	2	0	0	71	49	2	0	0	0	0	0	51
17:45	69	0	0	0	0	0	0	69	37	1	0	0	1	0	0	39
H/TOT	246	12	0	0	3	0	0	261	159	5	1	0	2	0	0	167
18:00	58	2	0	0	0	2	0	62	39	5	0	0	0	2	0	46
18:15	37	1	0	0	1	0	0	39	50	1	0	0	1	0	0	52
HH/TOT	95	3	0	0	1	2	0	101	89	6	0	0	1	2	0	98
P/TOT	425	26	0	0	6	2	0	459	327	13	1	0	4	2	0	347

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	D to B								D to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	10	3	0	0	1	0	0	14	43	1	1	0	0	0	0	45
07:45	20	1	1	0	2	0	0	24	41	4	0	2	0	0	0	47
HH/TOT	30	4	1	0	3	0	0	38	84	5	1	2	0	0	0	92
08:00	17	1	0	0	0	0	0	18	39	5	1	0	2	0	0	47
08:15	12	3	0	0	0	0	0	15	42	3	0	0	0	0	0	45
08:30	12	0	0	0	0	0	0	12	33	2	1	1	2	0	0	39
08:45	12	3	0	0	0	0	0	15	29	3	2	0	1	1	0	36
H/TOT	53	7	0	0	0	0	0	60	143	13	4	1	5	1	0	167
09:00	25	1	0	0	0	0	0	26	31	3	1	0	0	0	0	35
09:15	15	1	0	0	0	0	0	16	13	0	0	0	0	0	0	13
HH/TOT	40	2	0	0	0	0	0	42	44	3	1	0	0	0	0	48
P/TOT	123	13	1	0	3	0	0	140	271	21	6	3	5	1	0	307

	D to B								D to A							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	27	3	0	0	0	0	0	30	16	5	2	0	0	0	0	23
16:45	22	0	0	0	0	0	0	22	13	3	0	0	0	0	0	16
H/TOT	49	3	0	0	0	0	0	52	29	8	2	0	0	0	0	39
17:00	17	3	0	0	0	0	0	20	13	0	0	0	0	0	0	13
17:15	21	3	0	0	0	0	0	24	15	2	0	0	0	0	0	17
17:30	25	7	0	0	0	0	1	33	11	2	0	0	0	0	0	13
17:45	23	2	0	0	0	0	0	25	15	1	0	0	0	0	0	16
H/TOT	86	15	0	0	0	0	1	102	54	5	0	0	0	0	0	59
18:00	19	2	0	0	0	0	0	21	26	0	0	0	0	0	0	26
18:15	20	1	0	0	0	0	0	21	11	4	0	0	0	0	0	15
HH/TOT	39	3	0	0	0	0	0	42	37	4	0	0	0	0	0	41
P/TOT	174	21	0	0	0	0	1	196	120	17	2	0	0	0	0	139

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	121	15	3	1	0	1	0	141	75	11	8	3	1	0	0	98
07:45	132	14	5	2	0	0	1	154	74	3	6	3	0	0	0	86
HH/TOT	253	29	8	3	0	1	1	295	149	14	14	6	1	0	0	184
08:00	146	10	4	2	3	0	0	165	89	15	5	2	1	0	0	112
08:15	142	14	4	2	0	0	0	162	127	11	5	3	0	0	0	146
08:30	106	13	4	4	4	0	0	131	151	17	8	2	0	1	0	179
08:45	111	16	5	1	1	1	0	135	131	12	4	2	3	0	0	152
H/TOT	505	53	17	9	8	1	0	593	498	55	22	9	4	1	0	589
09:00	83	9	8	1	0	0	0	101	71	11	8	1	1	0	0	92
09:15	59	4	2	8	0	0	0	73	66	7	7	2	1	0	0	83
HH/TOT	142	13	10	9	0	0	0	174	137	18	15	3	2	0	0	175
P/TOT	900	95	35	21	8	2	1	1062	784	87	51	18	7	1	0	948

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	72	12	5	0	0	0	0	89	154	16	1	3	1	0	0	175
16:45	71	12	0	1	0	1	1	86	137	18	5	2	0	0	0	162
H/TOT	143	24	5	1	0	1	1	175	291	34	6	5	1	0	0	337
17:00	96	3	3	0	0	0	0	102	170	13	6	3	0	1	1	194
17:15	102	2	1	0	0	0	0	105	133	12	5	2	1	0	0	153
17:30	90	8	2	0	0	0	1	101	105	9	3	3	0	0	0	120
17:45	73	3	4	1	0	1	0	82	117	10	1	4	0	0	0	132
H/TOT	361	16	10	1	0	1	1	390	525	44	15	12	1	1	1	599
18:00	88	6	3	1	0	1	0	99	129	5	1	2	0	0	0	137
18:15	60	8	1	1	0	0	0	70	93	8	3	0	0	0	0	104
H/TOT	148	14	4	2	0	1	0	169	222	13	4	2	0	0	0	241
P/TOT	652	54	19	4	0	3	2	734	1038	91	25	19	2	1	1	1177

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	14	3	0	0	2	0	0	19	26	6	0	0	0	0	0	32
07:45	28	1	1	0	4	0	0	34	24	4	1	0	2	0	0	31
HH/TOT	42	4	1	0	6	0	0	53	50	10	1	0	2	0	0	63
08:00	19	2	0	0	0	0	0	21	20	6	1	0	1	0	0	28
08:15	20	5	0	0	0	0	0	25	24	0	0	0	0	0	0	24
08:30	25	2	1	0	2	0	0	30	34	10	0	0	1	0	0	45
08:45	21	5	0	0	0	0	0	26	31	7	1	0	2	0	0	41
H/TOT	85	14	1	0	2	0	0	102	109	23	2	0	4	0	0	138
09:00	32	4	1	0	1	0	0	38	44	3	3	0	0	0	0	50
09:15	27	1	0	0	0	0	0	28	27	3	1	0	2	0	0	33
HH/TOT	59	5	1	0	1	0	0	66	71	6	4	0	2	0	0	83
P/TOT	186	23	3	0	9	0	0	221	230	39	7	0	8	0	0	284

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	43	5	0	0	1	0	0	49	24	2	0	1	1	0	0	28
16:45	40	0	0	0	1	0	0	41	29	3	0	0	1	0	0	33
H/TOT	83	5	0	0	2	0	0	90	53	5	0	1	2	0	0	61
17:00	30	5	0	0	1	0	0	36	27	4	0	0	0	0	0	31
17:15	35	4	0	0	0	1	0	40	35	2	0	0	2	0	0	39
17:30	45	8	0	0	1	0	1	55	33	4	0	0	0	0	0	37
17:45	38	3	0	0	1	0	0	42	37	2	0	0	1	0	0	40
H/TOT	148	20	0	0	3	1	1	173	132	12	0	0	3	0	0	147
18:00	32	2	0	0	1	1	0	36	37	3	0	0	2	0	0	42
18:15	34	1	0	0	0	0	0	35	32	1	0	0	1	0	0	34
HH/TOT	66	3	0	0	1	1	0	71	69	4	0	0	3	0	0	76
P/TOT	297	28	0	0	6	2	1	334	254	21	0	1	8	0	0	284

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	100	13	6	2	2	0	0	123	89	15	2	1	2	1	0	110
07:45	111	4	6	2	2	0	0	125	117	11	5	0	4	0	1	138
HH/TOT	211	17	12	4	4	0	0	248	206	26	7	1	6	1	1	248
08:00	115	14	7	2	1	0	0	139	125	8	3	2	1	0	0	139
08:15	142	9	3	1	0	0	0	155	133	16	5	2	1	0	0	157
08:30	151	13	3	2	2	2	0	173	109	14	4	3	4	0	0	134
08:45	147	15	3	2	4	0	0	171	116	12	3	1	0	0	0	132
H/TOT	555	51	16	7	7	2	0	638	483	50	15	8	6	0	0	562
09:00	109	13	7	1	1	0	0	131	83	11	8	1	1	0	0	104
09:15	95	11	8	2	2	0	0	118	93	5	3	8	1	0	0	110
HH/TOT	204	24	15	3	3	0	0	249	176	16	11	9	2	0	0	214
P/TOT	970	92	43	14	14	2	0	1135	865	92	33	18	14	1	1	1024

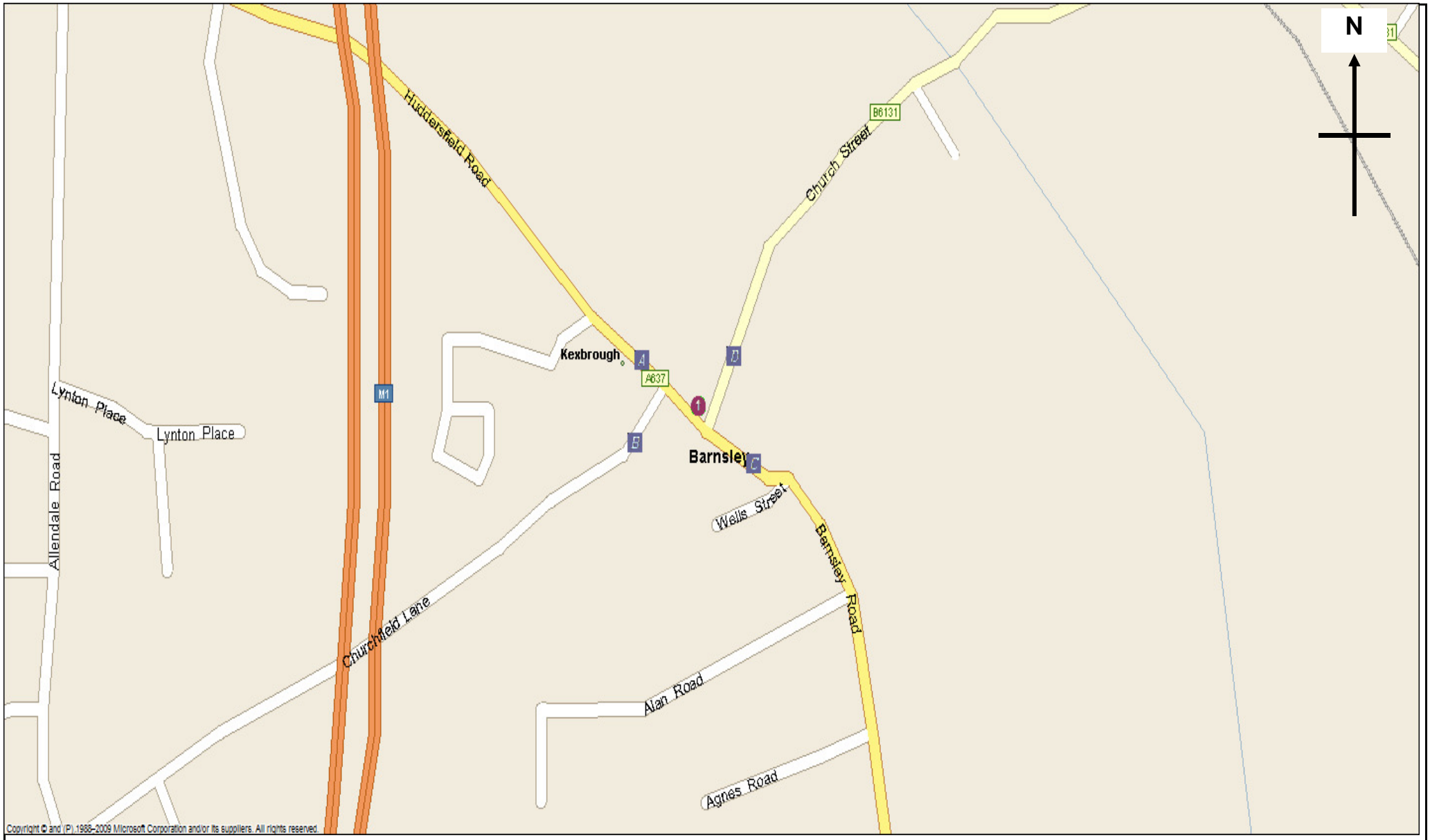
	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV 1**	**OGV 2**	**PSV**	**MCL**	**PCL**	**TOT**
16:30	136	11	0	4	2	0	0	153	109	16	3	0	2	0	0	130
16:45	113	12	4	2	2	0	0	133	119	12	0	1	2	1	1	136
H/TOT	249	23	4	6	4	0	0	286	228	28	3	1	4	1	1	266
17:00	132	10	6	3	1	1	0	153	149	7	3	0	1	0	0	160
17:15	113	12	4	2	2	0	0	133	157	3	1	0	1	1	0	163
17:30	114	10	2	1	0	0	0	127	160	14	2	0	3	0	1	180
17:45	111	6	1	4	2	0	0	124	141	3	4	1	1	1	0	151
H/TOT	470	38	13	10	5	1	0	537	607	27	10	1	6	2	1	654
18:00	131	7	1	2	1	2	0	144	127	7	3	1	1	4	0	143
18:15	114	5	3	0	2	0	0	124	97	5	1	1	1	0	0	105
HH/TOT	245	12	4	2	3	2	0	268	224	12	4	2	2	4	0	248
P/TOT	964	73	21	18	12	3	0	1091	1059	67	17	4	12	7	2	1168

SITE: 1 DATE: 08/12/2016

LOCATION: A637 Huddersfield Rd/Barnsley Rd/Churchfield Lane/B6131 Church St DAY: Thursday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
07:30	46	9	2	1	1	0	0	59	91	8	1	0	2	0	0	102
07:45	44	7	2	1	2	0	0	56	100	8	2	2	2	0	0	114
HH/TOT	90	16	4	2	3	0	0	115	191	16	3	2	4	0	0	216
08:00	48	12	2	0	1	0	0	63	94	9	4	0	2	0	0	109
08:15	74	8	3	2	1	0	0	88	94	9	0	0	0	0	0	103
08:30	100	16	5	0	0	0	0	121	88	3	1	1	3	1	0	97
08:45	89	3	2	0	1	0	0	95	90	8	2	0	1	1	0	102
H/TOT	311	39	12	2	3	0	0	367	366	29	7	1	6	2	0	411
09:00	83	9	5	0	1	0	0	98	109	10	2	0	1	0	0	122
09:15	71	6	3	0	3	0	0	83	66	7	2	0	1	0	0	76
HH/TOT	154	15	8	0	4	0	0	181	175	17	4	0	2	0	0	198
P/TOT	555	70	24	4	10	0	0	663	732	62	14	3	12	2	0	825

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT	CAR	LGV	OGV 1	OGV 2	PSV	MCL	PCL	TOT
16:30	125	16	1	0	1	0	0	143	89	10	2	0	0	0	0	101
16:45	129	12	1	0	1	0	0	143	68	3	0	0	1	0	0	72
H/TOT	254	28	2	0	2	0	0	286	157	13	2	0	1	0	0	173
17:00	154	9	1	0	0	0	1	165	66	3	1	0	1	0	0	71
17:15	148	6	1	0	2	0	0	157	73	7	0	0	0	0	0	80
17:30	134	12	1	2	2	0	0	151	85	11	0	0	0	0	1	97
17:45	148	7	0	0	0	0	0	155	75	4	0	0	1	0	0	80
H/TOT	584	34	3	2	4	0	1	628	299	25	1	0	2	0	1	328
18:00	126	7	0	0	1	2	0	136	84	7	0	0	0	2	0	93
18:15	95	6	0	0	1	0	0	102	81	6	0	0	1	0	0	88
HH/TOT	221	13	0	0	2	2	0	238	165	13	0	0	1	2	0	181
P/TOT	1059	75	5	2	8	2	1	1152	621	51	3	0	4	2	1	682



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 1 - A637 Huddersfield Rd/Barnsley Rd/Churchfield Rd/B6131 Church Street	**Project No:**	7009	**Drawing No:**	7009/01	**Drawn By:**	CW
	Survey Date:	Thursday 8th December 2016	**Project Name:**	DARTON				
	Survey Times:	0730 - 0930 / 1630 - 1830	**Drawing Title:**	Site Layout and Observed Movements				

APPENDIX D

Site Layout Plan



Site Name: Bloomhouse Lane Darton		PHASE I					Date: 2017/07/12	
Drawing No								
HOUSE TYPE	Beds	NUMBER	SQ.FEET	TOTAL SQ FEET	SQ. METRES	TOTAL SQ METRES	%	plot nos
Cranford	2	52	748	38896	69.49	3613.53	24.3%	
Langley	3	21	732	15372	68.00	1428.09	9.8%	
Birch	3	44	806	35464	74.88	3294.69	20.6%	
Davenham	4	24	1264	30336	117.43	2818.28	11.2%	
Banbury	4	32	1354	43328	125.79	4025.27	15.0%	
Stretton	5	4	1693	6772	157.28	629.13	1.9%	
Bowdon	5	5	1880	9400	174.66	873.28	2.3%	
Latchford	5	6	1790	10740	166.30	997.77	2.8%	
Hollin	4	7	1335	9345	124.02	868.17	3.3%	
Bayswater	4	19	1452	27588	134.89	2562.99	8.9%	
TOTALS:		214		227241		21111	100%	

Planning Aplication Area:	9.1	Hectares
POS	1.365	Hectars

Revisions

NOTE
For landscape proposal please refer to Spawforths Landscape proposal.

For the highways proposal please refer to Dudleys Structural & Civil Consultant and Sanderson Associates documentation

For the drainage proposal please refer to Dudleys Structural & Civil Consultant documentation

Planning Application Boundary
9.1 ha - Area

REV A Revised by MB 2016-12-15
Layout revised to accommodate preapplication comments.
REV B Revised by MB 2017-01-17
House mix revised to Clients comments.
REV C Revised by MB 2017-02-20
Terrace house to the entrance replaced with two detached dwellings to clients instruction.
REV D Revised by MB 2017-06-01
The layout revised in lane with contract layout.
REV E Revised by MB 2017-06-01
The layout revised in lane with contract layout. Schedule of accommodation added.
REV F Revised by MB 2017-06-02
The layout revised in lane with highways and client comments.
REV H Revised by MB 2017-06-21
The layout revised in lane with highways comments.
REV J Revised by MB 2017-06-29
The layout revised in lane with highways comments.
REV K Revised by MB 2017-07-13
Drawing name amended. Layout updated.
REV L Revised by MB 2017-07-14
Schedule of accommodation added.

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T: 01924 873873 F: 01924 870777 www.spawforths.co.uk mail@spawforths.co.uk

Client Name: Jones Homes

Project No	Project Title			
3967	Bloomhouse Lane, Darton			
Drawn By	Reviewed By	Scale	Discipline	Date
MB	GW	1000	Architecture	February 16
Drawing No.	Drawing Title			Revision
0000-030-05	Proposed Site Plan			L

File Path

Important notice:
Do not scale off this drawing. Critical dimensions should be checked on site prior to works commencing. Dimensional conflicts should be brought to the company's attention as soon as they become apparent. Failure to do so could render the contractor liable for subsequent losses. Copyright in this drawing and any work executed from this drawing remains the property of Spawforths.

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Appendix E

TRICS Output - Average Multi Modal Data

Calculation Reference: AUDIT-109307-170712-0705

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	2 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	4 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	2 days
	NY	NORTH YORKSHIRE	6 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	PS	POWYS	2 days
11	SCOTLAND		
	AG	ANGUS	1 days
	FA	FALKIRK	2 days
	HI	HIGHLAND	2 days
	PK	PERTH & KINROSS	1 days

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

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of dwellings
Actual Range:	6 to 432 (units:)
Range Selected by User:	75 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/09 to 29/11/16

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	11 days
Tuesday	10 days
Wednesday	10 days
Thursday	9 days
Friday	9 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	49 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	25
Edge of Town	18

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	43
No Sub Category	6

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C1	1 days
C3	47 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	6 days
5,001 to 10,000	12 days
10,001 to 15,000	12 days
15,001 to 20,000	7 days
20,001 to 25,000	5 days
25,001 to 50,000	7 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	7 days
50,001 to 75,000	5 days
75,001 to 100,000	12 days
100,001 to 125,000	3 days
125,001 to 250,000	7 days
250,001 to 500,000	6 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	16 days
1.1 to 1.5	32 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days
No	45 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	49 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 AG-03-A-01 BUNGALOWS/DET. ANGUS
KEPTIE ROAD

ARBROATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

2 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

3 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

4 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

5 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
HURDSFIELD
MACCLESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY 24/11/14 Survey Type: MANUAL

6 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
CASTLE LANE WEST
BOURNEMOUTH
Edge of Town
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 24/03/14 Survey Type: MANUAL

7 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD

TORQUAY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY 25/09/15 Survey Type: MANUAL

9 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY 28/09/15 Survey Type: MANUAL

10 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

11 FA-03-A-01 SEMI-DETACHED/TERRACED FALKIRK
MANDELA AVENUE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: THURSDAY 30/05/13 Survey Type: MANUAL

12 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY 29/05/13 Survey Type: MANUAL

13 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

14 HC-03-A-18 HOUSES & FLATS HAMPSHIRE
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 62
Survey date: TUESDAY 29/11/16 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 HI-03-A-13 HOUSING HIGHLAND
KINGSMILLS ROAD

INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY 21/05/09 Survey Type: MANUAL

16 HI-03-A-14 SEMI-DETACHED & TERRACED HIGHLAND
KING BRUDE ROAD
SCORGUIE
INVERNESS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 40
Survey date: WEDNESDAY 23/03/16 Survey Type: MANUAL

17 LC-03-A-30 SEMI-DETACHED LANCASHIRE
WATSON ROAD

BLACKPOOL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 24
Survey date: FRIDAY 14/06/13 Survey Type: MANUAL

18 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

19 LN-03-A-04 DETACHED & SEMI-DETACHED LINCOLNSHIRE
EGERTON ROAD

LINCOLN
Edge of Town Centre
Residential Zone
Total Number of dwellings: 30
Survey date: MONDAY 29/06/15 Survey Type: MANUAL

20 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

21 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 NE-03-A-03 PRIVATE HOUSES NORTH EAST LINCOLNSHIRE
STATION ROAD

SCUNTHORPE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY 20/05/14 Survey Type: MANUAL

23 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

24 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY 22/10/12 Survey Type: MANUAL

25 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY

THETFORD
Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

26 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

27 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET

YORK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

28 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

29 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY 17/09/13 Survey Type: MANUAL

30 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

31 NY-03-A-12 TOWN HOUSES NORTH YORKSHIRE
RACECOURSE LANE

NORTHALLERTON
Edge of Town Centre
Residential Zone
Total Number of dwellings: 47
Survey date: TUESDAY 27/09/16 Survey Type: MANUAL

32 PK-03-A-01 DETAC. & BUNGALOWS PERTH & KINROSS
TULLYLUMB TERRACE
GORNHILL
PERTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

33 PS-03-A-01 MIXED HOUSES POWYS
BRYN GLAS

WELSHPOOL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

34 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD

WELSHPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

35 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD

BYFLEET
Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

36 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 Survey Type: MANUAL

37 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

38 SH-03-A-03 DETATCHED SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

39 SH-03-A-04 TERRACED SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

40 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
SUTTON HILL
TELFORD
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY 24/10/13 Survey Type: MANUAL

41 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD

SHREWSBURY
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

42 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
NORTHFIELD
BRIDGWATER
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

43 ST-03-A-06 SEMI-DET. & TERRACED STAFFORDSHIRE
STANFORD ROAD
BLAKENHALL
WOLVERHAMPTON
Edge of Town Centre
No Sub Category
Total Number of dwellings: 17
Survey date: FRIDAY 09/05/14 Survey Type: MANUAL

44 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
BENTLEY RISE
DONCASTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

45 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

46 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

47 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
POTTERS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY 17/10/13 Survey Type: MANUAL

48 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
BROADBRIDGE HEATH
HORSHAM
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY 11/12/14 Survey Type: MANUAL

49 WS-03-A-05 TERRACED & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD

SHOREHAM BY SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 48
Survey date: WEDNESDAY 18/04/12 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.064	49	54	0.260	49	54	0.324
08:00 - 09:00	49	54	0.140	49	54	0.356	49	54	0.496
09:00 - 10:00	49	54	0.142	49	54	0.158	49	54	0.300
10:00 - 11:00	49	54	0.133	49	54	0.153	49	54	0.286
11:00 - 12:00	49	54	0.134	49	54	0.147	49	54	0.281
12:00 - 13:00	49	54	0.161	49	54	0.155	49	54	0.316
13:00 - 14:00	49	54	0.155	49	54	0.157	49	54	0.312
14:00 - 15:00	49	54	0.153	49	54	0.182	49	54	0.335
15:00 - 16:00	49	54	0.236	49	54	0.171	49	54	0.407
16:00 - 17:00	49	54	0.267	49	54	0.168	49	54	0.435
17:00 - 18:00	49	54	0.313	49	54	0.174	49	54	0.487
18:00 - 19:00	49	54	0.217	49	54	0.161	49	54	0.378
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.115			2.242			4.357

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.003	49	54	0.016	49	54	0.019
08:00 - 09:00	49	54	0.003	49	54	0.017	49	54	0.020
09:00 - 10:00	49	54	0.001	49	54	0.005	49	54	0.006
10:00 - 11:00	49	54	0.004	49	54	0.009	49	54	0.013
11:00 - 12:00	49	54	0.003	49	54	0.003	49	54	0.006
12:00 - 13:00	49	54	0.007	49	54	0.005	49	54	0.012
13:00 - 14:00	49	54	0.005	49	54	0.003	49	54	0.008
14:00 - 15:00	49	54	0.004	49	54	0.005	49	54	0.009
15:00 - 16:00	49	54	0.014	49	54	0.003	49	54	0.017
16:00 - 17:00	49	54	0.011	49	54	0.003	49	54	0.014
17:00 - 18:00	49	54	0.016	49	54	0.006	49	54	0.022
18:00 - 19:00	49	54	0.007	49	54	0.004	49	54	0.011
19:00 - 20:00	1	7	0.000	1	7	0.000	1	7	0.000
20:00 - 21:00	1	7	0.000	1	7	0.000	1	7	0.000
21:00 - 22:00	1	7	0.000	1	7	0.000	1	7	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.078			0.079			0.157

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.076	49	54	0.317	49	54	0.393
08:00 - 09:00	49	54	0.172	49	54	0.511	49	54	0.683
09:00 - 10:00	49	54	0.166	49	54	0.201	49	54	0.367
10:00 - 11:00	49	54	0.164	49	54	0.197	49	54	0.361
11:00 - 12:00	49	54	0.169	49	54	0.190	49	54	0.359
12:00 - 13:00	49	54	0.204	49	54	0.195	49	54	0.399
13:00 - 14:00	49	54	0.194	49	54	0.203	49	54	0.397
14:00 - 15:00	49	54	0.193	49	54	0.234	49	54	0.427
15:00 - 16:00	49	54	0.359	49	54	0.218	49	54	0.577
16:00 - 17:00	49	54	0.377	49	54	0.226	49	54	0.603
17:00 - 18:00	49	54	0.413	49	54	0.225	49	54	0.638
18:00 - 19:00	49	54	0.274	49	54	0.220	49	54	0.494
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.761			2.937			5.698

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.024	49	54	0.065	49	54	0.089
08:00 - 09:00	49	54	0.044	49	54	0.176	49	54	0.220
09:00 - 10:00	49	54	0.049	49	54	0.063	49	54	0.112
10:00 - 11:00	49	54	0.049	49	54	0.057	49	54	0.106
11:00 - 12:00	49	54	0.040	49	54	0.044	49	54	0.084
12:00 - 13:00	49	54	0.051	49	54	0.044	49	54	0.095
13:00 - 14:00	49	54	0.043	49	54	0.059	49	54	0.102
14:00 - 15:00	49	54	0.060	49	54	0.066	49	54	0.126
15:00 - 16:00	49	54	0.131	49	54	0.083	49	54	0.214
16:00 - 17:00	49	54	0.107	49	54	0.058	49	54	0.165
17:00 - 18:00	49	54	0.100	49	54	0.046	49	54	0.146
18:00 - 19:00	49	54	0.063	49	54	0.045	49	54	0.108
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.761			0.806			1.567

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.000	49	54	0.012	49	54	0.012
08:00 - 09:00	49	54	0.001	49	54	0.009	49	54	0.010
09:00 - 10:00	49	54	0.001	49	54	0.005	49	54	0.006
10:00 - 11:00	49	54	0.002	49	54	0.004	49	54	0.006
11:00 - 12:00	49	54	0.003	49	54	0.003	49	54	0.006
12:00 - 13:00	49	54	0.006	49	54	0.006	49	54	0.012
13:00 - 14:00	49	54	0.003	49	54	0.001	49	54	0.004
14:00 - 15:00	49	54	0.005	49	54	0.004	49	54	0.009
15:00 - 16:00	49	54	0.007	49	54	0.005	49	54	0.012
16:00 - 17:00	49	54	0.008	49	54	0.005	49	54	0.013
17:00 - 18:00	49	54	0.011	49	54	0.002	49	54	0.013
18:00 - 19:00	49	54	0.010	49	54	0.001	49	54	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.057			0.114

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	49	54	0.103	49	54	0.410	49	54	0.513
08:00 - 09:00	49	54	0.220	49	54	0.714	49	54	0.934
09:00 - 10:00	49	54	0.218	49	54	0.274	49	54	0.492
10:00 - 11:00	49	54	0.218	49	54	0.267	49	54	0.485
11:00 - 12:00	49	54	0.215	49	54	0.241	49	54	0.456
12:00 - 13:00	49	54	0.267	49	54	0.250	49	54	0.517
13:00 - 14:00	49	54	0.244	49	54	0.265	49	54	0.509
14:00 - 15:00	49	54	0.263	49	54	0.309	49	54	0.572
15:00 - 16:00	49	54	0.511	49	54	0.309	49	54	0.820
16:00 - 17:00	49	54	0.504	49	54	0.293	49	54	0.797
17:00 - 18:00	49	54	0.540	49	54	0.278	49	54	0.818
18:00 - 19:00	49	54	0.354	49	54	0.270	49	54	0.624
19:00 - 20:00	1	7	0.000	1	7	0.000	1	7	0.000
20:00 - 21:00	1	7	0.000	1	7	0.000	1	7	0.000
21:00 - 22:00	1	7	0.000	1	7	0.000	1	7	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.657			3.880			7.537

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/09 - 29/11/16
Number of weekdays (Monday-Friday):	49
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX F

TRICS Output - 85th percentile Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	2 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
11	SCOTLAND		
	FA	FALKIRK	1 days

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

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 82 to 432 (units:)
Range Selected by User: 75 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/09 to 25/09/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

2 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY 25/09/15 Survey Type: MANUAL

3 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY 29/05/13 Survey Type: MANUAL

4 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

5 NE-03-A-03 PRIVATE HOUSES NORTH EAST LINCOLNSHIRE
STATION ROAD

SCUNTHORPE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY 20/05/14 Survey Type: MANUAL

6 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY 22/10/12 Survey Type: MANUAL

7 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SH-03-A-04 TERRACED SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

9 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
BROADBRIDGE HEATH
HORSHAM
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY 11/12/14 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

Sanderson Associates (Consulting Engineers) Ltd Jubilee Way Wakefield Licence No: 109307

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00

WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.

15th Percentile = No. 8 DV-03-A-02 Tot: 0.344
85th Percentile = No. 2 CB-03-A-04 Tot: 0.549

Median Values		Mean Values	
Arrivals:	0.144	Arrivals:	0.134
Departures:	0.283	Departures:	0.334
Totals:	0.427	Totals:	0.467

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces
								Arrivals	Departures	Totals	Per Dwelling
1	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.287	0.454	0.741	1.86
2	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.183	0.366	0.549	1.74
3	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	3.50
4	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	2.24
5	NE-03-A-03	PRIVATE HOUSES	SCUNTHORPE	NORTH EAST LINCOLNS	180	Tue	20/05/14	0.144	0.283	0.427	2.68
6	NE-03-A-02	SEMI DETACHED	SCUNTHORPE	NORTH EAST LINCOLNS	432	Mon	12/05/14	0.067	0.354	0.421	1.00
7	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.139	0.278	0.417	2.28
8	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.103	0.241	0.344	2.25
9	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.062	0.280	0.342	1.66

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	2 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
11	SCOTLAND		
	FA	FALKIRK	1 days

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

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 82 to 432 (units:)
Range Selected by User: 75 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/09 to 25/09/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

2 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY 25/09/15 Survey Type: MANUAL

3 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY 29/05/13 Survey Type: MANUAL

4 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

5 NE-03-A-03 PRIVATE HOUSES NORTH EAST LINCOLNSHIRE
STATION ROAD

SCUNTHORPE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY 20/05/14 Survey Type: MANUAL

6 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY 22/10/12 Survey Type: MANUAL

7 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SH-03-A-04 TERRACED SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

9 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
BROADBRIDGE HEATH
HORSHAM
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY 11/12/14 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Ranking Type: TOTALS Time Range: 17:00-18:00

WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.

