

APPENDIX A
Development Characteristics and ET Conversion Factors for Albion

Table A1
Community Purpose Land

Assumptions

DSS	1 ha parkland/1000 residents	10
	1 ha parkland/1000 employees	10
House occupancy	2.7 people per house	2.7
Commercial occupancy	4 people per 100 sq m	0.04
Industrial occupancy	1 person per 100 sq m	0.01
Multi-unit occupancy	1.8 persons per unit or per 100 sq m GF	1.8

Type of Development	Desired parks provision per person	Desired parks provision per unit	Parks provision rate per unit	ET Conversion Rate
Detached dwelling	10 sq m	27	sq m PRL /House	1.00 ET/House
Multi-unit Dwelling	10 sq m	18.00	sq m PRL/Unit	0.67 ET/ Unit
Commercial	10 sq m	0.4	sq m PRL/1 sq m GFA	0.0148 ET/sq m GFA
Industrial	10 sq m	0.1	sq m PRL/1 sq m GFA	0.0037 ET/sq m GFA

Table A2
Waterways

Assumptions

Area of one house lot	500	300
Impervious area of house lot	60%	0.6
Impervious area of H-MDR Lots	90%	0.9
Impervious area of Commercial Lots	90%	0.9
Impervious area of Industrial Lots	90%	0.9

Type of Development	One lot of Developable Area	Impervious Area	EHL Conversion Rate
Detached dwelling	500 sq m	0.6	1.00 EHL/House Lot
Multi-unit Dwelling	500 sqm	0.9	1.500 EHL/ 500sqm developable area
Commercial	500 sqm	0.9	1.500 EHL/ 500sqm developable area
Industrial	500 sqm	0.9	1.500 EHL/ 500sqm developable area

Table A3
Transport

Assumptions

Detached Dwelling	2.7 persons per house
Multi-unit Dwelling	1.8 persons per unit
Commercial	4-5 employees per 100 sq m GFA
Industrial	1 employee per 100 sq m GFA

Roads

6-6.5 vehicle trips per day, but assume 6 on trunk roads
Average 4.5-4.8 vehicle trips per day for 2BR unit, 2.5-3 for 1BR unit, 6 for 3BR unit.
2.5 vehicle trips per day per person or 12 person trips per day per 100 sq m GFA
5 vehicle trips per day per 100 sq m GFA

Public Transport and Paths

10 person trips per day per house, of which 1 trip is via PT & 1 trip via walk/cycle
6 person trips per day per unit, of which 0.5 trip is for PT & 0.5 trip is via walk/cycle
12 person trips per day per 100 sq m with mode split of 87% Car/7% PT/6% walk or cycle
7 person trips per day per 100 sq m with 2% of these trips each for PT and walk or cycle

Road System	Development Type	Vehicle Trips/Day/Development Unit	Development Unit	Road Conversion Rates
	Detached Dwelling	6	Dwelling	1.0
	Multi-unit Dwelling	4.6	Dwelling	0.7667
	Commercial	0.12	sq m of GFA	0.02
	Industrial	0.05	sq m of GFA	0.0083

Public Transport	Development Type	Person Trips /Day/Development Unit	Development Unit	PT Conversion Rates
	Detached Dwelling	1	Dwelling	1
	Multi-unit Dwelling	0.5	Dwelling	0.5
	Commercial	0.0084	sq m of GFA	0.0084
	Industrial	0.0014	sq m of GFA	0.0014

Paths	Development Type	Person Trips /Day/Development Unit	Development Unit	Paths Conversion Rates
	Detached Dwelling	1	Dwelling	1
	Multi-unit Dwelling	0.65	Dwelling	0.65
	Commercial	0.0072	sq m of GFA	0.0072
	Industrial	0.0014	sq m of GFA	0.0014

**APPENDIX B
Forecast Development - Planning Units**

Table B1

Planning Unit	Site Area (ha)	House							Multi-Unit Dwellings							Commercial and Retail GFA							Industrial GFA							
		2006	2011	2016	2021	2026	2031	2036	2006	2011	2016	2021	2026	2031	2036	2006	2011	2016	2021	2026	2031	2036	2006	2011	2016	2021	2026	2031	2036	
1	1.158	7	7	7	7	7	7	7	0	72	143	143	143	143	143		14,916	29,833	29833	29833	29833	29833	29833	3,206	1,603	0	0	0	0	0
2	2.407	2	2	2	2	3	3	4	0	14	28	41	53	56	78	8668	11,661	14,653	17,646	20,638		26,622	2,322	2,036	1,749	1,458	1,166	875	583	
3	20.25	210	210	210	225	239	146	253	278	464	649	884	1,118	1,290	1,461	931	466	0	0	0	0	0	29,305	13,163	26,325	18,928	11,531	7,553	3,575	
4	20.81	19	19	19	9	35	36	37	0	179	358	511	664	686	707	10632	24,974	39,315	51,047	62,779	65,890	69,000	12,847	11,147	9,447	8,681	7,914	7,147	6,380	
5	8.209	8	8	8	12	16	20	23	11	75	160	232	303	373	443	10298	23,199	36,100	48,558	61,016	73,473	85,930	44,810	41,092	37,374	33,529	29,684	25,839	21,994	
6	13.01	0	0	0	0	0	0	0	0	1	1	1	1	0	0	2975	5,060	7,144	7,488	7,832	7,935	8,037	58,618	65,356	63,110	63,238	63,366	63,494	63,622	
7	1.836	4	4	4	7	9	9	9	15	44	73	94	114	137	160	5800	7,891	9,981	4,991	15,056	15,140	15,223	0	0	0	0	0	0	0	
8	14.82	2	2	2	2	2	2	2	17	25	32	31	34	35	36	1638	2694	3750	4375	5000	5000	5000	0	0	0	0	0	0	0	
Total		252	252	252	264	311	223	335	321	874	1444	1937	2430	2720	3028	40942	90,861	140776	163938	202154	197271	239645	2E+05	134397	138005	125834	113661	104908	96,154	

**Table B2
Base Parametres**

Sequence Period	Assumed Year for NPV	Discount Rate
1	June 2006- June 2011	2009
2	June 2011- June 2016	2014
3	July 2016- June 2021	2019
4	July 2021- June 2026	2024
5	July 2026- June 2031	2029
6	July 2031- June 2036	2034

For the purpose of discounting to the net present value(NPV) , it is assumed that development will occur, and infrastructure will be built generally in the middle of each sequence period

**APPENDIX C Table C1
Waterways EHL Conversion**

Sequence Period	Precinct	Detached House EHL Conversion	Multi Unit Dwellings EHL Conversion	Commercial/Ret ail EHL Conversion	Industrial EHL Conversion	Total EHL Conversion	Total EHL Conversion per Contribution Area	Total EHL Conversion per Sequence Period	Total NPV Conversion	Total NPV Conversion per Contribution Area	Total NPV Conversion per Sequence Period	
2006	1	7	0	72.34	2885.4	2964.74	111573.13	191809.51	No discounts are applied to existing development			
	2	2	0	7223.33	2089.8	9315.13						
	3	210	26410	0.00	26374.5	52994.50						
	4	19	0	5294.55	11562.3	16875.85						
	5	8	522.5	5149.00	40329	46008.50	80236.38					
	6	0	0	5695.33	52756.2	58451.53						
	7	4	1425	3480.00	0	4909.00						
	8	2	1615	1638.00	0	3255.00						
2006-2011	1	0	2567.89	5498.60	-1442.7	6623.80	27918.57	52651.14	5561.47	23440.97	44206.91	
	2	0	1108.33	2493.33	-257.4	3344.27						
	3	0	17575	0.00	-1341	16234.00						
	4	0	10203	7141.57	-1530	15814.57						
	5	0	3515	6450.50	-3346.2	6619.30	24732.57					
	6	0	0	3989.60	2021.4	6011.00						
	7	0	1653	1254.00	0	2907.00						
	8	0	665	1056.00	0	1721.00						
2011-2016	1	0	2567.89	5498.98	-1442.7	6624.18	28156.00	53081.58	4156.09	17665.42	33304.04	
	2	0	1108.33	2494.17	-258.3	3344.20						
	3	0	17670	0.00	-1341	16329.00						
	4	0	10203	7142.07	-1530	15815.07						
	5	0	3562.5	6450.50	-3346.2	6666.80	24925.58					
	6	0	190	3991.52	2021.4	6202.92						
	7	0	1653	1254.60	0	2907.60						
	8	0	760	1056.00	0	1816.00						
2016-2021	1	0	0	0.00	0	0.00	25633.13	42953.02	0.00	12017.81	20138.05	
	2	0	950.00	2493.33	-261.9	3181.43						
	3	14	22230	0.00	-6657.3	15586.70						
	4	8	8721	5842.33	-689.4	13881.93						
	5	4	3372.5	6229.00	-3460.5	6145.00	17319.88					
	6	0	0	658.55	115.2	773.75						
	7	2	1140	1522.20	0	2664.20						
	8	0	95	625.00	0	720.00						
2021-2026	1	0	0	0.00	0	0.00	25856.73	43234.32	0.00	9058.75	15146.87	
	2	1	1029.17	2494.17	-262.8	3261.53						
	3	15	22325	0.00	-6657.3	15682.70						
	4	8	8721	5842.33	-690.3	13881.03						
	5	4	3420	6229.00	-3460.5	6192.50	17377.58					
	6	0	0	658.55	115.2	773.75						
	7	3	1197	1522.80	0	2722.80						
	8	0	95	625.00	0	720.00						
2026-2031	1	0	0	0.00	0	0.00	42833.40	48705.69	0.00	11213.67	12751.02	
	2	0	1979.17	2493.33	-261.9	4210.60						
	3	7	32585	0.00	-3580.2	29011.80						
	4	1	2451	1548.73	-690.3	3310.43						
	5	3	6650	6228.50	-3460.5	9421.00	5872.29					
	6	0	-190	195.27	-115.2	-109.93						
	7	0	2622	49.80	0	2671.80						
	8	0	190	0.00	0	190.00						
2031-2036	1	0	0	0.00	0	0.00	42834.50	48709.81	0.00	8379.72	9529.11	
	2	1	1979.17	2493.33	-262.8	4210.70						
	3	7	32585	0.00	-3580.2	29011.80						
	4	1	2451	1549.22	-690.3	3310.92						
	5	4	6650	6228.50	-3460.5	9422.00	5875.31					
	6	0	-190	197.18	-115.2	-108.02						
	7	0	2622	50.40	0	2672.40						
	8	0	190	0.00	0	190.00						
		328	265708.67	129030.60	86077.80	481145.07		289335.55	144793.56	135076.00	135076.00	326885.51

Development Type	Waterways Conversion Rates
Detached Dwelling	1
Multi-unit Dwelling	1.500
Commercial	1.500
Industrial	1.500

Total Impervious Area	484544.71
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Sequence Period	Assumed Year for NPV
1	2009
2	2014
3	2019
4	2024
5	2029

Planning Unit one - Used for Infill calculations only and do not apply to this PSP

NPV Contribution Area W1/ Northern Catchment	193349.47
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NPV Contribution Area W2 Southern Catchment	133536.04
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APPENDIX C Table C2

