

Byford Development Contribution Plan Report - Appendices

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September 2010

Appendix A Thomas Road – Costing Spreadsheet



Cost Estimate Thomas Road August 2010

| _ | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|---|---|--|---------------------------------|---|---|--|
| 1 | Establishment/Preliminaries | | | | | Specification desumentation design |
| | General Condition of Contract, | | | | | Specification, documentation, design, plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | |
| | Management Requirements | | | | | Community Consultation and |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish |
| | (1.676 1.76 1.661.61.61.7) | | | | | Supervision and Overheads, Survey, |
| | | item | 4,787,639 | 0.075 | | QA, Demobilisation & cleanup |
| 2 | Subtotal Establishment/Preliminaries Earthworks | | | | \$359,072.91 | |
| 2 | Site clearing (assuming 60% area of | | | | | |
| | earthwork area) | ha | 5.50 | 15,800.00 | \$86,900.00 | |
| | Stripping 100 mm topsoil and stockpile for | ha | | | | |
| | respreading (assuming 60% of earthwork area) | | 5.50 | 10,500.00 | \$57,750.00 | |
| | Excavation and removal of unsuitable | m3 | 3.33 | 20,000.00 | 40.7.00.00 | |
| | material (Rate only required) | | | 78.10 | | |
| | Backfilling unsuitable material excavations with site excavated material or imported | m3 | | | | |
| | material (Rate only required) | | | 56.90 | | |
| | Excavation and removal of rock (Rate only | m3 | | 225.42 | | |
| | required) | | 12 200 | 326.40 | ¢22.190.00 | |
| | Embankment foundation compaction Embankment construction using site | m2 m3 | 12,200 | 1.90 | \$23,180.00 | |
| | excavated material | 1110 | 8,300 | \$7.57 | \$62,831.00 | |
| | Embankment construction from imported | rn3 | 10,800 | \$12.50 | \$135,000.00 | |
| | material Subgrade preparation for pavement | m2 | 24,192 | \$12.50 | \$135,000.00 | |
| | | 1112 | 24,132 | 73.10 | \$125,514.50 | |
| | Stabilisation and Mulch(Provisional Sum) | item | | \$15,000.00 | \$0.00 | |
| | Subtotal Earthworks | | | | \$490,975.56 | |
| 3 | Drainage | | | | | |
| | Curface drainage storm water drainage | | | | | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) | item | 1 | 375,000.00 | \$375,000.00 | |
| | Water Sensitive Landscape (Provisional | item | | 373,000.00 | \$373,000.00 | |
| | Sum) | item | 1 | 200,000.00 | \$200,000.00 | |
| | Hard Infrastructure (Provisional Sum) | item | 1 | 50,000.00 | \$50,000.00 | |
| | Subtotal Drainage | | | | \$625,000.00 | |
| 4 | Pavement & Surfacing | | | | | |
| | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD | | | | | |
| | | | | | | |
| | Sac Sampasion to 50% mm22 | m2 | | \$13.00 | | |
| | Supply and place 250mm thick limestone | m2 | | \$13.00 | | |
| | · | | 24192 | | \$354 412 80 | Pavement 7 0mx1 |
| | Supply and place 250mm thick limestone | m2 m2 | 24192 | \$13.00 \$14.65 | \$354,412.80 | Pavement 7.0mx1 |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD | | 24192 24192 | | \$354,412.80 \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base | m2 m2 | 24192 | \$14.65 \$9.00 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course | m2 | | \$14.65 | - | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite | m2 m2 m2 | 24192 | \$14.65 \$9.00 \$5.00 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) | m2 m2 | 24192 | \$14.65 \$9.00 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC | m2 m2 m2 | 24192 | \$14.65 \$9.00 \$5.00 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 m2 m2 | 24192 | \$14.65 \$9.00 \$5.00 \$11.00 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite | m2 m2 m2 m2 | 24192 24192 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$217,728.00 \$120,960.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 m2 m2 m2 m2 | 24192 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$217,728.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) | m2 m2 m2 m2 | 24192 24192 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$217,728.00 \$120,960.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb | m2 m2 m2 m2 m2 m2 m | 24192 24192 21168 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 | \$217,728.00 \$120,960.00 \$275,184.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb | m2 m2 m2 m2 m2 m2 m m | 24192 24192 21168 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$217,728.00 \$120,960.00 \$275,184.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm | m2 m2 m2 m2 m2 m2 mm m m m | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) | m2 m2 m2 m2 m2 m2 m2 m2 m0 m1 | 24192 24192 21168 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 | m2 m2 m2 m2 m2 m2 mm m m m | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway | m2 m2 m2 m2 m2 m2 mm m m m | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 | m2 m2 m2 m2 m2 m2 m2 m2 m2 m m m m m | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$35.00 \$72.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 \$57,600.00 | Intersection paving |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 m2 m2 m2 m2 m2 mm m m m m m2 | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$35.00 \$72.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 \$57,600.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | m2 m2 m2 m2 m2 m2 m2 m2 m2 m m m m m | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$35.00 \$72.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 \$57,600.00 | Intersection paving |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 m2 m2 m2 m2 m2 m2 m m m m m m2 m2 | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$35.00 \$72.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 \$57,600.00 | Intersection paving |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres Bridle path 3m (Rate only) Single lane Roundabout | m2 m2 m2 m2 m2 m2 m2 m m m m m m m N0 | 24192 24192 21168 6048 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$72.00 \$50.00 \$15.00 \$15.00 | \$217,728.00 \$120,960.00 \$275,184.00 \$110,678.40 \$57,600.00 | Intersection paving path 3.0m x 3024 |



Cost Estimate Thomas Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|--|------|----------|----------------|-----------------|-----------------------------------|
| 5 | Traffic Facilities | | | | | |
| | Signal Intersection (Provisional Sum) | No | 1 | \$250,000.00 | \$250,000.00 | |
| | Signs (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | |
| | Traffic Management | day | 100 | \$1,000.00 | \$100,000.00 | |
| | Subtotal Traffic Facilities | | | | \$280,000.00 | |
| 6 | Public Utilities | | | | | |
| | Western Power - Roadway Lighting | | | | | |
| | (Provision Sum) | item | 1 | \$700,000.00 | \$700,000.00 | |
| | | | | | | |
| | Western Power - Underground Existing | item | 1 | \$1,300,000.00 | \$1,300,000.00 | |
| | | | | | | |
| | Western Power - Underground Distribution | item | | \$9,600,000.00 | | Not included estimated by Telstra |
| | Telstra | item | 1 | \$450,000.00 | \$450,000.00 | |
| | Water Corporation | item | 1 | \$206,050.00 | \$206,050.00 | Sewer relocation |
| | WestNet Energy | item | 1 | \$80,000.00 | \$80,000.00 | |
| | Subtotal Public Utilities | | | | \$2,736,050.00 | (Not in 7.5% Provisional Sum) |
| 7 | Miscellaneous | | | | | |
| | As constructed | item | 1 | 1,500.00 | \$1,500.00 | |
| | Subtotal Miscellaneous | | | | \$1,500.00 | |
| | Total Cost Estimate | | | | \$7,523,688.76 | |
| | Contingency @ 15% | | | | \$1,128,553.31 | material quantity variations |
| | Total Including Contingency | | | | \$8,652,242.07 | |
| 8 | Property | | | | | |
| | Property Costs | m2 | 29600 | \$55.00 | \$1,628,000.00 | |
| | Subtotal Property Costs | | | | \$1,628,000.00 | |
| | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | OSTS | | | \$10,280,242.07 | |

