
Appendix D: Junction Assessment

Paramics Discovery Junction Assessment

AM peak		Pasteur Road/Bridge Road/Southtown Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Mill Road	92	105	+13	14%	63	62	-1	52	57	+5	
Bridge Road	985	411	-573	-58%	46	45	-1	154	124	-30	
Southtown Road	742	574	-169	-23%	52	49	-3	139	126	-13	
Pasteur Road	888	576	-312	-35%	81	71	-10	173	111	-63	
TOTAL	2707	1666	-1,041	-38%	60	56	-3				

PM peak		Pasteur Road/Bridge Road/Southtown Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Mill Road	153	156	+4	2%	93	81	-12	90	82	-8	
Bridge Road	1088	460	-628	-58%	90	47	-43	256	135	-121	
Southtown Road	748	563	-185	-25%	54	49	-5	124	114	-10	
Pasteur Road	534	494	-40	-8%	92	78	-14	160	154	-6	
TOTAL	2523	1673	-850	-34%	80	60	-20				

AM peak		North Quay/South Quay/Bridge Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
North Quay	338	343	+5	1%	65	62	-3	149	145	-4	
South Quay	1179	682	-497	-42%	32	31	-1	81	80	-1	
Bridge Road	1458	960	-498	-34%	34	33	-1	157	183	+26	
TOTAL	2975	1985	-990	-33%	37	37	0				

PM peak		North Quay/South Quay/Bridge Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
North Quay	332	328	-3	-1%	58	50	-8	138	68	-70	
South Quay	1427	850	-576	-40%	26	28	+2	102	70	-32	
Bridge Road	1081	830	-251	-23%	34	33	-1	134	173	+40	
TOTAL	2840	2009	-831	-29%	33	34	+1				

AM peak		South Quay/Yarmouth Way									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
South Quay (N)	869	440	-429	-49%	32	23	-9	182	118	-64	
Yarmouth Way	733	638	-95	-13%	68	42	-26	205	171	-34	
South Quay (S)	521	390	-131	-25%	19	20	+1	76	72	-4	
TOTAL	2123	1468	-655	-31%	41	30	-11				

PM peak		South Quay/Yarmouth Way									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
South Quay (N)	690	519	-171	-25%	27	25	-2	145	116	-28	
Yarmouth Way	672	608	-64	-10%	56	30	-26	161	67	-94	
South Quay (S)	832	475	-357	-43%	31	20	-11	171	89	-82	
TOTAL	2195	1602	-593	-27%	37	25	-12				

AM peak		Acle New Road/North Quay/Fullers Hill									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
North Quay (N)	1173	1215	+41	4%	55	46	-9	214	168	-47	
Fullers Hill	283	223	-60	-21%	23	20	-3	49	39	-10	
North Quay (S)	588	635	+47	8%	17	15	-2	72	60	-13	
Acle New Road	925	758	-167	-18%	24	30	+6	126	149	+23	
TOTAL	2970	2831	-138	-5%	35	33	-2				

PM peak		Acle New Road/North Quay/Fullers Hill									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
North Quay (N)	894	960	+66	7%	83	48	-35	260	170	-90	
Fullers Hill	410	325	-85	-21%	86	18	-68	141	50	-90	
North Quay (S)	789	1008	+218	28%	62	20	-42	185	110	-75	
Acle New Road	1036	820	-215	-21%	33	42	+9	200	206	+5	
TOTAL	3129	3113	-16	-1%	62	34	-27				

AM peak		A47/Acle New Road (Vauxhall RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 Acle New Road	902	900	-1	0%	72	73	+1	94	123	+30	
Runham Road	42	45	+3	7%	40	47	+7	11	42	+31	
Acle New Road	1090	1036	-54	-5%	46	43	-3	161	157	-5	
A47	1369	1357	-12	-1%	60	54	-6	156	114	-42	
TOTAL	3403	3338	-65	-2%	58	56	-3				

PM peak		A47/Acle New Road (Vauxhall RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 Acle New Road	876	886	+10	1%	102	107	+5	199	211	+12	
Runham Road	96	90	-7	-7%	293	361	+68	171	185	+15	
Acle New Road	1431	1329	-102	-7%	41	34	-7	173	124	-49	
A47	1276	1254	-23	-2%	58	51	-7	107	90	-17	
TOTAL	3680	3558	-122	-3%	68	66	-2				

AM peak		A47/Pasteur Road (Gapton RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (N)	1345	1377	+32	2%	71	69	-2	175	132	-44	
Pasteur Road	892	453	-439	-49%	23	24	+1	55	51	-4	
A47 (S)	1643	1503	-140	-9%	101	67	-34	568	292	-276	
Gapton Hall Road	831	700	-131	-16%	55	38	-17	216	184	-32	
TOTAL	4712	4033	-679	-14%	70	58	-12				