ESTIMATES OF EXISTING AND PROPOSED STORMWATER DRAINAGE

All Costings include 50% Contingency the rate applied for concept design phase

Scheme No.	Description	Total Area ha	PSP Area			Upstream Area			PSP Proportion	Stormwater Drainage Value						Stormwater Quality Improvement		Total PSP Proportion	
			ha	Fraction Impervious	Impervious Area ha	ha	Fraction Impervious	Impervious Area ha		Existing (still used)	Proposed Q10 Design	Proposed Q50 Design	PSP Proportion of Existing	PSP Proportion of Proposed Q10	PSP Proportion of Proposed Q50	PSP Proportion of Total	SQIDs		PSP Proportion of SQIDs
Southern Catchment																			
1	Racecourse	12.08	12.08	0.80	9.66	0.00	0.00	0.00	1.00	\$0	\$0	\$1,730,359	\$0	\$0	\$1,730,359	\$1,730,359		\$0	\$1,730,359
2	Cooksley St North	6.30	0.68	0.60	0.41	5.62	0.67	3.75	0.10	\$239,492	\$0	\$996,039	\$23,576	\$0	\$98,052	\$121,628		\$0	\$121,628
3	Cooksley St South	4.53	0.00	0.00	0.00	4.53	0.67	3.05	0.00	\$357,874	\$0	\$230,960	\$0	\$0	\$0	\$0		\$0	\$0
4	Yulestar St	2.64	2.16	0.90	1.94	0.49	0.84	0.41	0.83	\$783,374	\$0	\$506,706	\$646,675	\$0	\$418,286	\$1,064,960	\$200,000	\$165,100	\$1,230,060
5	Agnes St	6.04	6.04	0.90	5.43	0.00	0.00	0.00	1.00	\$1,464,197	\$0	\$161,699	\$1,464,197	\$0	\$161,699	\$1,625,896	\$90,000	\$90,000	\$1,715,896
6	Hutcheson St	2.90	2.90	0.90	2.61	0.00	0.00	0.00	1.00	\$824,126	\$0	\$223,537	\$824,126	\$0	\$223,537	\$1,047,663	\$50,000	\$50,000	\$1,097,663
7	Park & Nariel Sts	2.56	2.56	0.90	2.30	0.00	0.00	0.00	1.00	\$805,319	\$0	\$1,034,006	\$805,319	\$0	\$1,034,006	\$1,839,325	\$50,000	\$50,000	\$1,889,325
8	Nariel & Jobson Sts	1.54	1.54	0.90	1.38	0.00	0.00	0.00	1.00	\$107,709	\$0	\$316,216	\$107,709	\$0	\$316,216	\$423,925	\$50,000	\$50,000	\$473,925
9	Wallace St	1.70	1.70	0.90	1.53	0.00	0.00	0.00	1.00	\$317,055	\$0	\$846,974	\$317,055	\$0	\$846,974	\$1,164,029	\$50,000	\$50,000	\$1,214,029
10	Pedder St	1.21	1.21	0.90	1.09	0.00	0.00	0.00	1.00	\$257,670	\$0	\$599,134	\$257,670	\$0	\$599,134	\$856,804	\$300,000	\$300,000	\$1,156,804
Total Southern Catchment		41.49	23.85		20.06	10.63		7.20		\$5,156,816	\$0	\$6,645,630	\$4,446,327	\$0	\$5,428,263	\$9,874,589	\$790,000	\$755,100	\$10,629,689
Infrastructure Contribution Rate (\$/ha)																			\$338,225
Northern Catchment																			
1		11.13	0.00	0.00	0.00	11.13	0.84	9.33	0.00	\$1,691,632		\$0	\$0	\$0	\$0	\$0		\$0	\$0
2		2.45	1.19	0.90	1.08	1.25	0.90	1.13	0.49	\$85,365		\$0	\$41,705	\$0	\$0	\$41,705		\$0	\$41,705
3		0.99	0.99	0.67	0.66	0.00	0.00	0.00	1.00	\$118,599		\$0	\$118,599	\$0	\$0	\$118,599		\$0	\$118,599
4		0.33	0.33	0.68	0.22	0.00	0.00	0.00	1.00	\$59,177		\$0	\$59,177	\$0	\$0	\$59,177		\$0	\$59,177
5		71.57	43.54	0.66	28.64	28.03	0.68	19.20	0.60	\$7,334,465	\$15,191,382	\$0	\$4,391,253	\$9,095,306	\$0	\$13,486,559	\$720,000	\$431,075	\$13,917,633
6		1.02	1.02	0.90	0.92	0.00	0.00	0.00	1.00	\$149,589		\$0	\$149,589	\$0	\$0	\$149,589		\$0	\$149,589
7		1.64	1.64	0.90	1.48	0.00	0.00	0.00	1.00	\$240,693		\$0	\$240,693	\$0	\$0	\$240,693		\$0	\$240,693
8		0.22	0.22	0.90	0.20	0.00	0.00	0.00	1.00	\$115,036		\$0	\$115,036	\$0	\$0	\$115,036		\$0	\$115,036
9		3.43	3.43	0.90	3.09	0.00	0.00	0.00	1.00	\$226,046		\$0	\$226,046	\$0	\$0	\$226,046		\$0	\$226,046
10		1.45	1.45	0.90	1.30	0.00	0.00	0.00	1.00			\$0	\$0	\$0	\$0	\$0		\$0	\$0
11		0.83	0.83	0.90	0.75	0.00	0.00	0.00	1.00			\$0	\$0	\$0	\$0	\$0		\$0	\$0
Total Northern Catchment		95.06	54.65		38.34	40.41		29.66		\$10,020,602	\$15,191,382	\$0	\$5,342,098	\$9,095,306	\$0	\$14,437,404	\$720,000	\$431,075	\$14,868,479
Infrastructure Contribution Rate (\$/ha)																			\$485,964
Total		136.54	78.50	0.00	58.40	51.04	0.00	36.86	0.00	\$15,177,418	\$15,191,382	\$6,645,630	\$9,788,425	\$9,095,306	\$5,428,263	\$24,311,993	\$1,510,000	\$1,186,175	\$25,498,168

Southern Catchment

The Infrastructure Contribution Rate for the PSP areas within the Southern catchment is based on the cost for Schemes 4(PSP), 5, 6, 7, 8, 9 and 10 divided by the impervious areas for Schemes 1, 4(PSP), 5, 6, 7, 8, 9 and 10.

Racecourse Cost Share:

Scheme 1		
Cost Share	=	Scheme 1 Cost + Scheme 2 Cost + Scheme1 Area*Fraction Impervious/(Scheme 1 Area*Fraction Impervious + Schemes 4(PSP), 5, 6, 7, 8, 9 and 10 Areas*Fraction Impervious)*(Schemes 4(PSP), 5, 6, 7, 8, 9 and 10 Costs)
	=	\$5,120,057
Schemes 4, 5, 6, 7 and 8	=	Racecourse Component Area*Fraction Impervious/(Scheme 1 Area*Fraction Impervious + Schemes 4(PSP), 5, 6, 7, 8, 9 and 10 Areas*Fraction Impervious)*(Schemes 4(PSP), 5, 6, 7, 8, 9 and 10 Costs)
	=	1'254,932
Total	=	
Racecourse	=	\$6,374,989 plus cost for area draining to Northern Catchment
Cost Share	=	\$6,620,401

Northern Catchment

The Infrastructure Contribution Rate for the Northern Catchment is based on the cost and impervious area for the PSP area within Scheme 5, since this is the only area within the PSP and LSMP.

The Infrastructure Contribution Rate for all other areas should be the Infill ICP Contribution Rate.

APPENDIX C Table C3

Waterways Cost Apportionment

Contribution Area W1 Northern Catchment

Infrastructure Item	Base Cost 2007 Apportioned to PSP	Contingency 2% PSP Preparation	Total Cost	Timing	Discounted Cost	NPV Future EHL's	Contribution ICU/EHL
N2	\$41,705.14	\$834.10	\$42,539.25	2007	\$42,539.25	193349.47	0.14
N3	\$118,599.00	\$2,371.98	\$120,970.98	2007	\$120,970.98	193349.47	0.40
N4	\$59,177.00	\$1,183.54	\$60,360.54	2007	\$60,360.54	193349.47	0.20
N5	\$13,917,633.42	\$278,352.67	\$14,195,986.09	2011	\$11,244,550.62	193349.47	37.52
N6	\$149,589.00	\$2,991.78	\$152,580.78	2007	\$152,580.78	193349.47	0.51
N7	\$240,693.00	\$4,813.86	\$245,506.86	2007	\$245,506.86	193349.47	0.82
N8	\$115,036.00	\$2,300.72	\$117,336.72	2007	\$117,336.72	193349.47	0.39
N9	\$226,046.00	\$4,520.92	\$230,566.92	2007	\$230,566.92	193349.47	0.77
N10	\$0.00	\$0.00	\$0.00	2007	\$0.00	193349.47	0.00
N11	\$0.00	\$0.00	\$0.00	2007	\$0.00	193349.47	0.00
			\$15,165,848.14		\$12,214,412.67	Total ICU/EHL W1	40.76
Current 2007-2008 ICU Rate				1.55			

Contribution Area W2 Southern Catchment

Infrastructure Item	Base Cost 2007 Apportioned to PSP	Contingency 2% PSP Preparation	Total Cost	Timing	Discounted Cost	NPV Future EHL's	Contribution ICU/EHL
S4	\$1,230,060.30	\$24,601.21	\$1,254,661.50	2011	\$993,809.43	133536.04	4.80
S5	\$1,715,896.00	\$34,317.92	\$1,750,213.92	2011	\$1,386,333.36	133536.04	6.70
S6	\$1,097,663.00	\$21,953.26	\$1,119,616.26	2011	\$886,840.94	133536.04	4.28
S7	\$1,889,325.00	\$37,786.50	\$1,927,111.50	2011	\$1,526,452.81	133536.04	7.37
S8	\$473,925.00	\$9,478.50	\$483,403.50	2011	\$382,900.85	133536.04	1.85
S9	\$1,214,029.00	\$24,280.58	\$1,238,309.58	2011	\$980,857.17	133536.04	4.74
S10	\$1,156,804.00	\$23,136.08	\$1,179,940.08	2011	\$934,623.06	133536.04	4.52
			\$8,953,256.34		\$7,091,817.62	Total ICU/EHL W2	34.26
Base Year		2007					
Discount Rate		6%		\$24,119,104.48	\$19,306,230.29		