15th Percentile = No. 8 WS-03-A-04 Tot: 0.371

85th Percentile = No. 2 DV-03-A-02 Tot: 0.621

Median Values		Mean Values	
Arrivals:	0.296	Arrivals:	0.299
Departures:	0.174	Departures:	0.193
Totals:	0.470	Totals:	0.492

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces
								Arrivals	Departures	Totals	Per Dwelling
1	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.463	0.296	0.759	1.86
2	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.388	0.233	0.621	2.25
3	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	1.74
4	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.317	0.224	0.541	1.66
5	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	3.50
6	NE-03-A-02	SEMI DETACHED	SCUNTHORPE	NORTH EAST LINCOLNS	432	Mon	12/05/14	0.257	0.162	0.419	1.00
7	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	2.24
8	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.252	0.119	0.371	2.28
9	NE-03-A-03	PRIVATE HOUSES	SCUNTHORPE	NORTH EAST LINCOLNS	180	Tue	20/05/14	0.128	0.183	0.311	2.68

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

APPENDIX G

PICADY Output – Darton Lane/School Access/Station Road/Sackup Lane

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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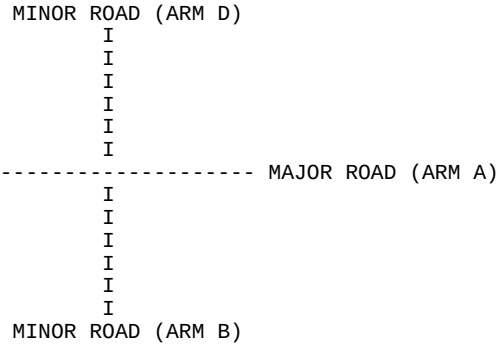
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"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
Station Road - Sackup Lane - Darton Lane - School Access\Station Road - Sackup Lane - Darton Lane - School Access.vpi"
(drive-on-the-left) at 14:48:55 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Station Road - Sackup Lane - Darton Lane - School Access
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Darton Lane
ARM B IS School Access
ARM C IS Station Road
ARM D IS Sackup Lane

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.80 M.	(W) 6.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B)190.00 M.	(VA-D) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 18.0 M.	(VD-A) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.	(VD-C) 30.0 M.
- LANE 1 WIDTH	(WB-C) 3.00 M.	(WD-A) -
- LANE 2 WIDTH	(WB-A) 0.00 M.	(WD-C) -
WIDTH AT 0 M FROM JUNCTION	-	6.00 M.
WIDTH AT 5 M FROM JUNCTION	-	3.75 M.
WIDTH AT 10 M FROM JUNCTION	-	3.50 M.
WIDTH AT 15 M FROM JUNCTION	-	2.75 M.
WIDTH AT 20 M FROM JUNCTION	-	2.75 M.
- LENGTH OF FLARED SECTION	-	DERIVED: 0 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
634.01	0.24	0.09

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
491.33	0.22	0.22	0.22	0.22

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.09	0.14	0.31	0.11

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing

I STREAM C-B STREAM A-B STREAM A-C STREAM A-D I

683.99	0.26	0.26	0.37	

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	
626.08	0.23	0.33	0.23	

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	
491.33	0.22	0.22	0.09	0.31	

	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D			
	0.14	0.14			

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	
491.33	0.22	0.22	0.09	0.31	

	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D			
	0.14	0.14			

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D	
0.00	0.00	0.00	0.00	0.00	

	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B			
	0.00	0.00			

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D	
0.00	0.00	0.00	0.00	0.00	

	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B			
	0.00	0.00			

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2016 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.36	6.54	4.36
ARM B	15.00	45.00	75.00	0.15	0.23	0.15
ARM C	15.00	45.00	75.00	3.75	5.63	3.75
ARM D	15.00	45.00	75.00	1.29	1.93	1.29

Demand set: 2016 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.083	0.851	0.066
		0.0	29.0	297.0	23.0
		(0.0)	(0.0)	(4.4)	(21.7)
	ARM B	0.333	0.000	0.167	0.500
		4.0	0.0	2.0	6.0
		(0.0)	(0.0)	(50.0)	(0.0)
	ARM C	0.693	0.140	0.000	0.167
		208.0	42.0	0.0	50.0
		(7.7)	(0.0)	(0.0)	(6.0)
	ARM D	0.126	0.184	0.689	0.000
		13.0	19.0	71.0	0.0
		(7.7)	(5.3)	(4.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-ACD	0.15	6.52	0.023		0.00	0.02	0.3		0.16
A-BCD	0.45	10.68	0.042		0.00	0.06	0.9		0.10
A-B	0.35								
A-C	3.58								
D-AB	0.30	6.78	0.044		0.00	0.05	0.7		0.15
D-BC	0.99	6.74	0.147		0.00	0.17	2.4		0.17
C-ABD	0.71	12.22	0.058		0.00	0.09	1.4		0.09
C-D	0.59								
C-A	2.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-ACD	0.18	6.24	0.029		0.02	0.03	0.4		0.17
A-BCD	0.59	11.09	0.053		0.06	0.08	1.2		0.10
A-B	0.41								
A-C	4.23								
D-AB	0.36	6.50	0.056		0.05	0.06	0.9		0.16
D-BC	1.18	6.46	0.183		0.17	0.22	3.2		0.19
C-ABD	0.90	12.40	0.072		0.09	0.12	1.9		0.09
C-D	0.70								
C-A	2.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-ACD	0.22	5.84	0.038		0.03	0.04	0.6		0.18
A-BCD	0.85	11.80	0.072		0.08	0.13	1.9		0.09
A-B	0.49								
A-C	5.06								
D-AB	0.45	6.09	0.074		0.06	0.08	1.2		0.18
D-BC	1.44	6.06	0.237		0.22	0.31	4.4		0.22
C-ABD	1.22	12.71	0.096		0.12	0.18	2.7		0.09
C-D	0.83								
C-A	3.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-ACD	0.22	5.83	0.038		0.04	0.04	0.6		0.18
A-BCD	0.85	11.80	0.072		0.13	0.13	1.9		0.09
A-B	0.49								
A-C	5.06								
D-AB	0.45	6.09	0.074		0.08	0.08	1.2		0.18
D-BC	1.44	6.06	0.237		0.31	0.31	4.6		0.22
C-ABD	1.22	12.71	0.096		0.18	0.18	2.7		0.09
C-D	0.83								
C-A	3.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-ACD	0.18	6.23	0.029		0.04	0.03	0.5		0.17
A-BCD	0.59	11.09	0.053		0.13	0.08	1.3		0.10
A-B	0.41								
A-C	4.23								
D-AB	0.36	6.49	0.056		0.08	0.06	0.9		0.16
D-BC	1.18	6.45	0.183		0.31	0.23	3.5		0.19
C-ABD	0.90	12.41	0.072		0.18	0.13	1.9		0.09
C-D	0.70								
C-A	2.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-ACD	0.15	6.52	0.023		0.03	0.02	0.4		0.16
A-BCD	0.46	10.68	0.043		0.08	0.06	0.9		0.10
A-B	0.35								
A-C	3.57								
D-AB	0.30	6.78	0.044		0.06	0.05	0.7		0.15
D-BC	0.99	6.74	0.147		0.23	0.18	2.7		0.17
C-ABD	0.71	12.22	0.058		0.13	0.09	1.4		0.09
C-D	0.59								
C-A	2.46								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.2
08.30	0.2
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-ACD	16.5	11.0	2.7	0.17	2.7	0.17
A-BCD	56.7	37.8	8.1	0.14	8.1	0.14
A-B	37.7	25.1				
A-C	385.9	257.3				
D-AB	33.3	22.2	5.5	0.16	5.5	0.16
D-BC	108.5	72.3	20.9	0.19	20.9	0.19
C-ABD	84.8	56.5	11.9	0.14	11.9	0.14
C-D	63.6	42.4				
C-A	264.5	176.3				
ALL	1051.6	701.1	49.2	0.05	49.2	0.05

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
634.01	0.24	0.09

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
491.33	0.22	0.22	0.22	0.22

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.09	0.14	0.31	0.11

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D
683.99	0.26	0.26	0.37

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
626.08	0.23	0.33	0.23

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
491.33	0.22	0.22	0.09	0.31

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.14	0.14

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
491.33	0.22	0.22	0.09	0.31

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.14	0.14

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2016 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.15	6.23	4.15
ARM B	15.00	45.00	75.00	0.60	0.90	0.60
ARM C	15.00	45.00	75.00	7.36	11.04	7.36
ARM D	15.00	45.00	75.00	1.52	2.29	1.52

Demand set: 2016 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.087	0.846	0.066
		0.0	29.0	281.0	22.0
		(0.0)	(0.0)	(1.1)	(18.2)
	ARM B	0.458	0.000	0.396	0.146
		22.0	0.0	19.0	7.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.715	0.044	0.000	0.241
		421.0	26.0	0.0	142.0
		(2.6)	(0.0)	(0.0)	(0.7)
	ARM D	0.213	0.082	0.705	0.000
		26.0	10.0	86.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-ACD	0.60	7.26	0.083		0.00	0.09	1.3		0.15
A-BCD	0.43	10.18	0.043		0.00	0.06	0.9		0.10
A-B	0.35								
A-C	3.38								
D-AB	0.40	7.11	0.056		0.00	0.06	0.9		0.15
D-BC	1.13	6.34	0.178		0.00	0.21	3.1		0.19
C-ABD	0.58	14.67	0.039		0.00	0.06	0.8		0.07
C-D	1.72								
C-A	5.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-ACD	0.72	6.91	0.104		0.09	0.11	1.7		0.16
A-BCD	0.57	10.47	0.055		0.06	0.08	1.3		0.10
A-B	0.41								
A-C	3.99								
D-AB	0.48	6.71	0.072		0.06	0.08	1.1		0.16
D-BC	1.35	5.91	0.228		0.21	0.29	4.2		0.22
C-ABD	0.83	15.51	0.053		0.06	0.08	1.2		0.07
C-D	2.02								
C-A	5.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-ACD	0.88	6.41	0.137		0.11	0.16	2.3		0.18
A-BCD	0.83	11.00	0.075		0.08	0.13	2.0		0.10
A-B	0.49								
A-C	4.77								
D-AB	0.60	6.14	0.097		0.08	0.11	1.5		0.18
D-BC	1.64	5.32	0.309		0.29	0.44	6.2		0.27
C-ABD	1.19	16.46	0.072		0.08	0.13	1.9		0.07
C-D	2.43								
C-A	7.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-ACD	0.88	6.41	0.138		0.16	0.16	2.4		0.18
A-BCD	0.83	11.00	0.076		0.13	0.14	2.1		0.10
A-B	0.49								
A-C	4.77								
D-AB	0.60	6.14	0.097		0.11	0.11	1.6		0.18
D-BC	1.64	5.32	0.309		0.44	0.44	6.6		0.27
C-ABD	1.19	16.46	0.072		0.13	0.13	1.9		0.07
C-D	2.43								
C-A	7.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-ACD	0.72	6.90	0.104		0.16	0.12	1.8		0.16
A-BCD	0.57	10.47	0.055		0.14	0.09	1.3		0.10
A-B	0.41								
A-C	3.99								
D-AB	0.48	6.70	0.072		0.11	0.08	1.2		0.16
D-BC	1.35	5.91	0.228		0.44	0.30	4.7		0.22
C-ABD	0.83	15.51	0.053		0.13	0.08	1.3		0.07
C-D	2.02								
C-A	5.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-ACD	0.60	7.25	0.083		0.12	0.09	1.4		0.15
A-BCD	0.44	10.18	0.043		0.09	0.06	0.9		0.10
A-B	0.35								
A-C	3.38								
D-AB	0.40	7.10	0.056		0.08	0.06	0.9		0.15
D-BC	1.13	6.33	0.179		0.30	0.22	3.4		0.19
C-ABD	0.58	14.67	0.040		0.08	0.06	0.8		0.07
C-D	1.72								
C-A	5.09								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY occur

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-ACD	66.1	44.0	10.9	0.16	10.9	0.16
A-BCD	55.1	36.7	8.5	0.15	8.5	0.15
A-B	37.6	25.1				
A-C	364.3	242.8				
D-AB	44.3	29.5	7.2	0.16	7.2	0.16
D-BC	123.6	82.4	28.2	0.23	28.2	0.23
C-ABD	77.9	52.0	8.0	0.10	8.0	0.10
C-D	184.8	123.2				
C-A	548.0	365.3				
ALL	1501.7	1001.1	62.8	0.04	62.8	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:49:06 on 13/07/2017]

APPENDIX H

ARCADY Output – Sackup Lane/Darton Lane/Station Road/Proposed Link Road

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 12:09:37 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.30	1.95	1.30
ARM B	15.00	45.00	75.00	4.05	6.08	4.05
ARM C	15.00	45.00	75.00	3.81	5.72	3.81
ARM D	15.00	45.00	75.00	0.24	0.36	0.24

DEMAND SET TITLE: 2017 AM Base

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.308	0.692	0.000
		0.0	32.0	72.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.090	0.000	0.873	0.037
		29.0	0.0	283.0	12.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.167	0.833	0.000	0.000
		51.0	254.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	19.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.30	9.96	0.131	- -	-	0.0	0.1	2.2	-	0.115
ARM B	4.07	14.85	0.274	- -	-	0.0	0.4	5.4	-	0.092
ARM C	3.83	16.22	0.236	- -	-	0.0	0.3	4.5	-	0.080
ARM D	0.24	13.08	0.018	- -	-	0.0	0.0	0.3	-	0.078

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	1.56	9.66	0.161	- - -	0.1	0.2	2.8	-	0.123
ARM B	4.85	14.76	0.329	- - -	0.4	0.5	7.1	-	0.101
ARM C	4.57	16.16	0.283	- - -	0.3	0.4	5.8	-	0.086
ARM D	0.28	12.67	0.022	- - -	0.0	0.0	0.3	-	0.081

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	1.91	9.26	0.206	- - -	0.2	0.3	3.8	-	0.136
ARM B	5.95	14.64	0.406	- - -	0.5	0.7	9.8	-	0.115
ARM C	5.60	16.09	0.348	- - -	0.4	0.5	7.7	-	0.095
ARM D	0.35	12.10	0.029	- - -	0.0	0.0	0.4	-	0.085

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	1.91	9.26	0.206	- - -	0.3	0.3	3.9	-	0.136
ARM B	5.95	14.64	0.406	- - -	0.7	0.7	10.2	-	0.115
ARM C	5.60	16.09	0.348	- - -	0.5	0.5	7.9	-	0.095
ARM D	0.35	12.10	0.029	- - -	0.0	0.0	0.4	-	0.085

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.56	9.66	0.161	- - -	0.3	0.2	3.0	-	0.124
ARM B	4.85	14.76	0.329	- - -	0.7	0.5	7.6	-	0.101
ARM C	4.57	16.16	0.283	- - -	0.5	0.4	6.1	-	0.086
ARM D	0.28	12.66	0.022	- - -	0.0	0.0	0.4	-	0.081

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.30	9.95	0.131	- - -	0.2	0.2	2.3	-	0.116
ARM B	4.07	14.84	0.274	- - -	0.5	0.4	5.8	-	0.093
ARM C	3.83	16.21	0.236	- - -	0.4	0.3	4.8	-	0.081
ARM D	0.24	13.07	0.018	- - -	0.0	0.0	0.3	-	0.078

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	
08.15	0.7	*
08.30	0.7	*
08.45	0.5	
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.5	*
08.30	0.5	*
08.45	0.4	
09.00	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	143.1	95.4	17.9	0.13	17.9	0.13
B	446.0	297.3	46.0	0.10	46.0	0.10
C	419.8	279.9	36.8	0.09	36.8	0.09
D	26.2	17.4	2.1	0.08	2.1	0.08
ALL	1035.1	690.0	102.8	0.10	102.8	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 12:09:52 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 12:19:17 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.54	2.31	1.54
ARM B	15.00	45.00	75.00	3.83	5.74	3.83
ARM C	15.00	45.00	75.00	7.46	11.19	7.46
ARM D	15.00	45.00	75.00	0.34	0.51	0.34

DEMAND SET TITLE: 2017 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.293	0.707	0.000
		0.0	36.0	87.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.837	0.069
		29.0	0.0	256.0	21.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		144.0	453.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	27.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.54	9.28	0.166	- -	-	0.0	0.2	2.9	-	0.129
ARM B	3.84	15.26	0.252	- -	-	0.0	0.3	4.9	-	0.087
ARM C	7.49	16.85	0.445	- -	-	0.0	0.8	11.4	-	0.106
ARM D	0.34	11.43	0.030	- -	-	0.0	0.0	0.4	-	0.090

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	1.84	8.75	0.211	- - -	0.2	0.3	3.8	-	0.145
ARM B	4.58	15.15	0.303	- - -	0.3	0.4	6.3	-	0.095
ARM C	8.94	16.78	0.533	- - -	0.8	1.1	16.2	-	0.127
ARM D	0.40	10.68	0.038	- - -	0.0	0.0	0.6	-	0.097
17.15-17.30									
ARM A	2.26	8.05	0.280	- - -	0.3	0.4	5.6	-	0.172
ARM B	5.62	15.01	0.374	- - -	0.4	0.6	8.6	-	0.106
ARM C	10.96	16.70	0.656	- - -	1.1	1.8	26.2	-	0.171
ARM D	0.50	9.68	0.051	- - -	0.0	0.1	0.8	-	0.109
17.30-17.45									
ARM A	2.26	8.04	0.281	- - -	0.4	0.4	5.8	-	0.173
ARM B	5.62	15.01	0.374	- - -	0.6	0.6	8.9	-	0.106
ARM C	10.96	16.69	0.656	- - -	1.8	1.9	28.0	-	0.174
ARM D	0.50	9.66	0.051	- - -	0.1	0.1	0.8	-	0.109
17.45-18.00									
ARM A	1.84	8.73	0.211	- - -	0.4	0.3	4.2	-	0.146
ARM B	4.58	15.15	0.303	- - -	0.6	0.4	6.7	-	0.095
ARM C	8.94	16.78	0.533	- - -	1.9	1.2	18.2	-	0.129
ARM D	0.40	10.65	0.038	- - -	0.1	0.0	0.6	-	0.098
18.00-18.15									
ARM A	1.54	9.25	0.167	- - -	0.3	0.2	3.1	-	0.130
ARM B	3.84	15.25	0.252	- - -	0.4	0.3	5.2	-	0.088
ARM C	7.49	16.84	0.445	- - -	1.2	0.8	12.6	-	0.108
ARM D	0.34	11.39	0.030	- - -	0.0	0.0	0.5	-	0.090

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.1	*
17.30	1.8	**
17.45	1.9	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	169.3	112.9	25.4	0.15	25.4	0.15
B	421.2	280.8	40.6	0.10	40.6	0.10
C	821.7	547.8	112.5	0.14	112.6	0.14
D	37.2	24.8	3.7	0.10	3.7	0.10
ALL	1449.4	966.3	182.2	0.13	182.3	0.13

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 12:19:25 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 15:50:23 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.30	1.95	1.30
ARM B	15.00	45.00	75.00	4.05	6.08	4.05
ARM C	15.00	45.00	75.00	3.81	5.72	3.81
ARM D	15.00	45.00	75.00	0.24	0.36	0.24

DEMAND SET TITLE: AM Average Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	0.14	0.21	0.14
ARM D	15.00	45.00	75.00	0.65	0.97	0.65

DEMAND SET TITLE: 2017 AM Base

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.308	0.692	0.000
		0.0	32.0	72.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.090	0.000	0.873	0.037
		29.0	0.0	283.0	12.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.167	0.833	0.000	0.000
		51.0	254.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	19.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

DEMAND SET TITLE: AM Average Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.167	0.333	0.500
		0.0	1.0	2.0	3.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	7.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	11.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.154	0.327	0.519	0.000
		8.0	17.0	27.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.38	9.76	0.141	- -	0.0	0.2	2.4	-	0.119
ARM B	4.15	14.68	0.283	- -	0.0	0.4	5.7	-	0.095
ARM C	3.97	16.19	0.245	- -	0.0	0.3	4.7	-	0.082
ARM D	0.89	13.08	0.068	- -	0.0	0.1	1.1	-	0.082
07.45-08.00									
ARM A	1.65	9.41	0.175	- -	0.2	0.2	3.1	-	0.129
ARM B	4.96	14.56	0.341	- -	0.4	0.5	7.5	-	0.104
ARM C	4.73	16.13	0.294	- -	0.3	0.4	6.1	-	0.088
ARM D	1.06	12.67	0.084	- -	0.1	0.1	1.3	-	0.086
08.00-08.15									
ARM A	2.02	8.95	0.225	- -	0.2	0.3	4.2	-	0.144
ARM B	6.07	14.39	0.422	- -	0.5	0.7	10.5	-	0.120
ARM C	5.80	16.04	0.361	- -	0.4	0.6	8.2	-	0.097
ARM D	1.30	12.10	0.108	- -	0.1	0.1	1.8	-	0.093
08.15-08.30									
ARM A	2.02	8.95	0.226	- -	0.3	0.3	4.3	-	0.144
ARM B	6.07	14.39	0.422	- -	0.7	0.7	10.9	-	0.120
ARM C	5.80	16.04	0.361	- -	0.6	0.6	8.4	-	0.098
ARM D	1.30	12.10	0.108	- -	0.1	0.1	1.8	-	0.093

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.65	9.41	0.175	- - -	0.3	0.2	3.3	-	0.129
ARM B	4.96	14.55	0.341	- - -	0.7	0.5	8.1	-	0.105
ARM C	4.73	16.13	0.294	- - -	0.6	0.4	6.4	-	0.088
ARM D	1.06	12.66	0.084	- - -	0.1	0.1	1.4	-	0.086

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.38	9.75	0.142	- - -	0.2	0.2	2.6	-	0.120
ARM B	4.15	14.67	0.283	- - -	0.5	0.4	6.1	-	0.095
ARM C	3.97	16.19	0.245	- - -	0.4	0.3	5.0	-	0.082
ARM D	0.89	13.07	0.068	- - -	0.1	0.1	1.1	-	0.082

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	*
08.15	0.7	*
08.30	0.7	*
08.45	0.5	*
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.6	*
08.30	0.6	*
08.45	0.4	
09.00	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	151.4	100.9	19.8	0.13	19.8	0.13
B	455.6	303.7	48.7	0.11	48.7	0.11
C	435.0	290.0	38.8	0.09	38.8	0.09
D	97.7	65.2	8.5	0.09	8.5	0.09
ALL	1139.7	759.8	115.8	0.10	115.8	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:50:30 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 15:54:04 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.54	2.31	1.54
ARM B	15.00	45.00	75.00	3.83	5.74	3.83
ARM C	15.00	45.00	75.00	7.46	11.19	7.46
ARM D	15.00	45.00	75.00	0.34	0.51	0.34

DEMAND SET TITLE: PM Average Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.11	0.17	0.11
ARM B	15.00	45.00	75.00	0.20	0.30	0.20
ARM C	15.00	45.00	75.00	0.31	0.47	0.31
ARM D	15.00	45.00	75.00	0.31	0.47	0.31

DEMAND SET TITLE: 2017 PM Base

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.293	0.707	0.000
		0.0	36.0	87.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.837	0.069
		29.0	0.0	256.0	21.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		144.0	453.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	27.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: PM Average Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.111	0.111	0.778
		0.0	1.0	1.0	7.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.063	0.000	0.000	0.938
		1.0	0.0	0.0	15.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.040	0.000	0.000	0.960
		1.0	0.0	0.0	24.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.160	0.320	0.520	0.000
		4.0	8.0	13.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.66	9.17	0.181	- -	-	0.0	0.2	3.1	-	0.133
ARM B	4.04	15.15	0.267	- -	-	0.0	0.4	5.2	-	0.090
ARM C	7.80	16.72	0.467	- -	-	0.0	0.9	12.4	-	0.111
ARM D	0.65	11.42	0.057	- -	-	0.0	0.1	0.9	-	0.093
17.00-17.15									
ARM A	1.98	8.62	0.229	- -	-	0.2	0.3	4.3	-	0.150
ARM B	4.82	15.02	0.321	- -	-	0.4	0.5	6.9	-	0.098
ARM C	9.32	16.63	0.560	- -	-	0.9	1.2	18.0	-	0.136
ARM D	0.78	10.67	0.073	- -	-	0.1	0.1	1.2	-	0.101
17.15-17.30									
ARM A	2.42	7.90	0.307	- -	-	0.3	0.4	6.3	-	0.182
ARM B	5.91	14.84	0.398	- -	-	0.5	0.7	9.5	-	0.112
ARM C	11.41	16.51	0.691	- -	-	1.2	2.2	30.2	-	0.191
ARM D	0.95	9.67	0.099	- -	-	0.1	0.1	1.6	-	0.115
17.30-17.45									
ARM A	2.42	7.88	0.308	- -	-	0.4	0.4	6.6	-	0.183
ARM B	5.91	14.84	0.398	- -	-	0.7	0.7	9.8	-	0.112
ARM C	11.41	16.51	0.692	- -	-	2.2	2.2	32.7	-	0.196
ARM D	0.95	9.64	0.099	- -	-	0.1	0.1	1.6	-	0.115

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	1.98	8.60	0.230	- - -	0.4	0.3	4.7	-	0.151
ARM B	4.82	15.01	0.321	- - -	0.7	0.5	7.4	-	0.098
ARM C	9.32	16.63	0.560	- - -	2.2	1.3	20.5	-	0.139
ARM D	0.78	10.63	0.073	- - -	0.1	0.1	1.2	-	0.102

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.66	9.14	0.181	- - -	0.3	0.2	3.4	-	0.134
ARM B	4.04	15.14	0.267	- - -	0.5	0.4	5.6	-	0.090
ARM C	7.80	16.72	0.467	- - -	1.3	0.9	13.8	-	0.113
ARM D	0.65	11.38	0.057	- - -	0.1	0.1	0.9	-	0.093

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.4	
17.45	0.4	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.2	*
17.30	2.2	**
17.45	2.2	**
18.00	1.3	*
18.15	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	181.7	121.1	28.4	0.16	28.4	0.16
B	443.2	295.5	44.5	0.10	44.5	0.10
C	856.1	570.8	127.6	0.15	127.6	0.15
D	71.6	47.7	7.4	0.10	7.4	0.10
ALL	1552.6	1035.1	207.9	0.13	208.0	0.13

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:54:17 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 15:50:58 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

T5

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.30	1.95	1.30
ARM B	15.00	45.00	75.00	4.05	6.08	4.05
ARM C	15.00	45.00	75.00	3.81	5.72	3.81
ARM D	15.00	45.00	75.00	0.24	0.36	0.24

DEMAND SET TITLE: AM 85% Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.09	0.13	0.09
ARM B	15.00	45.00	75.00	0.11	0.17	0.11
ARM C	15.00	45.00	75.00	0.19	0.28	0.19
ARM D	15.00	45.00	75.00	0.68	1.01	0.68

DEMAND SET TITLE: 2017 AM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.308	0.692	0.000
		0.0	32.0	72.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.090	0.000	0.873	0.037
		29.0	0.0	283.0	12.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.167	0.833	0.000	0.000
		51.0	254.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	19.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: AM 85% Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.143	0.286	0.571
		0.0	1.0	2.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	9.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.067	0.000	0.000	0.933
		1.0	0.0	0.0	14.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.167	0.315	0.519	0.000
		9.0	17.0	28.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.39	9.76	0.143	- -	0.0	0.2	2.4	-	0.119
ARM B	4.18	14.67	0.285	- -	0.0	0.4	5.7	-	0.095
ARM C	4.02	16.19	0.248	- -	0.0	0.3	4.8	-	0.082
ARM D	0.92	13.08	0.070	- -	0.0	0.1	1.1	-	0.082
07.45-08.00									
ARM A	1.66	9.41	0.177	- -	0.2	0.2	3.1	-	0.129
ARM B	4.99	14.55	0.343	- -	0.4	0.5	7.6	-	0.104
ARM C	4.79	16.12	0.297	- -	0.3	0.4	6.2	-	0.088
ARM D	1.09	12.66	0.086	- -	0.1	0.1	1.4	-	0.086
08.00-08.15									
ARM A	2.04	8.95	0.228	- -	0.2	0.3	4.2	-	0.144
ARM B	6.11	14.38	0.425	- -	0.5	0.7	10.6	-	0.120
ARM C	5.87	16.03	0.366	- -	0.4	0.6	8.4	-	0.098
ARM D	1.34	12.10	0.111	- -	0.1	0.1	1.8	-	0.093
08.15-08.30									
ARM A	2.04	8.94	0.228	- -	0.3	0.3	4.4	-	0.145
ARM B	6.11	14.37	0.425	- -	0.7	0.7	11.0	-	0.121
ARM C	5.87	16.03	0.366	- -	0.6	0.6	8.6	-	0.098
ARM D	1.34	12.09	0.111	- -	0.1	0.1	1.9	-	0.093

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.66	9.41	0.177	- - -	0.3	0.2	3.3	-	0.129
ARM B	4.99	14.54	0.343	- - -	0.7	0.5	8.1	-	0.105
ARM C	4.79	16.12	0.297	- - -	0.6	0.4	6.6	-	0.088
ARM D	1.09	12.65	0.086	- - -	0.1	0.1	1.5	-	0.086

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.39	9.74	0.143	- - -	0.2	0.2	2.6	-	0.120
ARM B	4.18	14.67	0.285	- - -	0.5	0.4	6.2	-	0.095
ARM C	4.02	16.18	0.248	- - -	0.4	0.3	5.1	-	0.082
ARM D	0.92	13.06	0.070	- - -	0.1	0.1	1.2	-	0.082

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	*
08.15	0.7	*
08.30	0.7	*
08.45	0.5	*
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.6	*
08.30	0.6	*
08.45	0.4	
09.00	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	152.8	101.9	20.1	0.13	20.1	0.13
B	458.3	305.6	49.2	0.11	49.2	0.11
C	440.5	293.6	39.6	0.09	39.6	0.09
D	100.5	67.0	8.8	0.09	8.8	0.09
ALL	1152.1	768.0	117.6	0.10	117.6	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:51:07 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 15:54:43 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2017 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.54	2.31	1.54
ARM B	15.00	45.00	75.00	3.83	5.74	3.83
ARM C	15.00	45.00	75.00	7.46	11.19	7.46
ARM D	15.00	45.00	75.00	0.34	0.51	0.34

DEMAND SET TITLE: PM 85% Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.14	0.21	0.14
ARM B	15.00	45.00	75.00	0.25	0.38	0.25
ARM C	15.00	45.00	75.00	0.39	0.58	0.39
ARM D	15.00	45.00	75.00	0.44	0.66	0.44

DEMAND SET TITLE: 2017 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.293	0.707	0.000
		0.0	36.0	87.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.837	0.069
		29.0	0.0	256.0	21.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		144.0	453.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	27.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: PM 85% Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.091	0.091	0.818
		0.0	1.0	1.0	9.0
		(0.0)%	(0.0)%	(0.0)%	(0.0)%
	ARM B	0.050	0.000	0.000	0.950
		1.0	0.0	0.0	19.0
		(0.0)%	(0.0)%	(0.0)%	(0.0)%
	ARM C	0.065	0.000	0.000	0.935
		2.0	0.0	0.0	29.0
		(0.0)%	(0.0)%	(0.0)%	(0.0)%
	ARM D	0.171	0.314	0.514	0.000
		6.0	11.0	18.0	0.0
		(0.0)%	(0.0)%	(0.0)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.68	9.13	0.184	- - -	0.0	0.2	3.2	-	0.134
ARM B	4.09	15.11	0.271	- - -	0.0	0.4	5.4	-	0.090
ARM C	7.88	16.69	0.472	- - -	0.0	0.9	12.6	-	0.112
ARM D	0.78	11.41	0.068	- - -	0.0	0.1	1.1	-	0.094
17.00-17.15									
ARM A	2.01	8.57	0.234	- - -	0.2	0.3	4.4	-	0.152
ARM B	4.88	14.97	0.326	- - -	0.4	0.5	7.0	-	0.099
ARM C	9.41	16.59	0.567	- - -	0.9	1.3	18.5	-	0.138
ARM D	0.93	10.66	0.087	- - -	0.1	0.1	1.4	-	0.103
17.15-17.30									
ARM A	2.46	7.84	0.314	- - -	0.3	0.4	6.5	-	0.185
ARM B	5.98	14.78	0.405	- - -	0.5	0.7	9.8	-	0.113
ARM C	11.52	16.46	0.700	- - -	1.3	2.2	31.3	-	0.197
ARM D	1.14	9.66	0.118	- - -	0.1	0.1	1.9	-	0.117
17.30-17.45									
ARM A	2.46	7.81	0.315	- - -	0.4	0.5	6.8	-	0.187
ARM B	5.98	14.78	0.405	- - -	0.7	0.7	10.1	-	0.114
ARM C	11.52	16.46	0.700	- - -	2.2	2.3	34.0	-	0.202
ARM D	1.14	9.63	0.118	- - -	0.1	0.1	2.0	-	0.118

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	2.01	8.54	0.235	- - -	0.5	0.3	4.8	-	0.154
ARM B	4.88	14.96	0.326	- - -	0.7	0.5	7.5	-	0.099
ARM C	9.41	16.59	0.567	- - -	2.3	1.3	21.1	-	0.142
ARM D	0.93	10.62	0.087	- - -	0.1	0.1	1.5	-	0.103

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.68	9.10	0.185	- - -	0.3	0.2	3.5	-	0.135
ARM B	4.09	15.10	0.271	- - -	0.5	0.4	5.7	-	0.091
ARM C	7.88	16.69	0.472	- - -	1.3	0.9	14.1	-	0.114
ARM D	0.78	11.37	0.068	- - -	0.1	0.1	1.1	-	0.094

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.4	
17.45	0.5	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.3	*
17.30	2.2	**
17.45	2.3	**
18.00	1.3	*
18.15	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	184.4	123.0	29.3	0.16	29.3	0.16
B	448.7	299.1	45.6	0.10	45.6	0.10
C	864.4	576.3	131.7	0.15	131.7	0.15
D	85.3	56.9	9.0	0.11	9.0	0.11
ALL	1582.9	1055.3	215.5	0.14	215.6	0.14

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:54:51 on 13/07/2017]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 12:11:55 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2022 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.40	2.10	1.40
ARM B	15.00	45.00	75.00	4.36	6.54	4.36
ARM C	15.00	45.00	75.00	4.07	6.11	4.07
ARM D	15.00	45.00	75.00	0.26	0.39	0.26

DEMAND SET TITLE: 2022 AM Base

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.313	0.688	0.000
		0.0	35.0	77.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.092	0.000	0.871	0.037
		32.0	0.0	304.0	13.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.166	0.834	0.000	0.000
		54.0	272.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	21.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.41	9.85	0.143	- -	-	0.0	0.2	2.4	-	0.118
ARM B	4.38	14.82	0.296	- -	-	0.0	0.4	6.0	-	0.095
ARM C	4.09	16.19	0.253	- -	-	0.0	0.3	4.9	-	0.082
ARM D	0.26	12.93	0.020	- -	-	0.0	0.0	0.3	-	0.079

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	1.68	9.53	0.176	- - -	0.2	0.2	3.1	-	0.127
ARM B	5.23	14.72	0.355	- - -	0.4	0.5	8.0	-	0.105
ARM C	4.88	16.13	0.303	- - -	0.3	0.4	6.3	-	0.089
ARM D	0.31	12.49	0.025	- - -	0.0	0.0	0.4	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	2.06	9.10	0.226	- - -	0.2	0.3	4.2	-	0.142
ARM B	6.40	14.60	0.439	- - -	0.5	0.8	11.2	-	0.122
ARM C	5.98	16.05	0.373	- - -	0.4	0.6	8.6	-	0.099
ARM D	0.39	11.88	0.032	- - -	0.0	0.0	0.5	-	0.087

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	2.06	9.10	0.226	- - -	0.3	0.3	4.3	-	0.142
ARM B	6.40	14.60	0.439	- - -	0.8	0.8	11.6	-	0.122
ARM C	5.98	16.05	0.373	- - -	0.6	0.6	8.8	-	0.099
ARM D	0.39	11.88	0.032	- - -	0.0	0.0	0.5	-	0.087

