

APPENDIX

A

INTERSECTION PROJECT COSTINGS

Appendix A	
Description:	IT-01 - Secondary - Connector Intersection (Rees Road & East-West Arterial Road)
Civil Component Number:	IT-01

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	17422	m2	3.68	64112.96	4.96	86413.12
	Earthworks	4136	m3	34.07	140913.52	40.52	167590.72
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	6512	m2	127.01	827089.12	133.78	871175.36
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	1303	m2	14.22	18528.66	16.16	21056.48
	Pavement Rehab	2106	m2	51.58	108627.48	59.32	124927.92
	Pavement Removal	416	m2	140.00	58240.00	161.00	66976.00
Concrete Works	Kerb and Channel	1842	m	54.81	100960.02	60.90	112177.80
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2488	m2	63.51	158012.88	73.63	183191.44
	Traffic Island	293	m2	77.60	22736.80	84.07	24632.51
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	400	m	259.10	103640.00	282.96	113184.00
	Drainage Pipe 450mm CR Bfilled	269	m	299.43	80546.67	334.33	89934.77
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	14	No.	2565.39	35915.46	2806.10	39285.40
	Drainage – Sub-soil drainage	759	m	33.88	25714.92	43.40	32940.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	60	No.	303.34	18200.40	363.01	21780.60
	Landscaping	5709	m2	21.61	123371.49	25.16	143638.44
	Topsoil Seeding	5709	m2	7.21	41161.89	8.44	48183.96
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	10	Item	338.43	3384.30	380.39	3803.90
	Line marking	9040	m2 of Pavement	3.11	28114.40	4.09	36973.60
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7018.32	319.78	7674.72
Other	Rock excavation	159	m3	100.00	15900.00	115.00	18285.00
	Telecom/power relocation allowance	48	m	1300.00	62400.00	1495.00	71760.00
	Water/gas relocation allowance	46	m	300.00	13800.00	345.00	15870.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	90107.25	3.25	102007.88
	VicRoads Fees	1	%	1.00	27725.31	1.00	31387.04
	Traffic Management	1	%	5.00	138626.54	5.00	156935.20
	Environmental Management	1	%	0.50	13862.65	0.50	15693.52
	Surveying and Design	1	%	5.00	138626.54	5.00	156935.20
	Supervision and Project management	1	%	9.00	249527.77	9.00	282483.37
	Site Establishment	1	%	2.50	69313.27	2.50	78467.60
	Contingency	1	%	15.00	415879.62	15.00	470805.61
Total - (2018) rates	Excluding Delivery				2,772,531		3,138,704
	Including Delivery				3,916,200		4,433,420
Total - (2021) rates	Excluding Delivery				3,022,059		3,421,188
	Including Delivery				4,268,658		4,832,428

Appendix A	
Description:	IT-02 - Secondary - Secondary T-Intersection (Exford Road & East-West Arterial Road)
Civil Component Number:	IT-02

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	20039	m2	3.68	73743.52	4.96	99393.44
	Earthworks	4224	m3	34.07	143911.68	40.52	171156.48
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	6651	m2	127.01	844743.51	133.78	889770.78
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	1331	m2	14.22	18926.82	16.16	21508.96
	Pavement Rehab	3891	m2	51.58	200697.78	59.32	230814.12
	Pavement Removal	490	m2	140.00	68600.00	161.00	78890.00
Concrete Works	Kerb and Channel	2036	m	54.81	111593.16	60.90	123992.40
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2588	m2	63.51	164363.88	73.63	190554.44
	Traffic Island	186	m2	77.60	14433.60	84.07	15637.02
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	591	m	259.10	153128.10	282.96	167229.36
	Drainage Pipe 450mm CR Bfilled	400	m	299.43	119772.00	334.33	133732.00
	Drainage Pipe 525mm CR Bfilled	84	m	403.86	33924.24	448.03	37634.52
	Drainage - pits	23	No.	2565.39	59003.97	2806.10	64540.30
	Drainage – Sub-soil drainage	2036	m	33.88	68979.68	43.40	88362.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	30	No.	303.34	9100.20	363.01	10890.30
	Landscaping	6879	m2	21.61	148655.19	25.16	173075.64
	Topsoil Seeding	6879	m2	7.21	49597.59	8.44	58058.76
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	5	Item	338.43	1692.15	380.39	1901.95
	Line marking	6651	m2 of Pavement	3.11	20684.61	4.09	27202.59
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	845	m3	100.00	84500.00	115.00	97175.00
	Telecom/power relocation allowance	295	m	1300.00	383500.00	1495.00	441025.00
	Water/gas relocation allowance	365	m	300.00	109500.00	345.00	125925.00
	Service proving fee	1	Item	3000.00	10000.00	3450.00	3450.00
Delivery	Council Fees	1	%	3.25	111938.38	3.25	126718.16
	VicRoads Fees	1	%	1.00	34442.58	1.00	38990.20
	Traffic Management	1	%	5.00	172212.89	5.00	194951.01
	Environmental Management	1	%	0.50	17221.29	0.50	19495.10
	Surveying and Design	1	%	5.00	172212.89	5.00	194951.01
	Supervision and Project management	1	%	9.00	309983.19	9.00	350911.82
	Site Establishment	1	%	2.50	86106.44	2.50	97475.50
	Contingency	1	%	15.00	516638.66	15.00	584853.03
Total - (2018) rates	Excluding Delivery				3,444,258		3,899,020
	Including Delivery				4,865,014		5,507,366
Total - (2021) rates	Excluding Delivery				3,754,241		4,249,932
	Including Delivery				5,302,865		6,003,029

Appendix A	
Description:	IT-03 - Secondary - Secondary T-Intersection (Exford Road & Toolern Road)
Civil Component Number:	IT-03

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	28152	m2	3.68	103599.36	4.96	139633.92
	Earthworks	6715	m3	34.07	228780.05	40.52	272091.80
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	10574	m2	127.01	1343003.74	133.78	1414589.72
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	2115	m2	14.22	30075.30	16.16	34178.40
	Pavement Rehab	2344	m2	51.58	120903.52	59.32	139046.08
	Pavement Removal	2156	m2	140.00	301840.00	161.00	347116.00
Concrete Works	Kerb and Channel	2999	m	54.81	164375.19	60.90	182639.10
	Kerb Removal	105	m	60.00	6300.00	69.00	7245.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	3865	m2	63.51	245466.15	73.63	284579.95
	Concrete Removal	342	m2	45.03	15400.26	49.53	16939.26
	Traffic Island	605	m2	77.60	46948.00	84.07	50862.35
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	849	m	259.10	219975.90	282.96	240233.04
	Drainage Pipe 450mm CR Bfilled	425	m	299.43	127257.75	334.33	142090.25
	Drainage Pipe 525mm CR Bfilled	142	m	403.86	57348.12	448.03	63620.26
	Drainage - pits	27	No.	2565.39	69265.53	2806.10	75764.70
	Drainage – Sub-soil drainage	2999	m	33.88	101606.12	43.40	130156.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	131	No.	303.34	39737.54	363.01	47554.31
	Landscaping	10800	m2	21.61	233388.00	25.16	271728.00
	Topsoil Seeding	10800	m2	7.21	77868.00	8.44	91152.00
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	9	Item	338.43	3045.87	380.39	3423.51
	Line marking	12918	m2 of Pavement	3.11	40174.98	4.09	52834.62
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	1343	m3	100.00	134300.00	115.00	154445.00
	Telecom/power relocation allowance	262	m	1300.00	340600.00	1495.00	391690.00
	Water/gas relocation allowance	1006	m	300.00	301800.00	345.00	347070.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Light pole relocation allowance	2	Item	10000.00	20000.00	11500.00	23000.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	2037	m	14.00	28518.00	16.10	32795.70
Delivery	Council Fees	1	%	3.25	166490.46	3.25	188470.08
	VicRoads Fees	1	%	1.00	51227.83	1.00	57990.79
	Traffic Management	1	%	5.00	256139.17	5.00	289953.96
	Environmental Management	1	%	0.50	25613.92	0.50	28995.40
	Surveying and Design	1	%	5.00	256139.17	5.00	289953.96
	Supervision and Project management	1	%	9.00	461050.51	9.00	521917.14
	Site Establishment	1	%	2.50	128069.59	2.50	144976.98
	Contingency	1	%	15.00	768417.51	15.00	869861.89
Total - (2018) rates	Excluding Delivery				5,122,783		5,799,079
	Including Delivery				7,235,932		8,191,199
Total - (2021) rates	Excluding Delivery				5,583,834		6,320,997
	Including Delivery				7,887,166		8,928,408