Waterways ICU's/ EHL'S	
W1	W2
40.76	34.26
61.13	51.39
61.13	51.39
61.13	51.39

**APPENDIX D Table D2
Local Roads ET Conversion**

Sequence Period	Precinct	Detached House ET Conversion	Multi Unit Dwellings ET Conversion	Commercial/Residential ET Conversion	Industrial ET Conversion	Total ET Conversion	Total ET Conversion per Contribution Area	Total ET Conversion per Sequence Period	Total NPV Conversion	Total NPV Conversion per Contribution Area	Total NPV Conversion per Sequence Period	Development Type	Road Conversion RATE				
2006	1.00	7.00	0.00	3.80	26.72	37.52	1514.00	2580			Existing Development not discounted						
	2.00	2.00	0.00	173.36	19.35	194.71											
	3.00	210.00	213.13	18.62	244.21	685.96											
	4.00	19.00	0.00	212.64	107.06	338.70											
	5.00	8.00	8.43	205.96	373.42	595.81	1065.98							Detached Dwelling	6		
	6.00	0.00	0.00	59.50	488.48	547.98									Multi-unit Dwelling	4.6	
	7.00	4.00	11.50	116.00	0.00	131.50									Commercial	0.12	
	8.00	2.00	13.03	32.76	0.00	47.79									Industrial	0.05	
2006-2011	1.00	0.00	54.43	288.86	-13.36	329.94	802.01	1363	277.02	673.38	1144.25						
	2.00	0.00	10.73	59.84	-2.38	68.19						57.25					
	3.00	0.00	141.83	-9.30	-12.42	120.12						100.85					
	4.00	0.00	137.23	286.82	-14.17	409.89						344.15					
	5.00	0.00	56.73	258.02	-30.98	283.77	560.80					238.26					
	6.00	0.00	0.00	41.68	18.72	60.40						50.71					
	7.00	0.00	22.23	41.80	0.00	64.03						53.76					
	8.00	0.00	5.37	21.12	0.00	26.49						22.24		470.86			
2011-2016	1.00	0.00	54.43	288.88	-13.36	329.96	803.56	1366	207.02	504.16	857.02						
	2.00	0.00	10.73	59.86	-2.39	68.20						42.79					
	3.00	0.00	142.60	-9.32	-12.42	120.86						75.83					
	4.00	0.00	137.23	286.84	-14.17	409.91						257.18					
	5.00	0.00	57.50	258.02	-30.98	284.54	562.40					178.52					
	6.00	0.00	0.77	41.70	18.72	61.18						38.39					
	7.00	0.00	22.23	41.82	0.00	64.05						40.19					
	8.00	0.00	6.13	21.12	0.00	27.25						17.10		352.85			
2016-2021	1.00	0.00	0.00	0.00	0.00	0.00	473.93	917	0.00	222.19	429.82						
	2.00	0.00	9.20	59.84	-2.43	66.62						31.23					
	3.00	14.00	179.40	0.00	-61.64	131.76						61.77					
	4.00	8.00	117.30	234.64	-6.38	353.56						165.76					
	5.00	4.00	54.43	249.16	-32.04	275.55	442.84					129.19					
	6.00	0.00	0.00	6.88	1.07	7.95						3.73					
	7.00	2.00	15.33	50.74	0.00	68.07						31.92					
	8.00	0.00	12.50	12.50	0.00	13.27						6.22		207.62			
2021-2026	1.00	0.00	0.00	0.00	0.00	0.00	478.24	923	0.00	167.55	323.32						
	2.00	1.00	9.97	59.86	-2.43	68.39						23.96					
	3.00	15.00	180.17	0.00	-61.64	133.53						46.78					
	4.00	8.00	117.30	234.64	-6.39	353.55						123.86					
	5.00	4.00	55.20	249.16	-32.04	276.32	444.62					96.81					
	6.00	0.00	0.00	6.88	1.07	7.95						2.78					
	7.00	3.00	16.10	50.76	0.00	69.86						24.48					
	8.00	0.00	0.77	12.50	0.00	13.27						4.65		155.77			
2026-2031	1.00	0.00	0.00	0.00	0.00	0.00	640.83	769	0.00	167.77	201.39						
	2.00	0.00	19.17	59.84	-2.43	76.58						20.05					
	3.00	7.00	262.97	0.00	-33.15	236.82						62.00					
	4.00	1.00	32.97	62.20	-6.39	89.78						23.50					
	5.00	3.00	107.33	249.14	-32.04	327.43	128.44					85.72					
	6.00	0.00	-0.77	2.04	-1.07	0.21						0.05					
	7.00	0.00	35.27	1.66	0.00	36.93						9.67					
	8.00	0.00	1.53	0.00	0.00	1.53						0.40		33.63			
2031-2036	1.00	0.00	0.00	0.00	0.00	0.00	642.82	771	0.00	125.76	150.89						
	2.00	1.00	19.17	59.84	-2.43	77.57						15.18					
	3.00	7.00	262.97	0.00	-33.15	236.82						46.33					
	4.00	1.00	32.97	62.22	-6.39	89.80						17.57					
	5.00	4.00	107.33	249.14	-32.04	328.43	128.50					64.25					
	6.00	0.00	-0.77	2.06	-1.07	0.23						0.04					
	7.00	0.00	35.27	1.68	0.00	36.95						7.23					
	8.00	0.00	1.53	0.00	0.00	1.53						0.30		25.14			
		335	2779.17	4777.78	797.017	8689.0		8689	3106.68		3106.68						
											5686.66						

Sequence Period	Assumed Year for NPV
1	2009
2	2014
3	2019
4	2024
5	2029
6	2034

APPENDIX D Table D3

Public Transport ET Conversion

Sequence Period	Precinct	Detached House ET Conversion	Multi Unit Dwellings ET Conversion	Commercial/Retail ET Conversion	Industrial ET Conversion	Total ET Conversion	Total ET Conversion per Contribution Area	Total ET Conversion Per Future Sequence Period	Total NPV Conversion	Total NPV Conversion per Contribution Area	Total NPV Conversion per Sequence Period	Public Transport ET Conversion																	
2006	1	7.00	0.00	1.60	4.49	13.08	652	970			Existing development not discounted	Development Type																	
	2	2.00	0.00	72.81	3.25	78.06						Public Transport Conversion Rates																	
	3	210.00	139.00	7.82	41.03	397.85						Detached Dwelling	1.0																
	4	19.00	0.00	89.31	17.99	126.29						Multi-unit Dwelling	0.5000																
	5	8.00	5.50	86.50	62.73	162.74	318					Commercial	0.01																
	6	0.00	0.00	24.99	82.07	107.06	413					686	129.79	346.75	575.68	Industrial	0.0014												
	7	4.00	7.50	48.72	0.00	60.22										272.6608	96.99	228.93	431.45	Sequence Period									
	8	2.00	8.50	13.76	0.00	24.26														1	2009								
2006-2011	1	0.00	35.50	121.32	-2.24	154.58		414	688	174.29	259.74									431.45	2	2014							
	2	0.00	7.00	25.13	-0.40	31.73	273.686														117.68	171.71	241.10	3	2019				
	3	0.00	92.50	-3.91	-2.09	86.51										294								102.88	181.92	4	2024		
	4	0.00	89.50	120.46	-2.38	207.58																				226	79.04	119.08	5
	5	0.00	37.00	108.37	-5.21	140.16		382																					18.96
	6	0.00	0.00	17.51	3.14	20.65	290					136.03	241.10	Total NPV ET conversion for Charge Area TA1															
	7	0.00	14.50	17.56	0.00	32.06								224	105.07	1638.60	NPV	617.89											
	8	0.00	3.50	8.87	0.00	12.37											294	75.20	1638.60							Exist + NPV			
2011-2016	1	0.00	35.50	121.33	-2.24	154.59		414	688	26.64	259.74									431.45						Total NPV ET conversion for Charge Area TA1			
	2	0.00	7.00	25.14	-0.40	31.74	273.686														171.71	241.10	NPV			617.89			
	3	0.00	93.00	-3.91	-2.09	87.00								294									102.88	181.92	Exist + NPV	935.72			
	4	0.00	89.50	120.47	-2.38	207.59											226								79.04	119.08	Total NPV ET conversion for Charge Area TA1		
	5	0.00	37.50	108.37	-5.21	140.66		382																			18.96	89.38	NPV
	6	0.00	0.50	17.51	3.14	21.16	290					136.03	241.10																Exist + NPV
	7	0.00	14.50	17.56	0.00	32.06								294	75.20	1638.60													Total NPV ET conversion for Charge Area TA1
	8	0.00	4.00	8.87	0.00	12.87											224	105.07	1638.60										NPV
2016-2021	1	0.00	0.00	0.00	0.00	0.00		294	688	9.75	259.74									431.45									Exist + NPV
	2	0.00	6.00	25.13	-0.41	30.73	273.686														171.71	241.10							Total NPV ET conversion for Charge Area TA1
	3	14.00	117.00	0.00	-10.36	120.64								294									102.88	181.92					NPV
	4	8.00	76.50	98.55	-1.07	181.98											226								79.04	119.08			Exist + NPV
	5	4.00	35.50	104.65	-5.38	138.76		382																			18.96	89.38	Total NPV ET conversion for Charge Area TA1
	6	0.00	0.00	2.89	0.18	3.07	290					136.03	241.10																NPV
	7	2.00	10.00	21.31	0.00	33.31								294	75.20	1638.60													Exist + NPV
	8	0.00	0.50	5.25	0.00	5.75											294	102.88	181.92										Total NPV ET conversion for Charge Area TA1
2021-2026	1	0.00	0.00	0.00	0.00	0.00		294	688	45.27	259.74									431.45									NPV
	2	1.00	6.50	25.14	-0.41	32.23	273.686														171.71	241.10							Exist + NPV
	3	15.00	117.50	0.00	-10.36	122.14								294									102.88	181.92					Total NPV ET conversion for Charge Area TA1
	4	8.00	76.50	98.55	-1.07	181.98											226								79.04	119.08			NPV
	5	4.00	36.00	104.65	-5.38	139.26		382																			18.96	89.38	Exist + NPV
	6	0.00	0.00	2.89	0.18	3.07	290					136.03	241.10																Total NPV ET conversion for Charge Area TA1
	7	3.00	10.50	21.32	0.00	34.82								294	102.88	181.92													NPV
	8	0.00	0.50	5.25	0.00	5.75											294	75.20	1638.60										Exist + NPV
2026-2031	1	0.00	0.00	0.00	0.00	0.00		294	688	12.20	259.74									431.45									Total NPV ET conversion for Charge Area TA1
	2	0.00	12.50	25.13	-0.41	37.23	273.686														171.71	241.10							NPV
	3	7.00	171.50	0.00	-5.57	172.93								294									102.88	181.92					Exist + NPV
	4	1.00	21.50	26.12	-1.07	47.55											226								79.04	119.08			Total NPV ET conversion for Charge Area TA1
	5	3.00	70.00	104.64	-5.38	172.26		382																			18.96	89.38	NPV
	6	0.00	-0.50	0.86	-0.18	0.18	290					136.03	241.10																Exist + NPV
	7	0.00	23.00	0.70	0.00	23.70								294	102.88	181.92													Total NPV ET conversion for Charge Area TA1
	8	0.00	1.00	0.00	0.00	1.00											294	75.20	1638.60										NPV
2031-2036	1	0.00	0.00	0.00	0.00	0.00		294	688	0.05	259.74									431.45									Exist + NPV
	2	1.00	12.50	25.13	-0.41	38.22	273.686														171.71	241.10							Total NPV ET conversion for Charge Area TA1
	3	7.00	171.50	0.00	-5.57	172.93								294									102.88	181.92					NPV
	4	1.00	21.50	26.13	-1.07	47.56											226								79.04	119.08			Exist + NPV
	5	4.00	70.00	104.64	-5.38	173.26		382																			18.96	89.38	Total NPV ET conversion for Charge Area TA1
	6	0.00	-0.50	0.87	-0.18	0.19	290					136.03	241.10																NPV
	7	0.00	23.00	0.71	0.00	23.71								294	75.20	1638.60													Exist + NPV
	8	0.00	1.00	0.00	0.00	1.00											294	102.88	181.92										Total NPV ET conversion for Charge Area TA1
		48.00	496.50	816.98	97.29	4288.07		1459	3318.51	1638.60	1638.60									617.89									935.72
																				2608.16									

APPENDIX D

Table D4 Transport Costings Pathways

Item		Cost							Total Cost	Timing	Discounted Cost (6%)
No.	Description	Construction			Contingency						
		Land Aquisition	Works	Subtotal	Rate Aquisition	Rate Works	PSP Prep	Subtotal			
A	Lever Street UCIP Stage 1	0	5,497,890	\$5,497,890	0	42%		\$2,309,114	\$7,807,004	2011	\$6,183,878
B	Lapriak Street Stairs Stage 3	0	770,000	\$770,000	0%	50%	2%	\$440,175	\$1,210,175	2011	\$958,572
C	Lever Street Extension UCIP Stage 2- Connection from Burdett St Park to Lapriak St Park	462,000	849,550	\$1,311,550	5%	27%	2%	\$278,710	\$1,590,260	2011	\$1,259,634
D	Cal-de-sac and Streetscping terminating Lever St		337,500	\$337,500	0	27%	2%	\$97,875	\$435,375	2011	\$344,858
E	Burdett St South	159,280	1,875,000	\$2,034,280	5%	27%	2%	\$554,900	\$2,589,180	2011	\$2,050,873
F	Amy Street	0	2,250,000	\$2,250,000	0	27%	2%	\$652,500	\$2,902,500	2011	\$2,299,052
G	Alion Railway Land Bridge	0	900,000	\$900,000	0	0%	2%	\$18,000	\$918,000	2011	\$727,142
Total		621,280.00	11,579,940	\$12,201,220				\$4,333,273	\$16,534,493		\$13,096,867

Base Year	2007
Discount Rate	6%

Table D5 Transport Costings Local Road

Item		Cost							Total Cost	Timing	Discounted Cost (6%)
No.	Description	Construction			Contingency						
		Land Aquisition	Works	Subtotal	Rate Aquisition	Rate Works	PSP Prep	Subtotal			
1	Albion overpass/ Hudson Rd/ Sangate Rd intersection	880000	1,010,400	\$1,890,400	5%	35%	2%	\$435,448	\$2,325,848	2012	\$1,738,009
2	Sandgate Rd Right Turn into Lapraik and Butler	665000	1,862,100	\$2,527,100	5%	35%	2%	\$78,542	\$2,605,642	2012	\$1,947,087
3	St	0	80,000	\$80,000	5%	35%	2%	\$29,600	\$109,600	2012	\$81,900
4	Cooksley Street appropaching Kingsford Smith Drive	120000	488,500	\$608,500	5%	35%	2%	\$189,145	\$797,645	2012	\$596,047
Total		1,665,000.00	3,441,000	\$5,106,000				\$732,735	\$5,838,735		\$4,363,042

