Development Contributions Plan 1070

Wollert

December 2016

Appendix 5:

Road, Intersection & Bridge Costings

Victorian Planning Authority

VICTORIA State Government

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **17 October 2016**
V160221T **Version 6**
Boundary Rd **Culvert Length, m:** 36.9
CL-1002 **PM %:** 9.83%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ **65,880**
	Project Management		3.00%	2.95%	$ 39,528	
	reporting and commissioning					
	of tender documents and management of contracts					
	liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.97%	$ 26,352	
B	**Design and Investigation**					$ **147,571**
	Traffic Investigations		0.85%	0.84%	$ 11,200	
	Cadastral and Engineering Survey		1.20%	1.18%	$ 15,811	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.18%	$ 15,811	
	Environmental Investigations			0.00%	$ -	
	Structural design and certification		1.20%	1.18%	$ 15,811	
	Landscape Design			0.00%	$ -	
	Preliminary and Final Design		4.25%	4.18%	$ 55,998	
	Construction Management		2.50%	2.46%	$ 32,940	
C	**Construction including Final Design**				$ 1,340,385	$ **1,340,385**
1	**PRELIMINARIES**					$ 215,180
1.1	Site Establishment	1	item	2.50%	$ 33,180	
1.2	Site Management & supervision including QA	20	wks	$ 850.00	$ 17,000	
1.3	Provision for traffic Mgt and diversion of traffic	20	wks	$ 6,000.00	$ 120,000	
1.4	Diversion Works including: setup of bypass lines and pump system, installation of temporary 300dia PVC pipes and installation of bund walls at extent culvert works	1	item	$ 45,000.00	$ 45,000	
2	**DEMOLITION**					$ 3,000
2.1	Trees		Item	$ 2,000	$ -	
2.2	Fence removal		Item	$ 1,000	$ -	
2.3	Excavation and removal of existing culvert	1	Item	$ 3,000	$ 3,000	
3	**EARTHWORKS**					$ 332,990
3.1	Stripping topsoil (100mm) approx 280m along road	9,485	m²	$ 3.50	$ 33,198	
3.2	Rock excavation	1	Item		$ 58,442	
3.3	Fill to road boxing	3,390	m³	$ 65.00	$ 220,350	
3.4	Excavation and Removal	700	m³	$ 30.00	$ 21,000	
4	**DRAINAGE, PIPES AND CULVERTS**					$ 726,715
4.1	Culvert Base Slab 380 thick + 300 wide edge down turn	487	m²	$ 400.00	$ 194,832	
4.2	150mm thick Class 2 CR under slab	487	m²	$ 15.00	$ 7,306	
4.3	2.1x1.2 Box culverts supply and lay	108	Lm	$ 2,500.00	$ 270,000	
4.4	2.1 Box culvertscover slabs supply and lay	72	Lm	$ 700.00	$ 50,400	
4.5	Backfill and compact Stabilised sand to top of culvert	36	m³	$ 350.00	$ 12,545	
4.6	Agg to culverts	216	Lm	$ 115.00	$ 24,840	
4.7	Construction of endwall Slab	168	m²	$ 400.00	$ 67,200	
4.8	Construction of endwall	92	m²	$ 650.00	$ 59,592	
4.9	Rock beaching at ends of culvert	400	m²	$ 100.00	$ 40,000	
5	**MISCELLANEOUS**					$ 62,500
5.1	Safety works under power lines(spotter)		weeks	$ 3,400.00	$ -	
5.2	Installation of crash barrier above culverts endwalls	50	Lm	$ 1,250.00	$ 62,500	
5.3	Guard Rail Transitions & anchor point	4	Item	$ 8,500.00	$ 34,000	
5.4	Ped fence to wingwalls	40	Lm	$ 155.00	$ 6,200	
5.5	Installation of crash fence	120	Lm	$ 200.00	$ 24,000	
	TOTAL A - C				$ 1,553,836	$ **1,553,836**
D	**Contingency**					
	Contingency (20% of C)				20%	$ 310,767
	Total Estimate					$ 1,864,603
E	**PROJECT BUDGET**					
						$ 1,864,603

Notes: **Services**
1 Service relocation / alterations have not been allowed for in the estimate
Demolition
2 We have only allowed to demolish the items shown above
EARTHWORKS
3 Cut fill quantities will vary with design, to allow lifting of the road over the culvert
Construction
4 Construction to take place aside existing road prior to road extension
5 Installation of culverts to be done prior or during road fill works
6 Regrading of creek not included

AUTHOR: Asiri Rajapakse
Date: 2/09/2015

REVIEWER:
Date: 2/09/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **17 October 2016**
V160221T — **Version 6**
Koukoura Drive — **Culvert Length, m:** 29.6
CL-1003 — **PM %:** 10.35%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 46,093**
	Project Management		3.00%	3.11%	$ 27,656	
	and commissioning					
	tender documents and management of contracts					
	environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	2.07%	$ 18,437	
B	**Design and Investigation**					**$ 103,248**
	Traffic Investigations		0.85%	0.88%	$ 7,836	
	Cadastral and Engineering Survey		1.20%	1.24%	$ 11,062	
	Design		1.20%	1.24%	$ 11,062	
	Environmental Investigations			0.00%	$ -	
	Structural design and certification		1.20%	1.24%	$ 11,062	
	Landscape Design			0.00%	$ -	
	Preliminary and Final Design		4.25%	4.40%	$ 39,179	
	Construction Management		2.50%	2.59%	$ 23,046	
C	**Construction including Final Design**				$ 890,680	**$ 890,680**
1	**PRELIMINARIES**					$ 185,024
1.1	Site Establishment	1	item	2.50%	$ 21,724	
1.2	Site Management & supervision including QA	18	wks	$ 850.00	$ 15,300	
1.3	Provision for traffic	18	wks	$ 6,000.00	$ 108,000	
1.4	system, installation of temporary 300dia PVC pipes and	1	item	$ 40,000.00	$ 40,000	
2	**DEMOLITION**					$ 3,000
2.1	Trees		Item	$ 2,000	$ -	
2.2	Fence removal		Item	$ 1,000	$ -	
2.3	Excavation and removal of existing culvert	1	Item	$ 3,000	$ 3,000	
3	**EARTHWORKS**					$ 221,162
3.1	Stripping topsoil (100mm)	13,838	m²	$ 3.50	$ 48,433	
3.2	Rock excavation	1	Item		$ 39,310	
3.3	Fill to road boxing	1,995	m³	$ 65.00	$ 129,675	
3.4	Excavation and Removal	125	m³	$ 30.00	$ 3,744	
4	**DRAINAGE, PIPES AND CULVERTS**					$ 418,995
4.1	Culvert Base Slab 380 thick + 300 wide edge down turn	209	m²	$ 400.00	$ 83,780	
4.2	150mm thick Class 2 CR under slab	209	m²	$ 15.00	$ 3,142	
4.3	2.1x1.2 Box culverts supply and lay	59	Lm	$ 2,000.00	$ 118,400	
4.4	2.1 Box culverts cover slabs supply and lay	30	Lm	$ 700.00	$ 20,720	
4.5	Backfill and compact Stabilised sand to top of culvert	36	m³	$ 350.00	$ 12,545	
4.6	Agg to culverts	118	Lm	$ 115.00	$ 13,616	
4.7	Construction of endwall Slab	168	m²	$ 400.00	$ 67,200	
4.8	Construction of endwall	92	m²	$ 650.00	$ 59,592	
4.9	Rock beaching at ends of culvert	400	m²	$ 100.00	$ 40,000	
5	**MISCELLANEOUS**					$ 62,500
5.1	Safety works under power lines(spotter)		weeks	$ 3,400.00	$ -	
5.2	Installation of crash barrier above culverts endwalls	50	Lm	$ 1,250.00	$ 62,500	
5.3	Guard Rail Transitions & anchor point	4	Item	$ 8,500.00	$ 34,000	
5.4	Ped fence to wingwalls	44	Lm	$ 155.00	$ 6,820	
5.5	Installation of crash fence	120	Lm	$ 200.00	$ 24,000	
	TOTAL A - C				$ 1,040,020	**$ 1,040,020**
D	**Contingency**					
	Contingency (20% of C)				20%	$ 208,004
	Total Estimate					$ 1,248,025
E	**PROJECT BUDGET**					
						$ 1,248,025

Notes: **Services**

1 Service relocation / alterations have not been allowed for in the estimate

Demolition

2 We have only allowed to demolish the items shown above

EARTHWORKS

3 Cut fill quantities will vary with design, to allow lifting of the road over the culvert
Allowance made for rock encountered for placing the culverts

Construction

4 Construction to take place aside existing road prior to road extension

5 Installation of culverts to be done prior or during road fill works

6 Regrading of creek not included

AUTHOR: Asiri Rajapakse
Date: 2/09/2015

REVIEWER:
Date: 2/09/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 7 **Pre-interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-02	IN-04	IN-05 (APA)	IN-06	IN-07	IN-08	TOTAL
A	Project and Program Management	$ 98,089.39	$ 83,717.60	$ 138,083.03	$ 106,001.97	$ 136,337.17	$ 138,887.33	$701,116.48
B	Design and Investigation	$ 179,503.58	$ 153,203.21	$ 252,691.94	$ 193,983.60	$ 249,497.01	$ 254,163.81	$1,283,043.16
C	Additional Items	$ 260,452.39	$ 266,236.86	$ 285,493.15	$ 290,296.91	$ 268,203.59	$ 277,587.23	$1,648,270.13
D	Construction	$ 2,229,304.25	$ 1,902,672.77	$ 3,138,250.64	$ 2,409,135.62	$ 3,098,571.96	$ 3,156,530.18	$15,934,465.41
	TOTAL A - D	**$ 2,767,349.60**	**$ 2,405,830.45**	**$ 3,814,518.75**	**$ 2,999,418.09**	**$ 3,752,609.73**	**$ 3,827,168.55**	**$19,566,895.17**
E	CONTINGENCY							
	Contingency (15% of D)	**$ 334,395.64**	**$ 285,400.92**	**$ 470,737.60**	**$ 361,370.34**	**$ 464,785.79**	**$ 473,479.53**	**$2,390,169.81**
F	PROJECT BUDGET							
	Total Estimate	**$ 3,101,745.24**	**$ 2,691,231.36**	**$ 4,285,256.35**	**$ 3,360,788.43**	**$ 4,217,395.53**	**$ 4,300,648.07**	**$21,957,064.99**

Notes:

1 **Cost does not include southern leg of intersection IN-2, IN-4, IN-5, IN-6**
2 **Site establishment -** Not included in pre-interim
3 **Soft spot rectification** - Taken as 20% of sub-base pavement
4 **Rock excavation** - Assume 50% of sub-base pavement
5 **Pavement** - Assume deep lift asphalt pavement
6 **Subsoil drains -** Assume same as kerb and channel
7 **Drainage** - Assume 375 DIA RCP
8 **Side entry pits** - Based on 50m intervals
9 **Light pole** - Based on 70m intervals
10 **Existing road** - Existing asphalt roads to be demolished as part of intersection works
11 **Substation** - No allowance for substations
12 **Tree planting** - Based on 80m intervals

AUTHOR: J.Ly
Date: 18/10/2016

REVIEWER: R.Henry
Date: 18/10/2016

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-02

PM %: 8.80%

18 October 2016
Version 7

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS QUANTITY	DCP WORKS AMOUNT	FUTURE REDUNDANT WORKS QUANTITY	FUTURE REDUNDANT WORKS AMOUNT
A	**Project and Program Management**					**$ 98,089.39**		**$ 73,583.10**		**$ 24,506.29**
	Project Management		3.00%	2.64%	$ 58,853.63			$ 44,149.86		$ 14,703.77
	Program Administration		2.00%	1.76%	$ 39,235.75			$ 29,433.24		$ 9,802.51
B	**Design and Investigation**					**$ 179,503.58**		**$ 134,657.07**		**$ 44,846.51**
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 23,541.45			$ 17,659.94		$ 5,881.51
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 23,541.45			$ 17,659.94		$ 5,881.51
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 83,375.98			$ 62,545.64		$ 20,830.34
	Construction Management		2.50%	2.20%	$ 49,044.69			$ 36,791.55		$ 12,253.14
C	**Additional Items**					**$ 260,452.39**		**$ 242,351.15**		**$ 18,101.23**
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 88,000.00				
2.1	Relocating Power Pole (HV)	3	No	$ 7,500.00	$ 22,500.00		3	$ 22,500.00		
2.2	Relocating communication pole		No	$ 3,500.00	$ -		-	$ -		
2.3	Telecom conduiting	260	m	$ 150.00	$ 39,000.00		260	$ 39,000.00		
2.4	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
2.5	Remove redundant telecom pole	1	No	$ 1,500.00	$ 1,500.00		1	$ 1,500.00		
3	**VicRoads**					$ 172,452.39				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 72,452.39	$ 72,452.39		1	$ 54,351.15	1	$ 18,101.23
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 2,229,304.25	**$ 2,229,304.25**		**$ 1,672,343.18**		**$ 556,961.07**
1	**PRELIMINARIES**					$ 40,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00		1	$ 30,000.00	1	$ 10,000.00
2	**DEMOLITION**					$ 44,000.00				
2.1	Trees	13	No	$ 500.00	$ 6,500.00		13	$ 6,500.00		
2.2	Demolition of existing Road	1	item	$ 37,500.00	$ 37,500.00		1	$ 37,500.00		
3	**EARTHWORKS**					$ 360,902.50				
3.1	Stripping topsoil (150mm)	8,350	m²	$ 6.00	$ 50,100.00		6,236	$ 37,417.50	2,114	$ 12,682.50
3.2	Cutting	1,548	m³	$ 15.00	$ 23,220.00		1,023	$ 15,349.68	525	$ 7,870.32
3.3	Filling and compact	610	m³	$ 12.00	$ 7,320.00		403	$ 4,838.92	207	$ 2,481.08
3.4	Cart off excess material	938	m³	$ 15.00	$ 14,070.00		620	$ 9,301.03	318	$ 4,768.97
3.5	Soft spot rectification (reclaimed FCR)	1,299	m³	$ 30.00	$ 38,955.00		833	$ 24,987.30	466	$ 13,967.70
3.6	Rock excavation & sub-surface remediation 450mm	3,246	m²	$ 70.00	$ 227,237.50		2,082	$ 145,759.25	1,164	$ 81,478.25
4	**PAVEMENT**					$ 1,050,267.50				
4.1	Deep lift asphalt 195 mm	5,885	m²	$ 105.00	$ 617,925.00		3,771	$ 395,981.25	2,114	$ 221,943.75
4.2	Sub-base course - 250 mm 3% CTCR	6,493	m²	$ 55.00	$ 357,087.50		4,165	$ 229,050.25	2,328	$ 128,037.25
4.3	Shoulder - full depth pavement	519	m²	$ 145.00	$ 75,255.00		268	$ 38,823.75	251	$ 36,431.25
5	**DRAINAGE**					$ 193,160.00				
5.1	Subsoil drains 100mm dia - screenings	675	Lm	$ 30.00	$ 20,250.00		360	$ 10,800.00	315	$ 9,450.00
5.2	375 RCP (class 2)	723	Lm	$ 170.00	$ 122,910.00		723	$ 122,910.00		
5.3	Side entry pits	20	No	$ 2,500.00	$ 50,000.00		20	$ 50,000.00		
6	**CONCRETE WORKS**					$ 76,240.00				
6.1	Kerb &channel	675	Lm	$ 50.00	$ 33,750.00		360	$ 18,000.00	315	$ 15,750.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	176	Lm	$ 130.00	$ 22,880.00		141	$ 18,330.00	35	$ 4,550.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	184	Lm	$ 65.00	$ 11,960.00		184	$ 11,960.00		
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00		6	$ 5,100.00		
6.5	10m concrete maintenance area end of all islands	30	m²	$ 85.00	$ 2,550.00				85	$ 2,550.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 118,000.00				
8.1	Light pole (1-way) and luminous lights	6	No	$ 8,000.00	$ 48,000.00		6	$ 48,000.00		
8.2	Light pole (2-way) and luminous lights	1	No	$ 9,000.00	$ 9,000.00		1	$ 9,000.00		
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00		4	$ 16,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00		1	$ 30,000.00		
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
9	**LANDSCAPING WORKS**					$ 14,734.25				
9.1	Topsoiling seeding	1,381	m²	$ 8.50	$ 11,734.25		1,381	$ 11,734.25		
9.2	Tree planting	12	No	$ 250.00	$ 3,000.00		12	$ 3,000.00		
10	**DELINEATION**					$ 30,000.00				
10.1	Signing	1	item	$ 10,000.00	$ 10,000.00		1	$ 10,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00		1	$ 15,000.00	1	$ 5,000.00
	TOTAL A - D				$ 2,767,349.60	**$ 2,767,349.60**		**$ 2,122,934.51**		**$ 644,415.09**
E	**Contingency**									
	Contingency (15% of D)				15%	$ 334,395.64		$ 250,851.48		$ 83,544.16
F	**PROJECT BUDGET**									
	Total Estimate					$ 3,101,745.24		$ 2,373,785.99		$ 727,959.25

NB: Cost split of Total Estimate	DCP %	77%
	Developer %	23%
Cost of southern leg works (not included in total estimate)	$	865,169.80

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 7**
Wollert PSP — **PM %:** 8.80%
IN-04

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS		FUTURE REDUNDANT WORKS	
							QUANTITY	AMOUNT	QUANTITY	AMOUNT
A	**Project and Program Management**					**$ 83,717.60**		**$ 67,978.67**		**$ 15,738.93**
	Project Management		3.00%	2.64%	$ 50,230.56			$ 40,787.20		$ 9,443.36
	Program Administration		2.00%	1.76%	$ 33,487.04			$ 27,191.47		$ 6,295.57
B	**Design and Investigation**					**$ 153,203.21**		**$ 124,400.97**		**$ 28,802.25**
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 20,092.22			$ 16,314.88		$ 3,777.34
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 20,092.22			$ 16,314.88		$ 3,777.34
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 71,159.96			$ 57,781.87		$ 13,378.09
	Construction Management		2.50%	2.20%	$ 41,858.80			$ 33,989.33		$ 7,869.47
C	**Additional Items**					**$ 266,236.86**		**$ 254,611.52**		**$ 11,625.35**
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 104,400.00				
2.1	Relocating Power Pole (HV)		No	$ 7,500.00	$ -					
2.2	Relocating communication pole	7	No	$ 3,500.00	$ 24,500.00		7	$ 24,500.00		
2.3	Relocating light pole		No	$ 3,000.00	$ -					
2.4	Telecom conduiting	366	m	$ 150.00	$ 54,900.00		366	$ 54,900.00		
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -					
3	**VicRoads**					$ 161,836.86				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 61,836.86	$ 61,836.86		1	$ 50,211.52	1	$ 11,625.35
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 1,902,672.77	**$ 1,902,672.77**		**$ 1,544,969.77**		**$ 357,703.00**
1	**PRELIMINARIES**					$ 40,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00		1	$ 32,400.00	1	$ 7,600.00
2	**DEMOLITION**					$ 42,000.00				
2.1	Trees		No	$ 500.00	$ -					
2.2	Demolition of existing Road	1	item	$ 42,000.00	$ 42,000.00		1	$ 42,000.00		
2.3	Demolition of existing fence									
3	**EARTHWORKS**					$ 287,942.77				
3.1	Stripping topsoil (150mm)	6,770	m^2	$ 6.00	$ 40,620.00		5,660	$ 33,960.00	1,110	$ 6,660.00
3.2	Cutting	1,019	m^3	$ 15.00	$ 15,277.66		819	$ 12,281.51	200	$ 2,996.15
3.3	Filling and compact	399	m^3	$ 12.00	$ 4,787.00		321	$ 3,848.21	78	$ 938.79
3.4	Cart off excess material	620	m^3	$ 15.00	$ 9,293.91		498	$ 7,471.25	122	$ 1,822.66
3.5	Soft spot rectification (reclaimed FCR)	1,063	m^3	$ 30.00	$ 31,897.20		817	$ 24,502.80	246	$ 7,394.40
3.6	Rock excavation & sub-surface remediation 450mm	2,658	m^2	$ 70.00	$ 186,067.00		2,042	$ 142,933.00	616	$ 43,134.00
4	**PAVEMENT**					$ 847,661.00				
4.1	Deep lift asphalt 195 mm	4,787	m^2	$ 105.00	$ 502,635.00		3,677	$ 386,085.00	1,110	$ 116,550.00
4.2	Sub-base course - 250 mm 3% CTCR	5,316	m^2	$ 55.00	$ 292,391.00		4,084	$ 224,609.00	1,232	$ 67,782.00
4.3	Shoulder - full depth pavement	363	m^2	$ 145.00	$ 52,635.00		-	$ -	363	$ 52,635.00
5	**DRAINAGE**					$ 182,900.00				
5.1	Subsoil drains 100mm dia - screenings	588	Lm	$ 30.00	$ 17,640.00		273	$ 8,190.00	315	$ 9,450.00
5.2	375 RCP (class 2)	678	Lm	$ 170.00	$ 115,260.00		678	$ 115,260.00		
5.3	Side entry pits	20	No	$ 2,500.00	$ 50,000.00		20	$ 50,000.00		
6	**CONCRETE WORKS**					$ 55,690.00				
6.1	Kerb &channel	588	Lm	$ 50.00	$ 29,400.00		273	$ 13,650.00	315	$ 15,750.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	146	Lm	$ 130.00	$ 18,980.00		-		146	$ 18,980.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -					
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00		6	$ 5,100.00		
6.5	10m concrete maintenance area end of all islands	26	m^2	$ 85.00	$ 2,210.00				26	$ 2,210.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 101,000.00				
8.1	Light pole (1-way) and luminous lights	5	No	$ 8,000.00	$ 40,000.00		5	$ 40,000.00		
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -					
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00		4	$ 16,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00		1	$ 30,000.00		
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
9	**LANDSCAPING WORKS**					$ 13,479.00				
9.1	Topsoiling seeding	1,174	m^2	$ 8.50	$ 9,979.00		1,174	$ 9,979.00		
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00		14	$ 3,500.00		
10	**DELINEATION**					$ 30,000.00				
10.1	Signing	1	item	$ 10,000.00	$ 10,000.00		1	$ 10,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00		1	$ 16,200.00	1	$ 3,800.00
	TOTAL A - D				$ 2,405,830.45	**$ 2,405,830.45**		**$ 1,991,960.92**		**$ 413,869.52**
E	**Contingency**									
	Contingency (15% of D)				15%	$ 285,400.92		$ 231,745.47		$ 53,655.45
F	**PROJECT BUDGET**									
	Total Estimate					$ 2,691,231.36		$ 2,223,706.39		$ 467,524.97

NB: Cost split of Total Estimate	DCP %	83%
	Developer %	17%
Cost of southern leg works (not included in total estimate)	$	753,600.80

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 7**
Wollert PSP — **PM %:** 8.80%
IN-05 (APA)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS		FUTURE REDUNDANT WORKS	
							QUANTITY	AMOUNT	QUANTITY	AMOUNT
A	**Project and Program Management**					**$ 138,083.03**		**$ 104,407.05**		**$ 33,675.98**
	Project Management		3.00%	2.64%	$ 82,849.82			$ 62,644.23		$ 20,205.59
	Program Administration		2.00%	1.76%	$ 55,233.21			$ 41,762.82		$ 13,470.39
B	**Design and Investigation**					**$ 252,691.94**		**$ 191,064.90**		**$ 61,627.04**
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 33,139.93			$ 25,057.69		$ 8,082.23
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 33,139.93			$ 25,057.69		$ 8,082.23
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 117,370.57			$ 88,745.99		$ 28,624.58
	Construction Management		2.50%	2.20%	$ 69,041.51			$ 52,203.53		$ 16,837.99
C	**Additional Items**					**$ 285,493.15**		**$ 260,618.84**		**$ 24,874.30**
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 83,500.00				
2.1	Relocating Power Pole (HV)	4	No	$ 7,500.00	$ 30,000.00		4	$ 30,000.00		
2.2	Relocating communication pole		No	$ 3,500.00	$ -		-	$ -		
2.3	Relocating light pole		No	$ 3,000.00	$ -		-	$ -		
2.4	Telecom conduiting	190	m	$ 150.00	$ 28,500.00		190	$ 28,500.00		
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -		-	$ -		
3	**VicRoads**					$ 201,993.15				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 101,993.15	$ 101,993.15		1	$ 77,118.84	1	$ 24,874.30
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 3,138,250.64	**$ 3,138,250.64**		**$ 2,372,887.53**		**$ 765,363.11**
1	**PRELIMINARIES**					$ 40,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00		1	$ 29,200.00	1	$ 10,800.00
2	**DEMOLITION**					$ 75,900.00				
2.1	Trees	7	No	$ 500.00	$ 3,500.00		7	$ 3,500.00		
2.2	Demolition of existing Road	1	item	$ 57,400.00	$ 57,400.00		1	$ 57,400.00		
2.3	Demolition of existing fence	1	item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
3	**EARTHWORKS**					$ 450,160.51				
3.1	Stripping topsoil (150mm)	11,800	m²	$ 6.00	$ 70,800.00		9,198	$ 55,188.00	2,602	$ 15,612.00
3.2	Cutting	1,591	m³	$ 15.00	$ 23,865.96		1,141	$ 17,114.57	450	$ 6,751.38
3.3	Filling and compact	623	m³	$ 12.00	$ 7,478.00		447	$ 5,362.57	176	$ 2,115.43
3.4	Cart off excess material	968	m³	$ 15.00	$ 14,518.46		694	$ 10,411.37	274	$ 4,107.09
3.5	Soft spot rectification (reclaimed FCR)	1,627	m³	$ 30.00	$ 48,804.60		1,031	$ 30,935.40	596	$ 17,869.20
3.6	Rock excavation & sub-surface remediation 450mm	4,067	m²	$ 70.00	$ 284,693.50		2,578	$ 180,456.50	1,489	$ 104,237.00
4	**PAVEMENT**					$ 1,411,785.50				
4.1	Deep lift asphalt 195 mm	7,478	m²	$ 105.00	$ 785,190.00		4,876	$ 511,980.00	2,602	$ 273,210.00
4.2	Sub-base course - 250 mm 3% CTCR	8,134	m²	$ 55.00	$ 447,375.50		5,156	$ 283,574.50	2,978	$ 163,801.00
4.3	Shoulder - full depth pavement	1,236	m²	$ 145.00	$ 179,220.00		600	$ 87,000.00	636	$ 92,220.00
5	**DRAINAGE**					$ 227,120.00				
5.1	Subsoil drains 100mm dia - screenings	729	Lm	$ 30.00	$ 21,870.00		53	$ 1,590.00	676	$ 20,280.00
5.2	375 RCP (class 2)	825	Lm	$ 170.00	$ 140,250.00		825	$ 140,250.00		
5.3	Side entry pits	26	No	$ 2,500.00	$ 65,000.00		26	$ 65,000.00		
6	**CONCRETE WORKS**					$ 84,220.00				
6.1	Kerb &channel	729	Lm	$ 50.00	$ 36,450.00		53	$ 2,650.00	676	$ 33,800.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	255	Lm	$ 130.00	$ 33,150.00		222	$ 28,860.00	33	$ 4,290.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -					
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00		6	$ 5,100.00		
6.5	10m concrete maintenance area end of all islands	112	m²	$ 85.00	$ 9,520.00				112	$ 9,520.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 145,000.00				
8.1	Light pole (1-way) and luminous lights	8	No	$ 8,000.00	$ 64,000.00		8	$ 64,000.00		
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -					
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00		4	$ 16,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 40,000.00	$ 40,000.00		1	$ 40,000.00		
8.6	Electrical connection	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
9	**LANDSCAPING WORKS**					$ 18,129.75				
9.1	Topsoiling seeding	1,604	m²	$ 8.50	$ 13,629.75		1,604	$ 13,629.75		
9.2	Tree planting	18	No	$ 250.00	$ 4,500.00		18	$ 4,500.00		
10	**DELINEATION**					$ 40,000.00				
10.1	Signing	1	item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 25,000.00	$ 25,000.00		1	$ 18,250.00	1	$ 6,750.00
11	**TRANSMISSION PIPELINE**					$ 343,935				
11.1	Clay excavation for transmission pipeline	347	m³	$ 45	$ 15,594		347	$ 15,594.20		
11.2	Hand excavation for rock around transimission pipeline (extra over allowance)	147	m	$ 1,050	$ 154,350		147	$ 154,350.00		
11.3	Wrap for transmission pipeline	147	m	$ 500	$ 73,500		147	$ 73,500.00		
11.4	Backfill stabilisation sand for transmission pipeline	347	m³	$ 150	$ 51,981		347	$ 51,980.67		
11.5	Transmission pipeline slab protection 200mm	294	m²	$ 165	$ 48,510		294	$ 48,510.00		
	TOTAL A - D				$ 3,814,518.75	**$ 3,814,518.75**		**$ 2,928,978.33**		**$ 885,540.42**
E	**Contingency**									
	Contingency (15% of D)				15%	$ 470,737.60		$ 355,933.13		$ 114,804.47
F	**PROJECT BUDGET**									
	Total Estimate					$ 4,285,256.35		$ 3,284,911.46		$ 1,000,344.89