Appendix A	
Description:	IT-04 - Secondary - Secondary Lane Upgrades (Exford Road & Greigs Road)
Civil Component Number:	IT-04

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	7451	m2	3.68	27419.68	4.96	36956.96
	Earthworks	1708	m3	34.07	58191.56	40.52	69208.16
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	2689	m2	127.01	341529.89	133.78	359734.42
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	538	m2	14.22	7650.36	16.16	8694.08
	Pavement Rehab	710	m2	51.58	36621.80	59.32	42117.20
	Pavement Removal	872	m2	140.00	122080.00	161.00	140392.00
Concrete Works	Kerb and Channel	777	m	54.81	42587.37	60.90	47319.30
	Kerb Removal	58	m	60.00	3480.00	69.00	4002.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	1043	m2	63.51	66240.93	73.63	76796.09
	Concrete Removal	35	m2	45.03	1576.05	49.53	1733.55
	Traffic Island	84	m2	77.60	6518.40	84.07	7061.88
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	242	m	259.10	62702.20	282.96	68476.32
	Drainage Pipe 450mm CR Bfilled	121	m	299.43	36231.03	334.33	40453.93
	Drainage Pipe 525mm CR Bfilled	41	m	403.86	16558.26	448.03	18369.23
	Drainage - pits	9	No.	2565.39	23088.51	2806.10	25254.90
	Drainage – Sub-soil drainage	777	m	33.88	26324.76	43.40	33721.80
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109730.28	0.00	128786.34	0.00
Landscape	Tree Planting	42	No.	303.34	12740.28	363.01	15246.42
	Landscaping	2918	m2	21.61	63057.98	25.16	73416.88
	Topsoil Seeding	2918	m2	7.21	21038.78	8.44	24627.92
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	1	Item/ Per Leg	48468.93	48468.93	55617.74	55617.74
Misc.	Regulatory Signage	4	Item	338.43	1353.72	380.39	1521.56
	Line marking	3399	m2 of Pavement	3.11	10570.89	4.09	13901.91
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	6	Item	292.43	1754.58	319.78	1918.68
Other	Rock excavation	342	m3	100.00	34200.00	115.00	39330.00
	Telecom/power relocation allowance	162	m	1300.00	210600.00	1495.00	242190.00
	Water/gas relocation allowance	369	m	300.00	110700.00	345.00	127305.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Light pole relocation allowance	1	Item	10000.00	10000.00	11500.00	11500.00
	Power pole relocation allowance	1	Item	40000.00	40000.00	46000.00	46000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	761	m	14.00	10654.00	16.10	12252.10
Delivery	Council Fees	1	%	3.25	49896.75	3.25	56704.42
	VicRoads Fees	1	%	1.00	15352.85	1.00	17447.51
	Traffic Management	1	%	5.00	76764.23	5.00	87237.57
	Environmental Management	1	%	0.50	7676.42	0.50	8723.76
	Surveying and Design	1	%	5.00	76764.23	5.00	87237.57
	Supervision and Project management	1	%	9.00	138175.62	9.00	157027.63
	Site Establishment	1	%	2.50	38382.12	2.50	43618.79
	Contingency	1	%	15.00	230292.69	15.00	261712.72
Total - (2018) rates	Excluding Delivery				1,535,285		1,744,751
	Including Delivery				2,168,590		2,464,461
Total - (2021) rates	Excluding Delivery				1,673,461		1,901,780
	Including Delivery				2,363,764		2,686,264

Appendix A	
Description:	IT-05 - Secondary - Secondary Intersection (Ferris Road & Toolern Road)
Civil Component Number:	IT-05

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	28076	m2	3.68	103319.68	4.96	139256.96
	Earthworks	10010	m3	34.07	341040.70	40.52	405605.20
Road Pavement	Primary Arterial Pavement	14000	m2	169.62	2374680.00	186.26	2607640.00
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	2800	m2	14.22	39816.00	16.16	45248.00
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	2936	m	54.81	160922.16	60.90	178802.40
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	3940	m2	63.51	250229.40	73.63	290102.20
	Traffic Island	467	m2	77.60	36239.20	84.07	39260.69
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	831	m	259.10	215312.10	282.96	235139.76
	Drainage Pipe 450mm CR Bfilled	416	m	299.43	124562.88	334.33	139081.28
	Drainage Pipe 525mm CR Bfilled	139	m	403.86	56136.54	448.03	62276.17
	Drainage - pits	22	No.	2565.39	56438.58	2806.10	61734.20
	Drainage – Sub-soil drainage	2936	m	33.88	99471.68	43.40	127422.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	149	No.	303.34	45197.66	363.01	54088.49
	Landscaping	9647	m2	21.61	208471.67	25.16	242718.52
	Topsoil Seeding	9647	m2	7.21	69554.87	8.44	81420.68
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	20	Item	338.43	6768.60	380.39	7607.80
	Line marking	14000	m2 of Pavement	3.11	43540.00	4.09	57260.00
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7018.32	319.78	7674.72
Other	Rock excavation	2002	m3	100.00	200200.00	115.00	230230.00
	Telecom/power relocation allowance	0	m	1300.00	0.00	1495.00	0.00
	Water/gas relocation allowance	48	m	300.00	14400.00	345.00	16560.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	167942.50	3.25	190657.26
	VicRoads Fees	1	%	1.00	51674.62	1.00	58663.77
	Traffic Management	1	%	5.00	258373.08	5.00	293318.86
	Environmental Management	1	%	0.50	25837.31	0.50	29331.89
	Surveying and Design	1	%	5.00	258373.08	5.00	293318.86
	Supervision and Project management	1	%	9.00	465071.54	9.00	527973.95
	Site Establishment	1	%	2.50	129186.54	2.50	146659.43
	Contingency	1	%	15.00	775119.23	15.00	879956.58
Total - (2018) rates	Excluding Delivery				5,167,462		5,866,377
	Including Delivery				7,299,039		8,286,258
Total - (2021) rates	Excluding Delivery				5,632,534		6,394,352
	Including Delivery				7,955,954		9,032,022

Appendix A	
Description:	IT-06 - Primary - Secondary Intersection (Mt Cottrell Road & Toolern Road)
Civil Component Number:	IT-06

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	37888	m2	3.68	139427.84	4.96	187924.48
	Earthworks	13272	m3	34.07	452177.04	40.52	537781.44
Road Pavement	Primary Arterial Pavement	15199	m2	169.62	2578054.38	186.26	2830965.74
	Secondary Arterial Pavement	3786	m2	127.01	480859.86	133.78	506491.08
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	3797	m2	14.22	53993.34	16.16	61359.52
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	3556	m	54.81	194904.36	60.90	216560.40
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	5575	m2	63.51	354068.25	73.63	410487.25
	Traffic Island	726	m2	77.60	56337.60	84.07	61034.82
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	969	m	259.10	251067.90	282.96	274188.24
	Drainage Pipe 450mm CR Bfilled	485	m	299.43	145223.55	334.33	162150.05
	Drainage Pipe 525mm CR Bfilled	162	m	403.86	65425.32	448.03	72580.86
	Drainage - pits	28	No.	2565.39	71830.92	2806.10	78570.80
	Drainage – Sub-soil drainage	3556	m	33.88	120477.28	43.40	154330.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	172	No.	303.34	52174.48	363.01	62437.72
	Landscaping	12587	m2	21.61	272005.07	25.16	316688.92
	Topsoil Seeding	12587	m2	7.21	90752.27	8.44	106234.28
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	20	Item	338.43	6768.60	380.39	7607.80
	Line marking	18985	m2 of Pavement	3.11	59043.35	4.09	77648.65
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7018.32	319.78	7674.72
Other	Rock excavation	2655	m3	100.00	265500.00	115.00	305325.00
	Telecom/power relocation allowance	31	m	1300.00	40300.00	1495.00	46345.00
	Water/gas relocation allowance	77	m	300.00	23100.00	345.00	26565.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Power pole relocation allowance	6	Item	40000.00	240000.00	46000.00	276000.00
Delivery	Council Fees	1	%	3.25	218876.16	3.25	247786.50
	VicRoads Fees	1	%	1.00	67346.51	1.00	76242.00
	Traffic Management	1	%	5.00	336732.56	5.00	381210.00
	Environmental Management	1	%	0.50	33673.26	0.50	38121.00
	Surveying and Design	1	%	5.00	336732.56	5.00	381210.00
	Supervision and Project management	1	%	9.00	606118.61	9.00	686177.99
	Site Establishment	1	%	2.50	168366.28	2.50	190605.00
	Contingency	1	%	15.00	1010197.68	15.00	1143629.99
Total - (2018) rates	Excluding Delivery				6,734,651		7,624,200
	Including Delivery				9,512,695		10,769,182
Total - (2021) rates	Excluding Delivery				7,340,770		8,310,378
	Including Delivery				10,368,838		11,738,409