Appendix B Abernethy Road – Costing Spreadsheet



Cost Estimate Abernethy Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|---|--------|-------------|--------------------|--------------------------------|--|
| 1 | Establishment/Preliminaries | | | (+/ | (4) | |
| | General Condition of Contract, | | | | | Specification, documentation, design, |
| | General Condition of Contract, | | | | | plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | |
| | Management Requirements | | | | | Community Consultation and |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, Supervision and Overheads, Survey, |
| | | item | \$5,532,779 | \$0.08 | \$414 958 46 | QA, Demobilisation & cleanup |
| | Subtotal Establishment/Preliminaries | псп | 73,332,773 | Ç0.00 | \$414,958.46 | • |
| 2 | Earthworks | | | | + 12 1 / 0001110 | |
| | Site clearing (assuming 60% area of | ha | | | | |
| | earthwork area) | | 6 | \$15,800.00 | \$97,960.00 | |
| | Stripping 100 mm topsoil and stockpile for respreading (assuming 60% of earthwork | ha | | | | |
| | area) | | 6 | \$10,500.00 | \$65,100.00 | |
| | Excavation and removal of unsuitable | m3 | | 4=0.40 | | |
| | material (Rate only required) Backfilling unsuitable material excavations | m3 | | \$78.10 | | |
| | with site excavated material or imported | 1113 | | | | |
| | material (Rate only required) | | | \$56.90 | | |
| | Excavation and removal of rock (Rate only | m3 | Γ | \$326.40 | | |
| | required) Embankment foundation compaction | m2 | 17,098 | \$326.40 | \$32,486.20 | |
| | Embankment construction using site | m3 | 17,030 | 71.50 | 732,400.20 | |
| | excavated material | | 11,283 | \$7.57 | \$85,412.31 | |
| | Embankment construction from imported | rn3 | 18,400 | \$12.50 | \$230,000.00 | |
| | material Subgrade preparation for pavement | m2 | 52,109 | \$12.50 | \$230,000.00 | |
| | | 1112 | 32,109 | \$5.16 | \$209,924.02 | |
| | Stabilisation and Mulch(Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | |
| | Subtotal Earthworks | | | | \$795,883.13 | |
| 3 | Drainage | | | | | |
| | | | | | | |
| | Surface drainage, storm water drainage, | | | ¢500,000,00 | ¢500,000,00 | |
| | drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional | item | 1 | \$500,000.00 | \$500,000.00 | |
| | Sum) | item | 1 | \$250,000.00 | \$250,000.00 | |
| | Hard Infrastructure (Provisional Sum) | item | 1 | \$55,000.00 | \$55,000.00 | |
| | Subtotal Drainage | | | , , | \$805,000.00 | |
| 4 | Pavement & Surfacing | | | | | |
| | Supply and place 225mm thick limestone | | | | | |
| | sub-base compacted to 95% MMDD | m2 | 44,421 | \$13.00 | \$577 473 00 | 2/5.00m pavements |
| | Supply and place 250mm thick limestone | 1112 | 44,421 | 713.00 | \$377,473.00 | 2/3.00m pavements |
| | sub-base compacted to 95% MMDD | | | | | |
| | Complete and allows 400mm are smallered and the | m2 | | \$14.65 | | |
| | Supply and place 100mm crushed rock base course compacted to 98% MMDD | m2 | 41,346 | \$9.00 | \$372,114.00 | |
| | Apply 10rnm thick primer seal to base | | | | | |
| | course | m2 | 39,637 | \$5.00 | \$198,185.00 | |
| | Construct 25mm compacted depth dense graded asphalt (7mm nominal granite | | | | | |
| | aggregate size) | m2 | | \$11.00 | | |
| | Construct 25mm compacted RED AC | 2 | | 640.50 | | |
| | (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 | | \$12.50 | | |
| | graded asphalt (10mm nominal granite | | | | | |
| | aggregate size) | m2 | 37,587 | \$13.00 | \$488,631.00 | |
| | Mountable Kerb | m | 10.7-1 | \$18.30 | A.O. | |
| | Semi Mountable Kerbing Barrier kerb | m | 10,251 | \$18.30 | \$187,593.30 | |
| | Flush kerb | m m | | \$18.30 \$35.00 | | |
| | Brick paving units on and including 30mm | 111 | | , σου.υυ | | |
| | sand bedding (in medians) | m2 | 1,200 | \$72.00 | \$86,400.00 | Intersection median paving |
| | Construct 100mm thick, class N20 | | | | | |
| | concrete, broom finished dual use pathway | | | | | |
| | With control joints at 1.25m centres and | | | | | |
| | 12mm wide expansion joints at 5m centres | m2 | 15,800 | \$50.00 | | Abernethy path 1x3.0m, 1x2.00m |
| | Single lane Roundabout | No | 4 | \$150,000.00 | \$600,000.00 | |
| | Double lane Roundabout | No | 0 | \$500,000.00 | \$0.00 | |
| - | Subtotal Pavement & Surfacing | | | | 3,300,396.30 | |



Cost Estimate Abernethy Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|--|------|----------|---|------------------|-------------------------------|
| 5 | Traffic Facilities | | | | | |
| | Signal Intersection (Provisional Sum) | No | 2 | \$250,000.00 | \$500,000.00 | |
| | Signs (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | |
| | Traffic Management | day | 100 | \$1,000.00 | \$100,000.00 | |
| | Subtotal Traffic Facilities | | | | \$630,000.00 | |
| 6 | Public Utilities | | | | | |
| | Western Power - Roadway Lighting | | | | | |
| | (Provision Sum) | item | 1 | \$1,000,000.00 | \$1,000,000.00 | |
| | Western Power - Underground Existing | item | 1 | \$2,000,000.00 | \$2,000,000.00 | |
| | | | | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1 // | |
| | Western Power - Underground Distribution | item | | | | |
| | Telstra | item | 1 | \$3,000,000.00 | \$3,000,000.00 | |
| | Water Corporation | item | 1 | \$393,750.00 | \$393,750.00 | Water main |
| | WestNet Energy | item | 1 | \$200,000.00 | \$200,000.00 | |
| | Subtotal Public Utilities | | | | \$6,593,750.00 | (Not in 7.5% Provisional Sum) |
| 7 | Miscellaneous | | | | | |
| | As constructed | item | 1 | \$1,500.00 | \$ 1,500.00 | |
| | Subtotal Miscellaneous | | | | \$ 1,500.00 | |
| | Total Cost Estimate | | | | \$ 12,541,487.89 | |
| | Contingency @ 15% | | | | \$ 1,881,223.18 | material quantity variations |
| | Total Including Contingency | | | | \$ 14,422,711.07 | |
| 8 | Property | | | | | |
| | Property Costs | m2 | 23500 | \$55.00 | \$1,292,500.00 | additional 10m |
| _ | Subtotal Property Costs | | | | \$1,292,500.00 | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | | | | \$15,715,211.07 | |

Appendix C Orton Road – Costing Spreadsheet





Cost Estimate Orton Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|--|----------------------------------|----------------------------------|---|---|---|
| 1 | Establishment/Preliminaries | | · | | | |
| | Conoral Condition of Contract | | | | | Specification, documentation, design, |
| | General Condition of Contract, | | | | | plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | |
| | Management Requirements | | | | | Community Consultation and |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, |
| | | | 44 ==0 ==4 | | 40.40.400.04 | Supervision and Overheads, Survey, |
| | Subtotal Establishment/Preliminaries | item | \$4,578,751 | 0.075 | \$343,406.34 \$343,406.34 | QA, Demobilisation & cleanup |
| 2 | Earthworks | | | | \$343,406.34 | |
| | Site clearing (assuming 60% area of | | | | | |
| | earthwork area) | ha | 5 | \$15,800.00 | \$79,000.00 | |
| | Stripping 100 mm topsoil and stockpile for | ha | | | | |
| | respreading (assuming 60% of earthwork | | 5 | \$10,500.00 | \$52,500.00 | |
| | area) Excavation and removal of unsuitable | m3 | 3 | \$10,500.00 | \$52,500.00 | |
| | material (Rate only required) | 1110 | | \$78.10 | | |
| | Backfilling unsuitable material excavations | m3 | | | | |
| | with site excavated material or imported | | | ¢E6.00 | | |
| | material (Rate only required) Excavation and removal of rock (Rate only | | | \$56.90 | | |
| | required) | m3 | | \$326.40 | | |
| | Embankment foundation compaction | m2 | 5,922 | \$1.90 | \$11,251.80 | |
| | Embankment construction using site | m3 | | 4 | 4 | |
| | excavated material | | 5,847 | \$7.57 | \$44,261.79 | |
| | Embankment construction from imported material | rn3 | 35,240 | \$12.50 | \$440,500.00 | |
| | Subgrade preparation for pavement | m2 | 38,637 | \$5.18 | \$200,139.66 | |
| | Stabilisation and Mulch(Provisional Sum) | | · | | | |
| | ` ' | item | 1 | \$30,000.00 | \$30,000.00 | |
| | Subtotal Earthworks | | | | \$857,653.25 | |
| | | | | | | |
| 3 | Drainage | | | | | |
| 3 | | | | | · <i>·</i> | |
| 3 | Surface drainage, storm water drainage, | itam | 1 | ¢500,000,00 | | |
| 3 | Surface drainage, storm water drainage, drainage structures (Provisional Sum) | item | 1 | \$500,000.00 | \$500,000.00 | |
| 3 | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional | | | | \$500,000.00 | |
| 3 | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) | item | 1 | \$300,000.00 | \$500,000.00 | |
| 3 | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) | | | | \$500,000.00 \$300,000.00 \$70,000.00 | |
| 3 | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) | item | 1 | \$300,000.00 | \$500,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage | item | 1 | \$300,000.00 | \$500,000.00 \$300,000.00 \$70,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing | item item | 1 1 | \$300,000.00 \$70,000.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD | item | 1 | \$300,000.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone | item item | 1 1 | \$300,000.00 \$70,000.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD | item item | 1 1 | \$300,000.00 \$70,000.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | item item | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$4444,652.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | item item | 1 1 | \$300,000.00 \$70,000.00 \$13.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | item item | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$4444,652.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10mm thick primer seal to base course Construct 25mm compacted depth dense | m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10mm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite | m2 m2 m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) | m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10mm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC | m2 m2 m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) | m2 m2 m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite | m2 m2 m2 m2 m2 m2 | 34204 34204 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 \$171,020.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) | m2 m2 m2 m2 m2 m2 m2 m2 | 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb | m2 m2 m2 m2 m2 m2 m2 m2 m2 | 34204 34204 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 \$171,020.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 30mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing | m2 | 34204 34204 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 \$171,020.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 30mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb | m2 m2 m2 m2 m2 m2 m2 m2 m2 m0 | 34204 34204 34204 31670 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 \$171,020.00 | 2/5.0m pavement |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) Water Sensitive Landscape (Provisional Sum) Hard Infrastructure (Provisional Sum) Subtotal Drainage Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 30mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing | m2 | 34204 34204 34204 | \$300,000.00 \$70,000.00 \$13.00 \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$500,000.00 \$300,000.00 \$70,000.00 \$870,000.00 \$444,652.00 \$307,836.00 \$171,020.00 | 2/5.0m pavement |