Table D6 Transport Costings Local Public Transport

Item		Cost							Total Cost	Timing	Discounted Cost (6%)
No.	Description	Construction			Contingency						
		Land Aquisition	Works	Subtotal	Rate Aquisition	Rate Works	PSP Prep	Subtotal			
1	Express Bus Stop		20,000	\$20,000	0%	30%	2%	\$6,400	\$26,400	2012	\$19,728
Total		0.00	20,000	\$20,000				\$6,400	\$26,400		\$19,728

\$22,399,628

\$17,479,637

Appendix D
Transport Cost Apportionment

Current 2007-2008 ICU RATE 1.55

Table D7 Pathways

Item		Discounted Cost	External use		Existing use PSP		Future use PSP		Charge	
No.	Description		% total use	Apportioned cost	% total use	Apportioned cost	% total use	Apportioned cost	NPV future demand	Charge
A	Lever Street UCIP Stage 1	\$6,183,878	0%		0%	\$0	100%	\$6,183,878.12	2,704	1,475.22
B	Lapriak Street Stairs Stage 3	\$958,572	10%	\$95,857.20	0%	\$0	90%	\$862,714.76	2,704	205.81
C	Lever Street Extension UCIP Stage 2- Connection from Burdett St Park to Lapriak St Park	\$1,259,634	0%	\$0.00	0%	\$0	100%	\$1,259,634.47	2,704	300.50
D	Cal-de-sac and Streetsciping terminating Lever St	\$344,858	0%	\$0.00	0%	\$0	100%	\$344,857.78	2,704	82.27
E	Burdett St South	\$1,875,000	0%	\$0.00	0%	\$0	100%	\$1,875,000.00	2,704	447.3
F	Amy Street	\$2,299,052	0%	\$0.00		\$0	100%	\$2,299,051.86	2,704	548.5
G	Albion Land Bridge	\$727,142	85%	\$618,070.68	0%	\$0	15%	\$109,071.30	2,704	26.0
Total		\$13,648,136		\$713,928				\$12,934,208		3,086

Table D8 Local Roads

Item		Discounted Cost	External use		Existing use PSP		Future use PSP		Charge	
No.	Description		% total use	Apportioned cost	% total use	Apportioned cost	% total use	Apportioned cost	NPV future demand	Charge
1	Albion overpass/ Hudson Rd/ Sangate Rd intersection	\$1,738,009	0%		0%	\$0	100%	\$1,738,008.93	5,687	197.18
2	Sandgate Rd Right Turn into Lapraik and Butler	\$1,947,087	0%		0%	\$0	100%	\$1,947,087.28	5,687	221
3	Sangate Rd right Turn into Anstey/ Lever St	\$81,900	0%		0%	\$0	100%	\$81,899.50	5,687	9
4	Cooksley Street appropaching Kingsford Smith Drive	\$596,047	0%		0%	\$0	100%	\$596,046.75	5,687	68
Total		\$4,363,042						\$4,363,042		495

Table D9 Local Public Transport

Item		Discounted Cost	External use		Existing use PSP		Future use PSP		Charge	
No.	Description		% total use	Apportioned cost	% total use	Apportioned cost	% total use	Apportioned cost	NPV future demand	Charge
1	Express Bus Stop	\$19,728	0%		0%	\$0	100%	\$19,727.62	936	13.60
2										
3										
4										
Total		\$19,728						\$19,728		14

\$17,316,978

3,594

DRAWING ISSUE: Preliminary

Table D10 - Lever Street Improvement Costing Estimates

All undergrounding items shown in red																				
Work Order	Lot No.	Item	Description	UNIT	RATE	Precinct A	Precinct B	Precinct C	Precinct D	Precinct E	Precinct F	Precinct G	Precinct H	Precinct I	Precinct J	Precinct K	over heads	QTY	TOTAL	
ESTABLISHMENT																				
ZZZ	SE	EST10	Site Establishment	Item	\$3,980.00													1.00	\$3,980.00	
ZZZ	SE	EST30	Locate existing underground services - Minor	Hr	\$152.00													13.00	\$1,976.00	
ZZZ	SE	EST40	Locate existing underground services - Major	Each	\$3,727.00													1.00	\$3,727.00	
TIME RELATED COSTS																				
ZZZ	SE	TRC10	Site facilities and services (including supply and erection of compound fencing)	Weeks	\$1,617.10													18.00	\$29,107.80	
ZZZ	SE	TRC20	Site office expenses	Weeks	\$1,265.00													18.00	\$22,770.00	
ZZZ	SE	TRC30	On-site supervision	Weeks	\$4,091.30													18.00	\$73,643.40	
ZZZ	SE	TRC40	Survey & Setting Out	Hr	\$219.55													100.00	\$21,955.00	
CCC	SE	TRC50	Day Rate for SCIP Team	Day														0.00	\$0.00	
TESTING																				
ZZZ	EX	TST10	Testing of existing material - PROVISIONAL (If ordered)	Each	\$804.00													10.00	\$8,040.00	
ZZZ	PU	TST20	Compaction testing (min order 3) - PROVISIONAL (if ordered)	Each	\$225.00													10.00	\$2,250.00	
ZZZ	RC	TST30	Concrete testing (min order 3) - PROVISIONAL (if ordered)	Each	\$77.00													10.00	\$770.00	
ZZZ	AC	TST40	Compaction testing of Asphaltic Concrete pavement (if ordered)	Lots	\$540.00													10.00	\$5,400.00	
ENVIRONMENTAL MANAGEMENT																				
YYY	SE	EMR10	Environmental Management including sucker truck	Weeks	\$502.70													18.00	\$9,048.60	
YYY	SE	EMR20	Protection of Existing Trees	Item	\$465.50													5.00	\$2,327.50	
			Preparation of Preliminary Environmental Assessment	Item	\$2,230.00													1.00	\$2,230.00	
			Audit	Item	\$1,000.00													2.00	\$2,000.00	
TRAFFIC MANAGEMENT																				
YYY	TR	TM10	Traffic Management	Item	\$11,641.00													9.00	\$104,769.00	
YYY	TR	TM20	Traffic Control Police (if required)	Hr	\$137.57													150.00	\$20,635.50	
YYY	TR	TM30	Traffic Controller	Hr	\$44.80													1000.00	\$44,800.00	
YYY	TR	TM40	Traffic Controller (Weekends)	Hr	\$86.04													100.00	\$8,604.00	
YYY	TR	TM45	Traffic Controller Sign Vehicle	Hr	\$25.81													700.00	\$18,067.00	
YYY	TR	TM50	Traffic barriers including relocation & maintenance	Weeks	\$2,186.00													18.00	\$39,348.00	
ZZZ	TR	TM60	Safety - Temporary pedestrian access	Weeks	\$1,639.70													18.00	\$29,514.60	
TR	TM70	Variable Message Boards	Weeks	\$2,108.80														18.00	\$37,958.40	
PROVISIONAL ITEMS																				
PUP	SV	PROV10	Temporary Relocation of mail boxes during construction	Item	\$278.00													0.00	\$0.00	
PUP	SV	PROV20	Reinstate Telstra Property connections (assumed 1/3 of properties would require reinstatement)	Item	\$707.00				2.00		2.00		5.00			2.00		11.00	\$7,777.00	
PUP	SV	PROV30	Reinstate Gas Property connections (assumed 1/3 of properties would require reinstatement)	Item	\$900.00				2.00		2.00		5.00			1.00		10.00	\$9,000.00	
SITE PREPARATION & REMOVAL																				
EEE	SE	REM10	Clearing Trees Individually, Removal & Disposal of rootball	No.	\$890.00	0.00	5.00	0.00	4.00	0.00	0.00	0.00	0.00	4.00	5.00			18.00	\$16,020.00	
GGG	DE	REM30	Remove existing furniture i.e. bins on posts, seats and planters	No.	\$304.00	0.00	14.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			16.00	\$4,864.00	
			Earthworks to Spoil	m2	\$120.00	10.00	40.00	10.00	30.00	12.00	21.00	7.00	85.00	7.00	66.00			288.00	\$34,560.00	
			Earthworks to spoil Cartage	psum	\$5,000.00													1.00	\$5,000.00	
REMOVALS DUE TO SCIP FINISHES																				
		SAW10	Saw Cutting of existing AC roadway pavement - up to 175mm thick	m	30.45	30.00		30.00		20.00		25.00		25.00	10.00	10.00		150.00	\$4,567.50	
SUB	DE	SAW15	Saw Cutting of existing AC roadway pavement - 175mm to 250mm thick	m	\$41.91													0.00	\$0.00	
SUB	DE	SAW20	Saw Cutting of existing concrete footpath - up to 100mm thick	m	\$29.88													0.00	\$0.00	
SUB	DE	SAW25	Saw Cutting of existing concrete footpath - 100mm to 180mm thick	m	\$42.56	27.5	53.5	47.9	109.5	53.0	56.0	44.0	247.0	103.0	126.00			867.40	\$36,916.54	
SUB	DE	SAW26	Saw Cutting of existing concrete/AC footpath - 180mm to 250mm thick	m	\$55.22	0.0	6.60	0.0	22.9	0.0	4.2	0.00	44.30	11.80	48.80			138.60	\$7,653.49	
GGG	DE	REM50	Remove & dispose concrete footpath	m2	\$50.72	89.0	227.50	190.5	256.5	103.0	75.0	164.50	410.50	128.00	118.00			1762.50	\$89,394.00	
GGG	DE	REM60	Remove & dispose of Existing turf footpath & spoil 140mm deep (also in islands)	m2	\$35.27	0.0	0.0	0.0	0.0	3.5	3.5	26.5	116.5	304.5	347.0			801.50	\$28,268.91	
GGG	DE	REM85	Remove & dispose of Existing driveway, spoil 140mm - 180mm deep - PROVISIONAL	m2	\$58.38	0.0	19.00	0.00	67.00	0.00	12.00	0.00	94.00	0.00	151.00			343.00	\$20,024.34	
GGG	DE	REM86	Remove & dispose of Existing footpath & driveway, spoil 180mm - 250mm deep - PROVISIONAL	m2	\$106.78													0.00	\$0.00	
			Earthworks select import fill material	m3	\$97.35	2.0	15.00	2.00	16.00	15.00	11.00	11.00	22.00	20.00	44.00			158.00	\$15,381.30	
22.1	REM90	Remove & Dispose of Existing AC - 150mm thick	m2	\$46.16	85.0	344.00	140.00	340.00	101.00	160.00	112.00	837.00	215.00	689.00			3023.00	\$139,541.68		
			Earthworks to spoil - (Area *0.5) cu m	m3	\$120.00	88.0	302.8	166.3	339.8	111.3	130.8	157.0	740.0	333.8	674.5	0.0	0.0	3044.00	\$365,280.00	
			Earthworks to Spoil - Cartage over 25km - Enter distance To Willawong below	m3 /k	\$4.00	88.0	302.8	166.3	339.8	111.3	130.8	157.0	740.0	333.8	674.5	0.0	0.0	3044.00	\$304,400.00	
			Distance to hardfill tip site (Willawong) - Enter value under Rate	km	25.00															
GGG	DE	REM40	Rem CKC - Excavate & Cart to 7 km	m	\$41.19	30.00	60.00	30.00	160.00	70.00	75.00	65.00	300.00	75.00	165.00			1030.00	\$42,425.70	
			Remove & Dispose of Existing Kerb Only in Existing Islands (remove to Landfill 12k)	m	\$35.00													0.00	\$0.00	
			Earthworks to Spoil - Cartage over 7km - Enter distance To Willawong below	m/km	0.40	30.00	60.00	30.00	160.00	70.00	75.00	65.00	300.00	75.00	165.00	0.00		1030.00	\$10,300.00	
			Distance (over 7 km two way) to Willawonghardfill tip - Enter value under Rate	km	25.00															
			Remove & Dispose of Existing Landscaping (include brickwork) NOT including trees	m2	\$35.00	0.00	10.00	3.80	11.60	13.10	0.00	14.20	19.60	13.60	53.50			139.40	\$4,879.00	
			Remove existing signs	Item	\$200.00	5.00	5.00	5.00	3.00	9.00	2.00	10.00	1.00	5.00	9.00			54.00	\$10,800.00	
DRAINAGE																				
GD2			Remove Existing Gully, grate, frame and lintel	No.	855.00	0.0	0.0	0.0	5.0	0.0	0.0	0.0	3.0	1.0	2.00			11.00	\$9,405.00	
GD30			Install New Lintel and grate frame on Existing Gully	No.	3,201.00													0.00	\$0.00	
			Remove Existing Gully, grate, frame and lintel	No.	2,625.00													0.00	\$0.00	
			Break into Existing Drainage System	No.	1,125.00	0.0	0.0	0.0	1.0	0.0	0.0	0.0	7.0	0.0	1.00			9.00	\$10,125.00	
			Construct New Gully and Lintel	No.	3,750.00				1.0	1.0	1.0	2.0	7.0	2.0	2.00			16.00	\$60,000.00	
			Construct New 1050 dia Manhole	No.	4,050.00	0.0	0.0	0.0	1.0	0.0	0.0	1.0	2.0	0.0	1.00			5.00	\$20,250.00	
			Excavate, Supply, Lay & Joint & Backfill 375mm dia Pipes	m	637.50					15.0	0.0	15.0	150.0	15.0	15.00			210.00	\$133,875.00	
			Raise Existing Manhole Covers	No.	525.00	0.0	0.0	0.0	1.0		1.0	0.0	3.0	3.0	2.00			10.00	\$5,250.00	
SEWERAGE																				
			Raise Existing Manhole Covers	No	525.00							1.0	3.0	2.0				6.00	\$3,150.00	
ENERGEX																				
TTT	DP	EM10	Replace existing manhole roof, install double lid system with infillable lid & frame to suit new footpath levels	No.	\$26,842.50													0.00	\$0.00	
TTT	DP	EM20	Replace existing No4 Electrical Pit lid with infillable lid & frame to suit new footpath levels	No.	\$2,000.00	0.0	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			1.00	\$2,000.00	
			Undergrounding of Overhead Power - HV/LV	m	\$2,200.00	0.0	0.0	0.00	0.00	15.00	40.00	30.00	145.00	20.00				250.00	\$550,000.00	
TTT	DP	EM40	Undergrounding of Overhead Power : LV only	m	\$2,025.00	0.0	0.0	0.00	0.00		0.00	0.00	0.00	0.00				0.00	\$0.00	
TTT	DP	EM50	Undergrounding of Overhead Power 11.33KV	m	\$6,750.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	\$0.00	
			Undergrounding of Overhead Power - LV Road crossing to street lighting and dwelling connections	m	\$240.00	0.0	0.0	0.00	15.00	0.00	0.00		27.00					42.00	\$10,080.00	

