

APPENDIX A

Traffic Survey Information

Report For Wednesday 01 Apr 2009 Report Date: 14 Aug 2009

SITE: 61970002 Welford Road, N of Guthlaxton Way, Wigston Road No: A5195

Report contains count(s): 23741 Sitecode: GR: 461066 297975

Approach: App1-Welford Road, N of Guthlaxton Way, Link Reference: 61970002

Direction: (App1/D1) - Northbound

For : 0700 to 1900 Wednesday 01 Apr 2009

For Each Vehicle Class

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	1	3	467	5	63	7	4	549	550
0800-0900	0	3	580	1	50	6	10	650	650
0900-1000	1	4	311	3	40	2	11	371	372
1000-1100	1	3	259	1	32	10	10	315	316
1100-1200	2	4	245	2	24	6	5	286	288
1200-1300	3	6	260	2	36	7	6	317	320
1300-1400	2	3	283	2	30	6	1	325	327
1400-1500	1	3	312	2	40	9	5	371	372
1500-1600	0	4	332	6	45	7	6	400	400
1600-1700	2	8	373	2	51	1	3	438	440
1700-1800	1	7	427	2	39	2	0	477	478
1800-1900	0	6	322	3	23	1	3	358	358
AM-Peak	2	4	580	5	63	10	11	650	650
Start-time	1100	900	800	700	700	1000	900	800	800
PM-Peak	3	8	427	6	51	9	6	477	478
Start-time	1200	1600	1700	1500	1600	1400	1200	1700	1700
0700-1900	14	54	4171	31	473	64	64	4857	4871

Approach: App1-Welford Road, N of Guthlaxton Way, Link Reference: 61970002

Direction: (App1/D2) - Southbound

For : 0700 to 1900 Wednesday 01 Apr 2009

For Each Vehicle Class

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	0	3	266	6	38	6	1	320	320
0800-0900	1	4	372	2	40	8	9	435	436
0900-1000	2	2	200	1	36	8	7	254	256
1000-1100	1	3	221	2	31	8	8	273	274
1100-1200	0	2	214	1	34	11	7	269	269
1200-1300	0	6	271	2	47	8	2	336	336
1300-1400	2	6	261	1	29	7	3	307	309
1400-1500	1	6	271	1	39	6	4	327	328
1500-1600	0	4	383	3	40	6	3	439	439
1600-1700	7	7	470	1	42	6	2	528	535
1700-1800	2	4	546	2	55	7	0	614	616
1800-1900	4	6	387	1	28	1	1	424	428
AM-Peak	2	4	372	6	40	11	9	435	436
Start-time	900	800	800	700	800	1100	800	800	800
PM-Peak	7	7	546	3	55	8	4	614	616
Start-time	1600	1600	1700	1500	1700	1200	1400	1700	1700
0700-1900	20	53	3862	23	459	82	47	4526	4546

Report For Wednesday 01 Apr 2009 Report Date: 14 Aug 2009

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Report contains count(s): 23741 Sitecode: GR: 461066 297975

Approach: Welford Road, N of Guthlaxton Way, Link Reference: 61970002

Combined

For : 0700 to 1900 Wednesday 01 Apr 2009

For Each Vehicle Class:

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	1	6	733	11	101	13	5	869	870
0800-0900	1	7	952	3	90	14	19	1085	1086
0900-1000	3	6	511	4	76	10	18	625	628
1000-1100	2	6	480	3	63	18	18	588	590
1100-1200	2	6	459	3	58	17	12	555	557
1200-1300	3	12	531	4	83	15	8	653	656
1300-1400	4	9	544	3	59	13	4	632	636
1400-1500	2	9	583	3	79	15	9	698	700
1500-1600	0	8	715	9	85	13	9	839	839
1600-1700	9	15	843	3	93	7	5	966	975
1700-1800	3	11	973	4	94	9	0	1091	1094
1800-1900	4	12	709	4	51	2	4	782	786
AM-Peak	3	7	952	11	101	18	19	1085	1086
Start-time	900	800	800	700	700	1000	800	800	800
PM-Peak	9	15	973	9	94	15	9	1091	1094
Start-time	1600	1600	1700	1500	1700	1200	1400	1700	1700
0700-1900	34	107	8033	54	932	146	111	9383	9417

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SITE: 61980006 Newton Lane, W of Meadow Way, Wigston Road No: C4502

Report contains count(s): 22138 Sitecode: GR: 461330 298387

Approach: App1-Newton Lane (w of Meadow Lane)