NB: Cost split of Total Estimate	DCP %	77%
	Developer %	23%
Cost of southern leg works (not included in total estimate)	$	207,655.14

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 7**
Wollert PSP — **PM %:** 8.80%
IN-06

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS		FUTURE REDUNDANT WORKS	
							QUANTITY	AMOUNT	QUANTITY	AMOUNT
A	**Project and Program Management**					**$ 106,001.97**		**$ 91,143.93**		**$ 14,858.04**
	Project Management		3.00%	2.64%	$ 63,601.18			$ 54,686.36		$ 8,914.82
	Program Administration		2.00%	1.76%	$ 42,400.79			$ 36,457.57		$ 5,943.22
B	**Design and Investigation**					**$ 193,983.60**		**$ 166,793.39**		**$ 27,190.21**
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 25,440.47			$ 21,874.54		$ 3,565.93
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 25,440.47			$ 21,874.54		$ 3,565.93
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 90,101.67			$ 77,472.34		$ 12,629.33
	Construction Management		2.50%	2.20%	$ 53,000.98			$ 45,571.96		$ 7,429.02
C	**Additional Items**					**$ 290,296.91**		**$ 279,322.22**		**$ 10,974.69**
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 112,000.00				
2.1	Relocating Power Pole (HV)	4	No	$ 7,500.00	$ 30,000.00		4	$ 30,000.00		
2.2	Relocating communication pole	6	No	$ 3,500.00	$ 21,000.00		6	$ 21,000.00		
2.3	Relocating light pole		No	$ 3,000.00	$ -		-	$ -		
2.4	Telecom conduiting	240	m	$ 150.00	$ 36,000.00		240	$ 36,000.00		
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -		-	$ -		
3	**VicRoads**					$ 178,296.91				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 78,296.91	$ 78,296.91		1	$ 67,322.22	1	$ 10,974.69
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 2,409,135.62	**$ 2,409,135.62**		**$ 2,071,452.94**		**$ 337,682.68**
1	**PRELIMINARIES**					$ 45,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 45,000.00	$ 45,000.00		1	$ 38,700.00	1	$ 6,300.00
2	**DEMOLITION**					$ 85,000.00				
2.1	Trees	-	No	$ 500.00	$ -		-	$ -		
2.2	Demolition of existing Road	1	item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
2.3	Demolition of existing fence	1	item	$ 20,000.00	$ 20,000.00		1	$ 20,000.00		
3	**EARTHWORKS**					$ 392,756.87				
3.1	Stripping topsoil (150mm)	10,810	m^2	$ 6.00	$ 64,860.00		9,881	$ 59,286.00	929	$ 5,574.00
3.2	Cutting	1,340	m^3	$ 15.00	$ 20,106.38		1,214	$ 18,216.00	126	$ 1,890.38
3.3	Filling and compact	525	m^3	$ 12.00	$ 6,300.00		476	$ 5,707.68	49	$ 592.32
3.4	Cart off excess material	815	m^3	$ 15.00	$ 12,231.38		739	$ 11,081.40	77	$ 1,149.98
3.5	Soft spot rectification (reclaimed FCR)	1,411	m^3	$ 30.00	$ 42,330.60		1,197	$ 35,919.60	214	$ 6,411.00
3.6	Rock excavation & sub-surface remediation 450mm	3,528	m^2	$ 70.00	$ 246,928.50		2,993	$ 209,531.00	534	$ 37,397.50
4	**PAVEMENT**					$ 1,145,665.50				
4.1	Deep lift asphalt 195 mm	6,300	m^2	$ 105.00	$ 661,500.00		5,371	$ 563,955.00	929	$ 97,545.00
4.2	Sub-base course - 250 mm 3% CTCR	7,055	m^2	$ 55.00	$ 388,030.50		5,987	$ 329,263.00	1,069	$ 58,767.50
4.3	Shoulder - full depth pavement	663	m^2	$ 145.00	$ 96,135.00		156	$ 22,620.00	507	$ 73,515.00
5	**DRAINAGE**					$ 201,280.00				
5.1	Subsoil drains 100mm dia - screenings	839	Lm	$ 30.00	$ 25,170.00		456	$ 13,680.00	383	$ 11,490.00
5.2	375 RCP (class 2)	683	Lm	$ 170.00	$ 116,110.00		683	$ 116,110.00		
5.3	Side entry pits	24	No	$ 2,500.00	$ 60,000.00		24	$ 60,000.00		
6	**CONCRETE WORKS**					$ 62,740.00				
6.1	Kerb &channel	839	Lm	$ 50.00	$ 41,950.00		456	$ 22,800.00	383	$ 19,150.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	88	Lm	$ 130.00	$ 11,440.00		53	$ 6,890.00	35	$ 4,550.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -					
6.4	Laybacks and tactile pavers	8	No	$ 850.00	$ 6,800.00		8	$ 6,800.00		
6.5	10m concrete maintenance area end of all islands	30	m^2	$ 85.00	$ 2,550.00				30	$ 2,550.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 127,000.00				
8.1	Light pole (1-way) and luminous lights	7	No	$ 8,000.00	$ 56,000.00		6	$ 48,000.00	1	$ 8,000.00
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -					
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00		4	$ 16,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00		1	$ 35,000.00		
8.6	Electrical connection	1	Item	$ 20,000.00	$ 20,000.00		1	$ 20,000.00		
9	**LANDSCAPING WORKS**					$ 15,693.25				
9.1	Topsoiling seeding	1,435	m^2	$ 8.50	$ 12,193.25		1,435	$ 12,193.25		
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00		14	$ 3,500.00		
10	**DELINEATION**					$ 32,000.00				
10.1	Signing	1	item	$ 12,000.00	$ 12,000.00		1	$ 12,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00		1	$ 17,200.00	1	$ 2,800.00
	TOTAL A - D				$ 2,999,418.09	**$ 2,999,418.09**		**$ 2,608,712.48**		**$ 390,705.61**
E	**Contingency**									
	Contingency (15% of D)				15%	$ 361,370.34		$ 310,717.94		$ 50,652.40
F	**PROJECT BUDGET**									
	Total Estimate					$ 3,360,788.43		$ 2,919,430.42		$ 441,358.01

NB: Cost split of Total Estimate	DCP %	87%
	Developer %	13%
Cost of southern leg works (not included in total estimate)	$	443,238.99

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-07

PM %: 8.80%

18 October 2016
Version 7

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS		FUTURE REDUNDANT WORKS	
							QUANTITY	AMOUNT	QUANTITY	AMOUNT
A	**Project and Program Management**					$ 136,337.17		$ 117,888.41		$ 18,448.76
	Project Management		3.00%	2.64%	$ 81,802.30			$ 70,733.05		$ 11,069.25
	Program Administration		2.00%	1.76%	$ 54,534.87			$ 47,155.36		$ 7,379.50
B	**Design and Investigation**					$ 249,497.01		$ 215,735.79		$ 33,761.22
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 32,720.92			$ 28,293.22		$ 4,427.70
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 32,720.92			$ 28,293.22		$ 4,427.70
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 115,886.59			$ 100,205.15		$ 15,681.44
	Construction Management		2.50%	2.20%	$ 68,168.58			$ 58,944.21		$ 9,224.38
C	**Additional Items**					$ 268,203.59		$ 254,576.67		$ 13,626.92
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 67,500.00				
2.1	Relocating Power Pole (HV)	9	No	$ 7,500.00	$ 67,500.00		9	$ 67,500.00		
2.2	Relocating communication pole		No	$ 3,500.00	$ -		-	$ -		
2.3	Relocating light pole		No	$ 3,000.00	$ -		-	$ -		
2.4	Telecom conduiting		m	$ 150.00	$ -		-	$ -		
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -		-	$ -		
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -		-	$ -		
3	**VicRoads**					$ 200,703.59				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 100,703.59	$ 100,703.59		1	$ 87,076.67	1	$ 13,626.92
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 3,098,571.96	$ 3,098,571.96		$ 2,679,282.07		$ 419,289.90
1	**PRELIMINARIES**					$ 40,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00		1	$ 34,400.00	1	$ 5,600.00
2	**DEMOLITION**					$ 155,000.00				
2.1	Trees	30	No	$ 500.00	$ 15,000.00		30	$ 15,000.00		
2.2	Demolition of existing Road	1	item	$ 70,000.00	$ 70,000.00		1	$ 70,000.00		
2.3	Demolition of existing fence	1	item	$ 20,000.00	$ 20,000.00		1	$ 20,000.00		
2.4	Demolition of existing building	1	item	$ 50,000.00	$ 50,000.00		1	$ 50,000.00		
3	**EARTHWORKS**					$ 515,115.21				
3.1	Stripping topsoil (150mm)	13,000	m²	$ 6.00	$ 78,000.00		11,778	$ 70,668.00	1,222	$ 7,332.00
3.2	Cutting	2,263	m³	$ 15.00	$ 33,942.86		2,028	$ 30,421.19	235	$ 3,521.67
3.3	Filling and compact	1,584	m³	$ 12.00	$ 19,008.00		1,420	$ 17,035.87	164	$ 1,972.13
3.4	Cart off excess material	679	m³	$ 15.00	$ 10,182.86		608	$ 9,126.36	70	$ 1,056.50
3.5	Soft spot rectification (reclaimed FCR)	1,824	m³	$ 30.00	$ 54,729.00		1,548	$ 46,430.40	277	$ 8,298.60
3.6	Rock excavation & sub-surface remediation 450mm	4,561	m²	$ 70.00	$ 319,252.50		3,869	$ 270,844.00	692	$ 48,408.50
4	**PAVEMENT**					$ 1,442,902.50				
4.1	Deep lift asphalt 195 mm	7,920	m²	$ 105.00	$ 831,600.00		6,698	$ 703,290.00	1,222	$ 128,310.00
4.2	Sub-base course - 250 mm 3% CTCR	9,122	m²	$ 55.00	$ 501,682.50		7,738	$ 425,612.00	1,383	$ 76,070.50
4.3	Shoulder - full depth pavement	756	m²	$ 145.00	$ 109,620.00		132	$ 19,140.00	624	$ 90,480.00
5	**DRAINAGE**					$ 249,380.00				
5.1	Subsoil drains 100mm dia - screenings	1,335	Lm	$ 30.00	$ 40,050.00		1,032	$ 30,960.00	303	$ 9,090.00
5.2	375 RCP (class 2)	849	Lm	$ 170.00	$ 144,330.00		849	$ 144,330.00		
5.3	Side entry pits	26	No	$ 2,500.00	$ 65,000.00		26	$ 65,000.00		
6	**CONCRETE WORKS**					$ 164,190.00				
6.1	Kerb &channel	1,335	Lm	$ 50.00	$ 66,750.00		1,032	$ 51,600.00	303	$ 15,150.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	439	Lm	$ 130.00	$ 57,070.00		424	$ 55,120.00	15	$ 1,950.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	370	Lm	$ 65.00	$ 24,050.00		370	$ 24,050.00		
6.4	Laybacks and tactile pavers	10	No	$ 850.00	$ 8,500.00		10	$ 8,500.00		
6.5	10m concrete maintenance area end of all islands	92	m²	$ 85.00	$ 7,820.00		62	$ 5,270.00	30	$ 2,550.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 161,000.00				
8.1	Light pole (1-way) and luminous lights	8	No	$ 8,000.00	$ 64,000.00		6	$ 48,000.00	2	$ 16,000.00
8.2	Light pole (2-way) and luminous lights	2	No	$ 9,000.00	$ 18,000.00		2	$ 18,000.00		
8.3	JUP lighting single	6	No	$ 4,000.00	$ 24,000.00		6	$ 24,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00		1	$ 35,000.00		
8.6	Electrical connection	1	Item	$ 20,000.00	$ 20,000.00		1	$ 20,000.00		
9	**LANDSCAPING WORKS**					$ 28,984.25				
9.1	Topsoiling seeding	2,881	m²	$ 8.50	$ 24,484.25		2,881	$ 24,484.25		
9.2	Tree planting	18	No	$ 250.00	$ 4,500.00		18	$ 4,500.00		
10	**DELINEATION**					$ 40,000.00				
10.1	Signing	1	item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 25,000.00	$ 25,000.00		1	$ 21,500.00	1	$ 3,500.00
	TOTAL A - D				$ 3,752,609.73	$ 3,752,609.73		$ 3,267,482.94		$ 485,126.80
E	**Contingency**									
	Contingency (15% of D)				15%	$ 464,785.79		$ 401,892.31		$ 62,893.48
F	PROJECT BUDGET									
	Total Estimate					$ 4,217,395.53		$ 3,669,375.25		$ 548,020.28

NB: Cost split of Total Estimate		
	DCP %	87%
	Developer %	13%

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 7**
Wollert PSP **PM %:** 8.80%
IN-08

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL	DCP WORKS		FUTURE REDUNDANT WORKS	
							QUANTITY	AMOUNT	QUANTITY	AMOUNT
A	**Project and Program Management**					**$ 138,887.33**		**$ 120,194.28**		**$ 18,693.05**
	Project Management		3.00%	2.64%	$ 83,332.40			$ 72,116.57		$ 11,215.83
	Program Administration		2.00%	1.76%	$ 55,554.93			$ 48,077.71		$ 7,477.22
B	**Design and Investigation**					**$ 254,163.81**		**$ 219,955.53**		**$ 34,208.28**
	Traffic Investigations			0.00%	$ -					
	Cadastral and Engineering Survey		1.20%	1.06%	$ 33,332.96			$ 28,846.63		$ 4,486.33
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.06%	$ 33,332.96			$ 28,846.63		$ 4,486.33
	Environmental Investigations			0.00%	$ -			$ -		$ -
	Landscape Design			0.00%	$ -			$ -		$ -
	Preliminary and Final Design		4.25%	3.74%	$ 118,054.23			$ 102,165.13		$ 15,889.09
	Construction Management		2.50%	2.20%	$ 69,443.66			$ 60,097.14		$ 9,346.53
C	**Additional Items**					**$ 277,587.23**		**$ 263,779.86**		**$ 13,807.37**
1	**SITE ESTABLISHMENT**	N/A	Item							
2	**SERVICE RELOCATION**					$ 75,000.00				
2.1	Relocating Power Pole (HV)	10	No	$ 7,500.00	$ 75,000.00		10	$ 75,000.00		
2.2	Relocating communication pole		No	$ 3,500.00	$ -		-	$ -		
2.3	Relocating light pole		No	$ 3,000.00	$ -		-	$ -		
2.4	Telecom conduiting		m	$ 150.00	$ -		-	$ -		
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -		-	$ -		
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -		-	$ -		
3	**VicRoads**					$ 202,587.23				
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 102,587.23	$ 102,587.23		1	$ 88,779.86	1	$ 13,807.37
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00		1	$ 100,000.00		
D	**Construction**				$ 3,156,530.18	**$ 3,156,530.18**		**$ 2,731,688.09**		**$ 424,842.09**
1	**PRELIMINARIES**					$ 40,000.00				
1.1	Site management & supervision including QA	N/A	weeks							
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00		1	$ 34,800.00	1	$ 5,200.00
2	**DEMOLITION**					$ 286,780.00				
2.1	Trees	80	No	$ 500.00	$ 40,000.00		80	$ 40,000.00		
2.2	Demolition of existing Road	1	item	$ 66,780.00	$ 66,780.00		1	$ 66,780.00		
2.3	Demolition of existing fence	1	item	$ 30,000.00	$ 30,000.00		1	$ 30,000.00		
2.4	Demolition of existing building	1	item	$ 150,000.00	$ 150,000.00		1	$ 150,000.00		
3	**EARTHWORKS**					$ 498,017.93				
3.1	Stripping topsoil (150mm)	12,230	m^2	$ 6.00	$ 73,380.00		10,877	$ 65,262.00	1,353	$ 8,118.00
3.2	Cutting	2,208	m^3	$ 15.00	$ 33,115.71		1,933	$ 28,996.42	275	$ 4,119.29
3.3	Filling and compact	1,545	m^3	$ 12.00	$ 18,544.80		1,353	$ 16,238.00	192	$ 2,306.80
3.4	Cart off excess material	662	m^3	$ 15.00	$ 9,934.71		580	$ 8,698.93	82	$ 1,235.79
3.5	Soft spot rectification (reclaimed FCR)	1,771	m^3	$ 30.00	$ 53,128.20		1,468	$ 44,049.00	303	$ 9,079.20
3.6	Rock excavation & sub-surface remediation 450mm	4,427	m^2	$ 70.00	$ 309,914.50		3,671	$ 256,952.50	757	$ 52,962.00
4	**PAVEMENT**					$ 1,409,268.50				
4.1	Deep lift asphalt 195 mm	7,727	m^2	$ 105.00	$ 811,335.00		6,374	$ 669,270.00	1,353	$ 142,065.00
4.2	Sub-base course - 250 mm 3% CTCR	8,855	m^2	$ 55.00	$ 487,008.50		7,342	$ 403,782.50	1,513	$ 83,226.00
4.3	Shoulder - full depth pavement	765	m^2	$ 145.00	$ 110,925.00		273	$ 39,585.00	492	$ 71,340.00
5	**DRAINAGE**					$ 251,070.00				
5.1	Subsoil drains 100mm dia - screenings	1,253	Lm	$ 30.00	$ 37,590.00		985	$ 29,550.00	268	$ 8,040.00
5.2	375 RCP (class 2)	844	Lm	$ 170.00	$ 143,480.00		844	$ 143,480.00		
5.3	Side entry pits	28	No	$ 2,500.00	$ 70,000.00		28	$ 70,000.00		
6	**CONCRETE WORKS**					$ 139,315.00				
6.1	Kerb &channel	1,253	Lm	$ 50.00	$ 62,650.00		985	$ 49,250.00	268	$ 13,400.00
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	359	Lm	$ 130.00	$ 46,670.00		344	$ 44,720.00	15	$ 1,950.00
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	264	Lm	$ 65.00	$ 17,160.00		264	$ 17,160.00		
6.4	Laybacks and tactile pavers	8	No	$ 850.00	$ 6,800.00		8	$ 6,800.00		
6.5	10m concrete maintenance area end of all islands	71	m^2	$ 85.00	$ 6,035.00		41	$ 3,485.00	30	$ 2,550.00
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00				
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00		1	$ 27,500.00		
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00		1	$ 28,000.00		
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00		1	$ 65,000.00		
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00		1	$ 25,000.00		
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00		1	$ 82,500.00		
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00		1	$ 48,000.00		
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00		1	$ 11,000.00		
8	**POWER & LIGHTING**					$ 163,000.00				
8.1	Light pole (1-way) and luminous lights	11	No	$ 8,000.00	$ 88,000.00		9	$ 72,000.00	2	$ 16,000.00
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -		-	$ -		
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00		5	$ 20,000.00		
8.4	JUP lighting dual		No	$ 5,000.00	$ -					
8.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00		1	$ 35,000.00		
8.6	Electrical connection	1	Item	$ 20,000.00	$ 20,000.00		1	$ 20,000.00		
9	**LANDSCAPING WORKS**					$ 27,078.75				
9.1	Topsoiling seeding	2,598	m^2	$ 8.50	$ 22,078.75		2,598	$ 22,078.75		
9.2	Tree planting	20	No	$ 250.00	$ 5,000.00		20	$ 5,000.00		
10	**DELINEATION**					$ 40,000.00				
10.1	Signing	1	item	$ 15,000.00	$ 15,000.00		1	$ 15,000.00		
10.2	Linemarking (Thermoplastic)	1	item	$ 25,000.00	$ 25,000.00		1	$ 21,750.00	1	$ 3,250.00
	TOTAL A - D				$ 3,827,168.55	**$ 3,827,168.55**		**$ 3,335,617.76**		**$ 491,550.79**
E	**Contingency**									
	Contingency (15% of D)				15%	$ 473,479.53		$ 409,753.21		$ 63,726.31
F	**PROJECT BUDGET**									
	Total Estimate					$ 4,300,648.07		$ 3,745,370.97		$ 555,277.10

NB: Cost split of Total Estimate	DCP %	87%
	Developer %	13%

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
26 October 2016
Version 6 **Interim Intersection (Addition to Pre-interim) Project Cost**

ITEM	DESCRIPTION	IN-2	IN-4	IN-5	IN-6	IN-7	IN-8	TOTAL
A	Project and Program Management	$ 75,267.66	$ 82,869.88	$ 155,931.45	$ 77,124.65	$ 77,406.51	$ 91,023.43	$ 559,623.58
B	Design and Investigation	$ -	$ -	$ -	$ -	$ -	$ -	$ -
C	Additional Items	$ 137,361.14	$ 131,395.87	$ 265,274.05	$ 138,287.89	$ 138,656.23	$ 156,451.07	$ 967,426.26
D	Construction	$ 1,710,628.60	$ 1,883,406.45	$ 3,543,896.60	$ 1,752,832.90	$ 1,759,238.80	$ 2,068,714.30	**$ 12,718,717.65**
	TOTAL A - D	**$ 1,923,257.40**	**$ 2,097,672.20**	**$ 3,965,102.10**	**$ 1,968,245.44**	**$ 1,975,301.54**	**$ 2,316,188.80**	**$ 14,245,767.49**
E	**CONTINGENCY**							
	Contingency (15% of D)	**$ 256,594.29**	**$ 282,510.97**	**$ 531,584.49**	**$ 262,924.94**	**$ 263,885.82**	**$ 310,307.15**	**$ 1,907,807.65**
F	**PROJECT BUDGET**							
	Total Estimate	**$ 2,179,851.69**	**$ 2,380,183.17**	**$ 4,496,686.59**	**$ 2,231,170.37**	**$ 2,239,187.36**	**$ 2,626,495.95**	**$ 16,153,575.14**

Notes:

1 **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
1 **Design cost -** Not included in interim
2 **Site establishment** - Taken as 2.5% of construction cost
3 **Soft spot rectification** - Taken as 20% of sub-base pavement
4 **Rock excavation** - Assume 50% of sub-base pavement
5 **Pavement** - Assume deep lift asphalt pavement
6 **Subsoil drains -** Assume same as kerb and channel
7 **Drainage** - Assume 375 DIA RCP
8 **Side entry pits** - Based on 50m intervals
9 **Light pole** - Based on 70m intervals
10 **Existing road** - Existing asphalt roads to be demolished as part of intersection works
11 **Substation** - No allowance for substations
12 **Tree planting** - Based on 80m intervals

AUTHOR: J.Ly
Date: 26/10/2016

REVIEWER: R.Henry
Date: 26/10/2016

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **26 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-02