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.68	9.52	0.176	- - -	0.3	0.2	3.3	-	0.128
ARM B	5.23	14.72	0.355	- - -	0.8	0.6	8.6	-	0.106
ARM C	4.88	16.13	0.303	- - -	0.6	0.4	6.7	-	0.089
ARM D	0.31	12.48	0.025	- - -	0.0	0.0	0.4	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.41	9.84	0.143	- - -	0.2	0.2	2.6	-	0.119
ARM B	4.38	14.81	0.296	- - -	0.6	0.4	6.5	-	0.096
ARM C	4.09	16.19	0.253	- - -	0.4	0.3	5.2	-	0.083
ARM D	0.26	12.92	0.020	- - -	0.0	0.0	0.3	-	0.079

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	*
08.15	0.8	*
08.30	0.8	*
08.45	0.6	*
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.6	*
08.30	0.6	*
08.45	0.4	
09.00	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	154.2	102.8	19.9	0.13	19.9	0.13
B	480.4	320.2	51.9	0.11	51.9	0.11
C	448.7	299.1	40.6	0.09	40.6	0.09
D	28.9	19.3	2.4	0.08	2.4	0.08
ALL	1112.2	741.4	114.9	0.10	114.9	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
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END OF JOB

========== end of file ==========

Printed at 12:12:02 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 12:20:53 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2022 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.65	2.47	1.65
ARM B	15.00	45.00	75.00	4.10	6.15	4.10
ARM C	15.00	45.00	75.00	7.99	11.98	7.99
ARM D	15.00	45.00	75.00	0.36	0.54	0.36

DEMAND SET TITLE: 2022 PM Base

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.295	0.705	0.000
		0.0	39.0	93.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.835	0.070
		31.0	0.0	274.0	23.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		154.0	485.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	29.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.66	9.09	0.182	- -	-	0.0	0.2	3.2	-	0.134
ARM B	4.12	15.22	0.270	- -	-	0.0	0.4	5.3	-	0.090
ARM C	8.02	16.82	0.477	- -	-	0.0	0.9	12.9	-	0.112
ARM D	0.36	11.17	0.033	- -	-	0.0	0.0	0.5	-	0.093

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	1.98	8.53	0.232	- - -	0.2	0.3	4.3	-	0.152
ARM B	4.91	15.11	0.325	- - -	0.4	0.5	7.0	-	0.098
ARM C	9.57	16.75	0.572	- - -	0.9	1.3	18.8	-	0.138
ARM D	0.43	10.37	0.042	- - -	0.0	0.0	0.6	-	0.101

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	2.42	7.79	0.311	- - -	0.3	0.4	6.4	-	0.186
ARM B	6.02	14.96	0.402	- - -	0.5	0.7	9.7	-	0.112
ARM C	11.73	16.66	0.704	- - -	1.3	2.3	31.9	-	0.197
ARM D	0.53	9.30	0.057	- - -	0.0	0.1	0.9	-	0.114

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	2.42	7.76	0.312	- - -	0.4	0.4	6.7	-	0.187
ARM B	6.02	14.95	0.403	- - -	0.7	0.7	10.0	-	0.112
ARM C	11.73	16.66	0.704	- - -	2.3	2.3	34.6	-	0.202
ARM D	0.53	9.27	0.057	- - -	0.1	0.1	0.9	-	0.114

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	1.98	8.50	0.233	- - -	0.4	0.3	4.8	-	0.154
ARM B	4.91	15.10	0.325	- - -	0.7	0.5	7.5	-	0.098
ARM C	9.57	16.75	0.572	- - -	2.3	1.4	21.5	-	0.142
ARM D	0.43	10.32	0.042	- - -	0.1	0.0	0.7	-	0.101

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.66	9.06	0.183	- - -	0.3	0.2	3.5	-	0.135
ARM B	4.12	15.21	0.271	- - -	0.5	0.4	5.7	-	0.090
ARM C	8.02	16.82	0.477	- - -	1.4	0.9	14.4	-	0.114
ARM D	0.36	11.12	0.033	- - -	0.0	0.0	0.5	-	0.093

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.3	*
17.30	2.3	**
17.45	2.3	**
18.00	1.4	*
18.15	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	181.7	121.1	28.9	0.16	28.9	0.16
B	451.5	301.0	45.3	0.10	45.3	0.10
C	879.5	586.4	134.0	0.15	134.1	0.15
D	39.9	26.6	4.1	0.10	4.1	0.10
ALL	1552.6	1035.1	212.3	0.14	212.4	0.14

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 15:51:30 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

T5

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Average Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	0.14	0.21	0.14
ARM D	15.00	45.00	75.00	0.65	0.97	0.65

DEMAND SET TITLE: 2022 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	1.40	2.10	1.40
ARM B	15.00	45.00	75.00	4.36	6.54	4.36
ARM C	15.00	45.00	75.00	4.07	6.11	4.07
ARM D	15.00	45.00	75.00	0.26	0.39	0.26

DEMAND SET TITLE: AM Average Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00		TURNING PROPORTIONS			
	ARM A	0.000	0.167	0.333	0.500
		TURNING COUNTS			
		0.0	1.0	2.0	3.0
		(PERCENTAGE OF H.V.S)			
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	7.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	11.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.154	0.327	0.519	0.000
		8.0	17.0	27.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: 2022 AM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.313	0.688	0.000
		0.0	35.0	77.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.092	0.000	0.871	0.037
		32.0	0.0	304.0	13.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.166	0.834	0.000	0.000
		54.0	272.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	21.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.48	9.65	0.154	- -	0.0	0.2	2.6	-	0.122
ARM B	4.47	14.65	0.305	- -	0.0	0.4	6.3	-	0.098
ARM C	4.23	16.16	0.262	- -	0.0	0.4	5.1	-	0.084
ARM D	0.92	12.93	0.071	- -	0.0	0.1	1.1	-	0.083
07.45-08.00									
ARM A	1.77	9.28	0.190	- -	0.2	0.2	3.4	-	0.133
ARM B	5.33	14.52	0.367	- -	0.4	0.6	8.4	-	0.109
ARM C	5.05	16.10	0.314	- -	0.4	0.5	6.7	-	0.090
ARM D	1.09	12.49	0.088	- -	0.1	0.1	1.4	-	0.088
08.00-08.15									
ARM A	2.17	8.79	0.246	- -	0.2	0.3	4.7	-	0.151
ARM B	6.53	14.34	0.456	- -	0.6	0.8	12.0	-	0.128
ARM C	6.18	16.00	0.386	- -	0.5	0.6	9.1	-	0.102
ARM D	1.34	11.88	0.113	- -	0.1	0.1	1.9	-	0.095
08.15-08.30									
ARM A	2.17	8.79	0.246	- -	0.3	0.3	4.9	-	0.151
ARM B	6.53	14.34	0.456	- -	0.8	0.8	12.4	-	0.128
ARM C	6.18	16.00	0.386	- -	0.6	0.6	9.4	-	0.102
ARM D	1.34	11.88	0.113	- -	0.1	0.1	1.9	-	0.095

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.77	9.27	0.191	- - -	0.3	0.2	3.7	-	0.133
ARM B	5.33	14.51	0.368	- - -	0.8	0.6	9.1	-	0.109
ARM C	5.05	16.09	0.314	- - -	0.6	0.5	7.1	-	0.091
ARM D	1.09	12.48	0.088	- - -	0.1	0.1	1.5	-	0.088

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.48	9.63	0.154	- - -	0.2	0.2	2.8	-	0.123
ARM B	4.47	14.64	0.305	- - -	0.6	0.4	6.8	-	0.098
ARM C	4.23	16.16	0.262	- - -	0.5	0.4	5.5	-	0.084
ARM D	0.92	12.92	0.071	- - -	0.1	0.1	1.2	-	0.083

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.6	*
08.15	0.8	*
08.30	0.8	*
08.45	0.6	*
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	
08.15	0.6	*
08.30	0.6	*
08.45	0.5	
09.00	0.4	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	162.4	108.3	22.1	0.14	22.1	0.14
B	490.0	326.7	55.0	0.11	55.0	0.11
C	463.9	309.2	42.8	0.09	42.8	0.09
D	100.5	67.0	8.9	0.09	8.9	0.09
ALL	1216.8	811.2	128.8	0.11	128.8	0.11

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:51:38 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 15:55:16 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: PM Average Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.11	0.17	0.11
ARM B	15.00	45.00	75.00	0.20	0.30	0.20
ARM C	15.00	45.00	75.00	0.31	0.47	0.31
ARM D	15.00	45.00	75.00	0.31	0.47	0.31

DEMAND SET TITLE: 2022 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.65	2.47	1.65
ARM B	15.00	45.00	75.00	4.10	6.15	4.10
ARM C	15.00	45.00	75.00	7.99	11.98	7.99
ARM D	15.00	45.00	75.00	0.36	0.54	0.36

DEMAND SET TITLE: PM Average Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.111	0.111	0.778
		0.0	1.0	1.0	7.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.063	0.000	0.000	0.938
		1.0	0.0	0.0	15.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.040	0.000	0.000	0.960
		1.0	0.0	0.0	24.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.160	0.320	0.520	0.000
		4.0	8.0	13.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: 2022 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.295	0.705	0.000
		0.0	39.0	93.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.835	0.070
		31.0	0.0	274.0	23.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		154.0	485.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	29.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.77	8.99	0.197	- - -	0.0	0.2	3.5	-	0.138
ARM B	4.32	15.11	0.286	- - -	0.0	0.4	5.8	-	0.092
ARM C	8.33	16.70	0.499	- - -	0.0	1.0	14.0	-	0.118
ARM D	0.68	11.16	0.061	- - -	0.0	0.1	0.9	-	0.095
17.00-17.15									
ARM A	2.11	8.40	0.251	- - -	0.2	0.3	4.8	-	0.159
ARM B	5.15	14.97	0.344	- - -	0.4	0.5	7.6	-	0.102
ARM C	9.95	16.60	0.599	- - -	1.0	1.5	20.9	-	0.149
ARM D	0.81	10.36	0.078	- - -	0.1	0.1	1.2	-	0.105
17.15-17.30									
ARM A	2.59	7.63	0.339	- - -	0.3	0.5	7.2	-	0.197
ARM B	6.31	14.79	0.427	- - -	0.5	0.7	10.7	-	0.118
ARM C	12.18	16.47	0.740	- - -	1.5	2.7	37.2	-	0.225
ARM D	0.99	9.29	0.107	- - -	0.1	0.1	1.7	-	0.121
17.30-17.45									
ARM A	2.59	7.60	0.340	- - -	0.5	0.5	7.6	-	0.199
ARM B	6.31	14.78	0.427	- - -	0.7	0.7	11.1	-	0.118
ARM C	12.18	16.47	0.740	- - -	2.7	2.8	41.1	-	0.233
ARM D	0.99	9.26	0.107	- - -	0.1	0.1	1.8	-	0.121

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	2.11	8.36	0.253	- - -	0.5	0.3	5.3	-	0.161
ARM B	5.15	14.97	0.344	- - -	0.7	0.5	8.2	-	0.102
ARM C	9.95	16.60	0.599	- - -	2.8	1.5	24.3	-	0.154
ARM D	0.81	10.30	0.079	- - -	0.1	0.1	1.3	-	0.105

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.77	8.95	0.198	- - -	0.3	0.2	3.8	-	0.139
ARM B	4.32	15.10	0.286	- - -	0.5	0.4	6.2	-	0.093
ARM C	8.33	16.69	0.499	- - -	1.5	1.0	15.8	-	0.121
ARM D	0.68	11.11	0.061	- - -	0.1	0.1	1.0	-	0.096

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	*
17.45	0.5	*
18.00	0.3	
18.15	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.7	*
17.45	0.7	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.5	*
17.30	2.7	***
17.45	2.8	***
18.00	1.5	**
18.15	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	194.1	129.4	32.4	0.17	32.4	0.17
B	473.5	315.7	49.5	0.10	49.5	0.10
C	913.9	609.3	153.3	0.17	153.4	0.17
D	74.3	49.6	8.0	0.11	8.0	0.11
ALL	1655.8	1103.9	243.2	0.15	243.2	0.15

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:55:24 on 13/07/2017]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout AM.vai"
(drive-on-the-left) at 15:52:00 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.30)AND ENDS(09.00)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2022 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.40	2.10	1.40
ARM B	15.00	45.00	75.00	4.36	6.54	4.36
ARM C	15.00	45.00	75.00	4.07	6.11	4.07
ARM D	15.00	45.00	75.00	0.26	0.39	0.26

DEMAND SET TITLE: AM 85% Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.09	0.13	0.09
ARM B	15.00	45.00	75.00	0.11	0.17	0.11
ARM C	15.00	45.00	75.00	0.19	0.28	0.19
ARM D	15.00	45.00	75.00	0.68	1.01	0.68

DEMAND SET TITLE: 2022 AM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.313	0.688	0.000
		0.0	35.0	77.0	0.0
		(0.0)	(6.3)	(4.2)	(0.0)
	ARM B	0.092	0.000	0.871	0.037
		32.0	0.0	304.0	13.0
		(17.2)	(0.0)	(4.7)	(0.0)
	ARM C	0.166	0.834	0.000	0.000
		54.0	272.0	0.0	0.0
		(6.0)	(6.4)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	21.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: AM 85% Development

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.143	0.286	0.571
		0.0	1.0	2.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	9.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.067	0.000	0.000	0.933
		1.0	0.0	0.0	14.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.167	0.315	0.519	0.000
		9.0	17.0	28.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.49	9.64	0.155	- -	0.0	0.2	2.6	-	0.122
ARM B	4.49	14.64	0.307	- -	0.0	0.4	6.4	-	0.098
ARM C	4.28	16.16	0.265	- -	0.0	0.4	5.2	-	0.084
ARM D	0.94	12.93	0.073	- -	0.0	0.1	1.1	-	0.083

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	1.78	9.28	0.192	- -	0.2	0.2	3.4	-	0.133
ARM B	5.36	14.51	0.370	- -	0.4	0.6	8.5	-	0.109
ARM C	5.11	16.09	0.318	- -	0.4	0.5	6.8	-	0.091
ARM D	1.12	12.48	0.090	- -	0.1	0.1	1.5	-	0.088

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	2.18	8.79	0.249	- -	0.2	0.3	4.8	-	0.151
ARM B	6.57	14.33	0.459	- -	0.6	0.8	12.1	-	0.128
ARM C	6.26	15.99	0.391	- -	0.5	0.6	9.3	-	0.102
ARM D	1.38	11.87	0.116	- -	0.1	0.1	1.9	-	0.095

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	2.18	8.78	0.249	- -	0.3	0.3	4.9	-	0.152
ARM B	6.57	14.33	0.459	- -	0.8	0.8	12.6	-	0.129
ARM C	6.26	15.99	0.391	- -	0.6	0.6	9.6	-	0.103
ARM D	1.38	11.87	0.116	- -	0.1	0.1	2.0	-	0.095

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.78	9.27	0.192	- - -	0.3	0.2	3.7	-	0.134
ARM B	5.36	14.50	0.370	- - -	0.8	0.6	9.2	-	0.110
ARM C	5.11	16.08	0.318	- - -	0.6	0.5	7.2	-	0.091
ARM D	1.12	12.47	0.090	- - -	0.1	0.1	1.5	-	0.088

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	1.49	9.63	0.155	- - -	0.2	0.2	2.8	-	0.123
ARM B	4.49	14.63	0.307	- - -	0.6	0.4	6.9	-	0.099
ARM C	4.28	16.16	0.265	- - -	0.5	0.4	5.6	-	0.084
ARM D	0.94	12.91	0.073	- - -	0.1	0.1	1.2	-	0.084

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.6	*
08.15	0.8	*
08.30	0.8	*
08.45	0.6	*
09.00	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.5	
08.15	0.6	*
08.30	0.6	*
08.45	0.5	
09.00	0.4	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	163.8	109.2	22.3	0.14	22.3	0.14
B	492.8	328.5	55.5	0.11	55.6	0.11
C	469.4	312.9	43.6	0.09	43.6	0.09
D	103.2	68.8	9.2	0.09	9.2	0.09
ALL	1229.1	819.4	130.7	0.11	130.7	0.11

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Arcady\Proposed Roundabout PM.vai"
(drive-on-the-left) at 15:55:46 on Thursday, 13 July 2017

FILE PROPERTIES

RUN TITLE: Proposed Link Rd / Sackup Ln / Darton Ln / Station Rd Roundabout Junction
LOCATION: Bloomhouse Lane, Darton
DATE: 13/07/17
CLIENT:
ENUMERATOR: brett.littlewood [PC137]
JOB NUMBER: 9169
STATUS: Preliminary
DESCRIPTION:

INPUT DATA

ARM A - Sackup Lane
ARM B - Darton Lane
ARM C - Station Road
ARM D - Proposed Link Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.00	4.20	2.60	10.00	28.80	40.0	0.432	12.002
ARM B	3.25	4.10	0.60	10.00	28.80	33.4	0.490	16.145
ARM C	3.65	4.85	1.20	10.00	28.80	50.0	0.489	17.524
ARM D	3.00	4.40	1.30	10.00	28.80	42.8	0.468	15.178

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: PM 85% Development

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.14	0.21	0.14
ARM B	15.00	45.00	75.00	0.25	0.38	0.25
ARM C	15.00	45.00	75.00	0.39	0.58	0.39
ARM D	15.00	45.00	75.00	0.44	0.66	0.44

DEMAND SET TITLE: 2022 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.65	2.47	1.65
ARM B	15.00	45.00	75.00	4.10	6.15	4.10
ARM C	15.00	45.00	75.00	7.99	11.98	7.99
ARM D	15.00	45.00	75.00	0.36	0.54	0.36

DEMAND SET TITLE: PM 85% Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.091	0.091	0.818
		0.0	1.0	1.0	9.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.050	0.000	0.000	0.950
		1.0	0.0	0.0	19.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.065	0.000	0.000	0.935
		2.0	0.0	0.0	29.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.171	0.314	0.514	0.000
		6.0	11.0	18.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

DEMAND SET TITLE: 2022 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.295	0.705	0.000
		0.0	39.0	93.0	0.0
		(0.0)	(0.0)	(1.2)	(0.0)
	ARM B	0.095	0.000	0.835	0.070
		31.0	0.0	274.0	23.0
		(13.8)	(0.0)	(1.2)	(0.0)
	ARM C	0.241	0.759	0.000	0.000
		154.0	485.0	0.0	0.0
		(0.7)	(2.5)	(0.0)	(0.0)
	ARM D	0.000	1.000	0.000	0.000
		0.0	29.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.79	8.94	0.201	- -	0.0	0.2	3.6	-	0.139
ARM B	4.37	15.07	0.290	- -	0.0	0.4	5.9	-	0.093
ARM C	8.41	16.66	0.505	- -	0.0	1.0	14.3	-	0.119
ARM D	0.80	11.15	0.072	- -	0.0	0.1	1.1	-	0.097
17.00-17.15									
ARM A	2.14	8.35	0.257	- -	0.2	0.3	5.0	-	0.161
ARM B	5.21	14.93	0.349	- -	0.4	0.5	7.8	-	0.103
ARM C	10.04	16.56	0.606	- -	1.0	1.5	21.5	-	0.152
ARM D	0.96	10.35	0.093	- -	0.1	0.1	1.5	-	0.107
17.15-17.30									
ARM A	2.62	7.57	0.347	- -	0.3	0.5	7.5	-	0.201
ARM B	6.39	14.73	0.434	- -	0.5	0.8	11.0	-	0.119
ARM C	12.29	16.42	0.749	- -	1.5	2.8	38.7	-	0.233
ARM D	1.17	9.29	0.126	- -	0.1	0.1	2.1	-	0.123
17.30-17.45									
ARM A	2.62	7.54	0.348	- -	0.5	0.5	7.9	-	0.203
ARM B	6.39	14.73	0.434	- -	0.8	0.8	11.4	-	0.120
ARM C	12.29	16.42	0.749	- -	2.8	2.9	42.9	-	0.241
ARM D	1.17	9.25	0.127	- -	0.1	0.1	2.2	-	0.124

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	2.14	8.31	0.258	- - -	0.5	0.4	5.5	-	0.163
ARM B	5.21	14.92	0.349	- - -	0.8	0.5	8.4	-	0.103
ARM C	10.04	16.56	0.606	- - -	2.9	1.6	25.1	-	0.157
ARM D	0.96	10.29	0.093	- - -	0.1	0.1	1.6	-	0.107

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.79	8.91	0.201	- - -	0.4	0.3	3.9	-	0.141
ARM B	4.37	15.06	0.290	- - -	0.5	0.4	6.3	-	0.094
ARM C	8.41	16.66	0.505	- - -	1.6	1.0	16.1	-	0.122
ARM D	0.80	11.10	0.072	- - -	0.1	0.1	1.2	-	0.097

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.5	**
17.30	2.8	***
17.45	2.9	***
18.00	1.6	**
18.15	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	196.8	131.2	33.3	0.17	33.3	0.17
B	479.0	319.3	50.7	0.11	50.7	0.11
C	922.2	614.8	158.7	0.17	158.7	0.17
D	88.1	58.7	9.7	0.11	9.7	0.11
ALL	1686.1	1124.1	252.4	0.15	252.4	0.15

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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APPENDIX I

PICADY Output – Woolley Edge Lane/The Grange

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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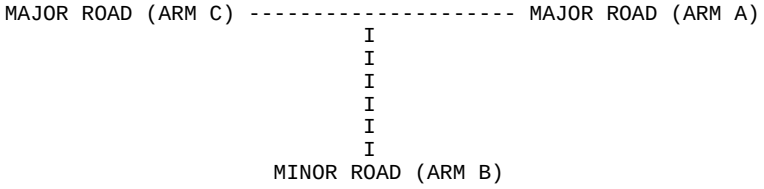
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Woolley Edge Lane - The Grange\
July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:34:46 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.35	11.02	7.35
ARM B	15.00	45.00	75.00	2.13	3.19	2.13
ARM C	15.00	45.00	75.00	2.56	3.84	2.56

Demand set: 2017 AM Base

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.003	0.997
		0.0	2.0	586.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.065	0.000	0.935
		11.0	0.0	159.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		191.0	14.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.00	10.08	0.198		0.00	0.24	3.5		0.12
B-A	0.14	6.21	0.022		0.00	0.02	0.3		0.16
C-AB	0.18	8.50	0.021		0.00	0.02	0.3		0.12
A-B	0.03								
A-C	7.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.38	9.69	0.246		0.24	0.32	4.7		0.14
B-A	0.16	5.80	0.028		0.02	0.03	0.4		0.18
C-AB	0.21	8.18	0.026		0.02	0.03	0.4		0.13
A-B	0.03								
A-C	8.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.92	9.16	0.319		0.32	0.46	6.7		0.16
B-A	0.20	5.21	0.039		0.03	0.04	0.6		0.20
C-AB	0.26	7.75	0.033		0.03	0.03	0.5		0.13
A-B	0.04								
A-C	10.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	2.92	9.16	0.319		0.46	0.46	6.9		0.16
B-A	0.20	5.21	0.039		0.04	0.04	0.6		0.20
C-AB	0.26	7.75	0.033		0.03	0.03	0.5		0.13
A-B	0.04								
A-C	10.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.38	9.69	0.246		0.46	0.33	5.1		0.14
B-A	0.16	5.80	0.028		0.04	0.03	0.5		0.18
C-AB	0.21	8.18	0.026		0.03	0.03	0.4		0.13
A-B	0.03								
A-C	8.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.00	10.08	0.198		0.33	0.25	3.8		0.12
B-A	0.14	6.21	0.022		0.03	0.02	0.4		0.16
C-AB	0.18	8.50	0.021		0.03	0.02	0.3		0.12
A-B	0.03								
A-C	7.35								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.3
08.15	0.5
08.30	0.5
08.45	0.3
09.00	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	218.9	145.9	30.8	0.14	30.8	0.14
B-A	15.1	10.1	2.7	0.18	2.7	0.18
C-AB	19.3	12.8	2.4	0.13	2.4	0.13
A-B	2.8	1.8				
A-C	806.6	537.7				
ALL	1325.5	883.7	36.0	0.03	36.0	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	2.91	4.37	2.91
ARM B	15.00	45.00	75.00	0.35	0.52	0.35
ARM C	15.00	45.00	75.00	8.15	12.22	8.15

Demand set: 2017 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	14.0	219.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.179	0.000	0.821
		5.0	0.0	23.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		568.0	84.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.29	11.36	0.025		0.00	0.03	0.4		0.09
B-A	0.06	6.91	0.009		0.00	0.01	0.1		0.15
C-AB	1.05	10.02	0.105		0.00	0.12	1.7		0.11
A-B	0.18								
A-C	2.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.34	11.21	0.031		0.03	0.03	0.5		0.09
B-A	0.07	6.52	0.011		0.01	0.01	0.2		0.16
C-AB	1.26	9.89	0.127		0.12	0.14	2.2		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.42	11.00	0.038		0.03	0.04	0.6		0.09
B-A	0.09	5.98	0.015		0.01	0.02	0.2		0.17
C-AB	1.54	9.71	0.159		0.14	0.19	2.8		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.42	11.00	0.038		0.04	0.04	0.6		0.09
B-A	0.09	5.98	0.015		0.02	0.02	0.2		0.17
C-AB	1.54	9.71	0.159		0.19	0.19	2.8		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.34	11.21	0.031		0.04	0.03	0.5		0.09
B-A	0.07	6.52	0.011		0.02	0.01	0.2		0.16
C-AB	1.26	9.89	0.127		0.19	0.15	2.2		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.29	11.36	0.025		0.03	0.03	0.4		0.09
B-A	0.06	6.91	0.009		0.01	0.01	0.1		0.15
C-AB	1.05	10.02	0.105		0.15	0.12	1.8		0.11
A-B	0.18								
A-C	2.75								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	31.7	21.1	2.9	0.09	2.9	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	115.6	77.1	13.5	0.12	13.5	0.12
A-B	19.3	12.8				
A-C	301.4	201.0				
ALL	1256.7	837.8	17.5	0.01	17.5	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:34:53 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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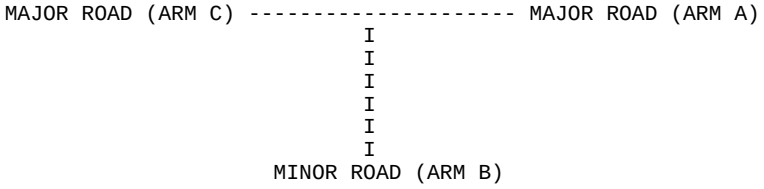
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Woolley Edge Lane - The Grange\
July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:35:17 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.35	11.02	7.35
ARM B	15.00	45.00	75.00	2.13	3.19	2.13
ARM C	15.00	45.00	75.00	2.56	3.84	2.56

Demand set: Ave Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.01	0.02	0.01
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	0.03	0.04	0.03

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.003	0.997
		0.0	2.0	586.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.065	0.000	0.935
		11.0	0.0	159.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		191.0	14.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.000	1.000	0.000
		0.0	2.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS (PERCENTAGE OF H.V.S))

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.06	10.08	0.204		0.00	0.25	3.7		0.12
B-A	0.14	6.20	0.022		0.00	0.02	0.3		0.16
C-AB	0.20	8.56	0.023		0.00	0.02	0.4		0.12
A-B	0.03								
A-C	7.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.46	9.69	0.254		0.25	0.34	4.9		0.14
B-A	0.16	5.78	0.028		0.02	0.03	0.4		0.18
C-AB	0.24	8.25	0.029		0.02	0.03	0.4		0.12
A-B	0.03								
A-C	8.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.01	9.15	0.329		0.34	0.48	7.0		0.16
B-A	0.20	5.18	0.039		0.03	0.04	0.6		0.20
C-AB	0.29	7.81	0.038		0.03	0.04	0.6		0.13
A-B	0.04								
A-C	10.77								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.01	9.15	0.329		0.48	0.49	7.3		0.16
B-A	0.20	5.17	0.039		0.04	0.04	0.6		0.20
C-AB	0.29	7.81	0.038		0.04	0.04	0.6		0.13
A-B	0.04								
A-C	10.77								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.46	9.69	0.254		0.49	0.34	5.3		0.14
B-A	0.16	5.78	0.029		0.04	0.03	0.5		0.18
C-AB	0.24	8.25	0.029		0.04	0.03	0.5		0.12
A-B	0.03								
A-C	8.80								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.06	10.07	0.204		0.34	0.26	4.0		0.12
B-A	0.14	6.20	0.022		0.03	0.02	0.4		0.16
C-AB	0.20	8.56	0.023		0.03	0.02	0.4		0.12
A-B	0.03								
A-C	7.37								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.3
08.00	0.3
08.15	0.5
08.30	0.5
08.45	0.3
09.00	0.3

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	225.7	150.5	32.1	0.14	32.1	0.14
B-A	15.1	10.1	2.7	0.18	2.7	0.18
C-AB	22.0	14.7	2.8	0.13	2.8	0.13
A-B	2.8	1.8				
A-C	808.0	538.6				
ALL	1336.5	891.0	37.7	0.03	37.7	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.91	4.37	2.91
ARM B	15.00	45.00	75.00	0.35	0.52	0.35
ARM C	15.00	45.00	75.00	8.15	12.22	8.15

Demand set: Ave Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.04	0.06	0.04
ARM C	15.00	45.00	75.00	0.08	0.11	0.08

Demand set: 2017 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	14.0	219.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.179	0.000	0.821
		5.0	0.0	23.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		568.0	84.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.167	0.833	0.000
		1.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.33	11.36	0.029		0.00	0.03	0.4		0.09
B-A	0.06	6.89	0.009		0.00	0.01	0.1		0.15
C-AB	1.12	10.03	0.111		0.00	0.12	1.8		0.11
A-B	0.18								
A-C	2.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.39	11.21	0.035		0.03	0.04	0.5		0.09
B-A	0.07	6.50	0.012		0.01	0.01	0.2		0.16
C-AB	1.33	9.90	0.135		0.12	0.15	2.3		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.48	11.00	0.043		0.04	0.05	0.7		0.09
B-A	0.09	5.95	0.015		0.01	0.02	0.2		0.17
C-AB	1.63	9.72	0.168		0.15	0.20	3.0		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.48	11.00	0.043		0.05	0.05	0.7		0.09
B-A	0.09	5.95	0.015		0.02	0.02	0.2		0.17
C-AB	1.63	9.72	0.168		0.20	0.20	3.0		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.39	11.21	0.035		0.05	0.04	0.6		0.09
B-A	0.07	6.49	0.012		0.02	0.01	0.2		0.16
C-AB	1.33	9.90	0.135		0.20	0.16	2.4		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.33	11.36	0.029		0.04	0.03	0.5		0.09
B-A	0.06	6.89	0.009		0.01	0.01	0.1		0.15
C-AB	1.12	10.03	0.111		0.16	0.13	1.9		0.11
A-B	0.18								
A-C	2.75								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	35.8	23.9	3.3	0.09	3.3	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	122.5	81.7	14.5	0.12	14.5	0.12
A-B	19.3	12.8				
A-C	301.4	201.0				
ALL	1269.1	846.0	18.8	0.01	18.9	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:35:35 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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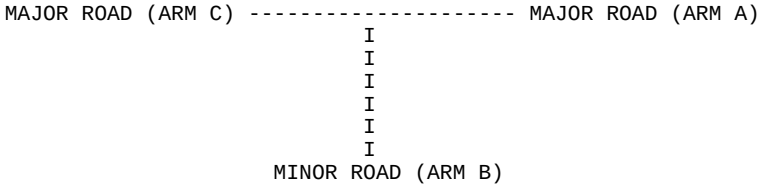
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Woolley Edge Lane - The Grange\
July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:35:54 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS IS REACHED	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		7.35	11.02	7.35
ARM B	15.00	45.00	75.00		2.13	3.19	2.13
ARM C	15.00	45.00	75.00		2.56	3.84	2.56

Demand set: 85% Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS IS REACHED	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		0.01	0.02	0.01
ARM B	15.00	45.00	75.00		0.06	0.09	0.06
ARM C	15.00	45.00	75.00		0.04	0.06	0.04

Demand set: 2017 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.003	0.997
		0.0	2.0	586.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.065	0.000	0.935
		11.0	0.0	159.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		191.0	14.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.000	1.000	0.000
		0.0	3.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS (PERCENTAGE OF H.V.S))

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.06	10.08	0.204		0.00	0.25	3.7		0.12
B-A	0.14	6.20	0.022		0.00	0.02	0.3		0.16
C-AB	0.21	8.59	0.025		0.00	0.03	0.4		0.12
A-B	0.03								
A-C	7.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.46	9.69	0.254		0.25	0.34	4.9		0.14
B-A	0.16	5.78	0.029		0.02	0.03	0.4		0.18
C-AB	0.25	8.28	0.031		0.03	0.03	0.5		0.12
A-B	0.03								
A-C	8.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.01	9.15	0.329		0.34	0.48	7.0		0.16
B-A	0.20	5.17	0.039		0.03	0.04	0.6		0.20
C-AB	0.31	7.84	0.040		0.03	0.04	0.6		0.13
A-B	0.04								
A-C	10.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.01	9.15	0.329		0.48	0.49	7.3		0.16
B-A	0.20	5.17	0.039		0.04	0.04	0.6		0.20
C-AB	0.31	7.84	0.040		0.04	0.04	0.6		0.13
A-B	0.04								
A-C	10.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.46	9.69	0.254		0.49	0.34	5.3		0.14
B-A	0.16	5.78	0.029		0.04	0.03	0.5		0.18
C-AB	0.25	8.28	0.031		0.04	0.03	0.5		0.12
A-B	0.03								
A-C	8.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.06	10.07	0.204		0.34	0.26	4.0		0.12
B-A	0.14	6.19	0.022		0.03	0.02	0.4		0.17
C-AB	0.21	8.59	0.025		0.03	0.03	0.4		0.12
A-B	0.03								
A-C	7.37								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.3
08.00	0.3
08.15	0.5
08.30	0.5
08.45	0.3
09.00	0.3

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	225.7	150.5	32.1	0.14	32.1	0.14
B-A	15.1	10.1	2.7	0.18	2.7	0.18
C-AB	23.4	15.6	3.0	0.13	3.0	0.13
A-B	2.8	1.8				
A-C	808.0	538.6				
ALL	1337.9	891.9	37.8	0.03	37.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.91	4.37	2.91
ARM B	15.00	45.00	75.00	0.35	0.52	0.35
ARM C	15.00	45.00	75.00	8.15	12.22	8.15

Demand set: 85% Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.04	0.06	0.04
ARM C	15.00	45.00	75.00	0.09	0.13	0.09