Direction: (App1/D1) - Eastbound

For : 0700 to 1900 Tuesday 09 May 2006

For Each Vehicle Class

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	2	2	134	9	41	0	1	187	189
0800-0900	1	1	160	7	50	2	8	228	229
0900-1000	1	2	144	10	38	0	2	196	197
1000-1100	1	0	97	3	28	0	4	132	133
1100-1200	1	1	174	4	24	0	3	206	207
1200-1300	0	2	169	4	27	5	2	209	209
1300-1400	3	1	178	4	17	3	2	205	208
1400-1500	2	4	214	9	39	3	0	269	271
1500-1600	1	2	275	7	32	4	2	322	323
1600-1700	1	5	370	7	36	3	2	423	424
1700-1800	6	5	437	5	29	2	0	478	484
1800-1900	6	8	347	4	16	1	0	376	382
AM-Peak	2	2	174	10	50	2	8	228	229
Start-time	700	700	1100	900	800	800	800	800	800
PM-Peak	6	8	437	9	39	5	2	478	484
Start-time	1700	1800	1700	1400	1400	1200	1200	1700	1700
0700-1900	25	33	2699	73	377	23	26	3231	3256

Approach: App1-Newton Lane (w of Meadow Lane)

Direction: (App1/D2) - Westbound

For : 0700 to 1900 Tuesday 09 May 2006

For Each Vehicle Class

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	2	4	276	6	47	0	3	336	338
0800-0900	7	2	364	6	32	6	6	416	423
0900-1000	3	1	259	15	22	6	7	310	313
1000-1100	2	1	140	4	26	5	6	182	184
1100-1200	0	2	130	4	29	5	2	172	172
1200-1300	0	0	149	5	19	7	5	185	185
1300-1400	2	1	145	5	23	4	1	179	181
1400-1500	3	3	153	5	17	7	2	187	190
1500-1600	1	2	162	8	26	6	1	205	206
1600-1700	2	2	186	7	55	11	1	262	264
1700-1800	1	4	224	5	19	2	0	254	255
1800-1900	3	1	220	6	18	5	1	251	254
AM-Peak	7	4	364	15	47	6	7	416	423
Start-time	800	700	800	900	700	800	900	800	800
PM-Peak	3	4	224	8	55	11	5	262	264
Start-time	1400	1700	1700	1500	1600	1600	1200	1600	1600
0700-1900	26	23	2408	76	333	64	35	2939	2965

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SITE: 61980006 Newton Lane, W of Meadow Way, Wigston Road No: C4503
 Report contains count(s): 22138 Sitecode: GR: 461330 298387
 Approach: Newton Lane (w of Meadow Lane
 Combined