Appendix A	
Description:	IT-10 - Primary - Primary Intersection (Mt Cottrell Road & Shogaki Drive)
Civil Component Number:	IT-10

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	31773	m2	3.68	116924.64	4.96	157594.08
	Earthworks	4789	m3	34.07	163161.23	40.52	194050.28
Road Pavement	Primary Arterial Pavement	6697	m2	169.62	1135945.14	186.26	1247383.22
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	1340	m2	14.22	19054.80	16.16	21654.40
	Pavement Rehab	3590	m2	51.58	185172.20	59.32	212958.80
	Pavement Removal	804	m2	140.00	112560.00	161.00	129444.00
Concrete Works	Kerb and Channel	1651	m	54.81	90491.31	60.90	100545.90
	Kerb Removal	105	m	60.00	6300.00	69.00	7245.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2085	m2	63.51	132418.35	73.63	153518.55
	Concrete Removal	342	m2	45.03	15400.26	49.53	16939.26
	Traffic Island	390	m2	77.60	30264.00	84.07	32787.30
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	396	m	259.10	102603.60	282.96	112052.16
	Drainage Pipe 450mm CR Bfilled	198	m	299.43	59287.14	334.33	66197.34
	Drainage Pipe 525mm CR Bfilled	66	m	403.86	26654.76	448.03	29569.98
	Drainage - pits	16	No.	2565.39	41046.24	2806.10	44897.60
	Drainage – Sub-soil drainage	1651	m	33.88	55935.88	43.40	71653.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	82	No.	303.34	24873.88	363.01	29766.82
	Landscaping	11725	m2	21.61	253377.25	25.16	295001.00
	Topsoil Seeding	11725	m2	7.21	84537.25	8.44	98959.00
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	9	Item	338.43	3045.87	380.39	3423.51
	Line marking	10287	m2 of Pavement	3.11	31992.57	4.09	42073.83
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	958	m3	100.00	95800.00	115.00	110170.00
	Telecom/power relocation allowance	362	m	1300.00	470600.00	1495.00	541190.00
	Water/gas relocation allowance	276	m	300.00	82800.00	345.00	95220.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Light pole relocation allowance	0	Item	10000.00	0.00	11500.00	0.00
	Power pole relocation allowance	3	Item	40000.00	120000.00	46000.00	138000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	427	m	14.00	5978.00	16.10	6874.70
Delivery	Council Fees	1	%	3.25	130891.49	3.25	150077.52
	VicRoads Fees	1	%	1.00	40274.30	1.00	46177.70
	Traffic Management	1	%	5.00	201371.52	5.00	230888.49
	Environmental Management	1	%	0.50	20137.15	0.50	23088.85
	Surveying and Design	1	%	5.00	201371.52	5.00	230888.49
	Supervision and Project management	1	%	9.00	362468.74	9.00	415599.29
	Site Establishment	1	%	2.50	100685.76	2.50	115444.25
	Contingency	1	%	15.00	604114.56	15.00	692665.48
Total - (2018) rates	Excluding Delivery				4,027,430		4,617,770
	Including Delivery				5,688,745		6,522,600
Total - (2021) rates	Excluding Delivery				4,389,900		5,033,370
	Including Delivery				6,200,734		7,109,635

Appendix A	
Description:	IT-12 - Primary - Connector T-Intersection (Shogaki Drive & Connector Road)
Civil Component Number:	IT-12

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	30768	m2	3.68	113226.24	4.96	152609.28
	Earthworks	9788	m3	34.07	333477.16	40.52	396609.76
Road Pavement	Primary Arterial Pavement	11285	m2	169.62	1914161.70	186.26	2101944.10
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	3212	m2	105.15	337741.80	112.44	361157.28
	Subgrade Preparation	2900	m2	14.22	41238.00	16.16	46864.00
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Removal	0	m2	140.00	0.00	161.00	0.00
Concrete Works	Kerb and Channel	2770	m	54.81	151823.70	60.90	168693.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	5686	m2	63.51	361117.86	73.63	418660.18
	Traffic Island	534	m2	77.60	41438.40	84.07	44893.38
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	775	m	259.10	200802.50	282.96	219294.00
	Drainage Pipe 450mm CR Bfilled	388	m	299.43	116178.84	334.33	129720.04
	Drainage Pipe 525mm CR Bfilled	130	m	403.86	52501.80	448.03	58243.90
	Drainage - pits	22	No.	2565.39	56438.58	2806.10	61734.20
	Drainage – Sub-soil drainage	2770	m	33.88	93847.60	43.40	120218.00
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	125	No.	303.34	37917.50	363.01	45376.25
	Landscaping	9982	m2	21.61	215711.02	25.16	251147.12
	Topsoil Seeding	9982	m2	7.21	71970.22	8.44	84248.08
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	16	Item	338.43	5414.88	380.39	6086.24
	Line marking	14497	m2 of Pavement	3.11	45085.67	4.09	59292.73
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7018.32	319.78	7674.72
Other	Rock excavation	1958	m3	100.00	195800.00	115.00	225170.00
	Telecom/power relocation allowance	235	m	1300.00	305500.00	1495.00	351325.00
	Water/gas relocation allowance	1344	m	300.00	403200.00	345.00	463680.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	189011.98	3.25	214886.39
	VicRoads Fees	1	%	1.00	58157.53	1.00	66118.89
	Traffic Management	1	%	5.00	290787.66	5.00	330594.45
	Environmental Management	1	%	0.50	29078.77	0.50	33059.45
	Surveying and Design	1	%	5.00	290787.66	5.00	330594.45
	Supervision and Project management	1	%	9.00	523417.80	9.00	595070.01
	Site Establishment	1	%	2.50	145393.83	2.50	165297.23
	Contingency	1	%	15.00	872362.99	15.00	991783.35
Total - (2018) rates	Excluding Delivery				5,815,753		6,611,889
	Including Delivery				8,214,752		9,339,293
Total - (2021) rates	Excluding Delivery				6,339,172		7,206,960
	Including Delivery				8,954,080		10,179,831

Appendix A	
Description:	IT-13 - Primary - Secondary Intersection (Ferris Road, Shogaki Drive & Abey Road)
Civil Component Number:	IT-13