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	14.0	219.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.179	0.000	0.821
		5.0	0.0	23.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		568.0	84.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.143	0.857	0.000
		1.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.33	11.36	0.029		0.00	0.03	0.4		0.09
B-A	0.06	6.89	0.009		0.00	0.01	0.1		0.15
C-AB	1.13	10.03	0.113		0.00	0.13	1.9		0.11
A-B	0.18								
A-C	2.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.39	11.21	0.035		0.03	0.04	0.5		0.09
B-A	0.07	6.49	0.012		0.01	0.01	0.2		0.16
C-AB	1.35	9.90	0.136		0.13	0.16	2.4		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.48	11.00	0.043		0.04	0.05	0.7		0.09
B-A	0.09	5.94	0.015		0.01	0.02	0.2		0.17
C-AB	1.65	9.72	0.170		0.16	0.20	3.0		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.48	11.00	0.043		0.05	0.05	0.7		0.09
B-A	0.09	5.94	0.015		0.02	0.02	0.2		0.17
C-AB	1.65	9.72	0.170		0.20	0.20	3.1		0.12
A-B	0.26								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.39	11.21	0.035		0.05	0.04	0.6		0.09
B-A	0.07	6.49	0.012		0.02	0.01	0.2		0.16
C-AB	1.35	9.90	0.136		0.20	0.16	2.4		0.12
A-B	0.21								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.33	11.36	0.029		0.04	0.03	0.5		0.09
B-A	0.06	6.89	0.009		0.01	0.01	0.1		0.15
C-AB	1.13	10.03	0.113		0.16	0.13	1.9		0.11
A-B	0.18								
A-C	2.75								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	35.8	23.9	3.3	0.09	3.3	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	123.9	82.6	14.6	0.12	14.6	0.12
A-B	19.3	12.8				
A-C	301.4	201.0				
ALL	1270.4	847.0	19.0	0.01	19.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:36:03 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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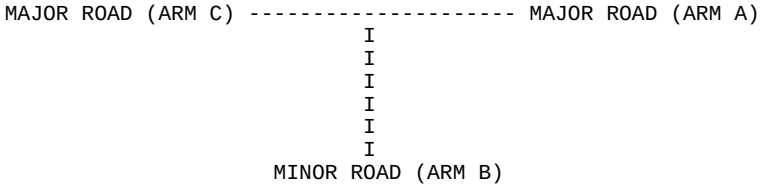
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Woolley Edge Lane - The Grange\
July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:36:22 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.89	11.83	7.89
ARM B	15.00	45.00	75.00	2.29	3.43	2.29
ARM C	15.00	45.00	75.00	2.75	4.13	2.75

Demand set: 2022 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.003	0.997
		0.0	2.0	629.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.066	0.000	0.934
		12.0	0.0	171.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		205.0	15.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.15	9.93	0.216		0.00	0.27	3.9		0.13
B-A	0.15	6.06	0.025		0.00	0.03	0.4		0.17
C-AB	0.19	8.38	0.022		0.00	0.02	0.3		0.12
A-B	0.03								
A-C	7.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.56	9.52	0.269		0.27	0.36	5.3		0.14
B-A	0.18	5.61	0.032		0.03	0.03	0.5		0.18
C-AB	0.22	8.04	0.028		0.02	0.03	0.4		0.13
A-B	0.03								
A-C	9.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.14	8.94	0.351		0.36	0.53	7.7		0.17
B-A	0.22	4.96	0.044		0.03	0.05	0.7		0.21
C-AB	0.28	7.58	0.036		0.03	0.04	0.6		0.14
A-B	0.04								
A-C	11.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.14	8.94	0.351		0.53	0.54	8.0		0.17
B-A	0.22	4.95	0.044		0.05	0.05	0.7		0.21
C-AB	0.28	7.58	0.036		0.04	0.04	0.6		0.14
A-B	0.04								
A-C	11.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.56	9.52	0.269		0.54	0.37	5.8		0.14
B-A	0.18	5.61	0.032		0.05	0.03	0.5		0.18
C-AB	0.22	8.04	0.028		0.04	0.03	0.4		0.13
A-B	0.03								
A-C	9.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.15	9.93	0.216		0.37	0.28	4.3		0.13
B-A	0.15	6.06	0.025		0.03	0.03	0.4		0.17
C-AB	0.19	8.38	0.022		0.03	0.02	0.3		0.12
A-B	0.03								
A-C	7.89								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.5	*
08.30	0.5	*
08.45	0.4	
09.00	0.3	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	235.4	156.9	35.0	0.15	35.0	0.15
B-A	16.5	11.0	3.1	0.19	3.1	0.19
C-AB	20.6	13.8	2.7	0.13	2.7	0.13
A-B	2.8	1.8				
A-C	865.8	577.2				
ALL	1423.2	948.8	40.8	0.03	40.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.11	4.67	3.11
ARM B	15.00	45.00	75.00	0.38	0.56	0.38
ARM C	15.00	45.00	75.00	8.73	13.09	8.73

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	15.0	234.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		608.0	90.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	11.31	0.028		0.00	0.03	0.4		0.09
B-A	0.06	6.77	0.009		0.00	0.01	0.1		0.15
C-AB	1.13	9.97	0.113		0.00	0.13	1.9		0.11
A-B	0.19								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.37	11.15	0.034		0.03	0.03	0.5		0.09
B-A	0.07	6.35	0.012		0.01	0.01	0.2		0.16
C-AB	1.35	9.83	0.137		0.13	0.16	2.4		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.46	10.93	0.042		0.03	0.04	0.6		0.10
B-A	0.09	5.78	0.016		0.01	0.02	0.2		0.18
C-AB	1.65	9.64	0.171		0.16	0.20	3.1		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.46	10.93	0.042		0.04	0.04	0.7		0.10
B-A	0.09	5.78	0.016		0.02	0.02	0.2		0.18
C-AB	1.65	9.64	0.171		0.20	0.21	3.1		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.37	11.15	0.034		0.04	0.03	0.5		0.09
B-A	0.07	6.35	0.012		0.02	0.01	0.2		0.16
C-AB	1.35	9.83	0.137		0.21	0.16	2.4		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.31	11.31	0.028		0.03	0.03	0.4		0.09
B-A	0.06	6.77	0.009		0.01	0.01	0.1		0.15
C-AB	1.13	9.97	0.113		0.16	0.13	1.9		0.11
A-B	0.19								
A-C	2.94								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	34.4	22.9	3.2	0.09	3.2	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	123.9	82.6	14.8	0.12	14.8	0.12
A-B	20.6	13.8				
A-C	322.1	214.7				
ALL	1344.8	896.5	19.1	0.01	19.1	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:36:30 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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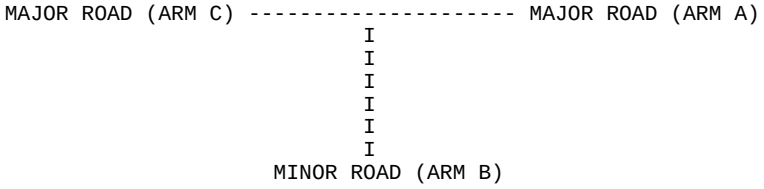
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Woolley Edge Lane - The Grange\
July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:36:54 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Ave Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START TO RISE	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.01	0.02	0.01
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	0.03	0.04	0.03

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START TO RISE	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.89	11.83	7.89
ARM B	15.00	45.00	75.00	2.29	3.43	2.29
ARM C	15.00	45.00	75.00	2.75	4.13	2.75

Demand set: Ave Development Traffic AM

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.000	1.000	0.000
		0.0	2.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 2022 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.003	0.997
		0.0	2.0	629.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.066	0.000	0.934
		12.0	0.0	171.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		205.0	15.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.21	9.93	0.222		0.00	0.28	4.1		0.13
B-A	0.15	6.05	0.025		0.00	0.03	0.4		0.17
C-AB	0.21	8.44	0.025		0.00	0.03	0.4		0.12
A-B	0.03								
A-C	7.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.64	9.51	0.277		0.28	0.38	5.5		0.15
B-A	0.18	5.59	0.032		0.03	0.03	0.5		0.18
C-AB	0.25	8.10	0.031		0.03	0.03	0.5		0.13
A-B	0.03								
A-C	9.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.23	8.94	0.361		0.38	0.56	8.0		0.17
B-A	0.22	4.92	0.045		0.03	0.05	0.7		0.21
C-AB	0.31	7.64	0.041		0.03	0.04	0.6		0.14
A-B	0.04								
A-C	11.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.23	8.94	0.361		0.56	0.56	8.4		0.18
B-A	0.22	4.92	0.045		0.05	0.05	0.7		0.21
C-AB	0.31	7.64	0.041		0.04	0.04	0.6		0.14
A-B	0.04								
A-C	11.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.64	9.51	0.277		0.56	0.39	6.0		0.15
B-A	0.18	5.59	0.032		0.05	0.03	0.5		0.18
C-AB	0.25	8.10	0.031		0.04	0.03	0.5		0.13
A-B	0.03								
A-C	9.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.21	9.93	0.222		0.39	0.29	4.5		0.13
B-A	0.15	6.04	0.025		0.03	0.03	0.4		0.17
C-AB	0.21	8.44	0.025		0.03	0.03	0.4		0.12
A-B	0.03								
A-C	7.90								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.6	*
08.30	0.6	*
08.45	0.4	
09.00	0.3	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	242.3	161.5	36.5	0.15	36.5	0.15
B-A	16.5	11.0	3.1	0.19	3.1	0.19
C-AB	23.4	15.6	3.0	0.13	3.0	0.13
A-B	2.8	1.8				
A-C	867.1	578.1				
ALL	1434.2	956.2	42.6	0.03	42.6	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Ave Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		0.00	0.00	0.00
ARM B	15.00	45.00	75.00		0.04	0.06	0.04
ARM C	15.00	45.00	75.00		0.08	0.11	0.08

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		3.11	4.67	3.11
ARM B	15.00	45.00	75.00		0.38	0.56	0.38
ARM C	15.00	45.00	75.00		8.73	13.09	8.73

Demand set: Ave Development Traffic PM

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.167	0.833	0.000
		1.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 2022 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	15.0	234.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		608.0	90.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.35	11.31	0.031		0.00	0.03	0.5		0.09
B-A	0.06	6.75	0.009		0.00	0.01	0.1		0.15
C-AB	1.19	9.98	0.119		0.00	0.13	2.0		0.11
A-B	0.19								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.42	11.15	0.038		0.03	0.04	0.6		0.09
B-A	0.07	6.33	0.012		0.01	0.01	0.2		0.16
C-AB	1.42	9.84	0.145		0.13	0.17	2.5		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.51	10.93	0.047		0.04	0.05	0.7		0.10
B-A	0.09	5.74	0.016		0.01	0.02	0.2		0.18
C-AB	1.74	9.65	0.181		0.17	0.22	3.3		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.51	10.93	0.047		0.05	0.05	0.7		0.10
B-A	0.09	5.74	0.016		0.02	0.02	0.2		0.18
C-AB	1.74	9.65	0.181		0.22	0.22	3.3		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.42	11.15	0.038		0.05	0.04	0.6		0.09
B-A	0.07	6.33	0.012		0.02	0.01	0.2		0.16
C-AB	1.42	9.84	0.145		0.22	0.17	2.6		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.35	11.31	0.031		0.04	0.03	0.5		0.09
B-A	0.06	6.75	0.009		0.01	0.01	0.1		0.15
C-AB	1.19	9.98	0.119		0.17	0.14	2.0		0.11
A-B	0.19								
A-C	2.94								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	38.5	25.7	3.6	0.09	3.6	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	130.8	87.2	15.7	0.12	15.7	0.12
A-B	20.6	13.8				
A-C	322.1	214.7				
ALL	1357.2	904.8	20.4	0.02	20.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:37:01 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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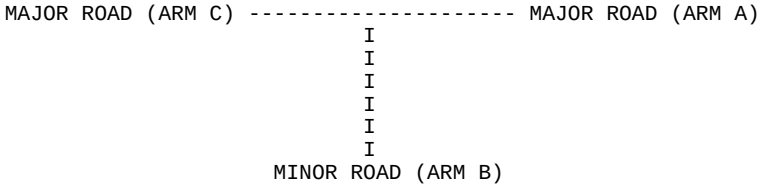
Run with file:-
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July 2017 Assessment\Woolley Edge Lane - The Grange.vpi"
(drive-on-the-left) at 13:37:24 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Edge Lane - The Grange
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Edge Lane (south)
ARM B IS The Grange
ARM C IS Woolley Edge Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)130.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 54.0 M.
- VISIBILITY TO RIGHT	(VB-A) 55.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.50 M.
WIDTH AT 10 M FROM JUNCTION	3.60 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.30 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 85% Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.01	0.02	0.01
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	0.04	0.06	0.04

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.89	11.83	7.89
ARM B	15.00	45.00	75.00	2.29	3.43	2.29
ARM C	15.00	45.00	75.00	2.75	4.13	2.75

Demand set: 85% Development Traffic AM

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.000	1.000	0.000
		0.0	3.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 2022 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.003	0.997
		0.0	2.0	629.0
		(0.0)	(0.0)	(1.6)
	ARM B	0.066	0.000	0.934
		12.0	0.0	171.0
		(9.1)	(0.0)	(0.6)
	ARM C	0.932	0.068	0.000
		205.0	15.0	0.0
		(3.7)	(7.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	2.21	9.93	0.222		0.00	0.28	4.1		0.13
B-A	0.15	6.04	0.025		0.00	0.03	0.4		0.17
C-AB	0.23	8.47	0.027		0.00	0.03	0.4		0.12
A-B	0.03								
A-C	7.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.64	9.51	0.277		0.28	0.38	5.5		0.15
B-A	0.18	5.59	0.032		0.03	0.03	0.5		0.18
C-AB	0.27	8.13	0.033		0.03	0.03	0.5		0.13
A-B	0.03								
A-C	9.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.23	8.94	0.361		0.38	0.56	8.0		0.17
B-A	0.22	4.92	0.045		0.03	0.05	0.7		0.21
C-AB	0.33	7.66	0.043		0.03	0.04	0.7		0.14
A-B	0.04								
A-C	11.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.23	8.94	0.361		0.56	0.56	8.4		0.18
B-A	0.22	4.91	0.045		0.05	0.05	0.7		0.21
C-AB	0.33	7.66	0.043		0.04	0.04	0.7		0.14
A-B	0.04								
A-C	11.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.64	9.51	0.277		0.56	0.39	6.0		0.15
B-A	0.18	5.58	0.032		0.05	0.03	0.5		0.19
C-AB	0.27	8.13	0.033		0.04	0.03	0.5		0.13
A-B	0.03								
A-C	9.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.21	9.93	0.222		0.39	0.29	4.5		0.13
B-A	0.15	6.04	0.025		0.03	0.03	0.4		0.17
C-AB	0.23	8.47	0.027		0.03	0.03	0.4		0.12
A-B	0.03								
A-C	7.90								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.6	*
08.30	0.6	*
08.45	0.4	
09.00	0.3	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	242.3	161.5	36.5	0.15	36.5	0.15
B-A	16.5	11.0	3.1	0.19	3.1	0.19
C-AB	24.8	16.5	3.2	0.13	3.2	0.13
A-B	2.8	1.8				
A-C	867.1	578.1				
ALL	1435.6	957.1	42.8	0.03	42.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
649.25	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 85% Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK	FLOW STOPS	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A		15.00	45.00		75.00	0.00	0.00	0.00
ARM B		15.00	45.00		75.00	0.04	0.06	0.04
ARM C		15.00	45.00		75.00	0.09	0.13	0.09

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK	FLOW STOPS	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A		15.00	45.00		75.00	3.11	4.67	3.11
ARM B		15.00	45.00		75.00	0.38	0.56	0.38
ARM C		15.00	45.00		75.00	8.73	13.09	8.73

Demand set: 85% Development Traffic PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.143	0.857	0.000
		1.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 2022 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.060	0.940
		0.0	15.0	234.0
		(0.0)	(0.0)	(1.4)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.871	0.129	0.000
		608.0	90.0	0.0
		(1.4)	(1.2)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.35	11.31	0.031		0.00	0.03	0.5		0.09
B-A	0.06	6.75	0.009		0.00	0.01	0.1		0.15
C-AB	1.20	9.98	0.121		0.00	0.14	2.0		0.11
A-B	0.19								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.42	11.15	0.038		0.03	0.04	0.6		0.09
B-A	0.07	6.32	0.012		0.01	0.01	0.2		0.16
C-AB	1.44	9.84	0.146		0.14	0.17	2.6		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.51	10.93	0.047		0.04	0.05	0.7		0.10
B-A	0.09	5.74	0.016		0.01	0.02	0.2		0.18
C-AB	1.76	9.65	0.183		0.17	0.22	3.3		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.51	10.93	0.047		0.05	0.05	0.7		0.10
B-A	0.09	5.74	0.016		0.02	0.02	0.2		0.18
C-AB	1.76	9.65	0.183		0.22	0.22	3.3		0.13
A-B	0.28								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.42	11.15	0.038		0.05	0.04	0.6		0.09
B-A	0.07	6.32	0.012		0.02	0.01	0.2		0.16
C-AB	1.44	9.84	0.146		0.22	0.17	2.6		0.12
A-B	0.22								
A-C	3.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.35	11.31	0.031		0.04	0.03	0.5		0.09
B-A	0.06	6.74	0.009		0.01	0.01	0.1		0.15
C-AB	1.20	9.98	0.121		0.17	0.14	2.1		0.11
A-B	0.19								
A-C	2.94								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	38.5	25.7	3.6	0.09	3.6	0.09
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	132.1	88.1	15.9	0.12	15.9	0.12
A-B	20.6	13.8				
A-C	322.1	214.7				
ALL	1358.5	905.7	20.6	0.02	20.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 13:37:30 on 13/07/2017]

APPENDIX J

PICADY Output – Woolley Colliery Road/Bloomhouse Lane

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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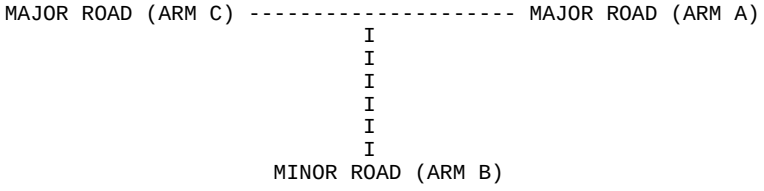
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 14:05:10 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.23	1.84	1.23
ARM B	15.00	45.00	75.00	0.30	0.45	0.30
ARM C	15.00	45.00	75.00	0.44	0.66	0.44

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.296	0.704
		0.0	29.0	69.0
		(0.0)	(0.0)	(1.5)
	ARM B	0.583	0.000	0.417
		14.0	0.0	10.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.800	0.200	0.000
		28.0	7.0	0.0
		(7.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.13	11.53	0.011		0.00	0.01	0.2		0.09
B-A	0.18	9.22	0.019		0.00	0.02	0.3		0.11
C-AB	0.09	11.84	0.008		0.00	0.01	0.1		0.09
C-A	0.35								
A-B	0.36								
A-C	0.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.15	11.46	0.013		0.01	0.01	0.2		0.09
B-A	0.21	9.14	0.023		0.02	0.02	0.3		0.11
C-AB	0.11	11.81	0.009		0.01	0.01	0.2		0.09
C-A	0.42								
A-B	0.43								
A-C	1.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.18	11.37	0.016		0.01	0.02	0.2		0.09
B-A	0.26	9.05	0.028		0.02	0.03	0.4		0.11
C-AB	0.13	11.78	0.011		0.01	0.01	0.2		0.09
C-A	0.51								
A-B	0.53								
A-C	1.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.18	11.37	0.016		0.02	0.02	0.2		0.09
B-A	0.26	9.05	0.028		0.03	0.03	0.4		0.11
C-AB	0.13	11.78	0.011		0.01	0.01	0.2		0.09
C-A	0.51								
A-B	0.53								
A-C	1.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.15	11.46	0.013		0.02	0.01	0.2		0.09
B-A	0.21	9.14	0.023		0.03	0.02	0.4		0.11
C-AB	0.11	11.81	0.009		0.01	0.01	0.2		0.09
C-A	0.42								
A-B	0.43								
A-C	1.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.13	11.52	0.011		0.01	0.01	0.2		0.09
B-A	0.18	9.22	0.019		0.02	0.02	0.3		0.11
C-AB	0.09	11.84	0.008		0.01	0.01	0.1		0.09
C-A	0.35								
A-B	0.36								
A-C	0.87								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	13.8	9.2	1.2	0.09	1.2	0.09
B-A	19.3	12.8	2.1	0.11	2.1	0.11
C-AB	10.0	6.7	0.9	0.09	0.9	0.09
C-A	38.2	25.4				
A-B	39.9	26.6				
A-C	95.0	63.3				
ALL	216.1	144.1	4.3	0.02	4.3	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.76	1.14	0.76
ARM B	15.00	45.00	75.00	0.39	0.58	0.39
ARM C	15.00	45.00	75.00	1.10	1.65	1.10

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.311	0.689
		0.0	19.0	42.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.548	0.000	0.452
		17.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.886	0.114	0.000
		78.0	10.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.18	11.72	0.015		0.00	0.02	0.2		0.09
B-A	0.21	9.11	0.023		0.00	0.02	0.3		0.11
C-AB	0.14	11.30	0.012		0.00	0.01	0.2		0.09
C-A	0.97								
A-B	0.24								
A-C	0.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.21	11.67	0.018		0.02	0.02	0.3		0.09
B-A	0.25	9.04	0.028		0.02	0.03	0.4		0.11
C-AB	0.17	11.39	0.015		0.01	0.02	0.3		0.09
C-A	1.15								
A-B	0.28								
A-C	0.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.26	11.60	0.022		0.02	0.02	0.3		0.09
B-A	0.31	8.93	0.035		0.03	0.04	0.5		0.12
C-AB	0.21	11.50	0.018		0.02	0.02	0.3		0.09
C-A	1.41								
A-B	0.35								
A-C	0.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.26	11.60	0.022		0.02	0.02	0.3		0.09
B-A	0.31	8.93	0.035		0.04	0.04	0.5		0.12
C-AB	0.21	11.50	0.018		0.02	0.02	0.3		0.09
C-A	1.41								
A-B	0.35								
A-C	0.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.21	11.67	0.018		0.02	0.02	0.3		0.09
B-A	0.25	9.04	0.028		0.04	0.03	0.4		0.11
C-AB	0.17	11.39	0.015		0.02	0.02	0.3		0.09
C-A	1.15								
A-B	0.28								
A-C	0.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.18	11.72	0.015		0.02	0.02	0.2		0.09
B-A	0.21	9.11	0.023		0.03	0.02	0.4		0.11
C-AB	0.14	11.30	0.012		0.02	0.01	0.2		0.09
C-A	0.97								
A-B	0.24								
A-C	0.53								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	19.3	12.8	1.7	0.09	1.7	0.09
B-A	23.4	15.6	2.7	0.11	2.7	0.11
C-AB	15.4	10.3	1.6	0.10	1.6	0.10
C-A	105.7	70.5				
A-B	26.2	17.4				
A-C	57.8	38.5				
ALL	247.8	165.2	5.9	0.02	5.9	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:05:24 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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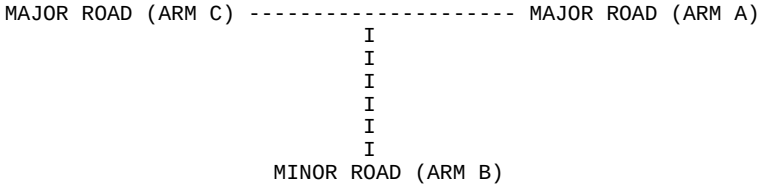
Run with file:-
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Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:09:14 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.23	1.84	1.23
ARM B	15.00	45.00	75.00	0.30	0.45	0.30
ARM C	15.00	45.00	75.00	0.44	0.66	0.44

Demand set: Average Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.03	0.04	0.03
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.08	0.11	0.08

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.296	0.704
		0.0	29.0	69.0
		(0.0)	(0.0)	(1.5)
	ARM B	0.583	0.000	0.417
		14.0	0.0	10.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.800	0.200	0.000
		28.0	7.0	0.0
		(7.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.000	1.000
		0.0	0.0	2.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.833	0.167	0.000
		5.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.14	11.59	0.012		0.00	0.01	0.2		0.09
B-A	0.18	9.14	0.019		0.00	0.02	0.3		0.11
C-AB	0.10	11.87	0.009		0.00	0.01	0.1		0.09
C-A	0.41								
A-B	0.36								
A-C	0.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.16	11.52	0.014		0.01	0.01	0.2		0.09
B-A	0.21	9.07	0.023		0.02	0.02	0.3		0.11
C-AB	0.13	11.85	0.011		0.01	0.01	0.2		0.09
C-A	0.49								
A-B	0.43								
A-C	1.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.20	11.42	0.018		0.01	0.02	0.3		0.09
B-A	0.26	8.96	0.029		0.02	0.03	0.4		0.11
C-AB	0.15	11.82	0.013		0.01	0.01	0.2		0.09
C-A	0.60								
A-B	0.53								
A-C	1.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.20	11.42	0.018		0.02	0.02	0.3		0.09
B-A	0.26	8.96	0.029		0.03	0.03	0.4		0.11
C-AB	0.15	11.82	0.013		0.01	0.01	0.2		0.09
C-A	0.60								
A-B	0.53								
A-C	1.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.16	11.52	0.014		0.02	0.01	0.2		0.09
B-A	0.21	9.07	0.023		0.03	0.02	0.4		0.11
C-AB	0.13	11.85	0.011		0.01	0.01	0.2		0.09
C-A	0.49								
A-B	0.43								
A-C	1.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.14	11.58	0.012		0.01	0.01	0.2		0.09
B-A	0.18	9.14	0.019		0.02	0.02	0.3		0.11
C-AB	0.10	11.87	0.009		0.01	0.01	0.1		0.09
C-A	0.41								
A-B	0.36								
A-C	0.89								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	15.1	10.1	1.3	0.09	1.3	0.09
B-A	19.3	12.8	2.2	0.11	2.2	0.11
C-AB	11.5	7.7	1.1	0.09	1.1	0.09
C-A	44.9	29.9				
A-B	39.9	26.6				
A-C	97.7	65.2				
ALL	228.5	152.3	4.6	0.02	4.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.76	1.14	0.76
ARM B	15.00	45.00	75.00	0.39	0.58	0.39
ARM C	15.00	45.00	75.00	1.10	1.65	1.10

Demand set: Average Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.06	0.09	0.06
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.04	0.06	0.04

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.311	0.689
		0.0	19.0	42.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.548	0.000	0.452
		17.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.886	0.114	0.000
		78.0	10.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.200	0.800
		0.0	1.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.667	0.333	0.000
		2.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.18	11.66	0.015		0.00	0.02	0.2		0.09
B-A	0.23	9.12	0.025		0.00	0.03	0.4		0.11
C-AB	0.15	11.39	0.013		0.00	0.01	0.2		0.09
C-A	0.99								
A-B	0.25								
A-C	0.58								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.21	11.60	0.018		0.02	0.02	0.3		0.09
B-A	0.27	9.04	0.030		0.03	0.03	0.4		0.11
C-AB	0.18	11.47	0.016		0.01	0.02	0.3		0.09
C-A	1.18								
A-B	0.30								
A-C	0.69								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.26	11.53	0.022		0.02	0.02	0.3		0.09
B-A	0.33	8.93	0.037		0.03	0.04	0.6		0.12
C-AB	0.23	11.58	0.020		0.02	0.02	0.4		0.09
C-A	1.44								
A-B	0.37								
A-C	0.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.26	11.53	0.022		0.02	0.02	0.3		0.09
B-A	0.33	8.93	0.037		0.04	0.04	0.6		0.12
C-AB	0.23	11.58	0.020		0.02	0.02	0.4		0.09
C-A	1.44								
A-B	0.37								
A-C	0.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.21	11.60	0.018		0.02	0.02	0.3		0.09
B-A	0.27	9.04	0.030		0.04	0.03	0.5		0.11
C-AB	0.18	11.47	0.016		0.02	0.02	0.3		0.09
C-A	1.18								
A-B	0.30								
A-C	0.69								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.18	11.66	0.015		0.02	0.02	0.2		0.09
B-A	0.23	9.12	0.025		0.03	0.03	0.4		0.11
C-AB	0.15	11.39	0.013		0.02	0.02	0.2		0.09
C-A	0.99								
A-B	0.25								
A-C	0.58								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	19.3	12.8	1.7	0.09	1.7	0.09
B-A	24.8	16.5	2.8	0.11	2.8	0.11
C-AB	17.0	11.3	1.7	0.10	1.7	0.10
C-A	108.3	72.2				
A-B	27.5	18.4				
A-C	63.3	42.2				
ALL	260.1	173.4	6.2	0.02	6.2	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:09:21 on 14/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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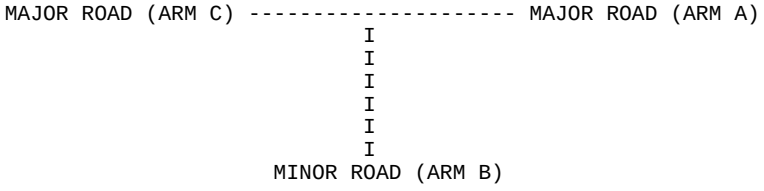
Run with file:-
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Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:09:44 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.23	1.84	1.23
ARM B	15.00	45.00	75.00	0.30	0.45	0.30
ARM C	15.00	45.00	75.00	0.44	0.66	0.44

Demand set: 85% Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.04	0.06	0.04
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.08	0.11	0.08

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000 0.0 (0.0)	0.296 29.0 (0.0)	0.704 69.0 (1.5)
	ARM B	0.583 14.0 (0.0)	0.000 0.0 (0.0)	0.417 10.0 (0.0)
	ARM C	0.800 28.0 (7.1)	0.200 7.0 (0.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.833	0.167	0.000
		5.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.14	11.58	0.012		0.00	0.01	0.2		0.09
B-A	0.18	9.14	0.019		0.00	0.02	0.3		0.11
C-AB	0.10	11.87	0.009		0.00	0.01	0.1		0.09
C-A	0.41								
A-B	0.36								
A-C	0.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.16	11.51	0.014		0.01	0.01	0.2		0.09
B-A	0.21	9.06	0.023		0.02	0.02	0.3		0.11
C-AB	0.13	11.85	0.011		0.01	0.01	0.2		0.09
C-A	0.49								
A-B	0.43								
A-C	1.08								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.20	11.42	0.018		0.01	0.02	0.3		0.09
B-A	0.26	8.96	0.029		0.02	0.03	0.4		0.11
C-AB	0.15	11.82	0.013		0.01	0.01	0.2		0.09
C-A	0.60								
A-B	0.53								
A-C	1.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.20	11.42	0.018		0.02	0.02	0.3		0.09
B-A	0.26	8.96	0.029		0.03	0.03	0.4		0.11
C-AB	0.15	11.82	0.013		0.01	0.01	0.2		0.09
C-A	0.60								
A-B	0.53								
A-C	1.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.16	11.51	0.014		0.02	0.01	0.2		0.09
B-A	0.21	9.06	0.023		0.03	0.02	0.4		0.11
C-AB	0.13	11.85	0.011		0.01	0.01	0.2		0.09
C-A	0.49								
A-B	0.43								
A-C	1.08								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.14	11.58	0.012		0.01	0.01	0.2		0.09
B-A	0.18	9.14	0.019		0.02	0.02	0.3		0.11
C-AB	0.10	11.87	0.009		0.01	0.01	0.1		0.09
C-A	0.41								
A-B	0.36								
A-C	0.90								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	15.1	10.1	1.3	0.09	1.3	0.09
B-A	19.3	12.8	2.2	0.11	2.2	0.11
C-AB	11.5	7.7	1.1	0.09	1.1	0.09
C-A	44.9	29.9				
A-B	39.9	26.6				
A-C	99.1	66.1				
ALL	229.9	153.2	4.6	0.02	4.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.76	1.14	0.76
ARM B	15.00	45.00	75.00	0.39	0.58	0.39
ARM C	15.00	45.00	75.00	1.10	1.65	1.10

Demand set: 85% Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.04	0.06	0.04

Demand set: 2017 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.311	0.689
		0.0	19.0	42.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.548	0.000	0.452
		17.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.886	0.114	0.000
		78.0	10.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.167	0.833
		0.0	1.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		1.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.667	0.333	0.000
		2.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.19	11.70	0.016		0.00	0.02	0.2		0.09
B-A	0.23	9.08	0.025		0.00	0.03	0.4		0.11
C-AB	0.15	11.39	0.013		0.00	0.01	0.2		0.09
C-A	0.99								
A-B	0.25								
A-C	0.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.22	11.65	0.019		0.02	0.02	0.3		0.09
B-A	0.27	9.00	0.030		0.03	0.03	0.5		0.11
C-AB	0.18	11.47	0.016		0.01	0.02	0.3		0.09
C-A	1.18								
A-B	0.30								
A-C	0.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.28	11.57	0.024		0.02	0.02	0.4		0.09
B-A	0.33	8.89	0.037		0.03	0.04	0.6		0.12
C-AB	0.23	11.58	0.020		0.02	0.02	0.4		0.09
C-A	1.44								
A-B	0.37								
A-C	0.86								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	11.57	0.024		0.02	0.02	0.4		0.09
B-A	0.33	8.89	0.037		0.04	0.04	0.6		0.12
C-AB	0.23	11.58	0.020		0.02	0.02	0.4		0.09
C-A	1.44								
A-B	0.37								
A-C	0.86								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	11.65	0.019		0.02	0.02	0.3		0.09
B-A	0.27	9.00	0.030		0.04	0.03	0.5		0.11
C-AB	0.18	11.47	0.016		0.02	0.02	0.3		0.09
C-A	1.18								
A-B	0.30								
A-C	0.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	11.70	0.016		0.02	0.02	0.3		0.09
B-A	0.23	9.08	0.025		0.03	0.03	0.4		0.11
C-AB	0.15	11.39	0.013		0.02	0.02	0.2		0.09
C-A	0.99								
A-B	0.25								
A-C	0.59								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	1.8	0.09	1.8	0.09
B-A	24.8	16.5	2.8	0.11	2.8	0.11
C-AB	17.0	11.3	1.7	0.10	1.7	0.10
C-A	108.3	72.2				
A-B	27.5	18.4				
A-C	64.7	43.1				
ALL	262.9	175.3	6.4	0.02	6.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:09:51 on 14/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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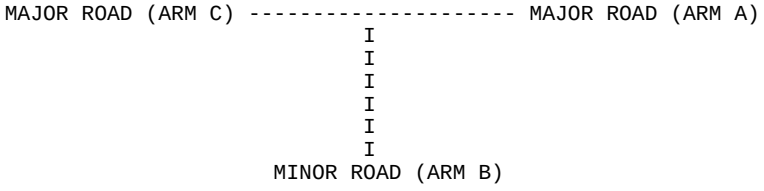
Run with file:-
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Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 14:06:58 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.33	1.99	1.33
ARM B	15.00	45.00	75.00	0.32	0.49	0.32
ARM C	15.00	45.00	75.00	0.47	0.71	0.47

