

Jf: 34576

24<sup>th</sup> January 2024

Blacktown City Council  
PO Box 63  
BLACKTOWN NSW 2148

**Attention: Mr Dennis Bagnall, Manager Developer Contributions**

## **RE: BLACKTOWN CP20 BASINS COST ESTIMATES**

As requested, we have reviewed WT Partnership's Peer Review (WTP), dated 12 December 2023 of our Cost Estimates dated 8 March 2023 and provide our following response:

- Our previous March 2023 estimates have been updated to reflect rates current in December 2023 so the base date is the same as WTP's;
- Escalation to expected construction dates is excluded. Contributions will be indexed from December 2023 until the date a developer pays the contributions;
- The bulk earthwork quantities that have been used are based on the expected volumes of the basins calculated by Council's engineers. We have maintained the quantities as previously advised;
- We have reviewed the amended rates provided by WTP and agree the tip fee rate for VENM is low. We have increased the rates for this is our estimate to reflect current market rates. It should be noted this rate is lower than the rate proposed by WTP. Please see the attached updated estimate;
- We have reviewed our March 2023 and increased the following rates to reflect current market prices:
  - Tip fee rate for VENM;
  - Rate of stormwater pipework;
  - Rate for reinforced concrete box culverts (RCBC's);
  - Rate for macrophyte tubestock planting;
  - Rate for trees.

If required please organise a meeting between Council, IPART, WTP and us to discuss the variances and decide on the best way to reach an agreement.

Should you require further information and details, please contact the undersigned.

Yours faithfully  
**MITCHELL BRANDTMAN**

**MATTHEW KRITZLER**  
Partner



**Mitchell Brandtman**

5D Quantity Surveyors & Construction Expert Opinion

# Blacktown Basins Cost Estimate

## Blacktown Basins Cost Estimate

Prepared for:  
Blacktown City Council

Contact:	Mr Matthew Kritzler
Phone:	1800 808 289
Email:	<a href="mailto:mkritzler@mitbrand.com">mkritzler@mitbrand.com</a>
Date:	25 January 2024
Issue:	1.0



## 1 SUMMARY

As requested, we have prepared a Cost Estimate for the basins within the Blacktown City Council area based upon the available documentation.

Based on current market rates the estimated cost for the works listed below in the summary is inclusive of preliminaries, margin, professional fees and contingency and exclusive of escalation and GST.

We note that the estimate should be considered as indicative only at this stage for the purposes of preparing a budget for a feasibility study or contribution plan and that prior to finalising any design or agreements, detailed estimates should be prepared base on further developed design information.

## 2 MAIN SUMMARY OF CONSTRUCTION COSTS

Refer to Attachment 1 for full details of our detailed cost estimate

<u>Item</u>	<u>E4.14 Jacqui Ave Total</u>	<u>E14.1 Albert St Total</u>	<u>F19.1 Hamilton St Total</u>	<u>F23.1 Woodland St Total</u>	<u>F24.1 Victoria St Total</u>
Soil And Water Management	\$17,175	\$16,245	\$23,725	\$17,570	\$49,620
Earthworks	\$3,847,673	\$7,778,832	\$13,598,434	\$3,539,177	\$7,698,612
Drainage	\$709,921	\$979,094	\$1,995,613	\$932,024	\$1,314,983
Raingarden	\$486,250	\$415,815	\$669,362	\$521,287	\$2,030,918
Landscaping	\$863,931	\$926,776	\$1,237,513	\$970,023	\$3,359,065
Preliminaries (10%)	\$592,500	\$1,011,700	\$1,752,500	\$598,100	\$1,445,400
Margin (8%)	\$521,400	\$890,300	\$1,542,200	\$526,300	\$1,271,900
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$7,038,850</b>	<b>\$12,018,762</b>	<b>\$20,819,347</b>	<b>\$7,104,481</b>	<b>\$17,170,498</b>
Project Management (3.5%)	\$246,400	\$420,700	\$728,700	\$248,700	\$601,000
Design (10%)	\$703,900	\$1,201,900	\$2,081,900	\$710,400	\$1,717,000
Contingency (15%)	\$1,198,400	\$2,046,200	\$3,544,500	\$1,209,500	\$2,923,300
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$9,187,550</b>	<b>\$15,687,562</b>	<b>\$27,174,447</b>	<b>\$9,273,081</b>	<b>\$22,411,798</b>