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	29964	m2	3.68	110267.52	4.96	148621.44
	Earthworks	5198	m3	34.07	177095.86	40.52	210622.96
Road Pavement	Primary Arterial Pavement	1576	m2	169.62	267321.12	186.26	293545.76
	Secondary Arterial Pavement	6410	m2	127.01	814134.10	133.78	857529.80
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	1598	m2	14.22	22723.56	16.16	25823.68
	Pavement Rehab	4823	m2	51.58	248770.34	59.32	286100.36
	Pavement Removal	4017	m2	140.00	562380.00	161.00	646737.00
Concrete Works	Kerb and Channel	2781	m	54.81	152426.61	60.90	169362.90
	Kerb Removal	1204	m	60.00	72240.00	69.00	83076.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	4551	m2	63.51	289034.01	73.63	335090.13
	Traffic Island	1474	m2	77.60	114382.40	84.07	123919.18
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	750	m	259.10	194325.00	282.96	212220.00
	Drainage Pipe 450mm CR Bfilled	252	m	299.43	75456.36	334.33	84251.16
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	29	No.	2565.39	74396.31	2806.10	81376.90
	Drainage – Sub-soil drainage	2781	m	33.88	94220.28	43.40	120695.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	128	No.	303.34	38827.52	363.01	46465.28
	Landscaping	11063	m2	21.61	239071.43	25.16	278345.08
	Topsoil Seeding	11063	m2	7.21	79764.23	8.44	93371.72
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	16	Item	338.43	5414.88	380.39	6086.24
	Line marking	12809	m2 of Pavement	3.11	39835.99	4.09	52388.81
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00
Other	Rock excavation	1040	m3	100.00	104000.00	115.00	119600.00
	Telecom/power relocation allowance	947	m	1300.00	1231100.00	1495.00	1415765.00
	Water/gas relocation allowance	743	m	300.00	222900.00	345.00	256335.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Earthen mound removal	2090	m3	34.07	71206.30	40.52	84686.80
	Light pole relocation allowance	8	Item	10000.00	80000.00	11500.00	92000.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
	Sawcut pavement tie ins, new kerb & channe	2500	m	14.00	35000.00	16.10	40250.00
Delivery	Council Fees	1	%	3.25	204439.15	3.25	233529.22
	VicRoads Fees	1	%	1.00	62904.35	1.00	71855.14
	Traffic Management	1	%	5.00	314521.77	5.00	359275.72
	Environmental Management	1	%	0.50	31452.18	0.50	35927.57
	Surveying and Design	1	%	5.00	314521.77	5.00	359275.72
	Supervision and Project management	1	%	9.00	566139.18	9.00	646696.29
	Site Establishment	1	%	2.50	157260.88	2.50	179637.86
	Contingency	1	%	15.00	943565.30	15.00	1077827.15
Total - (2018) rates	Excluding Delivery				6,290,435		7,185,514
	Including Delivery				8,885,240		10,149,539
Total - (2021) rates	Excluding Delivery				6,856,575		7,832,211
	Including Delivery				9,684,912		11,062,998

Appendix A	
Description:	IT-15 - Secondary - Connector Intersection (Ferris Road, Bridge Road)
Civil Component Number:	IT-15

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	18690	m2	3.68	68779.20	4.96	92702.40
	Earthworks	5755	m3	34.07	196072.85	40.52	233192.60
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	8067	m2	127.01	1024589.67	133.78	1079203.26
	Collector Arterial Pavement	1182	m2	105.15	124287.30	112.44	132904.08
	Subgrade Preparation	1850	m2	14.22	26307.00	16.16	29896.00
	Pavement Rehab	3044	m2	51.58	157009.52	59.32	180570.08
	Pavement Removal	0	m2	140.00	0.00	161.00	0.00
Concrete Works	Kerb and Channel	1775	m	54.81	97287.75	60.90	108097.50
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2622	m2	63.51	166523.22	73.63	193057.86
	Traffic Island	154	m2	77.60	11950.40	84.07	12946.78
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	800	m	259.10	207280.00	282.96	226368.00
	Drainage Pipe 450mm CR Bfilled	124	m	299.43	37129.32	334.33	41456.92
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	22	No.	2565.39	56438.58	2806.10	61734.20
	Drainage – Sub-soil drainage	1775	m	33.88	60137.00	43.40	77035.00
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	62	No.	303.34	18807.08	363.01	22506.62
	Landscaping	6636	m2	21.61	143403.96	25.16	166961.76
	Topsoil Seeding	0	m2	7.21	0.00	8.44	0.00
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	5	Item	338.43	1692.15	380.39	1901.95
	Line marking	9249	m2 of Pavement	3.11	28764.39	4.09	37828.41
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	1151	m3	100.00	115100.00	115.00	132365.00
	Telecom/power relocation allowance	554	m	1300.00	720200.00	1495.00	828230.00
	Water/gas relocation allowance	576	m	300.00	172800.00	345.00	198720.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	135003.85	3.25	152772.17
	VicRoads Fees	1	%	1.00	41539.65	1.00	47006.82
	Traffic Management	1	%	5.00	207698.23	5.00	235034.11
	Environmental Management	1	%	0.50	20769.82	0.50	23503.41
	Surveying and Design	1	%	5.00	207698.23	5.00	235034.11
	Supervision and Project management	1	%	9.00	373856.82	9.00	423061.40
	Site Establishment	1	%	2.50	103849.12	2.50	117517.06
	Contingency	1	%	15.00	623094.69	15.00	705102.33
Total - (2018) rates	Excluding Delivery				4,153,965		4,700,682
	Including Delivery				5,867,475		6,639,714
Total - (2021) rates	Excluding Delivery				4,527,822		5,123,744
	Including Delivery				6,395,549		7,237,288

Appendix A	
Description:	IT-16 - Secondary - Connector T-Intersection (Abey Road, Industry Collector Road)
Civil Component Number:	IT-16

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	16107	m2	3.68	59273.76	4.96	79890.72
	Earthworks	2845	m3	34.07	96929.15	40.52	115279.40
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	3805	m2	127.01	483273.05	133.78	509032.90
	Collector Arterial Pavement	801	m2	105.15	84225.15	112.44	90064.44
	Subgrade Preparation	922	m2	14.22	13110.84	16.16	14899.52
	Pavement Rehab	3459	m2	51.58	178415.22	59.32	205187.88
	Pavement Removal	0	m2	140.00	0.00	161.00	0.00
Concrete Works	Kerb and Channel	1599	m	54.81	87641.19	60.90	97379.10
	Kerb Removal	413	m	60.00	24780.00	69.00	28497.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2404	m2	63.51	152678.04	73.63	177006.52
	Concrete Removal	0	m3	45.03	0.00	49.53	0.00
	Traffic Island	227	m2	77.60	17615.20	84.07	19083.89
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	236	m	259.10	61147.60	282.96	66778.56
	Drainage Pipe 450mm CR Bfilled	118	m	299.43	35332.74	334.33	39450.94
	Drainage Pipe 525mm CR Bfilled	40	m	403.86	16154.40	448.03	17921.20
	Drainage - pits	10	No.	2565.39	25653.90	2806.10	28061.00
	Drainage – Sub-soil drainage	1599	m	33.88	54174.12	43.40	69396.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	87	No.	303.34	26390.58	363.01	31581.87
	Landscaping	5371	m2	21.61	116067.31	25.16	135134.36
	Topsoil Seeding	5371	m2	7.21	38724.91	8.44	45331.24
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	5	Item	338.43	1692.15	380.39	1901.95
	Line marking	8065	m2 of Pavement	3.11	25082.15	4.09	32985.85
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	569	m3	100.00	56900.00	115.00	65435.00
	Telecom/power relocation allowance	413	m	1300.00	536900.00	1495.00	617435.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Light pole relocation allowance	3	Item	10000.00	30000.00	11500.00	34500.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	413	m	14.00	5782.00	16.10	6649.30
Delivery	Council Fees	1	%	3.25	95847.36	3.25	109573.23
	VicRoads Fees	1	%	1.00	29491.49	1.00	33714.84
	Traffic Management	1	%	5.00	147457.47	5.00	168574.20
	Environmental Management	1	%	0.50	14745.75	0.50	16857.42
	Surveying and Design	1	%	5.00	147457.47	5.00	168574.20
	Supervision and Project management	1	%	9.00	265423.45	9.00	303433.56
	Site Establishment	1	%	2.50	73728.74	2.50	84287.10
	Contingency	1	%	15.00	442372.42	15.00	505722.59
Total - (2018) rates	Excluding Delivery				2,949,149		3,371,484
	Including Delivery				4,165,674		4,762,221
Total - (2021) rates	Excluding Delivery				3,214,573		3,674,918
	Including Delivery				4,540,584		5,190,822