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 75,267.66**
	Project Management		3.00%	2.64%	$ 45,160.60	
	Program Administration		2.00%	1.76%	$ 30,107.06	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 137,361.14**
1	**SITE ESTABLISHMENT**	1	Item	$ 42,765.72	$ 42,765.72	$ 42,765.72
2	**SERVICE RELOCATION**					$ 39,000.00
2.1	Telecom conduiting	260	m	$ 150.00	$ 39,000.00	
3	**VicRoads**					$ 55,595.43
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 55,595.43	$ 55,595.43	
D	**Construction**				$ 1,710,628.60	**$ 1,710,628.60**
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 180,815.00
2.1	Trees	1	No	$ 500.00	$ 500.00	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	2,365	m²	$ 55.00	$ 130,075.00	
2.3	Breakout of existing kerb & channel	315	Lm	$ 45.00	$ 14,175.00	
2.4	Demolition of existing shared pathway (3.0m wide)	35	Lm	$ 55.00	$ 1,925.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)	-	Lm	$ 55.00	$ -	
2.6	Sawcutting of existing pavement to match new pavement	457	Lm	$ 20.00	$ 9,140.00	
2.7	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 248,982.60
3.1	Stripping topsoil (150mm)	9,910	m²	$ 6.00	$ 59,460.00	
3.2	Cutting	1,100	m³	$ 15.00	$ 16,500.00	
3.3	Filling and compact	847	m³	$ 12.00	$ 10,164.00	
3.4	Cart off excess material	253	m³	$ 15.00	$ 3,795.00	
3.5	Soft spot rectification (reclaimed FCR)	776	m³	$ 30.00	$ 23,277.60	
3.6	Rock excavation & sub-surface remediation 450mm	1,940	m²	$ 70.00	$ 135,786.00	
4	**PAVEMENT**					$ 642,828.00
4.1	Deep lift asphalt 195 mm	3,336	m²	$ 105.00	$ 350,280.00	
4.2	Sub-base course - 250 mm 3% CTCR	3,880	m²	$ 55.00	$ 213,378.00	
4.3	Shoulder - full depth pavement	546	m²	$ 145.00	$ 79,170.00	
5	**DRAINAGE**					$ 113,770.00
5.1	Subsoil drains 100mm dia - screenings	1,220	Lm	$ 30.00	$ 36,600.00	
5.2	375 RCP (class 2)	201	Lm	$ 170.00	$ 34,170.00	
5.3	Side entry pits	6	No	$ 2,500.00	$ 15,000.00	
5.4	Relocate side entry pits	8	No	$ 3,500.00	$ 28,000.00	
6	**CONCRETE WORKS**					$ 212,970.00
6.1	Kerb & channel	1,220	Lm	$ 50.00	$ 61,000.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	848	Lm	$ 130.00	$ 110,240.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	200	Lm	$ 65.00	$ 13,000.00	
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00	
6.5	10m concrete maintenance area end of all islands	278	m²	$ 85.00	$ 23,630.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 28,000.00
8.1	Light pole (1-way) and luminous lights	-	No	$ 8,000.00	$ -	
8.2	Light pole (2-way) and luminous lights	2	No	$ 9,000.00	$ 18,000.00	
8.3	JUP lighting single	-	No	$ 4,000.00	$ -	
8.4	Cabling, conduits and pits	1	Item	$ 5,000.00	$ 5,000.00	
8.5	Electrical connection	1	Item	$ 5,000.00	$ 5,000.00	
9	**LANDSCAPING WORKS**					$ 24,263.00
9.1	Topsoiling seeding	2,678	m²	$ 8.50	$ 22,763.00	
9.2	Tree planting	6	No	$ 250.00	$ 1,500.00	
10	**DELINEATION**					$ 20,000.00
10.1	Signing	1	item	$ 5,000.00	$ 5,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 15,000.00	$ 15,000.00	
	TOTAL A - D				$ 1,923,257.40	**$ 1,923,257.40**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 256,594.29
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,179,851.69

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **26 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-04

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 82,869.88**
	Project Management		3.00%	2.64%	$ 49,721.93	
	Program Administration		2.00%	1.76%	$ 33,147.95	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 131,395.87**
1	**SITE ESTABLISHMENT**	1	Item	$ 47,085.16	$ 47,085.16	$ 47,085.16
2	**SERVICE RELOCATION**					$ 23,100.00
2.1	Telecom conduiting	154	m	$ 150.00	$ 23,100.00	
3	**VicRoads**					$ 61,210.71
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 61,210.71	$ 61,210.71	
D	**Construction**				$ 1,883,406.45	**$ 1,883,406.45**
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 184,140.00
2.1	Trees	85	No	$ 500.00	$ 42,500.00	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	1,473	m²	$ 55.00	$ 81,015.00	
2.3	Breakout of existing kerb & channel	315	Lm	$ 45.00	$ 14,175.00	
2.4	Demolition of existing shared pathway (3.0m wide)	166	Lm	$ 55.00	$ 9,130.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)		Lm	$ 55.00	$ -	
2.6	Sawcutting of existing pavement to match new pavement	616	Lm	$ 20.00	$ 12,320.00	
2.7	Demolition of existing concrete island		m²	$ 45.00	$ -	
2.8	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 269,593.70
3.1	Stripping topsoil (150mm)	10,475	m²	$ 6.00	$ 62,850.00	
3.2	Cutting	1,382	m³	$ 15.00	$ 20,730.00	
3.3	Filling and compact	921	m³	$ 12.00	$ 11,052.00	
3.4	Cart off excess material	461	m³	$ 15.00	$ 6,915.00	
3.5	Soft spot rectification (reclaimed FCR)	820	m³	$ 30.00	$ 24,592.20	
3.6	Rock excavation & sub-surface remediation 450mm	2,049	m²	$ 70.00	$ 143,454.50	
4	**PAVEMENT**					$ 696,653.50
4.1	Deep lift asphalt 195 mm	3,709	m²	$ 105.00	$ 389,445.00	
4.2	Sub-base course - 250 mm 3% CTCR	4,099	m²	$ 55.00	$ 225,428.50	
4.3	Shoulder - full depth pavement	564	m²	$ 145.00	$ 81,780.00	
5	**DRAINAGE**					$ 131,910.00
5.1	Subsoil drains 100mm dia - screenings	1,343	Lm	$ 30.00	$ 40,290.00	
5.2	375 RCP (class 2)	286	Lm	$ 170.00	$ 48,620.00	
5.3	Side entry pits	6	No	$ 2,500.00	$ 15,000.00	
5.4	Relocate side entry pits	8	No	$ 3,500.00	$ 28,000.00	
6	**CONCRETE WORKS**					$ 244,595.00
6.1	Kerb & channel	1,343	Lm	$ 50.00	$ 67,150.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,046	Lm	$ 130.00	$ 135,980.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	175	Lm	$ 65.00	$ 11,375.00	
6.4	Laybacks and tactile pavers	4	No	$ 850.00	$ 3,400.00	
6.5	Concrete island infill		m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	314	m²	$ 85.00	$ 26,690.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 67,000.00
8.1	Light pole (1-way) and luminous lights	2	No	$ 8,000.00	$ 16,000.00	
8.2	Light pole (2-way) and luminous lights	3	No	$ 9,000.00	$ 27,000.00	
8.3	JUP lighting single	1	No	$ 4,000.00	$ 4,000.00	
8.4	Cabling, conduits and pits	1	Item	$ 10,000.00	$ 10,000.00	
8.5	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
9	**LANDSCAPING WORKS**					$ 27,514.25
9.1	Topsoiling seeding	3,061	m²	$ 8.50	$ 26,014.25	
9.2	Tree planting	6	No	$ 250.00	$ 1,500.00	
10	**DELINEATION**					$ 23,000.00
10.1	Signing	1	item	$ 8,000.00	$ 8,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 15,000.00	$ 15,000.00	
	TOTAL A - D				$ 2,097,672.20	**$ 2,097,672.20**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 282,510.97
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,380,183.17

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **26 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-05

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 155,931.45**
	Project Management		3.00%	2.64%	$ 93,558.87	
	Program Administration		2.00%	1.76%	$ 62,372.58	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 265,274.05**
1	**SITE ESTABLISHMENT**	1	Item	$ 88,597.42	$ 88,597.42	$ 88,597.42
2	**SERVICE RELOCATION**					$ 61,500.00
2.1	Telecom conduiting	410	m	$ 150.00	$ 61,500.00	
3	**VicRoads**					$ 115,176.64
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 115,176.64	$ 115,176.64	
D	**Construction**				$ 3,543,896.60	**$ 3,543,896.60**
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 340,280.00
2.1	Trees	35	No	$ 500.00	$ 17,500.00	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	4,029	m²	$ 55.00	$ 221,595.00	
2.3	Breakout of existing kerb & channel	1,001	Lm	$ 45.00	$ 45,045.00	
2.4	Demolition of existing shared pathway (3.0m wide)	156	Lm	$ 55.00	$ 8,580.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)	20	Lm	$ 55.00	$ 1,100.00	
2.6	Sawcutting of existing pavement to match new pavement	821	Lm	$ 20.00	$ 16,420.00	
2.7	Demolition of existing concrete island	112	m²	$ 45.00	$ 5,040.00	
2.8	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 621,121.10
3.1	Stripping topsoil (150mm)	23,670	m²	$ 6.00	$ 142,020.00	
3.2	Cutting	2,860	m³	$ 15.00	$ 42,900.00	
3.3	Filling and compact	1,823	m³	$ 12.00	$ 21,876.00	
3.4	Cart off excess material	1,037	m³	$ 15.00	$ 15,555.00	
3.5	Soft spot rectification (reclaimed FCR)	1,945	m³	$ 30.00	$ 58,356.60	
3.6	Rock excavation & sub-surface remediation 450mm	4,863	m²	$ 70.00	$ 340,413.50	
4	**PAVEMENT**					$ 1,498,055.50
4.1	Deep lift asphalt 195 mm	7,909	m²	$ 105.00	$ 830,445.00	
4.2	Sub-base course - 250 mm 3% CTCR	9,726	m²	$ 55.00	$ 534,935.50	
4.3	Shoulder - full depth pavement	915	m²	$ 145.00	$ 132,675.00	
5	**DRAINAGE**					$ 255,010.00
5.1	Subsoil drains 100mm dia - screenings	2,562	Lm	$ 30.00	$ 76,860.00	
5.2	375 RCP (class 2)	595	Lm	$ 170.00	$ 101,150.00	
5.3	Side entry pits	14	No	$ 2,500.00	$ 35,000.00	
5.4	Relocate side entry pits	12	No	$ 3,500.00	$ 42,000.00	
6	**CONCRETE WORKS**					$ 395,415.00
6.1	Kerb & channel	2,562	Lm	$ 50.00	$ 128,100.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,747	Lm	$ 130.00	$ 227,110.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -	
6.4	Laybacks and tactile pavers	10	No	$ 850.00	$ 8,500.00	
6.5	Concrete island infill		m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	373	m²	$ 85.00	$ 31,705.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 133,000.00
8.1	Light pole (1-way) and luminous lights	9	No	$ 8,000.00	$ 72,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	3	No	$ 5,000.00	$ 15,000.00	
8.4	Cabling, conduits and pits	1	Item	$ 5,000.00	$ 5,000.00	
8.5	Electrical connection	1	Item	$ 5,000.00	$ 5,000.00	
9	**LANDSCAPING WORKS**					$ 49,015.00
9.1	Topsoiling seeding	5,590	m²	$ 8.50	$ 47,515.00	
9.2	Tree planting	6	No	$ 250.00	$ 1,500.00	
10	**DELINEATION**					$ 13,000.00
10.1	Signing	1	item	$ 3,000.00	$ 3,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 10,000.00	$ 10,000.00	
	TOTAL A - D				$ 3,965,102.10	**$ 3,965,102.10**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 531,584.49
F	**PROJECT BUDGET**					
	Total Estimate					$ 4,496,686.59

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **26 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-06

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 77,124.65**
	Project Management		3.00%	2.64%	$ 46,274.79	
	Program Administration		2.00%	1.76%	$ 30,849.86	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 138,287.89**
1	**SITE ESTABLISHMENT**	1	Item	$ 43,820.82	$ 43,820.82	$ 43,820.82
2	**SERVICE RELOCATION**					$ 37,500.00
2.1	Telecom conduiting	250	m	$ 150.00	$ 37,500.00	
3	**VicRoads**					$ 56,967.07
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 56,967.07	$ 56,967.07	
D	**Construction**				$ 1,752,832.90	**$ 1,752,832.90**
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 139,830.00
2.1	Trees	-	No	$ 500.00	$ -	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	1,436	m²	$ 55.00	$ 78,980.00	
2.3	Breakout of existing kerb & channel	383	Lm	$ 45.00	$ 17,235.00	
2.4	Demolition of existing shared pathway (3.0m wide)	35	Lm	$ 55.00	$ 1,925.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)	-	Lm	$ 55.00	$ -	
2.6	Sawcutting of existing pavement to match new pavement	567	Lm	$ 20.00	$ 11,340.00	
2.7	Remove light pole (1-way)	2	No	$ 2,000.00	$ 4,000.00	
2.8	Demolition of existing concrete island	30	m²	$ 45.00	$ 1,350.00	
2.9	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 288,005.90
3.1	Stripping topsoil (150mm)	10,680	m²	$ 6.00	$ 64,080.00	
3.2	Cutting	1,677	m³	$ 15.00	$ 25,155.00	
3.3	Filling and compact	1,112	m³	$ 12.00	$ 13,344.00	
3.4	Cart off excess material	565	m³	$ 15.00	$ 8,475.00	
3.5	Soft spot rectification (reclaimed FCR)	863	m³	$ 30.00	$ 25,895.40	
3.6	Rock excavation & sub-surface remediation 450mm	2,158	m²	$ 70.00	$ 151,056.50	
4	**PAVEMENT**					$ 727,559.50
4.1	Deep lift asphalt 195 mm	3,757	m²	$ 105.00	$ 394,485.00	
4.2	Sub-base course - 250 mm 3% CTCR	4,316	m²	$ 55.00	$ 237,374.50	
4.3	Shoulder - full depth pavement	660	m²	$ 145.00	$ 95,700.00	
5	**DRAINAGE**					$ 112,500.00
5.1	Subsoil drains 100mm dia - screenings	984	Lm	$ 30.00	$ 29,520.00	
5.2	375 RCP (class 2)	244	Lm	$ 170.00	$ 41,480.00	
5.3	Side entry pits	4	No	$ 2,500.00	$ 10,000.00	
5.4	Relocate side entry pits	9	No	$ 3,500.00	$ 31,500.00	
6	**CONCRETE WORKS**					$ 157,480.00
6.1	Kerb & channel	984	Lm	$ 50.00	$ 49,200.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	519	Lm	$ 130.00	$ 67,470.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	263	Lm	$ 65.00	$ 17,095.00	
6.4	Laybacks and tactile pavers	4	No	$ 850.00	$ 3,400.00	
6.5	Concrete island infill		m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	239	m²	$ 85.00	$ 20,315.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 51,000.00
8.1	Light pole (1-way) and luminous lights		No	$ 8,000.00	$ -	
8.2	Light pole (2-way) and luminous lights	3	No	$ 9,000.00	$ 27,000.00	
8.3	JUP lighting single	1	No	$ 4,000.00	$ 4,000.00	
8.4	Cabling, conduits and pits	1	Item	$ 10,000.00	$ 10,000.00	
8.5	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
9	**LANDSCAPING WORKS**					$ 17,457.50
9.1	Topsoiling seeding	1,995	m²	$ 8.50	$ 16,957.50	
9.2	Tree planting	2	No	$ 250.00	$ 500.00	
10	**DELINEATION**					$ 20,000.00
10.1	Signing	1	item	$ 5,000.00	$ 5,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 15,000.00	$ 15,000.00	
	TOTAL A - D				$ 1,968,245.44	**$ 1,968,245.44**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 262,924.94
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,231,170.37

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **26 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-07

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ **77,406.51**
	Project Management		3.00%	2.64%	$ 46,443.90	
	Program Administration		2.00%	1.76%	$ 30,962.60	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ **138,656.23**
1	**SITE ESTABLISHMENT**	1	Item	$ 43,980.97	$ 43,980.97	$ 43,980.97
2	**SERVICE RELOCATION**					$ 37,500.00
2.1	Telecom conduiting	250	m	$ 150.00	$ 37,500.00	
3	**VicRoads**					$ 57,175.26
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 57,175.26	$ 57,175.26	
D	**Construction**				$ 1,759,238.80	$ **1,759,238.80**
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 198,480.00
2.1	Trees	90	No	$ 500.00	$ 45,000.00	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	1,846	m²	$ 55.00	$ 101,530.00	
2.3	Breakout of existing kerb & channel	303	Lm	$ 45.00	$ 13,635.00	
2.4	Demolition of existing shared pathway (3.0m wide)	15	Lm	$ 55.00	$ 825.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)		Lm	$ 55.00	$ -	
2.6	Sawcutting of existing pavement to match new pavement	357	Lm	$ 20.00	$ 7,140.00	
2.7	Remove light pole (1-way)	2	No	$ 2,000.00	$ 4,000.00	
2.8	Demolition of existing concrete island	30	m²	$ 45.00	$ 1,350.00	
2.9	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 261,666.80
3.1	Stripping topsoil (150mm)	9,670	m²	$ 6.00	$ 58,020.00	
3.2	Cutting	713	m³	$ 15.00	$ 10,695.00	
3.3	Filling and compact	499	m³	$ 12.00	$ 5,988.00	
3.4	Cart off excess material	214	m³	$ 15.00	$ 3,210.00	
3.5	Soft spot rectification (reclaimed FCR)	896	m³	$ 30.00	$ 26,890.80	
3.6	Rock excavation & sub-surface remediation 450mm	2,241	m²	$ 70.00	$ 156,863.00	
4	**PAVEMENT**					$ 697,384.00
4.1	Deep lift asphalt 195 mm	3,652	m²	$ 105.00	$ 383,460.00	
4.2	Sub-base course - 250 mm 3% CTCR	4,482	m²	$ 55.00	$ 246,499.00	
4.3	Shoulder - full depth pavement	465	m²	$ 145.00	$ 67,425.00	
5	**DRAINAGE**					$ 91,950.00
5.1	Subsoil drains 100mm dia - screenings	1,276	Lm	$ 30.00	$ 38,280.00	
5.2	375 RCP (class 2)	101	Lm	$ 170.00	$ 17,170.00	
5.3	Side entry pits	2	No	$ 2,500.00	$ 5,000.00	
5.4	Relocate side entry pits	9	No	$ 3,500.00	$ 31,500.00	
6	**CONCRETE WORKS**					$ 188,480.00
6.1	Kerb & channel	1,276	Lm	$ 50.00	$ 63,800.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	737	Lm	$ 130.00	$ 95,810.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	95	Lm	$ 65.00	$ 6,175.00	
6.4	Laybacks and tactile pavers	8	No	$ 850.00	$ 6,800.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	187	m²	$ 85.00	$ 15,895.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 58,000.00
8.1	Light pole (1-way) and luminous lights		No	$ 8,000.00	$ -	
8.2	Light pole (2-way) and luminous lights	2	No	$ 9,000.00	$ 18,000.00	
8.3	JUP lighting dual	4	No	$ 5,000.00	$ 20,000.00	
8.4	Cabling, conduits and pits	1	Item	$ 10,000.00	$ 10,000.00	
8.5	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
9	**LANDSCAPING WORKS**					$ 11,278.00
9.1	Topsoiling seeding	1,268	m²	$ 8.50	$ 10,778.00	
9.2	Tree planting	2	No	$ 250.00	$ 500.00	
10	**DELINEATION**					$ 13,000.00
10.1	Signing	1	item	$ 3,000.00	$ 3,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 10,000.00	$ 10,000.00	
	TOTAL A - D				$ 1,975,301.54	$ **1,975,301.54**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 263,885.82
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,239,187.36

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **26 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-08

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 91,023.43
	Project Management		3.00%	2.64%	$ 54,614.06	
	Program Administration		2.00%	1.76%	$ 36,409.37	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 156,451.07
1	**SITE ESTABLISHMENT**	1	Item	$ 51,717.86	$ 51,717.86	$ 51,717.86
2	**SERVICE RELOCATION**					$ 37,500.00
2.1	Telecom conduiting	250	m	$ 150.00	$ 37,500.00	
3	**VicRoads**					$ 67,233.21
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 67,233.21	$ 67,233.21	
D	**Construction**				$ 2,068,714.30	$ 2,068,714.30
1	**PRELIMINARIES**					$ 114,000.00
1.1	Site management & supervision including QA	12	weeks	$ 2,500.00	$ 30,000.00	
1.2	Provision for traffic	1	Item	$ 84,000.00	$ 84,000.00	
2	**DEMOLITION**					$ 160,720.00
2.1	Trees	20	No	$ 500.00	$ 10,000.00	
2.2	Demolition of existing Road (plane off 195mm of asphalt)	1,845	m²	$ 55.00	$ 101,475.00	
2.3	Breakout of existing kerb & channel	268	Lm	$ 45.00	$ 12,060.00	
2.4	Demolition of existing shared pathway (3.0m wide)	15	Lm	$ 55.00	$ 825.00	
2.5	Demolition of existing pedestrian footpath (1.5m wide)		Lm	$ 55.00	$ -	
2.6	Sawcutting of existing pavement to match new pavement	368	Lm	$ 20.00	$ 7,360.00	
2.7	Remove light pole (1-way)	2	No	$ 2,000.00	$ 4,000.00	
2.8	Demolition of existing concrete island		m²	$ 45.00	$ -	
2.9	Remove part of signals	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 305,013.30
3.1	Stripping topsoil (150mm)	12,575	m²	$ 6.00	$ 75,450.00	
3.2	Cutting	883	m³	$ 15.00	$ 13,245.00	
3.3	Filling and compact	619	m³	$ 12.00	$ 7,428.00	
3.4	Cart off excess material	264	m³	$ 15.00	$ 3,960.00	
3.5	Soft spot rectification (reclaimed FCR)	1,000	m³	$ 30.00	$ 29,989.80	
3.6	Rock excavation & sub-surface remediation 450mm	2,499	m²	$ 70.00	$ 174,940.50	
4	**PAVEMENT**					$ 774,466.50
4.1	Deep lift asphalt 195 mm	4,128	m²	$ 105.00	$ 433,440.00	
4.2	Sub-base course - 250 mm 3% CTCR	4,998	m²	$ 55.00	$ 274,906.50	
4.3	Shoulder - full depth pavement	456	m²	$ 145.00	$ 66,120.00	
5	**DRAINAGE**					$ 257,270.00
5.1	Subsoil drains 100mm dia - screenings	1,425	Lm	$ 30.00	$ 42,750.00	
5.2	375 RCP (class 2)	1,006	Lm	$ 170.00	$ 171,020.00	
5.3	Side entry pits	2	No	$ 2,500.00	$ 5,000.00	
5.4	Relocate side entry pits	11	No	$ 3,500.00	$ 38,500.00	
6	**CONCRETE WORKS**					$ 246,925.00
6.1	Kerb & channel	1,425	Lm	$ 50.00	$ 71,250.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	880	Lm	$ 130.00	$ 114,400.00	
6.3	Pedestrian Footpath (1.5m wide,125 mm, residential, as per MPA)	170	Lm	$ 65.00	$ 11,050.00	
6.4	Laybacks and tactile pavers	8	No	$ 850.00	$ 6,800.00	
6.5	Concrete island infill	177	m²	$ 120.00	$ 21,240.00	
6.6	10m concrete maintenance area end of all islands	261	m²	$ 85.00	$ 22,185.00	
7	**TRAFFIC SIGNAL WORKS**					$ 125,000.00
7.1	Relocate traffic signal	1	Item	$ 125,000.00	$ 125,000.00	
8	**POWER & LIGHTING**					$ 58,000.00
8.1	Light pole (1-way) and luminous lights		No	$ 8,000.00	$ -	
8.2	Light pole (2-way) and luminous lights	2	No	$ 9,000.00	$ 18,000.00	
8.3	JUP lighting dual	4	No	$ 5,000.00	$ 20,000.00	
8.4	Cabling, conduits and pits	1	Item	$ 10,000.00	$ 10,000.00	
8.5	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
9	**LANDSCAPING WORKS**					$ 14,319.50
9.1	Topsoiling seeding	1,567	m²	$ 8.50	$ 13,319.50	
9.2	Tree planting	4	No	$ 250.00	$ 1,000.00	
10	**DELINEATION**					$ 13,000.00
10.1	Signing	1	item	$ 3,000.00	$ 3,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 10,000.00	$ 10,000.00	
	TOTAL A - D				$ 2,316,188.80	$ 2,316,188.80
E	**Contingency**					
	Contingency (15% of D)				15%	$ 310,307.15
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,626,495.95

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 6 **Interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-01	IN-02	IN-04	IN-05 (APA)	IN-06
A	**Project and Program Management**	$ 246,291.79	$ 131,465.22	$ 138,392.79	$ 236,049.71	$ 148,168.05
B	**Design and Investigation**	$ -	$ -	$ -	$ -	$ -
C	**Additional Items**	$ 670,920.07	$ 421,301.14	$ 456,354.21	$ 583,854.90	$ 457,628.70
D	**Construction**	$ 5,597,540.74	$ 2,987,845.85	$ 3,145,290.59	$ 5,364,766.25	$ 3,367,455.64
	TOTAL A - D	**$ 6,514,752.61**	**$ 3,540,612.20**	**$ 3,740,037.58**	**$ 6,184,670.86**	**$ 3,973,252.38**
E	**CONTINGENCY**					
	Contingency (15% of D)	**$ 839,631.11**	**$ 448,176.88**	**$ 471,793.59**	**$ 804,714.94**	**$ 505,118.35**
F	**PROJECT BUDGET**					
	Total Estimate	**$ 7,354,383.72**	**$ 3,988,789.08**	**$ 4,211,831.17**	**$ 6,989,385.80**	**$ 4,478,370.73**

Notes:

1 **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
2 **Design cost -** Not included in interim estimate except for IN-18 & IN-20 (completed in CG140690)
3 **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
4 **Soft spot rectification** - Taken as 20% of sub-base pavement
5 **Rock excavation** - Assume 50% of sub-base pavement
6 **Pavement** - Assume deep lift asphalt pavement
7 **Subsoil drains -** Assume same as kerb and channel
8 **Drainage** - Assume 375 DIA RCP
9 **Side entry pits** - Based on 50m intervals
10 **Light pole** - Based on 70m intervals
11 **Existing road** - Existing asphalt roads to be demolished as part of intersection works
12 **Substation** - No allowance for substations
13 **Tree planting** - Based on 80m intervals