### 3 SUMMARY OF CONSTRUCTION COSTS

#### E4.14 – Jacqui Avenue Basin

<u>Item</u>	<u>E4.14 Jacqui Ave Total</u>	<u>E4.14 Jacqui Ave Basin</u>	<u>E4.14 Jacqui Ave Bio-retention</u>	<u>E4.14 Jacqui Ave GPT</u>
Soil And Water Management	\$17,175	\$17,175	\$0	\$0
Earthworks	\$3,847,673	\$3,838,211	\$9,462	\$0
Drainage	\$709,921	\$303,887	\$140,034	\$266,000
Raingarden	\$486,250	\$0	\$486,250	\$0
Landscaping	\$863,931	\$781,899	\$82,032	\$0
Preliminaries (10%)	\$592,500	\$494,200	\$71,800	\$26,600
Margin (8%)	\$521,400	\$434,700	\$63,200	\$23,500
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$7,038,850</b>	<b>\$5,870,072</b>	<b>\$852,778</b>	<b>\$316,100</b>
Project Management (3.5%)	\$246,400	\$205,500	\$29,800	\$11,100
Design (10%)	\$703,900	\$587,000	\$85,300	\$31,600
Contingency (15%)	\$1,198,400	\$999,400	\$145,200	\$53,800
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$9,187,550</b>	<b>\$7,661,972</b>	<b>\$1,113,078</b>	<b>\$412,600</b>



E14.1 – Albert St Basin

<u>Item</u>	<u>E14.1 Albert St Total</u>	<u>E14.1 Albert St Basin</u>	<u>E14.1 Albert St Bio-retention</u>	<u>E14.1 Albert St GPT</u>
Soil And Water Management	\$16,245	\$16,245	\$0	\$0
Earthworks	\$7,778,832	\$7,741,056	\$37,776	\$0
Drainage	\$979,094	\$449,912	\$174,182	\$355,000
Raingarden	\$415,815	\$0	\$415,815	\$0
Landscaping	\$926,776	\$859,312	\$67,464	\$0
Preliminaries (10%)	\$1,011,700	\$906,700	\$69,600	\$35,500
Margin (8%)	\$890,300	\$797,900	\$61,200	\$31,200
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$12,018,762</b>	<b>\$10,771,125</b>	<b>\$826,037</b>	<b>\$412,700</b>
Project Management (3.5%)	\$420,700	\$376,900	\$28,900	\$14,800
Design (10%)	\$1,201,900	\$1,077,100	\$82,600	\$42,200
Contingency (15%)	\$2,046,200	\$1,833,700	\$140,600	\$71,800
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$15,687,562</b>	<b>\$14,058,825</b>	<b>\$1,078,137</b>	<b>\$550,500</b>





E19.1 – Hamilton St Basin

<u>Item</u>	<u>E19.1 Hamilton St Total</u>	<u>E19.1 Hamilton St Basin</u>	<u>E19.1 Hamilton St Bio-retention</u>	<u>E19.1 Hamilton St GPT</u>
Soil And Water Management	\$23,725	\$23,725	\$0	\$0
Earthworks	\$13,598,434	\$13,479,382	\$119,052	\$0
Drainage	\$1,995,613	\$899,756	\$30,857	\$1,065,000
Raingarden	\$669,362	\$0	\$669,362	\$0
Landscaping	\$1,237,513	\$1,128,631	\$108,882	\$0
Preliminaries (10%)	\$1,752,500	\$1,553,200	\$92,900	\$106,400
Margin (8%)	\$1,542,200	\$1,366,600	\$81,700	\$93,800
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$20,819,347</b>	<b>\$18,451,294</b>	<b>\$1,102,753</b>	<b>\$1,265,200</b>
Project Management (3.5%)	\$728,700	\$645,700	\$38,600	\$44,300
Design (10%)	\$2,081,900	\$1,845,100	\$110,300	\$126,500
Contingency (15%)	\$3,554,500	\$3,141,300	\$187,700	\$215,400
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$27,174,447</b>	<b>\$24,083,394</b>	<b>\$1,439,353</b>	<b>\$1,651,400</b>