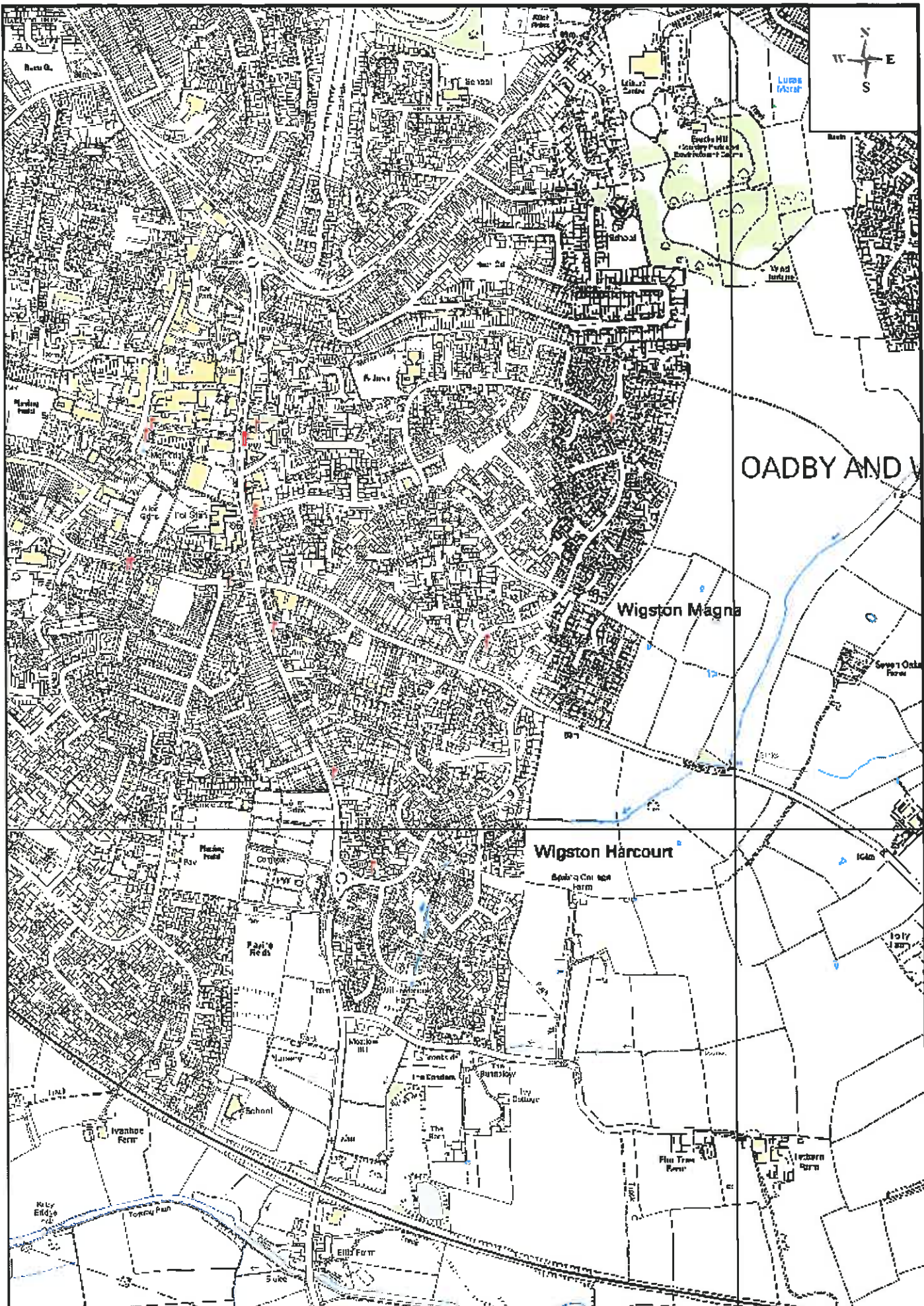
For : 0700 to 1900 Tuesday 09 May 2006

For Each Vehicle Class

Time_Per.:	PCL	M/C	CAR	BUS	LGV	MGV	HGV	MTRVEH	Total
0700-0800	4	6	410	15	88	0	4	523	527
0800-0900	8	3	524	13	82	8	14	644	652
0900-1000	4	3	403	25	60	6	9	506	510
1000-1100	3	1	237	7	54	5	10	314	317
1100-1200	1	3	304	8	53	5	5	378	379
1200-1300	0	2	318	9	46	12	7	394	394
1300-1400	5	2	323	9	40	7	3	384	389
1400-1500	5	7	367	14	56	10	2	456	461
1500-1600	2	4	437	15	58	10	3	527	529
1600-1700	3	7	556	14	91	14	3	685	688
1700-1800	7	9	661	10	48	4	0	732	739
1800-1900	9	9	567	10	34	6	1	627	636
AM-Peak	8	6	524	25	88	8	14	644	652
Start-time	800	700	800	900	700	800	800	800	800
PM-Peak	9	9	661	15	91	14	7	732	739
Start-time	1800	1700	1700	1500	1600	1600	1200	1700	1700
0700-1900	51	56	5107	149	710	87	61	6170	6221

APPENDIX B

Personal Injury Accident Data



Wigston Magna

Wigston Harcourt

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TRAFFIC ACCIDENTS - SUMMARY REPORT
 WATERMAN BOREHAM WIGSTON 13.08.09

DATE : 13/08/2009

25/04/06	02897	Tue	1750	Daylight: street lights present				
					A5199 030	Dry	460840	
298800	Slight A5199 BULL HEAD STREET WIGSTON OUTSIDE POLICE STATION.							
	V3 TRAV N BRAKES DUE TO TRAFFIC AHEAD & V4 COLLS REAR V3.							
	V3 THEN COLLS REAR V2 PUSHING IT INTO V1.							
Car							Driver	
S	N	Going ahead other					Male	49 -
Car							Driver	
S	N	Going ahead other					Female	41 -
Casualty								
Female	08	Vehicle or pillion passenger						
								Slight
Car							Driver	
S	N	Going ahead other					Female	32 -
Casualty								
Female	32	Driver or rider						Slight
Car							Driver	
S	N	Going ahead other					Female	32 -

26/04/06	03273	Wed	0915	Daylight: street lights present				
					A5199 030	Dry	461040	
298130	Serious A5199 WELFORD ROAD WIGSTON JW COTTAGE ROAD.							
	V1 TURNS RIGHT FROM COTTAGE ROAD INTO PATH V2 TRAV S ON WELFORD ROAD.							
	V1 COLLS V2 CAUSING IT TO COLL V3 TRAV N.							
Goods vehicle over 3.5 tonnes and under 7.5 tonnes mgw							Driver	
E	N	Turning right					Male	60 -
Car							Driver	
N	S	Going ahead other					Female	71 -
Car							Driver	
S	N	Going ahead other					Male	52 -
Casualty								
Female	24	Vehicle or pillion passenger						Serious