AUTHOR: J.Ly
Date: 18/10/2016

REVIEWER: R.Henry
Date: 18/10/2016

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
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Version 6 **Interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-07	IN-08	IN-09	IN-10	IN-13
A	**Project and Program Management**	$ 183,477.87	$ 195,489.14	$ 369,516.93	$ 104,448.32	$ 96,493.70
B	**Design and Investigation**	$ -	$ -	$ -	$ -	$ -
C	**Additional Items**	$ 418,023.43	$ 426,895.38	$ 700,938.64	$ 296,494.96	$ 296,099.72
D	**Construction**	$ 4,169,951.55	$ 4,442,934.91	$ 8,398,112.15	$ 2,373,825.39	$ 2,193,038.56
	TOTAL A - D	**$ 4,771,452.84**	**$ 5,065,319.43**	**$ 9,468,567.73**	**$ 2,774,768.67**	**$ 2,585,631.98**
E	**CONTINGENCY**					
	Contingency (15% of D)	**$ 625,492.73**	**$ 666,440.24**	**$ 1,259,716.82**	**$ 356,073.81**	**$ 328,955.78**
F	**PROJECT BUDGET**					
	Total Estimate	**$ 5,396,945.58**	**$ 5,731,759.66**	**$ 10,728,284.55**	**$ 3,130,842.48**	**$ 2,914,587.76**

Notes:

1 **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
2 **Design cost -** Not included in interim estimate except for IN-18 & IN-20 (completed in CG140690)
3 **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
4 **Soft spot rectification** - Taken as 20% of sub-base pavement
5 **Rock excavation** - Assume 50% of sub-base pavement
6 **Pavement** - Assume deep lift asphalt pavement
7 **Subsoil drains -** Assume same as kerb and channel
8 **Drainage** - Assume 375 DIA RCP
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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
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Version 6 **Interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-14	IN-15	IN-18	IN-20	IN-21 (APA)
A	Project and Program Management	$ 117,838.70	$ 163,312.49	$ 122,506.64	$ 186,106.12	$ 175,467.79
B	Design and Investigation	$ -	$ -	$ 269,514.61	$ 409,433.47	$ -
C	Additional Items	$ 326,493.75	$ 374,919.73			$ 329,304.49
D	Construction	$ 2,678,152.21	$ 3,711,647.44	$ 2,722,369.75	$ 4,389,295.30	$ 3,987,904.26
	TOTAL A - D	**$ 3,122,484.66**	**$ 4,249,879.66**	**$ 3,114,390.99**	**$ 4,984,834.89**	**$ 4,492,676.54**
E	CONTINGENCY					
	Contingency (15% of D)	**$ 401,722.83**	**$ 556,747.12**	**$ 408,355.46**	**$ 658,394.30**	**$ 598,185.64**
F	PROJECT BUDGET					
	Total Estimate	**$ 3,524,207.49**	**$ 4,806,626.77**	**$ 3,522,746.46**	**$ 5,643,229.18**	**$ 5,090,862.18**

Notes:

1. **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
2. **Design cost -** Not included in interim estimate except for IN-18 & IN-20 (completed in CG140690)
3. **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
4. **Soft spot rectification** - Taken as 20% of sub-base pavement
5. **Rock excavation** - Assume 50% of sub-base pavement
6. **Pavement** - Assume deep lift asphalt pavement
7. **Subsoil drains -** Assume same as kerb and channel
8. **Drainage** - Assume 375 DIA RCP
9. **Side entry pits** - Based on 50m intervals
10. **Light pole** - Based on 70m intervals
11. **Existing road** - Existing asphalt roads to be demolished as part of intersection works
12. **Substation** - No allowance for substations
13. **Tree planting** - Based on 80m intervals

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 6 **Interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-22	IN-23	IN-24	IN-26	IN-31
A	Project and Program Management	$ 128,134.56	$ 79,345.95	$ 103,674.75	$ 161,758.09	$ 156,243.18
B	Design and Investigation	$ -	$ -	$ -	$ -	$ -
C	Additional Items	$ 295,948.58	$ 229,190.73	$ 289,484.05	$ 372,888.41	$ 352,181.43
D	Construction	$ 2,912,149.18	$ 1,803,317.02	$ 2,356,244.31	$ 3,676,320.16	$ 3,550,981.39
	TOTAL A - D	**$ 3,336,232.33**	**$ 2,111,853.70**	**$ 2,749,403.11**	**$ 4,210,966.65**	**$ 4,059,406.00**
E	CONTINGENCY					
	Contingency (15% of D)	**$ 436,822.38**	**$ 270,497.55**	**$ 353,436.65**	**$ 551,448.02**	**$ 532,647.21**
F	PROJECT BUDGET					
	Total Estimate	**$ 3,773,054.70**	**$ 2,382,351.25**	**$ 3,102,839.75**	**$ 4,762,414.67**	**$ 4,592,053.20**

Notes:

1. **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
2. **Design cost -** Not included in interim estimate except for IN-18 & IN-20 (completed in CG140690)
3. **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
4. **Soft spot rectification** - Taken as 20% of sub-base pavement
5. **Rock excavation** - Assume 50% of sub-base pavement
6. **Pavement** - Assume deep lift asphalt pavement
7. **Subsoil drains -** Assume same as kerb and channel
8. **Drainage** - Assume 375 DIA RCP
9. **Side entry pits** - Based on 50m intervals
10. **Light pole** - Based on 70m intervals
11. **Existing road** - Existing asphalt roads to be demolished as part of intersection works
12. **Substation** - No allowance for substations
13. **Tree planting** - Based on 80m intervals

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 6 **Interim Intersection Project Cost**

ITEM	DESCRIPTION	IN-32	IN-33	TOTAL
A	**Project and Program Management**	$ 97,708.78	$ 71,988.96	$ 3,413,879.51
B	**Design and Investigation**	$ -	$ -	$ -
C	**Additional Items**	$ 324,687.62	$ 212,076.48	$ 7,835,686.41
D	**Construction**	$ 2,220,654.19	$ 1,636,112.65	**$ 77,685,909.48**
	TOTAL A - D	**$ 2,643,050.59**	**$ 1,920,178.09**	**$ 89,614,423.48**
E	**CONTINGENCY**			
	Contingency (15% of D)	**$ 333,098.13**	**$ 245,416.90**	**$ 11,652,886.42**
F	**PROJECT BUDGET**			
	Total Estimate	**$ 2,976,148.72**	**$ 2,165,594.98**	**$ 101,267,309.90**

Notes:

1 **Cost does not include southern leg of intersection IN-2, IN-4, IN-6**
2 **Design cost -** Not included in interim estimate except for IN-18 & IN-20 (completed in CG140690)
3 **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
4 **Soft spot rectification** - Taken as 20% of sub-base pavement
5 **Rock excavation** - Assume 50% of sub-base pavement
6 **Pavement** - Assume deep lift asphalt pavement
7 **Subsoil drains -** Assume same as kerb and channel
8 **Drainage** - Assume 375 DIA RCP
9 **Side entry pits** - Based on 50m intervals
10 **Light pole** - Based on 70m intervals
11 **Existing road** - Existing asphalt roads to be demolished as part of intersection works
12 **Substation** - No allowance for substations
13 **Tree planting** - Based on 80m intervals

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REVIEWER: R.Henry
Date: 18/10/2016

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-01

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 246,291.79**
	Project Management		3.00%	2.64%	$ 147,775.08	
	Program Administration		2.00%	1.76%	$ 98,516.72	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 670,920.07**
1	**SITE ESTABLISHMENT**	1	Item	$ 100,000.00	$ 100,000.00	$ 100,000.00
2	**SERVICE RELOCATION**					$ 289,000.00
2.1	Relocating Power Pole (HV)	16	No	$ 7,500.00	$ 120,000.00	
2.2	Relocating communication pole	8	No	$ 3,000.00	$ 24,000.00	
2.3	Telecom conduiting	800	Lm	$ 150.00	$ 120,000.00	
2.4	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00	
2.5	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 281,920.07
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 181,920.07	$ 181,920.07	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 5,597,540.74	**$ 5,597,540.74**
1	**PRELIMINARIES**					$ 130,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 80,000.00	$ 80,000.00	
2	**DEMOLITION**					$ 254,520.00
2.1	Trees	8	No	$ 500.00	$ 4,000.00	
2.2	Demolition of existing Road	1	Item	$ 144,000.00	$ 144,000.00	
2.3	Breakout of existing kerb & channel	621	Lm	$ 45.00	$ 27,945.00	
2.4	Demolition of existing pedestrian footpath	65	Lm	$ 55.00	$ 3,575.00	
2.5	Demolition of existing building	1	Item	$ 50,000.00	$ 50,000.00	
2.6	Demolition of existing fence	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 1,063,883.24
3.1	Stripping topsoil (150mm)	31,000	m^2	$ 6.00	$ 186,000.00	
3.2	Cutting	5,248	m^3	$ 15.00	$ 78,724.49	
3.3	Filling and compact	2,884	m^3	$ 12.00	$ 34,609.35	
3.4	Cart off excess material	2,364	m^3	$ 15.00	$ 35,462.81	
3.5	Soft spot rectification (reclaimed FCR)	3,557	m^3	$ 30.00	$ 106,695.60	
3.6	Rock excavation & sub-surface remediation 450mm	8,891	m^2	$ 70.00	$ 622,391.00	
4	**PAVEMENT**					$ 2,603,502.00
4.1	Deep lift asphalt 195 mm	15,430	m^2	$ 105.00	$ 1,620,150.00	
4.2	Sub-base course - 250 mm 3% CTCR	17,783	m^2	$ 45.00	$ 800,217.00	
4.3	Shoulder - full depth pavement	1,263	m^2	$ 145.00	$ 183,135.00	
5	**DRAINAGE**					$ 416,420.00
5.1	Subsoil drains 100mm dia - screenings	2,614	Lm	$ 30.00	$ 78,420.00	
5.2	375 RCP (class 2)	1,400	Lm	$ 170.00	$ 238,000.00	
5.3	Side entry pits	40	No	$ 2,500.00	$ 100,000.00	
6	**CONCRETE WORKS**					$ 483,920.00
6.1	Kerb &channel	2,614	Lm	$ 50.00	$ 130,700.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,851	Lm	$ 130.00	$ 240,630.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -	
6.4	Laybacks and tactile pavers	20	No	$ 850.00	$ 17,000.00	
6.5	Concrete island infill	390	m^2	$ 120.00	$ 46,800.00	
6.6	10m concrete maintenance area end of all islands	574	m^2	$ 85.00	$ 48,790.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 217,000.00
8.1	Light pole (1-way) and luminous lights	8	No	$ 8,000.00	$ 64,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	8	No	$ 4,000.00	$ 32,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 50,000.00	$ 50,000.00	
8.6	Electrical connection	1	Item	$ 35,000.00	$ 35,000.00	
9	**LANDSCAPING WORKS**					$ 68,295.50
9.1	Topsoiling seeding	7,623	m^2	$ 8.50	$ 64,795.50	
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00	
10	**DELINEATION**					$ 58,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 40,000.00	$ 40,000.00	
	TOTAL A - D				$ 6,514,752.61	**$ 6,514,752.61**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 839,631.11
F	**PROJECT BUDGET**					
	Total Estimate					$ 7,354,383.72

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-02

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 131,465.22**
	Project Management		3.00%	2.64%	$ 78,879.13	
	Program Administration		2.00%	1.76%	$ 52,586.09	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 421,301.14**
1	**SITE ESTABLISHMENT**	1	Item	$ 74,696.15	$ 74,696.15	$ 74,696.15
2	**SERVICE RELOCATION**					$ 149,500.00
2.1	Relocating Power Pole (HV)	6	No	$ 7,500.00	$ 45,000.00	
2.2	Relocating communication pole	520	Lm	$ 150.00	$ 78,000.00	
2.3	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00	
2.4	Remove redundant telecom pole	1	No	$ 1,500.00	$ 1,500.00	
3	**VicRoads**					$ 197,104.99
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 97,104.99	$ 97,104.99	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,987,845.85	**$ 2,987,845.85**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 44,500.00
2.1	Trees	14	No	$ 500.00	$ 7,000.00	
2.2	Demolition of existing Road	1	item	$ 37,500.00	$ 37,500.00	
3	**EARTHWORKS**					$ 530,591.10
3.1	Stripping topsoil (150mm)	18,260	m²	$ 6.00	$ 109,560.00	
3.2	Cutting	2,648	m³	$ 15.00	$ 39,720.00	
3.3	Filling and compact	1,457	m³	$ 12.00	$ 17,484.00	
3.4	Cart off excess material	1,191	m³	$ 15.00	$ 17,865.00	
3.5	Soft spot rectification (reclaimed FCR)	1,688	m³	$ 30.00	$ 50,628.60	
3.6	Rock excavation & sub-surface remediation 450mm	4,219	m²	$ 70.00	$ 295,333.50	
4	**PAVEMENT**					$ 1,309,045.50
4.1	Deep lift asphalt 195 mm	6,999	m²	$ 105.00	$ 734,895.00	
4.2	Sub-base course - 250 mm 3% CTCR	8,438	m²	$ 55.00	$ 464,095.50	
4.3	Shoulder - full depth pavement	759	m²	$ 145.00	$ 110,055.00	
5	**DRAINAGE**					$ 270,050.00
5.1	Subsoil drains 100mm dia - screenings	1,599	Lm	$ 30.00	$ 47,970.00	
5.2	375 RCP (class 2)	924	Lm	$ 170.00	$ 157,080.00	
5.3	Side entry pits	26	No	$ 2,500.00	$ 65,000.00	
6	**CONCRETE WORKS**					$ 215,485.00
6.1	Kerb &channel	1,599	Lm	$ 50.00	$ 79,950.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	568	Lm	$ 130.00	$ 73,840.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	311	Lm	$ 65.00	$ 20,215.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	10m concrete maintenance area end of all islands	368	m²	$ 85.00	$ 31,280.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 146,000.00
8.1	Light pole (1-way) and luminous lights	6	No	$ 8,000.00	$ 48,000.00	
8.2	Light pole (2-way) and luminous lights	3	No	$ 9,000.00	$ 27,000.00	
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00	
8.6	Electrical connection	1	Item	$ 20,000.00	$ 20,000.00	
9	**LANDSCAPING WORKS**					$ 30,174.25
9.1	Topsoiling seeding	3,021	m²	$ 8.50	$ 25,674.25	
9.2	Tree planting	18	No	$ 250.00	$ 4,500.00	
10	**DELINEATION**					$ 50,000.00
10.1	Signing	1	item	$ 15,000.00	$ 15,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 3,540,612.20	**$ 3,540,612.20**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 448,176.88
F	**PROJECT BUDGET**					
	Total Estimate					$ 3,988,789.08

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-04

Interim Intersection Project Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 138,392.79**
	Project Management		3.00%	2.64%	$ 83,035.67	
	Program Administration		2.00%	1.76%	$ 55,357.11	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 456,354.21**
1	**SITE ESTABLISHMENT**	1	Item	$ 78,632.26	$ 78,632.26	$ 78,632.26
2	**SERVICE RELOCATION**					$ 175,500.00
2.1	Relocating Power Pole (HV)	5	No	$ 7,500.00	$ 37,500.00	
2.2	Relocating communication pole	10	No	$ 3,500.00	$ 35,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting	520	Lm	$ 150.00	$ 78,000.00	
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 202,221.94
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 102,221.94	$ 102,221.94	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,145,290.59	**$ 3,145,290.59**
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 136,500.00
2.1	Trees	85	No	$ 500.00	$ 42,500.00	
2.2	Demolition of existing Road	1	Item	$ 74,000.00	$ 74,000.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 20,000.00	$ 20,000.00	
3	**EARTHWORKS**					$ 529,619.84
3.1	Stripping topsoil (150mm)	19,510	m²	$ 6.00	$ 117,060.00	
3.2	Cutting	2,401	m³	$ 15.00	$ 36,020.41	
3.3	Filling and compact	1,320	m³	$ 12.00	$ 15,835.51	
3.4	Cart off excess material	1,082	m³	$ 15.00	$ 16,226.02	
3.5	Soft spot rectification (reclaimed FCR)	1,680	m³	$ 30.00	$ 50,411.40	
3.6	Rock excavation & sub-surface remediation 450mm	4,201	m²	$ 70.00	$ 294,066.50	
4	**PAVEMENT**					$ 1,337,819.50
4.1	Deep lift asphalt 195 mm	7,060	m²	$ 105.00	$ 741,300.00	
4.2	Sub-base course - 250 mm 3% CTCR	8,402	m²	$ 55.00	$ 462,104.50	
4.3	Shoulder - full depth pavement	927	m²	$ 145.00	$ 134,415.00	
5	**DRAINAGE**					$ 273,610.00
5.1	Subsoil drains 100mm dia - screenings	1,491	Lm	$ 30.00	$ 44,730.00	
5.2	375 RCP (class 2)	964	Lm	$ 170.00	$ 163,880.00	
5.3	Side entry pits	26	No	$ 2,500.00	$ 65,000.00	
6	**CONCRETE WORKS**					$ 210,620.00
6.1	Kerb &channel	1,491	Lm	$ 50.00	$ 74,550.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	683	Lm	$ 130.00	$ 88,790.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	186	Lm	$ 65.00	$ 12,090.00	
6.4	Laybacks and tactile pavers	10	No	$ 850.00	$ 8,500.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	314	m²	$ 85.00	$ 26,690.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 168,000.00
8.1	Light pole (1-way) and luminous lights	7	No	$ 8,000.00	$ 56,000.00	
8.2	Light pole (2-way) and luminous lights	3	No	$ 9,000.00	$ 27,000.00	
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 40,000.00	$ 40,000.00	
8.6	Electrical connection	1	Item	$ 25,000.00	$ 25,000.00	
9	**LANDSCAPING WORKS**					$ 34,121.25
9.1	Topsoiling seeding	3,603	m²	$ 8.50	$ 30,621.25	
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 3,740,037.58	**$ 3,740,037.58**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 471,793.59
F	PROJECT BUDGET					
	Total Estimate					$ 4,211,831.17

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-05 (APA)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 236,049.71**
	Project Management		3.00%	2.64%	$ 141,629.83	
	Program Administration		2.00%	1.76%	$ 94,419.89	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 583,854.90**
1	**SITE ESTABLISHMENT**	1	Item	$ 100,000.00	$ 100,000.00	$ 100,000.00
2	**SERVICE RELOCATION**					$ 209,500.00
2.1	Relocating Power Pole (HV)	7	No	$ 7,500.00	$ 52,500.00	
2.2	Relocating communication pole	12	No	$ 3,500.00	$ 42,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting	600	Lm	$ 150.00	$ 90,000.00	
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 274,354.90
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 174,354.90	$ 174,354.90	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 5,364,766.25	**$ 5,364,766.25**
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 139,700.00
2.1	Trees	42	No	$ 500.00	$ 21,000.00	
2.2	Demolition of existing Road	1	Item	$ 93,700.00	$ 93,700.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 974,712.12
3.1	Stripping topsoil (150mm)	35,470	m²	$ 6.00	$ 212,820.00	
3.2	Cutting	4,451	m³	$ 15.00	$ 66,760.20	
3.3	Filling and compact	2,446	m³	$ 12.00	$ 29,349.53	
3.4	Cart off excess material	2,005	m³	$ 15.00	$ 30,073.29	
3.5	Soft spot rectification (reclaimed FCR)	3,101	m³	$ 30.00	$ 93,030.60	
3.6	Rock excavation & sub-surface remediation 450mm	7,753	m²	$ 70.00	$ 542,678.50	
4	**PAVEMENT**					$ 2,249,569.50
4.1	Deep lift asphalt 195 mm	13,085	m²	$ 105.00	$ 1,373,925.00	
4.2	Sub-base course - 250 mm 3% CTCR	15,505	m²	$ 45.00	$ 697,729.50	
4.3	Shoulder - full depth pavement	1,227	m²	$ 145.00	$ 177,915.00	
5	**DRAINAGE**					$ 422,070.00
5.1	Subsoil drains 100mm dia - screenings	2,689	Lm	$ 30.00	$ 80,670.00	
5.2	375 RCP (class 2)	1,420	Lm	$ 170.00	$ 241,400.00	
5.3	Side entry pits	40	No	$ 2,500.00	$ 100,000.00	
6	**CONCRETE WORKS**					$ 432,195.00
6.1	Kerb &channel	2,689	Lm	$ 50.00	$ 134,450.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,900	Lm	$ 130.00	$ 247,000.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -	
6.4	Laybacks and tactile pavers	16	No	$ 850.00	$ 13,600.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	437	m²	$ 85.00	$ 37,145.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 275,000.00
8.1	Light pole (1-way) and luminous lights	17	No	$ 8,000.00	$ 136,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	7	No	$ 4,000.00	$ 28,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 45,000.00	$ 45,000.00	
8.6	Electrical connection	1	Item	$ 30,000.00	$ 30,000.00	
9	**LANDSCAPING WORKS**					$ 72,584.75
9.1	Topsoiling seeding	7,834	m²	$ 8.50	$ 66,584.75	
9.2	Tree planting	24	No	$ 250.00	$ 6,000.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
11	**TRANSMISSION PIPELINE**					$ 343,935
11.1	Clay excavation for transmission pipeline	347	m³	$ 45	$ 15,594	
11.2	Hand excavation for rock around transimission pipeline (extra over allowance)	147	m	$ 1,050	$ 154,350	
11.3	Wrap for transmission pipeline	147	m	$ 500	$ 73,500	
11.4	Backfill stabilisation sand for transmission pipeline	347	m³	$ 150	$ 51,981	
11.5	Transmission pipeline slab protection 200mm	294	m²	$ 165	$ 48,510	
	TOTAL A - D				$ 6,184,670.86	**$ 6,184,670.86**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 804,714.94
F	**PROJECT BUDGET**					
	Total Estimate					$ 6,989,385.80

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-06

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ **148,168.05**
	Project Management		3.00%	2.64%	$ 88,900.83	
	Program Administration		2.00%	1.76%	$ 59,267.22	
B	**Design and Investigation**					$ **-**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ **457,628.70**
1	**SITE ESTABLISHMENT**	1	Item	$ 84,186.39	$ 84,186.39	$ 84,186.39
2	**SERVICE RELOCATION**					$ 164,000.00
2.1	Relocating Power Pole (HV)	5	No	$ 7,500.00	$ 37,500.00	
2.2	Relocating communication pole	8	No	$ 3,500.00	$ 28,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting	490	Lm	$ 150.00	$ 73,500.00	
2.5	Telecom cabling (re-pulling)	1	Item	$ 25,000.00	$ 25,000.00	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 209,442.31
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 109,442.31	$ 109,442.31	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,367,455.64	$ **3,367,455.64**
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 104,300.00
2.1	Trees	-	No	$ 500.00	$ -	
2.2	Demolition of existing Road	1	Item	$ 79,300.00	$ 79,300.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 598,964.89
3.1	Stripping topsoil (150mm)	19,640	m²	$ 6.00	$ 117,840.00	
3.2	Cutting	2,884	m³	$ 15.00	$ 43,255.10	
3.3	Filling and compact	1,585	m³	$ 12.00	$ 19,016.07	
3.4	Cart off excess material	1,299	m³	$ 15.00	$ 19,485.01	
3.5	Soft spot rectification (reclaimed FCR)	1,948	m³	$ 30.00	$ 58,444.20	
3.6	Rock excavation & sub-surface remediation 450mm	4,870	m²	$ 70.00	$ 340,924.50	
4	**PAVEMENT**					$ 1,559,473.50
4.1	Deep lift asphalt 195 mm	8,478	m²	$ 105.00	$ 890,190.00	
4.2	Sub-base course - 250 mm 3% CTCR	9,741	m²	$ 55.00	$ 535,738.50	
4.3	Shoulder - full depth pavement	921	m²	$ 145.00	$ 133,545.00	
5	**DRAINAGE**					$ 267,980.00
5.1	Subsoil drains 100mm dia - screenings	1,403	Lm	$ 30.00	$ 42,090.00	
5.2	375 RCP (class 2)	917	Lm	$ 170.00	$ 155,890.00	
5.3	Side entry pits	28	No	$ 2,500.00	$ 70,000.00	
6	**CONCRETE WORKS**					$ 188,210.00
6.1	Kerb &channel	1,403	Lm	$ 50.00	$ 70,150.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	567	Lm	$ 130.00	$ 73,710.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	205	Lm	$ 65.00	$ 13,325.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	245	m²	$ 85.00	$ 20,825.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 162,000.00
8.1	Light pole (1-way) and luminous lights	5	No	$ 8,000.00	$ 40,000.00	
8.2	Light pole (2-way) and luminous lights	3	No	$ 9,000.00	$ 27,000.00	
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 45,000.00	$ 45,000.00	
8.6	Electrical connection	1	Item	$ 30,000.00	$ 30,000.00	
9	**LANDSCAPING WORKS**					$ 31,527.25
9.1	Topsoiling seeding	3,239	m²	$ 8.50	$ 27,527.25	
9.2	Tree planting	16	No	$ 250.00	$ 4,000.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 3,973,252.38	$ **3,973,252.38**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 505,118.35
F	**PROJECT BUDGET**					
	Total Estimate					$ 4,478,370.73