Cost Estimate Orton Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | | |
|------|---|------|----------|----------------|-----------------|-------------------------------|--|--|--|
| | Construct 100mm thick, class N20 | | | | | | | | |
| | concrete, broom finished dual use pathway | | | | | | | | |
| | With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | | | | | | | | |
| | · | m2 | 11,300 | | \$565,000.00 | 2/2.5m paths | | | |
| | Bridle path 3m (Rate only) | m2 | | \$15.00 | | | | | |
| | Single lane Roundabout | No | 3 | \$150,000.00 | \$450,000.00 | | | | |
| | Double lane Roundabout | No | | \$500,000.00 | \$0.00 | | | | |
| | Channelisation Dual Carriageway | No | | \$450,000.00 | \$0.00 | | | | |
| | Subtotal Pavement & Surfacing | | | | \$2,829,598.00 | | | | |
| 5 | Traffic Facilities | | | | | | | | |
| | Signal Intersection (Provisional Sum) | No | | \$250,000.00 | | | | | |
| | Signs (Provisional Sum) | item | 1 | \$10,000.00 | | | | | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$10,000.00 | \$ 10,000.00 | | | | |
| | Traffic Management | day | 75 | \$1,000.00 | \$ 75,000.00 | | | | |
| | Subtotal Traffic Facilities | | • | | \$ 20,000.00 | | | | |
| 6 | Public Utilities | | | | | | | | |
| | Western Power - Roadway Lighting | | | | | | | | |
| | (Provision Sum) | item | 1 | \$650,000.00 | \$650,000.00 | | | | |
| | | | | | | | | | |
| | Western Power - Underground Existing | item | 1 | \$1,250,000.00 | \$1,250,000.00 | | | | |
| | Western Power - Underground | | | | | | | | |
| | Distribution | item | | | | | | | |
| | Telstra | item | 1 | \$180,000.00 | \$180,000.00 | | | | |
| | Water Corporation | item | | | | | | | |
| | WestNet Energy | item | 1 | \$40,000.00 | \$40,000.00 | | | | |
| | Subtotal Public Utilities | | | | \$2,120,000.00 | (Not in 7.5% Provisional Sum) | | | |
| 7 | Miscellaneous | | | | | | | | |
| | As constructed | item | 1 | \$1,500.00 | \$1,500.00 | | | | |
| | Subtotal Miscellaneous | | | | \$1,500.00 | | | | |
| | Total Cost Estimate | | | | \$7,042,157.59 | | | | |
| | Contingency @ 15% | | | | \$1,056,323.64 | material quantity variations | | | |
| | Total Including Contingency | | | | \$8,098,481.23 | | | | |
| 8 | Property | | | | | | | | |
| | Property Costs | m2 | 45715 | \$55.00 | \$2,514,325.00 | | | | |
| | Subtotal Property Costs | | | | \$2,514,325.00 | | | | |
| | | | | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND C | OSTS | | | \$10,612,806.23 | | | | |

Appendix D Kardan Boulevard – Costing Spreadsheets





Cost Estimate Kardan Blvd August 2010

| | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|-------------------|--|----------------|----------------|-------------------------------|---|--|
| | Establishment/Preliminaries | | | | | Specification desumentation design |
| | General Condition of Contract, | | | | | Specification, documentation, design, plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | |
| | Management Requirements | | | | | Community Consultation and |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, |
| | | item | \$1,838,490.94 | 0.075 | \$137 886 82 | Supervision and Overheads, Survey, QA, Demobilisation & cleanup |
| | Subtotal Establishment/Preliminaries | iteiii | \$1,030,430.54 | 0.073 | \$137,886.82 | QA, Demobilisation & cleanup |
| | Earthworks | | | | · · | |
| | Site clearing (assuming 60% area of | ha | 4.00 | 645 000 00 | 645 000 00 | |
| | earthwork area) Stripping 100 mm topsoil and stockpile for | ha | 1.00 | \$15,800.00 | \$15,800.00 | |
| | respreading (assuming 60% of earthwork | 116 | | | | |
| | area) Excavation and removal of unsuitable | | 1.00 | \$10,500.00 | \$10,500.00 | |
| | material (Rate only required) | m3 | | \$78.10 | | |
| | Backfilling unsuitable material excavations | m3 | | | | |
| | with site excavated material or imported material (Rate only required) | | | \$56.90 | | |
| | Excavation and removal of rock (Rate only | m2 | | φ30.30 | | |
| | required) | m3 | | \$326.40 | | |
| \longrightarrow | Embankment foundation compaction Embankment construction using site | m2 m3 | | \$1.90 | | |
| 1 | excavated material | IIIS | | \$7.57 | | |
| | Embankment construction from imported | rn3 | | 410 =0 | | |
| | material Subgrade preparation for pavement | m2 | 21.022 | \$12.50 \$5.18 | ¢100 050 04 | |
| | | IIIZ | 21,033 | \$3.10 | \$108,950.94 | |
| | Stabilisation and Mulch(Provisional Sum) | item | 1 | \$10,000.00 | \$10,000.00 | |
| | Subtotal Earthworks | | | | \$145,250.94 | |
| 3 | Drainage | | | T | | |
| | Surface drainage, storm water drainage, | | | | | |
| | drainage structures (Provisional Sum) | item | 1 | \$300,000.00 | \$300,000.00 | |
| | Water Sensitive Landscape (Provisional | | _ | + | + + + + + + + + + + + + + + + + + + + | |
| : | Sum) | item | 1 | \$200,000.00 | \$200,000.00 | |
| | Hard Infrastructure (Provisional Sum) | item | 1 | \$35,000.00 | \$35,000.00 | |
| | Subtotal Drainage | | | | \$535,000.00 | |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone | | | I | | |
| : | sub-base compacted to 95% MMDD | | | | | |
| | Cumply and place 250mm think limesetons | m2 | 21,033 | \$13.00 | \$273,429.00 | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | | | | | |
| | · | m2 | | \$14.65 | | |
| | Supply and place 100mm crushed rock base course compacted to 98% MMDD | m2 | 21,033 | \$9.00 | \$189,297.00 | |
| | Apply 10rnm thick primer seal to base | 1112 | 21,033 | \$5.00 | 7105,257.00 | |
| | course | m2 | 21,033 | \$5.00 | \$105,165.00 | |
| | Construct 25mm compacted depth dense graded asphalt (7mm nominal granite | | | | | |
| | aggregate size) | m2 | | \$11.00 | | |
| | Construct 25mm compacted RED AC | m? | | ¢12 E0 | | |
| | (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 | | \$12.50 | | |
| | graded asphalt (10mm nominal granite | | | | | |
| | aggregate size) Mountable Kerb | m2 | 15,573 | \$13.00 | \$202,449.00 | |
| ; | Semi Mountable Kerbing | m m | 5,500 | \$18.30 \$18.30 | \$0.00 \$100,650.00 | |
| ; | Barrier kerb | m | 3,300 | \$18.30 | \$100,030.00 | |
| ; | | | 360 | \$35.00 | \$12,600.00 | |
| i | Flush kerb | m | | | _ | |
| | Brick paving units on and including 30mm | | 225 | 470.00 | 64440000 | Internación a servica |
| | Brick paving units on and including 30mm sand bedding (in medians) | m2 | 200 | \$72.00 | \$14,400.00 | Intersection paving |
| | Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 | | 200 | \$72.00 | \$14,400.00 | Intersection paving |
| | Brick paving units on and including 30mm sand bedding (in medians) | | 200 | \$72.00 | \$14,400.00 | Intersection paving |
| | Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway | m2 | | | | |
| | Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | | 4,485 | \$72.00 \$50.00 \$15.00 | | Intersection paving paths 2.5mx1365, 1.5mx 715 |
| | Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 | | \$50.00 | | |
| | Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres Bridle path 3m (Rate only) | m2 m2 m2 | | \$50.00 \$15.00 | | |



