

PART-NIGHT SWITCH OFF SAVINGS

ANALYSIS SHEETS

3rd JULY 2012

OVERALL TOTALS

	No of Units		Tonnes of CO ₂ saved	Cost of energy saved
PATHS	461		45	£7,985.21
ROADS	407		90	£15,876.43
SIGNIFICANT ROADS	1,727		395	£69,421.63
OVERALL TOTALS	2,595		531	£93,283.26

Appendix D

Area - PATHS	No of Lights	Col. Nos.	Ward	Wattage	Total Load	Burning Period (hrs per year)	Energy Cost Dusk to Dawn	Burning Period (hrs per year)	Energy Cost Part Night	Saving per Year
Assuming dusk to dawn burning hours (with an Electronic PEC 70/35) of 4,141 hours.										
Assume switching of PEC Dusk to 24.00 / 05.30 to Dawn (35 lux), of 2,182 hours										
Energy cost of 9.5p per kWh										
Battle Hill Waggonway	15	19 – 26A389, 33 – 38 & 42B781	Battle Hill	36	540	4141	£212.43	2182	£111.94	£100.50
Oakhurst Terrace	5	7 & 10 - 12O158, 4H503,	Benton	80	400	4141	£157.36	2182	£82.92	£74.44
Granville Crescent	9	6 - 14G323	Benton	80	720	4141	£283.24	2182	£149.25	£134.00
Woodvale Road	8	20 - 25W677, 86W537, un-numbered	Camperdown	114	912	4141	£358.78	2182	£189.05	£169.73
Killingworth Lake play area	9	20 - 28N281,	Camperdown	36	324	4141	£127.46	2182	£67.16	£60.30
Killingworth Lake play area	11	75 - 85W537	Camperdown	36	396	4141	£155.78	2182	£82.09	£73.70
Wallsend Road	3	78 – 80W479	Chirton	123	369	4141	£145.16	2182	£76.49	£68.67
Wallsend Road	4	50, 52, 54 & 56AW479	Chirton	279	1116	4141	£439.03	2182	£231.34	£207.69
Wallsend Road	1	1S660	Chirton	123	123	4141	£48.39	2182	£25.50	£22.89
Percy Main / West Chirton Waggonway	48	1-22XR5 , 1-26XR6	Chirton	50	2400	4141	£944.15	2182	£497.50	£446.65
Farrington Road to Rake Lane	12	12 – 23T255	Cullercoats	80	960	4141	£377.66	2182	£199.00	£178.66
East Bailey	14	109 – 121E287, 9H501	Killingworth	114	1596	4141	£627.86	2182	£330.83	£297.02
Green Lane	4	12 - 15L440,	Killingworth	62	248	4141	£97.56	2182	£51.41	£46.15
Green Lane	3	10 - 12K257	Killingworth	62	186	4141	£73.17	2182	£38.56	£34.62
Green Lane	6	10 – 15A422	Killingworth	62	372	4141	£146.34	2182	£77.11	£69.23
Green Lane	17	1 – 8G339, 10 – 18G339,	Killingworth	36	612	4141	£240.76	2182	£126.86	£113.90
Green Lane	2	29 & 30G386	Killingworth	36	72	4141	£28.32	2182	£14.92	£13.40

Appendix D

Pathways between Killingworth Village and East Bailey	22	77, 78, 80E287, 90 - 108E287,	Killingworth	172	3784	4141	£1,488.61	2182	£784.39	£704.22
Pathways between Killingworth Village and East Bailey	2	3, 4S683,	Killingworth	62	124	4141	£48.78	2182	£25.70	£23.08
Pathways between Killingworth Village and East Bailey	1	6S593	Killingworth	36	36	4141	£14.16	2182	£7.46	£6.70
West Farm Wynd to Salters Lane	7	24W544, 46W544, 49 - 53W544	Longbenton	114	798	4141	£313.93	2182	£165.42	£148.51
Benton Lane to Benton Lane.....	6	17 - 22B715	Longbenton	172	1032	4141	£405.98	2182	£213.92	£192.06
Hartley Avenue to Monkseaton Drive	26	98 - 123XR4	Monkseaton N	172	4472	4141	£1,759.26	2182	£927.00	£832.26
Home Park to Railway underpass	2	7 - 8H597,	Northumberland	36	72	4141	£28.32	2182	£14.92	£13.40
Home Park to Railway underpass	5	15 - 19H597	Northumberland	62	310	4141	£121.95	2182	£64.26	£57.69
Hotspur Road to Mullen Road	7	32 - 38M570	Northumberland	114	798	4141	£313.93	2182	£165.42	£148.51
Hedlam View to Howdon Lane	13	15 - 27H531	Riverside	62	806	4141	£317.08	2182	£167.08	£150.00
Howdon Lane to the A19	19	23 - 41H617	Riverside	29	551	4141	£216.76	2182	£114.22	£102.54
Howdon Road	4	19 - 22H618	Riverside	36	144	4141	£56.65	2182	£29.85	£26.80
Howdon Road	5	5 - 9T211	Riverside	36	180	4141	£70.81	2182	£37.31	£33.50
Howdon Road	3	12 - 14B603	Riverside	36	108	4141	£42.49	2182	£22.39	£20.10
Redburn Dene	16	1 - 16R423	Riverside	90	1440	4141	£566.49	2182	£298.50	£267.99
Linear Park (Chirton Dene)	56	1 - 56L479	Riverside	90	5040	4141	£1,982.71	2182	£1,044.74	£937.97
Chirton Dene Way to Ballast Hill Road	26	8 - 33H513	Riverside	114	2964	4141	£1,166.02	2182	£614.41	£551.62
Hadrian's Cycleway	19	71 - 89XR4	Wallsend etc	172	3268	4141	£1,285.61	2182	£677.42	£608.19
Boyd Road to St. Peter's Road	9	19 - 27B807	Wallsend	172	1548	4141	£608.98	2182	£320.88	£288.09