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-07

PM %: 8.80%

18 October 2016
Version 6

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 183,477.87
	Project Management		3.00%	2.64%	$ 110,086.72	
	Program Administration		2.00%	1.76%	$ 73,391.15	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 418,023.43
1	**SITE ESTABLISHMENT**	1	Item	$ 100,000.00	$ 100,000.00	$ 100,000.00
2	**SERVICE RELOCATION**					$ 82,500.00
2.1	Relocating Power Pole (HV)	11	No	$ 7,500.00	$ 82,500.00	
2.2	Relocating communication pole		No	$ 3,500.00	$ -	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 235,523.43
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 135,523.43	$ 135,523.43	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 4,169,951.55	$ 4,169,951.55
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 218,120.00
2.1	Trees	120	No	$ 500.00	$ 60,000.00	
2.2	Demolition of existing Road	1	Item	$ 78,120.00	$ 78,120.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building	1	Item	$ 50,000.00	$ 50,000.00	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 732,489.30
3.1	Stripping topsoil (150mm)	22,670	m²	$ 6.00	$ 136,020.00	
3.2	Cutting	2,976	m³	$ 15.00	$ 44,640.00	
3.3	Filling and compact	2,083	m³	$ 12.00	$ 24,998.40	
3.4	Cart off excess material	893	m³	$ 15.00	$ 13,392.00	
3.5	Soft spot rectification (reclaimed FCR)	2,505	m³	$ 30.00	$ 75,137.40	
3.6	Rock excavation & sub-surface remediation 450mm	6,261	m²	$ 70.00	$ 438,301.50	
4	**PAVEMENT**					$ 1,848,559.50
4.1	Deep lift asphalt 195 mm	10,416	m²	$ 105.00	$ 1,093,680.00	
4.2	Sub-base course - 250 mm 3% CTCR	12,523	m²	$ 55.00	$ 688,759.50	
4.3	Shoulder - full depth pavement	456	m²	$ 145.00	$ 66,120.00	
5	**DRAINAGE**					$ 301,730.00
5.1	Subsoil drains 100mm dia - screenings	2,341	Lm	$ 30.00	$ 70,230.00	
5.2	375 RCP (class 2)	950	Lm	$ 170.00	$ 161,500.00	
5.3	Side entry pits	28	No	$ 2,500.00	$ 70,000.00	
6	**CONCRETE WORKS**					$ 361,665.00
6.1	Kerb &channel	2,341	Lm	$ 50.00	$ 117,050.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,120	Lm	$ 130.00	$ 145,600.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	510	Lm	$ 65.00	$ 33,150.00	
6.4	Laybacks and tactile pavers	18	No	$ 850.00	$ 15,300.00	
6.5	Concrete island infill	177	m²	$ 120.00	$ 21,240.00	
6.6	10m concrete maintenance area end of all islands	345	m²	$ 85.00	$ 29,325.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 199,000.00
8.1	Light pole (1-way) and luminous lights	6	No	$ 8,000.00	$ 48,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	10	No	$ 4,000.00	$ 40,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 45,000.00	$ 45,000.00	
8.6	Electrical connection	1	Item	$ 30,000.00	$ 30,000.00	
9	**LANDSCAPING WORKS**					$ 53,387.75
9.1	Topsoiling seeding	5,752	m²	$ 8.50	$ 48,887.75	
9.2	Tree planting	18	No	$ 250.00	$ 4,500.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 4,771,452.84	$ 4,771,452.84
E	**Contingency**					
	Contingency (15% of D)				15%	$ 625,492.73
F	**PROJECT BUDGET**					
	Total Estimate					$ 5,396,945.58

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — 18 October 2016
V160221T — Version 6
Wollert PSP — PM %: 8.80%
IN-08

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 195,489.14**
	Project Management		3.00%	2.64%	$ 117,293.48	
	Program Administration		2.00%	1.76%	$ 78,195.65	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 426,895.38**
1	**SITE ESTABLISHMENT**	1	Item	$ 100,000.00	$ 100,000.00	$ 100,000.00
2	**SERVICE RELOCATION**					$ 82,500.00
2.1	Relocating Power Pole (HV)	11	No	$ 7,500.00	$ 82,500.00	
2.2	Relocating communication pole		No	$ 3,500.00	$ -	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 244,395.38
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 144,395.38	$ 144,395.38	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 4,442,934.91	**$ 4,442,934.91**
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 304,550.00
2.1	Trees	100	No	$ 500.00	$ 50,000.00	
2.2	Demolition of existing Road	1	Item	$ 74,550.00	$ 74,550.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building	1	Item	$ 150,000.00	$ 150,000.00	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 774,161.16
3.1	Stripping topsoil (150mm)	24,805	m²	$ 6.00	$ 148,830.00	
3.2	Cutting	3,091	m³	$ 15.00	$ 46,371.43	
3.3	Filling and compact	2,164	m³	$ 12.00	$ 25,968.00	
3.4	Cart off excess material	927	m³	$ 15.00	$ 13,911.43	
3.5	Soft spot rectification (reclaimed FCR)	2,630	m³	$ 30.00	$ 78,889.80	
3.6	Rock excavation & sub-surface remediation 450mm	6,574	m²	$ 70.00	$ 460,190.50	
4	**PAVEMENT**					$ 1,928,421.50
4.1	Deep lift asphalt 195 mm	10,820	m²	$ 105.00	$ 1,136,100.00	
4.2	Sub-base course - 250 mm 3% CTCR	13,148	m²	$ 55.00	$ 723,156.50	
4.3	Shoulder - full depth pavement	477	m²	$ 145.00	$ 69,165.00	
5	**DRAINAGE**					$ 340,600.00
5.1	Subsoil drains 100mm dia - screenings	2,587	Lm	$ 30.00	$ 77,610.00	
5.2	375 RCP (class 2)	1,047	Lm	$ 170.00	$ 177,990.00	
5.3	Side entry pits	34	No	$ 2,500.00	$ 85,000.00	
6	**CONCRETE WORKS**					$ 378,920.00
6.1	Kerb &channel	2,587	Lm	$ 50.00	$ 129,350.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,194	Lm	$ 130.00	$ 155,220.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	450	Lm	$ 65.00	$ 29,250.00	
6.4	Laybacks and tactile pavers	18	No	$ 850.00	$ 15,300.00	
6.5	Concrete island infill	177	m²	$ 120.00	$ 21,240.00	
6.6	10m concrete maintenance area end of all islands	336	m²	$ 85.00	$ 28,560.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 203,000.00
8.1	Light pole (1-way) and luminous lights	9	No	$ 8,000.00	$ 72,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 45,000.00	$ 45,000.00	
8.6	Electrical connection	1	Item	$ 30,000.00	$ 30,000.00	
9	**LANDSCAPING WORKS**					$ 58,282.25
9.1	Topsoiling seeding	6,269	m²	$ 8.50	$ 53,282.25	
9.2	Tree planting	20	No	$ 250.00	$ 5,000.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 5,065,319.43	**$ 5,065,319.43**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 666,440.24
F	**PROJECT BUDGET**					
	Total Estimate					$ 5,731,759.66

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-09

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 369,516.93
	Project Management		3.00%	2.64%	$ 221,710.16	
	Program Administration		2.00%	1.76%	$ 147,806.77	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 700,938.64
1	**SITE ESTABLISHMENT**	1	Item	$ 100,000.00	$ 100,000.00	$ 100,000.00
2	**SERVICE RELOCATION**					$ 228,000.00
2.1	Relocating Power Pole (HV)	25	No	$ 7,500.00	$ 187,500.00	
2.2	Relocating communication pole	9	No	$ 3,500.00	$ 31,500.00	
2.3	Relocating light pole	3	No	$ 3,000.00	$ 9,000.00	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 372,938.64
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 272,938.64	$ 272,938.64	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 8,398,112.15	$ 8,398,112.15
1	**PRELIMINARIES**					$ 150,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 100,000.00	$ 100,000.00	
2	**DEMOLITION**					$ 394,175.00
2.1	Trees	40	No	$ 500.00	$ 20,000.00	
2.2	Demolition of existing Road	1	Item	$ 201,000.00	$ 201,000.00	
2.3	Breakout of existing kerb & channel	515	Lm	$ 45.00	$ 23,175.00	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building	1	Item	$ 100,000.00	$ 100,000.00	
2.6	Demolition of existing fence	1	Item	$ 50,000.00	$ 50,000.00	
3	**EARTHWORKS**					$ 2,478,134.90
3.1	Stripping topsoil (150mm)	34,605	m²	$ 6.00	$ 207,630.00	
3.2	Cutting	42,744	m³	$ 15.00	$ 641,160.00	
3.3	Filling and compact	3,305	m³	$ 12.00	$ 39,660.00	
3.4	Cart off excess material	39,439	m³	$ 15.00	$ 591,585.00	
3.5	Soft spot rectification (reclaimed FCR)	4,869	m³	$ 30.00	$ 146,063.40	
3.6	Rock excavation & sub-surface remediation 450mm	12,172	m²	$ 70.00	$ 852,036.50	
4	**PAVEMENT**					$ 3,465,850.50
4.1	Deep lift asphalt 195 mm	20,545	m²	$ 105.00	$ 2,157,225.00	
4.2	Sub-base course - 250 mm 3% CTCR	24,344	m²	$ 45.00	$ 1,095,475.50	
4.3	Shoulder - full depth pavement	1,470	m²	$ 145.00	$ 213,150.00	
5	**DRAINAGE**					$ 532,260.00
5.1	Subsoil drains 100mm dia - screenings	4,221	Lm	$ 30.00	$ 126,630.00	
5.2	375 RCP (class 2)	1,739	Lm	$ 170.00	$ 295,630.00	
5.3	Side entry pits	44	No	$ 2,500.00	$ 110,000.00	
6	**CONCRETE WORKS**					$ 585,965.00
6.1	Kerb &channel	4,221	Lm	$ 50.00	$ 211,050.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	2,377	Lm	$ 130.00	$ 309,010.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	313	Lm	$ 65.00	$ 20,345.00	
6.4	Laybacks and tactile pavers	16	No	$ 850.00	$ 13,600.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	376	m²	$ 85.00	$ 31,960.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 329,000.00
8.1	Light pole (1-way) and luminous lights	11	No	$ 8,000.00	$ 88,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	25	No	$ 4,000.00	$ 100,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 60,000.00	$ 60,000.00	
8.6	Electrical connection	1	Item	$ 45,000.00	$ 45,000.00	
9	**LANDSCAPING WORKS**					$ 102,726.75
9.1	Topsoiling seeding	11,086	m²	$ 8.50	$ 94,226.75	
9.2	Tree planting	34	No	$ 250.00	$ 8,500.00	
10	**DELINEATION**					$ 58,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 40,000.00	$ 40,000.00	
	TOTAL A - D				$ 9,468,567.73	$ 9,468,567.73
E	**Contingency**					
	Contingency (15% of D)				15%	$ 1,259,716.82
F	**PROJECT BUDGET**					
	Total Estimate					$ 10,728,284.55

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-10

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 104,448.32**
	Project Management		3.00%	2.64%	$ 62,668.99	
	Program Administration		2.00%	1.76%	$ 41,779.33	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 296,494.96**
1	**SITE ESTABLISHMENT**	1	Item	$ 59,345.63	$ 59,345.63	$ 59,345.63
2	**SERVICE RELOCATION**					$ 60,000.00
2.1	Relocating Power Pole (HV)	8	No	$ 7,500.00	$ 60,000.00	
2.2	Relocating communication pole		No	$ 3,500.00	$ -	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 177,149.33
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 77,149.33	$ 77,149.33	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,373,825.39	**$ 2,373,825.39**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 98,550.00
2.1	Trees	10	No	$ 500.00	$ 5,000.00	
2.2	Demolition of existing Road	1	Item	$ 53,550.00	$ 53,550.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 40,000.00	$ 40,000.00	
3	**EARTHWORKS**					$ 614,422.14
3.1	Stripping topsoil (150mm)	8,610	m²	$ 6.00	$ 51,660.00	
3.2	Cutting	10,374	m³	$ 15.00	$ 155,610.00	
3.3	Filling and compact	830	m³	$ 12.00	$ 9,959.04	
3.4	Cart off excess material	9,544	m³	$ 15.00	$ 143,161.20	
3.5	Soft spot rectification (reclaimed FCR)	1,239	m³	$ 30.00	$ 37,175.40	
3.6	Rock excavation & sub-surface remediation 450mm	3,098	m²	$ 70.00	$ 216,856.50	
4	**PAVEMENT**					$ 885,409.50
4.1	Deep lift asphalt 195 mm	5,187	m²	$ 105.00	$ 544,635.00	
4.2	Sub-base course - 250 mm 3% CTCR	6,196	m²	$ 55.00	$ 340,774.50	
4.3	Shoulder - full depth pavement	-	m²	$ 145.00	$ -	
5	**DRAINAGE**					$ 171,210.00
5.1	Subsoil drains 100mm dia - screenings	1,121	Lm	$ 30.00	$ 33,630.00	
5.2	375 RCP (class 2)	574	Lm	$ 170.00	$ 97,580.00	
5.3	Side entry pits	16	No	$ 2,500.00	$ 40,000.00	
6	**CONCRETE WORKS**					$ 136,995.00
6.1	Kerb &channel	1,121	Lm	$ 50.00	$ 56,050.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	438	Lm	$ 130.00	$ 56,940.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	232	Lm	$ 65.00	$ 15,080.00	
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	45	m²	$ 85.00	$ 3,825.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 93,000.00
8.1	Light pole (1-way) and luminous lights	4	No	$ 8,000.00	$ 32,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	**LANDSCAPING WORKS**					$ 24,738.75
9.1	Topsoiling seeding	2,558	m²	$ 8.50	$ 21,738.75	
9.2	Tree planting	12	No	$ 250.00	$ 3,000.00	
10	**DELINEATION**					$ 33,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00	
	TOTAL A - D				$ 2,774,768.67	**$ 2,774,768.67**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 356,073.81
F	**PROJECT BUDGET**					
	Total Estimate					$ 3,130,842.48

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-13

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	Project and Program Management					$ 96,493.70
	Project Management		3.00%	2.64%	$ 57,896.22	
	Program Administration		2.00%	1.76%	$ 38,597.48	
B	Design and Investigation					$ -
	Completed in pre-interim		N/A	N/A		
C	Additional Items					$ 296,099.72
1	SITE ESTABLISHMENT	1	Item	$ 54,825.96	$ 54,825.96	$ 54,825.96
2	SERVICE RELOCATION					$ 70,000.00
2.1	Relocating Power Pole (HV)	7	No	$ 7,500.00	$ 52,500.00	
2.2	Relocating communication pole	5	No	$ 3,500.00	$ 17,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	VicRoads					$ 171,273.75
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 71,273.75	$ 71,273.75	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	Construction				$ 2,193,038.56	$ 2,193,038.56
1	PRELIMINARIES					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	DEMOLITION					$ 98,850.00
2.1	Trees	50	No	$ 500.00	$ 25,000.00	
2.2	Demolition of existing Road	1	Item	$ 43,850.00	$ 43,850.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	EARTHWORKS					$ 368,475.06
3.1	Stripping topsoil (150mm)	12,280	m²	$ 6.00	$ 73,680.00	
3.2	Cutting	1,696	m³	$ 15.00	$ 25,438.78	
3.3	Filling and compact	932	m³	$ 12.00	$ 11,183.55	
3.4	Cart off excess material	764	m³	$ 15.00	$ 11,459.34	
3.5	Soft spot rectification (reclaimed FCR)	1,203	m³	$ 30.00	$ 36,104.40	
3.6	Rock excavation & sub-surface remediation 450mm	3,009	m²	$ 70.00	$ 210,609.00	
4	PAVEMENT					$ 900,597.00
4.1	Deep lift asphalt 195 mm	4,986	m²	$ 105.00	$ 523,530.00	
4.2	Sub-base course - 250 mm 3% CTCR	6,017	m²	$ 55.00	$ 330,957.00	
4.3	Shoulder - full depth pavement	318	m²	$ 145.00	$ 46,110.00	
5	DRAINAGE					$ 178,370.00
5.1	Subsoil drains 100mm dia - screenings	1,146	Lm	$ 30.00	$ 34,380.00	
5.2	375 RCP (class 2)	597	Lm	$ 170.00	$ 101,490.00	
5.3	Side entry pits	17	No	$ 2,500.00	$ 42,500.00	
6	CONCRETE WORKS					$ 167,200.00
6.1	Kerb &channel	1,146	Lm	$ 50.00	$ 57,300.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	555	Lm	$ 130.00	$ 72,150.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	110	Lm	$ 65.00	$ 7,150.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	240	m²	$ 85.00	$ 20,400.00	
7	TRAFFIC SIGNAL WORKS					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	POWER & LIGHTING					$ 90,000.00
8.1	Light pole (1-way) and luminous lights	2	No	$ 8,000.00	$ 16,000.00	
8.2	Light pole (2-way) and luminous lights	1	No	$ 9,000.00	$ 9,000.00	
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	LANDSCAPING WORKS					$ 27,046.50
9.1	Topsoiling seeding	2,829	m²	$ 8.50	$ 24,046.50	
9.2	Tree planting	12	No	$ 250.00	$ 3,000.00	
10	DELINEATION					$ 36,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 23,000.00	$ 23,000.00	
	TOTAL A - D				$ 2,585,631.98	$ 2,585,631.98
E	Contingency					
	Contingency (15% of D)				15%	$ 328,955.78
F	PROJECT BUDGET					
	Total Estimate					$ 2,914,587.76

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-14

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 117,838.70
	Project Management		3.00%	2.64%	$ 70,703.22	
	Program Administration		2.00%	1.76%	$ 47,135.48	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 326,493.75
1	**SITE ESTABLISHMENT**	1	Item	$ 66,953.81	$ 66,953.81	$ 66,953.81
2	**SERVICE RELOCATION**					$ 72,500.00
2.1	Relocating Power Pole (HV)	5	No	$ 7,500.00	$ 37,500.00	
2.2	Relocating communication pole	10	No	$ 3,500.00	$ 35,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 187,039.95
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 87,039.95	$ 87,039.95	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,678,152.21	**$ 2,678,152.21**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 107,980.00
2.1	Trees	60	No	$ 500.00	$ 30,000.00	
2.2	Demolition of existing Road	1	Item	$ 42,980.00	$ 42,980.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 35,000.00	$ 35,000.00	
3	**EARTHWORKS**					$ 439,859.21
3.1	Stripping topsoil (150mm)	16,670	m²	$ 6.00	$ 100,020.00	
3.2	Cutting	1,951	m³	$ 15.00	$ 29,270.41	
3.3	Filling and compact	1,072	m³	$ 12.00	$ 12,868.04	
3.4	Cart off excess material	879	m³	$ 15.00	$ 13,185.36	
3.5	Soft spot rectification (reclaimed FCR)	1,388	m³	$ 30.00	$ 41,636.40	
3.6	Rock excavation & sub-surface remediation 450mm	3,470	m²	$ 70.00	$ 242,879.00	
4	**PAVEMENT**					$ 1,141,087.00
4.1	Deep lift asphalt 195 mm	5,737	m²	$ 105.00	$ 602,385.00	
4.2	Sub-base course - 250 mm 3% CTCR	6,939	m²	$ 55.00	$ 381,667.00	
4.3	Shoulder - full depth pavement	1,083	m²	$ 145.00	$ 157,035.00	
5	**DRAINAGE**					$ 231,100.00
5.1	Subsoil drains 100mm dia - screenings	1,336	Lm	$ 30.00	$ 40,080.00	
5.2	375 RCP (class 2)	756	Lm	$ 170.00	$ 128,520.00	
5.3	Side entry pits	25	No	$ 2,500.00	$ 62,500.00	
6	**CONCRETE WORKS**					$ 246,150.00
6.1	Kerb &channel	1,336	Lm	$ 50.00	$ 66,800.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,026	Lm	$ 130.00	$ 133,380.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	192	Lm	$ 65.00	$ 12,480.00	
6.4	Laybacks and tactile pavers	8	No	$ 850.00	$ 6,800.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	314	m²	$ 85.00	$ 26,690.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 121,000.00
8.1	Light pole (1-way) and luminous lights	7	No	$ 8,000.00	$ 56,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	5	No	$ 4,000.00	$ 20,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	**LANDSCAPING WORKS**					$ 38,476.00
9.1	Topsoiling seeding	4,056	m²	$ 8.50	$ 34,476.00	
9.2	Tree planting	16	No	$ 250.00	$ 4,000.00	
10	**DELINEATION**					$ 36,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 23,000.00	$ 23,000.00	
	TOTAL A - D				$ 3,122,484.66	**$ 3,122,484.66**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 401,722.83
F	**PROJECT BUDGET**					
	Total Estimate					$ 3,524,207.49

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-15

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 163,312.49**
	Project Management		3.00%	2.64%	$ 97,987.49	
	Program Administration		2.00%	1.76%	$ 65,324.99	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 374,919.73**
1	**SITE ESTABLISHMENT**	1	Item	$ 92,791.19	$ 92,791.19	$ 92,791.19
2	**SERVICE RELOCATION**					$ 61,500.00
2.1	Relocating Power Pole (HV)	4	No	$ 7,500.00	$ 30,000.00	
2.2	Relocating communication pole	9	No	$ 3,500.00	$ 31,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 220,628.54
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 120,628.54	$ 120,628.54	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,711,647.44	**$ 3,711,647.44**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 91,300.00
2.1	Trees	30	No	$ 500.00	$ 15,000.00	
2.2	Demolition of existing Road	1	Item	$ 41,300.00	$ 41,300.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 35,000.00	$ 35,000.00	
3	**EARTHWORKS**					$ 704,133.94
3.1	Stripping topsoil (150mm)	28,475	m²	$ 6.00	$ 170,850.00	
3.2	Cutting	3,230	m³	$ 15.00	$ 48,454.08	
3.3	Filling and compact	1,775	m³	$ 12.00	$ 21,301.68	
3.4	Cart off excess material	1,455	m³	$ 15.00	$ 21,826.98	
3.5	Soft spot rectification (reclaimed FCR)	2,155	m³	$ 30.00	$ 64,639.20	
3.6	Rock excavation & sub-surface remediation 450mm	5,387	m²	$ 70.00	$ 377,062.00	
4	**PAVEMENT**					$ 1,760,231.00
4.1	Deep lift asphalt 195 mm	9,497	m²	$ 105.00	$ 997,185.00	
4.2	Sub-base course - 250 mm 3% CTCR	10,773	m²	$ 55.00	$ 592,526.00	
4.3	Shoulder - full depth pavement	1,176	m²	$ 145.00	$ 170,520.00	
5	**DRAINAGE**					$ 257,360.00
5.1	Subsoil drains 100mm dia - screenings	1,418	Lm	$ 30.00	$ 42,540.00	
5.2	375 RCP (class 2)	896	Lm	$ 170.00	$ 152,320.00	
5.3	Side entry pits	25	No	$ 2,500.00	$ 62,500.00	
6	**CONCRETE WORKS**					$ 296,195.00
6.1	Kerb &channel	1,418	Lm	$ 50.00	$ 70,900.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,344	Lm	$ 130.00	$ 174,720.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	475	m²	$ 85.00	$ 40,375.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 203,000.00
8.1	Light pole (1-way) and luminous lights	14	No	$ 8,000.00	$ 112,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	4	No	$ 4,000.00	$ 16,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 45,000.00	$ 45,000.00	
8.6	Electrical connection	1	Item	$ 30,000.00	$ 30,000.00	
9	**LANDSCAPING WORKS**					$ 44,927.50
9.1	Topsoiling seeding	4,815	m²	$ 8.50	$ 40,927.50	
9.2	Tree planting	16	No	$ 250.00	$ 4,000.00	
10	**DELINEATION**					$ 38,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 25,000.00	$ 25,000.00	
	TOTAL A - D				$ 4,249,879.66	**$ 4,249,879.66**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 556,747.12
F	**PROJECT BUDGET**					
	Total Estimate					$ 4,806,626.77

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 9.00%
IN-18

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 122,507**
	Project Management		3.00%	2.70%	$ 73,504	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.80%	$ 49,003	
B	**Design and Investigation (%)**					**$ 269,515**
	Traffic Investigations		0.85%	0.77%	$ 20,826	
	Cadastral and Engineering Survey		1.20%	1.08%	$ 29,402	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.08%	$ 29,402	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.90%	$ 24,501	
	Preliminary and Final Design		4.25%	3.83%	$ 104,131	
	Construction Management		2.50%	2.25%	$ 61,253	
C	**Construction**				$ 2,722,370	**$ 2,722,370**
1						$ 113,000
1.1	Site establishment	1	Item	$ 68,000	$ 68,000	
1.2	Site management & supervision including QA	14	wks	$ 2,500	$ 35,000	
1.3	Provision for traffic	1	Item	$ 10,000	$ 10,000	
2	**DEMOLITION**					$ 7,000
2.1	Trees	4	No	$ 500	$ 2,000	
2.2	Dry stone wall demolition & make good	1	item	$ 5,000	$ 5,000	
3	**EARTHWORKS**					$ 1,070,921
3.1	Stripping topsoil (150mm)	1,581	m²	$ 6	$ 9,486	
3.2	Excavation and removal	325	m³	$ 30	$ 9,750	
3.3	Filling	13,150	m³	$ 15	$ 197,250	
3.4	Import Fill material	12,825	m³	$ 45	$ 577,125	
3.5	Additional Cut and Fill allowance	2,790	m³	$ 30	$ 83,700	
3.6	Soft spot rectification	1,019	m³	$ 15	$ 15,285	
3.7	Rock excavation & sub-surface remediation 450mm	2,548	m²	$ 70	$ 178,325	
4	**PAVEMENT**					$ 708,100
4.1	Deep lift asphalt 195 mm	4,075	m²	$ 105	$ 427,875	
4.2	Subbase course - 250 mm 3% CTCR	5,095	m²	$ 55	$ 280,225	
4.3	Shoulder 1m wide - full depth pavement	-	m	$ 145	$ -	
5	**DRAINAGE**					$ 158,700
5.1	Subsoil drains 100mm dia - screenings	1,020	Lm	$ 30	$ 30,600	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	380	Lm	$ 170	$ 64,600	
5.4	Side entry pits	13	No	$ 2,500	$ 32,500	
5.5	Allowance tomodify draiange to ultimate location	1	item	$ 31,000	$ 31,000	
6	**CONCRETE WORKS**					$ 172,975
6.1	Kerb &channel	1,020	Lm	$ 50	$ 51,000	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	390	Lm	$ 130	$ 50,700	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	185	Lm	$ 65	$ 12,025	
6.4	Laybacks and tactile pavers	6	No	$ 850	$ 5,100	
6.5	10m concrete maintenance area end of all islands	270	m²	$ 85	$ 22,950	
6.6	Additional Shared Paths	240	Lm	$ 130	$ 31,200	
7	**TRAFFIC SIGNAL WORKS**					$ 237,500
7.1	General items	1	Item	$ 23,000	$ 23,000	
7.2	Conduits	1	Item	$ 18,000	$ 18,000	
7.3	Pedestals	1	Item	$ 45,000	$ 45,000	
7.4	Lanterns	1	Item	$ 18,000	$ 18,000	
7.5	Controller	1	Item	$ 75,000	$ 75,000	
7.6	Detectors	1	Item	$ 9,500	$ 9,500	
7.7	Cabling & connections	1	Item	$ 40,000	$ 40,000	
7.8	Clean-up	1	Item	$ 9,000	$ 9,000	
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**	1	item	$ 100,000	$ 100,000	$ 100,000
9	**POWER & LIGHTING**					$ 118,000
9.1	Light pole (1-way) and luminous lights	3	No	$ 8,000	$ 24,000	
9.2	Light pole (2-way) and luminous lights	4	No	$ 9,000	$ 36,000	
9.3	JUP lighting single	2	No	$ 4,000	$ 8,000	
9.4	JUP lighting dual	1	No	$ 5,000	$ 5,000	
9.5	Cabling, conduits and pits	1	Item	$ 30,000	$ 30,000	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
10	**LANDSCAPING WORKS**					$ 8,674
10.1	Topsoiling seeding	668	m²	$ 8.50	$ 5,674	
10.2	Tree planting	12	No	$ 250.00	$ 3,000	
11	**SIGNING**	1	item	$ 7,500	$ 7,500	$ 7,500
12	**LINEMARKING (Thermoplastic)**	1	item	$ 20,000	$ 20,000	$ 20,000
13	**SERVICE RELOCATION**					$ -
13.1	NA		item			
14	**MISCELLANEOUS**					$ -
15	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 3,114,391	**$ 3,114,391**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 408,355.46
E	**PROJECT BUDGET**					
	Total Estimate					$ 3,522,746