Table D10 - Lever Street Improvement Costing Estimates

DRAWING ISSUE: Preliminary																				
All undergrounding items shown in red																				
Work Order	Lot No.	Item	Description	UNIT	RATE	Precinct A	Precinct B	Precinct C	Precinct D	Precinct E	Precinct F	Precinct G	Precinct H	Precinct I	Precinct J	Precinct K	over heads	QTY	TOTAL	
TTT	DP	EM60	Underground power supply to dwelling - including 'Green-boy' and switch board connection	No.	\$10,000.00	0.0	0.0	0.00	1.00	0.00	0.00	0.00	0.00	4.00				5.00	\$50,000.00	
		EP10	Replace existing manhole roof, install double lid system with infillable lid & frame to suit new footpath levels	No.	\$18,000.00			2.00										2.00	\$36,000.00	
			Straighten/adjust existing pillar	No.	\$1,237.50													0.00	\$0.00	
			Supply & install or raise No. 4 pit to suit new footpath level with infill lid	No.	\$1,243.80													0.00	\$0.00	
TRAFFIC SIGNAL MODIFICATIONS																				
TLE	DP	TS30	Raise or lower No. 4 Traffic pit to suit new footpath levels and install infill lid	No.	\$1,125.00			5.00											\$411,540.00	
			Supply and installation of No. 4 Traffic signals electrical pit	No.	\$1,125.00													0.00	\$0.00	
TLE	DP	TS40	Removal of No 4 Traffic Signals electrical pit	No.	\$1,400.00													0.00	\$0.00	
			Replacement No. 4 Traffic Signals electrical pit	No.	\$3,200.00													0.00	\$0.00	
			New Installation of signals at intersections (per leg)	Item	\$90,000.00			2.00				2.20						4.20	\$378,000.00	
			Supply and install 100mm dia Signals Coms conduit in own trench	m	\$280.00		5.0	65.00	13.00			10.00						93.00	\$26,040.00	
			Supply and install 100mm dia Signals Coms conduit in common trench	m	\$150.00					10.00	35.00	5.00						50.00	\$7,500.00	
GAS																				
PUP	DP	G10	Raise Gas Valves to suit new footpath level	Item	\$900.00		1.0	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00			4.00	\$3,600.00	
						0.0	0.0											0.00	\$0.00	
TELSTRA																				
Relocate existing Local Distribution conduit & cables onto correct alignment																				
PUP	DP	T50	Supply and install or raise P2 to suit new footpath levels with infill lid	No.	\$1,243.80	0.0	0.0	0.00	26.00	0.00	0.00	12.00	146.00	9.00				193.00	\$57,900.00	
		T60	Supply & install or raise P5 pit to suit new footpath level with infill lid	No.	\$2,250.00				1.0	3.0	0.0	0.00	10.00	2.00	2.00			14.00	\$17,413.20	
PUP	DP	T60	Supply & install P6 pit to suit new footpath level with infill lid	No.	\$1,800.00													4.00	\$9,000.00	
			Replace existing manhole roof, install double lid system with infillable lid & frame to suit new	No.	\$15,000.00			1.0	1.0	1.0								3.00	\$45,000.00	
CCC	DP	T65	Supply & install infill cover to raised pits to suit new footpath level - PROVISIONAL	No.	\$1,125.00													0.00	\$0.00	
			Infill lid to Chamber/Manhole	No.	\$10,125.00													0.00	\$0.00	
OPTUS																				
Undergrounding of Optus Overhead Cable Television Service in Joint Use Trench with Energex																				
			Optus to draw cables and connect to OH supply	Item	\$28,000.00					15.0	40.0	30.00	145.00	20.00				250.00	\$12,500.00	
			Optus Cable TV domestic underground service connection	No.	\$1,500.00	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0			1.00	\$28,000.00	
			Install No5 pits with infill lids	No.	\$2,000.00					1.0	1.0	1.0	2.0	2.0				3.00	\$4,500.00	
										1.0	1.0	2.0	2.0					6.00	\$12,000.00	
WATER SUPPLY																				
LLL	SV	W10	Water meter and pit (supply point) < 3m from watermain	No.	\$4,543.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			2.00	\$9,087.00	
		W30	Raise Water Valves and Hydrants to suit new footpath level	No.	\$1,650.00	1.0	2.0	2.0	3.00	1.00	1.00	2.00	3.00	5.00	5.00	1.00			21.00	\$34,650.00
			Raise Water meter pit lid to new footpath levels	No.	\$1,650.00				1.00	1.00	3.00	1.00	5.00	0.00	1.00			12.00	\$19,800.00	
			Repair/Reinstate domestic water service	No.	\$375.00	0.0	0.0	0.00	1.00	0.00	1.00	0.00	4.00	0.00				6.00	\$2,250.00	
			Raise lid and frame on Water Manhole	No.	\$6,750.00													0.00	\$0.00	
			Relocate 100mm dia water main	m	\$1,500.00							20.00						20.00	\$30,000.00	
WATER SENSITIVE URBAN DESIGN (WSUD)																				
Allowance for WSUD in shown precincts																				
					5.00%	5010.1	23816.0	20799.8	18401.9	8692.9	11899.5	23763.0	58431.8	24415.1	33896.4			229126.50	\$229,126.50	
SUB-SURFACE WORKS																				
GGG	SS	SSW10	Supply and install 90mm slotted ag pipe including excavation and backfill	m	\$118.50	11.5	78.0	34.0	23.00	11.00	0.00	4.50	46.50	68.00	123.00			399.50	\$47,340.75	
GGG	SS	SSW20	Supply and install 150*75mm Galv. RHS Roofwater Drains	m	\$204.15	6.0	0.0	10.7	16.80	4.90	6.90	0.00	39.10	0.00	15.40			99.80	\$20,374.17	
GGG	SS	SSW30	Supply and install Everhard 300 series Roofwater Pits at property Boundary	No.	\$622.50	2.0	0.0	3.0	7.00	2.00	3.00	0.00	19.00	0.00	4.00			40.00	\$24,900.00	
		SSW25	Supply and install Kerb Adaptors in existing Kerb & channe	No.	\$229.50	1.0	0.0	2.0	4.00	1.00	0.00	1.00	6.00	7.00	11.00			33.00	\$7,573.50	
KERB																				
Mountable Kerb Only - Island																				
CCC	KC	CKC30	Construct Concrete Kerb Only 5m -50m	m	\$88.00													0.00	\$0.00	
CCC	KC	CKC30	Construct Concrete Kerb & Channel 5m -50m	m	\$150.00	23.0	0.0	60.0	50.0	32.0	35.0	60.0	145.0	110.0	90.0			522.00	\$78,300.00	
			Construct Concrete Kerb & Channel 50m -300m	m	\$126.15													638.00	\$95,700.00	
			Construct Porphyry kerb and channe	m	\$248.74													0.00	\$0.00	
CCC	KC	KR20	Construct Kerb Ramps - In Existing CKC	Item	\$638.60	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0				1.00	\$638.60	
CCC	KC	KR10N	Construct Kerb Ramps - In New CKC	No.	\$485.00	0.0	0.0	5.0	0.0	6.0	0.0	6.0	0.0	6.0	2.0			25.00	\$12,125.00	
RETAINING WALL																				
SUB	MW	RTW10	Construct Block Work Retaining Wall as per UMS 412 (Average Height 1.8m)	m	\$1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50	0.00	0.00	0.00			11.50	\$17,250.00	
SUB	RC	RTW30	Concrete Protection of Services	m	\$229.60	0.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			7.20	\$1,653.12	
			Coloured concrete insitu wall with attached timber slat seating	m	\$2,000.00	0.00	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			31.50	\$63,000.00	
CONCRETE																				
CCC	DW10		Concrete Driveways apron - 180mm Industrial	m2	\$137.98	0.00	0.00	0.00	23.00	0.00	7.00	0.00	56.00	0.00	92.00			178.00	\$24,560.44	
CCC	RC	FP30	Thickened slab (furniture, driveway slab) - extra over	m2	\$62.30	0.00	0.00	0.00	26.00	0.00	5.00	0.00	41.00	0.00	94.00			166.00	\$10,341.80	
CCC	RC	FP20	Additional F92 Mesh (for Driveways and thickened slab areas)	m2	\$57.20	0.00	0.00	0.00	49.00	0.00	12.00	0.00	97.00	0.00	186.00	0.00	0.00	344.00	\$19,676.80	
PAVEMENT																				
Construct Pavement- Class 3 Crushed Rock (Area * 0.5) in Road Carriageway																				
				m3	\$105.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	
SURFACING																				
CWO	AC	ACS30	Asphalt Supply (Type 2) Multigrade 25mm Nominal Thickness (Area * 0.032*2.6)	t	\$163.10	0.0	0.0	2.50	28.00	8.30	13.30	8.40	67.60	17.90	54.70			200.70	\$32,734.17	
CWO	AC	ACS40	Asphalt Supply (Type 4) Multigrade 75mm Nominal Thickness (Area * 0.075*2.6)	t	\$78.40			5.90	66.00	19.50	31.20	19.70	158.50	42.00	128.30			471.10	\$36,934.24	
CWO	AC	ACL30	Lay Asphalt (Type 2) Multigrade	t	\$338.80	0.0	0.0	2.50	28.00	8.30	13.30	8.40	67.60	17.90	54.70			200.70	\$67,997.16	
CWO	AC	ACL40	Lay Asphalt (Type 4) Multigrade	t	\$156.70			5.90	66.00	19.50	31.20	19.70	158.50	42.00	128.30			471.10	\$73,821.37	
			OVERLAY - Asphalt Supply (Type 3) Multigrade (32mm thick)	t	\$163.10													0.00	\$0.00	
			OVERLAY - Lay Asphalt (Type 3) Multigrade (32mm thick)	t	\$338.80													0.00	\$0.00	
FOOTPATH SURFACE TREATMENT																				
CCC	SG	PFS10	Supply & lay hazard tactile indicators (by Pathfinder Systems)	m2	\$544.38	1.5	0.0	3.0	8.5	4.0	2.5	4.5	28.5	8.5	21.5			82.50	\$44,911.35	
SUB		PFS20	Supply & lay directional tactile indicators (by Pathfinder Systems)	m2	\$715.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.00	\$0.00	
		PFP10	PT1 Exposed base colour aggregate includes sub-base preparation as detailec	m2	\$134.74	170.0	585.00	310.00	250.00	120.00	105.00	170.00	435.00	320.00	510.00			2975.00	\$400,851.50	
CCC	RC	FP40	Contraction joints	m	\$33.45	44.20	152.10	80.60	65.00	31.20	27.30	44.20	113.10	83.20	132.60	0.00	0.00	773.50	\$25,873.58	
CCC	RC	FP50	Expansion joints	m	\$55.98	11.49	39.55	20.96	16.90	8.11	7.10	11.49	29.41	21.63	34.48	0.00	0.00	201.11	\$11,258.14	
CCC	RC	FP60	Isolation joints	m	\$23.45	2.99	10.28	5.45	4.39	2.11	1.85	2.99	7.65	5.62	8.96	0.00	0.00	52.29	\$1,226.17	
FURNITURE																				
FFF	SG	SEAT	Seat on existing or new concrete slab	No.	\$2,121.20	0.0	8.0	0.0	1.0	1.0	0.0	0.0	3.0	5.0	5.0			23.00	\$48,787.60	
FFF	SG	BIN	Bin with lid on existing or new concrete slab	No.	\$2,016.90	1.0	3.0	3.0	1.0	1.0	0.0	2.0	0.0	4.0	3.0			18.00	\$36,304.20	