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.302	0.698
		0.0	32.0	74.0
		(0.0)	(0.0)	(1.5)
	ARM B	0.577	0.000	0.423
		15.0	0.0	11.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.789	0.211	0.000
		30.0	8.0	0.0
		(7.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.14	11.52	0.012		0.00	0.01	0.2		0.09
B-A	0.19	9.17	0.021		0.00	0.02	0.3		0.11
C-AB	0.10	11.83	0.009		0.00	0.01	0.1		0.09
C-A	0.37								
A-B	0.40								
A-C	0.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.16	11.45	0.014		0.01	0.01	0.2		0.09
B-A	0.22	9.09	0.025		0.02	0.03	0.4		0.11
C-AB	0.12	11.80	0.011		0.01	0.01	0.2		0.09
C-A	0.44								
A-B	0.48								
A-C	1.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.20	11.35	0.018		0.01	0.02	0.3		0.09
B-A	0.28	8.99	0.031		0.03	0.03	0.5		0.11
C-AB	0.15	11.76	0.013		0.01	0.01	0.2		0.09
C-A	0.54								
A-B	0.59								
A-C	1.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.20	11.35	0.018		0.02	0.02	0.3		0.09
B-A	0.28	8.99	0.031		0.03	0.03	0.5		0.11
C-AB	0.15	11.76	0.013		0.01	0.01	0.2		0.09
C-A	0.54								
A-B	0.59								
A-C	1.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.16	11.45	0.014		0.02	0.01	0.2		0.09
B-A	0.22	9.09	0.025		0.03	0.03	0.4		0.11
C-AB	0.12	11.80	0.011		0.01	0.01	0.2		0.09
C-A	0.44								
A-B	0.48								
A-C	1.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.14	11.52	0.012		0.01	0.01	0.2		0.09
B-A	0.19	9.17	0.021		0.03	0.02	0.3		0.11
C-AB	0.10	11.83	0.009		0.01	0.01	0.1		0.09
C-A	0.37								
A-B	0.40								
A-C	0.93								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	15.1	10.1	1.3	0.09	1.3	0.09
B-A	20.6	13.8	2.3	0.11	2.3	0.11
C-AB	11.5	7.6	1.1	0.09	1.1	0.09
C-A	40.8	27.2				
A-B	44.0	29.4				
A-C	101.9	67.9				
ALL	234.0	156.0	4.7	0.02	4.7	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.81	1.22	0.81
ARM B	15.00	45.00	75.00	0.41	0.62	0.41
ARM C	15.00	45.00	75.00	1.19	1.78	1.19

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.323	0.677
		0.0	21.0	44.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.545	0.000	0.455
		18.0	0.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.884	0.116	0.000
		84.0	11.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.19	11.71	0.016		0.00	0.02	0.2		0.09
B-A	0.23	9.08	0.025		0.00	0.03	0.4		0.11
C-AB	0.15	11.34	0.013		0.00	0.02	0.2		0.09
C-A	1.04								
A-B	0.26								
A-C	0.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.22	11.66	0.019		0.02	0.02	0.3		0.09
B-A	0.27	9.00	0.030		0.03	0.03	0.5		0.11
C-AB	0.18	11.43	0.016		0.02	0.02	0.3		0.09
C-A	1.24								
A-B	0.31								
A-C	0.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.28	11.59	0.024		0.02	0.02	0.4		0.09
B-A	0.33	8.89	0.037		0.03	0.04	0.6		0.12
C-AB	0.23	11.55	0.020		0.02	0.02	0.4		0.09
C-A	1.51								
A-B	0.39								
A-C	0.81								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	11.59	0.024		0.02	0.02	0.4		0.09
B-A	0.33	8.88	0.037		0.04	0.04	0.6		0.12
C-AB	0.23	11.55	0.020		0.02	0.02	0.4		0.09
C-A	1.51								
A-B	0.39								
A-C	0.81								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	11.66	0.019		0.02	0.02	0.3		0.09
B-A	0.27	9.00	0.030		0.04	0.03	0.5		0.11
C-AB	0.18	11.43	0.016		0.02	0.02	0.3		0.09
C-A	1.24								
A-B	0.31								
A-C	0.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	11.71	0.016		0.02	0.02	0.3		0.09
B-A	0.23	9.08	0.025		0.03	0.03	0.4		0.11
C-AB	0.15	11.34	0.013		0.02	0.02	0.2		0.09
C-A	1.04								
A-B	0.26								
A-C	0.55								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	1.8	0.09	1.8	0.09
B-A	24.8	16.5	2.8	0.11	2.8	0.11
C-AB	17.1	11.4	1.7	0.10	1.7	0.10
C-A	113.7	75.8				
A-B	28.9	19.3				
A-C	60.6	40.4				
ALL	265.7	177.1	6.4	0.02	6.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:07:05 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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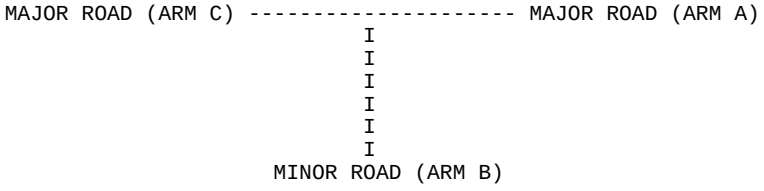
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:10:12 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.33	1.99	1.33
ARM B	15.00	45.00	75.00	0.32	0.49	0.32
ARM C	15.00	45.00	75.00	0.47	0.71	0.47

Demand set: Average Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.03	0.04	0.03
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.08	0.11	0.08

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.302	0.698
		0.0	32.0	74.0
		(0.0)	(0.0)	(1.5)
	ARM B	0.577	0.000	0.423
		15.0	0.0	11.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.789	0.211	0.000
		30.0	8.0	0.0
		(7.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	2.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.833	0.167	0.000
		5.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.15	11.57	0.013		0.00	0.01	0.2		0.09
B-A	0.19	9.10	0.021		0.00	0.02	0.3		0.11
C-AB	0.12	11.86	0.010		0.00	0.01	0.2		0.09
C-A	0.43								
A-B	0.40								
A-C	0.95								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.18	11.50	0.016		0.01	0.02	0.2		0.09
B-A	0.22	9.02	0.025		0.02	0.03	0.4		0.11
C-AB	0.14	11.83	0.012		0.01	0.01	0.2		0.09
C-A	0.52								
A-B	0.48								
A-C	1.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.22	11.40	0.019		0.02	0.02	0.3		0.09
B-A	0.28	8.91	0.031		0.03	0.03	0.5		0.12
C-AB	0.17	11.80	0.015		0.01	0.02	0.3		0.09
C-A	0.63								
A-B	0.59								
A-C	1.39								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.22	11.40	0.019		0.02	0.02	0.3		0.09
B-A	0.28	8.91	0.031		0.03	0.03	0.5		0.12
C-AB	0.17	11.80	0.015		0.02	0.02	0.3		0.09
C-A	0.63								
A-B	0.59								
A-C	1.39								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.18	11.50	0.016		0.02	0.02	0.2		0.09
B-A	0.22	9.02	0.025		0.03	0.03	0.4		0.11
C-AB	0.14	11.83	0.012		0.02	0.01	0.2		0.09
C-A	0.52								
A-B	0.48								
A-C	1.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.15	11.57	0.013		0.02	0.01	0.2		0.09
B-A	0.19	9.10	0.021		0.03	0.02	0.3		0.11
C-AB	0.12	11.86	0.010		0.01	0.01	0.2		0.09
C-A	0.43								
A-B	0.40								
A-C	0.95								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	16.5	11.0	1.5	0.09	1.5	0.09
B-A	20.6	13.8	2.3	0.11	2.3	0.11
C-AB	13.0	8.7	1.2	0.10	1.2	0.10
C-A	47.6	31.7				
A-B	44.0	29.4				
A-C	104.6	69.7				
ALL	246.4	164.3	5.0	0.02	5.0	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.81	1.22	0.81
ARM B	15.00	45.00	75.00	0.41	0.62	0.41
ARM C	15.00	45.00	75.00	1.19	1.78	1.19

Demand set: Average Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.06	0.09	0.06
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.04	0.06	0.04

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.323	0.677
		0.0	21.0	44.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.545	0.000	0.455
		18.0	0.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.884	0.116	0.000
		84.0	11.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.200	0.800
		0.0	1.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.667	0.333	0.000
		2.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.19	11.65	0.016		0.00	0.02	0.2		0.09
B-A	0.24	9.08	0.026		0.00	0.03	0.4		0.11
C-AB	0.17	11.42	0.015		0.00	0.02	0.2		0.09
C-A	1.06								
A-B	0.28								
A-C	0.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.22	11.60	0.019		0.02	0.02	0.3		0.09
B-A	0.28	9.00	0.032		0.03	0.03	0.5		0.11
C-AB	0.20	11.51	0.018		0.02	0.02	0.3		0.09
C-A	1.27								
A-B	0.33								
A-C	0.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.28	11.52	0.024		0.02	0.02	0.4		0.09
B-A	0.35	8.88	0.039		0.03	0.04	0.6		0.12
C-AB	0.25	11.63	0.022		0.02	0.03	0.4		0.09
C-A	1.54								
A-B	0.40								
A-C	0.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	11.52	0.024		0.02	0.02	0.4		0.09
B-A	0.35	8.88	0.039		0.04	0.04	0.6		0.12
C-AB	0.25	11.63	0.022		0.03	0.03	0.4		0.09
C-A	1.54								
A-B	0.40								
A-C	0.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	11.60	0.019		0.02	0.02	0.3		0.09
B-A	0.28	9.00	0.032		0.04	0.03	0.5		0.11
C-AB	0.20	11.51	0.018		0.03	0.02	0.3		0.09
C-A	1.27								
A-B	0.33								
A-C	0.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	11.65	0.016		0.02	0.02	0.3		0.09
B-A	0.24	9.08	0.026		0.03	0.03	0.4		0.11
C-AB	0.17	11.42	0.015		0.02	0.02	0.3		0.09
C-A	1.06								
A-B	0.28								
A-C	0.60								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	1.8	0.09	1.8	0.09
B-A	26.2	17.4	3.0	0.11	3.0	0.11
C-AB	18.7	12.4	1.9	0.10	1.9	0.10
C-A	116.2	77.5				
A-B	30.3	20.2				
A-C	66.1	44.0				
ALL	278.0	185.4	6.7	0.02	6.7	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:10:19 on 14/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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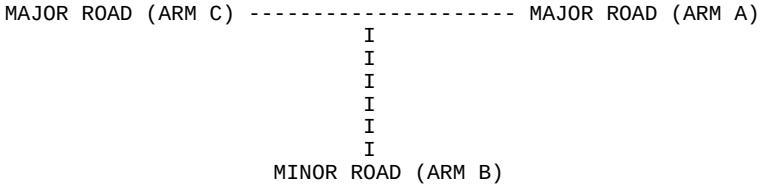
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
Woolley Colliery Road - Bloomhouse Lane\July 2017 Assessment\Woolley Colliery Road - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:12:11 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Woolley Colliery Road - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Woolley Colliery Road (north)
ARM B IS Bloomhouse Lane
ARM C IS Woolley Colliery Road (south)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 19.0 M.
- VISIBILITY TO RIGHT	(VB-A) 75.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.30 M.
WIDTH AT 10 M FROM JUNCTION	3.20 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.50 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.33	1.99	1.33
ARM B	15.00	45.00	75.00	0.32	0.49	0.32
ARM C	15.00	45.00	75.00	0.47	0.71	0.47

Demand set: 85% Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.04	0.06	0.04
ARM B	15.00	45.00	75.00	0.01	0.02	0.01
ARM C	15.00	45.00	75.00	0.08	0.11	0.08

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.302	0.698
		0.0	32.0	74.0
		(0.0)	(0.0)	(1.5)
	ARM B	0.577	0.000	0.423
		15.0	0.0	11.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.789	0.211	0.000
		30.0	8.0	0.0
		(7.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.833	0.167	0.000
		5.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.15	11.57	0.013		0.00	0.01	0.2		0.09
B-A	0.19	9.10	0.021		0.00	0.02	0.3		0.11
C-AB	0.12	11.85	0.010		0.00	0.01	0.2		0.09
C-A	0.43								
A-B	0.40								
A-C	0.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.18	11.49	0.016		0.01	0.02	0.2		0.09
B-A	0.22	9.02	0.025		0.02	0.03	0.4		0.11
C-AB	0.14	11.83	0.012		0.01	0.01	0.2		0.09
C-A	0.52								
A-B	0.48								
A-C	1.15								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.22	11.39	0.019		0.02	0.02	0.3		0.09
B-A	0.28	8.91	0.031		0.03	0.03	0.5		0.12
C-AB	0.17	11.80	0.015		0.01	0.02	0.3		0.09
C-A	0.63								
A-B	0.59								
A-C	1.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.22	11.39	0.019		0.02	0.02	0.3		0.09
B-A	0.28	8.91	0.031		0.03	0.03	0.5		0.12
C-AB	0.17	11.80	0.015		0.02	0.02	0.3		0.09
C-A	0.63								
A-B	0.59								
A-C	1.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.18	11.49	0.016		0.02	0.02	0.2		0.09
B-A	0.22	9.02	0.025		0.03	0.03	0.4		0.11
C-AB	0.14	11.83	0.012		0.02	0.01	0.2		0.09
C-A	0.52								
A-B	0.48								
A-C	1.15								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.15	11.57	0.013		0.02	0.01	0.2		0.09
B-A	0.19	9.10	0.021		0.03	0.02	0.3		0.11
C-AB	0.12	11.85	0.010		0.01	0.01	0.2		0.09
C-A	0.43								
A-B	0.40								
A-C	0.97								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	16.5	11.0	1.5	0.09	1.5	0.09
B-A	20.6	13.8	2.3	0.11	2.3	0.11
C-AB	13.0	8.7	1.2	0.10	1.2	0.10
C-A	47.6	31.7				
A-B	44.0	29.4				
A-C	106.0	70.7				
ALL	247.8	165.2	5.0	0.02	5.0	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.81	1.22	0.81
ARM B	15.00	45.00	75.00	0.41	0.62	0.41
ARM C	15.00	45.00	75.00	1.19	1.78	1.19

Demand set: 85% Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.04	0.06	0.04

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.323	0.677
		0.0	21.0	44.0
		(0.0)	(0.0)	(4.9)
	ARM B	0.545	0.000	0.455
		18.0	0.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.884	0.116	0.000
		84.0	11.0	0.0
		(3.9)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development PM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.167	0.833
		0.0	1.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		1.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.667	0.333	0.000
		2.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.20	11.70	0.017		0.00	0.02	0.3		0.09
B-A	0.24	9.05	0.026		0.00	0.03	0.4		0.11
C-AB	0.17	11.42	0.015		0.00	0.02	0.2		0.09
C-A	1.06								
A-B	0.28								
A-C	0.61								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.24	11.64	0.021		0.02	0.02	0.3		0.09
B-A	0.28	8.96	0.032		0.03	0.03	0.5		0.12
C-AB	0.20	11.50	0.018		0.02	0.02	0.3		0.09
C-A	1.27								
A-B	0.33								
A-C	0.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.29	11.56	0.025		0.02	0.03	0.4		0.09
B-A	0.35	8.84	0.039		0.03	0.04	0.6		0.12
C-AB	0.25	11.62	0.022		0.02	0.03	0.4		0.09
C-A	1.54								
A-B	0.40								
A-C	0.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.29	11.56	0.025		0.03	0.03	0.4		0.09
B-A	0.35	8.84	0.039		0.04	0.04	0.6		0.12
C-AB	0.25	11.62	0.022		0.03	0.03	0.4		0.09
C-A	1.54								
A-B	0.40								
A-C	0.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.24	11.64	0.021		0.03	0.02	0.3		0.09
B-A	0.28	8.96	0.032		0.04	0.03	0.5		0.12
C-AB	0.20	11.50	0.018		0.03	0.02	0.3		0.09
C-A	1.27								
A-B	0.33								
A-C	0.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.20	11.69	0.017		0.02	0.02	0.3		0.09
B-A	0.24	9.05	0.026		0.03	0.03	0.4		0.11
C-AB	0.17	11.42	0.015		0.02	0.02	0.3		0.09
C-A	1.06								
A-B	0.28								
A-C	0.61								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	22.0	14.7	1.9	0.09	1.9	0.09
B-A	26.2	17.4	3.0	0.11	3.0	0.11
C-AB	18.7	12.4	1.9	0.10	1.9	0.10
C-A	116.2	77.5				
A-B	30.3	20.2				
A-C	67.4	45.0				
ALL	280.8	187.2	6.9	0.02	6.9	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:12:22 on 14/07/2017]

APPENDIX K

PICADY Output – Sackup Lane/Bloomhouse Lane

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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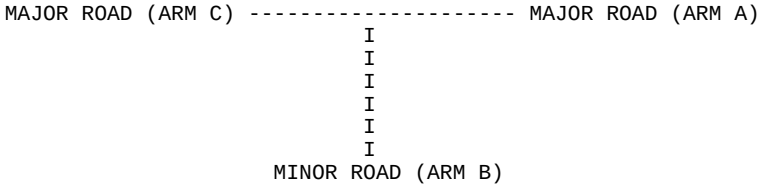
Run with file:-
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July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 14:29:53 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.30	1.95	1.30
ARM B	15.00	45.00	75.00	0.50	0.75	0.50
ARM C	15.00	45.00	75.00	1.15	1.72	1.15

Demand set: 2017 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.048	0.952
		0.0	5.0	99.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.075	0.000	0.925
		3.0	0.0	37.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.783	0.217	0.000
		72.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.46	11.09	0.042		0.00	0.04	0.6		0.09
B-A	0.04	7.60	0.005		0.00	0.00	0.1		0.13
C-AB	0.27	12.13	0.022		0.00	0.03	0.4		0.08
C-A	0.88								
A-B	0.06								
A-C	1.24								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.55	11.02	0.050		0.04	0.05	0.8		0.10
B-A	0.04	7.50	0.006		0.00	0.01	0.1		0.13
C-AB	0.33	12.16	0.027		0.03	0.03	0.5		0.08
C-A	1.05								
A-B	0.07								
A-C	1.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.68	10.92	0.062		0.05	0.07	1.0		0.10
B-A	0.06	7.36	0.007		0.01	0.01	0.1		0.14
C-AB	0.41	12.21	0.034		0.03	0.04	0.6		0.08
C-A	1.28								
A-B	0.09								
A-C	1.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.68	10.92	0.062		0.07	0.07	1.0		0.10
B-A	0.06	7.36	0.007		0.01	0.01	0.1		0.14
C-AB	0.41	12.21	0.034		0.04	0.04	0.6		0.08
C-A	1.28								
A-B	0.09								
A-C	1.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.55	11.02	0.050		0.07	0.05	0.8		0.10
B-A	0.04	7.50	0.006		0.01	0.01	0.1		0.13
C-AB	0.33	12.16	0.027		0.04	0.03	0.5		0.08
C-A	1.05								
A-B	0.07								
A-C	1.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.46	11.09	0.042		0.05	0.04	0.7		0.09
B-A	0.04	7.60	0.005		0.01	0.01	0.1		0.13
C-AB	0.27	12.13	0.022		0.03	0.03	0.4		0.08
C-A	0.88								
A-B	0.06								
A-C	1.24								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	50.9	34.0	4.9	0.10	4.9	0.10
B-A	4.1	2.8	0.6	0.13	0.6	0.13
C-AB	30.3	20.2	3.1	0.10	3.1	0.10
C-A	96.3	64.2				
A-B	6.9	4.6				
A-C	136.3	90.8				
ALL	324.8	216.6	8.5	0.03	8.5	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.81	2.72	1.81
ARM B	15.00	45.00	75.00	0.38	0.56	0.38
ARM C	15.00	45.00	75.00	1.86	2.79	1.86

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.041	0.959
		0.0	6.0	139.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.785	0.215	0.000
		117.0	32.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	10.85	0.029		0.00	0.03	0.4		0.09
B-A	0.06	7.53	0.008		0.00	0.01	0.1		0.13
C-AB	0.45	12.35	0.037		0.00	0.05	0.7		0.08
C-A	1.42								
A-B	0.08								
A-C	1.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.37	10.75	0.035		0.03	0.04	0.5		0.10
B-A	0.07	7.38	0.010		0.01	0.01	0.1		0.14
C-AB	0.56	12.43	0.045		0.05	0.06	0.9		0.08
C-A	1.68								
A-B	0.09								
A-C	2.08								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.46	10.61	0.043		0.04	0.04	0.7		0.10
B-A	0.09	7.17	0.013		0.01	0.01	0.2		0.14
C-AB	0.71	12.53	0.056		0.06	0.08	1.2		0.08
C-A	2.03								
A-B	0.11								
A-C	2.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.46	10.61	0.043		0.04	0.05	0.7		0.10
B-A	0.09	7.17	0.013		0.01	0.01	0.2		0.14
C-AB	0.71	12.53	0.056		0.08	0.08	1.2		0.08
C-A	2.03								
A-B	0.11								
A-C	2.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.37	10.75	0.035		0.05	0.04	0.6		0.10
B-A	0.07	7.38	0.010		0.01	0.01	0.2		0.14
C-AB	0.56	12.43	0.045		0.08	0.06	0.9		0.08
C-A	1.68								
A-B	0.09								
A-C	2.08								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.31	10.85	0.029		0.04	0.03	0.5		0.09
B-A	0.06	7.53	0.008		0.01	0.01	0.1		0.13
C-AB	0.45	12.35	0.037		0.06	0.05	0.7		0.08
C-A	1.41								
A-B	0.08								
A-C	1.74								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	34.4	22.9	3.3	0.10	3.3	0.10
B-A	6.9	4.6	0.9	0.14	0.9	0.14
C-AB	51.5	34.3	5.5	0.11	5.5	0.11
C-A	153.6	102.4				
A-B	8.3	5.5				
A-C	191.3	127.5				
ALL	446.0	297.3	9.7	0.02	9.7	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:30:00 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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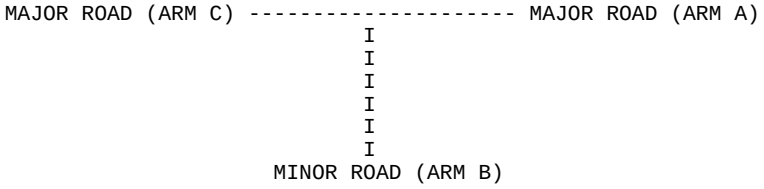
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Sackup Lane - Bloomhouse Lane\
July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:00:25 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		1.30	1.95	1.30
ARM B	15.00	45.00	75.00		0.50	0.75	0.50
ARM C	15.00	45.00	75.00		1.15	1.72	1.15

Demand set: Ave Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		0.10	0.15	0.10
ARM B	15.00	45.00	75.00		0.05	0.08	0.05
ARM C	15.00	45.00	75.00		0.05	0.08	0.05

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.048	0.952
		0.0	5.0	99.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.075	0.000	0.925
		3.0	0.0	37.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.783	0.217	0.000
		72.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.750	0.000	0.250
		3.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.750	0.250	0.000
		3.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.48	10.99	0.043		0.00	0.05	0.7		0.10
B-A	0.08	7.68	0.010		0.00	0.01	0.1		0.13
C-AB	0.29	12.13	0.024		0.00	0.03	0.4		0.08
C-A	0.92								
A-B	0.06								
A-C	1.34								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.57	10.91	0.052		0.05	0.05	0.8		0.10
B-A	0.09	7.57	0.012		0.01	0.01	0.2		0.13
C-AB	0.35	12.16	0.028		0.03	0.03	0.5		0.08
C-A	1.09								
A-B	0.07								
A-C	1.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.70	10.80	0.065		0.05	0.07	1.0		0.10
B-A	0.11	7.42	0.015		0.01	0.01	0.2		0.14
C-AB	0.43	12.20	0.036		0.03	0.04	0.7		0.09
C-A	1.33								
A-B	0.09								
A-C	1.96								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.70	10.80	0.065		0.07	0.07	1.0		0.10
B-A	0.11	7.42	0.015		0.01	0.01	0.2		0.14
C-AB	0.43	12.20	0.036		0.04	0.05	0.7		0.09
C-A	1.33								
A-B	0.09								
A-C	1.96								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.57	10.91	0.052		0.07	0.06	0.8		0.10
B-A	0.09	7.57	0.012		0.01	0.01	0.2		0.13
C-AB	0.35	12.16	0.028		0.05	0.04	0.5		0.08
C-A	1.09								
A-B	0.07								
A-C	1.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.48	10.99	0.043		0.06	0.05	0.7		0.10
B-A	0.08	7.68	0.010		0.01	0.01	0.2		0.13
C-AB	0.29	12.13	0.024		0.04	0.03	0.4		0.08
C-A	0.92								
A-B	0.06								
A-C	1.34								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	52.3	34.9	5.0	0.10	5.0	0.10
B-A	8.3	5.5	1.1	0.13	1.1	0.13
C-AB	32.0	21.3	3.3	0.10	3.3	0.10
C-A	100.2	66.8				
A-B	6.9	4.6				
A-C	147.3	98.2				
ALL	346.9	231.2	9.4	0.03	9.4	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.81	2.72	1.81
ARM B	15.00	45.00	75.00	0.38	0.56	0.38
ARM C	15.00	45.00	75.00	1.86	2.79	1.86

Demand set: Ave Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.10	0.15	0.10

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.041	0.959
		0.0	6.0	139.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.785	0.215	0.000
		117.0	32.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.333	0.667
		0.0	2.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		2.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.875	0.125	0.000
		7.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	10.78	0.029		0.00	0.03	0.4		0.10
B-A	0.09	7.60	0.012		0.00	0.01	0.2		0.13
C-AB	0.47	12.38	0.038		0.00	0.05	0.7		0.08
C-A	1.50								
A-B	0.10								
A-C	1.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.37	10.67	0.035		0.03	0.04	0.5		0.10
B-A	0.10	7.44	0.014		0.01	0.01	0.2		0.14
C-AB	0.58	12.47	0.046		0.05	0.06	0.9		0.08
C-A	1.77								
A-B	0.12								
A-C	2.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.46	10.53	0.044		0.04	0.05	0.7		0.10
B-A	0.13	7.22	0.018		0.01	0.02	0.3		0.14
C-AB	0.74	12.59	0.058		0.06	0.08	1.2		0.08
C-A	2.15								
A-B	0.15								
A-C	2.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.46	10.53	0.044		0.05	0.05	0.7		0.10
B-A	0.13	7.22	0.018		0.02	0.02	0.3		0.14
C-AB	0.74	12.59	0.058		0.08	0.08	1.2		0.08
C-A	2.15								
A-B	0.15								
A-C	2.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.37	10.67	0.035		0.05	0.04	0.6		0.10
B-A	0.10	7.44	0.014		0.02	0.01	0.2		0.14
C-AB	0.58	12.47	0.046		0.08	0.06	0.9		0.08
C-A	1.77								
A-B	0.12								
A-C	2.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.31	10.78	0.029		0.04	0.03	0.5		0.10
B-A	0.09	7.59	0.012		0.01	0.01	0.2		0.13
C-AB	0.47	12.38	0.038		0.06	0.05	0.7		0.08
C-A	1.50								
A-B	0.10								
A-C	1.79								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	34.4	22.9	3.3	0.10	3.3	0.10
B-A	9.6	6.4	1.3	0.14	1.3	0.14
C-AB	53.6	35.7	5.8	0.11	5.8	0.11
C-A	162.5	108.3				
A-B	11.0	7.3				
A-C	196.8	131.2				
ALL	468.0	312.0	10.4	0.02	10.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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RELEASE 5.0 (JUNE 2010)

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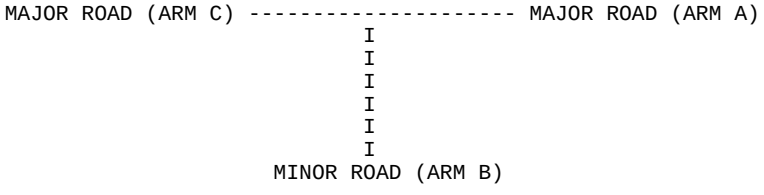
Run with file:-
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July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:00:56 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		1.30	1.95	1.30
ARM B	15.00	45.00	75.00		0.50	0.75	0.50
ARM C	15.00	45.00	75.00		1.15	1.72	1.15

Demand set: 85% Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		0.13	0.19	0.13
ARM B	15.00	45.00	75.00		0.05	0.08	0.05
ARM C	15.00	45.00	75.00		0.05	0.08	0.05

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.048	0.952
		0.0	5.0	99.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.075	0.000	0.925
		3.0	0.0	37.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.783	0.217	0.000
		72.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.100	0.900
		0.0	1.0	9.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.750	0.000	0.250
		3.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		4.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.48	10.99	0.043		0.00	0.05	0.7		0.10
B-A	0.08	7.68	0.010		0.00	0.01	0.1		0.13
C-AB	0.27	12.13	0.022		0.00	0.03	0.4		0.08
C-A	0.93								
A-B	0.08								
A-C	1.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.57	10.90	0.052		0.05	0.05	0.8		0.10
B-A	0.09	7.57	0.012		0.01	0.01	0.2		0.13
C-AB	0.33	12.16	0.027		0.03	0.03	0.5		0.08
C-A	1.11								
A-B	0.09								
A-C	1.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.70	10.79	0.065		0.05	0.07	1.0		0.10
B-A	0.11	7.42	0.015		0.01	0.01	0.2		0.14
C-AB	0.41	12.20	0.034		0.03	0.04	0.6		0.08
C-A	1.35								
A-B	0.11								
A-C	1.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.70	10.79	0.065		0.07	0.07	1.0		0.10
B-A	0.11	7.42	0.015		0.01	0.01	0.2		0.14
C-AB	0.41	12.20	0.034		0.04	0.04	0.7		0.08
C-A	1.35								
A-B	0.11								
A-C	1.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.57	10.90	0.052		0.07	0.06	0.8		0.10
B-A	0.09	7.57	0.012		0.01	0.01	0.2		0.13
C-AB	0.33	12.16	0.027		0.04	0.03	0.5		0.08
C-A	1.11								
A-B	0.09								
A-C	1.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.48	10.99	0.043		0.06	0.05	0.7		0.10
B-A	0.08	7.68	0.010		0.01	0.01	0.2		0.13
C-AB	0.27	12.13	0.022		0.03	0.03	0.4		0.08
C-A	0.93								
A-B	0.08								
A-C	1.36								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	52.3	34.9	5.1	0.10	5.1	0.10
B-A	8.3	5.5	1.1	0.13	1.1	0.13
C-AB	30.5	20.3	3.1	0.10	3.1	0.10
C-A	101.7	67.8				
A-B	8.3	5.5				
A-C	148.7	99.1				
ALL	349.6	233.1	9.3	0.03	9.3	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.81	2.72	1.81
ARM B	15.00	45.00	75.00	0.38	0.56	0.38
ARM C	15.00	45.00	75.00	1.86	2.79	1.86

Demand set: 85% Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.11	0.17	0.11
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.13	0.19	0.13

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.041	0.959
		0.0	6.0	139.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.167	0.000	0.833
		5.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.785	0.215	0.000
		117.0	32.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.333	0.667
		0.0	3.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		2.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.900	0.100	0.000
		9.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	10.77	0.029		0.00	0.03	0.4		0.10
B-A	0.09	7.58	0.012		0.00	0.01	0.2		0.13
C-AB	0.47	12.39	0.038		0.00	0.05	0.7		0.08
C-A	1.52								
A-B	0.11								
A-C	1.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.37	10.66	0.035		0.03	0.04	0.5		0.10
B-A	0.10	7.42	0.014		0.01	0.01	0.2		0.14
C-AB	0.58	12.47	0.047		0.05	0.06	0.9		0.08
C-A	1.80								
A-B	0.13								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.46	10.52	0.044		0.04	0.05	0.7		0.10
B-A	0.13	7.20	0.018		0.01	0.02	0.3		0.14
C-AB	0.74	12.59	0.059		0.06	0.08	1.2		0.08
C-A	2.18								
A-B	0.17								
A-C	2.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.46	10.52	0.044		0.05	0.05	0.7		0.10
B-A	0.13	7.20	0.018		0.02	0.02	0.3		0.14
C-AB	0.74	12.59	0.059		0.08	0.08	1.2		0.08
C-A	2.18								
A-B	0.17								
A-C	2.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.37	10.66	0.035		0.05	0.04	0.6		0.10
B-A	0.10	7.42	0.014		0.02	0.01	0.2		0.14
C-AB	0.58	12.47	0.047		0.08	0.06	0.9		0.08
C-A	1.80								
A-B	0.13								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.31	10.77	0.029		0.04	0.03	0.5		0.10
B-A	0.09	7.58	0.012		0.01	0.01	0.2		0.13
C-AB	0.47	12.39	0.038		0.06	0.05	0.7		0.08
C-A	1.52								
A-B	0.11								
A-C	1.82								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	34.4	22.9	3.3	0.10	3.3	0.10
B-A	9.6	6.4	1.3	0.14	1.3	0.14
C-AB	53.8	35.8	5.8	0.11	5.8	0.11
C-A	165.1	110.1				
A-B	12.4	8.3				
A-C	199.6	133.1				
ALL	474.9	316.6	10.4	0.02	10.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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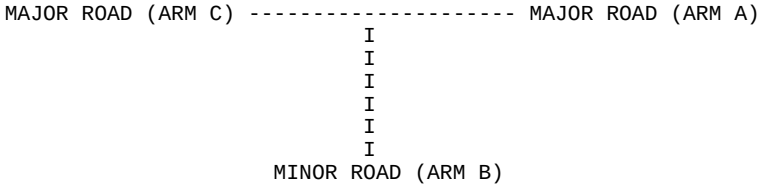
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Sackup Lane - Bloomhouse Lane\
July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 14:31:27 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.39	2.08	1.39
ARM B	15.00	45.00	75.00	0.52	0.79	0.52
ARM C	15.00	45.00	75.00	1.21	1.82	1.21