Appendix D

Cramlington Road to Wardle Drive	5	9 - 13E332	Weetslade / Camperdown	114	570	4141	£224.24	2182	£118.16	£106.08
Cramlington Road to Wardle Drive	6	16 - 21P356	Weetslade / Camperdown	114	684	4141	£269.08	2182	£141.79	£127.30
Cramlington Road to Wardle Drive	5	11 - 15O160	Weetslade / Camperdown	114	570	4141	£224.24	2182	£118.16	£106.08
Cramlington Road to Wardle Drive	2	25 - 26W490	Weetslade / Camperdown	114	228	4141	£89.69	2182	£47.26	£42.43
Cramlington Road to Wardle Drive	1	25AW490	Weetslade / Camperdown	36	36	4141	£14.16	2182	£7.46	£6.70
Sandy Lane	12	58 – 69S527	Weetslade	62	744	4141	£292.69	2182	£154.22	£138.46
Marmion Terrace	11	6 – 16M441	Whitley Bay	114	1254	4141	£493.32	2182	£259.94	£233.38
Total	356	Green – Category 1	34.16 tonnes of CO₂ saved						£5,998.72	
Total	105	Brown – Category 2	11.31 tonnes of CO₂ saved						£1,986.48	
Total	461								£7,985.21	

Area - ROADS	No of Lights	Col. Nos.	Ward	Wattage	Total Load	Burning Period (hrs per year)	Energy Cost Dusk to Dawn	Burning Period (hrs per year)	Energy Cost Part Night	Saving per Year
---------------------	---------------------	------------------	-------------	----------------	-------------------	--------------------------------------	---------------------------------	--------------------------------------	-------------------------------	------------------------

Assuming dusk to dawn burning hours (with an Electronic PEC 70/35) of 4,141 hours.

Assume switching of PEC Dusk to 24.00 / 05.30 to Dawn (35 lux), of 2,182 hours

Energy cost of 9.5p per kWh

Burradon Road	17	33 - 49B913	Camperdown	172	2924	4141	£1,150.29	2182	£606.12	£544.17
Weetslade Road	16	40 - 55W514	Camperdown	279	4464	4141	£1,756.12	2182	£925.34	£830.77
High Flatworth	29	3 – 31XR87	Chirton	172	4988	4141	£1,962.25	2182	£1,033.96	£928.29
High Flatworth to Silverlink bus lane	18	32XR87 - 35XR87, 40 & 41XR87, 45XR87 - 56XR87	Chirton / Collingwood	172	3096	4141	£1,217.95	2182	£641.77	£576.18
High Flatworth to Silverlink bus lane (paths)	7	36XR87 - 39XR87, 42XR87 - 44XR87	Chirton / Collingwood	114	798	4141	£313.93	2182	£165.42	£148.51
Murton Lane	18	2 – 19M574	Collingwood	80	1440	4141	£566.49	2182	£298.50	£267.99
Francis Way / Edmund Road	3	1 – 3F365	Killingworth	279	837	4141	£329.27	2182	£173.50	£155.77