PM peak		A47/Pasteur Road (Gapton RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (N)	1565	1664	+99	6%	94	58	-36	450	130	-320	
Pasteur Road	925	699	-226	-24%	157	37	-120	131	75	-57	
A47 (S)	1213	1366	+153	13%	180	84	-96	704	341	-364	
Gapton Hall Road	836	705	-131	-16%	56	34	-22	211	144	-67	
TOTAL	4539	4434	-105	-2%	123	59	-64				

AM peak		A47/William Adams Way (Harfrey's RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (N)	1584	1180	-404	-25%	44	44	-	139	143	+5	
Wm Adams Way (E)	358	754	+396	110%	47	16	-31	88	87	-1	
A47 (S)	2023	2115	+92	5%	51	85	+34	206	459	+254	
Wm Adams Way (W)	308	265	-44	-14%	20	22	+2	53	43	-10	
TOTAL	4274	4314	+40	1%	46	58	+12				

PM peak		A47/William Adams Way (Harfrey's RB)									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (N)	1646	1527	-119	-7%	55	49	-6	214	159	-55	
Wm Adams Way (E)	363	966	+602	166%	52	31	-21	82	136	+54	
A47 (S)	1491	1570	+79	5%	37	37	-	75	96	+20	
Wm Adams Way (W)	531	502	-29	-5%	24	28	+4	61	97	+35	
TOTAL	4031	4565	+534	13%	44	39	-5				

AM peak		A47/A143 Beccles Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (SB off slip)	391	415	+24	6%	51	50	-1	70	75	+5	
Beccles Road (E)	268	254	-14	-5%	63	50	-13	57	63	+6	
Shrublands Way	318	341	+23	7%	25	31	+6	84	101	+17	
Beccles Road (W)	499	686	+187	37%	59	60	+1	45	105	+60	
TOTAL	1476	1695	+219	15%	50	50	-0				

PM peak		A47/A143 Beccles Road									
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
A47 (SB off slip)	562	801	+239	43%	39	46	+7	73	112	+40	
Beccles Road (E)	407	475	+68	17%	51	52	+1	55	66	+12	
Shrublands Way	144	156	+12	8%	32	32	-	76	75	-1	
Beccles Road (W)	444	453	+9	2%	46	44	-2	37	37	+1	
TOTAL	1557	1885	+328	21%	43	46	+2				

AM peak											
A143 Beccles Road/B1370 Burgh Road											
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Beccles Road (N)	409	494	+84	21%	12	13	+1	40	73	+33	
Burnt Lane	79	88	+9	11%							
Church Road	406	520	+114	28%	14	15	+1	28	44	+15	
Beccles Road (W)	285	522	+237	83%	19	23	+4	41	91	+50	
Burgh Road	307	346	+39	13%	19	23	+4	40	68	+27	
Suffolk Road	64	65	+2	3%	11	12	+1	14	14	+0	
TOTAL	1550	2035	+485	31%	15	17	+3				

PM peak A143 Beccles Road/B1370 Burgh Road											
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Beccles Road (N)	577	682	+106	18%	13	14	+1	61	67	+6	
Burnt Lane	51	57	+6	13%							
Church Road	436	481	+45	10%	16	16	-	34	45	+11	
Beccles Road (W)	252	289	+37	15%	19	19	-	44	40	-5	
Burgh Road	280	302	+22	8%	18	19	+1	31	35	+5	
Suffolk Road	48	53	+5	10%	10	11	+1	8	9	+1	
TOTAL	1643	1865	+221	13%	15	16	+1				

AM peak William Adams Way/Southtown Road junction											
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Southtown Road	411	336	-75	-18%	25	24	-1	90	83	-7	
Beccles Road	812	1196	+385	47%	34	26	-8	100	94	-6	
William Adams Way	402	437	+35	9%	49	38	-11	108	158	+50	
TOTAL	1625	1969	+344	21%	35	28	-7				

PM peak William Adams Way/Southtown Road junction											
Approach	Do Min Flow (veh)	Do Sth Flow (veh)	Flow change (veh)	Flow change (%)	Do Min Mean Delay (sec)	Do Sth Mean Delay (sec)	Mean Delay change (sec)	Do Min MMQ (m)	Do Sth MMQ (m)	MMQ change (m)	RAG assessment
Southtown Road	692	451	-241	-35%	47	25	-22	208	79	-129	
Beccles Road	538	590	+52	10%	34	29	-5	92	58	-34	
William Adams Way	399	576	+176	44%	53	41	-12	89	161	+72	
TOTAL	1630	1617	-12	-1%	44	32	-12				

Sensitivity test LinSIG

AM peak		North Quay/South Quay/Bridge Road		
Approach	Do Sth Flow (veh)	Do Sth MMQ Paramics (m)	Do Sth MMQ LinSIG (m)	
North Quay	343	145	63	
South Quay	682	80	45	
Bridge Road	960	183	104	

PM peak		North Quay/South Quay/Bridge Road		
Approach	Do Sth Flow (veh)	Do Sth MMQ Paramics (m)	Do Sth MMQ LinSIG (m)	
North Quay	328	68	52	
South Quay	850	70	63	
Bridge Road	830	173	75	