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.045	0.955
		0.0	5.0	106.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.071	0.000	0.929
		3.0	0.0	39.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.794	0.206	0.000
		77.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.49	11.07	0.044		0.00	0.05	0.7		0.09
B-A	0.04	7.56	0.005		0.00	0.00	0.1		0.13
C-AB	0.27	12.14	0.022		0.00	0.03	0.4		0.08
C-A	0.94								
A-B	0.06								
A-C	1.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.58	10.99	0.053		0.05	0.06	0.8		0.10
B-A	0.04	7.45	0.006		0.00	0.01	0.1		0.14
C-AB	0.33	12.18	0.027		0.03	0.03	0.5		0.08
C-A	1.12								
A-B	0.07								
A-C	1.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.72	10.89	0.066		0.06	0.07	1.0		0.10
B-A	0.06	7.31	0.008		0.01	0.01	0.1		0.14
C-AB	0.41	12.23	0.034		0.03	0.04	0.6		0.08
C-A	1.37								
A-B	0.09								
A-C	1.95								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.72	10.89	0.066		0.07	0.07	1.1		0.10
B-A	0.06	7.31	0.008		0.01	0.01	0.1		0.14
C-AB	0.41	12.23	0.034		0.04	0.04	0.7		0.08
C-A	1.37								
A-B	0.09								
A-C	1.95								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.58	10.99	0.053		0.07	0.06	0.9		0.10
B-A	0.04	7.45	0.006		0.01	0.01	0.1		0.14
C-AB	0.33	12.18	0.027		0.04	0.03	0.5		0.08
C-A	1.12								
A-B	0.07								
A-C	1.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.49	11.07	0.044		0.06	0.05	0.7		0.09
B-A	0.04	7.56	0.005		0.01	0.01	0.1		0.13
C-AB	0.27	12.14	0.022		0.03	0.03	0.4		0.08
C-A	0.94								
A-B	0.06								
A-C	1.33								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	53.7	35.8	5.1	0.10	5.1	0.10
B-A	4.1	2.8	0.6	0.13	0.6	0.13
C-AB	30.5	20.3	3.1	0.10	3.1	0.10
C-A	103.0	68.7				
A-B	6.9	4.6				
A-C	145.9	97.3				
ALL	344.1	229.4	8.8	0.03	8.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.92	2.89	1.92
ARM B	15.00	45.00	75.00	0.40	0.60	0.40
ARM C	15.00	45.00	75.00	1.99	2.98	1.99

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.039	0.961
		0.0	6.0	148.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.156	0.000	0.844
		5.0	0.0	27.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.780	0.220	0.000
		124.0	35.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.34	10.83	0.031		0.00	0.03	0.5		0.10
B-A	0.06	7.46	0.008		0.00	0.01	0.1		0.14
C-AB	0.50	12.37	0.040		0.00	0.05	0.8		0.08
C-A	1.49								
A-B	0.08								
A-C	1.86								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.40	10.73	0.038		0.03	0.04	0.6		0.10
B-A	0.07	7.30	0.010		0.01	0.01	0.2		0.14
C-AB	0.61	12.45	0.049		0.05	0.07	1.0		0.08
C-A	1.77								
A-B	0.09								
A-C	2.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.50	10.58	0.047		0.04	0.05	0.7		0.10
B-A	0.09	7.08	0.013		0.01	0.01	0.2		0.14
C-AB	0.78	12.57	0.062		0.07	0.09	1.3		0.08
C-A	2.14								
A-B	0.11								
A-C	2.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.50	10.58	0.047		0.05	0.05	0.7		0.10
B-A	0.09	7.07	0.013		0.01	0.01	0.2		0.14
C-AB	0.78	12.57	0.062		0.09	0.09	1.3		0.08
C-A	2.14								
A-B	0.11								
A-C	2.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.40	10.72	0.038		0.05	0.04	0.6		0.10
B-A	0.07	7.30	0.010		0.01	0.01	0.2		0.14
C-AB	0.61	12.45	0.049		0.09	0.07	1.0		0.08
C-A	1.77								
A-B	0.09								
A-C	2.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.34	10.83	0.031		0.04	0.03	0.5		0.10
B-A	0.06	7.46	0.008		0.01	0.01	0.1		0.14
C-AB	0.50	12.37	0.041		0.07	0.05	0.8		0.08
C-A	1.49								
A-B	0.08								
A-C	1.86								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	37.2	24.8	3.6	0.10	3.6	0.10
B-A	6.9	4.6	1.0	0.14	1.0	0.14
C-AB	56.9	37.9	6.1	0.11	6.1	0.11
C-A	162.0	108.0				
A-B	8.3	5.5				
A-C	203.7	135.8				
ALL	474.9	316.6	10.7	0.02	10.7	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:31:33 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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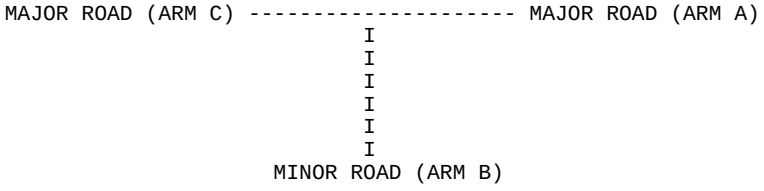
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Sackup Lane - Bloomhouse Lane\
July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:01:24 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		1.39	2.08	1.39
ARM B	15.00	45.00	75.00		0.52	0.79	0.52
ARM C	15.00	45.00	75.00		1.21	1.82	1.21

Demand set: Ave Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		0.10	0.15	0.10
ARM B	15.00	45.00	75.00		0.05	0.08	0.05
ARM C	15.00	45.00	75.00		0.05	0.08	0.05

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.045	0.955
		0.0	5.0	106.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.071	0.000	0.929
		3.0	0.0	39.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.794	0.206	0.000
		77.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.750	0.000	0.250
		3.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.750	0.250	0.000
		3.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.50	10.97	0.046		0.00	0.05	0.7		0.10
B-A	0.08	7.64	0.010		0.00	0.01	0.1		0.13
C-AB	0.29	12.14	0.024		0.00	0.03	0.4		0.08
C-A	0.98								
A-B	0.06								
A-C	1.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.60	10.89	0.055		0.05	0.06	0.9		0.10
B-A	0.09	7.53	0.012		0.01	0.01	0.2		0.13
C-AB	0.35	12.17	0.029		0.03	0.04	0.5		0.08
C-A	1.16								
A-B	0.07								
A-C	1.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.73	10.77	0.068		0.06	0.07	1.1		0.10
B-A	0.11	7.37	0.015		0.01	0.02	0.2		0.14
C-AB	0.44	12.22	0.036		0.04	0.05	0.7		0.08
C-A	1.42								
A-B	0.09								
A-C	2.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.73	10.77	0.068		0.07	0.07	1.1		0.10
B-A	0.11	7.37	0.015		0.02	0.02	0.2		0.14
C-AB	0.44	12.22	0.036		0.05	0.05	0.7		0.08
C-A	1.42								
A-B	0.09								
A-C	2.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.60	10.89	0.055		0.07	0.06	0.9		0.10
B-A	0.09	7.53	0.012		0.02	0.01	0.2		0.13
C-AB	0.35	12.17	0.029		0.05	0.04	0.5		0.08
C-A	1.16								
A-B	0.07								
A-C	1.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.50	10.97	0.046		0.06	0.05	0.7		0.10
B-A	0.08	7.64	0.010		0.01	0.01	0.2		0.13
C-AB	0.29	12.14	0.024		0.04	0.03	0.4		0.08
C-A	0.98								
A-B	0.06								
A-C	1.43								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	55.1	36.7	5.3	0.10	5.3	0.10
B-A	8.3	5.5	1.1	0.13	1.1	0.13
C-AB	32.2	21.5	3.3	0.10	3.3	0.10
C-A	106.8	71.2				
A-B	6.9	4.6				
A-C	156.9	104.6				
ALL	366.1	244.1	9.8	0.03	9.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.92	2.89	1.92
ARM B	15.00	45.00	75.00	0.40	0.60	0.40
ARM C	15.00	45.00	75.00	1.99	2.98	1.99

Demand set: Ave Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.08	0.11	0.08
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.10	0.15	0.10

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.039	0.961
		0.0	6.0	148.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.156	0.000	0.844
		5.0	0.0	27.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.780	0.220	0.000
		124.0	35.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Ave Development Traffic PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.333	0.667
		0.0	2.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		2.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.875	0.125	0.000
		7.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.34	10.76	0.031		0.00	0.03	0.5		0.10
B-A	0.09	7.52	0.012		0.00	0.01	0.2		0.13
C-AB	0.52	12.41	0.042		0.00	0.05	0.8		0.08
C-A	1.58								
A-B	0.10								
A-C	1.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.40	10.65	0.038		0.03	0.04	0.6		0.10
B-A	0.10	7.35	0.014		0.01	0.01	0.2		0.14
C-AB	0.64	12.49	0.051		0.05	0.07	1.0		0.08
C-A	1.86								
A-B	0.12								
A-C	2.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.50	10.49	0.047		0.04	0.05	0.7		0.10
B-A	0.13	7.12	0.018		0.01	0.02	0.3		0.14
C-AB	0.81	12.62	0.064		0.07	0.09	1.4		0.08
C-A	2.25								
A-B	0.15								
A-C	2.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.50	10.49	0.047		0.05	0.05	0.7		0.10
B-A	0.13	7.12	0.018		0.02	0.02	0.3		0.14
C-AB	0.81	12.62	0.064		0.09	0.09	1.4		0.08
C-A	2.25								
A-B	0.15								
A-C	2.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.40	10.65	0.038		0.05	0.04	0.6		0.10
B-A	0.10	7.35	0.014		0.02	0.01	0.2		0.14
C-AB	0.64	12.49	0.051		0.09	0.07	1.0		0.08
C-A	1.86								
A-B	0.12								
A-C	2.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.34	10.76	0.031		0.04	0.03	0.5		0.10
B-A	0.09	7.52	0.012		0.01	0.01	0.2		0.13
C-AB	0.52	12.41	0.042		0.07	0.05	0.8		0.08
C-A	1.58								
A-B	0.10								
A-C	1.91								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	37.2	24.8	3.6	0.10	3.6	0.10
B-A	9.6	6.4	1.3	0.14	1.3	0.14
C-AB	59.0	39.4	6.4	0.11	6.4	0.11
C-A	170.8	113.9				
A-B	11.0	7.3				
A-C	209.2	139.5				
ALL	496.9	331.3	11.3	0.02	11.3	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:01:30 on 14/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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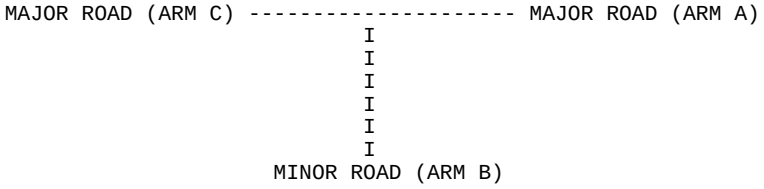
Run with file:-
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July 2017 Assessment\Sackup Lane - Bloomhouse Lane.vpi"
(drive-on-the-left) at 09:01:46 on Friday, 14 July 2017

RUN INFORMATION

RUN TITLE	: Sackup Lane - Bloomhouse Lane
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sackup Lane (south)
ARM B IS Bloomhouse Lane
ARM C IS Sackup Lane (north)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 52.0 M.
- VISIBILITY TO RIGHT	(VB-A) 17.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	4.90 M.
WIDTH AT 10 M FROM JUNCTION	3.70 M.
WIDTH AT 15 M FROM JUNCTION	3.20 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.39	2.08	1.39
ARM B	15.00	45.00	75.00	0.52	0.79	0.52
ARM C	15.00	45.00	75.00	1.21	1.82	1.21

Demand set: 85% Development Traffic AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.13	0.19	0.13
ARM B	15.00	45.00	75.00	0.05	0.08	0.05
ARM C	15.00	45.00	75.00	0.05	0.08	0.05

Demand set: 2022 AM Base

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.045	0.955
		0.0	5.0	106.0
		(0.0)	(0.0)	(6.1)
	ARM B	0.071	0.000	0.929
		3.0	0.0	39.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.794	0.206	0.000
		77.0	20.0	0.0
		(5.6)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.100	0.900
		0.0	1.0	9.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.750	0.000	0.250
		3.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		4.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.50	10.97	0.046		0.00	0.05	0.7		0.10
B-A	0.08	7.64	0.010		0.00	0.01	0.1		0.13
C-AB	0.27	12.14	0.023		0.00	0.03	0.4		0.08
C-A	0.99								
A-B	0.08								
A-C	1.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.60	10.88	0.055		0.05	0.06	0.9		0.10
B-A	0.09	7.52	0.012		0.01	0.01	0.2		0.13
C-AB	0.33	12.17	0.027		0.03	0.03	0.5		0.08
C-A	1.18								
A-B	0.09								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.73	10.76	0.068		0.06	0.07	1.1		0.10
B-A	0.11	7.37	0.015		0.01	0.02	0.2		0.14
C-AB	0.42	12.22	0.034		0.03	0.04	0.7		0.08
C-A	1.44								
A-B	0.11								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.73	10.76	0.068		0.07	0.07	1.1		0.10
B-A	0.11	7.36	0.015		0.02	0.02	0.2		0.14
C-AB	0.42	12.22	0.034		0.04	0.04	0.7		0.08
C-A	1.44								
A-B	0.11								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.60	10.88	0.055		0.07	0.06	0.9		0.10
B-A	0.09	7.52	0.012		0.02	0.01	0.2		0.13
C-AB	0.33	12.17	0.027		0.04	0.03	0.5		0.08
C-A	1.18								
A-B	0.09								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.50	10.97	0.046		0.06	0.05	0.7		0.10
B-A	0.08	7.64	0.010		0.01	0.01	0.2		0.13
C-AB	0.27	12.14	0.023		0.03	0.03	0.4		0.08
C-A	0.99								
A-B	0.08								
A-C	1.44								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	55.1	36.7	5.3	0.10	5.3	0.10
B-A	8.3	5.5	1.1	0.13	1.1	0.13
C-AB	30.7	20.5	3.2	0.10	3.2	0.10
C-A	108.3	72.2				
A-B	8.3	5.5				
A-C	158.3	105.5				
ALL	368.9	245.9	9.6	0.03	9.6	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.28	0.28

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.92	2.89	1.92
ARM B	15.00	45.00	75.00	0.40	0.60	0.40
ARM C	15.00	45.00	75.00	1.99	2.98	1.99

Demand set: 85% Development Traffic PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.11	0.17	0.11
ARM B	15.00	45.00	75.00	0.03	0.04	0.03
ARM C	15.00	45.00	75.00	0.13	0.19	0.13

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.039	0.961
		0.0	6.0	148.0
		(0.0)	(0.0)	(5.1)
	ARM B	0.156	0.000	0.844
		5.0	0.0	27.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.780	0.220	0.000
		124.0	35.0	0.0
		(0.9)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development Traffic PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.333	0.667
		0.0	3.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		2.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.900	0.100	0.000
		9.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.34	10.75	0.032		0.00	0.03	0.5		0.10
B-A	0.09	7.51	0.012		0.00	0.01	0.2		0.13
C-AB	0.52	12.41	0.042		0.00	0.05	0.8		0.08
C-A	1.60								
A-B	0.11								
A-C	1.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.40	10.64	0.038		0.03	0.04	0.6		0.10
B-A	0.10	7.34	0.014		0.01	0.01	0.2		0.14
C-AB	0.64	12.50	0.051		0.05	0.07	1.0		0.08
C-A	1.89								
A-B	0.13								
A-C	2.31								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.50	10.48	0.047		0.04	0.05	0.7		0.10
B-A	0.13	7.10	0.018		0.01	0.02	0.3		0.14
C-AB	0.81	12.63	0.064		0.07	0.09	1.4		0.08
C-A	2.29								
A-B	0.17								
A-C	2.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.50	10.48	0.047		0.05	0.05	0.7		0.10
B-A	0.13	7.10	0.018		0.02	0.02	0.3		0.14
C-AB	0.81	12.63	0.064		0.09	0.09	1.4		0.08
C-A	2.29								
A-B	0.17								
A-C	2.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.40	10.64	0.038		0.05	0.04	0.6		0.10
B-A	0.10	7.34	0.014		0.02	0.01	0.2		0.14
C-AB	0.64	12.50	0.051		0.09	0.07	1.0		0.08
C-A	1.89								
A-B	0.13								
A-C	2.31								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.34	10.75	0.032		0.04	0.03	0.5		0.10
B-A	0.09	7.51	0.012		0.01	0.01	0.2		0.13
C-AB	0.52	12.41	0.042		0.07	0.06	0.8		0.08
C-A	1.60								
A-B	0.11								
A-C	1.93								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	37.2	24.8	3.6	0.10	3.6	0.10
B-A	9.6	6.4	1.3	0.14	1.3	0.14
C-AB	59.2	39.5	6.4	0.11	6.4	0.11
C-A	173.4	115.6				
A-B	12.4	8.3				
A-C	212.0	141.3				
ALL	503.8	335.8	11.4	0.02	11.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 09:01:56 on 14/07/2017]

APPENDIX L

PICADY Output – Church Street/Station Road

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

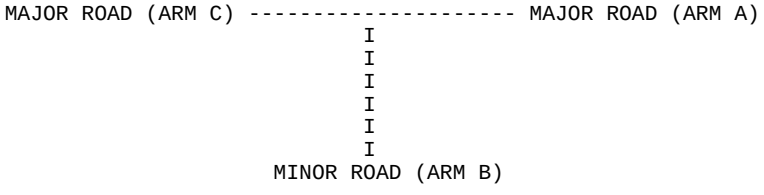
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:06:32 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.89	5.83	3.89
ARM B	15.00	45.00	75.00	0.93	1.39	0.93
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00				
	ARM A	0.000	0.080	0.920
		0.0	25.0	286.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		74.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		415.0	0.0	0.0
		(4.2)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.62	0.000		0.00	0.00	0.0		0.00
B-A	0.93	7.93	0.117		0.00	0.13	1.9		0.14
C-AB	0.00	8.65	0.000		0.00	0.00	0.0		0.00
C-A	5.21								
A-B	0.31								
A-C	3.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.40	0.000		0.00	0.00	0.0		0.00
B-A	1.11	7.58	0.146		0.13	0.17	2.5		0.15
C-AB	0.00	8.48	0.000		0.00	0.00	0.0		0.00
C-A	6.22								
A-B	0.37								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	8.09	0.000		0.00	0.00	0.0		0.00
B-A	1.36	7.09	0.191		0.17	0.23	3.4		0.17
C-AB	0.00	8.26	0.000		0.00	0.00	0.0		0.00
C-A	7.62								
A-B	0.46								
A-C	5.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	8.09	0.000		0.00	0.00	0.0		0.00
B-A	1.36	7.09	0.191		0.23	0.24	3.5		0.17
C-AB	0.00	8.26	0.000		0.00	0.00	0.0		0.00
C-A	7.62								
A-B	0.46								
A-C	5.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.40	0.000		0.00	0.00	0.0		0.00
B-A	1.11	7.58	0.146		0.24	0.17	2.7		0.15
C-AB	0.00	8.48	0.000		0.00	0.00	0.0		0.00
C-A	6.22								
A-B	0.37								
A-C	4.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.61	0.000		0.00	0.00	0.0		0.00
B-A	0.93	7.93	0.117		0.17	0.13	2.1		0.14
C-AB	0.00	8.65	0.000		0.00	0.00	0.0		0.00
C-A	5.21								
A-B	0.31								
A-C	3.59								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	101.9	67.9	16.0	0.16	16.0	0.16
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	571.2	380.8				
A-B	34.4	22.9				
A-C	393.7	262.4				
ALL	1101.1	734.1	16.0	0.01	16.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	0.59	0.88	0.59
ARM C	15.00	45.00	75.00	4.47	6.71	4.47

Demand set: 2017 PM Base

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	78.0	584.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		47.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		358.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.90	0.000		0.00	0.00	0.0		0.00
B-A	0.59	6.90	0.085		0.00	0.09	1.3		0.16
C-AB	0.00	7.77	0.000		0.00	0.00	0.0		0.00
C-A	4.49								
A-B	0.98								
A-C	7.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.54	0.000		0.00	0.00	0.0		0.00
B-A	0.70	6.40	0.110		0.09	0.12	1.8		0.18
C-AB	0.00	7.44	0.000		0.00	0.00	0.0		0.00
C-A	5.36								
A-B	1.17								
A-C	8.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	7.04	0.000		0.00	0.00	0.0		0.00
B-A	0.86	5.72	0.151		0.12	0.17	2.5		0.21
C-AB	0.00	6.98	0.000		0.00	0.00	0.0		0.00
C-A	6.57								
A-B	1.43								
A-C	10.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	7.04	0.000		0.00	0.00	0.0		0.00
B-A	0.86	5.72	0.151		0.17	0.18	2.6		0.21
C-AB	0.00	6.98	0.000		0.00	0.00	0.0		0.00
C-A	6.57								
A-B	1.43								
A-C	10.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.54	0.000		0.00	0.00	0.0		0.00
B-A	0.70	6.40	0.110		0.18	0.13	1.9		0.18
C-AB	0.00	7.44	0.000		0.00	0.00	0.0		0.00
C-A	5.36								
A-B	1.17								
A-C	8.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.89	0.000		0.00	0.00	0.0		0.00
B-A	0.59	6.90	0.085		0.13	0.09	1.5		0.16
C-AB	0.00	7.77	0.000		0.00	0.00	0.0		0.00
C-A	4.49								
A-B	0.98								
A-C	7.33								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	64.7	43.1	11.7	0.18	11.7	0.18
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	492.8	328.5				
A-B	107.4	71.6				
A-C	803.8	535.9				
ALL	1468.6	979.1	11.7	0.01	11.7	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:06:40 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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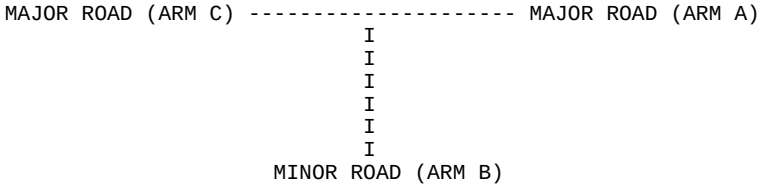
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:07:30 on Thursday, 13 July 2017

RUN INFORMATION
****

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.89	5.83	3.89
ARM B	15.00	45.00	75.00	0.93	1.39	0.93
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

Demand set: Average Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.21	0.32	0.21
ARM B	15.00	45.00	75.00	0.17	0.26	0.17
ARM C	15.00	45.00	75.00	0.36	0.54	0.36

Demand set: 2017 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.080	0.920
		0.0	25.0	286.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		74.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		415.0	0.0	0.0
		(4.2)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.353	0.647
		0.0	6.0	11.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		14.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		29.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.53	0.000		0.00	0.00	0.0		0.00
B-A	1.10	7.85	0.141		0.00	0.16	2.3		0.15
C-AB	0.00	8.60	0.000		0.00	0.00	0.0		0.00
C-A	5.57								
A-B	0.39								
A-C	3.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.29	0.000		0.00	0.00	0.0		0.00
B-A	1.32	7.48	0.176		0.16	0.21	3.1		0.16
C-AB	0.00	8.43	0.000		0.00	0.00	0.0		0.00
C-A	6.65								
A-B	0.46								
A-C	4.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.96	0.000		0.00	0.00	0.0		0.00
B-A	1.61	6.97	0.232		0.21	0.30	4.3		0.19
C-AB	0.00	8.20	0.000		0.00	0.00	0.0		0.00
C-A	8.15								
A-B	0.57								
A-C	5.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.96	0.000		0.00	0.00	0.0		0.00
B-A	1.61	6.97	0.232		0.30	0.30	4.5		0.19
C-AB	0.00	8.20	0.000		0.00	0.00	0.0		0.00
C-A	8.15								
A-B	0.57								
A-C	5.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.29	0.000		0.00	0.00	0.0		0.00
B-A	1.32	7.48	0.176		0.30	0.22	3.4		0.16
C-AB	0.00	8.43	0.000		0.00	0.00	0.0		0.00
C-A	6.65								
A-B	0.46								
A-C	4.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.53	0.000		0.00	0.00	0.0		0.00
B-A	1.10	7.85	0.141		0.22	0.17	2.6		0.15
C-AB	0.00	8.60	0.000		0.00	0.00	0.0		0.00
C-A	5.57								
A-B	0.39								
A-C	3.73								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	121.1	80.8	20.1	0.17	20.1	0.17
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	611.1	407.4				
A-B	42.7	28.4				
A-C	408.8	272.5				
ALL	1183.7	789.2	20.1	0.02	20.1	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	0.59	0.88	0.59
ARM C	15.00	45.00	75.00	4.47	6.71	4.47

Demand set: Average Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.47	0.71	0.47
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	0.17	0.26	0.17

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	78.0	584.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		47.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		358.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.342	0.658
		0.0	13.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		7.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		14.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.79	0.000		0.00	0.00	0.0		0.00
B-A	0.68	6.82	0.099		0.00	0.11	1.6		0.16
C-AB	0.00	7.68	0.000		0.00	0.00	0.0		0.00
C-A	4.67								
A-B	1.14								
A-C	7.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.41	0.000		0.00	0.00	0.0		0.00
B-A	0.81	6.30	0.128		0.11	0.15	2.1		0.18
C-AB	0.00	7.33	0.000		0.00	0.00	0.0		0.00
C-A	5.57								
A-B	1.36								
A-C	9.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	6.88	0.000		0.00	0.00	0.0		0.00
B-A	0.99	5.57	0.178		0.15	0.21	3.1		0.22
C-AB	0.00	6.84	0.000		0.00	0.00	0.0		0.00
C-A	6.83								
A-B	1.67								
A-C	11.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	6.88	0.000		0.00	0.00	0.0		0.00
B-A	0.99	5.57	0.178		0.21	0.21	3.2		0.22
C-AB	0.00	6.84	0.000		0.00	0.00	0.0		0.00
C-A	6.83								
A-B	1.67								
A-C	11.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.41	0.000		0.00	0.00	0.0		0.00
B-A	0.81	6.30	0.128		0.21	0.15	2.3		0.18
C-AB	0.00	7.33	0.000		0.00	0.00	0.0		0.00
C-A	5.57								
A-B	1.36								
A-C	9.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.79	0.000		0.00	0.00	0.0		0.00
B-A	0.68	6.82	0.099		0.15	0.11	1.7		0.16
C-AB	0.00	7.68	0.000		0.00	0.00	0.0		0.00
C-A	4.67								
A-B	1.14								
A-C	7.64								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	74.3	49.6	14.0	0.19	14.0	0.19
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	512.0	341.4				
A-B	125.3	83.5				
A-C	838.2	558.8				
ALL	1549.9	1033.2	14.0	0.01	14.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:07:36 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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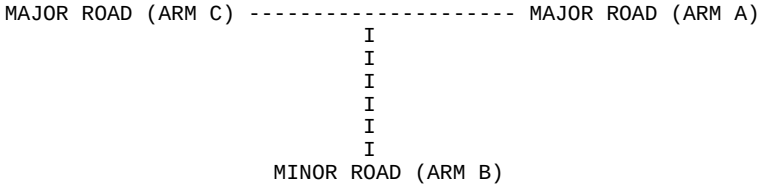
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:07:52 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A		15.00	45.00	75.00	3.89	5.83	3.89
ARM B		15.00	45.00	75.00	0.93	1.39	0.93
ARM C		15.00	45.00	75.00	5.19	7.78	5.19

Demand set: 85% Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A		15.00	45.00	75.00	0.28	0.41	0.28
ARM B		15.00	45.00	75.00	0.19	0.28	0.19
ARM C		15.00	45.00	75.00	0.38	0.56	0.38

Demand set: 2017 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.080	0.920
		0.0	25.0	286.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		74.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		415.0	0.0	0.0
		(4.2)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.318	0.682
		0.0	7.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		15.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		30.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.52	0.000		0.00	0.00	0.0		0.00
B-A	1.12	7.84	0.143		0.00	0.16	2.4		0.15
C-AB	0.00	8.59	0.000		0.00	0.00	0.0		0.00
C-A	5.58								
A-B	0.40								
A-C	3.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.27	0.000		0.00	0.00	0.0		0.00
B-A	1.33	7.46	0.179		0.16	0.21	3.1		0.16
C-AB	0.00	8.42	0.000		0.00	0.00	0.0		0.00
C-A	6.67								
A-B	0.48								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.93	0.000		0.00	0.00	0.0		0.00
B-A	1.63	6.94	0.235		0.21	0.30	4.4		0.19
C-AB	0.00	8.18	0.000		0.00	0.00	0.0		0.00
C-A	8.17								
A-B	0.59								
A-C	5.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.93	0.000		0.00	0.00	0.0		0.00
B-A	1.63	6.94	0.235		0.30	0.31	4.6		0.19
C-AB	0.00	8.18	0.000		0.00	0.00	0.0		0.00
C-A	8.17								
A-B	0.59								
A-C	5.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.27	0.000		0.00	0.00	0.0		0.00
B-A	1.33	7.46	0.179		0.31	0.22	3.4		0.16
C-AB	0.00	8.42	0.000		0.00	0.00	0.0		0.00
C-A	6.67								
A-B	0.48								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.51	0.000		0.00	0.00	0.0		0.00
B-A	1.12	7.84	0.143		0.22	0.17	2.6		0.15
C-AB	0.00	8.59	0.000		0.00	0.00	0.0		0.00
C-A	5.58								
A-B	0.40								
A-C	3.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	122.5	81.7	20.5	0.17	20.5	0.17
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	612.5	408.3				
A-B	44.0	29.4				
A-C	414.3	276.2				
ALL	1193.4	795.6	20.5	0.02	20.5	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2017 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	0.59	0.88	0.59
ARM C	15.00	45.00	75.00	4.47	6.71	4.47

Demand set: 85% Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.59	0.88	0.59
ARM B	15.00	45.00	75.00	0.11	0.17	0.11
ARM C	15.00	45.00	75.00	0.24	0.36	0.24

Demand set: 2017 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	78.0	584.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		47.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		358.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.340	0.660
		0.0	16.0	31.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		9.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		19.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.77	0.000		0.00	0.00	0.0		0.00
B-A	0.70	6.80	0.103		0.00	0.11	1.6		0.16
C-AB	0.00	7.66	0.000		0.00	0.00	0.0		0.00
C-A	4.73								
A-B	1.18								
A-C	7.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.38	0.000		0.00	0.00	0.0		0.00
B-A	0.84	6.27	0.134		0.11	0.15	2.2		0.18
C-AB	0.00	7.30	0.000		0.00	0.00	0.0		0.00
C-A	5.65								
A-B	1.41								
A-C	9.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	6.84	0.000		0.00	0.00	0.0		0.00
B-A	1.03	5.54	0.186		0.15	0.22	3.2		0.22
C-AB	0.00	6.81	0.000		0.00	0.00	0.0		0.00
C-A	6.92								
A-B	1.72								
A-C	11.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	6.84	0.000		0.00	0.00	0.0		0.00
B-A	1.03	5.54	0.186		0.22	0.23	3.4		0.22
C-AB	0.00	6.81	0.000		0.00	0.00	0.0		0.00
C-A	6.92								
A-B	1.72								
A-C	11.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.38	0.000		0.00	0.00	0.0		0.00
B-A	0.84	6.27	0.134		0.23	0.16	2.4		0.18
C-AB	0.00	7.30	0.000		0.00	0.00	0.0		0.00
C-A	5.65								
A-B	1.41								
A-C	9.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.76	0.000		0.00	0.00	0.0		0.00
B-A	0.70	6.80	0.103		0.16	0.12	1.8		0.16
C-AB	0.00	7.66	0.000		0.00	0.00	0.0		0.00
C-A	4.73								
A-B	1.18								
A-C	7.72								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	77.1	51.4	14.7	0.19	14.7	0.19
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	518.9	345.9				
A-B	129.4	86.3				
A-C	846.5	564.3				
ALL	1571.9	1047.9	14.7	0.01	14.7	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:08:02 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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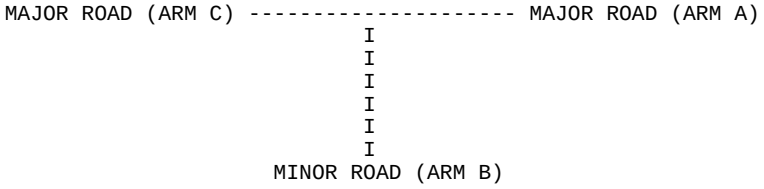
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:08:18 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.18	6.26	4.18
ARM B	15.00	45.00	75.00	0.99	1.48	0.99
ARM C	15.00	45.00	75.00	5.56	8.34	5.56

Demand set: 2022 AM Base

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00		TURNING PROPORTIONS		
	ARM A	0.000	0.081	0.919
		0.0	27.0	307.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		79.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		445.0	0.0	0.0
		(4.2)	(0.0)	(0.0)
		TURNING COUNTS (PERCENTAGE OF H.V.S)		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.54	0.000		0.00	0.00	0.0		0.00
B-A	0.99	7.80	0.127		0.00	0.14	2.1		0.15
C-AB	0.00	8.58	0.000		0.00	0.00	0.0		0.00
C-A	5.58								
A-B	0.34								
A-C	3.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.30	0.000		0.00	0.00	0.0		0.00
B-A	1.18	7.42	0.159		0.14	0.19	2.7		0.16
C-AB	0.00	8.41	0.000		0.00	0.00	0.0		0.00
C-A	6.67								
A-B	0.40								
A-C	4.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.97	0.000		0.00	0.00	0.0		0.00
B-A	1.45	6.90	0.210		0.19	0.26	3.8		0.18
C-AB	0.00	8.17	0.000		0.00	0.00	0.0		0.00
C-A	8.17								
A-B	0.50								
A-C	5.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.97	0.000		0.00	0.00	0.0		0.00
B-A	1.45	6.90	0.210		0.26	0.26	3.9		0.18
C-AB	0.00	8.17	0.000		0.00	0.00	0.0		0.00
C-A	8.17								
A-B	0.50								
A-C	5.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.30	0.000		0.00	0.00	0.0		0.00
B-A	1.18	7.42	0.159		0.26	0.19	3.0		0.16
C-AB	0.00	8.41	0.000		0.00	0.00	0.0		0.00
C-A	6.67								
A-B	0.40								
A-C	4.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.53	0.000		0.00	0.00	0.0		0.00
B-A	0.99	7.80	0.127		0.19	0.15	2.3		0.15
C-AB	0.00	8.58	0.000		0.00	0.00	0.0		0.00
C-A	5.58								
A-B	0.34								
A-C	3.85								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	108.7	72.5	17.8	0.16	17.8	0.16
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	612.5	408.3				
A-B	37.2	24.8				
A-C	422.6	281.7				
ALL	1181.0	787.3	17.8	0.02	17.8	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	0.63	0.94	0.63
ARM C	15.00	45.00	75.00	4.79	7.18	4.79

