

Appendix H1

Cost estimate

Breakdown of Item 5 infrastructure construction item – northern and southern routes

Refer to Table 7.8 and Table 7.9

Infrastructure construction estimate from Section 5 of Table 7.8 Estimate Summary

Project: Berry Bypass, Strategic Route Feasibility, Northern Option

Estimate Prepared by: Evans & Peck (PJ)

Quantities Prepared by: Aecom

Design Prepared by: Aecom

Project No: D/00386

Date: 27/06/2012

Estimate Type: Strategic Route Feasibility

Item	Base Estimate (excluding contingency)	Contingency		Estimate (including contingency)	% of Total Estimate	Comments/Assumptions
		%	Amount			
Infrastructure						
5 (a) - Base Infrastructure:						
Earthworks	\$62,752,678	54%	\$33,964,585	\$96,717,263		
Drainage	\$14,299,143	54%	\$7,739,342	\$22,038,485		
Pavements	\$47,742,020	40%	\$19,096,808	\$66,838,828		
Structures						
Bridges	\$96,366,140	40%	\$38,546,456	\$134,912,596		
Retaining Walls	\$2,530,278	40%	\$1,012,111	\$3,542,390		
Others						
Furniture/Signs/Delineation	\$15,878,843	40%	\$6,351,537	\$22,230,380		Incl. Minor concrete works, UPVC Ducts, Guide posts, Safety barriers, pavement Markings, Signposts & Street lighting
Sub - Total:	\$239,569,103		\$106,710,839	\$346,279,943	81.40%	
5 (b) - Environmental Works						
Landscaping	\$14,126,099	40%	\$5,650,440	\$19,776,539		
Erosion & Sediment Control	\$3,483,899	47%	\$1,639,602	\$5,123,501		
Fauna Crossings/Protection	\$417,713	47%	\$196,585	\$614,299		
Noise Attenuation	\$4,093,220	40%	\$1,637,288	\$5,730,508		
Compensatory Habitat						
Environmental Monitoring	\$528,330	47%	\$248,644	\$776,973		
Sub - Total:	\$22,649,262		\$9,372,559	\$32,021,820	7.53%	
5 (c) - General Activities						
General or Contract specific	\$3,716,960	52%	\$1,931,899	\$5,648,859		Building Condition Reports, Treat contaminated water, Maintenance, Temporary works allowance and Flood mitigation
Property Adjts & Fencing	\$2,940,561	40%	\$1,176,224	\$4,116,785		
Traffic Management	\$6,599,022	40%	\$2,639,609	\$9,238,630		
Design & Verification (DCM & Boot)						Refer "Northern - RMS Summary" worksheet
Other	\$20,075,293	40%	\$8,030,117	\$28,105,410		Mobilisation, Community Liaison, Management plans, Demolition, HVRA & Other
Sub - Total:	\$33,331,835		\$13,777,849	\$47,109,685	11.07%	
5 (d) - Adjustment Sums (Including markup and contingency)						
E/O Reroute alignment south of STP	\$0	50%	\$0	\$0		Refer NOTE 1. below
E/O Island embankment	\$0	50%	\$0	\$0		Southern Option ONLY!
E/O Realignment of Northern interchange	\$0	50%	\$0	\$0		Southern Option ONLY!
Changes to vertical alignment to generate extra fill material	\$0	50%	\$0	\$0		Southern Option ONLY!
E/O Adjustment to Southern Interchange	\$0	50%	\$0	\$0		Southern Option ONLY!
Sub - Total:	\$0		\$0	\$0	0.00%	
TOTAL:	\$295,550,200		\$129,861,248	\$425,411,448	100.00%	

NOTE:

Total Amount

\$425,411,448

- Adjustment Sums items **HIGHLIGHTED** are included in scope of item **HIGHLIGHTED**
- Provisional Sum amount NOT incl. in Project Estimate total because derived from a discretionary item currently under consideration

5 (e) - Provisional Sums (including markup and contingency)						
Additional pedestrian bridge	\$3,004,128	50%	\$1,501,122	\$4,505,250		Refer NOTE 2. above
Northbound offload ramp to Woodhill Mountain Road	\$270,343	50%	\$135,087	\$405,430		Northern Option ONLY!
E/O Adjustments to Kangaroo Valley Road (KVR) Interchange	\$10,533,350	50%	\$5,263,370	\$15,796,720		Northern Option ONLY!
E/O Revised Northbound off-ramp Kangaroo Valley Road (KVR) Interchange	\$3,499,260	50%	\$1,748,532	\$5,247,793		Northern Option ONLY!
Sub - Total:	\$17,307,083		\$8,648,110	\$25,955,193		