E23.1 – Woodland St Basin

<u>Item</u>	<u>E23.1 Woodland St Total</u>	<u>E23.1 Woodland St Basin</u>	<u>E23.1 Woodland St Bio-retention</u>	<u>E23.1 Woodland St GPT</u>
Soil And Water Management	\$17,570	\$17,570	\$0	\$0
Earthworks	\$3,539,177	\$3,522,005	\$17,172	\$0
Drainage	\$932,024	\$503,584	\$73,440	\$355,000
Raingarden	\$521,287	\$0	\$521,287	\$0
Landscaping	\$970,023	\$880,090	\$89,933	\$0
Preliminaries (10%)	\$598,100	\$492,400	\$70,200	\$35,400
Margin (8%)	\$526,300	\$433,300	\$61,800	\$31,200
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$7,104,481</b>	<b>\$5,848,949</b>	<b>\$833,832</b>	<b>\$421,600</b>
Project Management (3.5%)	\$248,700	\$204,700	\$29,200	\$14,800
Design (10%)	\$710,400	\$584,900	\$83,400	\$42,200
Contingency (15%)	\$1,209,500	\$995,800	\$142,000	\$71,800
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$9,273,081</b>	<b>\$7,634,349</b>	<b>\$1,088,432</b>	<b>\$550,400</b>



E24.1 – Victoria St Basin

<u>Item</u>	<u>E24.1 Victoria St Total</u>	<u>E24.1 Victoria St Basin</u>	<u>E24.1 Victoria St Bio-retention</u>	<u>E24.1 Victoria St GPT</u>
Soil And Water Management	\$49,620	\$49,620	\$0	\$0
Earthworks	\$7,698,612	\$7,549,794	\$148,818	\$0
Drainage	\$1,314,983	\$438,886	\$166,097	\$710,000
Raingarden	\$2,030,918	\$0	\$2,030,918	\$0
Landscaping	\$3,359,065	\$3,041,862	\$317,203	\$0
Preliminaries (10%)	\$1,445,400	\$1,108,100	\$266,400	\$70,900
Margin (8%)	\$1,271,900	\$975,100	\$234,400	\$62,400
<b>CONSTRUCTION TOTAL (Excl. Design, Contingency and GST)</b>	<b>\$17,170,498</b>	<b>\$13,163,362</b>	<b>\$3,163,836</b>	<b>\$843,300</b>
Project Management (3.5%)	\$601,000	\$460,800	\$110,700	\$29,500
Design (10%)	\$1,717,000	\$1,316,300	\$316,400	\$84,300
Contingency (15%)	\$2,923,300	\$2,241,100	\$538,600	\$143,600
Escalation – From December 2023	Excluded	Excluded	Excluded	Excluded
<b>TOTAL EXCLUDING GST AND ESCALATION</b>	<b>\$22,411,798</b>	<b>\$17,181,562</b>	<b>\$4,129,536</b>	<b>\$1,100,700</b>





#### **4 INFORMATION USED**

The following information has been used in the preparation of this cost estimate:

- Blacktown City Council – CP20 Detention Basin E4.14, revision 1, dated 25 September 2018;
- Blacktown City Council – CP20 Basin E14.2, Bioretention E14.3 & GPT E14.4, revision 0, dated 25 August 2022;
- Blacktown City Council – Riverstone Alex Avenue, revision A, dated 1 December 2009;
- Blacktown City Council – Woodland S Basin CP20 F23 Option 1, revision 1, dated 28 March 2022;
- Blacktown City Council – CP20 Basin F24 Victoria Street Riverstone, revision 0, dated 5 October 2022;

#### **5 SCHEDULE OF EXCLUSIONS**

The following exclusions have been made in the preparation of this cost estimate:

- Land costs, legal and stamp duty;
- Legal fees, taxes and duties;
- Finance and related fees and charges;
- Authority fees and contributions;
- Excavation in rock;
- Works beyond site boundaries;
- Escalation beyond December 2023, except for stage 2 of the raingarden construction;
- GST.