Appendix A	
Description:	IT-17 - Secondary - Connector T-Intersection (Abey Road, Bundy Drive)
Civil Component Number:	IT-17

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	16463	m2	3.68	60583.84	4.96	81656.48
	Earthworks	2855	m3	34.07	97269.85	40.52	115684.60
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	3883	m2	127.01	493179.83	133.78	519467.74
	Collector Arterial Pavement	727	m2	105.15	76444.05	112.44	81743.88
	Subgrade Preparation	922	m2	14.22	13110.84	16.16	14899.52
	Pavement Rehab	3731	m2	51.58	192444.98	59.32	221322.92
	Pavement Removal	385	m2	140.00	53900.00	161.00	61985.00
Concrete Works	Kerb and Channel	1714	m	54.81	93944.34	60.90	104382.60
	Kerb Removal	1031	m	60.00	61860.00	69.00	71139.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2339	m2	63.51	148549.89	73.63	172220.57
	Concrete Removal	1286	m3	45.03	57908.58	49.53	63695.58
	Traffic Island	342	m2	77.60	26539.20	84.07	28751.94
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	242	m	259.10	62702.20	282.96	68476.32
	Drainage Pipe 450mm CR Bfilled	121	m	299.43	36231.03	334.33	40453.93
	Drainage Pipe 525mm CR Bfilled	41	m	403.86	16558.26	448.03	18369.23
	Drainage - pits	10	No.	2565.39	25653.90	2806.10	28061.00
	Drainage – Sub-soil drainage	1714	m	33.88	58070.32	43.40	74387.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	87	No.	303.34	26390.58	363.01	31581.87
	Landscaping	5493	m2	21.61	118703.73	25.16	138203.88
	Topsoil Seeding	5493	m2	7.21	39604.53	8.44	46360.92
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	5	Item	338.43	1692.15	380.39	1901.95
	Line marking	8341	m2 of Pavement	3.11	25940.51	4.09	34114.69
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5263.74	319.78	5756.04
Other	Rock excavation	571	m3	100.00	57100.00	115.00	65665.00
	Telecom/power relocation allowance	453	m	1300.00	588900.00	1495.00	677235.00
	Water/gas relocation allowance	39	m	300.00	11700.00	345.00	13455.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Light pole relocation allowance	4	Item	10000.00	40000.00	11500.00	46000.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	459	m	14.00	6426.00	16.10	7389.90
Delivery	Council Fees	1	%	3.25	104409.98	3.25	119314.19
	VicRoads Fees	1	%	1.00	32126.15	1.00	36712.06
	Traffic Management	1	%	5.00	160630.73	5.00	183560.29
	Environmental Management	1	%	0.50	16063.07	0.50	18356.03
	Surveying and Design	1	%	5.00	160630.73	5.00	183560.29
	Supervision and Project management	1	%	9.00	289135.32	9.00	330408.52
	Site Establishment	1	%	2.50	80315.37	2.50	91780.15
	Contingency	1	%	15.00	481892.20	15.00	550680.87
Total - (2018) rates	Excluding Delivery				3,212,615		3,671,206
	Including Delivery				4,537,818		5,185,578
Total - (2021) rates	Excluding Delivery				3,501,750		4,001,615
	Including Delivery				4,946,222		5,652,281

Appendix A	
Description:	IT-18 - Primary- Connector Intersection (Ferris Road, Shakamaker Drive)
Civil Component Number:	IT-18

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Sitemworks/ Earthworks	Site Preparation	24432	m2	3.68	89909.76	4.96	121182.72
	Earthworks	2513	m3	34.07	85617.91	40.52	101826.76
Road Pavement	Primary Arterial Pavement	2717	m2	169.62	460857.54	186.26	506068.42
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	1066	m2	105.15	112089.90	112.44	119861.04
	Subgrade Preparation	757	m2	14.22	10764.54	16.16	12233.12
	Pavement Rehab	5809	m2	51.58	299628.22	59.32	344589.88
	Pavement Removal	1243	m2	140.00	174020.00	161.00	200123.00
Concrete Works	Kerb and Channel	2244	m	54.81	122993.64	60.90	136659.60
	Kerb Removal	1500	m	60.00	90000.00	69.00	103500.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	4561	m2	63.51	289669.11	73.63	335826.43
	Concrete Removal	14	m3	45.03	630.42	49.53	693.42
	Traffic Island	510	m2	77.60	39576.00	84.07	42875.70
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	750	m	259.10	194325.00	282.96	212220.00
	Drainage Pipe 450mm CR Bfilled	282	m	299.43	84439.26	334.33	94281.06
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	24	No.	2565.39	61569.36	2806.10	67346.40
	Drainage – Sub-soil drainage	2244	m	33.88	76026.72	43.40	97389.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	113	No.	303.34	34277.42	363.01	41020.13
	Landscaping	9046	m2	21.61	195484.06	25.16	227597.36
	Topsoil Seeding	9046	m2	7.21	65221.66	8.44	76348.24
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	16	Item	338.43	5414.88	380.39	6086.24
	Line marking	9592	m2 of Pavement	3.11	29831.12	4.09	39231.28
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7018.32	319.78	7674.72
Other	Rock excavation	503	m3	100.00	50300.00	115.00	57845.00
	Telecom/power relocation allowance	542	m	1300.00	704600.00	1495.00	810290.00
	Water/gas relocation allowance	157	m	300.00	47100.00	345.00	54165.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Earthen mound removal	6480	m3	34.07	220773.60	40.52	262569.60
	Light pole relocation allowance	3	Item	10000.00	30000.00	11500.00	34500.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
	Sawcut pavement tie ins, new kerb & channel, etc.	2704	m	14.00	37856.00	16.10	43534.40
Delivery	Council Fees	1	%	3.25	146059.42	3.25	168310.57
	VicRoads Fees	1	%	1.00	44941.36	1.00	51787.87
	Traffic Management	1	%	5.00	224706.80	5.00	258939.34
	Environmental Management	1	%	0.50	22470.68	0.50	25893.93
	Surveying and Design	1	%	5.00	224706.80	5.00	258939.34
	Supervision and Project management	1	%	9.00	404472.23	9.00	466090.82
	Site Establishment	1	%	2.50	112353.40	2.50	129469.67
	Contingency	1	%	15.00	674120.39	15.00	776818.03
Total - (2018) rates	Excluding Delivery				4,494,136		5,178,787
	Including Delivery				6,347,967		7,315,036
Total - (2021) rates	Excluding Delivery				4,898,609		5,644,878
	Including Delivery				6,919,285		7,973,390

Appendix A	
Description:	IT-20 - Primary- Connector Intersection (Mt Cottrell Road, South Connector Road)
Civil Component Number:	IT-20

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	25670	m2	3.68	94465.60	4.96	127323.20
	Earthworks	9003	m3	34.07	306732.21	40.52	364801.56
Road Pavement	Primary Arterial Pavement	11412	m2	169.62	1935703.44	186.26	2125599.12
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	1576	m2	105.15	165716.40	112.44	177205.44
	Subgrade Preparation	2598	m2	14.22	36943.56	16.16	41983.68
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	2394	m	54.81	131215.14	60.90	145794.60
	Cycle Path	3505	m2	76.59	268447.95	91.94	322249.70
	SUP/ Footpath	1103	m2	63.51	70051.53	73.63	81213.89
	Traffic Island	145	m2	77.60	11252.00	84.07	12190.15
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	1000	m	259.10	259100.00	282.96	282960.00
	Drainage Pipe 450mm CR Bfilled	194	m	299.43	58089.42	334.33	64860.02
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	32	No.	2565.39	82092.48	2806.10	89795.20
	Drainage – Sub-soil drainage	2394	m	33.88	81108.72	43.40	103899.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	115	No.	303.34	34884.10	363.01	41746.15
	Landscaping	7920	m2	21.61	171151.20	25.16	199267.20
	Topsoil Seeding	7920	m2	7.21	57103.20	8.44	66844.80
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	16	Item	338.43	5414.88	380.39	6086.24
	Line marking	12988	m2 of Pavement	3.11	40392.68	4.09	53120.92
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4678.88	319.78	5116.48
Other	Rock excavation	1801	m3	100.00	180100.00	115.00	207115.00
	Telecom/power relocation allowance	270	m	1300.00	351000.00	1495.00	403650.00
	Water/gas relocation allowance	56	m	300.00	16800.00	345.00	19320.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Power pole removal	7	Item	40000.00	280000.00	46000.00	322000.00
Delivery	Council Fees	1	%	3.25	174089.01	3.25	198295.20
	VicRoads Fees	1	%	1.00	53565.85	1.00	61013.91
	Traffic Management	1	%	5.00	267829.24	5.00	305069.54
	Environmental Management	1	%	0.50	26782.92	0.50	30506.95
	Surveying and Design	1	%	5.00	267829.24	5.00	305069.54
	Supervision and Project management	1	%	9.00	482092.64	9.00	549125.16
	Site Establishment	1	%	2.50	133914.62	2.50	152534.77
	Contingency	1	%	15.00	803487.73	15.00	915208.61
Total - (2018) rates	Excluding Delivery				5,356,585		6,101,391
	Including Delivery				7,566,176		8,618,214
Total - (2021) rates	Excluding Delivery				5,838,678		6,650,516
	Including Delivery				8,247,133		9,393,854