Appendix D

Francis Way / Edmund Road	7	1 – 7E315	Killingworth	279	1953	4141	£768.30	2182	£404.84	£363.46
Whitley Road to Rising Sun Country Park	18	1 – 18R420	Killingworth	172	3096	4141	£1,217.95	2182	£641.77	£576.18
Rink Way	7	1 – 7R351	Monkseaton S	172	1204	4141	£473.65	2182	£249.58	£224.07
Monks Wood	13	2 – 14M537	Preston	84	1092	4141	£429.59	2182	£226.36	£203.23
Ropery Lane / Western Road	15	3 – 17R373	Riverside	279	4185	4141	£1,646.36	2182	£867.51	£778.85
Ropery Lane / Western Road	9	6 – 14W564	Riverside	172	1548	4141	£608.98	2182	£320.88	£288.09
Howdon Road	9	8 – 14H618, 17 – 18H618	Riverside	172	1548	4141	£608.98	2182	£320.88	£288.09
Hayhole Road	20	1 – 20H523	Riverside	279	5580	4141	£2,195.14	2182	£1,156.68	£1,038.47
Coble Dene	76	1 – 76C762	Riverside	279	21204	4141	£8,341.55	2182	£4,395.38	£3,946.17
Coble Dene	6	1 - 6R391	Riverside	279	1674	4141	£658.54	2182	£347.00	£311.54
Coble Dene	2	2 x High Masts	Riverside	1736	3472	4141	£1,365.87	2182	£719.71	£646.16
Earl Grey Way	17	1 – 17E276	Riverside	172	2924	4141	£1,150.29	2182	£606.12	£544.17
Earl Grey Way	2	20- - 21R423	Riverside	90	180	4141	£70.81	2182	£37.31	£33.50
Chirton Dene Way	11	26 - 36C694	Riverside	172	1892	4141	£744.30	2182	£392.19	£352.11
Ballast Hill Road	19	1 – 19B606	Riverside	172	3268	4141	£1,285.61	2182	£677.42	£608.19
Clifford's Fort Moat car park	9	6 - 14C737	Tynemouth	172	1548	4141	£608.98	2182	£320.88	£288.09
Tynemouth Priory (Haven side)	10	2 - 11P323	Tynemouth	99	990	4141	£389.46	2182	£205.22	£184.24
Tynemouth Priory (Haven side)	9	1 - 9S621	Tynemouth	114	1026	4141	£403.62	2182	£212.68	£190.94
Benton Way	14	16 - 29B720	Wallsend	279	3906	4141	£1,536.60	2182	£809.67	£726.93
Gainers Terrace	9	1 – 9G250	Wallsend	172	1548	4141	£608.98	2182	£320.88	£288.09

Appendix D

Rheydt Avenue to Wallsend Sports Centre	17	1 – 17R340	Wallsend / Northumberland	172	2924	4141	£1,150.29	2182	£606.12	£544.17
Total	231	Green – Category 1		45.40 tonnes of CO₂ saved				£7,972.55		
Total	176	Brown – Category 2		45.01 tonnes of CO₂ saved				£7,903.88		
Total	407							£15,876.43		

Area - SIGNIFICANT ROADS	No of Lights	Col. Nos.	Ward	Wattage	Total Load	Burning Period (hrs per year)	Energy Cost Dusk to Dawn	Burning Period (hrs per year)	Energy Cost Part Night	Saving per Year
Assuming dusk to dawn burning hours (with an Electronic PEC 70/35) of 4,141 hours.										
Assume switching of PEC Dusk to 24.00 / 05.30 to Dawn (35 lux), of 2,182 hours										
Energy cost of 9.5p per kWh										
A189 Lighting Trial	46	ALL	Camperdown / Longbenton	279	12834	4141	£5,048.83	2182	£2,660.36	£2,388.47
A189 Spine Road – Balliol Business Park Roundabout northwards (including junctions)	124	ALL	Camperdown / Longbenton	279	34596	4141	£13,609.89	2182	£7,171.40	£6,438.49
A189 Spine Road – Sub Total	170	ALL	Camperdown / Longbenton	279	47430	4141	£18,658.72	2182	£9,831.76	£8,826.96
Dudley Lane	31	81 – 111D382	Camperdown / Weetslade	172	5332	4141	£2,097.58	2182	£1,105.27	£992.31
Southgate	28	10 – 37S619	Camperdown	172	4816	4141	£1,894.59	2182	£998.31	£896.28
Station Road / Northumbrian Way	29	22 - 50S653	Camperdown	172	4988	4141	£1,962.25	2182	£1,033.96	£928.29
Station Road / Northumbrian Way	23	1 – 23N281	Camperdown	172	3956	4141	£1,556.27	2182	£820.04	£736.23
Killingworth Way	87	1 – 86K219	Camperdown / Killingworth / Weetslade	279	24273	4141	£9,548.88	2182	£5,031.55	£4,517.33
Cobalt and Silverlink Business Parks	250	as required	Collingwood	279	69750	4141	£27,439.30	2182	£14,458.48	£12,980.82
New York Road	33	as required	Collingwood	150	4950	4141	£1,947.31	2182	£1,026.09	£921.22