Demand set: 2022 PM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	84.0	625.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		50.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		383.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.77	0.000		0.00	0.00	0.0		0.00
B-A	0.63	6.72	0.093		0.00	0.10	1.5		0.16
C-AB	0.00	7.65	0.000		0.00	0.00	0.0		0.00
C-A	4.81								
A-B	1.05								
A-C	7.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.38	0.000		0.00	0.00	0.0		0.00
B-A	0.75	6.19	0.121		0.10	0.14	2.0		0.18
C-AB	0.00	7.30	0.000		0.00	0.00	0.0		0.00
C-A	5.74								
A-B	1.26								
A-C	9.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	6.85	0.000		0.00	0.00	0.0		0.00
B-A	0.92	5.45	0.168		0.14	0.20	2.9		0.22
C-AB	0.00	6.81	0.000		0.00	0.00	0.0		0.00
C-A	7.03								
A-B	1.54								
A-C	11.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	6.84	0.000		0.00	0.00	0.0		0.00
B-A	0.92	5.45	0.168		0.20	0.20	3.0		0.22
C-AB	0.00	6.81	0.000		0.00	0.00	0.0		0.00
C-A	7.03								
A-B	1.54								
A-C	11.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.38	0.000		0.00	0.00	0.0		0.00
B-A	0.75	6.19	0.121		0.20	0.14	2.2		0.18
C-AB	0.00	7.30	0.000		0.00	0.00	0.0		0.00
C-A	5.74								
A-B	1.26								
A-C	9.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.77	0.000		0.00	0.00	0.0		0.00
B-A	0.63	6.72	0.093		0.14	0.10	1.6		0.16
C-AB	0.00	7.65	0.000		0.00	0.00	0.0		0.00
C-A	4.81								
A-B	1.05								
A-C	7.84								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	68.8	45.9	13.1	0.19	13.1	0.19
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	527.2	351.4				
A-B	115.6	77.1				
A-C	860.3	573.5				
ALL	1571.9	1047.9	13.1	0.01	13.1	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:08:25 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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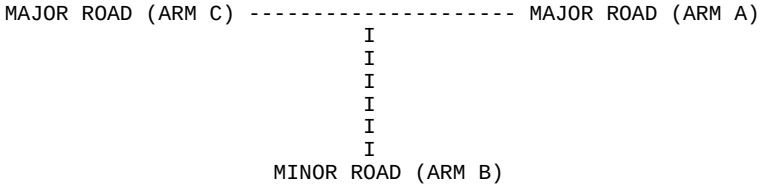
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:08:42 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	TO RISE	IS REACHED FLOW STOPS	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00		75.00		4.18	6.26	4.18
ARM B	15.00	45.00		75.00		0.99	1.48	0.99
ARM C	15.00	45.00		75.00		5.56	8.34	5.56

Demand set: Average Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	TO RISE	IS REACHED FLOW STOPS	FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00		75.00		0.21	0.32	0.21
ARM B	15.00	45.00		75.00		0.17	0.26	0.17
ARM C	15.00	45.00		75.00		0.36	0.54	0.36

Demand set: 2022 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.081	0.919
		0.0	27.0	307.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		79.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		445.0	0.0	0.0
		(4.2)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.353	0.647
		0.0	6.0	11.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		14.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		29.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.45	0.000		0.00	0.00	0.0		0.00
B-A	1.17	7.72	0.151		0.00	0.18	2.5		0.15
C-AB	0.00	8.54	0.000		0.00	0.00	0.0		0.00
C-A	5.95								
A-B	0.41								
A-C	3.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.19	0.000		0.00	0.00	0.0		0.00
B-A	1.39	7.32	0.190		0.18	0.23	3.4		0.17
C-AB	0.00	8.36	0.000		0.00	0.00	0.0		0.00
C-A	7.10								
A-B	0.49								
A-C	4.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.83	0.000		0.00	0.00	0.0		0.00
B-A	1.71	6.77	0.252		0.23	0.33	4.8		0.20
C-AB	0.00	8.10	0.000		0.00	0.00	0.0		0.00
C-A	8.70								
A-B	0.61								
A-C	5.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.83	0.000		0.00	0.00	0.0		0.00
B-A	1.71	6.77	0.252		0.33	0.33	5.0		0.20
C-AB	0.00	8.10	0.000		0.00	0.00	0.0		0.00
C-A	8.70								
A-B	0.61								
A-C	5.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.19	0.000		0.00	0.00	0.0		0.00
B-A	1.39	7.32	0.190		0.33	0.24	3.7		0.17
C-AB	0.00	8.36	0.000		0.00	0.00	0.0		0.00
C-A	7.10								
A-B	0.49								
A-C	4.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.45	0.000		0.00	0.00	0.0		0.00
B-A	1.17	7.72	0.151		0.24	0.18	2.8		0.15
C-AB	0.00	8.54	0.000		0.00	0.00	0.0		0.00
C-A	5.95								
A-B	0.41								
A-C	3.99								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	128.0	85.3	22.2	0.17	22.2	0.17
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	652.4	435.0				
A-B	45.4	30.3				
A-C	437.7	291.8				
ALL	1263.6	842.4	22.2	0.02	22.2	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	0.63	0.94	0.63
ARM C	15.00	45.00	75.00	4.79	7.18	4.79

Demand set: Average Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.47	0.71	0.47
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	0.17	0.26	0.17

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	84.0	625.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		50.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		383.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: Average Development PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.342	0.658
		0.0	13.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		7.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		14.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.66	0.000		0.00	0.00	0.0		0.00
B-A	0.72	6.64	0.108		0.00	0.12	1.7		0.17
C-AB	0.00	7.56	0.000		0.00	0.00	0.0		0.00
C-A	4.98								
A-B	1.22								
A-C	8.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.26	0.000		0.00	0.00	0.0		0.00
B-A	0.85	6.08	0.140		0.12	0.16	2.3		0.19
C-AB	0.00	7.18	0.000		0.00	0.00	0.0		0.00
C-A	5.95								
A-B	1.45								
A-C	9.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	6.69	0.000		0.00	0.00	0.0		0.00
B-A	1.05	5.31	0.197		0.16	0.24	3.5		0.23
C-AB	0.00	6.67	0.000		0.00	0.00	0.0		0.00
C-A	7.29								
A-B	1.78								
A-C	11.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	6.68	0.000		0.00	0.00	0.0		0.00
B-A	1.05	5.31	0.197		0.24	0.24	3.6		0.23
C-AB	0.00	6.67	0.000		0.00	0.00	0.0		0.00
C-A	7.29								
A-B	1.78								
A-C	11.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.25	0.000		0.00	0.00	0.0		0.00
B-A	0.85	6.08	0.140		0.24	0.17	2.6		0.19
C-AB	0.00	7.18	0.000		0.00	0.00	0.0		0.00
C-A	5.95								
A-B	1.45								
A-C	9.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.66	0.000		0.00	0.00	0.0		0.00
B-A	0.72	6.64	0.108		0.17	0.12	1.9		0.17
C-AB	0.00	7.56	0.000		0.00	0.00	0.0		0.00
C-A	4.98								
A-B	1.22								
A-C	8.16								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	78.5	52.3	15.6	0.20	15.6	0.20
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	546.4	364.3				
A-B	133.5	89.0				
A-C	894.7	596.5				
ALL	1653.1	1102.1	15.6	0.01	15.6	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:08:49 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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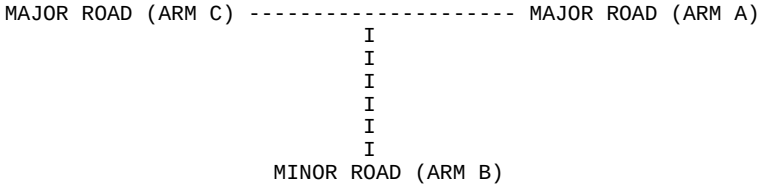
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\Church Street - Station Road\
July 2017 Assessment\Church Street - Station Road.vpi"
(drive-on-the-left) at 15:09:08 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Church Street - Station Road
LOCATION	: Darton, Barnsley
DATE	: 20/07/16
CLIENT	:
ENUMERATOR	: Ashley.Armitage [PC114]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Church Street
ARM B IS Station Road (north)
ARM C IS Station Road (east)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	8.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	90.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	190.0 M.
- VISIBILITY TO RIGHT	(VB-A)	25.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.00 M.
WIDTH AT 5 M FROM JUNCTION		4.00 M.
WIDTH AT 10 M FROM JUNCTION		3.25 M.
WIDTH AT 15 M FROM JUNCTION		3.25 M.
WIDTH AT 20 M FROM JUNCTION		3.25 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	TO RISE	IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00		75.00		4.18	6.26	4.18
ARM B	15.00	45.00		75.00		0.99	1.48	0.99
ARM C	15.00	45.00		75.00		5.56	8.34	5.56

Demand set: 85% Development AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	TO RISE	IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00		75.00		0.28	0.41	0.28
ARM B	15.00	45.00		75.00		0.19	0.28	0.19
ARM C	15.00	45.00		75.00		0.38	0.56	0.38

Demand set: 2022 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.081	0.919
		0.0	27.0	307.0
		(0.0)	(12.0)	(6.4)
	ARM B	1.000	0.000	0.000
		79.0	0.0	0.0
		(1.4)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		445.0	0.0	0.0
		(4.2)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.318	0.682
		0.0	7.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		15.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		30.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	1.18	7.70	0.153		0.00	0.18	2.6		0.15
C-AB	0.00	8.53	0.000		0.00	0.00	0.0		0.00
C-A	5.96								
A-B	0.43								
A-C	4.04								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.18	0.000		0.00	0.00	0.0		0.00
B-A	1.41	7.30	0.193		0.18	0.24	3.4		0.17
C-AB	0.00	8.34	0.000		0.00	0.00	0.0		0.00
C-A	7.12								
A-B	0.51								
A-C	4.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.81	0.000		0.00	0.00	0.0		0.00
B-A	1.72	6.75	0.256		0.24	0.34	4.9		0.20
C-AB	0.00	8.09	0.000		0.00	0.00	0.0		0.00
C-A	8.72								
A-B	0.62								
A-C	5.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.81	0.000		0.00	0.00	0.0		0.00
B-A	1.72	6.75	0.256		0.34	0.34	5.1		0.20
C-AB	0.00	8.09	0.000		0.00	0.00	0.0		0.00
C-A	8.72								
A-B	0.62								
A-C	5.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.17	0.000		0.00	0.00	0.0		0.00
B-A	1.41	7.30	0.193		0.34	0.24	3.8		0.17
C-AB	0.00	8.34	0.000		0.00	0.00	0.0		0.00
C-A	7.12								
A-B	0.51								
A-C	4.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.43	0.000		0.00	0.00	0.0		0.00
B-A	1.18	7.70	0.153		0.24	0.18	2.8		0.15
C-AB	0.00	8.53	0.000		0.00	0.00	0.0		0.00
C-A	5.96								
A-B	0.43								
A-C	4.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	129.4	86.3	22.6	0.17	22.6	0.17
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	653.8	435.9				
A-B	46.8	31.2				
A-C	443.2	295.5				
ALL	1273.2	848.8	22.6	0.02	22.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2022 PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	0.63	0.94	0.63
ARM C	15.00	45.00	75.00	4.79	7.18	4.79

Demand set: 85% Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.59	0.88	0.59
ARM B	15.00	45.00	75.00	0.11	0.17	0.11
ARM C	15.00	45.00	75.00	0.24	0.36	0.24

Demand set: 2022 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.118	0.882
		0.0	84.0	625.0
		(0.0)	(2.6)	(2.3)
	ARM B	1.000	0.000	0.000
		50.0	0.0	0.0
		(4.3)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		383.0	0.0	0.0
		(1.1)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: 85% Development PM

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.340	0.660
		0.0	16.0	31.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		9.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		19.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	7.64	0.000		0.00	0.00	0.0		0.00
B-A	0.74	6.62	0.112		0.00	0.12	1.8		0.17
C-AB	0.00	7.53	0.000		0.00	0.00	0.0		0.00
C-A	5.04								
A-B	1.25								
A-C	8.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	0.88	6.05	0.146		0.12	0.17	2.5		0.19
C-AB	0.00	7.16	0.000		0.00	0.00	0.0		0.00
C-A	6.02								
A-B	1.50								
A-C	9.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	6.65	0.000		0.00	0.00	0.0		0.00
B-A	1.08	5.27	0.206		0.17	0.25	3.7		0.24
C-AB	0.00	6.63	0.000		0.00	0.00	0.0		0.00
C-A	7.38								
A-B	1.84								
A-C	12.04								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	6.64	0.000		0.00	0.00	0.0		0.00
B-A	1.08	5.27	0.206		0.25	0.26	3.8		0.24
C-AB	0.00	6.63	0.000		0.00	0.00	0.0		0.00
C-A	7.38								
A-B	1.84								
A-C	12.04								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	0.88	6.05	0.146		0.26	0.17	2.7		0.19
C-AB	0.00	7.16	0.000		0.00	0.00	0.0		0.00
C-A	6.02								
A-B	1.50								
A-C	9.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	7.63	0.000		0.00	0.00	0.0		0.00
B-A	0.74	6.62	0.112		0.17	0.13	2.0		0.17
C-AB	0.00	7.53	0.000		0.00	0.00	0.0		0.00
C-A	5.04								
A-B	1.25								
A-C	8.23								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	81.2	54.1	16.4	0.20	16.4	0.20
C-AB	0.0	0.0	0.0	0.00	0.0	0.00
C-A	553.3	368.9				
A-B	137.6	91.8				
A-C	902.9	602.0				
ALL	1675.1	1116.7	16.4	0.01	16.4	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:09:14 on 13/07/2017]

APPENDIX M

PICADY Output – A637/Churchfield Lane/Church Street

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

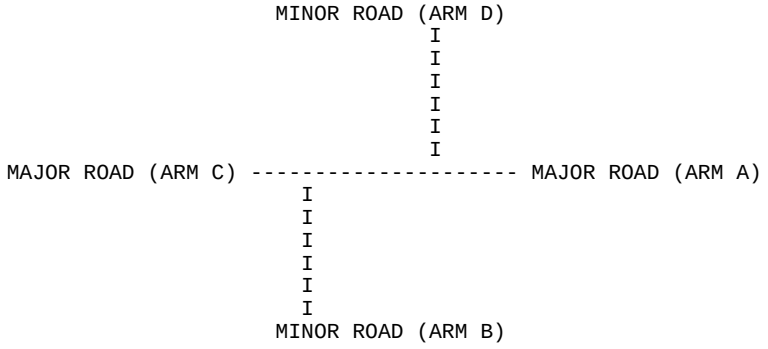
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:30:19 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2017 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.20	10.80	7.20
ARM B	15.00	45.00	75.00	1.63	2.44	1.63
ARM C	15.00	45.00	75.00	6.63	9.94	6.63
ARM D	15.00	45.00	75.00	5.35	8.02	5.35

Demand set: AM 2017 Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.069	0.759	0.172
		0.0	40.0	437.0	99.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.346	0.000	0.023	0.631
		45.0	0.0	3.0	82.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.711	0.004	0.000	0.285
		377.0	2.0	0.0	151.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.164	0.421	0.000
		178.0	70.0	180.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.61	0.005		0.00	0.00	0.1		0.13
B-AD	1.59	6.79	0.235		0.00	0.30	4.3		0.19
A-BCD	1.24	9.27	0.134		0.00	0.15	2.3		0.12
D-A	2.23	8.75	0.255		0.00	0.34	4.8		0.15
D-BC	3.14	6.45	0.487		0.00	0.91	12.5		0.29
C-ABD	0.03	8.43	0.003		0.00	0.00	0.0		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.04	7.12	0.006		0.00	0.01	0.1		0.14
B-AD	1.90	6.22	0.306		0.30	0.43	6.2		0.23
A-BCD	1.48	8.92	0.166		0.15	0.20	3.0		0.13
D-A	2.67	8.14	0.328		0.34	0.48	6.9		0.18
D-BC	3.75	5.96	0.629		0.91	1.58	21.6		0.43
C-ABD	0.03	8.05	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.06	6.31	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.42	0.430		0.43	0.73	10.2		0.32
A-BCD	1.82	8.44	0.215		0.20	0.27	4.1		0.15
D-A	3.27	7.24	0.451		0.48	0.80	11.3		0.25
D-BC	4.59	5.29	0.867		1.58	4.41	52.4		0.96
C-ABD	0.04	7.53	0.005		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.06	6.26	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.39	0.433		0.73	0.75	11.1		0.33
A-BCD	1.82	8.44	0.215		0.27	0.27	4.1		0.15
D-A	3.27	7.15	0.457		0.80	0.82	12.2		0.26
D-BC	4.59	5.29	0.867		4.41	5.11	72.1		1.20
C-ABD	0.04	7.49	0.005		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.04	7.06	0.006		0.01	0.01	0.1		0.14
B-AD	1.90	6.16	0.309		0.75	0.46	7.2		0.24
A-BCD	1.48	8.91	0.166		0.27	0.20	3.0		0.13
D-A	2.67	8.02	0.333		0.82	0.51	8.0		0.19
D-BC	3.75	5.95	0.629		5.11	1.83	33.6		0.55
C-ABD	0.03	7.99	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.58	0.005		0.01	0.01	0.1		0.13
B-AD	1.59	6.77	0.235		0.46	0.31	4.9		0.19
A-BCD	1.24	9.26	0.134		0.20	0.16	2.3		0.12
D-A	2.23	8.70	0.257		0.51	0.35	5.4		0.16
D-BC	3.14	6.44	0.487		1.83	0.99	15.9		0.31
C-ABD	0.03	8.41	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.7	*
08.30	0.7	*
08.45	0.5	
09.00	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.5	
08.15	0.8	*
08.30	0.8	*
08.45	0.5	*
09.00	0.3	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.9	*
08.00	1.6	**
08.15	4.4	****
08.30	5.1	*****
08.45	1.8	**
09.00	1.0	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	174.8	116.5	43.9	0.25	43.9	0.25
A-BCD	136.3	90.8	18.8	0.14	18.8	0.14
D-A	245.0	163.3	48.8	0.20	48.8	0.20
D-BC	344.1	229.4	208.2	0.61	208.3	0.61
C-ABD	2.8	1.8	0.3	0.13	0.3	0.13
ALL	2290.4	1526.9	320.7	0.14	320.8	0.14

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2017 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	1.85	2.78	1.85
ARM C	15.00	45.00	75.00	7.57	11.36	7.57
ARM D	15.00	45.00	75.00	4.15	6.23	4.15

Demand set: PM 2017 Base

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.106	0.495	0.399
		0.0	70.0	328.0	264.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.209	0.000	0.047	0.743
		31.0	0.0	7.0	110.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		343.0	2.0	0.0	261.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.509	0.310	0.181	0.000
		169.0	103.0	60.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.09	8.15	0.011		0.00	0.01	0.2		0.12
B-AD	1.77	7.49	0.236		0.00	0.30	4.4		0.17
A-BCD	3.31	9.33	0.355		0.00	0.54	8.0		0.16
D-A	2.12	9.24	0.229		0.00	0.29	4.2		0.14
D-BC	2.05	6.31	0.324		0.00	0.47	6.6		0.23
C-ABD	0.03	8.91	0.003		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.10	7.76	0.014		0.01	0.01	0.2		0.13
B-AD	2.11	7.00	0.302		0.30	0.42	6.1		0.20
A-BCD	3.96	8.93	0.443		0.54	0.78	11.7		0.20
D-A	2.53	8.71	0.291		0.29	0.40	5.9		0.16
D-BC	2.44	5.70	0.428		0.47	0.72	10.3		0.30
C-ABD	0.03	8.63	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.13	7.13	0.018		0.01	0.02	0.3		0.14
B-AD	2.59	6.34	0.408		0.42	0.67	9.5		0.26
A-BCD	4.84	8.39	0.578		0.78	1.35	19.9		0.28
D-A	3.10	7.92	0.392		0.40	0.63	9.0		0.21
D-BC	2.99	4.88	0.613		0.72	1.46	19.7		0.50
C-ABD	0.04	8.24	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.13	7.11	0.018		0.02	0.02	0.3		0.14
B-AD	2.59	6.33	0.409		0.67	0.68	10.1		0.27
A-BCD	4.84	8.38	0.578		1.35	1.38	21.1		0.28
D-A	3.10	7.89	0.393		0.63	0.64	9.5		0.21
D-BC	2.99	4.87	0.615		1.46	1.53	22.5		0.53
C-ABD	0.04	8.23	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.10	7.74	0.014		0.02	0.01	0.2		0.13
B-AD	2.11	6.99	0.302		0.68	0.44	6.9		0.21
A-BCD	3.96	8.93	0.443		1.38	0.82	12.5		0.20
D-A	2.53	8.68	0.292		0.64	0.42	6.5		0.16
D-BC	2.44	5.68	0.430		1.53	0.78	12.6		0.32
C-ABD	0.03	8.62	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.09	8.13	0.011		0.01	0.01	0.2		0.12
B-AD	1.77	7.48	0.237		0.44	0.31	4.9		0.18
A-BCD	3.31	9.33	0.355		0.82	0.56	8.5		0.17
D-A	2.12	9.22	0.230		0.42	0.30	4.7		0.14
D-BC	2.05	6.29	0.325		0.78	0.49	7.8		0.24
C-ABD	0.03	8.90	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.3	*
17.45	1.4	*
18.00	0.8	*
18.15	0.6	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.7	*
17.30	1.5	*
17.45	1.5	**
18.00	0.8	*
18.15	0.5	

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	9.6	6.4	1.3	0.13	1.3	0.13
B-AD	194.1	129.4	42.0	0.22	42.0	0.22
A-BCD	363.4	242.3	81.6	0.22	81.6	0.22
D-A	232.6	155.1	39.9	0.17	39.9	0.17
D-BC	224.4	149.6	79.5	0.35	79.5	0.35
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2406.0	1604.0	244.4	0.10	244.5	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:30:26 on 13/07/2017]

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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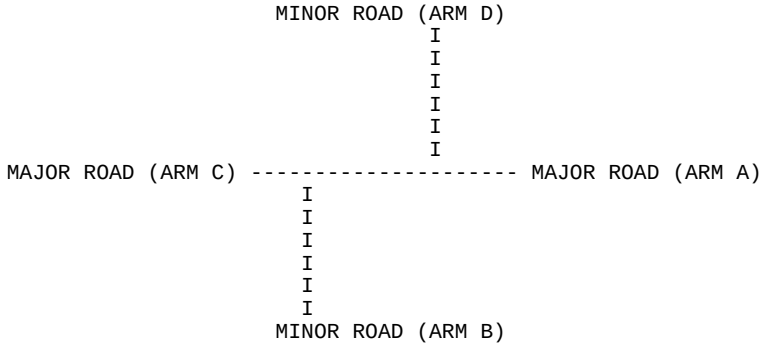
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:30:48 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2017 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.20	10.80	7.20
ARM B	15.00	45.00	75.00	1.63	2.44	1.63
ARM C	15.00	45.00	75.00	6.63	9.94	6.63
ARM D	15.00	45.00	75.00	5.35	8.02	5.35

Demand set: AM Ave Development

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.14	0.21	0.14
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.04	0.06	0.04
ARM D	15.00	45.00	75.00	0.47	0.71	0.47

Demand set: AM 2017 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.069	0.759	0.172
		0.0	40.0	437.0	99.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.346	0.000	0.023	0.631
		45.0	0.0	3.0	82.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.711	0.004	0.000	0.285
		377.0	2.0	0.0	151.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.164	0.421	0.000
		178.0	70.0	180.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: AM Ave Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	11.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.763	0.000	0.237	0.000
		29.0	0.0	9.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.59	0.005		0.00	0.00	0.1		0.13
B-AD	1.59	6.76	0.236		0.00	0.30	4.3		0.19
A-BCD	1.38	9.30	0.148		0.00	0.17	2.6		0.13
D-A	2.60	8.74	0.297		0.00	0.42	6.0		0.16
D-BC	3.25	6.42	0.507		0.00	0.99	13.5		0.30
C-ABD	0.03	8.41	0.003		0.00	0.00	0.0		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.04	7.09	0.006		0.00	0.01	0.1		0.14
B-AD	1.90	6.18	0.308		0.30	0.44	6.3		0.23
A-BCD	1.65	8.95	0.184		0.17	0.22	3.4		0.14
D-A	3.10	8.10	0.383		0.42	0.61	8.8		0.20
D-BC	3.88	5.92	0.656		0.99	1.76	23.8		0.47
C-ABD	0.03	8.02	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.06	6.27	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.38	0.433		0.44	0.74	10.4		0.32
A-BCD	2.02	8.46	0.239		0.22	0.31	4.6		0.16
D-A	3.80	7.16	0.530		0.61	1.09	15.2		0.29
D-BC	4.75	5.24	0.907		1.76	5.40	61.8		1.11
C-ABD	0.04	7.49	0.005		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.06	6.21	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.33	0.437		0.74	0.76	11.3		0.33
A-BCD	2.02	8.46	0.239		0.31	0.31	4.7		0.16
D-A	3.80	7.05	0.539		1.09	1.14	16.8		0.31
D-BC	4.75	5.24	0.908		5.40	6.55	90.6		1.49
C-ABD	0.04	7.44	0.005		0.00	0.00	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.04	7.01	0.006		0.01	0.01	0.1		0.14
B-AD	1.90	6.11	0.312		0.76	0.46	7.3		0.24
A-BCD	1.65	8.94	0.184		0.31	0.23	3.4		0.14
D-A	3.10	7.94	0.391		1.14	0.65	10.4		0.21
D-BC	3.88	5.91	0.656		6.55	2.09	41.4		0.65
C-ABD	0.03	7.94	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.56	0.005		0.01	0.01	0.1		0.13
B-AD	1.59	6.74	0.237		0.46	0.31	4.9		0.20
A-BCD	1.38	9.29	0.149		0.23	0.18	2.6		0.13
D-A	2.60	8.68	0.299		0.65	0.43	6.8		0.17
D-BC	3.25	6.41	0.507		2.09	1.07	17.4		0.33
C-ABD	0.03	8.38	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.7	*
08.30	0.8	*
08.45	0.5	
09.00	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.6	*
08.15	1.1	*
08.30	1.1	*
08.45	0.7	*
09.00	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	1.0	*
08.00	1.8	**
08.15	5.4	*****
08.30	6.5	*******
08.45	2.1	**
09.00	1.1	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	174.8	116.5	44.5	0.25	44.5	0.25
A-BCD	151.4	100.9	21.3	0.14	21.3	0.14
D-A	284.9	189.9	63.8	0.22	63.8	0.22
D-BC	356.5	237.7	248.4	0.70	248.5	0.70
C-ABD	2.8	1.8	0.4	0.13	0.4	0.13
ALL	2361.9	1574.6	379.0	0.16	379.1	0.16

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2017 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	1.85	2.78	1.85
ARM C	15.00	45.00	75.00	7.57	11.36	7.57
ARM D	15.00	45.00	75.00	4.15	6.23	4.15

Demand set: PM Ave Development

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.31	0.47	0.31
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.10	0.15	0.10
ARM D	15.00	45.00	75.00	0.22	0.34	0.22

Demand set: PM 2017 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.106	0.495	0.399
		0.0	70.0	328.0	264.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.209	0.000	0.047	0.743
		31.0	0.0	7.0	110.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		343.0	2.0	0.0	261.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.509	0.310	0.181	0.000
		169.0	103.0	60.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: PM Ave Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	25.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	8.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.778	0.000	0.222	0.000
		14.0	0.0	4.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.09	8.14	0.011		0.00	0.01	0.2		0.12
B-AD	1.77	7.46	0.237		0.00	0.31	4.4		0.17
A-BCD	3.63	9.32	0.389		0.00	0.63	9.2		0.17
D-A	2.30	9.22	0.249		0.00	0.33	4.7		0.14
D-BC	2.10	6.21	0.337		0.00	0.50	7.0		0.24
C-ABD	0.03	8.90	0.003		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.10	7.75	0.014		0.01	0.01	0.2		0.13
B-AD	2.11	6.97	0.303		0.31	0.43	6.2		0.21
A-BCD	4.33	8.92	0.486		0.63	0.93	13.8		0.22
D-A	2.74	8.67	0.316		0.33	0.46	6.6		0.17
D-BC	2.50	5.58	0.448		0.50	0.78	11.1		0.32
C-ABD	0.03	8.62	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.13	7.10	0.018		0.01	0.02	0.3		0.14
B-AD	2.59	6.30	0.411		0.43	0.68	9.6		0.27
A-BCD	5.30	8.36	0.634		0.93	1.72	25.1		0.32
D-A	3.36	7.84	0.428		0.46	0.73	10.4		0.22
D-BC	3.06	4.73	0.648		0.78	1.67	22.2		0.56
C-ABD	0.04	8.23	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.13	7.09	0.018		0.02	0.02	0.3		0.14
B-AD	2.59	6.29	0.411		0.68	0.69	10.3		0.27
A-BCD	5.30	8.36	0.634		1.72	1.77	27.2		0.33
D-A	3.36	7.80	0.431		0.73	0.75	11.1		0.23
D-BC	3.06	4.71	0.650		1.67	1.76	25.9		0.60
C-ABD	0.04	8.22	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.10	7.73	0.014		0.02	0.01	0.2		0.13
B-AD	2.11	6.96	0.303		0.69	0.44	7.0		0.21
A-BCD	4.33	8.91	0.486		1.77	0.98	15.0		0.22
D-A	2.74	8.62	0.318		0.75	0.47	7.4		0.17
D-BC	2.50	5.56	0.450		1.76	0.85	13.9		0.34
C-ABD	0.03	8.60	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.09	8.12	0.011		0.01	0.01	0.2		0.12
B-AD	1.77	7.45	0.237		0.44	0.32	4.9		0.18
A-BCD	3.63	9.32	0.389		0.98	0.65	9.8		0.18
D-A	2.30	9.19	0.250		0.47	0.34	5.2		0.15
D-BC	2.10	6.19	0.339		0.85	0.52	8.3		0.25
C-ABD	0.03	8.89	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.7	**
17.45	1.8	**
18.00	1.0	*
18.15	0.7	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.8	*
17.30	1.7	**
17.45	1.8	**
18.00	0.9	*
18.15	0.5	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	9.6	6.4	1.3	0.13	1.3	0.13
B-AD	194.1	129.4	42.3	0.22	42.3	0.22
A-BCD	397.8	265.2	100.2	0.25	100.2	0.25
D-A	251.9	167.9	45.5	0.18	45.5	0.18
D-BC	229.9	153.2	88.3	0.38	88.3	0.38
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2476.2	1650.8	277.8	0.11	277.9	0.11

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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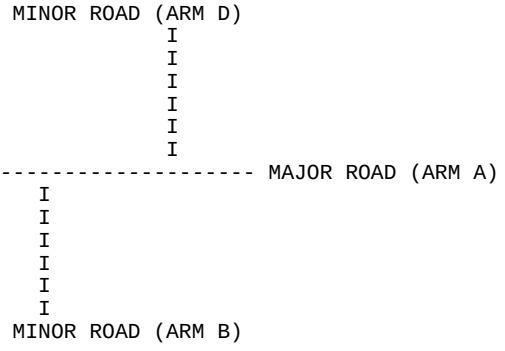
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:31:45 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2017 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.20	10.80	7.20
ARM B	15.00	45.00	75.00	1.63	2.44	1.63
ARM C	15.00	45.00	75.00	6.63	9.94	6.63
ARM D	15.00	45.00	75.00	5.35	8.02	5.35

Demand set: AM 85% Development

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.19	0.28	0.19
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.05	0.08	0.05
ARM D	15.00	45.00	75.00	0.49	0.73	0.49

Demand set: AM 2017 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.069	0.759	0.172
		0.0	40.0	437.0	99.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.346	0.000	0.023	0.631
		45.0	0.0	3.0	82.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.711	0.004	0.000	0.285
		377.0	2.0	0.0	151.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.164	0.421	0.000
		178.0	70.0	180.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: AM 85% Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	15.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.769	0.000	0.231	0.000
		30.0	0.0	9.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.59	0.005		0.00	0.00	0.1		0.13
B-AD	1.59	6.76	0.236		0.00	0.30	4.3		0.19
A-BCD	1.43	9.31	0.154		0.00	0.18	2.7		0.13
D-A	2.61	8.73	0.299		0.00	0.42	6.0		0.16
D-BC	3.25	6.40	0.508		0.00	0.99	13.5		0.31
C-ABD	0.03	8.41	0.003		0.00	0.00	0.0		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.04	7.09	0.006		0.00	0.01	0.1		0.14
B-AD	1.90	6.18	0.308		0.30	0.44	6.3		0.23
A-BCD	1.71	8.95	0.191		0.18	0.23	3.5		0.14
D-A	3.12	8.09	0.385		0.42	0.61	8.8		0.20
D-BC	3.88	5.90	0.658		0.99	1.77	24.0		0.47
C-ABD	0.03	8.02	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.06	6.27	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.37	0.434		0.44	0.74	10.4		0.32
A-BCD	2.09	8.47	0.247		0.23	0.32	4.9		0.16
D-A	3.82	7.15	0.534		0.61	1.10	15.4		0.29
D-BC	4.75	5.22	0.911		1.77	5.50	62.7		1.13
C-ABD	0.04	7.49	0.005		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.06	6.20	0.009		0.01	0.01	0.1		0.16
B-AD	2.33	5.33	0.438		0.74	0.76	11.3		0.33
A-BCD	2.09	8.47	0.247		0.32	0.33	4.9		0.16
D-A	3.82	7.04	0.542		1.10	1.15	17.0		0.31
D-BC	4.75	5.21	0.912		5.50	6.71	92.6		1.53
C-ABD	0.04	7.44	0.005		0.00	0.00	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.04	7.01	0.006		0.01	0.01	0.1		0.14
B-AD	1.90	6.10	0.312		0.76	0.46	7.3		0.24
A-BCD	1.71	8.95	0.191		0.33	0.24	3.6		0.14
D-A	3.12	7.93	0.393		1.15	0.66	10.5		0.21
D-BC	3.88	5.89	0.658		6.71	2.11	42.2		0.66
C-ABD	0.03	7.94	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.56	0.005		0.01	0.01	0.1		0.13
B-AD	1.59	6.73	0.237		0.46	0.32	4.9		0.20
A-BCD	1.43	9.30	0.154		0.24	0.18	2.8		0.13
D-A	2.61	8.67	0.301		0.66	0.44	6.8		0.17
D-BC	3.25	6.39	0.508		2.11	1.08	17.5		0.33
C-ABD	0.03	8.38	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.4	
08.15	0.7	*
08.30	0.8	*
08.45	0.5	
09.00	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.6	*
08.15	1.1	*
08.30	1.2	*
08.45	0.7	*
09.00	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	1.0	*
08.00	1.8	**
08.15	5.5	*****
08.30	6.7	*******
08.45	2.1	**
09.00	1.1	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	174.8	116.5	44.5	0.25	44.5	0.25
A-BCD	156.9	104.6	22.3	0.14	22.3	0.14
D-A	286.3	190.9	64.5	0.23	64.5	0.23
D-BC	356.5	237.7	252.5	0.71	252.6	0.71
C-ABD	2.8	1.8	0.4	0.13	0.4	0.13
ALL	2370.2	1580.1	384.7	0.16	384.9	0.16