Appendix A	
Description:	IT-21 - Primary- Connector Intersection (Toolern Road, Eastern North-South Connector Road)
Civil Component Number:	IT-21

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	18525	m2	3.68	68172.00	4.96	91884.00
	Earthworks	6457	m3	34.07	219989.99	40.52	261637.64
Road Pavement	Primary Arterial Pavement	7682	m2	169.62	1303020.84	186.26	1430849.32
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	1801	m2	105.15	189375.15	112.44	202504.44
	Subgrade Preparation	1897	m2	14.22	26975.34	16.16	30655.52
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1916	m	54.81	105015.96	60.90	116684.40
	Cycle Path	2444	m2	76.59	187185.96	91.94	224701.36
	SUP/ Footpath	377	m2	63.51	23943.27	73.63	27758.51
	Traffic Island	117	m2	77.60	9079.20	84.07	9836.19
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	943	m	259.10	244331.30	282.96	266831.28
	Drainage Pipe 450mm CR Bfilled	0	m	299.43	0.00	334.33	0.00
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	25	No.	2565.39	64134.75	2806.10	70152.50
	Drainage – Sub-soil drainage	1916	m	33.88	64914.08	43.40	83154.40
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	87	No.	303.34	26390.58	363.01	31581.87
	Landscaping	6082	m2	21.61	131432.02	25.16	153023.12
	Topsoil Seeding	6082	m2	7.21	43851.22	8.44	51332.08
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	16	Item	338.43	5414.88	380.39	6086.24
	Line marking	9483	m2 of Pavement	3.11	29492.13	4.09	38785.47
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4678.88	319.78	5116.48
Other	Rock excavation	1292	m3	100.00	129200.00	115.00	148580.00
	Telecom/power relocation allowance	60	m	1300.00	78000.00	1495.00	89700.00
	Water/gas relocation allowance	50	m	300.00	15000.00	345.00	17250.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Power pole removal	1	Item	30000.00	30000.00	34500.00	34500.00
Delivery	Council Fees	1	%	3.25	120696.52	3.25	137470.21
	VicRoads Fees	1	%	1.00	37137.39	1.00	42298.53
	Traffic Management	1	%	5.00	185686.95	5.00	211492.63
	Environmental Management	1	%	0.50	18568.70	0.50	21149.26
	Surveying and Design	1	%	5.00	185686.95	5.00	211492.63
	Supervision and Project management	1	%	9.00	334236.51	9.00	380686.73
	Site Establishment	1	%	2.50	92843.48	2.50	105746.31
	Contingency	1	%	15.00	557060.86	15.00	634477.89
Total - (2018) rates	Excluding Delivery				3,713,739		4,229,853
	Including Delivery				5,245,656		5,974,667
Total - (2021) rates	Excluding Delivery				4,047,976		4,610,540
	Including Delivery				5,717,766		6,512,388

Appendix A	
Description:	IT-22 - Secondary- Connector Intersection (Toolern Road, Central North-South Connector Road)
Civil Component Number:	IT-22

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	18549	m2	3.68	68260.32	4.96	92003.04
	Earthworks	5862	m3	34.07	199718.34	40.52	237528.24
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	7713	m2	127.01	979628.13	133.78	1031845.14
	Collector Arterial Pavement	1801	m2	105.15	189375.15	112.44	202504.44
	Subgrade Preparation	1903	m2	14.22	27060.66	16.16	30752.48
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1867	m	54.81	102330.27	60.90	113700.30
	Cycle Path	2452	m2	76.59	187798.68	91.94	225436.88
	SUP/ Footpath	377	m2	63.51	23943.27	73.63	27758.51
	Traffic Island	183	m2	77.60	14200.80	84.07	15384.81
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	922	m	259.10	238890.20	282.96	260889.12
	Drainage Pipe 450mm CR Bfilled	0	m	299.43	0.00	334.33	0.00
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	22	No.	2565.39	56438.58	2806.10	61734.20
	Drainage – Sub-soil drainage	1867	m	33.88	63253.96	43.40	81027.80
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	88	No.	303.34	26693.92	363.01	31944.88
	Landscaping	6007	m2	21.61	129811.27	25.16	151136.12
	Topsoil Seeding	6007	m2	7.21	43310.47	8.44	50699.08
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	10	Item	338.43	3384.30	380.39	3803.90
	Line marking	9514	m2 of Pavement	3.11	29588.54	4.09	38912.26
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4678.88	319.78	5116.48
Other	Rock excavation	1173	m3	100.00	117300.00	115.00	134895.00
	Telecom/power relocation allowance	0	m	1300.00	0.00	1495.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	104643.74	3.25	118115.41
	VicRoads Fees	1	%	1.00	32198.07	1.00	36343.20
	Traffic Management	1	%	5.00	160990.36	5.00	181716.02
	Environmental Management	1	%	0.50	16099.04	0.50	18171.60
	Surveying and Design	1	%	5.00	160990.36	5.00	181716.02
	Supervision and Project management	1	%	9.00	289782.65	9.00	327088.84
	Site Establishment	1	%	2.50	80495.18	2.50	90858.01
	Contingency	1	%	15.00	482971.09	15.00	545148.06
Total - (2018) rates	Excluding Delivery				3,219,807		3,634,320
	Including Delivery				4,547,978		5,133,478
Total - (2021) rates	Excluding Delivery				3,509,590		3,961,410
	Including Delivery				4,957,296		5,595,492

Appendix A	
Description:	IT-23 - Secondary- Connector T-Intersection (Toolern Road, Western North-South Connector Road)
Civil Component Number:	IT-23

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	16357	m2	3.68	60193.76	4.96	81130.72
	Earthworks	5065	m3	34.07	172564.55	40.52	205233.80
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	7226	m2	127.01	917774.26	133.78	966694.28
	Collector Arterial Pavement	889	m2	105.15	93478.35	112.44	99959.16
	Subgrade Preparation	1623	m2	14.22	23079.06	16.16	26227.68
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1739	m	54.81	95314.59	60.90	105905.10
	Cycle Path	2269	m2	76.59	173782.71	91.94	208611.86
	SUP/ Footpath	183	m2	63.51	11622.33	73.63	13474.29
	Traffic Island	197	m2	77.60	15287.20	84.07	16561.79
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	866	m	259.10	224380.60	282.96	245043.36
	Drainage Pipe 450mm CR Bfilled	26	m	299.43	7785.18	334.33	8692.58
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	20	No.	2565.39	51307.80	2806.10	56122.00
	Drainage – Sub-soil drainage	1739	m	33.88	58917.32	43.40	75472.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	78	No.	303.34	23660.52	363.01	28314.78
	Landscaping	5548	m2	21.61	119892.28	25.16	139587.68
	Topsoil Seeding	5548	m2	7.21	40001.08	8.44	46825.12
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	5	Item	338.43	1692.15	380.39	1901.95
	Line marking	8115	m2 of Pavement	3.11	25237.65	4.09	33190.35
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	8	Item	292.43	2339.44	319.78	2558.24
Other	Rock excavation	1013	m3	100.00	101300.00	115.00	116495.00
	Telecom/power relocation allowance	0	m	1300.00	0.00	1495.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00
	Service proving fee	0	Item	10000.00	0.00	11500.00	0.00
Delivery	Council Fees	1	%	3.25	89880.48	3.25	101378.75
	VicRoads Fees	1	%	1.00	27655.53	1.00	31193.46
	Traffic Management	1	%	5.00	138277.66	5.00	155967.30
	Environmental Management	1	%	0.50	13827.77	0.50	15596.73
	Surveying and Design	1	%	5.00	138277.66	5.00	155967.30
	Supervision and Project management	1	%	9.00	248899.78	9.00	280741.14
	Site Establishment	1	%	2.50	69138.83	2.50	77983.65
	Contingency	1	%	15.00	414832.97	15.00	467901.90
Total - (2018) rates	Excluding Delivery				2,765,553		3,119,346
	Including Delivery				3,906,344		4,406,076
Total - (2021) rates	Excluding Delivery				3,014,453		3,400,088
	Including Delivery				4,257,915		4,802,624