Infrastructure construction estimate from Section 5 of Table 7.9 Estimate Summary

Project: Berry Bypass, Strategic Route Feasibility, Southern Option

Estimate Prepared by: Evans & Peck (PJ)

Quantities Prepared by: Aecom

Design Prepared by: Aecom

Project No: D/00386

Date: 27/06/2012

Estimate Type: Strategic Route Feasibility

Item	Base Estimate (excluding contingency)	Contingency		Estimate (including contingency)	% of Total Estimate	Comments/Assumptions
		%	Amount			
Infrastructure						
5 (a) - Base Infrastructure:						
Earthworks	\$144,340,094	65%	\$93,639,558	\$237,979,652		
Drainage	\$13,379,570	54%	\$7,253,581	\$20,633,152		
Pavements	\$45,030,027	40%	\$18,012,011	\$63,042,038		
Structures						
Bridges	\$126,125,738	40%	\$50,450,295	\$176,576,033		
Retaining Walls	\$4,854,686	40%	\$1,941,874	\$6,796,560		
Others						
Furniture/Signs/Delineation	\$15,438,658	40%	\$6,175,463	\$21,614,121		Incl. Minor concrete works, UPVC Ducts, Guide posts, Safety barriers, pavement Markings, Signposts & Street lighting
Sub - Total:	\$349,168,772		\$177,472,782	\$526,641,555	95.14%	
5 (b) - Environmental Works						
Landscaping	\$14,223,893	40%	\$5,689,557	\$19,913,450		
Erosion & Sediment Control	\$3,930,629	47%	\$1,851,599	\$5,782,227		
Fauna Crossings/Protection	\$415,088	47%	\$195,535	\$610,623		
Noise Attenuation	\$1,559,706	47%	\$734,729	\$2,294,435		
Compensatory Habitat						
Environmental Monitoring	\$659,525	47%	\$310,682	\$970,207		
Sub - Total:	\$20,788,841		\$8,782,102	\$29,570,943	5.34%	
5 (c) - General Activities						
General or Contract specific	\$5,654,469	51%	\$2,898,732	\$8,553,200		Building Condition Reports, Treat contaminated water, Maintenance, Temporary works allowance and Flood mitigation
Property Adjts & Fencing	\$2,900,310	40%	\$1,160,124	\$4,060,434		
Traffic Management	\$5,814,607	40%	\$2,325,843	\$8,140,449		
Design & Verification (DCM & Boot)						Refer "Southern - RMS Summary" worksheet
Other	\$19,817,167	40%	\$7,926,867	\$27,744,034		Mobilisation, Community Liaison, Management plans, Demolition, HVRA & Other
Sub - Total:	\$34,186,553		\$14,311,565	\$48,498,118	8.76%	
5 (d) - Adjustment Sums (Including markup and contingency)						
E/O Reroute alignment south of STP	\$6,190,271	55%	\$3,427,398	\$9,617,669		Refer NOTE 1. below
E/O Island embankment	-\$3,615,923	55%	-\$2,002,046	-\$5,617,969		Southern Option ONLY!
E/O Realignment of Northern interchange	-\$1,460,910	55%	-\$808,869	-\$2,269,780		Southern Option ONLY!
Changes to vertical alignment to generate extra fill material	-\$35,496,479	55%	-\$19,653,508	-\$55,149,987		Southern Option ONLY!
E/O Adjustment to Southern Interchange	-\$9,739,402	55%	-\$5,392,462	-\$15,131,864		Southern Option ONLY!
Sub - Total:	-\$32,922,131		-\$18,228,156	-\$51,150,287	-9.24%	
TOTAL:	\$371,222,034		\$182,338,293	\$553,560,328	100.00%	

NOTE:

Total Amount **\$553,560,328**

- Adjustment Sums items **HIGHLIGHTED** are included in scope of item **HIGHLIGHTED**
- Provisional Sum amount NOT incl. in Project Estimate total because derived from a discretionary item currently under consideration

5 (e) - Provisional Sums (including markup and contingency)						
Additional pedestrian bridge	\$0	55%	\$0	\$0		Refer NOTE 2. above
Northbound offload ramp to Woodhill Mountain Road	\$0	55%	\$0	\$0		Northern Option ONLY!
E/O Adjustments to Kangaroo Valley Road (KVR) Interchange	\$0	55%	\$0	\$0		Northern Option ONLY!
E/O Revised Northbound off-ramp Kangaroo Valley Road (KVR) Interchange	\$0	55%	\$0	\$0		Northern Option ONLY!
Sub - Total:	\$0		\$0	\$0		