09/06/06 04042 Fri 1717 Daylight: street lights present
A5199 030 Dry 460860

298720

Slight A5199 BULL HEAD ST WIGSTON J/W KELMARSH AVE
V2 TRAV E TURNS R INTO KELMARSH AVE & COLLS FRONT V1 TRAV S ON
BULL HEAD ST

Car					Driver		
N	S	Going ahead other			Male	40	^
Casualty							
Male	40		Driver or rider	Slight			
Female	40		Vehicle or pillion passenger	Slight			

Car					Driver		
S	E	Turning right			Female	21	-
Casualty							
Female	21		Driver or rider	Slight			

21/07/06 05053 Fri 0910 Daylight: street lights present
B582 030 Dry 460560

298620

Slight B582 MOAT ST WIGSTON MAGNA O/SIDE NO 29
V1 TRAV E O/TAKES PARKED VEH & COLLS REAR V2 (GOODS) PARKED

Car					Driver		
W	E	Going ahead other			Male	77	-
Casualty							
Male	77		Driver or rider	Slight			

Goods vehicle 3.5 tonnes mgw and under					Driver		
Standing still							
Standing still							
Parked					Not traced	Null	>

24/08/06 05962 Thu 1125 Daylight: street lights present
A5199 030 Wet / Damp 460820

298850

Slight A5199 BULL HEAD ST WIGSTON AT ENT TO WALKERS TYRES
V1(GOODS) TRAV E LEAVING WALKERS TYRES, COLLS PED ON MOBILITY VEH
TRAV S ON PAVEMENT

Goods vehicle 3.5 tonnes mgw and under					Driver		
W	E	Turning left			Male	61	x
Casualty							
Male	91		Pedestrian	Slight			

20/08/06 06121 Sun 0030 Darkness: street lighting unknown
B582 030 Wet / Damp460800

298580

Slight B582 MOAT STREET WIGSTON JW CROSS STREET.
PASSENGER IS INJURED GETTING OUT OF TAXI.

Taxi / Private hire car				Driver	
W E Moving off				Male	21 >
Casualty					
Female	20	Vehicle or pillion passenger			
		Slight			

06/10/06 07144 Fri 1410 Daylight: street lights present
A5199 030 Dry 460860

298730

Slight A5199 BULL HEAD STREET WIGSTON JW KELMARSH AVENUE.
V2 TRAV N ON BULL HEAD STREET TURNS RIGHT TWDS KELMARSH AVENUE
& COLLS V1 TRAV S.

Car				Driver	
N S Going ahead other				Male	22 -
Casualty					
Male	22	Driver or rider	Slight		

Car				Driver	
S E Turning right				Female	50 ^
Casualty					
Female	50	Driver or rider	Slight		

16/03/07 01983 Fri 0800 Daylight: street lights present
J4325 030 Dry 461130

297915

Slight BROUGHTONS FIELD WIGSTON OUTSIDE NUMBER 20.
V1 REVERSES FROM DRIVEWAY & COLLS V2 ALSO REVERISING FROM DRIVEWAY.

Car				Driver	
S N Reversing				Female	27 >
Casualty					
Female	27	Driver or rider	Slight		

Car				Driver	
N S Reversing				Male	Null >

11/05/07 03194 Fri 0040 Darkness: street lights present and lit
J4417 030 Wet / Damp461400

298440

Slight MEADOW WAY WIGSTON JW GRASSINGTON DRIVE.
NO ACCOUNT GIVEN.

Car				Driver	
NE S Going ahead left hand bend				Male	21 -
Casualty					
Male	21	Driver or rider	Slight		
Male	18	Vehicle or pillion passenger			