Appendix D

New York Road	7	as required	Collingwood	279	1953	4141	£768.30	2182	£404.84	£363.46
New York By-pass	36	5N217 - 40N217	Collingwood	172	6192	4141	£2,435.90	2182	£1,283.54	£1,152.36
New York By-pass	4	1N217 - 4N217	Collingwood	279	1116	4141	£439.03	2182	£231.34	£207.69
Rake Lane	20	all	Collingwood	279	5580	4141	£2,195.14	2182	£1,156.68	£1,038.47
Rake Lane	78	all	Collingwood	172	13416	4141	£5,277.79	2182	£2,781.00	£2,496.78
Middle Engine Lane	67	35 - 101M502	Collingwood		0	4141	£0.00	2182	£0.00	£0.00
Holystone Way	42	1 – 42H636	Killingworth	279	11718	4141	£4,609.80	2182	£2,429.02	£2,180.78
Whitley Road from Great Lime Road to Darsley Park Sports Ground	14	22W599 - 85W599	Killingworth	175	2450	4141	£963.82	2182	£507.86	-£1,465.21
Whitley Road from Great Lime Road to Darsley Park Sports Ground	2	as required	Killingworth	172	344	4141	£135.33	2182	£71.31	-£3,161.20
Whitley Road from Great Lime Road to Darsley Park Sports Ground	42	as required	Killingworth	279	11718	4141	£4,609.80	2182	£2,429.02	£2,874.79
Salters Lane Industrial Estate south roundabout to West Moor roundabout.	57	29S508 - 86S508	Longbenton	279	15903	4141	£6,256.16	2182	£3,296.53	£2,959.63
Station Road	27	100 – 126S661	Northumberland	172	4644	4141	£1,826.93	2182	£962.65	£864.27
Beach Road (Coast Rd to Tynemouth Baths)	30	2 – 31B653	Preston	279	8370	4141	£3,292.72	2182	£1,735.02	£1,557.70
East Howdon By-pass	13	29 – 42E394	Riverside	223	2899	4141	£1,140.45	2182	£600.93	£539.52
East Howdon By-pass	28	1 – 28E394	Riverside	223	6244	4141	£2,456.36	2182	£1,294.32	£1,162.04
Howdon Road	52	23 – 74H618	Riverside	223	11596	4141	£4,561.81	2182	£2,403.73	£2,158.07
Earsdon Road – Shiremoor to Monkseaton Drive	17	59 - 75E281	St. Mary's	279	4743	4141	£1,865.87	2182	£983.18	£882.70
Earsdon Road – Shiremoor to Monkseaton Drive	21	179 – 200S716	St. Mary's	279	5859	4141	£2,304.90	2182	£1,214.51	£1,090.39

Appendix D

Earsdon Road – Shiremoor to Monkseaton Drive	8	1 – 5E281 , 7E281 , 8E281 , 12E281	St. Mary's	434	3472	4141	£1,365.87	2182	£719.71	£646.16
Earsdon Road – Shiremoor to Monkseaton Drive	34	9-11E281 , 13E281 - 42E281	St. Mary's	279	9486	4141	£3,731.74	2182	£1,966.35	£1,765.39
Monkseaton Drive – Earsdon Road to Holywell Avenue	39	2 - 40M538	St. Mary's	114	4446	4141	£1,749.03	2182	£921.61	£827.42
Blyth Road – last corner northwards	31	15 – 45B780	St. Mary's	172	5332	4141	£2,097.58	2182	£1,105.27	£992.31
Shiremoor By-pass	217	all	Valley	279	60543	4141	£23,817.31	2182	£12,549.96	£11,267.36
Killingworth Lane	25	2 - 8K215, 11 – 28K215	Valley / Killingworth	172	4300	4141	£1,691.60	2182	£891.35	£800.25
Hadrian Road	92	4 – 95H455	Wallsend / Riverside	172	15824	4141	£6,225.08	2182	£3,280.16	£2,944.93
Sandy Lane	36	3 – 38S527	Weetslade	172	6192	4141	£2,435.90	2182	£1,283.54	£1,152.36
Sandy Lane	7	39 – 45S527	Weetslade	279	1953	4141	£768.30	2182	£404.84	£363.46
Dudley Lane	30	25 – 54D382	Weetslade	172	5160	4141	£2,029.92	2182	£1,069.62	£960.30
Total	1,727								395.34 tonnes of CO₂ saved	
Total	1,727									£69,421.63