Cost Estimate Kardan Blvd August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | |
|------|--|------|----------|--------------|----------------|-------------------------------|--|--|
| 5 | Traffic Facilities | | | | | | | |
| | Signal Intersection (Provisional Sum) | No | | \$250,000.00 | - | | | |
| | Signs (Provisional Sum) | item | 1 | \$10,000.00 | 10,000.00 | | | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$10,000.00 | 10,000.00 | | | |
| | Traffic Management | day | 30 | \$500.00 | 15,000.00 | | | |
| | Subtotal Traffic Facilities | | | | 35,000.00 | | | |
| 6 | Public Utilities | | | | | | | |
| | Western Power - Roadway Lighting | | | | | | | |
| | (Provision Sum) | item | 1 | \$325,000.00 | 325,000.00 | | | |
| | Western Power - Underground Existing | item | | | | | | |
| | Western Power - Underground Distribution | item | | | | | | |
| | Telstra | item | | | | | | |
| | Water Corporation | item | | | | | | |
| | WestNet Energy | item | | | | | | |
| | Subtotal Public Utilities | | | | 325,000.00 | (Not in 7.5% Provisional Sum) | | |
| 7 | Miscellaneous | | | | | | | |
| | As constructed | item | 1 | \$1,000.00 | \$1,000.00 | | | |
| | Subtotal Miscellaneous | | | | \$1,000.00 | | | |
| | Total Cost Estimate | | | | \$2,301,377.76 | | | |
| | Contingency @ 15% | | | | \$345,206.66 | material quantity variations | | |
| | Total Including Contingency | | | | \$2,646,584.42 | | | |
| 8 | Property | | | | | | | |
| | Property Costs | m2 | 3575 | \$55.00 | \$196,625.00 | Through Kalimna additional 5m | | |
| | Property Costs | m2 | 6500 | \$55.00 | \$357,500.00 | Through Kalimna / Larsen Rd | | |
| | Subtotal Property Costs | | | | \$554,125.00 | | | |
| | | | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | OSTS | | | \$3,200,709.42 | | | |

Appendix E San Simeon Boulevard – Costing



Cost Estimate San Simeon Blvd August 2010

| | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|---|--|--|---|---|---|---|
| 1 | Establishment/Preliminaries | | | | | |
| | General Condition of Contract, | | | | | Specification, documentation, design, |
| | General Requirements | | | | | plans QA BCITF Levy, Insurance |
| | General Requirements | | | | | berri Levy, msurance |
| | | | | | | Community Consultation and |
| | Management Requirements (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, |
| | (7.3% Provisional Sum) | | | | | Supervision and Overheads, Survey, QA, |
| | | item | \$4,352,132.65 | 0.075 | \$326,409.95 | Demobilisation & cleanup |
| | Subtotal Establishment/Preliminaries | | | | \$326,409.95 | |
| 2 | Earthworks | | | | | |
| | Site clearing (assuming 60% area of earthwork area) | ha | 6 | \$15,800.00 | \$94,800.00 | |
| | Stripping 100 mm topsoil and stockpile for | ha | J | 713,000.00 | 75-1,000.00 | |
| | respreading (assuming 60% of earthwork | | | | | |
| | area) | 0 | 6 | \$10,500.00 | \$63,000.00 | |
| | Excavation and removal of unsuitable material (Rate only required) | m3 | | \$78.10 | | |
| | Backfilling unsuitable material excavations | m3 | | ψ, 0.120 | | |
| | with site excavated material or imported | | | 4= 5 00 | | |
| | material (Rate only required) | | | \$56.90 | | |
| | Excavation and removal of rock (Rate only required) | m3 | | \$326.40 | | |
| | Embankment foundation compaction | m2 | 24,416 | \$1.90 | \$46,390.40 | |
| | Embankment construction using site | m3 | | | - | |
| | excavated material | | 16,675 | \$7.57 | \$126,229.75 | |
| | Embankment construction from imported material | rn3 | 21,745 | \$12.50 | \$271,812.50 | |
| | Subgrade preparation for pavement | m2 | 45,000 | \$5.18 | \$233,100.00 | |
| | Stabilisation and Mulch(Provisional Sum) | | , | | - | |
| | | item | 1 | \$75,000.00 | \$75,000.00 | |
| 2 | Subtotal Earthworks | | | | \$910,332.65 | |
| 3 | Drainage | | | | | |
| | Surface drainage storm water drainage | | | | | |
| | Surface drainage, storm water drainage, drainage structures (Provisional Sum) | item | 1 | \$500,000.00 | \$500,000.00 | |
| | Water Sensitive Landscape (Provisional | item | | \$300,000.00 | \$300,000.00 | |
| | Sum) | item | 1 | \$250,000.00 | \$250,000.00 | |
| | Hard Infrastructure (Provisional Sum) | item | 1 | \$70,000.00 | \$70,000.00 | |
| | <u> </u> | | | | \$820,000.00 | |
| | Subtotal Drainage | | | | \$820,000.00 | |
| 4 | Pavement & Surfacing | | | | \$820,000.00 | |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone | | | | \$820,000.00 | |
| 4 | Pavement & Surfacing | m2 | 40000 | \$13.00 | | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone | m2 | 40000 | \$13.00 | | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD | | 40000 | · | | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | m2 m2 | 40000 | \$13.00 \$14.65 | | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock | | 40000 | · | | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | m2 m2 | 40000 | \$14.65 \$9.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course | m2 | | \$14.65 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense | m2 m2 | 40000 | \$14.65 \$9.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) | m2 m2 | 40000 | \$14.65 \$9.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC | m2 m2 m2 m2 | 40000 | \$14.65 \$9.00 \$5.00 \$11.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) | m2 m2 m2 | 40000 | \$14.65 \$9.00 \$5.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 m2 m2 m2 | 40000 | \$14.65 \$9.00 \$5.00 \$11.00 | \$520,000.00 | 2/5.0m road pavement |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) | m2 m2 m2 m2 | 40000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$520,000.00 | |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb | m2 m2 m2 m2 | 40000 40000 35000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing | m2 m2 m2 m2 m2 m2 m m | 40000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$520,000.00 \$360,000.00 \$200,000.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb | m2 m2 m2 m2 m2 m2 mm m0 m2 mm | 40000 40000 35000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb | m2 m2 m2 m2 m2 m2 m m | 40000 40000 35000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm | m2 m2 m2 m2 m2 m2 mm m0 m2 mm | 40000 40000 35000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) | m2 m2 m2 m2 m2 mm2 mm m m m m | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm | m2 m2 m2 m2 m2 mm2 mm m m m m | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | m2 m2 m2 m2 m2 mm2 mm m m m m | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway | m2 m2 m2 m2 m2 mm2 mm m m m m | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | intersection median paving |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | m2 m m m m | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | intersection median paving 1/2.5m path 1500m |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Semi Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 m2 m2 m2 m2 mm m m m m m m2 | 40000 40000 35000 12000 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$18.30 \$18.30 \$18.30 \$35.00 \$72.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 | intersection median paving 1/2.5m path 1500m |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres Bridle path 3m (Rate only) Single lane Roundabout Double lane Roundabout | m2 m | 40000 40000 35000 12000 600 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$35.00 \$72.00 \$50.00 \$150,000.00 \$500,000.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 \$43,200.00 | intersection median paving 1/2.5m path 1500m |
| 4 | Supply and place 225mm thick limestone sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres Bridle path 3m (Rate only) Single lane Roundabout | m2 m2 m2 m2 m2 mm m m m m m m m m No | 40000 40000 35000 12000 600 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$72.00 \$72.00 | \$520,000.00 \$360,000.00 \$200,000.00 \$455,000.00 \$219,600.00 \$43,200.00 | intersection median paving 1/2.5m path 1500m |