Slight

22/05/07	03484	Tue	2000	Daylight: street lights present	J4417 030	Dry	461695	
298950	Fatal	MEADOW WAY WIGSTON JW BLAKESLEY WALK. V1 TRAV S TWDS NEWTON LANE CROSSES C/WAY ON RIGHT BEND & COLLS WITH SKIP.						
	Car						Driver	
	NW S	Going ahead right hand bend				Male	26	^
	Casualty							
	Male	26	Driver or rider		Fatal			
	Male	26	Vehicle or pillion passenger		Serious			
25/10/07	07426	Thu	1610	Daylight: street lights present	A5199 030	Dry	460905	
298470	Slight	A5199 WELFORD ROAD WIGSTON JW WISTOW ROAD. V1 TURNS RIGHT FROM WISTOW ROAD & COLLS V2 TRAV S ON WELFORD ROAD.						
	Car						Driver	
	E N	Turning right				Female	40	-
	Casualty							
	Female	40	Driver or rider		Slight			
	Car						Driver	
	N S	Going ahead other				Female	55	-
	Casualty							
	Female	55	Driver or rider		Slight			
10/11/07	07841	Sat	1810	Darkness: street lights present and lit	A5199 030	Wet / Damp	460840	
298910	Slight	A5199 BULL HEAD STREET WIGSTON JW PADDOCK STREET. V1 TRAV S ON BULL HEAD STREET TURNS RIGHT TWDS PADDOCK STREET & COLLS WITH PED CROSSING FROM OS.						
	Taxi / Private hire car						Driver	
	N W	Turning right				Male	27	-
	Casualty							
	Female	15	Pedestrian		Slight			
10/01/08	00153	Thu	0850	Daylight: street lights present	B582 030	Wet / Damp	460795	
298575	Slight	B582 MOAT STREET WIGSTON JW HORSWELL LANE. V1 TRAV N FROM HORSWELL LANE PULLS OUT INTO PATH V2 TRAV W ON MOAT STREET.						
	Car						Driver	
	S E	Turning right				Female	57	x
	Casualty							
	Female	57	Driver or rider		Slight			
	Car						Driver	
	E W	Going ahead other				Female	41	x

Casualty
Female 16 Vehicle or pillion passenger
Slight

29/03/08 02086 Sat 1905 Darkness: street lights present and lit
A5199 030 Wet / Damp460860

298730
Slight A5199 BULL HEAD ST WIGSTON J/W KELLMARSH AVENUE
V1 TURNS RIGHT FROM KELMARSH AVENUE & COLLS FRONT V2 TRAV S
ON BULL HEAD STREET.

Car				Driver		
E	N	Turning right		Female	26	^
Casualty						
Female	26	Driver or rider	Slight			

Car				Driver		
N	S	Going ahead other		Male	55	>

27/06/08 04234 Fri 1220 Daylight: street lights present

B582 030 Dry 460570

298620
Slight B582 MOAT STREET WIGSTON OUTSIDE NUMBER 64.
V1 TRAV E ON MOAT STREET WHEN DRIVER IS TAKEN ILL. V1 COLLS V2 & V3
PARKED ON NS. V3 COLLS PARKED V4.

Car				Driver		
W	E	Going ahead other		Female	55	^
Casualty						
Female	55	Driver or rider	Slight			

Car				Driver		
Standing still						
Standing still						
Parked				Not traced	Null	>

Car				Driver		
Standing still						
Standing still						
Parked				Not traced	Null	>

Car				Driver		
Standing still						
Standing still						
Parked				Not traced	Null	>

29/07/08 04910 Tue 1742 Daylight: street lights present
A50 030 Dry 460865
298940
Slight A50 BULLHEAD STREET WIGSTON O/SIDE PETROL STATION. (DIRECTIONS UNCLEAR)
V1 (CYCLE) TRAVS S ON BULLSHEAD STREET ON FOOTWAY . V1 CROSSES
SOMMERFIELD GARAGE EXIT WHEN V2 COLLS WITH V1 AT EXIT

Pedal cycle				Driver	
N S	Going ahead other			Female	17
Casualty					
Female	17	Driver or rider	Slight		
Car				Driver	
E N	Turning right			Not traced	Null >

31/08/08 05658 Sun 1440 Daylight: street lights present
B5418 030 Wet / Damp 460620
298945
Slight B5418 LONG STREET WIGSTON JW PADDOCK STREET.
V1 TURNS RIGHT FROM PADDOCK STREET & CLIPS REAR WHEEL OF V2 (CYCLE)
TRAV S CAUSING RIDER TO FALL.

Car				Driver	
E N	Turning right			Male	31 -
Pedal cycle				Driver	
N S	Going ahead other			Male	72
Casualty					
Male	72	Driver or rider	Slight		

27/09/08 06199 Sat 0645 Darkness: no street lighting
C4503 030 Wet / Damp 461570
298270
Fatal C4503 NEWTON LANE WIGSTON APPROX 80M E GUTHLAXTON WAY.
V1 TRAV E SWERVES ONTO OPPOSITE C/WAY INTO PATH V2 TRAV W.
V2 COLLS FRONT NS V1.