Table D10 - Lever Street Improvement Costing Estimates

DRAWING ISSUE: Preliminary

All undergrounding items shown in red																			
Work Order	Lot No.	Item	Description	UNIT	RATE	Precinct A	Precinct B	Precinct C	Precinct D	Precinct E	Precinct F	Precinct G	Precinct H	Precinct I	Precinct J	Precinct K	over heads	QTY	TOTAL
FFF	SG	FTN_A40	Drinking fountain - Apollo 400 (includes connections, water supply, sawcut/removals in existing)	No.	\$3,952.00	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	\$3,952.00
		GRATE	Tree Grate	m	\$3,012.00	2.00	7.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00	\$33,132.00
		BIKE	Bike Rack	No.	\$1,015.00	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.00	\$2,030.00
CCC	SG	AWN	Replace Stirrup & Footing to Awning Posts	No.	\$834.80	5.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	\$5,008.80
RATE 2 LIGHTING																			
			Rate 2 Electrical Reticulation	Psum	\$7,500.00	0.00	0.00	2.00	2.00	1.00	1.00	2.00	3.00	2.00	1.00			14.00	\$105,000.00
RATE 3 LIGHTING																			
TTT	DP	DL10	Rate 3 electrical conduit in placem (Incl. Trench, lay & backfill)	m	\$150.00	17.50	52.00	20.00	61.00	6.00	30.00	14.00	146.00	67.00	143.00			556.50	\$83,475.00
TTT	DP	DL20	Rate 3 electrical pits (No.4)	No.	\$598.00	2.00	5.00	2.00	5.00	1.00	3.00	3.00	6.00	8.00	12.00			47.00	\$28,106.00
TLE	SC	DL30	Rate 3 electrical point of supply/ switchbox & PE cell	No.	\$2,000.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00			6.00	\$12,000.00
TLE	SC	DL40	Supply and install Pedestrian SCIP Lights	No.	\$4,000.00	2.00	5.00	2.00	5.00	1.00	3.00	3.00	6.00	8.00	12.00			47.00	\$188,000.00
ARTWORK FOOTINGS																			
AF10			Pole footings as per detail with mechanical excavation	PSUM	\$50,000.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			1.00	\$50,000.00
																		0.00	\$0.00
LANDSCAPE PREPARATION																			
LLL	LS	ES10	Earthworks to spoil in planter areas (includes tree rootball space of 1.6x1.2x1.0m deep)	m3	\$169.12	0.00	11.50	0.00	21.76	6.30	4.30	7.90	22.82	54.48	44.93	0.00	0.00	174.00	\$29,426.88
LLL	LS	ES20	Earthworks to spoil for trees in turf areas and tree grates (includes tree rootball space of	m3	\$137.30	3.84	13.44	3.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.12	\$2,899.78
LLL	LS	ES30	Scarify existing subgrade 150mm deep - tree & garden areas	m2	\$6.67	0.00	23.00	0.00	40.00	10.00	5.00	14.00	34.00	93.00	72.00			291.00	\$1,940.97
LLL	LS	ES40	Supply and install 900mm deep root barrier to property and road side at tree locations	m	\$10.12	6.40	28.80	6.40	16.00	6.40	6.40	6.40	25.60	48.00	44.80	0.00	0.00	195.20	\$1,975.42
LLL	LS	LS10	Supply & spread 'A Horizon' topsoil to planter areas (top 400mm depth)	m3	\$170.26	-0.50	6.95	-0.50	14.75	3.50	1.50	5.10	11.60	33.45	25.30	0.00	0.00	101.15	\$17,221.80
LLL	LS	LS11	Supply & spread 'B Horizon' topsoil to trees in planter areas (1.4m3 around tree hole at base	m3	\$179.50	0.00	1.66	0.00	4.15	1.66	1.66	1.66	6.64	12.45	11.62	0.00	0.00	41.50	\$7,449.25
LLL	LS	LS20	Supply & spread 'A Horizon' topsoil to trees in turf areas (top 150mm depth)	m3	\$170.00	0.40	1.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20	\$374.00
LLL	LS	LS21	Supply & spread 'B Horizon' topsoil to trees in turf areas	m3	\$179.50	2.30	8.05	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.65	\$2,270.68
LLL	LS	LS30	Supply & spread 'A Horizon' topsoil to turf areas (150mm depth)	m3	\$170.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00
LLL	LS	LS40	Supply & placement of Turf	m2	\$11.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00
LLL	LS	LS50	Supply & placement of Organic Mulch (25mm grade Hoop Pine bark) in 75mm layer to planter	m3	\$94.60	0.00	1.73	0.00	3.00	0.75	0.38	1.05	2.55	6.98	5.40	0.00	0.00	21.83	\$2,064.65
LLL	LS	LS51	Supply & placement of Organic Mulch (25mm grade Hoop Pine bark) to trees in turf (0.1m3 per	m3	\$95.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00
PLANTING WORKS																			
		PTM30	Traffic Controller	Hr	65.44													0.00	\$0.00
		PTM45	Traffic Controller Sign Vehicle	Hr	64.72													0.00	\$0.00
BCC	LS	P100	Supply and install 100mm plant	No.	\$5.23	0.00	301.92	0.00	544.80	145.92	85.92	193.92	511.68	1310.40	1045.44	0.00	0.00	4140.00	\$21,652.20
BCC	LS	P140	Supply and install 140mm plant	No.	\$6.16	0.00	155.04	33.60	93.60	37.44	37.44	37.44	149.76	280.80	262.08	0.00	0.00	1087.20	\$6,697.15
BCC	LS	P200	Supply and install 200mm plant	No.	\$16.67	0.00	15.33	0.00	24.32	4.93	0.93	8.13	14.91	51.36	36.10	0.00	0.00	156.00	\$2,600.52
			Ex ground moreton bay fig (garden bed)	No.	\$7,500.00		2.00											2.00	\$15,000.00
			Ex ground moreton bay fig (tree grate)	No.	\$7,500.00													0.00	\$0.00
			Ex ground verticle tree (garden bed)	No.	\$5,000.00									7.00	3.00			10.00	\$50,000.00
			Ex ground verticle tree (tree grate)	No.	\$5,000.00													0.00	\$0.00
			Exground medium tree (garden bed)	No.	\$3,000.00				5.00	2.00	2.00	8.00	8.00	11.00				38.00	\$114,000.00
			Exground medium tree (tree grate)	No.	\$3,000.00													11.00	\$33,000.00
			Exground Large tree (garden bed)	No.	\$5,000.00		2.00	7.00	2.00									0.00	\$0.00
			Exground large tree (tree grate)	No.	\$5,000.00													0.00	\$0.00
BCC	LS	PCRANE	Crane Hire for installing Ex Ground stock	Hr	\$115.50	1.50	6.75	1.50	3.75	1.50	1.50	1.50	6.00	11.25	10.50	0.00	0.00	45.75	\$5,284.13
BCC	LS	PTC	Additional Traffic Control for Crane	Hr	\$78.10	1.50	6.75	1.50	3.75	1.50	1.50	1.50	6.00	11.25	10.50	0.00	0.00	45.75	\$3,573.08
BCC	LS	P100_M	Extra over to replace & install 100mm plant (14per sqm) 12 weeks	No.	\$5.23	0.00	30.19	0.00	54.48	14.59	8.59	19.39	51.17	131.04	104.54	0.00	0.00	414.00	\$2,165.22
BCC	LS	P140_M	Extra over to replace & install 140mm plant (5.25per sqm) 12 weeks	No.	\$6.16	0.00	15.50	3.36	9.36	3.74	3.74	3.74	14.98	28.08	26.21	0.00	0.00	108.72	\$669.72
BCC	LS	P200_M	Extra over to replace & install 200mm plant (0.8per sqm) 12 weeks	No.	\$16.67	0.00	1.53	0.00	2.43	0.49	0.09	0.81	1.49	5.14	3.61	0.00	0.00	15.60	\$260.05
		P10%	PERCENTAGE OF PLANTS STOLEN - Enter under RATE	%	10.00													0.00	\$0.00
BCC	LS	PMTCE	12 Week Plant Maintenance Period	Item	\$11,088.00													0.00	\$0.00
																		0.00	\$0.00
																		0.00	\$0.00
SIGNS AND PAVEMENT MARKING																			
CWO	SG	SPM	Alterations to signs and pavement marking	Item	\$100.00													250.00	\$25,000.00
						\$105,212.52	\$500,136.44	\$436,796.24	\$386,439.89	\$182,551.47	\$249,889.48	\$499,022.19	\$1,227,067.69	\$512,716.19	\$711,824.47	\$304.50		\$0.00	
Construction Total						\$105,212.52	\$500,136.44	\$436,796.24	\$386,439.89	\$182,551.47	\$249,889.48	\$499,022.19	\$1,227,067.69	\$512,716.19	\$711,824.47	\$304.50	\$0.00	\$5,497,889.89	
Project Delivery & Management @ 15%					15%	\$15,781.88	\$75,020.47	\$65,519.44	\$57,965.98	\$27,382.72	\$37,483.42	\$74,853.33	\$184,060.15	\$76,907.43	\$106,773.67	\$45.68	\$0.00	\$824,683.48	
Contingency @ 15%					15%	\$15,781.88	\$75,020.47	\$65,519.44	\$57,965.98	\$27,382.72	\$37,483.42	\$74,853.33	\$184,060.15	\$76,907.43	\$106,773.67	\$45.68	\$0.00	\$824,683.48	
Artwork @ 2%					2%	\$2,104.25	\$10,002.73	\$8,735.92	\$7,728.80	\$3,651.03	\$4,997.79	\$9,980.44	\$24,541.35	\$10,254.32	\$14,236.49	\$6.09	\$0.00	\$109,957.80	
Escalation @ 10%					10%	\$10,521.25	\$50,013.64	\$43,679.62	\$38,643.99	\$18,255.15	\$24,988.95	\$49,902.22	\$122,706.77	\$51,271.62	\$71,182.45	\$30.45	\$0.00	\$549,788.99	
Community Consultation Item					ITEM														\$50,000.00
City Planning Resources Allowance					ITEM														\$0.00
Acquisition of Approx.0.0m2 of lot RP					PSUM														\$0.00
Acquisition of Approx.0.0m2 of lot RP					PSUM														\$0.00
Grand Total Cost						\$149,401.78	\$710,193.75	\$620,250.66	\$548,744.65	\$259,223.09	\$354,843.07	\$708,611.51	\$1,742,436.12	\$728,056.99	\$1,010,790.74	\$432.39	\$0.00	\$7,857,003.65	
Notes																			
Costing excludes irrigation																			