#### **6 SCHEDULE OF ASSUMPTIONS**

The following assumptions have been made in the preparation of this cost estimate:

- Work will be tendered on a competitive basis;
- Earthworks quantities;
- Remediation allowances have been based on similar Council and Landcom works to Scheduled Lands;
- Raingardens will be built in two stages, with the second stage being built 5-10 years after stage 1 is complete;
- Bioretention filter composition based on previous detailed design projects in Blacktown Council municipality;
- Road frontages will require fencing or bollards to stop vehicles entering sites;



- Estimate cost based on Option 1 for Basin 5 (Woodland St)
- Allowances for landscaping is based on similar projects;
- Watering and maintenance of landscaped areas is required for 3 years;
- Preliminaries at 10% and margin at 8%;
- Project management at 3.5%;
- Design at 10%;
- Contingency at 15%.

**Yours Sincerely**

**MITCHELL BRANDTMAN**

**Matthew Kritzler  
Partner**

**Attachment 1 - Cost Estimates**

Project: Blacktown Basin Costs  
Summary Cost Estimate - January 2024

Description	E4.14 Jacqui Ave Total	E4.14 Jacqui Ave Basin	E4.14 Jacqui Ave Bio-retention	E4.14 Jacqui Ave GPT
<b>SOIL AND WATER MANAGEMENT</b>	\$17,175	\$17,175	\$0	\$0
<b>EARTHWORKS</b>	\$3,847,673	\$3,838,211	\$9,462	\$0
<b>DRAINAGE</b>	\$709,921	\$303,887	\$140,034	\$266,000
<b>RAINGARDEN</b>	\$486,250	\$0	\$486,250	\$0
<b>LANDSCAPING</b>	\$863,931	\$781,899	\$82,032	\$0
<b>PRELIMINARIES (10%)</b>	\$592,500	\$494,200	\$71,800	\$26,600
<b>MARGIN (8%)</b>	\$521,400	\$434,700	\$63,200	\$23,500
<b>Construction Total (Excl. Design, Contingency and GST)</b>	<b>\$7,038,850</b>	<b>\$5,870,072</b>	<b>\$852,778</b>	<b>\$316,100</b>
<b>PROJECT MANAGEMENT (3.5%)</b>	\$246,400	\$205,500	\$29,800	\$11,100
<b>DESIGN (10%)</b>	\$703,900	\$587,000	\$85,300	\$31,600
<b>CONTINGENCY (15%)</b>	\$1,198,400	\$999,400	\$145,200	\$53,800
<b>ESCALATION - From December 2023</b>	Excluded	Excluded	Excluded	Excluded
<b>Construction Total (Excl. GST and Escalation)</b>	<b>\$9,187,550</b>	<b>\$7,661,972</b>	<b>\$1,113,078</b>	<b>\$412,600</b>

Project: Blacktown Basin Costs  
Summary Cost Estimate - January 2024

Description	E14.1 Albert St Total	E14.1 Albert St Basin	E14.1 Albert St Bio-retention	E14.1 Albert St GPT
<b>SOIL AND WATER MANAGEMENT</b>	\$16,245	\$16,245	\$0	\$0
<b>EARTHWORKS</b>	\$7,778,832	\$7,741,056	\$37,776	\$0
<b>DRAINAGE</b>	\$979,094	\$449,912	\$174,182	\$355,000
<b>RAINGARDEN</b>	\$415,815	\$0	\$415,815	\$0
<b>LANDSCAPING</b>	\$926,776	\$859,312	\$67,464	\$0
<b>PRELIMINARIES (10%)</b>	\$1,011,700	\$906,700	\$69,600	\$35,500
<b>MARGIN (8%)</b>	\$890,300	\$797,900	\$61,200	\$31,200
<b>Construction Total (Excl. Design, Contingency and GST)</b>	<b>\$12,018,762</b>	<b>\$10,771,125</b>	<b>\$826,037</b>	<b>\$421,700</b>
<b>PROJECT MANAGEMENT (3.5%)</b>	\$420,700	\$376,900	\$28,900	\$14,800
<b>DESIGN (10%)</b>	\$1,201,900	\$1,077,100	\$82,600	\$42,200
<b>CONTINGENCY (15%)</b>	\$2,046,200	\$1,833,700	\$140,600	\$71,800
<b>ESCALATION - From December 2023</b>	Excluded	Excluded	Excluded	Excluded
<b>Construction Total (Excl. GST and Escalation)</b>	<b>\$15,687,562</b>	<b>\$14,058,825</b>	<b>\$1,078,137</b>	<b>\$550,500</b>