Car				Driver	
N E	Going ahead other			Male	20 +
Casualty					
Male	20	Driver or rider	Slight		
Male	20	Vehicle or pillion passenger	Slight		
Male	18	Vehicle or pillion passenger	Fatal		
Car				Driver	
E W	Going ahead other			Female	22 -
Casualty					
Female	22	Driver or rider	Slight		

12/12/08 08288 Fri 1610 Darkness: street lights present and lit
C3602 030 Wet / Damp460505

298795

Serious C3602 LONG STREET WIGSTON J/W CENTRAL AVENUE
V2 TRAVS SE ON CENTRAL AVENUE AND TURNS LEFT ONTO LONG STREET
COLL WITH V1 (MOTORCYCLE) TRAV NE ON LONG STREET.

Motorcycle over 50cc and up to 125cc Driver
S N Going ahead other Female 19 x
Casualty
Female 19 Driver or rider Serious

Car Driver
NW NE Turning left Male Null x

16/12/08 08355 Tue 1605 Darkness: street lights present and lit
A5199 030 Dry 460885

298571

Slight A5199 BULL HEAD STREET OADBY JW MOAT STREET.
V1 TRAV S MID JUNCTION. V2 TRAV E FROM MOAT ST FAILS TO STOP AT
RED LIGHT, ENTERS MAIN ROAD AND COLLS WITH V1 OFFSIDE.

Car Driver
N S Going ahead other Male 50 x
Casualty
Male 50 Driver or rider Slight

Car Driver
W E Going ahead other Male 30 x

12/01/09 00279 Mon 1720 Darkness: street lights present and lit
A5199 030 Wet / Damp460860

298745

Slight A5199 BULL HEAD STREET LEICESTER JW KELMARSH AVENUE.
V1 STATIONARY AT TRAFFIC LIGHTS TRAV S. V2 STATIONARY BEHIND V1. V3
TRAV S FAILS TO STOP & COLLS REAR V2. V2 IS PUSHED INTO REAR OF V1.

Car Driver
N S Waiting to go ahead but held up Male 43 x
Casualty
Male 43 Driver or rider Slight

Car Driver
N S Waiting to go ahead but held up Male 47 x
Casualty
Female 09 Vehicle or pillion passenger
Slight

Car Driver
N S Slowing or stopping Male 39 x

30/01/09 00673 Fri 1715 Daylight: street lights present
B5418 030 Dry 460835

298910
Slight B5418 PADDOCK STREET WIGSTON J/W BULLHEAD STREET
PED CROSSES PADDOCK STREET NORTHBOUND AND COLLS WITH V1 TURNING
RIGHT FROM BULLHEAD STREET.

Bus or coach (17 or more passenger seats) Driver
N W Turning right Not tracedNull >
Casualty
Male Null Pedestrian Slight

09/04/09 02118 Thu 1730 Daylight: street lights present
C3602 030 Dry 460605


298920
Slight C3602 LONG STREET OADBY & WIGSTON. OUTSIDE DRIVE TO ELIZABETH COURT.
V1 TRAV S/W ON LONG STREET. V1 LOSES CONTROL DUE TO ILL HEALTH CROSSES
C/WAY & LEAVES C/WAY ON O/S. V1 COLLS BOLLARDS & VEHICLE IN CAR PARK.

Car Driver
N SW Going ahead other Male 60 x
Casualty
Male 60 Driver or rider Slight

Driver k = knows area s = stranger
Breath test + = positive - = negative * = refused
x = not requested > = not contacted ^ = Not provided (medical
reasons)

APPENDIX C

**Junction Capacity
Assessments**

ARCADY 6		
GUI Version: 6.2 AF		
Analysis Program: Release 5.0 (JANUARY 2009)		
(c) Copyright TRL Limited, 2004		
Adapted from ARCADY/3 which is Crown Copyright by permission of the controller of HMSO		
For sales and distribution information, program advice and maintenance, contact:		
TRL Limited Crowthorne House Nine Mile Ride Wokingham, Berks. RG40 3GA, UK		Tel: +44 (0)1344 770758 Fax: +44 (0)1344 770864 Email: software@trl.co.uk Web: www.trlsoftware.co.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 Information

Run with file:- q:\Projects\Projects 209701-209711 - Land off Newton Lane\Calcs\Junction Capacity\Welford Road\AM Peak.val
 At: 14:37:34 on Tuesday, August 25, 2009
 Mode: Drive On The Left
 Units: Metric

Arm Labelling

Arm	Full Arm Names
Arm A	A5199 Welford Road (N)
Arm B	Site Access
Arm C	A5199 Welford Road (S)

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100

File Properties

Run Title	AM Peak Assessment Traffic
Location	Welford Road
Date	17/08/2009
Client	David Wilson Homes
Enumerator	jonw [NOTHP63071606]
Job Number	209711
Status	Final Version
Description	