APPENDIX E

Table E1 Community Purpose ET Calculations

Discount Rate 6%

Sequence Period	Precinct	Detached House ET Conversion	Multi Unit Dwellings ET Conversion	Commercial Retail ET Conversion	Industrial ET Conversion	Total ET Conversion	Total ET Conversion per Contribution Area	Total ET Conversion per Sequence Period	Total NPV Conversion	Total NPV Conversion per Contribution Area	Total NPV Conversion per Sequence Period	ET Conversion Rate			
												1.00	ET/House		
2006	1	7	0	2.81	11.87	21.69	1012.23	1635.02				0.67	ET/ Multi Unit		
	2	2	0	128.41	8.60	139.01							0.0148	ET/sq m GFA	
	3	210	185.33	13.79	108.54	517.66									
	4	19	0.00	157.51	47.58	224.09									
	5	8	7.33	152.56	165.96	333.86	622.80								
	6	0	0.00	44.07	217.10	261.18									
	7	4	10.00	85.93	0.00	99.93									
	8	2	11.33	24.27	0.00	37.60									
2006-2011	1	0	47.33	213.97	-5.94	255.37	645.58	1080.88	214.41		907.53	1	2009		
	2	0	9.33	44.33	-1.06	52.60								2	2014
	3	0	123.33	-6.89	-5.52	110.93								3	2019
	4	0	119.33	212.46	-6.30	325.50				542.04				4	2024
	5	0	49.33	191.13	-13.77	226.69	435.30							5	2029
	6	0	0.00	30.87	8.32	39.19								6	2034
	7	0	19.33	30.96	0.00	50.30									
	8	0	4.67	15.64	0.00	20.31				365.48					
2011-2016	1	0	47.33	213.99	-5.94	255.38	646.93	1083.60	160.23		679.86				
	2	0	9.33	44.34	-1.06	52.61									
	3	0	124.00	-6.90	-5.52	111.58									
	4	0	119.33	212.47	-6.30	325.51				405.89					
	5	0	50.00	191.13	-13.77	227.36	436.67								
	6	0	0.67	30.89	8.32	39.87									
	7	0	19.33	30.98	0.00	50.31									
	8	0	5.33	15.64	0.00	20.98				273.97					
2016-2021	1	0	0.00	0.00	0.00	0.00	415.51	764.89	0.00		358.61				
	2	0	8.00	44.33	-1.08	51.25									
	3	14	156.00	0.00	-27.40	142.60									
	4	8	102.00	173.81	-2.84	280.97				194.81					
	5	4	47.33	184.56	-14.24	221.66	349.39								
	6	0	0.00	5.10	0.47	5.57									
	7	2	13.33	37.59	0.00	52.92									
	8	0	0.67	9.26	0.00	9.93				163.81					
2021-2026	1	0	0.00	0.00	0.00	0.00	419.52	770.58	0.00		269.97				
	2	1	8.67	44.34	-1.08	52.93									
	3	15	156.67	0.00	-27.40	144.27									
	4	8	102.00	173.81	-2.84	280.97				146.98					
	5	4	48.00	184.56	-14.24	222.32	351.06								
	6	0	0.00	5.10	0.47	5.57									
	7	3	14.00	37.60	0.00	54.60									
	8	0	0.67	9.26	0.00	9.93				122.99					
2026-2031	1	0	0.00	0.00	0.00	0.00	547.49	653.99	0.00		171.21				
	2	0	16.67	44.33	-1.08	59.91									
	3	7	228.67	0.00	-14.73	220.93									
	4	1	28.67	46.07	-2.84	72.90				143.33					
	5	3	93.33	184.55	-14.24	266.64	106.50								
	6	0	-0.67	1.51	-0.47	0.37									
	7	0	30.67	1.23	0.00	31.90									
	8	0	1.33	0.00	0.00	1.33				27.88					
2031-2036	1	0	0.00	0.00	0.00	0.00	549.49	656.03	0.00		128.34				
	2	1	16.67	44.33	-1.08	60.91									
	3	7	228.67	0.00	-14.73	220.93									
	4	1	28.67	46.09	-2.84	72.91				107.50					
	5	4	93.33	184.55	-14.24	267.64	106.54								
	6	0	-0.67	1.53	-0.47	0.39									
	7	0	30.67	1.24	0.00	31.91									
	8	0	1.33	0.00	0.00	1.33				20.84					
		83	1830.00	2197.26	-181.17	3929.09		5009.97	2515.52		2515.52	Total NPV Charge area 1	1540.54		
												Total NPV Charge Area 2	974.98		

APPENDIX E

Table E2 Community Infrastructure Network Costings

Item	Base Cost	Contigency	Total Cost	Proposed Charge Area
Burdett st Park Acquisition	5,544,000.00	0.05	5,821,200.00	1
Lapriak St Park Acquisition	345,300.00	0.05	362,565.00	1
Lapriak embellishments	170,996.50	0.40	239,395.10	1
Burdett embellishments	685,522.00	0.40	959,730.80	1
Crosby embellishments	523,089.50	0.40	732,325.30	1&2
Sub Total	7,268,908.00		8,115,216.20	
Amy St Park Acquisition	13,000,000.00	0.05	13,650,000.00	2
			0.00	
Amy St embellishments	592,448.50	0.40	829,427.90	2
Cameron Rocks embellishments	27,768.00	0.25	34,710.00	2
Yowoggera Park Master Plan	15,000	0.15	17,250.00	2
Sub Total	13,635,216.50		14,531,387.90	
Aquisition charge area 1			6,183,765.00	
Embillishments charge 1			1,565,288.55	
Aquistion charge 2			13,650,000.00	
Embillishments charge 2			1,247,550.55	
Total	20,904,124.50		22,646,604.10	

Current ICU RATE - 2007/2008	1.55
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APPENDIX E

Table E3 Community Purpose Cost Apportionment

Embellishment cost for Crosby Park split 50/50 between each contribution area

Item					Cost				
Contribution Area	Description	Land Aquisition		Park Embellishments	Sub Total	PSP PREP 2%	Total Cost	Timing	Discounted cost (6%)
		Cost	Contingency 5%	Cost					
1	Burdett Street Park	5,544,000.00	277,200.00	959,730.80	\$6,780,930.80	\$135,618.62	\$6,916,549.42	2012	\$5,168,448.1
	Lapriak Street Park	345,300.00	12,050.00	239,395.10	\$596,745.1	\$11,934.90	\$608,680.00	2012	\$454,841.1
	Crosby Park	0.00	0.00	366,162.65	\$366,162.7	\$7,323.25	\$373,485.90	2012	\$279,090.4
2	Amy Street Park	13,000,000.00	650,000.00	829,427.90	\$14,479,427.9	\$289,588.56	\$14,769,016.46	2012	\$11,036,268.3
	Cameraon Rocks Park	\$0		34,710.00	\$34,710.0	\$694.20	\$35,404.20	2012	\$26,456.1
	Yowoggera Park	\$0	\$0	17,250.00	\$17,250.0	\$345.00	\$17,595.00	2012	\$13,148.0
	Crosby Park	\$0	\$0	366,162.65	\$366,162.7	\$7,323.25	\$373,485.90	2012	\$279,090.4
Total		\$18,889,300	\$939,250	\$2,812,839	\$22,641,389	\$452,828	\$23,094,217		\$17,257,342.3

Base Year	2007
Discount Rate	6%

Current ICU Rate	1.55
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Table E4 Community Purpose : Cost Apportionment

Item		Future use			Charge	
Contribution Area	Description	Total Discounted Cost	% total use PSP area	Apportioned cost	Total NPV ET's Future Demand	Charge ICU/ET'S
1	Burdett st Park	\$5,168,448.08	100%	100%	1,541	2,164
	Lapriak St Parrk	\$454,841.11	100%	100%	1,541	190
	Crosby Park	\$279,090.39	50%	50%	1,541	117
	Sub Total	\$5,902,379.58				2,472
2	Amy Street Park	\$11,036,268.25	100%	100%	975	7,303
	Cameron Rocks Park	\$26,456.08	95%	100%	975	18
	Yowoggera Park	\$13,148.01	100%	100%	975	9
	Crosby Park	\$279,090.39	50%	50%	975	185
	Sub Total	\$11,354,962.73				7,514
Total		\$17,257,342.31			Total Charge	9,986

Development Type	Contribution	
	Charge Area 1	Charge Area 2
Detached Dwelling	2,472	7,514
MUD	1656.14	5034.23
Commercial	36.58	111.20
Industry	9.15	27.80

Cameron Rocks Reserve (D0171)
Preliminary Estimate of Probable Costs
Table E5

Corridor Link Park: Local: Multipurpose Corridor

0.8059 ha

Item	Unit	Rate	Quantity	Total Cost
Furniture, Structures and Lighting				
Park Bench	ea	1,033.00	4	4,132.00
Sub total				\$4,132.00
Landscaping Works				
Trees: 3m x 2m ex ground	ea	773.00	12	9,276.00
Guying	ea	30.00	12	360.00
Watering (Recycled Water)	hr	700.00	20	14,000.00
Sub total				\$23,636.00
Sub total				\$27,768.00
Contingency (25% of subtotal)				\$6,942.00
Total				\$34,710.00

Burdett Street Park (New)
Preliminary Estimate of Probable Costs

Table E6

Informal Use Park: District: Urban Common

0.4000 ha

Note:

Item	Unit	Rate	Quantity	Total Cost
Site Establishment & Preparation				
Site office, safety fencing, project signage, site survey and set out	ea	15,000.00	1	15,000.00
Erosion and sediment control	ea	5,000.00	1	5,000.00
Environmental compliance (1% of project cost)	ea	6,787.00	1	6,787.00
Earthworks to Spoil	m3	32.73	500	16,365.00
Sub total				\$43,152.00
Services				
Electrical connection	ea	3,450.00	1	3,450.00
Electrical conduiting	m	51.30	100	5,130.00
Water connection	ea	3,150.00	1	3,150.00
Water conduiting	m	51.30	50	2,565.00
Sub Total				\$14,295.00
Hard Landscape Works				
Vehicular crossover	ea	1.00	1500	1,500.00
Pedestrian paving: exposed aggregate	m2	90.00	3000	270,000.00
Bollards	no.	76.00	50	3,800.00
Bollards - Removable	no.	335.00	6	2,010.00
Wall - free-standing stone	m2	320.00	100	32,000.00
Drainage: 100mm agi pipe	m	29.00	500	14,500.00
Drainage: drain Inlet with Grate	ea	1,500.00	4	6,000.00
Drainage: soakage trenches	m	30.00	120	3,600.00
Sub total				\$333,410.00
Furniture, Structures and Lighting				
Shade structure - large	ea	35,000.00	1	35,000.00
Shade structure - small	ea	10,000.00	2	20,000.00
Table & seating - aluminium	ea	1,210.00	3	3,630.00
Park Bench	ea	1,033.00	8	8,264.00
Bubbler Drinking Fountain	ea	3,675.00	1	3,675.00
Rubbish bin	ea	1700	2	3,400.00
Signage - park Identification	ea	450.00	1	450.00
Signage - banner poles	ea	3,100.00	8	24,800.00
Signage - interpretive	ea	1,500.00	1	1,500.00
Lighting - general park lights	ea	5,115.00	10	51,150.00
Lighting - uplights	ea	280.00	10	2,800.00
Public Art	ea	40,000.00	1	40,000.00
Sub total				\$194,669.00