Appendix A	
Description:	IT-25 - Primary- Connector T-Intersection (Mt Cottrell Road, Bridge Road)
Civil Component Number:	IT-25

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	2448	m2	3.68	9008.64	4.96	12142.08
	Earthworks	592	m3	34.07	20169.44	40.52	23987.84
Road Pavement	Primary Arterial Pavement	365	m2	169.62	61911.30	186.26	67984.90
	Secondary Arterial Pavement	521	m2	127.01	66172.21	133.78	69699.38
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00
	Subgrade Preparation	178	m2	14.22	2531.16	16.16	2876.48
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	265	m	54.81	14524.65	60.90	16138.50
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	623	m2	63.51	39566.73	73.63	45871.49
	Traffic Island	70	m2	77.60	5432.00	84.07	5884.90
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	150	m	259.10	38865.00	282.96	42444.00
	Drainage Pipe 450mm CR Bfilled	35	m	299.43	10480.05	334.33	11701.55
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	7	No.	2565.39	17957.73	2806.10	19642.70
	Drainage – Sub-soil drainage	265	m	33.88	8978.20	43.40	11501.00
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109730.28	0.00	128786.34	0.00
Landscape	Tree Planting	10	No.	303.34	3033.40	363.01	3630.10
	Landscaping	871	m2	21.61	18822.31	25.16	21914.36
	Topsoil Seeding	871	m2	7.21	6279.91	8.44	7351.24
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	1	Item/ Per Leg	48468.93	48468.93	55617.74	55617.74
Misc.	Regulatory Signage	4	Item	338.43	1353.72	380.39	1521.56
	Line marking	886	m2 of Pavement	3.11	2755.46	4.09	3623.74
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	4	Item	292.43	1169.72	319.78	1279.12
Other	Rock excavation	119	m3	100.00	11900.00	115.00	13685.00
	Telecom/power relocation allowance	56	m	1300.00	72800.00	1495.00	83720.00
	Water/gas relocation allowance	23	m	300.00	6900.00	345.00	7935.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Construct hump (Asphalt Size 10 Type N)	91	m2	57.15	5200.65	65.72	5980.75
	Hump asphalt disposal fee (inc. transport)	91	m2	26.79	2437.89	30.81	2803.57
Delivery	Council Fees	1	%	3.25	18137.07	3.25	20753.47
	VicRoads Fees	1	%	1.00	5580.64	1.00	6385.68
	Traffic Management	1	%	5.00	27903.19	5.00	31928.42
	Environmental Management	1	%	0.50	2790.32	0.50	3192.84
	Surveying and Design	1	%	5.00	27903.19	5.00	31928.42
	Supervision and Project management	1	%	9.00	50225.74	9.00	57471.16
	Site Establishment	1	%	2.50	13951.59	2.50	15964.21
	Contingency	1	%	15.00	83709.56	15.00	95785.26
Total - (2018) rates	Excluding Delivery				558,064		638,568
	Including Delivery				788,265		901,978
Total - (2021) rates	Excluding Delivery				608,290		696,040
	Including Delivery				859,210		983,157

Appendix A	
Description:	IT-26 - Primary- Connector Intersection (Mt Cottrell Road, Alfred Road)
Civil Component Number:	IT-26

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	18764	m2	3.68	69051.52	4.96	93069.44
	Earthworks	6904	m3	34.07	235219.28	40.52	279750.08
Road Pavement	Primary Arterial Pavement	7710	m2	169.62	1307770.20	186.26	1436064.60
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00
	Collector Arterial Pavement	2600	m2	105.15	273390.00	112.44	292344.00
	Subgrade Preparation	2062	m2	14.22	29321.64	16.16	33321.92
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1829	m	54.81	100247.49	60.90	111386.10
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2825	m2	63.51	179415.75	73.63	208004.75
	Traffic Island	327	m2	77.60	25375.20	84.07	27490.89
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	700	m	259.10	181370.00	282.96	198072.00
	Drainage Pipe 450mm CR Bfilled	274	m	299.43	82043.82	334.33	91606.42
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00
	Drainage - pits	36	No.	2565.39	92354.04	2806.10	101019.60
	Drainage – Sub-soil drainage	1829	m	33.88	61966.52	43.40	79378.60
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	91	No.	303.34	27603.94	363.01	33033.91
	Landscaping	5301	m2	21.61	114554.61	25.16	133373.16
	Topsoil Seeding	5301	m2	7.21	38220.21	8.44	44740.44
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	14	Item	338.43	4738.02	380.39	5325.46
	Line marking	10310	m2 of Pavement	3.11	32064.10	4.09	42167.90
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4678.88	319.78	5116.48
Other	Rock excavation	1381	m3	100.00	138100.00	115.00	158815.00
	Telecom/power relocation allowance	471	m	1300.00	612300.00	1495.00	704145.00
	Water/gas relocation allowance	22	m	300.00	6600.00	345.00	7590.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Power pole relocation allowance	4	Item	40000.00	160000.00	46000.00	184000.00
Delivery	Council Fees	1	%	3.25	145942.12	3.25	165979.56
	VicRoads Fees	1	%	1.00	44905.27	1.00	51070.64
	Traffic Management	1	%	5.00	224526.34	5.00	255353.18
	Environmental Management	1	%	0.50	22452.63	0.50	25535.32
	Surveying and Design	1	%	5.00	224526.34	5.00	255353.18
	Supervision and Project management	1	%	9.00	404147.40	9.00	459635.72
	Site Establishment	1	%	2.50	112263.17	2.50	127676.59
	Contingency	1	%	15.00	673579.01	15.00	766059.53
Total - (2018) rates	Excluding Delivery				4,490,527		5,107,064
	Including Delivery				6,342,869		7,213,727
Total - (2021) rates	Excluding Delivery				4,894,675		5,566,700
	Including Delivery				6,913,728		7,862,964

Appendix A	
Description:	IT-27- Secondary- Connector Intersection (Ferris Road, Alfred Road)
Civil Component Number:	IT-27