Geometric Data

Data Item	Arm A	Arm B	Arm C
Approach Road Half-Width (m)	3.25	3.00	3.25
Entry Width (m)	4.80	4.50	4.80
Flare Length (m)	5.00	5.00	5.00
Entry Radius (m)	15.00	15.00	15.00
Inscribed Circle Diameter (m)	32.00	32.00	15.00
Entry Angle (degrees)	35.00	32.00	32.00
Slope	0.539	0.529	0.554
Intercept (PCU/Min)	19.657	18.573	19.869

Demand Data

Demand Profiles are Synthesised using **ODTAB** Data
 Period of interest (for Queue and Delay calculations): **07:45 to 09:15**
 Length of Time Period: **90 min**
 Length of Time Segment: **15 min**

Total Traffic Demand (Vehicles/Hour) for Demand Set: AM Peak Assessment Traffic

From/To	Arm A	Arm B	Arm C
Arm A	0.0	31.0	435.0
Arm B	91.0	0.0	60.0
Arm C	650.0	21.0	0.0

Entry Flow Data for Demand Set: AM Peak Assessment Traffic

Arms	Number of Minutes From Start When			Rate of flow (Veh/Min)		
	Flow Starts To Rise	Top of Peak is Reached	Flow Stops Falling	Before Peak	At Top of Peak	After Peak
Arm A	15.00	45.00	75.00	5.82	8.74	5.82
Arm B	15.00	45.00	75.00	1.89	2.83	1.89
Arm C	15.00	45.00	75.00	8.39	12.58	8.39

Turning Proportions

ODTAB Demand Data type is used, no turning proportions available.

Heavy Vehicle Percentages for Demand Set: AM Peak Assessment Traffic

Vary over entry

Time Period	From/To	Arm A	Arm B	Arm C
07:45 to 09:15	Arm A	0.0	31.0	435.0
	Arm B	91.0	0.0	60.0
	Arm C	650.0	21.0	0.0

Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 07:45 to 08:00	A	5.85	18.75	0.312	-	0.0	0.4	6.6	-	0.077
	B	1.89	15.57	0.122	-	0.0	0.1	2.0	-	0.073
	C	8.42	18.77	0.449	-	0.0	0.8	11.6	-	0.096
Segment : 2 - 08:00 to 08:15	A	6.98	18.72	0.373	-	0.4	0.6	8.7	-	0.085
	B	2.26	14.98	0.151	-	0.1	0.2	2.6	-	0.079
	C	10.05	18.65	0.539	-	0.8	1.2	16.7	-	0.116
Segment : 3 - 08:15 to 08:30	A	8.55	18.68	0.458	-	0.6	0.8	12.2	-	0.098
	B	2.77	14.17	0.196	-	0.2	0.2	3.5	-	0.088
	C	12.31	18.48	0.666	-	1.2	1.9	27.4	-	0.159
Segment : 4 - 08:30 to 08:45	A	8.55	18.68	0.458	-	0.8	0.8	12.6	-	0.099
	B	2.77	14.16	0.196	-	0.2	0.2	3.6	-	0.088
	C	12.31	18.48	0.666	-	1.9	2.0	29.3	-	0.162
Segment : 5 - 08:45 to 09:00	A	6.98	18.72	0.373	-	0.8	0.6	9.2	-	0.085
	B	2.26	14.96	0.151	-	0.2	0.2	2.7	-	0.079
	C	10.05	18.64	0.539	-	2.0	1.2	18.6	-	0.118
Segment : 6 - 09:00 to 09:15	A	5.85	18.75	0.312	-	0.6	0.5	7.0	-	0.078
	B	1.89	15.55	0.122	-	0.2	0.1	2.1	-	0.073
	C	8.42	18.76	0.449	-	1.2	0.8	12.7	-	0.097


Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	641.4	427.6	56.2	0.09	56.2	0.09
B	207.8	138.6	16.7	0.08	16.7	0.08
C	923.6	615.7	116.4	0.13	116.4	0.13
ALL	1772.8	1181.9	189.2	0.11	189.2	0.11

Delay is that occurring only within the time period.

Inclusive delay includes delay suffered by vehicles that 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.