Cost Estimate San Simeon Blvd August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | | |
|------|--|------|----------|--------------|----------------|-------------------------------|--|--|--|
| 5 | Traffic Facilities | | | | | | | | |
| | Signal Intersection (Provisional Sum) | No | | \$250,000.00 | | | | | |
| | Signs (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | | | | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$15,000.00 | \$15,000.00 | | | | |
| | Traffic Management | day | 30 | \$1,000.00 | \$30,000.00 | | | | |
| | Subtotal Traffic Facilities | | | | \$60,000.00 | | | | |
| 6 | Public Utilities | | | | | | | | |
| | Western Power - Roadway Lighting | | | | | | | | |
| | (Provision Sum) | item | 1 | \$900,000.00 | \$900,000.00 | | | | |
| | | | | | | | | | |
| | Western Power - Underground Existing | item | | | | | | | |
| | | | | | | | | | |
| | Western Power - Underground Distribution | item | | | | | | | |
| | Telstra | item | | | | | | | |
| | Water Corporation | item | | | | | | | |
| | WestNet Energy | item | | | | | | | |
| | Subtotal Public Utilities | | | | \$900,000.00 | (Not in 7.5% Provisional Sum) | | | |
| 7 | Miscellaneous | | | | | | | | |
| | As constructed | item | 1 | \$1,500.00 | \$1,500.00 | | | | |
| | Subtotal Miscellaneous | | | | \$1,500.00 | | | | |
| | Total Cost Estimate | | | | \$5,578,542.60 | | | | |
| | Contingency @ 15% | | | | \$836,781.39 | material quantity variations | | | |
| | Total Including Contingency | | | | \$6,415,323.99 | | | | |
| 8 | Property | | | | | | | | |
| | Property Costs | m2 | 14000 | \$55.00 | \$770,000.00 | 30m @1400m | | | |
| | Property Costs | m2 | 7500 | \$55.00 | \$412,500.00 | 25m @1500m | | | |
| | Subtotal Property Costs | | | | \$1,182,500.00 | | | | |
| | | | | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | OSTS | | | \$7,597,823.99 | | | | |

Appendix F Doley Road - Costing





Cost Estimate Doley Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|--|----------|-------------|-------------------------|-------------------------|---|
| 1 | Establishment/Preliminaries | | | (+/ | (+/ | |
| | | | | | | Specification, documentation, design, |
| | General Condition of Contract , | | | | | plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | |
| | Management Requirements | | | | | Community Consultation and |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, |
| | , , | | 40.000 446 | | 4=6.0=6.40 | Supervision and Overheads, Survey, |
| | Cubtatal Fatablish was at /Dualinain anias | item | \$2,359,416 | 0.075 | | QA, Demobilisation & cleanup |
| 2 | Subtotal Establishment/Preliminaries Earthworks | | | | 176,956.18 | |
| | Site clearing (assuming 60% area of | | | | | |
| | earthwork area) | ha | 3 | 15,800.00 | 47,400.00 | |
| | Stripping 100 mm topsoil and stockpile for | ha | | | | |
| | respreading (assuming 60% of earthwork area) | | 3 | 10,500.00 | 31,500.00 | |
| | Excavation and removal of unsuitable | m3 | 3 | 10,300.00 | 31,300.00 | |
| | material (Rate only required) | | | 78.10 | | |
| | Backfilling unsuitable material excavations | m3 | | | | |
| | with site excavated material or imported material (Rate only required) | | | 56.90 | | |
| | Excavation and removal of rock (Rate only | - 2 | | 30.30 | | |
| | required) | m3 | | 326.40 | | |
| | Embankment foundation compaction | m2 | | 1.90 | | |
| | Embankment construction using site | m3 | | 7.57 | | |
| | excavated material Embankment construction from imported | | | 7.57 | | |
| | material | rn3 | | 12.50 | | |
| | Subgrade preparation for pavement | m2 | 23,254 | 5.18 | 120,455.72 | |
| | Stabilisation and Mulch(Provisional Sum) | | | | | |
| | , , | item | 1 | 10,000.00 | 10,000.00 | |
| 2 | Subtotal Earthworks | | | | 209,355.72 | |
| 3 | Drainage | | | | | |
| | Surface drainage, storm water drainage, | | | | | |
| | drainage structures (Provisional Sum) | item | 1 | 300,000.00 | 300,000.00 | |
| | Water Sensitive Landscape (Provisional | item | 1 | 300,000.00 | 300,000.00 | |
| | Sum) | item | 1 | 150,000.00 | 150,000.00 | |
| | Hard Infrastructure (Provisional Sum) | item | 1 | 40,000.00 | 40,000.00 | |
| | Subtotal Drainage | | | | 490,000.00 | |
| 4 | Pavement & Surfacing | | | | | |
| | Supply and place 225mm thick limestone | | | | | |
| | sub-base compacted to 95% MMDD | m2 | 23,254 | \$13.00 | \$302,302.00 | |
| | Supply and place 250mm thick limestone | 1112 | 23,234 | 715.00 | 7302,302.00 | |
| | sub-base compacted to 95% MMDD | | | | | |
| | | m2 | | \$14.65 | | |
| | Supply and place 100mm crushed rock base course compacted to 98% MMDD | m2 | 23,254 | \$9.00 | \$209,286.00 | |
| | Apply 10rnm thick primer seal to base | | 23,237 | \$5.00 | 7203,200.00 | |
| | course | m2 | 23,254 | \$5.00 | \$116,270.00 | |
| | Construct 25mm compacted depth dense | _ | Ι Τ | | | |
| | graded asphalt (7mm nominal granite aggregate size) | m2 | | \$11.00 | | |
| | Construct 25mm compacted RED AC | | | · | | |
| | (7mm nominal granite aggregate size) | m2 | | \$12.50 | | |
| | Construct 30mm compacted depth dense | | | | | |
| | graded asphalt (10mm nominal granite aggregate size) | m2 | 19,744 | \$13.00 | \$256,672.00 | |
| | Mountable Kerb | m | <u> </u> | \$18.30 | | |
| | Semi Mountable Kerbing | m | | \$18.30 | | |
| | Barrier kerb | m | | \$18.30 | | |
| | Flush kerb | m | 7,898 | \$35.00 | \$276,430.00 | flush kerb |
| | Brick paving units on and including 30mm | m2 | 200 | \$72.00 | ¢14 400 00 | intersection paving |
| | sand bedding (in medians) | IIIZ | 200 | \$72.00 | \$14,400.00 | Intersection basing |
| 1 | Construct 100mm thick, class N20 | | | | | |
| | concrete, broom finished dual use pathway With control joints at 1.25m centres and | | | | | |
| | 12mm wide expansion joints at 5m centres | m I | 0 77 | ĆEO OO | ¢420 7 00 00 | |
| | Single lane Roundabout | m2 No | 8,774 | \$50.00 \$150,000.00 | · · · | |
| | Double lane Roundabout | No | | \$150,000.00 | | |
| | Channelisation Dual Carriageway | No | + | \$450,000.00 | | |
| | Subtotal Pavement & Surfacing | 140 | 1 | Ç +30,000.00 | 1,614,060.00 | |
| I | - and the state of | | | | _,5,555.00 | I |



Cost Estimate Doley Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | |
|------|--|------|----------|--------------|----------------|-------------------------------|--|--|
| 5 | Traffic Facilities | | | | <u> </u> | | | |
| | Signal Intersection (Provisional Sum) | No | | \$250,000.00 | | | | |
| | Signs (Provisional Sum) | item | 1 | \$10,000.00 | \$10,000.00 | | | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$10,000.00 | \$10,000.00 | | | |
| | Traffic Management | day | 50 | \$500.00 | \$25,000.00 | | | |
| | Subtotal Traffic Facilities | | | | \$45,000.00 | | | |
| 6 | Public Utilities | | | | | | | |
| | Western Power - Roadway Lighting | | | | | | | |
| | (Provision Sum) | item | 1 | \$500,000.00 | \$500,000.00 | | | |
| | | | | | | | | |
| | Western Power - Underground Existing | item | | | | | | |
| | Western Power - Underground Distribution | item | | | | | | |
| | Telstra | item | | | | | | |
| | Water Corporation | item | | | | | | |
| | WestNet Energy | item | | | | | | |
| | Subtotal Public Utilities | | | | \$500,000.00 | (Not in 7.5% Provisional Sum) | | |
| 7 | Miscellaneous | | | | | | | |
| | As constructed | item | 1 | 1,000.00 | \$1,000.00 | | | |
| | Subtotal Miscellaneous | | | | \$1,000.00 | | | |
| | Total Cost Estimate | | | | \$3,036,371.90 | | | |
| | Contingency @ 15% | | | | \$455,455.78 | material quantity variations | | |
| | Total Including Contingency | | | | \$3,491,827.68 | | | |
| 8 | Property | | | | | | | |
| | Property Costs | m2 | 17500 | \$55.00 | \$962,500.00 | Additional 10m widening | | |
| | Subtotal Property Costs | | | | \$962,500.00 | | | |
| | | | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | OSTS | | | \$4,454,327.68 | | | |