AUTHOR: Asiri Rajapakse
Date: 26/11/2015

REVIEWER: Rob Henry
Date: 26/11/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.48%
IN-20

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 186,106**
	Project Management		3.00%	2.54%	$ 111,664	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.70%	$ 74,442	
B	**Design and Investigation (%)**					**$ 409,433**
	Traffic Investigations		0.85%	0.72%	$ 31,638	
	Cadastral and Engineering Survey		1.20%	1.02%	$ 44,665	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.02%	$ 44,665	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.85%	$ 37,221	
	Preliminary and Final Design		4.25%	3.60%	$ 158,190	
	Construction Management		2.50%	2.12%	$ 93,053	
C	**Construction**				$ 4,389,295	**$ 4,389,295**
1	**PRELIMINARIES**					$ 165,000
1.1	Site establishment	1	Item	$ 100,000	$ 100,000	
1.2	Site management & supervision including QA	22	wks	$ 2,500	$ 55,000	
1.3	Provision for traffic	1	Item	$ 10,000	$ 10,000	
2	**DEMOLITION**					$ 27,500
2.1	Trees	5	No	$ 500	$ 2,500	
2.2	Demolition of Dry Stone fence	1	item	$ 25,000	$ 25,000	
3	**EARTHWORKS**					$ 1,331,978
3.1	Stripping topsoil (150mm)	3,230	m²	$ 6	$ 19,380	
3.2	Excavation and removal	-	m³	$ 30	$ -	
3.3	Filling	12,466	m³	$ 15	$ 186,990	
3.6	Import Fill material	12,466	m³	$ 45	$ 560,970	
3.5	Additional Cut and Fill allowance	6,765	m³	$ 30	$ 202,950	
3.6	Soft spot rectification (reclaimed FCR)	1,904	m³	$ 15	$ 28,554	
3.7	Rock excavation & sub-surface remediation 450mm	4,759	m²	$ 70	$ 333,134	
4	**PAVEMENT**					$ 1,411,826
4.1	Deep lift asphalt 195 mm	7,553	m²	$ 105	$ 793,065	
4.2	Subbase course - 250 mm 3% CTCR	9,518	m²	$ 55	$ 523,496	
4.3	Shoulder 1m wide - full depth pavement	657	m	$ 145	$ 95,265	
5	**DRAINAGE**					$ 475,750
5.1	Subsoil drains 100mm dia - screenings	2,425	Lm	$ 30	$ 72,750	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	1,200	Lm	$ 170	$ 204,000	
5.4	Side entry pits	30	No	$ 2,500	$ 75,000	
5.5	Allowance tomodify draiange to ultimate location	1	item	$ 124,000	$ 124,000	
6	**CONCRETE WORKS**					$ 297,150
6.1	Kerb &channel	1,768	Lm	$ 50	$ 88,400	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	845	Lm	$ 130	$ 109,850	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	300	Lm	$ 65	$ 19,500	
6.4	Laybacks and tactile pavers	8	No	$ 850	$ 6,800	
6.5	10m concrete maintenance area end of all islands	250	m²	$ 85	$ 21,250	
6.6	Additional Shared Paths	395	Lm	$ 130	$ 51,350	
7	**TRAFFIC SIGNAL WORKS**					$ 290,000
7.1	General items	1	Item	$ 27,500	$ 27,500	
7.2	Conduits	1	Item	$ 25,000	$ 25,000	
7.3	Pedestals	1	Item	$ 60,000	$ 60,000	
7.4	Lanterns	1	Item	$ 24,000	$ 24,000	
7.5	Controller	1	Item	$ 82,500	$ 82,500	
7.6	Detectors	1	Item	$ 15,000	$ 15,000	
7.7	Cabling & connections	1	Item	$ 45,000	$ 45,000	
7.8	Clean-up	1	Item	$ 11,000	$ 11,000	
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**	1	item	$ 100,000	$ 100,000	$ 100,000
9	**POWER & LIGHTING**					$ 221,000
9.1	Light pole (1-way) and luminous lights	20	No	$ 8,000	$ 160,000	
9.2	Light pole (2-way) and luminous lights	-	No	$ 9,000	$ -	
9.3	JUP lighting single	4	No	$ 4,000	$ 16,000	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	1	Item	$ 30,000	$ 30,000	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
10	**LANDSCAPING WORKS**					$ 29,092
10.1	Topsoiling seeding	2,952	m²	$ 8.50	$ 25,092	
10.2	Tree planting	16	No	$ 250.00	$ 4,000	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ -
13.1	NA		item			
14	**MISCELLANEOUS**					$ -
15	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 4,984,835	**$ 4,984,835**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 658,394
E	**PROJECT BUDGET**					
	Total Estimate					$ 5,643,229

AUTHOR: Asiri Rajapakse
Date: 26/11/2015

REVIEWER: Rob Henry
Date: 26/11/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-21 (APA)

PM %: 8.80%

18 October 2016
Version 6

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 175,467.79
	Project Management		3.00%	2.64%	$ 105,280.67	
	Program Administration		2.00%	1.76%	$ 70,187.11	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 329,304.49
1	**SITE ESTABLISHMENT**	1	Item	$ 99,697.61	$ 99,697.61	$ 99,697.61
2	**SERVICE RELOCATION**					$ -
2.1	Relocating Power Pole (HV)		No	$ 7,500.00	$ -	
2.2	Relocating communication pole		No	$ 3,500.00	$ -	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 229,606.89
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 129,606.89	$ 129,606.89	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,987,904.26	$ 3,987,904.26
1	**PRELIMINARIES**					$ 55,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 5,000.00	$ 5,000.00	
2	**DEMOLITION**					$ -
2.1	Trees		No	$ 500.00	$ -	
2.2	Demolition of existing Road		Item	$ 41,300.00	$ -	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence		Item	$ 35,000.00	$ -	
3	**EARTHWORKS**					$ 786,889.26
3.1	Stripping topsoil (150mm)	24,088	m²	$ 6.00	$ 144,528.00	
3.2	Cutting	9,520	m³	$ 15.00	$ 142,798.50	
3.3	Filling and compact	1,172	m³	$ 12.00	$ 14,060.16	
3.4	Cart off excess material	8,348	m³	$ 15.00	$ 125,223.30	
3.5	Soft spot rectification (reclaimed FCR)	1,757	m³	$ 30.00	$ 52,723.80	
3.6	Rock excavation & sub-surface remediation 450mm	4,394	m²	$ 70.00	$ 307,555.50	
4	**PAVEMENT**					$ 1,397,506.50
4.1	Deep lift asphalt 195 mm	7,323	m²	$ 105.00	$ 768,915.00	
4.2	Sub-base course - 250 mm 3% CTCR	8,787	m²	$ 55.00	$ 483,301.50	
4.3	Shoulder - full depth pavement	1,002	m²	$ 145.00	$ 145,290.00	
5	**DRAINAGE**					$ 259,430.00
5.1	Subsoil drains 100mm dia - screenings	1,627	Lm	$ 30.00	$ 48,810.00	
5.2	375 RCP (class 2)	886	Lm	$ 170.00	$ 150,620.00	
5.3	Side entry pits	24	No	$ 2,500.00	$ 60,000.00	
6	**CONCRETE WORKS**					$ 277,255.00
6.1	Kerb &channel	1,627	Lm	$ 50.00	$ 81,350.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,068	Lm	$ 130.00	$ 138,840.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	381	Lm	$ 65.00	$ 24,765.00	
6.4	Laybacks and tactile pavers	16	No	$ 850.00	$ 13,600.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	220	m²	$ 85.00	$ 18,700.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 229,000.00
8.1	Light pole (1-way) and luminous lights	16	No	$ 8,000.00	$ 128,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single		No	$ 4,000.00	$ -	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 40,000.00	$ 40,000.00	
8.6	Electrical connection	1	Item	$ 25,000.00	$ 25,000.00	
9	**LANDSCAPING WORKS**					$ 42,900.25
9.1	Topsoiling seeding	4,577	m²	$ 8.50	$ 38,900.25	
9.2	Tree planting	16	No	$ 250.00	$ 4,000.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
11	**TRANSMISSION PIPELINE**					$ 584,923
11.1	Clay excavation for transmission pipeline	589	m³	$ 45	$ 26,521	
11.2	Hand excavation for rock around transimission pipeline (extra over allowance)	250	m	$ 1,050	$ 262,500	
11.3	Wrap for transmission pipeline	250	m	$ 500	$ 125,000	
11.4	Backfill stabilisation sand for transmission pipeline	589	m³	$ 150	$ 88,403	
11.5	Transmission pipeline slab protection 200mm	500	m²	$ 165	$ 82,500	
	TOTAL A - D				$ 4,492,676.54	$ 4,492,676.54
E	**Contingency**					
	Contingency (15% of D)				15%	$ 598,185.64
F	**PROJECT BUDGET**					
	Total Estimate					$ 5,090,862.18

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-22

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 128,134.56
	Project Management		3.00%	2.64%	$ 76,880.74	
	Program Administration		2.00%	1.76%	$ 51,253.83	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 295,948.58
1	**SITE ESTABLISHMENT**	1	Item	$ 72,803.73	$ 72,803.73	$ 72,803.73
2	**SERVICE RELOCATION**					$ 28,500.00
2.1	Relocating Power Pole (HV)	1	No	$ 7,500.00	$ 7,500.00	
2.2	Relocating communication pole	6	No	$ 3,500.00	$ 21,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 194,644.85
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 94,644.85	$ 94,644.85	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,912,149.18	$ 2,912,149.18
1	**PRELIMINARIES**					$ 85,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 35,000.00	$ 35,000.00	
2	**DEMOLITION**					$ 54,300.00
2.1	Trees	7	No	$ 500.00	$ 3,500.00	
2.2	Demolition of existing Road	1	Item	$ 20,800.00	$ 20,800.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 505,537.93
3.1	Stripping topsoil (150mm)	17,415	m²	$ 6.00	$ 104,490.00	
3.2	Cutting	2,464	m³	$ 15.00	$ 36,966.00	
3.3	Filling and compact	1,152	m³	$ 12.00	$ 13,819.07	
3.4	Cart off excess material	1,313	m³	$ 15.00	$ 19,692.17	
3.5	Soft spot rectification (reclaimed FCR)	1,613	m³	$ 30.00	$ 48,376.20	
3.6	Rock excavation & sub-surface remediation 450mm	4,031	m²	$ 70.00	$ 282,194.50	
4	**PAVEMENT**					$ 1,162,128.50
4.1	Deep lift asphalt 195 mm	6,161	m²	$ 105.00	$ 646,905.00	
4.2	Sub-base course - 250 mm 3% CTCR	8,063	m²	$ 55.00	$ 443,448.50	
4.3	Shoulder - full depth pavement	495	m²	$ 145.00	$ 71,775.00	
5	**DRAINAGE**					$ 238,510.00
5.1	Subsoil drains 100mm dia - screenings	2,113	Lm	$ 30.00	$ 63,390.00	
5.2	375 RCP (class 2)	736	Lm	$ 170.00	$ 125,120.00	
5.3	Side entry pits	20	No	$ 2,500.00	$ 50,000.00	
6	**CONCRETE WORKS**					$ 282,935.00
6.1	Kerb &channel	2,113	Lm	$ 50.00	$ 105,650.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	841	Lm	$ 130.00	$ 109,330.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	712	Lm	$ 65.00	$ 46,280.00	
6.4	Laybacks and tactile pavers	16	No	$ 850.00	$ 13,600.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	95	m²	$ 85.00	$ 8,075.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 187,000.00
8.1	Light pole (1-way) and luminous lights	12	No	$ 8,000.00	$ 96,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single		No	$ 4,000.00	$ -	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00	
8.6	Electrical connection	1	Item	$ 20,000.00	$ 20,000.00	
9	**LANDSCAPING WORKS**					$ 46,737.75
9.1	Topsoiling seeding	4,852	m²	$ 8.50	$ 41,237.75	
9.2	Tree planting	22	No	$ 250.00	$ 5,500.00	
10	**DELINEATION**					$ 48,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 30,000.00	$ 30,000.00	
	TOTAL A - D				$ 3,336,232.33	$ 3,336,232.33
E	**Contingency**					
	Contingency (15% of D)				15%	$ 436,822.38
F	**PROJECT BUDGET**					
	Total Estimate					$ 3,773,054.70

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-23

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 79,345.95
	Project Management		3.00%	2.64%	$ 47,607.57	
	Program Administration		2.00%	1.76%	$ 31,738.38	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 229,190.73
1	**SITE ESTABLISHMENT**	1	Item	$ 45,082.93	$ 45,082.93	$ 45,082.93
2	**SERVICE RELOCATION**					$ 25,500.00
2.1	Relocating Power Pole (HV)	2	No	$ 7,500.00	$ 15,000.00	
2.2	Relocating communication pole	3	No	$ 3,500.00	$ 10,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 158,607.80
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 58,607.80	$ 58,607.80	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 1,803,317.02	$ 1,803,317.02
1	**PRELIMINARIES**					$ 85,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 35,000.00	$ 35,000.00	
2	**DEMOLITION**					$ 48,000.00
2.1	Trees	30	No	$ 500.00	$ 15,000.00	
2.2	Demolition of existing Road	1	Item	$ 13,000.00	$ 13,000.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 20,000.00	$ 20,000.00	
3	**EARTHWORKS**					$ 281,605.77
3.1	Stripping topsoil (150mm)	10,080	m²	$ 6.00	$ 60,480.00	
3.2	Cutting	1,190	m³	$ 15.00	$ 17,857.14	
3.3	Filling and compact	654	m³	$ 12.00	$ 7,850.47	
3.4	Cart off excess material	536	m³	$ 15.00	$ 8,044.06	
3.5	Soft spot rectification (reclaimed FCR)	914	m³	$ 30.00	$ 27,420.60	
3.6	Rock excavation & sub-surface remediation 450mm	2,285	m²	$ 70.00	$ 159,953.50	
4	**PAVEMENT**					$ 643,215.50
4.1	Deep lift asphalt 195 mm	3,500	m²	$ 105.00	$ 367,500.00	
4.2	Sub-base course - 250 mm 3% CTCR	4,570	m²	$ 55.00	$ 251,355.50	
4.3	Shoulder - full depth pavement	168	m²	$ 145.00	$ 24,360.00	
5	**DRAINAGE**					$ 161,420.00
5.1	Subsoil drains 100mm dia - screenings	1,189	Lm	$ 30.00	$ 35,670.00	
5.2	375 RCP (class 2)	475	Lm	$ 170.00	$ 80,750.00	
5.3	Side entry pits	18	No	$ 2,500.00	$ 45,000.00	
6	**CONCRETE WORKS**					$ 169,950.00
6.1	Kerb &channel	1,189	Lm	$ 50.00	$ 59,450.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	498	Lm	$ 130.00	$ 64,740.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	398	Lm	$ 65.00	$ 25,870.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	114	m²	$ 85.00	$ 9,690.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 125,000.00
8.1	Light pole (1-way) and luminous lights	10	No	$ 8,000.00	$ 80,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single		No	$ 4,000.00	$ -	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	**LANDSCAPING WORKS**					$ 26,625.75
9.1	Topsoiling seeding	2,780	m²	$ 8.50	$ 23,625.75	
9.2	Tree planting	12	No	$ 250.00	$ 3,000.00	
10	**DELINEATION**					$ 36,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 23,000.00	$ 23,000.00	
	TOTAL A - D				$ 2,111,853.70	$ 2,111,853.70
E	**Contingency**					
	Contingency (15% of D)				15%	$ 270,497.55
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,382,351.25

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-24

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 103,674.75**
	Project Management		3.00%	2.64%	$ 62,204.85	
	Program Administration		2.00%	1.76%	$ 41,469.90	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 289,484.05**
1	**SITE ESTABLISHMENT**	1	Item	$ 58,906.11	$ 58,906.11	$ 58,906.11
2	**SERVICE RELOCATION**					$ 54,000.00
2.1	Relocating Power Pole (HV)	3	No	$ 7,500.00	$ 22,500.00	
2.2	Relocating communication pole	9	No	$ 3,500.00	$ 31,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 176,577.94
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 76,577.94	$ 76,577.94	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,356,244.31	**$ 2,356,244.31**
1	**PRELIMINARIES**					$ 95,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 45,000.00	$ 45,000.00	
2	**DEMOLITION**					$ 114,420.00
2.1	Trees	70	No	$ 500.00	$ 35,000.00	
2.2	Demolition of existing Road	1	Item	$ 49,420.00	$ 49,420.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 369,639.56
3.1	Stripping topsoil (150mm)	11,770	m²	$ 6.00	$ 70,620.00	
3.2	Cutting	1,581	m³	$ 15.00	$ 23,719.39	
3.3	Filling and compact	869	m³	$ 12.00	$ 10,427.66	
3.4	Cart off excess material	712	m³	$ 15.00	$ 10,684.81	
3.5	Soft spot rectification (reclaimed FCR)	1,240	m³	$ 30.00	$ 37,198.20	
3.6	Rock excavation & sub-surface remediation 450mm	3,100	m²	$ 70.00	$ 216,989.50	
4	**PAVEMENT**					$ 899,598.50
4.1	Deep lift asphalt 195 mm	4,649	m²	$ 105.00	$ 488,145.00	
4.2	Sub-base course - 250 mm 3% CTCR	6,200	m²	$ 55.00	$ 340,983.50	
4.3	Shoulder - full depth pavement	486	m²	$ 145.00	$ 70,470.00	
5	**DRAINAGE**					$ 200,390.00
5.1	Subsoil drains 100mm dia - screenings	1,723	Lm	$ 30.00	$ 51,690.00	
5.2	375 RCP (class 2)	610	Lm	$ 170.00	$ 103,700.00	
5.3	Side entry pits	18	No	$ 2,500.00	$ 45,000.00	
6	**CONCRETE WORKS**					$ 231,750.00
6.1	Kerb &channel	1,723	Lm	$ 50.00	$ 86,150.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	734	Lm	$ 130.00	$ 95,420.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	568	Lm	$ 65.00	$ 36,920.00	
6.4	Laybacks and tactile pavers	6	No	$ 850.00	$ 5,100.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	96	m²	$ 85.00	$ 8,160.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 145,000.00
8.1	Light pole (1-way) and luminous lights	11	No	$ 8,000.00	$ 88,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	3	No	$ 4,000.00	$ 12,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	**LANDSCAPING WORKS**					$ 37,946.25
9.1	Topsoiling seeding	4,053	m²	$ 8.50	$ 34,446.25	
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00	
10	**DELINEATION**					$ 36,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 23,000.00	$ 23,000.00	
	TOTAL A - D				$ 2,749,403.11	**$ 2,749,403.11**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 353,436.65
F	**PROJECT BUDGET**					
	Total Estimate					$ 3,102,839.75

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
V160221T
Wollert PSP
IN-26

18 October 2016
Version 6

PM %: 8.80%

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					$ 161,758.09
	Project Management		3.00%	2.64%	$ 97,054.85	
	Program Administration		2.00%	1.76%	$ 64,703.23	
B	**Design and Investigation**					$ -
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					$ 372,888.41
1	**SITE ESTABLISHMENT**	1	Item	$ 91,908.00	$ 91,908.00	$ 91,908.00
2	**SERVICE RELOCATION**					$ 61,500.00
2.1	Relocating Power Pole (HV)	4	No	$ 7,500.00	$ 30,000.00	
2.2	Relocating communication pole	9	No	$ 3,500.00	$ 31,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 219,480.41
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 119,480.41	$ 119,480.41	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,676,320.16	$ 3,676,320.16
1	**PRELIMINARIES**					$ 100,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 50,000.00	$ 50,000.00	
2	**DEMOLITION**					$ 111,950.00
2.1	Trees	65	No	$ 500.00	$ 32,500.00	
2.2	Demolition of existing Road	1	Item	$ 49,450.00	$ 49,450.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 652,037.66
3.1	Stripping topsoil (150mm)	19,185	m²	$ 6.00	$ 115,110.00	
3.2	Cutting	2,964	m³	$ 15.00	$ 44,464.29	
3.3	Filling and compact	1,629	m³	$ 12.00	$ 19,547.66	
3.4	Cart off excess material	1,335	m³	$ 15.00	$ 20,029.71	
3.5	Soft spot rectification (reclaimed FCR)	2,209	m³	$ 30.00	$ 66,276.00	
3.6	Rock excavation & sub-surface remediation 450mm	5,523	m²	$ 70.00	$ 386,610.00	
4	**PAVEMENT**					$ 1,561,755.00
4.1	Deep lift asphalt 195 mm	8,715	m²	$ 105.00	$ 915,075.00	
4.2	Sub-base course - 250 mm 3% CTCR	11,046	m²	$ 55.00	$ 607,530.00	
4.3	Shoulder - full depth pavement	270	m²	$ 145.00	$ 39,150.00	
5	**DRAINAGE**					$ 288,490.00
5.1	Subsoil drains 100mm dia - screenings	2,590	Lm	$ 30.00	$ 77,700.00	
5.2	375 RCP (class 2)	887	Lm	$ 170.00	$ 150,790.00	
5.3	Side entry pits	24	No	$ 2,500.00	$ 60,000.00	
6	**CONCRETE WORKS**					$ 334,705.00
6.1	Kerb &channel	2,590	Lm	$ 50.00	$ 129,500.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,080	Lm	$ 130.00	$ 140,400.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	708	Lm	$ 65.00	$ 46,020.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	101	m²	$ 85.00	$ 8,585.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 217,000.00
8.1	Light pole (1-way) and luminous lights	13	No	$ 8,000.00	$ 104,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	3	No	$ 4,000.00	$ 12,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 40,000.00	$ 40,000.00	
8.6	Electrical connection	1	Item	$ 25,000.00	$ 25,000.00	
9	**LANDSCAPING WORKS**					$ 55,382.50
9.1	Topsoiling seeding	6,045	m²	$ 8.50	$ 51,382.50	
9.2	Tree planting	16	No	$ 250.00	$ 4,000.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 4,210,966.65	$ 4,210,966.65
E	**Contingency**					
	Contingency (15% of D)				15%	$ 551,448.02
F	**PROJECT BUDGET**					
	Total Estimate					$ 4,762,414.67

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 6**
Wollert PSP **PM %:** 8.80%
IN-31

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 156,243.18**
	Project Management		3.00%	2.64%	$ 93,745.91	
	Program Administration		2.00%	1.76%	$ 62,497.27	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 352,181.43**
1	**SITE ESTABLISHMENT**	1	Item	$ 88,774.53	$ 88,774.53	$ 88,774.53
2	**SERVICE RELOCATION**					$ 48,000.00
2.1	Relocating Power Pole (HV)	3	No	$ 7,500.00	$ 22,500.00	
2.2	Relocating communication pole	3	No	$ 3,500.00	$ 10,500.00	
2.3	Relocating light pole	5	No	$ 3,000.00	$ 15,000.00	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 215,406.90
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 115,406.90	$ 115,406.90	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 3,550,981.39	**$ 3,550,981.39**
1	**PRELIMINARIES**					$ 150,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 100,000.00	$ 100,000.00	
2	**DEMOLITION**					$ 175,305.00
2.1	Trees	20	No	$ 500.00	$ 10,000.00	
2.2	Demolition of existing Road	1	Item	$ 98,000.00	$ 98,000.00	
2.3	Breakout of existing kerb & channel	829	Lm	$ 45.00	$ 37,305.00	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 591,424.39
3.1	Stripping topsoil (150mm)	19,860	m²	$ 6.00	$ 119,160.00	
3.2	Cutting	2,700	m³	$ 15.00	$ 40,500.00	
3.3	Filling and compact	1,484	m³	$ 12.00	$ 17,804.86	
3.4	Cart off excess material	1,216	m³	$ 15.00	$ 18,243.93	
3.5	Soft spot rectification (reclaimed FCR)	1,930	m³	$ 30.00	$ 57,909.60	
3.6	Rock excavation & sub-surface remediation 450mm	4,826	m²	$ 70.00	$ 337,806.00	
4	**PAVEMENT**					$ 1,473,078.00
4.1	Deep lift asphalt 195 mm	7,938	m²	$ 105.00	$ 833,490.00	
4.2	Sub-base course - 250 mm 3% CTCR	9,652	m²	$ 55.00	$ 530,838.00	
4.3	Shoulder - full depth pavement	750	m²	$ 145.00	$ 108,750.00	
5	**DRAINAGE**					$ 282,600.00
5.1	Subsoil drains 100mm dia - screenings	1,904	Lm	$ 30.00	$ 57,120.00	
5.2	375 RCP (class 2)	944	Lm	$ 170.00	$ 160,480.00	
5.3	Side entry pits	26	No	$ 2,500.00	$ 65,000.00	
6	**CONCRETE WORKS**					$ 315,030.00
6.1	Kerb &channel	1,904	Lm	$ 50.00	$ 95,200.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	1,104	Lm	$ 130.00	$ 143,520.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	222	Lm	$ 65.00	$ 14,430.00	
6.4	Laybacks and tactile pavers	16	No	$ 850.00	$ 13,600.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	568	m²	$ 85.00	$ 48,280.00	
7	**TRAFFIC SIGNAL WORKS**					$ 302,000.00
7.1	General items	1	Item	$ 27,500.00	$ 27,500.00	
7.2	Conduits	1	Item	$ 28,000.00	$ 28,000.00	
7.3	Pedestals	1	Item	$ 65,000.00	$ 65,000.00	
7.4	Lanterns	1	Item	$ 25,000.00	$ 25,000.00	
7.5	Controller	1	Item	$ 82,500.00	$ 82,500.00	
7.6	Detectors	1	Item	$ 15,000.00	$ 15,000.00	
7.7	Cabling & connections	1	Item	$ 48,000.00	$ 48,000.00	
7.8	Clean-up	1	Item	$ 11,000.00	$ 11,000.00	
8	**POWER & LIGHTING**					$ 161,000.00
8.1	Light pole (1-way) and luminous lights	6	No	$ 8,000.00	$ 48,000.00	
8.2	Light pole (2-way) and luminous lights	4	No	$ 9,000.00	$ 36,000.00	
8.3	JUP lighting single	3	No	$ 4,000.00	$ 12,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 40,000.00	$ 40,000.00	
8.6	Electrical connection	1	Item	$ 25,000.00	$ 25,000.00	
9	**LANDSCAPING WORKS**					$ 47,544.00
9.1	Topsoiling seeding	5,064	m²	$ 8.50	$ 43,044.00	
9.2	Tree planting	18	No	$ 250.00	$ 4,500.00	
10	**DELINEATION**					$ 53,000.00
10.1	Signing	1	item	$ 18,000.00	$ 18,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 35,000.00	$ 35,000.00	
	TOTAL A - D				$ 4,059,406.00	**$ 4,059,406.00**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 532,647.21
F	**PROJECT BUDGET**					
	Total Estimate					$ 4,592,053.20