Landscaping Works				
Topsoil to garden beds	m3	21.00	400	8,400.00
Mulch to garden beds	m3	22.00	100	2,200.00
Plants: 200 mm pot size	ea	13.50	1500	20,250.00
Plants: 300 mm pot size	ea	37.50	500	18,750.00
Trees: 200 litre	ea	440.00	20	8,800.00
Trees: 3m x 2m ex ground	ea	773.00	20	15,460.00
Fertiliser	m2	0.40	1000	400.00
Timber stakes	ea	3.40	40	136.00
Guying	ea	30.00	20	600.00
Watering (Recycled Water)	hr	700.00	28	19,600.00
Maintenance - garden planting (12 weeks)	ea	5,400.00	1	5,400.00
Sub total				\$99,996.00
Sub total				\$685,522.00
Contingency (30% of subtotal)				\$205,656.60
Design Fees (10% of subtotal)				\$68,552.20
Total				\$959,730.80

Amy Street Park (New)

Preliminary Estimate of Probable Costs

Table E7

Informal Use Park: District: Urban Common

0.5000 ha

Item	Unit	Rate	Quantity	Total Cost
Site Establishment & Preparation				
Site office, safety fencing, project signage, site survey and set out	ea	15,000.00	1	15,000.00
Erosion and sediment control	ea	5,000.00	1	5,000.00
Environmental compliance (1% of project cost)	ea	5,865.00	1	5,865.00
Electrical connection	ea	3,450.00	1	3,450.00
Water connection	ea	3,150.00	1	3,150.00
Earthworks to Spoil	m3	32.73	500	16,365.00
Sub total				\$48,830.00
Services				
Electrical connection	ea	3,450.00	1	3,450.00
Electrical conduiting	m	51.30	125	6,412.50
Water connection	ea	3,150.00	1	3,150.00
Water conduiting	m	51.30	70	3,591.00
Sub Total				\$16,603.50
Hard Landscape Works				
Vehicular crossover	ea	1.00	1500	1,500.00
Pedestrian paving: exposed aggregate	m2	90.00	2000	180,000.00
Bollards	no.	76.00	50	3,800.00
Bollards - Removable	no.	335.00	6	2,010.00
Wall - free-standing stone	m2	320.00	100	32,000.00
Drainage: 100mm agi pipe	m	29.00	300	8,700.00
Drainage: drain Inlet with Grate	ea	1,500.00	4	6,000.00
Drainage: soakage trenches	m	30.00	120	3,600.00
Sub total				\$237,610.00
Furniture, Structures and Lighting				
Shade structure - large	ea	35,000.00	1	35,000.00
Shade structure - small	ea	10,000.00	2	20,000.00
Table & seating - aluminium	ea	1,210.00	3	3,630.00
Park Bench	ea	1,033.00	8	8,264.00
Bubbler Drinking Fountain	ea	3,675.00	1	3,675.00
Rubbish bin	ea	1700	2	3,400.00
Signage - park Identification	ea	450.00	1	450.00
Signage - banner poles	ea	3,100.00	8	24,800.00
Signage - interpretive	ea	1,500.00	1	1,500.00
Lighting - general park lights	ea	5,115.00	10	51,150.00
Lighitng - uplights	ea	280.00	10	2,800.00
Public Art	ea	40,000.00	1	40,000.00
Sub total				\$194,669.00
Landscaping Works				
Topsoil to garden beds - 400mm deep	m2	8.40	200	1,680.00
Topsoil beneath turf - 100mm deep	m2	2.10	2500	5,250.00
Turf	m2	7.60	2500	19,000.00
Plants: 200 mm pot size	ea	13.50	750	10,125.00
Plants: 300 mm pot size	ea	37.50	250	9,375.00

Trees: 200 litre	ea	440.00	20	8,800.00
Trees: 3m x 2m ex ground	ea	773.00	20	15,460.00
Mulch to garden beds - 100mm deep	m2	2.20	50	110.00
Fertiliser	m2	0.40	500	200.00
Timber stakes	ea	3.40	40	136.00
Guying	ea	30.00	20	600.00
Watering (Recycled Water)	hr	700.00	20	14,000.00
Maintenance - turf (12 weeks)	m2	2.00	2500	5,000.00
Maintenance - garden planting (12 weeks)	ea	5,000.00	1	5,000.00
Sub total				\$94,736.00
Sub total				\$592,448.50
Contingency (30% of subtotal)				\$177,734.55
Design Fees (10% of subtotal)				\$59,244.85
Total				\$829,427.90

Lapraik Street Park (New)

Preliminary Estimate of Probable Costs

Table E8

Proposed Corridor Link Park: Local: Multipurpose Corridor

0.3170 ha

Item	Unit	Rate	Quantity	Total Cost
Site Establishment & Preparation				
Site office, safety fencing, project signage, site survey and set out	ea	15,000.00	1	15,000.00
Erosion and sediment control	ea	5,000.00	1	5,000.00
Clearing and stripping	ea	2,500.00	1	2,500.00
Weed control	m2	0.50	500	250.00
Tree removal	ea	2,200.00	10	22,000.00
Environmental compliance (1% of project cost)	ea	2,671.00	1	2,671.00
Earthworks to Spoil	m3	32.73	500	16,365.00
Sub total				\$63,786.00
Geotechnical Services				
Geotechnical services as necessary to stabilise cliff face	ea	100,000.00	1	100,000.00
Sub Total				\$100,000.00
Services				
Electrical connection	ea	3,450.00	1	3,450.00
Electrical conduiting	m	51.30	40	2,052.00
Water connection	ea	3,150.00	1	3,150.00
Water conduiting	m	51.30	15	769.50
Sub Total				\$9,421.50
Hard Landscape Works				
Vehicular crossover	ea	1.00	1500	1,500.00
Pedestrian paving: exposed aggregate	m2	90.00	150	13,500.00
Fencing	m2	80.00	70	5,600.00
Bollards	no.	76.00	40	3,040.00
Bollards - Removable	no.	335.00	1	335.00
Sub total				\$23,975.00
Furniture, Structures and Lighting				
Shade structure - medium	ea	15,000.00	2	30,000.00
Table & seating - aluminium	ea	1,210.00	1	1,210.00
Park Bench	ea	1,033.00	2	2,066.00
Bubbler Drinking Fountain	ea	3,675.00	1	3,675.00
Signage - park Identification	ea	450.00	1	450.00
Sub total				\$37,401.00
Landscaping Works				
Topsoil to garden beds - 400mm deep	m2	8.40	150	1,260.00
Plants: 200 mm pot size	ea	13.50	300	4,050.00
Plants: 300 mm pot size	ea	37.50	150	5,625.00

Trees: 100 litre	ea	216.00	20	4,320.00
Mulch to garden beds - 100mm deep	m2	2.20	150	330.00
Fertiliser	m2	0.40	150	60.00
Guying	ea	30.00	20	600.00
Watering (Recycled Water)	hr	700.00	20	14,000.00
Maintenance - garden planting (12 weeks)	ea	5,000.00	1	5,000.00
Sub total				\$35,245.00
Sub total				\$269,828.50
Contingency (30% of subtotal)				\$80,948.55
Design Fees (10% of subtotal)				\$26,982.85
Total				\$377,759.90

Crosby Park (D0173)
Preliminary Estimate of Probable Costs
Table E9

Sport Park: Metropolitan: General Sport 4.5000 ha
 Sport Park: District: General Sport 3.4000 ha

Informal Use Park: District: Informal Recreation. 4.5048 ha

Item	Unit	Rate	Quantity	Total Cost
Site Establishment & Preparation				
Site office, safety fencing, project signage, site survey and set out	ea	15,000.00	1	15,000.00
Erosion and sediment control	ea	5,000.00	1	7,500.00
Environmental compliance (1% of project cost)	ea	5,179.00	1	5,179.00
Clearing and stripping	ea	1,500.00	1	1,500.00
Weed control	m2	0.50	500	250.00
Tree removal	ea	2,200.00	5	11,000.00
Earthworks to Spoil	m3	32.73	250	8,182.50
Sub total				\$48,611.50
Services				
Electrical connection	ea	3,450.00	1	3,450.00
Electrical conduiting	m	51.30	40	2,052.00
Water connection	ea	3,150.00	1	3,150.00
Water conduiting	m	51.30	200	10,260.00
Sub Total				\$18,912.00
Hard Landscape Works				
Pedestrian paving: broom finished (2m wide paths)	m2	75.00	2,000.00	150,000.00
Bollards	no.	45.00	250.00	11,250.00
Bollards - Removable	no.	335.00	4.00	1,340.00
Drainage: 100mm agi pipe	m	29.00	500.00	14,500.00
Drainage: drain Inlet with Grate	ea	1,500.00	4.00	6,000.00
Drainage: soakage trenches	m	30.00	120.00	3,600.00
Sub total				\$186,690.00
Furniture, Structures and Lighting				
Shade structure - large				
Shae structure - medium	ea	35,000.00	1	35,000.00
Picnic table	ea	15,000.00	1	15,000.00
Park Bench	ea	1,210.00	3	3,630.00
Barbecue - electric single	ea	1,033.00	8	8,264.00
Bubbler drinking fountain	ea	10,533.00	2	21,066.00
Bubbler and tap with dog bowl	ea	3,675.00	2	7,350.00
Rubbish bin	ea	2,838.00	2	5,676.00
Rubbish bin - dog refuse	ea	1,700.00	2	3,400.00
Signage - park identification	ea	650.00	2	1,300.00
Signage - interpretive	ea	450.00	2	900.00
Signage - parks ordinance	ea	1,500.00	1	1,500.00
Signage - dog off-leash	ea	120.00	2	240.00
Fitness Equipment	ea	136.00	1	136.00

	ea	2,500.00	1	2500.00
Sub total				\$105,962.00
Playground				
Concrete edging				
Under Surfacing - rubber	m	19.00	150	2,850.00
Under Surfacing - mulched softfall	m2	108.00	20	2,160.00
Remove existing play equipment	m3	17.60	380	6,688.00
Centre Piece Module - average	ea	5,000.00	1	5,000.00
Centre Piece Module - large	ea	15,000.00	1	15,000.00
Individual playground piece - small	ea	20,000.00	1	20,000.00
Individual playground piece - average	ea	1,500.00	1	1,500.00
Spring Toy - small	ea	3,000.00	2	6,000.00
	ea	900.00	2	1,800.00
Sub total				\$60,998.00
Landscaping Works				
Topsoil to garden beds - 400mm deep				
Topsoil beneath turf - 100mm deep	m2	8.40	750	6,300.00
Mulch to garden beds	m2	2.10	1000	2,100.00
Turf	m3	22.00	100	2,200.00
Plants: 140mm pot size	m2	7.60	1000	7,600.00
Plants: 200 mm pot size	ea	7.00	1500	10,500.00
Plants: 300 mm pot size	ea	13.50	1500	20,250.00
Trees: 100 litre	ea	37.50	500	18,750.00
Trees: 200 litre	ea	216.00	20	4,320.00
Fertiliser	ea	440.00	4	1,760.00
Timber stakes	m2	0.40	1000	400.00
Guying	ea	3.40	40	136.00
Watering (Recycled Water)	ea	30.00	20	600.00
Maintenance - turf (12 weeks)	hr	700.00	28	19,600.00
Maintenance - garden planting (12 weeks)	m2	2.00	1000	2,000.00
	ea	5,400.00	1	5,400.00
Sub total				\$101,916.00
Sub total				\$523,089.50
Contingency (30% of subtotal)				\$156,926.85
Design Fees (10% of subtotal)				\$52,308.95
Total				\$732,325.30