Appendix G Warrington Road – Costing Spreadsheet





Cost Estimate Warrington Road August 2010

| | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | | |
|---|---|--|-------------------------------------|---|---|---|--|--|--|
| 1 | Establishment/Preliminaries | | | | | | | | |
| | General Condition of Contract, | | | | | Specification, documentation, design, | | | |
| | General Condition of Contract, | | | | | plans QA | | | |
| | General Requirements | | | | | BCITF Levy, Insurance | | | |
| | | | | | | | | | |
| | Management Requirements | | | | | Community Consultation and | | | |
| | (7.5% Provisional Sum) | | | | | Notification, Mobilisation & Establish, | | | |
| | , | | _ | | | Supervision and Overheads, Survey, | | | |
| | | item | \$1,542,937 | \$0.075 | · | QA, Demobilisation & cleanup | | | |
| | Subtotal Establishment/Preliminaries | | | | \$115,720.31 | | | | |
| 2 | Earthworks | | | 1 | | | | | |
| | Site clearing (assuming 60% area of earthwork area) | ha | 2 | \$15,800.00 | \$31,600.00 | | | | |
| | Stripping 100 mm topsoil and stockpile for | ha | 2 | 713,800.00 | 731,000.00 | | | | |
| | respreading (assuming 60% of earthwork | | | | | | | | |
| | area) | | 2 | \$10,500.00 | \$21,000.00 | | | | |
| | Excavation and removal of unsuitable | m3 | | Ć70 10 | | | | | |
| | material (Rate only required) Backfilling unsuitable material excavations | m3 | | \$78.10 | | | | | |
| | with site excavated material or imported | IIIO | | | | | | | |
| | material (Rate only required) | | | \$56.90 | | | | | |
| | Excavation and removal of rock (Rate only | m3 | | , | | | | | |
| | required) | | | \$326.40 | | | | | |
| | Embankment foundation compaction | m2 | | \$1.90 | | | | | |
| | Embankment construction using site excavated material | m3 | | \$7.57 | | | | | |
| | Embankment construction from imported | | | 77.57 | | | | | |
| | material | rn3 | | \$12.50 | | | | | |
| | Subgrade preparation for pavement | m2 | 16,497 | \$5.18 | \$85,454.46 | | | | |
| | Stabilisation and Mulch(Provisional Sum) | • | 4 | 640,000,00 | 640,000,00 | | | | |
| | · · · · · · · · · · · · · · · · · · · | item | 1] | \$10,000.00 | \$10,000.00 | | | | |
| 2 | Subtotal Earthworks | | | | \$148,054.46 | | | | |
| 3 | Drainage | | ı | T | | | | | |
| | | | | | | | | | |
| | Surface drainage, storm water drainage, | | | 4222 222 22 | 4200 000 00 | | | | |
| | drainage structures (Provisional Sum) | item | 1 | \$300,000.00 | \$300,000.00 | | | | |
| | Water Sensitive Landscape (Provisional | | | | | | | | |
| | Sum) Subtotal Drainage | item | | | \$300,000.00 | | | | |
| 4 | | | | | \$300,000.00 | | | | |
| 4 | Pavement & Surfacing Supply and place 225mm thick limestone | | | | | | | | |
| | Supply and place 225mm thick innestone | | | | | | | | |
| | | | | | | | | | |
| | sub-base compacted to 95% MMDD | m2 | 16,497 | \$13.00 | \$214,461.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone | m2 | 16,497 | \$13.00 | \$214,461.00 | | | | |
| | sub-base compacted to 95% MMDD | | 16,497 | · | \$214,461.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | m2 | 16,497 | \$13.00 \$14.65 | \$214,461.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock | | 16,497 16,497 | · | | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD | m2 | | \$14.65 | \$214,461.00 \$148,473.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course | m2 | | \$14.65 | | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense | m2 m2 | 16,497 | \$14.65 \$9.00 | \$148,473.00 | | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite | m2 m2 m2 | 16,497 | \$14.65 \$9.00 \$5.00 | \$148,473.00 | | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) | m2 m2 | 16,497 | \$14.65 \$9.00 | \$148,473.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) | m2 m2 m2 | 16,497 | \$14.65 \$9.00 \$5.00 | \$148,473.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense | m2 m2 m2 | 16,497 | \$14.65 \$9.00 \$5.00 \$11.00 | \$148,473.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite | m2 m2 m2 m2 | 16,497 16,497 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$148,473.00 \$82,485.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) | m2 m2 m2 m2 m2 | 16,497 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 | \$148,473.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb | m2 m2 m2 m2 m2 m2 | 16,497 16,497 12,987 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 | \$148,473.00 \$82,485.00 \$168,831.00 | | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing | m2 m2 m2 m2 m2 m2 m | 16,497 16,497 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$148,473.00 \$82,485.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb | m2 m2 m2 m2 m2 m2 m2 m0 m1 | 16,497 16,497 12,987 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$148,473.00 \$82,485.00 \$168,831.00 | | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb | m2 m2 m2 m2 m2 m2 m | 16,497 16,497 12,987 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 | \$148,473.00 \$82,485.00 \$168,831.00 | | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb | m2 m2 m2 m2 m2 m2 m2 m0 m1 | 16,497 16,497 12,987 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) | m2 m2 m2 m2 m2 m2 mm m m m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$18.30 \$18.30 \$18.30 \$35.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm | m2 m2 m2 m2 m2 m2 mm m m m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$18.30 \$18.30 \$18.30 \$35.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | m2 m2 m2 m2 m2 m2 mm m m m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$18.30 \$18.30 \$18.30 \$35.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 | Intersection paving | | | |
| | sub-base compacted to 95% MMDD Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway | m2 m2 m2 m2 m2 m2 mm m m m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and | m2 m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$18.30 \$18.30 \$18.30 \$35.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 \$14,400.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 m2 m2 m2 m2 mm m0 m1 m1 m2 m2 | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$35.00 \$72.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 \$14,400.00 | Intersection paving | | | |
| | Supply and place 250mm thick limestone sub-base compacted to 95% MMDD Supply and place 100mm crushed rock base course compacted to 98% MMDD Apply 10rnm thick primer seal to base course Construct 25mm compacted depth dense graded asphalt (7mm nominal granite aggregate size) Construct 25mm compacted RED AC (7mm nominal granite aggregate size) Construct 30mm compacted depth dense graded asphalt (10mm nominal granite aggregate size) Mountable Kerb Semi Mountable Kerbing Barrier kerb Flush kerb Brick paving units on and including 30mm sand bedding (in medians) Construct 100mm thick, class N20 concrete, broom finished dual use pathway With control joints at 1.25m centres and 12mm wide expansion joints at 5m centres | m2 m2 m2 m2 m2 m2 m2 m2 m0 m m m m m | 16,497 16,497 12,987 3,510 | \$14.65 \$9.00 \$5.00 \$11.00 \$12.50 \$13.00 \$18.30 \$18.30 \$18.30 \$72.00 \$50.00 | \$148,473.00 \$82,485.00 \$168,831.00 \$64,233.00 \$14,400.00 | Intersection paving | | | |