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-32

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 97,708.78**
	Project Management		3.00%	2.64%	$ 58,625.27	
	Program Administration		2.00%	1.76%	$ 39,083.51	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 324,687.62**
1	**SITE ESTABLISHMENT**	1	Item	$ 55,516.35	$ 55,516.35	$ 55,516.35
2	**SERVICE RELOCATION**					$ 97,000.00
2.1	Relocating Power Pole (HV)	12	No	$ 7,500.00	$ 90,000.00	
2.2	Relocating communication pole	2	No	$ 3,500.00	$ 7,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 172,171.26
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 72,171.26	$ 72,171.26	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 2,220,654.19	**$ 2,220,654.19**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 113,500.00
2.1	Trees	20	No	$ 500.00	$ 10,000.00	
2.2	Demolition of existing Road	1	Item	$ 73,500.00	$ 73,500.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 100,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 30,000.00	$ 30,000.00	
3	**EARTHWORKS**					$ 364,453.94
3.1	Stripping topsoil (150mm)	7,550	m²	$ 6.00	$ 45,300.00	
3.2	Cutting	1,845	m³	$ 15.00	$ 27,673.47	
3.3	Filling and compact	1,014	m³	$ 12.00	$ 12,165.98	
3.4	Cart off excess material	831	m³	$ 15.00	$ 12,465.99	
3.5	Soft spot rectification (reclaimed FCR)	1,302	m³	$ 30.00	$ 39,051.00	
3.6	Rock excavation & sub-surface remediation 450mm	3,254	m²	$ 70.00	$ 227,797.50	
4	**PAVEMENT**					$ 927,487.50
4.1	Deep lift asphalt 195 mm	5,424	m²	$ 105.00	$ 569,520.00	
4.2	Sub-base course - 250 mm 3% CTCR	6,509	m²	$ 55.00	$ 357,967.50	
4.3	Shoulder - full depth pavement	-	m²	$ 145.00	$ -	
5	**DRAINAGE**					$ 191,040.00
5.1	Subsoil drains 100mm dia - screenings	1,205	Lm	$ 30.00	$ 36,150.00	
5.2	375 RCP (class 2)	617	Lm	$ 170.00	$ 104,890.00	
5.3	Side entry pits	20	No	$ 2,500.00	$ 50,000.00	
6	**CONCRETE WORKS**					$ 116,400.00
6.1	Kerb &channel	1,205	Lm	$ 50.00	$ 60,250.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	377	Lm	$ 130.00	$ 49,010.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	Lm	$ 65.00	$ -	
6.4	Laybacks and tactile pavers	4	No	$ 850.00	$ 3,400.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	44	m²	$ 85.00	$ 3,740.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 133,000.00
8.1	Light pole (1-way) and luminous lights	8	No	$ 8,000.00	$ 64,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	6	No	$ 4,000.00	$ 24,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
8.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
9	**LANDSCAPING WORKS**					$ 25,272.75
9.1	Topsoiling seeding	2,562	m²	$ 8.50	$ 21,772.75	
9.2	Tree planting	14	No	$ 250.00	$ 3,500.00	
10	**DELINEATION**					$ 33,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00	
	TOTAL A - D				$ 2,643,050.59	**$ 2,643,050.59**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 333,098.13
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,976,148.72

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 6**
Wollert PSP — **PM %:** 8.80%
IN-33

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 71,988.96**
	Project Management		3.00%	2.64%	$ 43,193.37	
	Program Administration		2.00%	1.76%	$ 28,795.58	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 212,076.48**
1	**SITE ESTABLISHMENT**	1	Item	$ 40,902.82	$ 40,902.82	$ 40,902.82
2	**SERVICE RELOCATION**					$ 18,000.00
2.1	Relocating Power Pole (HV)	1	No	$ 7,500.00	$ 7,500.00	
2.2	Relocating communication pole	3	No	$ 3,500.00	$ 10,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 153,173.66
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 53,173.66	$ 53,173.66	
3.2	SIGNAL MAINTENANCE (10 YEARS) by Road Authority	1	Item	$ 100,000.00	$ 100,000.00	
D	**Construction**				$ 1,636,112.65	**$ 1,636,112.65**
1	**PRELIMINARIES**					$ 90,000.00
1.1	Site management & supervision including QA	20	weeks	$ 2,500.00	$ 50,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 165,950.00
2.1	Trees	5	No	$ 500.00	$ 2,500.00	
2.2	Demolition of existing Road	1	Item	$ 38,450.00	$ 38,450.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building	1	Item	$ 100,000.00	$ 100,000.00	
2.6	Demolition of existing fence	1	Item	$ 25,000.00	$ 25,000.00	
3	**EARTHWORKS**					$ 217,488.15
3.1	Stripping topsoil (150mm)	7,310	m²	$ 6.00	$ 43,860.00	
3.2	Cutting	934	m³	$ 15.00	$ 14,005.10	
3.3	Filling and compact	513	m³	$ 12.00	$ 6,157.01	
3.4	Cart off excess material	421	m³	$ 15.00	$ 6,308.84	
3.5	Soft spot rectification (reclaimed FCR)	718	m³	$ 30.00	$ 21,535.20	
3.6	Rock excavation & sub-surface remediation 450mm	1,795	m²	$ 70.00	$ 125,622.00	
4	**PAVEMENT**					$ 522,171.00
4.1	Deep lift asphalt 195 mm	2,745	m²	$ 105.00	$ 288,225.00	
4.2	Sub-base course - 250 mm 3% CTCR	3,589	m²	$ 55.00	$ 197,406.00	
4.3	Shoulder - full depth pavement	252	m²	$ 145.00	$ 36,540.00	
5	**DRAINAGE**					$ 118,250.00
5.1	Subsoil drains 100mm dia - screenings	938	Lm	$ 30.00	$ 28,140.00	
5.2	375 RCP (class 2)	383	Lm	$ 170.00	$ 65,110.00	
5.3	Side entry pits	10	No	$ 2,500.00	$ 25,000.00	
6	**CONCRETE WORKS**					$ 129,790.00
6.1	Kerb &channel	938	Lm	$ 50.00	$ 46,900.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	412	Lm	$ 130.00	$ 53,560.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	140	Lm	$ 65.00	$ 9,100.00	
6.4	Laybacks and tactile pavers	12	No	$ 850.00	$ 10,200.00	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	118	m²	$ 85.00	$ 10,030.00	
7	**TRAFFIC SIGNAL WORKS**					$ 226,500.00
7.1	General items	1	Item	$ 20,625.00	$ 20,625.00	
7.2	Conduits	1	Item	$ 21,000.00	$ 21,000.00	
7.3	Pedestals	1	Item	$ 48,750.00	$ 48,750.00	
7.4	Lanterns	1	Item	$ 18,750.00	$ 18,750.00	
7.5	Controller	1	Item	$ 61,875.00	$ 61,875.00	
7.6	Detectors	1	Item	$ 11,250.00	$ 11,250.00	
7.7	Cabling & connections	1	Item	$ 36,000.00	$ 36,000.00	
7.8	Clean-up	1	Item	$ 8,250.00	$ 8,250.00	
8	**POWER & LIGHTING**					$ 113,000.00
8.1	Light pole (1-way) and luminous lights	10	No	$ 8,000.00	$ 80,000.00	
8.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
8.3	JUP lighting single	2	No	$ 4,000.00	$ 8,000.00	
8.4	JUP lighting dual		No	$ 5,000.00	$ -	
8.5	Cabling, conduits and pits	1	Item	$ 15,000.00	$ 15,000.00	
8.6	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
9	**LANDSCAPING WORKS**					$ 21,963.50
9.1	Topsoiling seeding	2,231	m²	$ 8.50	$ 18,963.50	
9.2	Tree planting	12	No	$ 250.00	$ 3,000.00	
10	**DELINEATION**					$ 31,000.00
10.1	Signing	1	item	$ 13,000.00	$ 13,000.00	
10.2	Linemarking (Thermoplastic)	1	item	$ 18,000.00	$ 18,000.00	
	TOTAL A - D				$ 1,920,178.09	**$ 1,920,178.09**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 245,416.90
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,165,594.98

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 3

Interim Road Project Cost

ITEM	DESCRIPTION	Koukoura Drive – Southern Section RD-01 (APA)	Koukoura Drive – Central Section RD-02	Koukoura Drive – Northern Section RD-03 (APA)	Summerhill Road - Arterial Standard RD-04	Summerhill Road – (upgrade within existing road reserve) RD-05
A	**Project and Program Management**	$ 145,072.75	$ 156,871.66	$ 146,471.08	$ 167,088.17	$ 154,885.57
B	**Design and Investigation**	$ 319,160.04	$ 345,117.64	$ 322,236.37	$ 367,593.97	$ 340,748.24
C	**Additional Items**					
D	**Construction**	$ 3,300,858.87	$ 3,610,394.84	$ 3,340,275.46	$ 3,881,258.22	$ 3,560,587.71
	TOTAL A - D	**$ 3,765,091.66**	**$ 4,112,384.13**	**$ 3,808,982.91**	**$ 4,415,940.35**	**$ 4,056,221.52**
E	**CONTINGENCY**					
	Contingency (15% of D)	**$ 495,128.83**	**$ 541,559.23**	**$ 501,041.32**	**$ 582,188.73**	**$ 534,088.16**
F	**PROJECT BUDGET**					
	Total Estimate	**$ 4,260,220.49**	**$ 4,653,943.36**	**$ 4,310,024.23**	**$ 4,998,129.09**	**$ 4,590,309.68**

Notes:

1 **Design cost -** Not included in interim except for RD-01, RD-02, RD-03, RD-04, RD-05 (completed in CG140690)
2 **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
3 **Soft spot rectification** - Taken as 20% of sub-base pavement
4 **Rock excavation** - Assume 50% of sub-base pavement
5 **Pavement** - Assume deep lift asphalt pavement
6 **Subsoil drains -** Assume same as kerb and channel
7 **Drainage** - Assume 375 DIA RCP
8 **Side entry pits** - Based on 50m intervals
9 **Light pole** - Based on 70m intervals
10 **Existing road** - Existing asphalt roads to be demolished as part of road works
11 **Substation** - No allowance for substations
12 **Tree planting** - Based on 80m intervals

AUTHOR: J.Ly
Date: 18/10/2016

REVIEWER: R.Henry
Date: 18/10/2016

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
SUMMARY SHEET
V160221T
Wollert PSP
18 October 2016
Version 3

Interim Road Project Cost

ITEM	DESCRIPTION	Between Koukoura Drive & Connector Boulevard RD-06	Between Bodycoats Road & Andrew Road RD-06	Between Andrew Road & Epping Road RD-06	TOTAL
A	Project and Program Management	$ 80,758.07	$ 49,114.73	$ 46,667.11	$ 946,929.12
B	Design and Investigation	$ -	$ -	$ -	$ 1,694,856.27
C	Additional Items	$ 130,536.12	$ 93,184.02	$ 93,985.42	$ 317,705.56
D	Construction	$ 1,835,410.75	$ 1,116,243.80	$ 1,060,616.05	$ 21,705,645.70
	TOTAL A - D	**$ 2,046,704.94**	**$ 1,258,542.55**	**$ 1,201,268.58**	**$ 24,665,136.65**
E	**CONTINGENCY**				
	Contingency (15% of D)	**$ 275,311.61**	**$ 167,436.57**	**$ 159,092.41**	**$ 3,255,846.86**
F	**PROJECT BUDGET**				
	Total Estimate	**$ 2,322,016.55**	**$ 1,425,979.12**	**$ 1,360,360.99**	**$ 27,920,983.51**

Notes:

1. **Design cost -** Not included in interim except for RD-01, RD-02, RD-03, RD-04, RD-05 (completed in CG140690)
2. **Site establishment** - Taken as 2.5% of construction cost with upper limit of $100,000
3. **Soft spot rectification** - Taken as 20% of sub-base pavement
4. **Rock excavation** - Assume 50% of sub-base pavement
5. **Pavement** - Assume deep lift asphalt pavement
6. **Subsoil drains -** Assume same as kerb and channel
7. **Drainage** - Assume 375 DIA RCP
8. **Side entry pits** - Based on 50m intervals
9. **Light pole** - Based on 70m intervals
10. **Existing road** - Existing asphalt roads to be demolished as part of road works
11. **Substation** - No allowance for substations
12. **Tree planting** - Based on 80m intervals

AUTHOR: J.Ly
Date: 18/10/2016

REVIEWER: R.Henry
Date: 18/10/2016

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.79%
RD-01 (APA)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 145,073**
	Project Management		3.00%	2.64%	$ 87,044	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.76%	$ 58,029	
B	**Design and Investigation (%)**					**$ 319,160**
	Traffic Investigations		0.85%	0.75%	$ 24,662	
	Cadastral and Engineering Survey		1.20%	1.05%	$ 34,817	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.05%	$ 34,817	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.88%	$ 29,015	
	Preliminary and Final Design		4.25%	3.74%	$ 123,312	
	Construction Management		2.50%	2.20%	$ 72,536	
C	**Construction**				$ 3,300,859	**$ 3,300,859**
1	**PRELIMINARIES**					$ 229,000
1.1	Site establishment	1	Item	$ 83,000	$ 83,000	
1.2	Site management & supervision including QA	20	wks	$ 2,500	$ 50,000	
1.3	Provision for traffic	1	Item	$ 96,000	$ 96,000	
2	**DEMOLITION**					$ -
2.1	Trees	-	No	$ 500	$ -	
2.2	Strip asphalt from existing pavement	-	m²	$ 5	$ -	
3	**EARTHWORKS (VERTICAL ALIGNMENT AVAILABLE)**					$ 958,481
3.1	Stripping topsoil (150mm)	4,767	m²	$ 6	$ 28,602	
3.2	Excavation and removal (inc. reclamation of FCR)- allowance	1,854	m³	$ 30	$ 55,605	
3.3	Filling	15,776	m³	$ 15	$ 236,640	
3.4	Import Fill material	13,923	m³	$ 45	$ 626,513	
3.5	Soft spot rectification (reclaimed FCR)	741	m³	$ 15	$ 11,121	
4	**PAVEMENT**					$ 727,370
4.1	Deep lift asphalt 195 mm	3,018	m²	$ 105	$ 316,890	
4.2	Subbase course - 250 mm 3% CTCR	3,707	m²	$ 55	$ 203,885	
4.3	Shoulder - full depth pavement	530	m²	$ 145	$ 76,850	
4.4	Rock excavation & sub-surface remediation 450mm	1,853.50	m²	$ 70	$ 129,745	
5	**DRAINAGE**					$ 162,816
5.1	Subsoil drains 100mm dia - screenings	1,060	Lm	$ 30	$ 31,800	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	615	Lm	$ 170	$ 104,516	
5.4	Side entry pits	11	No	$ 2,500	$ 26,500	
5.5	Allowance to modify draiange to ultimate location		item	$ 86,800	$ -	
6	**CONCRETE WORKS**					$ 198,100
6.1	Kerb &channel	530	Lm	$ 50	$ 26,500	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	1,060	Lm	$ 130	$ 137,800	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	No	$ 65	$ -	
6.4	Laybacks and tactile pavers	-	m²	$ 850	$ -	
6.5	10m concrete maintenance area end of all islands	-	m²	$ 85	$ -	
6.6	Additional Shared Paths	260	Lm	$ 130	$ 33,800	
7	**TRAFFIC SIGNAL WORKS**		NA			$ -
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**		NA		$ -	$ -
9	**POWER & LIGHTING**					$ 122,893
9.1	Light pole (1-way) and luminous lights	-	No	$ 8,000	$ -	
9.2	Light pole (2-way) and luminous lights	8	No	$ 9,000	$ 68,143	
9.3	JUP lighting single	-	No	$ 4,000	$ -	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	530	Lm	$ 75	$ 39,750	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
10	**LANDSCAPING WORKS**					$ 87,128
10.1	Topsoiling seeding	9,805	m²	$ 8.50	$ 83,343	
10.2	Tree planting	15	No	$ 250.00	$ 3,786	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ -
13.1	NA		Item			
14	**TRANSMISSION PIPELINE**					$ 775,071
14.1	Transmission pipeline slab protection 200mm	660	m²	$ 165	$ 108,900	
14.2	Transmission pipeline slab excavation 200mm	66	m³	$ 45	$ 2,970	
14.3	Clay excavation for transmission pipeline	778	m³	$ 45	$ 35,010	
14.4	Hand excavation for rock around transimission pipeline (extra over allowance)	330	m	$ 1,050	$ 346,500	
14.5	Backfill stabilisation sand for transmission pipeline	778	m³	$ 150	$ 116,691	
14.6	Wrap for transmission pipeline	330	m	$ 500	$ 165,000	
15	**MISCELLANEOUS**					$ -
15.1	Exisiting Road outside of new road pavements					
15.1.1	Strip asphalt	-	m²	$ 5	$ -	
15.1.2	Recycle FCR to stockpile	-	m³	$ 10	$ -	
15.1.3	backfill with structural fill	-	m³	$ 12	$ -	
16	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 3,765,092	**$ 3,765,092**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 495,129
E	**PROJECT BUDGET**					
	Total Estimate					$ 4,260,220
	Total Estimate per linear metre					8038

AUTHOR: Asiri Rajapakse
Date: 27/11/2015

REVIEWER: Rob Henry
Date: 27/11/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.69%
RD-02

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 156,872**
	Project Management		3.00%	2.61%	$ 94,123	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.74%	$ 62,749	
B	**Design and Investigation (%)**					**$ 345,118**
	Traffic Investigations		0.85%	0.74%	$ 26,668	
	Cadastral and Engineering Survey		1.20%	1.04%	$ 37,649	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.04%	$ 37,649	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.87%	$ 31,374	
	Preliminary and Final Design		4.25%	3.69%	$ 133,341	
	Construction Management		2.50%	2.17%	$ 78,436	
C	**Construction**				$ 3,610,395	**$ 3,610,395**
1	**PRELIMINARIES**					$ 237,000
1.1	Site establishment	1	Item	$ 91,000	$ 91,000	
1.2	Site management & supervision including QA	20	wks	$ 2,500	$ 50,000	
1.3	Provision for traffic	1	Item	$ 96,000	$ 96,000	
2	**DEMOLITION**					$ -
2.1	Trees	-	No	$ 500	$ -	
2.2	Strip asphalt from existing pavement	-	m²	$ 5	$ -	
3	**EARTHWORKS (VERTICAL ALIGNMENT AVAILABLE)**					$ 901,652
3.1	Stripping topsoil (150mm)	8,356	m²	$ 6	$ 50,137	
3.2	Excavation and removal (inc. reclamation of FCR)	5,338	m³	$ 30	$ 160,140	
3.3	Filling	15,198	m³	$ 15	$ 227,970	
3.4	Import Fill material	9,860	m³	$ 45	$ 443,700	
3.3	Soft spot rectification (reclaimed FCR)	1,314	m³	$ 15	$ 19,705	
4	**PAVEMENT**					$ 1,419,657
4.1	Deep lift asphalt 195 mm	5,405	m²	$ 105	$ 567,525	
4.2	Subbase course - 250 mm 3% CTCR	6,568	m²	$ 55	$ 361,251	
4.3	Shoulder - full depth pavement	894	m²	$ 145	$ 129,630	
4.4	Rock excavation & sub-surface remediation 450mm	6,568	m²	$ 55	$ 361,251	
5	**DRAINAGE**					$ 274,914
5.1	Subsoil drains 100mm dia - screenings	1,789	Lm	$ 30	$ 53,670	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	1,038	Lm	$ 170	$ 176,494	
5.4	Side entry pits	18	No	$ 2,500	$ 44,750	
5.5	Allowance to modify draiange to ultimate location		item	$ 86,800	$ -	
6.6	Transmission pipleline slab protection 200mm	-	m	$ 130	$ -	
6	**CONCRETE WORKS**					$ 393,150
6.1	Kerb &channel	895	Lm	$ 50	$ 44,750	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	1,785	Lm	$ 130	$ 232,050	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	No	$ 65	$ -	
6.4	Laybacks and tactile pavers	-	m²	$ 850	$ -	
6.5	10m concrete maintenance area end of all islands	-	m²	$ 85	$ -	
6.6	Additional Shared Paths	895	Lm	$ 130	$ 116,350	
7	**TRAFFIC SIGNAL WORKS**		NA			$ -
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**		NA		$ -	$ -
9	**POWER & LIGHTING**					$ 197,196
9.1	Light pole (1-way) and luminous lights	-	No	$ 8,000	$ -	
9.2	Light pole (2-way) and luminous lights	13	No	$ 9,000	$ 115,071	
9.3	JUP lighting single	-	No	$ 4,000	$ -	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	895	Lm	$ 75	$ 67,125	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
10	**LANDSCAPING WORKS**					$ 146,826
10.1	Topsoiling seeding	16,522	m²	$ 8.50	$ 140,433	
10.2	Tree planting	26	No	$ 250.00	$ 6,393	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ -
13.1	NA		Item			
14	**MISCELLANEOUS**					$ -
	Exisiting Road outside of new road pavements					
14.1	Strip asphalt	-	m²	$ 5	$ -	
14.2	Recycle FCR to stockpile	-	m³	$ 10	$ -	
14.3	backfill with structural fill	-	m³	$ 12	$ -	
14.4	Topsoiling	-	m²	$ 8.50	$ -	
15	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 4,112,384	**$ 4,112,384**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 541,559
E	**PROJECT BUDGET**					
	Total Estimate					$ 4,653,943
	Total Estimate per linear metre					5200

AUTHOR: Asiri Rajapakse
Date: 27/11/2015

REVIEWER: Rob Henry
Date: 27/11/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.77%
RD-03 (APA)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 146,471**
	Project Management		3.00%	2.63%	$ 87,883	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.75%	$ 58,588	
B	**Design and Investigation (%)**					**$ 322,236**
	Traffic Investigations		0.85%	0.75%	$ 24,900	
	Cadastral and Engineering Survey		1.20%	1.05%	$ 35,153	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.05%	$ 35,153	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.88%	$ 29,294	
	Preliminary and Final Design		4.25%	3.73%	$ 124,500	
	Construction Management		2.50%	2.19%	$ 73,236	
C	**Construction**				$ 3,340,275	**$ 3,340,275**
1	**PRELIMINARIES**					$ 231,000
1.1	Site establishment	1	Item	$ 85,000	$ 85,000	
1.2	Site management & supervision including QA	20	wks	$ 2,500	$ 50,000	
1.3	Provision for traffic	1	Item	$ 96,000	$ 96,000	
2	**DEMOLITION**					$ 2,500
2.1	Trees	5	No	$ 500	$ 2,500	
2.2	Strip asphalt from existing pavement	-	m²	$ 5	$ -	
3	**EARTHWORKS (VERTICAL ALIGNMENT AVAILABLE)**					$ 921,869
3.1	Stripping topsoil (150mm)	6,889	m²	$ 6	$ 41,335	
3.2	Excavation and removal (inc. reclamation of FCR)	714	m³	$ 30	$ 21,420	
3.3	Filling	14,586	m³	$ 15	$ 218,790	
3.4	Import Fill material	13,872	m³	$ 45	$ 624,240	
3.5	Soft spot rectification (reclaimed FCR)	##### ###	m³	$ 15	$ 16,084	
4	**PAVEMENT**					$ 1,158,837
4.1	Deep lift asphalt 195 mm	4,365	m²	$ 105	$ 458,325	
4.2	Subbase course - 250 mm 3% CTCR	5,361	m²	$ 55	$ 294,866	
4.3	Shoulder - full depth pavement	764	m²	$ 145	$ 110,780	
4.4	Rock excavation & sub-surface remediation 450mm	5,361	m²	$ 55	$ 294,866	
5	**DRAINAGE**					$ 235,532
5.1	Subsoil drains 100mm dia - screenings	1,531	Lm	$ 30	$ 45,930	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	890	Lm	$ 170	$ 151,252	
5.4	Side entry pits	15	No	$ 2,500	$ 38,350	
5.5	Allowance to modify draiange to ultimate location		item	$ 86,800	$ -	
6	**CONCRETE WORKS**					$ 336,180
6.1	Kerb &channel	767	Lm	$ 50	$ 38,350	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	1,531	Lm	$ 130	$ 199,030	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	No	$ 65	$ -	
6.4	Laybacks and tactile pavers	-	m²	$ 850	$ -	
6.5	10m concrete maintenance area end of all islands	-	m²	$ 85	$ -	
6.6	Additional Shared Paths	760	Lm	$ 130	$ 98,800	
7	**TRAFFIC SIGNAL WORKS**		NA			$ -
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**		NA			$ -
9	**POWER & LIGHTING**					$ 171,139
9.1	Light pole (1-way) and luminous lights	-	NA		$ -	
9.2	Light pole (2-way) and luminous lights	11	No	$ 9,000	$ 98,614	
9.3	JUP lighting single	-	No	$ 4,000	$ -	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	767	Lm	$ 75	$ 57,525	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
10	**LANDSCAPING WORKS**					$ 125,783
10.1	Topsoiling seeding	14,154	m²	$ 8.50	$ 120,305	
10.2	Tree planting	22	No	$ 250.00	$ 5,479	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ -
13.1	NA		Item			
14	**TRANSMISSION PIPELINE**					$ 117,435
14.1	Transmission pipleline slab protection 200mm	100	m²	$ 165	$ 16,500	
14.2	Transmission pipeline slab excavation 200mm	10	m³	$ 45	$ 450	
14.3	Clay excavation for transmission pipeline	118	m	$ 45	$ 5,304	
14.4	Hand excavation for rock around transimission pipeline (extra over allowance)	50	m	$ 1,050	$ 52,500	
14.5	Backfill stabilisation sand for transmission pipeline	118	m³	$ 150	$ 17,681	
14.6	Wrap for transmission pipeline	50	m	$ 500	$ 25,000	
15	**MISCELLANEOUS**					$ -
15.1	Exisiting Road outside of new road pavements					
15.1.1	Strip asphalt	-	m²	$ 5	$ -	
15.1.2	Recycle FCR to stockpile	-	m³	$ 10	$ -	
15.1.3	backfill with structural fill	-	m³	$ 12	$ -	
16	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 3,808,983	**$ 3,808,983**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 501,041
E	**PROJECT BUDGET**					
	Total Estimate					$ 4,310,024
	Total Estimate per linear metre					5619