ARCADY 6		
GUI Version: 6.2 AF		
Analysis Program: Release 5.0 (JANUARY 2009)		
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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 Information

Run with file: q:\Projects\Projects 209701-209711 - Land off Newton Lane\Calcs\Junction Capacity\Welford Road\PM Peak.vai
 At: 14:43:26 on Tuesday, August 25, 2009
 Mode: Drive On The Left
 Units: Metric

Arm Labelling

Arm	Full Arm Names
Arm A	A5199 Welford Road (N)
Arm B	Site Access
Arm C	A5199 Welford Road (S)

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100

File Properties

Run Title	PM Peak Assessment Traffic
Location	Welford Road
Date	17/08/2009
Client	David Wilson Homes
Enumerator	jonw [NOTTHP63071606]
Job Number	209711
Status	Final Version
Description	

Geometric Data

Data Item	Arm A	Arm B	Arm C
Approach Road Half-Width (m)	3.25	3.00	3.25
Entry Width (m)	4.80	4.50	4.80
Flare Length (m)	5.00	5.00	5.00
Entry Radius (m)	15.00	15.00	15.00
Inscribed Circle Diameter (m)	32.00	32.00	15.00
Entry Angle (degrees)	35.00	32.00	32.00
Slope	0.539	0.529	0.554
Intercept (PCU/Min)	19.657	18.573	19.869

Demand Data

Demand Profiles are Synthesised using **ODTAB** Data
 Period of interest (for Queue and Delay calculations): **16:45 to 18:15**
 Length of Time Period: **90 min**
 Length of Time Segment: **15 min**

Total Traffic Demand (Vehicles/Hour) for Demand Set: PM Peak Assessment Traffic

From/To	Arm A	Arm B	Arm C
Arm A	0.0	60.0	614.0
Arm B	32.0	0.0	40.0
Arm C	477.0	77.0	0.0

Entry Flow Data for Demand Set: PM Peak Assessment Traffic

Arms	Number of Minutes From Start When			Rate of flow (Veh/Min)		
	Flow Starts To Rise	Top of Peak is Reached	Flow Stops Falling	Before Peak	At Top of Peak	After Peak
Arm A	15.00	45.00	75.00	8.43	12.64	8.43
Arm B	15.00	45.00	75.00	0.90	1.35	0.90
Arm C	15.00	45.00	75.00	6.93	10.39	6.93

Turning Proportions

ODTAB Demand Data type is used, no turning proportions available.

Heavy Vehicle Percentages for Demand Set: PM Peak Assessment Traffic

Vary over entry

Time Period	From/To	Arm A	Arm B	Arm C
16:45 to 18:15	Arm A	0.0	60.0	614.0
	Arm B	32.0	0.0	40.0
	Arm C	477.0	77.0	0.0

Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 16:45 to 17:00	A	8.46	18.88	0.448	-	0.0	0.8	11.6	-	0.095
	B	0.90	14.46	0.062	-	0.0	0.1	1.0	-	0.074
	C	6.95	19.51	0.356	-	0.0	0.5	8.0	-	0.079
Segment : 2 - 17:00 to 17:15	A	10.10	18.78	0.538	-	0.8	1.1	16.6	-	0.115
	B	1.08	13.64	0.079	-	0.1	0.1	1.3	-	0.080
	C	8.30	19.47	0.426	-	0.5	0.7	10.8	-	0.089
Segment : 3 - 17:15 to 17:30	A	12.37	18.64	0.663	-	1.1	1.9	27.1	-	0.156
	B	1.32	12.55	0.105	-	0.1	0.1	1.7	-	0.089
	C	10.17	19.41	0.524	-	0.7	1.1	15.7	-	0.108
Segment : 4 - 17:30 to 17:45	A	12.37	18.64	0.663	-	1.9	1.9	29.0	-	0.159
	B	1.32	12.52	0.106	-	0.1	0.1	1.8	-	0.089
	C	10.17	19.41	0.524	-	1.1	1.1	16.3	-	0.108
Segment : 5 - 17:45 to 18:00	A	10.10	18.78	0.538	-	1.9	1.2	18.5	-	0.117
	B	1.08	13.61	0.079	-	0.1	0.1	1.3	-	0.080
	C	8.30	19.47	0.426	-	1.1	0.8	11.6	-	0.090
Segment : 6 - 18:00 to 18:15	A	8.46	18.88	0.448	-	1.2	0.8	12.7	-	0.096
	B	0.90	14.42	0.063	-	0.1	0.1	1.0	-	0.074
	C	6.95	19.51	0.356	-	0.8	0.6	8.6	-	0.080

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	927.7	618.5	115.4	0.12	115.5	0.12
B	99.1	66.1	8.1	0.08	8.1	0.08
C	762.5	508.4	70.9	0.09	71.0	0.09
ALL	1789.4	1192.9	194.5	0.11	194.5	0.11

Delay is that occurring only within the time period.

Inclusive delay includes delay suffered by vehicles that 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.