Cost Estimate Warrington Road August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments | | | | | | |
|------|--|--------------|-------------------------------|--------------|----------------|------------------------------|--|--|--|--|--|--|
| 5 | Traffic Facilities | | | | | | | | | | | |
| | Signal Intersection (Provisional Sum) | No | | \$250,000.00 | | | | | | | | |
| | Signs (Provisional Sum) | | 1 | \$10,000.00 | \$10,000.00 | | | | | | | |
| | Pavement Marking (Provisional Sum) | item | 1 | \$10,000.00 | \$10,000.00 | | | | | | | |
| | Traffic Management | day | 60 | \$500.00 | \$30,000.00 | | | | | | | |
| | Subtotal Traffic Facilities | | | | \$50,000.00 | | | | | | | |
| 6 | Public Utilities | | | | | | | | | | | |
| | Western Power - Roadway Lighting | | | | | | | | | | | |
| | (Provision Sum) | item | 1 | \$500,000.00 | \$500,000.00 | | | | | | | |
| | | | | | | | | | | | | |
| | Western Power - Underground Existing | item | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Western Power - Underground Distribution | item | | | | | | | | | | |
| | Telstra | item | | | | | | | | | | |
| | Water Corporation | item | | | | | | | | | | |
| | WestNet Energy | item | | | | | | | | | | |
| | Subtotal Public Utilities | \$500,000.00 | (Not in 7.5% Provisional Sum) | | | | | | | | | |
| 7 | Miscellaneous | | | | | | | | | | | |
| | As constructed | item | 1 | \$1,000.00 | \$1,000.00 | | | | | | | |
| | Subtotal Miscellaneous | \$1,000.00 | | | | | | | | | | |
| | Total Cost Estimate | | \$2,158,657.77 | | | | | | | | | |
| | Contingency @ 15% | | | | \$323,798.67 | material quantity variations | | | | | | |
| | Total Including Contingency | | | | \$2,482,456.43 | | | | | | | |
| 8 | Property | | | | | | | | | | | |
| | Property Costs | m2 | | \$55.00 | | No additional widening | | | | | | |
| | Subtotal Property Costs | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | TOTAL ROAD CONSTRUCTION AND LAND CO | OSTS | | | \$2,482,456.43 | | | | | | | |

Appendix H Bridle Trail - Costing





Cost Estimate Bridle Trail August 2010

| Item | Description | Unit | Quantity | Rate (\$) | Amount (\$) | Comments |
|------|---|--------------|--|------------|------------------------------------|--|
| 1 | Establishment/Preliminaries | | | | | |
| | General Condition of Contract, | | | | | Specification, documentation, design, |
| | · | | | | | plans QA |
| | General Requirements | | | | | BCITF Levy, Insurance |
| | | | | | | Community Consultation and |
| | Management Requirements | | | | | Community Consultation and Notification, Mobilisation & Establish, |
| | (5.0% Provisional Sum) | | | | | Supervision and Overheads, Survey, |
| | | item | \$161,276 | 0.05 | \$8,063.80 | QA, Demobilisation & cleanup |
| | Subtotal Establishment/Preliminaries | | | | \$8,063.80 | |
| 2 | Earthworks | | | | | |
| | Site clearing (assuming 60% area of | ha | | | | |
| | earthwork area) Stripping 50 mm topsoil and stockpile for | m2 | | | | |
| | respreading (assuming 60% of earthwork | | | 4 | 4 | |
| | area) Excavation and removal of unsuitable | m3 | 4590 | \$3.30 | \$15,147.00 | |
| | material (Rate only required) | 1113 | | \$78.10 | | |
| | Backfilling unsuitable material excavations | m3 | | · | | |
| | with site excavated material or imported material | | 60 | \$56.90 | \$3,414.00 | |
| | Excavation and removal of rock (Rate only | | 00 | 05.00¢ | ۶۵,414.00 | |
| | required) | m3 | | \$326.40 | | |
| | Embankment foundation compaction | m2 | | \$1.90 | | |
| | Embankment construction using site excavated material | m3 | | \$7.57 | | |
| | Embankment construction from imported | rn3 | | - | | |
| | material | | | \$12.50 | | |
| | Subgrade preparation for pavement | m2 | 7650 | \$3.10 | \$23,715.00 | |
| | Stabilisation and Mulch(Provisional Sum) | item | 1 | \$2,000.00 | \$2,000.00 | |
| | Subtotal Earthworks | | • | | \$44,276.00 | |
| 3 | Drainage | | | | | |
| | Surface drainage, storm water drainage, | | | | | |
| | drainage structures Install culvert(Provisional Sum) | | | 62.400.00 | ć2 400 00 | |
| | Subtotal Drainage | item | 1 | \$2,400.00 | \$2,400.00 \$2,400.00 | |
| 4 | Pavement & Surfacing | | | | 72,400.00 | |
| | Supply and place 100mm thick limestone | | | | | |
| | sub-base compacted to 95% MMDD | 2 | 7.650 | ć= 00 | ¢20.250.00 | |
| | Supply and place 100mm crushed rock | m2 | 7,650 | \$5.00 | \$38,250.00 | |
| | base course compacted to 98% MMDD | m2 | 7,650 | \$9.00 | \$68,850.00 | |
| | Subtotal Pavement & Surfacing | | | | \$107,100.00 | |
| 5 | Traffic Facilities | | | | | |
| | Signs (Provisional Sum) | item | 1 | \$1,500.00 | \$1,500.00 | |
| | Traffic Management Subtotal Traffic Facilities | day | 5 | \$1,000.00 | \$5,000.00 \$6,500.00 | - |
| 6 | Public Utilities | | | | \$6,500.00 | |
| U | Western Power - Roadway Lighting | | | | | Ι |
| | (Provision Sum) | item | | | | |
| | | | | | | |
| | Western Power - Underground Existing | item | | | | |
| | Markens Barrier Had | | | | | |
| | Western Power - Underground Distribution Telstra | item | | | | |
| | Water Corporation | item item | + | | | |
| | WestNet Energy | item | + | | | |
| | Subtotal Public Utilities | | | | \$0.00 | (Not in 5.0% Provisional Sum) |
| 7 | Miscellaneous | | | | | |
| | As constructed | \$1,000.00 | | | | |
| | Subtotal Miscellaneous | \$1,000.00 | I control of the cont | | | |
| | Total Cost Estimate | | | | \$169,339.80 | |
| | Contingency @ 15% Total Including Contingency | | | | \$25,400.97 \$194,740.77 | material quantity variations |
| 8 | Property Property | | | | Ş134,/4U.// | |
| - 0 | Property Costs | m2 | 14259 | \$55.00 | \$784,245 00 | Through Kalimna/ Larsen Rd |
| | Subtotal Property Costs | | 1,233 | Ψ33.00 | \$784,245.00 | |
| | | | | | · | |
| | TOTAL ROAD CONSTRUCTION AND LAND C | OSTS | | | \$978,985.77 | |
| | | | | | | |