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Date: *27/11/2015*

REVIEWER: *Rob Henry*
Date: *27/11/2015*

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.61%
RD-04

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 167,088**
	Project Management		3.00%	2.58%	$ 100,253	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.72%	$ 66,835	
B	**Design and Investigation (%)**					**$ 367,594**
	Traffic Investigations		0.85%	0.73%	$ 28,405	
	Cadastral and Engineering Survey		1.20%	1.03%	$ 40,101	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.03%	$ 40,101	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.86%	$ 33,418	
	Preliminary and Final Design		4.25%	3.66%	$ 142,025	
	Construction Management		2.50%	2.15%	$ 83,544	
C	**Construction**				$ 3,881,258	**$ 3,881,258**
1	**PRELIMINARIES**					$ 244,000
1.1	Site establishment	1	Item	$ 98,000	$ 98,000	
1.2	Site management & supervision including QA	20	wks	$ 2,500	$ 50,000	
1.3	Provision for traffic	1	Item	$ 96,000	$ 96,000	
2	**DEMOLITION**					$ -
2.1	Trees	-	No	$ 500	$ -	
2.2	Strip asphalt from existing pavement	-	m²	$ 5	$ -	
3	**EARTHWORKS**					$ 826,841
3.1	Stripping topsoil (150mm)	8,990	m²	$ 6	$ 53,938	
3.2	Excavation and removal (inc. reclamation of FCR) - of pavement areas	3,496	m³	$ 30	$ 104,876	
3.3	Cut and Fill Allowance	21,568	m³	$ 30	$ 647,052	
3.4	Soft spot rectification (reclaimed FCR)	1,398	m³	$ 15	$ 20,975	
4	**PAVEMENT**					$ 1,511,707
4.1	Deep lift asphalt 195 mm	5,693	m²	$ 105	$ 597,765	
4.2	Subbase course - 250 mm 3% CTCR	6,992	m²	$ 55	$ 384,544	
4.3	Shoulder - full depth pavement	999	m²	$ 145	$ 144,855	
4.4	Rock excavation & sub-surface remediation 450mm	6,992	m²	$ 55	$ 384,544	
5	**DRAINAGE**					$ 306,893
5.1	Subsoil drains 100mm dia - screenings	1,998	Lm	$ 30	$ 59,940	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	1,159	Lm	$ 170	$ 197,003	
5.4	Side entry pits	20	No	$ 2,500	$ 49,950	
5.5	Allowance to modify draiange to ultimate location		item	$ 86,800	$ -	
6	**CONCRETE WORKS**					$ 309,820
6.1	Kerb &channel	999	Lm	$ 50	$ 49,950	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	999	Lm	$ 130	$ 129,870	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	No	$ 65	$ -	
6.4	Laybacks and tactile pavers	-	m²	$ 850	$ -	
6.5	10m concrete maintenance area end of all islands	-	m²	$ 85	$ -	
6.6	Additional Shared Paths	1,000	Lm	$ 130	$ 130,000	
7	**TRAFFIC SIGNAL WORKS**		NA			$ -
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**		NA		$ -	$ -
9	**POWER & LIGHTING**					$ 228,368
9.1	Light pole (1-way) and luminous lights	-	No	$ 8,000	$ -	
9.2	Light pole (2-way) and luminous lights	14	No	$ 9,000	$ 128,443	
9.3	JUP lighting single	-	No	$ 4,000	$ -	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	999	Lm	$ 75	$ 74,925	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
9.7	Removal & replacement of pole-mounted substation	2	Item	$ 5,000	$ 10,000	
10	**LANDSCAPING WORKS**					$ 113,279
10.1	Topsoiling seeding	12,488	m²	$ 8.50	$ 106,144	
10.2	Tree planting	29	No	$ 250.00	$ 7,136	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ 300,350
13.1	Relocate power pole (HV)	10	No	$ 7,500	$ 75,000	
13.2	Telecom conduiting	999	Lm	$ 150	$ 149,850	
13.3	Telecom cabling	1	Item	$ 50,000	$ 50,000	
13.4	Remove reduntant telecom pole	17	No	$ 1,500	$ 25,500	
14	**MISCELLANEOUS**					$ -
	Exisiting Road outside of new road pavements					
14.1	Strip asphalt	-	m²	$ 5	$ -	
14.2	Recycle FCR to stockpile	-	m³	$ 10	$ -	
14.3	backfill with structural fill	-	m³	$ 12	$ -	
14.4	Topsoiling	-	m²	$ 8.50	$ -	
15	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 4,415,940	**$ 4,415,940**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 582,189
E	**PROJECT BUDGET**					
	Total Estimate					$ 4,998,129
	Total Estimate per linear metre					5003

AUTHOR: Asiri Rajapakse
Date: 27/11/2015

REVIEWER: Rob Henry
Date: 27/11/2015

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.70%
RD-05

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management (%)**					**$ 154,886**
	Project Management		3.00%	2.61%	$ 92,931	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc					
	Records management					
	Program Administration		2.00%	1.74%	$ 61,954	
B	**Design and Investigation (%)**					**$ 340,748**
	Traffic Investigations		0.85%	0.74%	$ 26,331	
	Cadastral and Engineering Survey		1.20%	1.04%	$ 37,173	
	Geotechnical investigations Pavement Investigations and Design		1.20%	1.04%	$ 37,173	
	Environmental Investigations			0.00%	$ -	
	Landscape Design		1.00%	0.87%	$ 30,977	
	Preliminary and Final Design		4.25%	3.70%	$ 131,653	
	Construction Management		2.50%	2.18%	$ 77,443	
C	**Construction**				$ 3,560,588	**$ 3,560,588**
1	**PRELIMINARIES**					$ 236,000
1.1	Site establishment	1	Item	$ 90,000	$ 90,000	
1.2	Site management & supervision including QA	20	wks	$ 2,500	$ 50,000	
1.3	Provision for traffic	1	Item	$ 96,000	$ 96,000	
2	**DEMOLITION**					$ 25,800
2.1	Trees	-	No	$ 500	$ -	
2.2	Strip asphalt from existing pavement	5,160	m²	$ 5	$ 25,800	
3	**EARTHWORKS**					$ 650,630
3.1	Stripping topsoil (150mm)	2,860	m²	$ 6	$ 17,160	
3.2	Excavation and removal (inc. reclamation of FCR) - of pavement areas	4,010	m³	$ 30	$ 120,300	
3.3	Cut and Fill Allowance	16,304	m³	$ 30	$ 489,110	
3.4	Soft spot rectification (reclaimed FCR)	1,604	m³	$ 15	$ 24,060	
4	**PAVEMENT**					$ 1,534,460
4.1	Deep lift asphalt 195 mm	6,212	m²	$ 105	$ 652,260	
4.2	Subbase course - 250 mm 3% CTCR	8,020	m²	$ 55	$ 441,100	
4.3	Shoulder - full depth pavement	-	m²	$ 145	$ -	
4.4	Rock excavation & sub-surface remediation 450mm	8,020	m²	$ 55	$ 441,100	
5	**DRAINAGE**					$ 349,878
5.1	Subsoil drains 100mm dia - screenings	1,808	Lm	$ 30	$ 54,240	
5.2	Subsoil drains 100mm dia - no fines conc	-	Lm	$ 45	$ -	
5.3	375 RCP (class 2)	1,207	Lm	$ 170	$ 205,238	
5.4	Side entry pits	36	No	$ 2,500	$ 90,400	
5.5	Allowance to modify draiange to ultimate location		item	$ 86,800	$ -	
6	**CONCRETE WORKS**					$ 90,400
6.1	Kerb &channel	1,808	Lm	$ 50	$ 90,400	
6.2	Shared Paths (3.0m wide,125 mm, residential, as per MPA)	-	Lm	$ 130	$ -	
6.3	Footpaths (1.5m wide,125 mm, residential, as per MPA)	-	No	$ 65	$ -	
6.4	Laybacks and tactile pavers	-	m²	$ 850	$ -	
6.5	10m concrete maintenance area end of all islands	-	m²	$ 85	$ -	
7	**TRAFFIC SIGNAL WORKS**		NA			$ -
8	**SIGNAL MAINTENANCE (10 YEARS) by Road Authority**		NA		$ -	$ -
9	**POWER & LIGHTING**					$ 211,879
9.1	Light pole (1-way) and luminous lights	-	No	$ 8,000	$ -	
9.2	Light pole (2-way) and luminous lights	13	No	$ 9,000	$ 118,029	
9.3	JUP lighting single	-	No	$ 4,000	$ -	
9.4	JUP lighting dual	-	No	$ 5,000	$ -	
9.5	Cabling, conduits and pits	918	Lm	$ 75	$ 68,850	
9.6	Electrical connection	1	Item	$ 15,000	$ 15,000	
9.7	Removal & replacement of pole-mounted substation	2	Item	$ 5,000	$ 10,000	
10	**LANDSCAPING WORKS**					$ 14,241
10.1	Topsoiling seeding	904	m²	$ 8.50	$ 7,684	
10.2	Tree planting	26	No	$ 250.00	$ 6,557	
11	**SIGNING**	1	item	$ 10,000	$ 10,000	$ 10,000
12	**LINEMARKING (Thermoplastic)**	1	item	$ 30,000	$ 30,000	$ 30,000
13	**SERVICE RELOCATION**					$ 291,200
13.1	Relocate power pole (HV)	11	No	$ 7,500	$ 82,500	
13.2	Telecom conduiting	918	Lm	$ 150	$ 137,700	
13.3	Telecom cabling	1	Item	$ 50,000	$ 50,000	
13.4	Remove reduntant telecom pole	14	No	$ 1,500	$ 21,000	
14	**MISCELLANEOUS**					$ 116,100
	Exisiting Road outside of new road pavements					
14.1	Strip asphalt	5,160	m²	$ 5	$ 25,800	
14.2	Recycle FCR to stockpile	1,548	m³	$ 10	$ 15,480	
14.3	backfill with structural fill	2,580	m³	$ 12	$ 30,960	
14.4	Topsoiling	5,160	m²	$ 8.50	$ 43,860	
15	**PROVISIONAL SUM - DAYWORK**		item		$ -	$ -
	TOTAL A - C				$ 4,056,222	**$ 4,056,222**
D	**Contingency**					
	Contingency (15% of C)				15%	$ 534,088
E	**PROJECT BUDGET**					
	Total Estimate					$ 4,590,310
	Total Estimate per linear metre					5000

AUTHOR: *Asiri Rajapakse*
Date: *27/11/2015*

REVIEWER: *Rob Henry*
Date: *27/11/2015*

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.80%
RD-06 **Between Koukoura Drive & Connector Boulevard**

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 80,758.07**
	Project Management		3.00%	2.64%	$ 48,454.84	
	Program Administration		2.00%	1.76%	$ 32,303.23	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 130,536.12**
1	**SITE ESTABLISHMENT**	1	Item	$ 45,885.27	$ 45,885.27	$ 45,885.27
2	**SERVICE RELOCATION**					$ 25,000.00
2.1	Relocating Power Pole (HV)	1	No	$ 7,500.00	$ 7,500.00	
2.2	Relocating Communication Pole	5	No	$ 3,500.00	$ 17,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 59,650.85
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 59,650.85	$ 59,650.85	
D	**Construction**				$ 1,835,410.75	**$ 1,835,410.75**
1	**PRELIMINARIES**					$ 65,000.00
1.1	Site management & supervision including QA	10	weeks	$ 2,500.00	$ 25,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 48,800.00
2.1	Trees	15	No	$ 500.00	$ 7,500.00	
2.2	Demolition of existing Road	1	Item	$ 21,300.00	$ 21,300.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 20,000.00	$ 20,000.00	
3	**EARTHWORKS**					$ 436,725.50
3.1	Stripping topsoil (150mm)	11,735	m²	$ 6.00	$ 70,410.00	
3.2	Cutting	5,384	m³	$ 15.00	$ 80,752.50	
3.3	Filling and compact	717.80	m³	$ 12.00	$ 8,613.60	
3.4	Cart off excess material	4,666	m³	$ 15.00	$ 69,985.50	
3.5	Soft spot rectification (reclaimed FCR)	1,010	m³	$ 30.00	$ 30,287.40	
3.6	Rock excavation & sub-surface remediation 450mm	2,524	m²	$ 70.00	$ 176,676.50	
4	**PAVEMENT**					$ 759,314.50
4.1	Deep lift asphalt 195 mm	3,589	m²	$ 105.00	$ 376,845.00	
4.2	Sub-base course - 250 mm 3% CTCR	5,048	m²	$ 55.00	$ 277,634.50	
4.3	Shoulder - full depth pavement	723	m²	$ 145.00	$ 104,835.00	
5	**DRAINAGE**					$ 177,880.00
5.1	Subsoil drains 100mm dia - screenings	1,621	Lm	$ 30.00	$ 48,630.00	
5.2	375 RCP (class 2)	525	Lm	$ 170.00	$ 89,250.00	
5.3	Side entry pits	16	No	$ 2,500.00	$ 40,000.00	
6	**CONCRETE WORKS**					$ 186,155.00
6.1	Kerb &channel	1,621	Lm	$ 50.00	$ 81,050.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	404	Lm	$ 130.00	$ 52,520.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	809	Lm	$ 65.00	$ 52,585.00	
6.4	Laybacks and tactile pavers		No	$ 850.00	$ -	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	-	m²	$ 85.00	$ -	
7	**POWER & LIGHTING**					$ 106,000.00
7.1	Light pole (1-way) and luminous lights	7	No	$ 8,000.00	$ 56,000.00	
7.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
7.3	JUP lighting single		No	$ 4,000.00	$ -	
7.4	JUP lighting dual		No	$ 5,000.00	$ -	
7.5	Cabling, conduits and pits	1	Item	$ 35,000.00	$ 35,000.00	
7.6	Electrical connection	1	Item	$ 15,000.00	$ 15,000.00	
8	**LANDSCAPING WORKS**					$ 30,535.75
8.1	Topsoiling seeding	3,240	m²	$ 8.50	$ 27,535.75	
8.2	Tree planting	12	No	$ 250.00	$ 3,000.00	
9	**DELINEATION**					$ 25,000.00
9.1	Signing	1	item	$ 5,000.00	$ 5,000.00	
9.2	Linemarking (Thermoplastic)	1	item	$ 20,000.00	$ 20,000.00	
	TOTAL A - D				$ 2,046,704.94	**$ 2,046,704.94**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 275,311.61
F	**PROJECT BUDGET**					
	Total Estimate					$ 2,322,016.55

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PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS **18 October 2016**
V160221T **Version 3**
Wollert PSP **PM %:** 8.80%
RD-06 **Between Bodycoats Road & Andrew Road**

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 49,114.73**
	Project Management		3.00%	2.64%	$ 29,468.84	
	Program Administration		2.00%	1.76%	$ 19,645.89	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 93,184.02**
1	**SITE ESTABLISHMENT**	1	Item	$ 27,906.10	$ 27,906.10	$ 27,906.10
2	**SERVICE RELOCATION**					$ 29,000.00
2.1	Relocating Power Pole (HV)	2	No	$ 7,500.00	$ 15,000.00	
2.2	Relocating Communication Pole	4	No	$ 3,500.00	$ 14,000.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 36,277.92
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 36,277.92	$ 36,277.92	
D	**Construction**				$ 1,116,243.80	**$ 1,116,243.80**
1	**PRELIMINARIES**					$ 65,000.00
1.1	Site management & supervision including QA	10	weeks	$ 2,500.00	$ 25,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 67,820.00
2.1	Trees	50	No	$ 500.00	$ 25,000.00	
2.2	Demolition of existing Road	1	Item	$ 22,820.00	$ 22,820.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 20,000.00	$ 20,000.00	
3	**EARTHWORKS**					$ 227,176.80
3.1	Stripping topsoil (150mm)	5,685	m²	$ 6.00	$ 34,110.00	
3.2	Cutting	2,834	m³	$ 15.00	$ 42,502.50	
3.3	Filling and compact	1,259.33	m³	$ 12.00	$ 15,112.00	
3.4	Cart off excess material	1,574	m³	$ 15.00	$ 23,612.50	
3.5	Soft spot rectification (reclaimed FCR)	546	m³	$ 30.00	$ 16,366.80	
3.6	Rock excavation & sub-surface remediation 450mm	1,364	m²	$ 70.00	$ 95,473.00	
4	**PAVEMENT**					$ 427,979.00
4.1	Deep lift asphalt 195 mm	1,889	m²	$ 105.00	$ 198,345.00	
4.2	Sub-base course - 250 mm 3% CTCR	2,728	m²	$ 55.00	$ 150,029.00	
4.3	Shoulder - full depth pavement	549	m²	$ 145.00	$ 79,605.00	
5	**DRAINAGE**					$ 118,960.00
5.1	Subsoil drains 100mm dia - screenings	932	Lm	$ 30.00	$ 27,960.00	
5.2	375 RCP (class 2)	300	Lm	$ 170.00	$ 51,000.00	
5.3	Side entry pits	16	No	$ 2,500.00	$ 40,000.00	
6	**CONCRETE WORKS**					$ 91,515.00
6.1	Kerb &channel	932	Lm	$ 50.00	$ 46,600.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	230	Lm	$ 130.00	$ 29,900.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	231	Lm	$ 65.00	$ 15,015.00	
6.4	Laybacks and tactile pavers		No	$ 850.00	$ -	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	-	m²	$ 85.00	$ -	
7	**POWER & LIGHTING**					$ 80,000.00
7.1	Light pole (1-way) and luminous lights	5	No	$ 8,000.00	$ 40,000.00	
7.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
7.3	JUP lighting single		No	$ 4,000.00	$ -	
7.4	JUP lighting dual		No	$ 5,000.00	$ -	
7.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
7.6	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
8	**LANDSCAPING WORKS**					$ 17,793.00
8.1	Topsoiling seeding	1,858	m²	$ 8.50	$ 15,793.00	
8.2	Tree planting	8	No	$ 250.00	$ 2,000.00	
9	**DELINEATION**					$ 20,000.00
9.1	Signing	1	item	$ 5,000.00	$ 5,000.00	
9.2	Linemarking (Thermoplastic)	1	item	$ 15,000.00	$ 15,000.00	
	TOTAL A - D				$ 1,258,542.55	**$ 1,258,542.55**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 167,436.57
F	**PROJECT BUDGET**					
	Total Estimate					$ 1,425,979.12

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS — **18 October 2016**
V160221T — **Version 3**
Wollert PSP — **PM %:** 8.80%
RD-06 — **Between Andrew Road & Epping Road**

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A	**Project and Program Management**					**$ 46,667.11**
	Project Management		3.00%	2.64%	$ 28,000.26	
	Program Administration		2.00%	1.76%	$ 18,666.84	
B	**Design and Investigation**					**$ -**
	Completed in pre-interim		N/A	N/A		
C	**Additional Items**					**$ 93,985.42**
1	**SITE ESTABLISHMENT**	1	Item	$ 26,515.40	$ 26,515.40	$ 26,515.40
2	**SERVICE RELOCATION**					$ 33,000.00
2.1	Relocating Power Pole (HV)	3	No	$ 7,500.00	$ 22,500.00	
2.2	Relocating Communication Pole	3	No	$ 3,500.00	$ 10,500.00	
2.3	Relocating light pole		No	$ 3,000.00	$ -	
2.4	Telecom conduiting		Lm	$ 150.00	$ -	
2.5	Telecom cabling (re-pulling)		Item	$ 25,000.00	$ -	
2.6	Remove redundant telecom pole		No	$ 1,500.00	$ -	
3	**VicRoads**					$ 34,470.02
3.1	VicRoads approvals/construction fees (3.25% of construction)	1	Item	$ 34,470.02	$ 34,470.02	
D	**Construction**				$ 1,060,616.05	**$ 1,060,616.05**
1	**PRELIMINARIES**					$ 65,000.00
1.1	Site management & supervision including QA	10	weeks	$ 2,500.00	$ 25,000.00	
1.2	Provision for traffic	1	Item	$ 40,000.00	$ 40,000.00	
2	**DEMOLITION**					$ 59,100.00
2.1	Trees	30	No	$ 500.00	$ 15,000.00	
2.2	Demolition of existing Road	1	Item	$ 24,100.00	$ 24,100.00	
2.3	Breakout of existing kerb & channel		Lm	$ 45.00	$ -	
2.4	Demolition of existing pedestrian footpath		Lm	$ 55.00	$ -	
2.5	Demolition of existing building		Item	$ 50,000.00	$ -	
2.6	Demolition of existing fence	1	Item	$ 20,000.00	$ 20,000.00	
3	**EARTHWORKS**					$ 219,150.30
3.1	Stripping topsoil (150mm)	5,520	m²	$ 6.00	$ 33,120.00	
3.2	Cutting	2,738	m³	$ 15.00	$ 41,062.50	
3.3	Filling and compact	1,216.67	m³	$ 12.00	$ 14,600.00	
3.4	Cart off excess material	1,521	m³	$ 15.00	$ 22,812.50	
3.5	Soft spot rectification (reclaimed FCR)	525	m³	$ 30.00	$ 15,739.80	
3.6	Rock excavation & sub-surface remediation 450mm	1,312	m²	$ 70.00	$ 91,815.50	
4	**PAVEMENT**					$ 405,506.50
4.1	Deep lift asphalt 195 mm	1,825	m²	$ 105.00	$ 191,625.00	
4.2	Sub-base course - 250 mm 3% CTCR	2,623	m²	$ 55.00	$ 144,281.50	
4.3	Shoulder - full depth pavement	480	m²	$ 145.00	$ 69,600.00	
5	**DRAINAGE**					$ 101,760.00
5.1	Subsoil drains 100mm dia - screenings	887	Lm	$ 30.00	$ 26,610.00	
5.2	375 RCP (class 2)	295	Lm	$ 170.00	$ 50,150.00	
5.3	Side entry pits	10	No	$ 2,500.00	$ 25,000.00	
6	**CONCRETE WORKS**					$ 101,550.00
6.1	Kerb &channel	887	Lm	$ 50.00	$ 44,350.00	
6.2	Shared Pathway (3.0m wide,125 mm, residential, as per MPA)	220	Lm	$ 130.00	$ 28,600.00	
6.3	Pedestrian Footpaths (1.5m wide,125 mm, residential, as per MPA)	440	Lm	$ 65.00	$ 28,600.00	
6.4	Laybacks and tactile pavers		No	$ 850.00	$ -	
6.5	Concrete island infill	-	m²	$ 120.00	$ -	
6.6	10m concrete maintenance area end of all islands	-	m²	$ 85.00	$ -	
7	**POWER & LIGHTING**					$ 72,000.00
7.1	Light pole (1-way) and luminous lights	4	No	$ 8,000.00	$ 32,000.00	
7.2	Light pole (2-way) and luminous lights		No	$ 9,000.00	$ -	
7.3	JUP lighting single		No	$ 4,000.00	$ -	
7.4	JUP lighting dual		No	$ 5,000.00	$ -	
7.5	Cabling, conduits and pits	1	Item	$ 30,000.00	$ 30,000.00	
7.6	Electrical connection	1	Item	$ 10,000.00	$ 10,000.00	
8	**LANDSCAPING WORKS**					$ 16,549.25
8.1	Topsoiling seeding	1,771	m²	$ 8.50	$ 15,049.25	
8.2	Tree planting	6	No	$ 250.00	$ 1,500.00	
9	**DELINEATION**					$ 20,000.00
9.1	Signing	1	item	$ 5,000.00	$ 5,000.00	
9.2	Linemarking (Thermoplastic)	1	item	$ 15,000.00	$ 15,000.00	
	TOTAL A - D				$ 1,201,268.58	**$ 1,201,268.58**
E	**Contingency**					
	Contingency (15% of D)				15%	$ 159,092.41
F	**PROJECT BUDGET**					
	Total Estimate					$ 1,360,360.99