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2017 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	1.85	2.78	1.85
ARM C	15.00	45.00	75.00	7.57	11.36	7.57
ARM D	15.00	45.00	75.00	4.15	6.23	4.15

Demand set: PM 85% Development

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.39	0.58	0.39
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.11	0.17	0.11
ARM D	15.00	45.00	75.00	0.31	0.47	0.31

Demand set: PM 2017 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.106	0.495	0.399
		0.0	70.0	328.0	264.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.209	0.000	0.047	0.743
		31.0	0.0	7.0	110.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		343.0	2.0	0.0	261.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.509	0.310	0.181	0.000
		169.0	103.0	60.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: PM 85% Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	31.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	9.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.760	0.000	0.240	0.000
		19.0	0.0	6.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.09	8.13	0.011		0.00	0.01	0.2		0.12
B-AD	1.77	7.45	0.237		0.00	0.31	4.4		0.17
A-BCD	3.70	9.32	0.397		0.00	0.65	9.5		0.18
D-A	2.36	9.21	0.256		0.00	0.34	4.9		0.14
D-BC	2.12	6.19	0.343		0.00	0.51	7.1		0.24
C-ABD	0.03	8.90	0.003		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.10	7.74	0.014		0.01	0.01	0.2		0.13
B-AD	2.11	6.96	0.303		0.31	0.43	6.2		0.21
A-BCD	4.42	8.92	0.496		0.65	0.96	14.4		0.22
D-A	2.82	8.65	0.326		0.34	0.48	6.9		0.17
D-BC	2.53	5.55	0.456		0.51	0.81	11.4		0.33
C-ABD	0.03	8.61	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.13	7.10	0.018		0.01	0.02	0.3		0.14
B-AD	2.59	6.29	0.411		0.43	0.68	9.6		0.27
A-BCD	5.41	8.36	0.647		0.96	1.82	26.5		0.33
D-A	3.45	7.81	0.442		0.48	0.77	11.0		0.23
D-BC	3.10	4.70	0.660		0.81	1.75	23.2		0.58
C-ABD	0.04	8.22	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.13	7.08	0.018		0.02	0.02	0.3		0.14
B-AD	2.59	6.28	0.412		0.68	0.69	10.3		0.27
A-BCD	5.41	8.36	0.648		1.82	1.89	29.0		0.34
D-A	3.45	7.77	0.444		0.77	0.79	11.7		0.23
D-BC	3.10	4.68	0.663		1.75	1.85	27.2		0.62
C-ABD	0.04	8.21	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.10	7.72	0.014		0.02	0.01	0.2		0.13
B-AD	2.11	6.95	0.304		0.69	0.44	7.0		0.21
A-BCD	4.42	8.91	0.496		1.89	1.02	15.7		0.23
D-A	2.82	8.60	0.327		0.79	0.49	7.7		0.17
D-BC	2.53	5.53	0.458		1.85	0.88	14.4		0.35
C-ABD	0.03	8.59	0.003		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.09	8.12	0.011		0.01	0.01	0.2		0.12
B-AD	1.77	7.44	0.238		0.44	0.32	4.9		0.18
A-BCD	3.70	9.31	0.397		1.02	0.67	10.2		0.18
D-A	2.36	9.18	0.257		0.49	0.35	5.4		0.15
D-BC	2.12	6.16	0.344		0.88	0.54	8.5		0.25
C-ABD	0.03	8.89	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	1.0	*
17.30	1.8	**
17.45	1.9	**
18.00	1.0	*
18.15	0.7	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	
18.15	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.8	**
17.45	1.9	**
18.00	0.9	*
18.15	0.5	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	9.6	6.4	1.3	0.13	1.3	0.13
B-AD	194.1	129.4	42.4	0.22	42.4	0.22
A-BCD	406.0	270.7	105.3	0.26	105.4	0.26
D-A	258.8	172.5	47.6	0.18	47.7	0.18
D-BC	232.6	155.1	91.8	0.39	91.8	0.39
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2495.5	1663.6	288.8	0.12	288.8	0.12

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:31:52 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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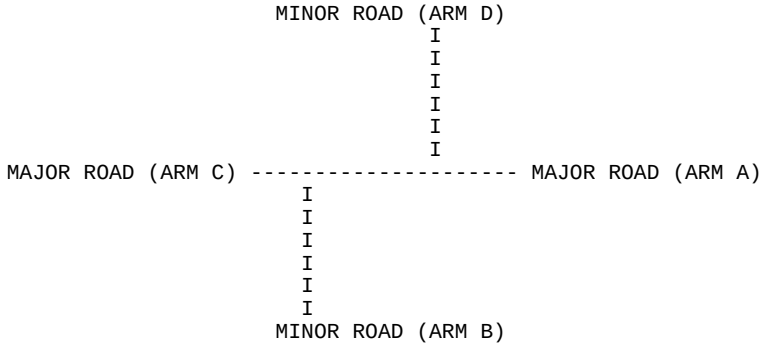
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:32:19 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2022 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.72	11.59	7.72
ARM B	15.00	45.00	75.00	1.74	2.61	1.74
ARM C	15.00	45.00	75.00	7.11	10.67	7.11
ARM D	15.00	45.00	75.00	5.76	8.64	5.76

Demand set: AM 2022 Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.068	0.759	0.173
		0.0	42.0	469.0	107.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.345	0.000	0.022	0.633
		48.0	0.0	3.0	88.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.712	0.004	0.000	0.285
		405.0	2.0	0.0	162.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.163	0.421	0.000
		192.0	75.0	194.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.44	0.005		0.00	0.01	0.1		0.14
B-AD	1.71	6.58	0.259		0.00	0.34	4.9		0.20
A-BCD	1.34	9.14	0.147		0.00	0.17	2.5		0.13
D-A	2.41	8.53	0.282		0.00	0.39	5.5		0.16
D-BC	3.38	6.26	0.539		0.00	1.11	15.1		0.33
C-ABD	0.03	8.29	0.003		0.00	0.00	0.0		0.12
07.45-08.00									
B-C	0.04	6.88	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.96	0.342		0.34	0.51	7.3		0.25
A-BCD	1.60	8.76	0.183		0.17	0.22	3.3		0.14
D-A	2.88	7.85	0.366		0.39	0.57	8.2		0.20
D-BC	4.03	5.74	0.702		1.11	2.12	28.2		0.54
C-ABD	0.03	7.88	0.004		0.00	0.00	0.1		0.13
08.00-08.15									
B-C	0.06	5.90	0.009		0.01	0.01	0.1		0.17
B-AD	2.50	5.10	0.489		0.51	0.91	12.7		0.38
A-BCD	1.96	8.25	0.238		0.22	0.31	4.6		0.16
D-A	3.52	6.86	0.514		0.57	1.02	14.2		0.29
D-BC	4.94	5.02	0.983		2.12	7.86	83.5		1.49
C-ABD	0.04	7.32	0.005		0.00	0.00	0.1		0.14
08.15-08.30									
B-C	0.06	5.79	0.010		0.01	0.01	0.1		0.17
B-AD	2.50	5.03	0.496		0.91	0.96	14.1		0.39
A-BCD	1.96	8.24	0.238		0.31	0.31	4.7		0.16
D-A	3.52	6.85	0.514		1.02	1.04	15.4		0.30
D-BC	4.94	5.02	0.984		7.86	10.76	141.0		2.27
C-ABD	0.04	7.24	0.005		0.00	0.00	0.1		0.14
08.30-08.45									
B-C	0.04	6.74	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.83	0.349		0.96	0.55	8.8		0.27
A-BCD	1.60	8.75	0.183		0.31	0.23	3.4		0.14
D-A	2.88	7.58	0.380		1.04	0.63	9.9		0.22
D-BC	4.03	5.73	0.703		10.76	2.72	69.5		1.06
C-ABD	0.03	7.75	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.39	0.005		0.01	0.01	0.1		0.14
B-AD	1.71	6.54	0.261		0.55	0.36	5.6		0.21
A-BCD	1.34	9.13	0.147		0.23	0.17	2.6		0.13
D-A	2.41	8.46	0.285		0.63	0.40	6.3		0.17
D-BC	3.38	6.25	0.540		2.72	1.23	20.5		0.37
C-ABD	0.03	8.25	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.5	*
08.15	0.9	*
08.30	1.0	*
08.45	0.6	*
09.00	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.3	
08.45	0.2	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.4	
08.00	0.6	*
08.15	1.0	*
08.30	1.0	*
08.45	0.6	*
09.00	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	1.1	*
08.00	2.1	**
08.15	7.9	********
08.30	10.8	**********
08.45	2.7	***
09.00	1.2	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	187.2	124.8	53.4	0.29	53.4	0.29
A-BCD	147.3	98.2	21.2	0.14	21.2	0.14
D-A	264.3	176.2	59.6	0.23	59.6	0.23
D-BC	370.3	246.8	357.7	0.97	357.8	0.97
C-ABD	2.8	1.8	0.4	0.13	0.4	0.13
ALL	2459.7	1639.8	492.8	0.20	492.9	0.20

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2022 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	2.00	3.00	2.00
ARM C	15.00	45.00	75.00	8.13	12.19	8.13
ARM D	15.00	45.00	75.00	4.45	6.67	4.45

Demand set: PM 2022 Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.106	0.495	0.399
		0.0	75.0	351.0	283.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.213	0.000	0.050	0.738
		34.0	0.0	8.0	118.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		368.0	2.0	0.0	280.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.508	0.312	0.180	0.000
		181.0	111.0	64.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.10	8.02	0.013		0.00	0.01	0.2		0.13
B-AD	1.91	7.31	0.261		0.00	0.35	4.9		0.18
A-BCD	3.55	9.18	0.387		0.00	0.62	9.1		0.18
D-A	2.27	9.05	0.251		0.00	0.33	4.7		0.15
D-BC	2.20	6.09	0.361		0.00	0.55	7.7		0.25
C-ABD	0.03	8.81	0.003		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.12	7.57	0.016		0.01	0.02	0.2		0.13
B-AD	2.28	6.79	0.335		0.35	0.49	7.1		0.22
A-BCD	4.24	8.75	0.484		0.62	0.92	13.8		0.22
D-A	2.71	8.47	0.320		0.33	0.46	6.7		0.17
D-BC	2.62	5.44	0.482		0.55	0.89	12.5		0.35
C-ABD	0.03	8.51	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.15	6.81	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.08	0.459		0.49	0.82	11.5		0.30
A-BCD	5.19	8.16	0.636		0.92	1.74	25.3		0.33
D-A	3.32	7.57	0.439		0.46	0.76	10.8		0.23
D-BC	3.21	4.55	0.706		0.89	2.09	27.1		0.67
C-ABD	0.04	8.09	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.15	6.78	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.07	0.460		0.82	0.84	12.4		0.30
A-BCD	5.19	8.16	0.636		1.74	1.80	27.6		0.34
D-A	3.32	7.52	0.442		0.76	0.78	11.6		0.24
D-BC	3.21	4.53	0.709		2.09	2.24	32.7		0.74
C-ABD	0.04	8.08	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.12	7.54	0.016		0.02	0.02	0.3		0.13
B-AD	2.28	6.77	0.336		0.84	0.52	8.2		0.22
A-BCD	4.24	8.75	0.485		1.80	0.98	15.0		0.23
D-A	2.71	8.41	0.323		0.78	0.48	7.6		0.18
D-BC	2.62	5.41	0.485		2.24	0.98	16.4		0.38
C-ABD	0.03	8.49	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.10	8.00	0.013		0.02	0.01	0.2		0.13
B-AD	1.91	7.30	0.261		0.52	0.36	5.6		0.19
A-BCD	3.55	9.18	0.387		0.98	0.64	9.8		0.18
D-A	2.27	9.02	0.252		0.48	0.34	5.3		0.15
D-BC	2.20	6.06	0.362		0.98	0.58	9.3		0.26
C-ABD	0.03	8.80	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY occur

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.7	**
17.45	1.8	**
18.00	1.0	*
18.15	0.6	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	
18.15	0.3	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.9	*
17.30	2.1	**
17.45	2.2	**
18.00	1.0	*
18.15	0.6	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	11.0	7.3	1.5	0.14	1.5	0.14
B-AD	209.2	139.5	49.8	0.24	49.8	0.24
A-BCD	389.5	259.7	100.5	0.26	100.5	0.26
D-A	249.1	166.1	46.8	0.19	46.8	0.19
D-BC	240.9	160.6	105.6	0.44	105.7	0.44
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2580.8	1720.5	304.6	0.12	304.6	0.12

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:32:25 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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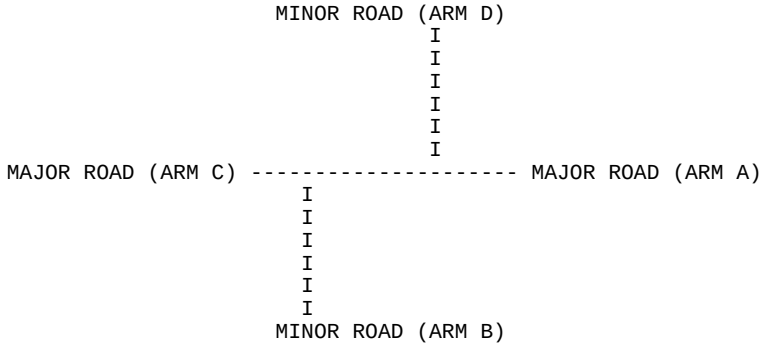
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:32:44 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2022 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.72	11.59	7.72
ARM B	15.00	45.00	75.00	1.74	2.61	1.74
ARM C	15.00	45.00	75.00	7.11	10.67	7.11
ARM D	15.00	45.00	75.00	5.76	8.64	5.76

Demand set: AM Ave Development

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.14	0.21	0.14
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.04	0.06	0.04
ARM D	15.00	45.00	75.00	0.47	0.71	0.47

Demand set: AM 2022 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.068	0.759	0.173
		0.0	42.0	469.0	107.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.345	0.000	0.022	0.633
		48.0	0.0	3.0	88.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.712	0.004	0.000	0.285
		405.0	2.0	0.0	162.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.163	0.421	0.000
		192.0	75.0	194.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: AM Ave Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	11.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	3.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.763	0.000	0.237	0.000
		29.0	0.0	9.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.42	0.005		0.00	0.01	0.1		0.14
B-AD	1.71	6.55	0.261		0.00	0.35	4.9		0.20
A-BCD	1.48	9.16	0.162		0.00	0.19	2.8		0.13
D-A	2.77	8.51	0.326		0.00	0.48	6.8		0.17
D-BC	3.49	6.23	0.560		0.00	1.21	16.2		0.35
C-ABD	0.03	8.27	0.003		0.00	0.00	0.0		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.04	6.85	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.92	0.344		0.35	0.51	7.3		0.26
A-BCD	1.77	8.79	0.201		0.19	0.25	3.7		0.14
D-A	3.31	7.80	0.424		0.48	0.72	10.3		0.22
D-BC	4.17	5.70	0.731		1.21	2.39	31.4		0.59
C-ABD	0.03	7.85	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.06	5.85	0.009		0.01	0.01	0.1		0.17
B-AD	2.50	5.06	0.494		0.51	0.93	12.9		0.38
A-BCD	2.17	8.27	0.262		0.25	0.35	5.2		0.16
D-A	4.06	6.88	0.590		0.72	1.36	18.8		0.34
D-BC	5.10	4.97	1.026		2.39	9.77	99.6		1.74
C-ABD	0.04	7.28	0.005		0.00	0.00	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.06	5.71	0.010		0.01	0.01	0.1		0.18
B-AD	2.50	4.96	0.503		0.93	0.98	14.4		0.40
A-BCD	2.17	8.26	0.262		0.35	0.35	5.3		0.16
D-A	4.06	6.88	0.590		1.36	1.40	20.8		0.35
D-BC	5.10	4.96	1.028		9.77	14.40	182.7		2.86
C-ABD	0.04	7.18	0.005		0.00	0.01	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.04	6.67	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.75	0.354		0.98	0.56	9.0		0.27
A-BCD	1.77	8.78	0.201		0.35	0.26	3.8		0.14
D-A	3.31	7.43	0.446		1.40	0.83	13.2		0.25
D-BC	4.17	5.69	0.732		14.40	3.33	104.4		1.55
C-ABD	0.03	7.67	0.004		0.01	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.36	0.005		0.01	0.01	0.1		0.14
B-AD	1.71	6.51	0.262		0.56	0.36	5.7		0.21
A-BCD	1.48	9.16	0.162		0.26	0.19	2.9		0.13
D-A	2.77	8.41	0.330		0.83	0.50	7.8		0.18
D-BC	3.49	6.22	0.561		3.33	1.34	23.0		0.40
C-ABD	0.03	8.22	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.5	*
08.15	0.9	*
08.30	1.0	*
08.45	0.6	*
09.00	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.2	
08.15	0.3	
08.30	0.4	
08.45	0.3	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.5	
08.00	0.7	*
08.15	1.4	*
08.30	1.4	*
08.45	0.8	*
09.00	0.5	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	1.2	*
08.00	2.4	**
08.15	9.8	**********
08.30	14.4	**********
08.45	3.3	***
09.00	1.3	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	187.2	124.8	54.2	0.29	54.3	0.29
A-BCD	162.4	108.3	23.9	0.15	23.9	0.15
D-A	304.2	202.8	77.7	0.26	77.7	0.26
D-BC	382.6	255.1	457.2	1.19	457.4	1.20
C-ABD	2.8	1.8	0.4	0.13	0.4	0.13
ALL	2531.2	1687.5	614.0	0.24	614.2	0.24

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2022 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	2.00	3.00	2.00
ARM C	15.00	45.00	75.00	8.13	12.19	8.13
ARM D	15.00	45.00	75.00	4.45	6.67	4.45

Demand set: PM Ave Development

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.31	0.47	0.31
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.10	0.15	0.10
ARM D	15.00	45.00	75.00	0.22	0.34	0.22

Demand set: PM 2022 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.106	0.495	0.399
		0.0	75.0	351.0	283.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.213	0.000	0.050	0.738
		34.0	0.0	8.0	118.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		368.0	2.0	0.0	280.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.508	0.312	0.180	0.000
		181.0	111.0	64.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: PM Ave Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	25.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	8.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.778	0.000	0.222	0.000
		14.0	0.0	4.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.10	8.01	0.013		0.00	0.01	0.2		0.13
B-AD	1.91	7.28	0.262		0.00	0.35	5.0		0.18
A-BCD	3.86	9.17	0.421		0.00	0.72	10.5		0.19
D-A	2.45	9.02	0.271		0.00	0.37	5.3		0.15
D-BC	2.25	5.99	0.375		0.00	0.58	8.1		0.26
C-ABD	0.03	8.80	0.003		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.12	7.56	0.016		0.01	0.02	0.2		0.13
B-AD	2.28	6.76	0.337		0.35	0.50	7.2		0.22
A-BCD	4.61	8.74	0.528		0.72	1.10	16.4		0.24
D-A	2.92	8.41	0.347		0.37	0.52	7.6		0.18
D-BC	2.68	5.32	0.505		0.58	0.97	13.6		0.37
C-ABD	0.03	8.50	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.15	6.78	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.04	0.462		0.50	0.83	11.7		0.30
A-BCD	5.65	8.14	0.694		1.10	2.28	32.6		0.38
D-A	3.58	7.47	0.479		0.52	0.89	12.6		0.25
D-BC	3.28	4.40	0.746		0.97	2.46	31.1		0.77
C-ABD	0.04	8.08	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.15	6.75	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.03	0.463		0.83	0.85	12.6		0.31
A-BCD	5.65	8.14	0.695		2.28	2.39	36.8		0.40
D-A	3.58	7.40	0.483		0.89	0.92	13.6		0.26
D-BC	3.28	4.38	0.751		2.46	2.70	39.0		0.88
C-ABD	0.04	8.06	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.12	7.53	0.016		0.02	0.02	0.3		0.13
B-AD	2.28	6.74	0.338		0.85	0.52	8.2		0.23
A-BCD	4.61	8.73	0.529		2.39	1.18	18.2		0.25
D-A	2.92	8.34	0.350		0.92	0.55	8.6		0.19
D-BC	2.68	5.28	0.508		2.70	1.08	18.4		0.42
C-ABD	0.03	8.47	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.10	7.98	0.013		0.02	0.01	0.2		0.13
B-AD	1.91	7.27	0.262		0.52	0.36	5.6		0.19
A-BCD	3.86	9.16	0.422		1.18	0.75	11.3		0.19
D-A	2.45	8.98	0.272		0.55	0.38	5.9		0.15
D-BC	2.25	5.96	0.377		1.08	0.62	9.9		0.27
C-ABD	0.03	8.79	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.3	**
17.45	2.4	**
18.00	1.2	*
18.15	0.7	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	0.9	*
18.00	0.5	*
18.15	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	1.0	*
17.30	2.5	**
17.45	2.7	***
18.00	1.1	*
18.15	0.6	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	11.0	7.3	1.5	0.14	1.5	0.14
B-AD	209.2	139.5	50.2	0.24	50.3	0.24
A-BCD	423.9	282.6	125.9	0.30	125.9	0.30
D-A	268.4	178.9	53.6	0.20	53.6	0.20
D-BC	246.4	164.3	120.2	0.49	120.2	0.49
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2651.0	1767.3	351.7	0.13	351.8	0.13

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:32:51 on 13/07/2017]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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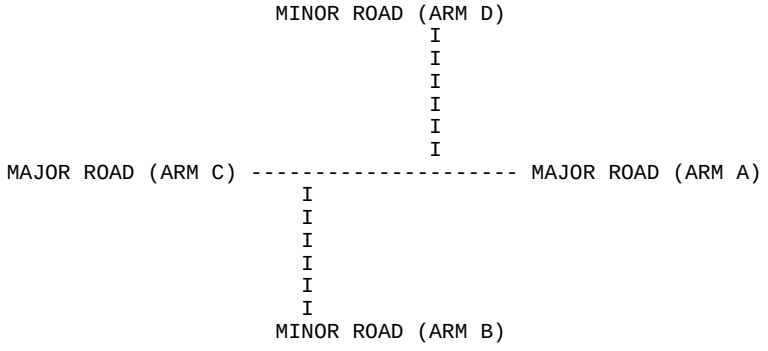
Run with file:-
"J:\9000\9100\9169_BloomhouseLaneDarton\engineering\Traffic_Programs\Picady\
A637 - Churchfield Lane - Church Street\A637 - Churchfield Lane - Church Street.vpi"
(drive-on-the-left) at 16:33:11 on Thursday, 13 July 2017

RUN INFORMATION

RUN TITLE	: Huddersfield Road / Church Street / Churchfield Lane
LOCATION	: Bloomhouse Lane
DATE	: 13/07/17
CLIENT	:
ENUMERATOR	: brett.littlewood [PC137]
JOB NUMBER	: 9169
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A637 S
ARM B IS Churchfield Lane
ARM C IS A637 N
ARM D IS Church Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.10 M.	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B) 80.00 M.	(VA-D)200.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (2)	YES (6)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.	(VD-A) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 50.0 M.	(VD-C) 34.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) 3.90 M.
- LANE 2 WIDTH	(WB-A) -	(WD-C) 4.00 M.
WIDTH AT 0 M FROM JUNCTION	9.30 M.	-
WIDTH AT 5 M FROM JUNCTION	6.35 M.	-
WIDTH AT 10 M FROM JUNCTION	4.90 M.	-
WIDTH AT 15 M FROM JUNCTION	3.75 M.	-
WIDTH AT 20 M FROM JUNCTION	3.20 M.	-
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU	-

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: AM 2022 Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.72	11.59	7.72
ARM B	15.00	45.00	75.00	1.74	2.61	1.74
ARM C	15.00	45.00	75.00	7.11	10.67	7.11
ARM D	15.00	45.00	75.00	5.76	8.64	5.76

Demand set: AM 85% Development

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.19	0.28	0.19
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.05	0.08	0.05
ARM D	15.00	45.00	75.00	0.49	0.73	0.49

Demand set: AM 2022 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.068	0.759	0.173
		0.0	42.0	469.0	107.0
		(0.0)	(12.8)	(5.8)	(4.1)
	ARM B	0.345	0.000	0.022	0.633
		48.0	0.0	3.0	88.0
		(9.1)	(0.0)	(0.0)	(2.5)
	ARM C	0.712	0.004	0.000	0.285
		405.0	2.0	0.0	162.0
		(5.9)	(0.0)	(0.0)	(8.7)
	ARM D	0.416	0.163	0.421	0.000
		192.0	75.0	194.0	0.0
		(2.8)	(4.3)	(5.1)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: AM 85% Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.30 - 09.00	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	15.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.769	0.000	0.231	0.000
		30.0	0.0	9.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	0.04	7.42	0.005		0.00	0.01	0.1		0.14
B-AD	1.71	6.55	0.261		0.00	0.35	4.9		0.20
A-BCD	1.53	9.17	0.167		0.00	0.20	2.9		0.13
D-A	2.79	8.51	0.327		0.00	0.48	6.8		0.17
D-BC	3.49	6.22	0.561		0.00	1.21	16.3		0.35
C-ABD	0.03	8.27	0.003		0.00	0.00	0.0		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.04	6.85	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.92	0.344		0.35	0.51	7.3		0.26
A-BCD	1.83	8.79	0.208		0.20	0.26	3.9		0.14
D-A	3.33	7.80	0.427		0.48	0.73	10.4		0.22
D-BC	4.17	5.68	0.733		1.21	2.41	31.6		0.60
C-ABD	0.03	7.85	0.004		0.00	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.06	5.85	0.009		0.01	0.01	0.1		0.17
B-AD	2.50	5.05	0.494		0.51	0.93	12.9		0.38
A-BCD	2.24	8.28	0.271		0.26	0.37	5.5		0.17
D-A	4.07	6.88	0.592		0.73	1.38	19.0		0.35
D-BC	5.10	4.95	1.031		2.41	9.97	101.2		1.78
C-ABD	0.04	7.28	0.005		0.00	0.00	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.06	5.71	0.010		0.01	0.01	0.1		0.18
B-AD	2.50	4.95	0.504		0.93	0.98	14.5		0.41
A-BCD	2.24	8.27	0.271		0.37	0.37	5.6		0.17
D-A	4.07	6.87	0.593		1.38	1.41	21.0		0.36
D-BC	5.10	4.94	1.032		9.97	14.80	187.1		2.93
C-ABD	0.04	7.18	0.005		0.00	0.01	0.1		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.04	6.66	0.007		0.01	0.01	0.1		0.15
B-AD	2.04	5.74	0.355		0.98	0.56	9.0		0.27
A-BCD	1.83	8.78	0.208		0.37	0.27	4.0		0.14
D-A	3.33	7.41	0.449		1.41	0.84	13.4		0.25
D-BC	4.17	5.67	0.734		14.80	3.40	108.9		1.61
C-ABD	0.03	7.66	0.004		0.01	0.00	0.1		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.04	7.36	0.005		0.01	0.01	0.1		0.14
B-AD	1.71	6.50	0.262		0.56	0.36	5.7		0.21
A-BCD	1.53	9.16	0.167		0.27	0.20	3.0		0.13
D-A	2.79	8.41	0.331		0.84	0.50	7.9		0.18
D-BC	3.49	6.21	0.562		3.40	1.35	23.2		0.41
C-ABD	0.03	8.22	0.003		0.00	0.00	0.0		0.12

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.3	
08.00	0.5	*
08.15	0.9	*
08.30	1.0	*
08.45	0.6	*
09.00	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.2	
08.00	0.3	
08.15	0.4	
08.30	0.4	
08.45	0.3	
09.00	0.2	

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.5	
08.00	0.7	*
08.15	1.4	*
08.30	1.4	*
08.45	0.8	*
09.00	0.5	*

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	1.2	*
08.00	2.4	**
08.15	10.0	**********
08.30	14.8	**********
08.45	3.4	***
09.00	1.4	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.45	0.0	
08.00	0.0	
08.15	0.0	
08.30	0.0	
08.45	0.0	
09.00	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	4.1	2.8	0.6	0.15	0.6	0.15
B-AD	187.2	124.8	54.3	0.29	54.3	0.29
A-BCD	167.9	111.9	24.9	0.15	24.9	0.15
D-A	305.6	203.7	78.5	0.26	78.5	0.26
D-BC	382.6	255.1	468.4	1.22	468.5	1.22
C-ABD	2.8	1.8	0.4	0.13	0.4	0.13
ALL	2539.5	1693.0	627.1	0.25	627.2	0.25

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

B-AD Stream

Intercept For STREAM B-AD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

D-A Stream

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-B
703.49	0.22	0.22	0.09	0.09

D-BC Stream

Intercept For STREAM D-BC	Slope For Opposing STREAM C-A	Slope For Opposing STREAM B-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-D
561.65	0.20	0.20	0.08	0.08

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-D	Slope For Opposing
0.13	0.13	0.29	

C-B Stream

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM D-B
620.29	0.20	0.20	0.20	0.20

A-D Stream

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing STREAM B-A	Slope For Opposing STREAM B-D
620.29	0.21	0.21	0.21	0.21

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: PM 2022 Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.86	13.29	8.86
ARM B	15.00	45.00	75.00	2.00	3.00	2.00
ARM C	15.00	45.00	75.00	8.13	12.19	8.13
ARM D	15.00	45.00	75.00	4.45	6.67	4.45

Demand set: PM 85% Development

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	0.39	0.58	0.39
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	0.11	0.17	0.11
ARM D	15.00	45.00	75.00	0.31	0.47	0.31

Demand set: PM 2022 Base

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.106	0.495	0.399
		0.0	75.0	351.0	283.0
		(0.0)	(4.3)	(3.4)	(1.1)
	ARM B	0.213	0.000	0.050	0.738
		34.0	0.0	8.0	118.0
		(9.7)	(0.0)	(0.0)	(0.0)
	ARM C	0.566	0.003	0.000	0.431
		368.0	2.0	0.0	280.0
		(6.5)	(0.0)	(0.0)	(2.3)
	ARM D	0.508	0.312	0.180	0.000
		181.0	111.0	64.0	0.0
		(1.8)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

Demand set: PM 85% Development

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	31.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	9.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.760	0.000	0.240	0.000
		19.0	0.0	6.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.10	8.00	0.013	0.00	0.01	0.2			0.13
B-AD	1.91	7.27	0.262	0.00	0.35	5.0			0.18
A-BCD	3.94	9.17	0.430	0.00	0.74	10.9			0.19
D-A	2.51	9.01	0.279	0.00	0.38	5.5			0.15
D-BC	2.27	5.96	0.381	0.00	0.60	8.3			0.27
C-ABD	0.03	8.80	0.003	0.00	0.00	0.0			0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.12	7.55	0.016		0.01	0.02	0.2		0.13
B-AD	2.28	6.75	0.337		0.35	0.50	7.2		0.22
A-BCD	4.70	8.74	0.539		0.74	1.15	17.0		0.24
D-A	3.00	8.39	0.357		0.38	0.55	7.9		0.18
D-BC	2.71	5.29	0.513		0.60	1.00	14.0		0.38
C-ABD	0.03	8.49	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.15	6.77	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.03	0.463		0.50	0.83	11.7		0.30
A-BCD	5.76	8.14	0.708		1.15	2.44	34.6		0.40
D-A	3.67	7.44	0.494		0.55	0.94	13.3		0.26
D-BC	3.32	4.37	0.761		1.00	2.61	32.7		0.80
C-ABD	0.04	8.07	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.15	6.74	0.022		0.02	0.02	0.3		0.15
B-AD	2.79	6.01	0.464		0.83	0.85	12.6		0.31
A-BCD	5.76	8.13	0.708		2.44	2.56	39.6		0.42
D-A	3.67	7.36	0.498		0.94	0.97	14.4		0.27
D-BC	3.32	4.34	0.765		2.61	2.89	41.6		0.93
C-ABD	0.04	8.05	0.005		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.12	7.52	0.016		0.02	0.02	0.3		0.14
B-AD	2.28	6.73	0.339		0.85	0.52	8.3		0.23
A-BCD	4.70	8.73	0.539		2.56	1.23	19.1		0.26
D-A	3.00	8.31	0.361		0.97	0.57	9.0		0.19
D-BC	2.71	5.25	0.517		2.89	1.13	19.3		0.43
C-ABD	0.03	8.46	0.004		0.00	0.00	0.1		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.10	7.98	0.013		0.02	0.01	0.2		0.13
B-AD	1.91	7.26	0.263		0.52	0.36	5.6		0.19
A-BCD	3.94	9.16	0.430		1.23	0.77	11.8		0.19
D-A	2.51	8.97	0.280		0.57	0.39	6.1		0.16
D-BC	2.27	5.94	0.383		1.13	0.64	10.2		0.28
C-ABD	0.03	8.78	0.003		0.00	0.00	0.0		0.11

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.4	**
17.45	2.6	***
18.00	1.2	*
18.15	0.8	*

QUEUE FOR STREAM D-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	1.0	*
18.00	0.6	*
18.15	0.4	

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	1.0	*
17.30	2.6	***
17.45	2.9	***
18.00	1.1	*
18.15	0.6	*

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	11.0	7.3	1.5	0.14	1.5	0.14
B-AD	209.2	139.5	50.4	0.24	50.4	0.24
A-BCD	432.2	288.1	133.1	0.31	133.1	0.31
D-A	275.3	183.5	56.2	0.20	56.2	0.20
D-BC	249.1	166.1	126.1	0.51	126.1	0.51
C-ABD	2.8	1.8	0.3	0.12	0.3	0.12
ALL	2670.3	1780.2	367.6	0.14	367.7	0.14

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

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