Appendix I Water Monitoring – Costing



| Item | Hours | People | Salary / hr | Cost | Year 1 | Year 2 [#] | Year 3# | Year 4 [#] | Year 5 [#] | Responsibility SCM004.4/09/10 |
|--|-------------------|----------------|------------------|-----------------------------------|----------------------------|------------------------------|------------------------------|--------------------------------------|--|--|
| Salary Costs | | | *** | | | | | | | |
| Preparation of Sample and Analysis Plan (SAP) | 16 | 1 | \$80/hr | \$1,280.00 | \$1,280.00 | 120 | - | | | SSJ |
| Sampling Preparation | 36 | 1 | \$25/hr | \$900.00 | \$900.00 | \$945.00 | \$992.25 | \$1,041.86 | \$1,093.96 | |
| Sample Collection | 144 | 1 | \$25/hr | \$3,600.00 | \$3,600.00 | \$3,780.00 | \$3,969.00 | \$4,167.45 | \$4,375.82 | |
| Data Management (site and program registration, data entry, verification/validation) | 37 | 1 | \$80/hr | \$2,960.00 | \$2,960.00 | \$3,108.00 | \$3,263.40 | \$3,426.57 | | Dept of Water |
| Preparation / assistance with report (Annual Report) | 40 | 1 | \$80/hr | \$3,200.00 | \$3,200.00 | \$3,360.00 | \$3,528.00 | \$3,704.40 | \$3,889.62 | |
| Travel costs/courier costs | - | - | - | \$500.00 | \$500.00 | \$525.00 | \$551.25 | \$578.81 | 2. A. C. | Consultant |
| Sub Total (GST Inc) | | | | \$12,440.00 | \$12,440.00 | \$11,718.00 | \$12,303.90 | \$12,919.10 | \$13,565.05 | |
| Sub Total (GST Excl) | | | | \$11,309.09 | \$11,309.09 | \$10,652.73 | \$11,185.36 | \$11,744.63 | \$12,331.86 | |
| Item | No. of Samples | Sample Runs | \$ per Sample | Cost | Year 1 | Year 2 [#] | Year 3 [#] | Year 4 [#] | Year 5 [#] | |
| Analysis Costs - Water | | | | | 20.011.00 | 20.004.70 | ¢0.440.04 | ¢2 562 00 | \$2,601.12 | |
| Total Nitrogen | 15 | 9 | \$16.40 | \$2,214.00 | \$2,214.00 | \$2,324.70 | \$2,440.94 | \$2,562.98 \$2,562.98 | \$2,691.13 \$2,691.13 | |
| Dissolved Organic Nitrogen, DON | 15 | 9 | \$16.40 | \$2,214.00 | \$2,214.00 | \$2,324.70 | \$2,440.94 | \$3,891.36 | \$4,085.92 | |
| Dissolved Organic Carbon, DOC | 15 | 9 | \$24.90 | \$3,361.50 | \$3,361.50 | \$3,529.58 | \$3,706.05 | | \$5,193.55 | |
| Total Organic Carbon, TOC | 15 | 9 | \$31.65 | \$4,272.75 | \$4,272.75 | \$4,486.39 | \$4,710.71 | \$4,946.24 | \$1,337.36 | |
| Total Oxidised Nitrogen, TON (NO ₃ -N + NO ₂ -N) | 15 | 9 | \$8.15 | \$1,100.25 | \$1,100.25 | \$1,155.26 | \$1,213.03 | \$1,273.68 | | |
| Ammoniacal Nitrogen, NH3-N | 15 | 9 | \$12.45 | \$1,680.75 | \$1,680.75 | \$1,764.79 | \$1,853.03 | \$1,945.68 | \$2,042.96 \$2,157.83 | |
| Total Phosphorus | 15 | 9 | \$13.15 | \$1,775.25 | \$1,775.25 | \$1,864.01 | \$1,957.21 | \$2,055.07 | | |
| FRP Ortho Phosphorus, PO4-P | 15 | 9 | \$8.15 | \$1,100.25 | \$1,100.25 | \$1,155.26 | \$1,213.03 | \$1,273.68 | \$1,337.36 \$2,133.21 | |
| Total Suspended Solids, TSS | 15 | 9 | \$13.00 | \$1,755.00 | \$1,755.00 | \$1,842.75 | \$1,934.89 | \$2,031.63 \$491.41 | \$515.98 | |
| Metals Set-up (Filtered) | 15 | 2 | \$14.15 | \$424.50 | \$424.50 | \$445.73 | \$468.01 | \$3,023.14 | \$3,174.29 | |
| Heavy Metals (Al, As, Cd, Cr, Cu, Co, Fe, Hg, Mn, Mo, Ni, Pb, Se & Zn) | 15 | 2 | \$87.05 | \$2,611.50 | \$2,611.50 | \$2,742.08 | \$2,879.18 | | | |
| Total Recoverable Hydrocarbons (TRH) | 15 | 2 | \$84.65 | \$2,539.50 | \$2,539.50 | \$2,666.48 | \$2,799.80 | \$2,939.79 | \$3,086.78 | |
| Polycyclic Aromatic Hydrocarbons and BTEX | 15 | 2 | \$242.75 | \$7,282.50 | \$7,282.50 | \$7,646.63 | \$8,028.96 | \$8,430.40 | \$8,851.92 | |
| Total Water Hardness (as CaCO3) | 15 | 2 | \$12.45 | \$373.50 | \$373.50 | \$392.18 | \$411.78 | \$432.37 | \$453.99 | |
| Analysis Costs - Sediment | | | | | | | | 00 740 00 | AC 000 00 | |
| Total Recoverable Hydrocarbons (TRH) | 14 | 2 | \$84.65 | \$2,370.20 | \$2,370.20 | \$2,488.71 | \$2,613.15 | \$2,743.80 | \$2,880.99 | |
| Polycyclic Aromatic Hydrocarbons & BTEX | 14 | 2 | \$176.15 | \$4,932.20 | \$4,932.20 | \$5,178.81 | \$5,437.75 | \$5,709.64 | \$5,995.12 | |
| Metals Set-up | 14 | 2 | \$33.90 | \$949.20 | \$949.20 | \$996.66 | \$1,046.49 | \$1,098.82 | \$1,153.76 | |
| Total Heavy Metals (Al, As, Cd, Ca, Cr, Cu, Fe, Pb, Mn, Hg, Ni, Se & Zn) | 14 | 2 | \$87.05 | \$2,437.40 | \$2,437.40 | \$2,559.27 | \$2,687.23 | \$2,821.60 | \$2,962.67 | |
| Moisture | 14 | 2 | \$13.60 | \$380.80 | \$380.80 | \$399.84 | \$419.83 | \$440.82 | \$462.86 | |
| Analysis Costs - Other | | | | \$00.000.00 | \$22,000,00 | | | | | |
| Troll 9500 Profiler XP | | | | \$22,000.00 | \$22,000.00 \$100.00 | \$105.00 | \$110.25 | \$115.76 | \$121.55 | |
| Distilled Water (20L) | | | | \$100.00 \$100.00 | \$100.00 | \$105.00 | \$110.25 | \$115.76 | \$121.55 | |
| Nitrile Gloves | | | | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| Lab Handling Fee | | | | \$65,975.05 | \$65,975.05 | \$46,173.80 | \$48,482.49 | \$50,906.62 | \$53,451.95 | |
| Sub Total (GST Inc) Sub Total (GST Excl) | | | | \$59,977.32 | \$59,977.32 | \$41,976.18 | \$44,074.99 | \$46,278.74 | \$48,592.68 | |
| Item | Hours | People | Salary / | Cost | Year 1 | Year 2 [#] | Year 3# | Year 4 [#] | Year 5 [#] | |
| Salary Costs | | | hr | ž. | | | | | | |
| Monitor local superficial aquifer groundwater levels (Monthly) - Labour | \$72.00 | \$1.00 | \$140.00 | \$10,080.00 | \$10,080.00 | \$10,584.00 | \$11,113.20 | \$11,668.86 | \$12,252.30 | |
| Monitor flows within developments and wetlands - labour | \$72.00 | \$1.00 | \$140.00 | \$10,080.00 | \$10,080.00 | \$10,584.00 | \$11,113.20 | \$11,668.86 | \$12,252.30 | TOTAL \$440,314.26 GST Inclusive Contingency 15% \$66,047.14 |
| Equipment Costs Monitor local superficial aquifer groundwater levels (Monthly) - | n/a | n/a | n/a | \$500.00 | \$500.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | TOTAL \$506,361.4 |
| Equipment | | | | | | | | | | |
| Equipment Monitor flows within developments and wetlands - equipment | n/a | n/a | n/a | \$25,000.00 | \$25,000.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| | n/a | n/a | n/a | \$25,000.00 \$45,660.00 | \$25,000.00 \$45,660.00 | \$0.00 \$21,168.00 | \$0.00 \$22,226.40 | \$0.00 \$23,337.72 \$21,216.11 | \$0.00 \$24,504.61 \$22,276.91 | |

Total

\$78,415.05 \$124,075.05 \$79,059.80 \$83,012.79 \$87,163.43 \$91,521.60

Appendix J Administrative Items – Costing Spreadsheet

BYFORD DEVELOPERS CONTRIBUTION

| <u>Administration</u> | % of Administration Cost | Total | Previous | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|------------------------|--------------------------|--------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Planning Studies | 25% | 1,435,276.08 | 648,853.52 | 304,142.81 | 25,474.17 | 26,620.51 | 27,818.43 | 29,070.26 | 30,378.42 | 31,745.45 | 33,173.99 | 34,666.82 | 36,226.83 | 37,857.04 | 39,560.61 | 41,340.83 | 43,201.17 | 45,145.22 |
| Traffic Studies | 1% | 57,080.56 | 39,680.56 | 8,700.00 | - | * | 8,700.00 | - | = | * | - | - | - | - | - | · | - | - |
| Drainage | 2% | 99,729.75 | 99,729.75 | - | - | - | - | - | - | - | | • | * | 141 | 2 8 | 22 | ~ | - |
| Road Design Cost | 7% | 407,307.19 | 28,665.00 | - | 20,000.00 | 20,900.00 | 21,840.50 | 22,823.32 | 23,850.37 | 24,923.64 | 26,045.20 | 27,217.24 | 28,442.01 | 29,721.90 | 31,059.39 | 32,457.06 | 33,917.63 | 35,443.92 |
| Borrowing Cost | 3% | 154,245.24 | 6,001.83 | 54,888.00 | 48,599.88 | 20,046.15 | 14,013.66 | 7,822.83 | 2,872.89 | - | - | | | | | | • | <u> </u> |
| Scheme Management Cost | 63% | 3,690,021.33 | 262,511.54 | | | | | | | | | | | | 270,133.63 | | | |
| | 100% | 5.843.660.16 | 1.085.442.21 | 502,066.05 | 268,020.57 | 249,340.77 | 262,326.54 | 258,218.29 | 264,536.14 | 273,438.10 | 285,742.81 | 298,601.24 | 312,038.30 | 326,080.02 | 340,753.62 | 330,087.53 | 3/2,111.4/ | 388,856.49 |