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	12442	m2	3.68	45786.56	4.96	61712.32
	Earthworks	3428	m3	34.07	116791.96	40.52	138902.56
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	1867	m2	127.01	237127.67	133.78	249767.26
	Collector Arterial Pavement	4191	m2	105.15	440683.65	112.44	471236.04
	Subgrade Preparation	1212	m2	14.22	17234.64	16.16	19585.92
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1043	m	54.81	57166.83	60.90	63518.70
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	1131	m2	63.51	71829.81	73.63	83275.53
	Traffic Island	84	m2	77.60	6518.40	84.07	7061.88
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	102	m	259.10	26428.20	282.96	28861.92
	Drainage Pipe 450mm CR Bfilled	173	m	299.43	51801.39	334.33	57839.09
	Drainage Pipe 525mm CR Bfilled	279	m	403.86	112676.94	448.03	125000.37
	Drainage - pits	20	No.	2565.39	51307.80	2806.10	56122.00
	Drainage – Sub-soil drainage	1043	m	33.88	35336.84	43.40	45266.20
	Concrete headwall	2	No.	4500.00	9000.00	5175.00	10350.00
	Rock riprap	49	m2	200.00	9800.00	230.00	11270.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109730.28	438921.12	128786.34	515145.36
Landscape	Tree Planting	91	No.	303.34	27603.94	363.01	33033.91
	Landscaping	4803	m2	21.61	103792.83	25.16	120843.48
	Topsoil Seeding	4803	m2	7.21	34629.63	8.44	40537.32
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48468.93	193875.72	55617.74	222470.96
Misc.	Regulatory Signage	0	Item	338.43	0.00	380.39	0.00
	Line marking	6058	m2 of Pavement	3.11	18840.38	4.09	24777.22
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00
Other	Rock excavation	686	m3	100.00	68600.00	115.00	78890.00
	Telecom/power relocation allowance	134	m	1300.00	174200.00	1495.00	200330.00
	Water/gas relocation allowance	143	m	300.00	42900.00	345.00	49335.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	80411.47	3.25	91479.85
	VicRoads Fees	1	%	1.00	24741.99	1.00	28147.64
	Traffic Management	1	%	5.00	123709.95	5.00	140738.22
	Environmental Management	1	%	0.50	12370.99	0.50	14073.82
	Surveying and Design	1	%	5.00	123709.95	5.00	140738.22
	Supervision and Project management	1	%	9.00	222677.91	9.00	253328.80
	Site Establishment	1	%	2.50	61854.97	2.50	70369.11
	Contingency	1	%	15.00	371129.85	15.00	422214.67
Total - (2018) rates	Excluding Delivery				2,474,199		2,814,764
	Including Delivery				3,494,806		3,975,855
Total - (2021) rates	Excluding Delivery				2,696,877		3,068,094
	Including Delivery				3,809,339		4,333,683

Appendix A	
Description:	IT-28- Secondary- Connector Intersection (Ferris Road, South Connector Road)
Civil Component Number:	IT-28

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	12126	m2	3.68	44623.68	4.96	60144.96
	Earthworks	2978	m3	34.07	101460.46	40.52	120668.56
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	3353	m2	127.01	425864.53	133.78	448564.34
	Collector Arterial Pavement	1586	m2	105.15	166767.90	112.44	178329.84
	Subgrade Preparation	988	m2	14.22	14049.36	16.16	15966.08
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1108	m	54.81	60729.48	60.90	67477.20
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	1155	m2	63.51	73354.05	73.63	85042.65
	Traffic Island	3	m2	77.60	232.80	84.07	252.21
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	50	m	259.10	12955.00	282.96	14148.00
	Drainage Pipe 450mm CR Bfilled	0	m	299.43	0.00	334.33	0.00
	Drainage Pipe 525mm CR Bfilled	245	m	403.86	98945.70	448.03	109767.35
	Drainage - pits	7	No.	2565.39	17957.73	2806.10	19642.70
	Drainage – Sub-soil drainage	1108	m	33.88	37539.04	43.40	48087.20
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	76	No.	303.34	23053.84	363.01	27588.76
	Landscaping	4795	m2	21.61	103619.95	25.16	120642.20
	Topsoil Seeding	4795	m2	7.21	34571.95	8.44	40469.80
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	10	Item	338.43	3384.30	380.39	3803.90
	Line marking	4939	m2 of Pavement	3.11	15360.29	4.09	20200.51
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	12	Item	292.43	3509.16	319.78	3837.36
Other	Rock excavation	596	m3	100.00	59600.00	115.00	68540.00
	Telecom/power relocation allowance	71	m	1300.00	92300.00	1495.00	106145.00
	Water/gas relocation allowance	68	m	300.00	20400.00	345.00	23460.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
	Tree removal	30	Item	1000.00	30000.00	1150.00	34500.00
Delivery	Council Fees	1	%	3.25	64877.20	3.25	73778.97
	VicRoads Fees	1	%	1.00	19962.22	1.00	22701.22
	Traffic Management	1	%	5.00	99811.08	5.00	113506.11
	Environmental Management	1	%	0.50	9981.11	0.50	11350.61
	Surveying and Design	1	%	5.00	99811.08	5.00	113506.11
	Supervision and Project management	1	%	9.00	179659.94	9.00	204311.01
	Site Establishment	1	%	2.50	49905.54	2.50	56753.06
	Contingency	1	%	15.00	299433.23	15.00	340518.34
Total - (2018) rates	Excluding Delivery				1,996,222		2,270,122
	Including Delivery				2,819,663		3,206,548
Total - (2021) rates	Excluding Delivery				2,175,882		2,474,434
	Including Delivery				3,073,433		3,495,138

Appendix A	
Description:	IT-29- Secondary- Connector Intersection (Ferris Road, South Connector Road)
Civil Component Number:	IT-29

Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)
Siteworks/ Earthworks	Site Preparation	13711	m2	3.68	50456.48	4.96	68006.56
	Earthworks	2432	m3	34.07	82858.24	40.52	98544.64
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00
	Secondary Arterial Pavement	3039	m2	127.01	385983.39	133.78	406557.42
	Collector Arterial Pavement	937	m2	105.15	98525.55	112.44	105356.28
	Subgrade Preparation	796	m2	14.22	11319.12	16.16	12863.36
	Pavement Rehab	2638	m2	51.58	136068.04	59.32	156486.16
	Pavement Other	0	m2	0.00	0.00	0.00	0.00
Concrete Works	Kerb and Channel	1352	m	54.81	74103.12	60.90	82336.80
	Cycle Path	0	m2	76.59	0.00	91.94	0.00
	SUP/ Footpath	2243	m2	63.51	142452.93	73.63	165152.09
	Traffic Island	145	m2	77.60	11252.00	84.07	12190.15
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00
	Drainage Pipe 375mm CR Bfilled	400	m	259.10	103640.00	282.96	113184.00
	Drainage Pipe 450mm CR Bfilled	300	m	299.43	89829.00	334.33	100299.00
	Drainage Pipe 525mm CR Bfilled	70	m	403.86	28270.20	448.03	31362.10
	Drainage - pits	17	No.	2565.39	43611.63	2806.10	47703.70
	Drainage – Sub-soil drainage	1352	m	33.88	45805.76	43.40	58676.80
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109730.28	329190.84	128786.34	386359.02
Landscape	Tree Planting	77	No.	303.34	23357.18	363.01	27951.77
	Landscaping	4663	m2	21.61	100767.43	25.16	117321.08
	Topsoil Seeding	4663	m2	7.21	33620.23	8.44	39355.72
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48468.93	145406.79	55617.74	166853.22
Misc.	Regulatory Signage	8	Item	338.43	2707.44	380.39	3043.12
	Line marking	3976	m2 of Pavement	3.11	12365.36	4.09	16261.84
	Landscape maintenance (intersections)	1	Item	71344.66	71344.66	88131.43	88131.43
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00
	Tactile Pavers (Hazard only)	12	Item	292.43	3509.16	319.78	3837.36
Other	Rock excavation	487	m3	100.00	48700.00	115.00	56005.00
	Telecom/power relocation allowance	409	m	1300.00	531700.00	1495.00	611455.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00
	Service proving fee	1	Item	10000.00	10000.00	11500.00	11500.00
Delivery	Council Fees	1	%	3.25	85047.45	3.25	97070.79
	VicRoads Fees	1	%	1.00	26168.45	1.00	29867.94
	Traffic Management	1	%	5.00	130842.23	5.00	149339.68
	Environmental Management	1	%	0.50	13084.22	0.50	14933.97
	Surveying and Design	1	%	5.00	130842.23	5.00	149339.68
	Supervision and Project management	1	%	9.00	235516.01	9.00	268811.43
	Site Establishment	1	%	2.50	65421.11	2.50	74669.84
	Contingency	1	%	15.00	392526.68	15.00	448019.04
Total - (2018) rates	Excluding Delivery				2,616,845		2,986,794
	Including Delivery				3,696,293		4,218,846
Total - (2021) rates	Excluding Delivery				2,852,361		3,255,606
	Including Delivery				4,028,960		4,598,543