Project: Blacktown Basin Costs  
Summary Cost Estimate - January 2024

Description	F19.1 Hamilton St Total	F19.1 Hamilton St Basin	F19.1 Hamilton St Bio-retention	F19.1 Hamilton St GPT
<b>SOIL AND WATER MANAGEMENT</b>	\$23,725	\$23,725	\$0	\$0
<b>EARTHWORKS</b>	\$13,598,434	\$13,479,382	\$119,052	\$0
<b>DRAINAGE</b>	\$1,995,613	\$899,756	\$30,857	\$1,065,000
<b>RAINGARDEN</b>	\$669,362	\$0	\$669,362	\$0
<b>LANDSCAPING</b>	\$1,237,513	\$1,128,631	\$108,882	\$0
<b>PRELIMINARIES (10%)</b>	\$1,752,500	\$1,553,200	\$92,900	\$106,400
<b>MARGIN (8%)</b>	\$1,542,200	\$1,366,600	\$81,700	\$93,800
<b>Construction Total (Excl. Design, Contingency and GST)</b>	<b>\$20,819,347</b>	<b>\$18,451,294</b>	<b>\$1,102,753</b>	<b>\$1,265,200</b>
<b>PROJECT MANAGEMENT (3.5%)</b>	\$728,700	\$645,700	\$38,600	\$44,300
<b>DESIGN (10%)</b>	\$2,081,900	\$1,845,100	\$110,300	\$126,500
<b>CONTINGENCY (15%)</b>	\$3,544,500	\$3,141,300	\$187,700	\$215,400
<b>ESCALATION - From December 2023</b>	Excluded	Excluded	Excluded	Excluded
<b>Construction Total (Excl. GST and Escalation)</b>	<b>\$27,174,447</b>	<b>\$24,083,394</b>	<b>\$1,439,353</b>	<b>\$1,651,400</b>

Project: Blacktown Basin Costs  
Summary Cost Estimate - January 2024

Description	F23.1 Woodland St Total	F23.1 Woodland St Basin	F23.1 Woodland St Bio-retention	F23.1 Woodland St GPT
<b>SOIL AND WATER MANAGEMENT</b>	\$17,570	\$17,570	\$0	\$0
<b>EARTHWORKS</b>	\$3,539,177	\$3,522,005	\$17,172	\$0
<b>DRAINAGE</b>	\$932,024	\$503,584	\$73,440	\$355,000
<b>RAINGARDEN</b>	\$521,287	\$0	\$521,287	\$0
<b>LANDSCAPING</b>	\$970,023	\$880,090	\$89,933	\$0
<b>PRELIMINARIES (10%)</b>	\$598,100	\$492,400	\$70,200	\$35,400
<b>MARGIN (8%)</b>	\$526,300	\$433,300	\$61,800	\$31,200
<b>Construction Total (Excl. Design, Contingency and GST)</b>	<b>\$7,104,481</b>	<b>\$5,848,949</b>	<b>\$833,832</b>	<b>\$421,600</b>
<b>PROJECT MANAGEMENT (3.5%)</b>	\$248,700	\$204,700	\$29,200	\$14,800
<b>DESIGN (10%)</b>	\$710,400	\$584,900	\$83,400	\$42,200
<b>CONTINGENCY (15%)</b>	\$1,209,500	\$995,800	\$142,000	\$71,800
<b>ESCALATION - From December 2023</b>	Excluded	Excluded	Excluded	Excluded
<b>Construction Total (Excl. GST and Escalation)</b>	<b>\$9,273,081</b>	<b>\$7,634,349</b>	<b>\$1,088,432</b>	<b>\$550,400</b>



Project: Blacktown Basin Costs  
Summary Cost Estimate - January 2024

Description	F24.1 Victoria St Total	F24.1 Victoria St Basin	F24.1 Victoria St Bio-retention	F24.1 Victoria St GPT
<b>SOIL AND WATER MANAGEMENT</b>	\$49,620	\$49,620	\$0	\$0
<b>EARTHWORKS</b>	\$7,698,612	\$7,549,794	\$148,818	\$0
<b>DRAINAGE</b>	\$1,314,983	\$438,886	\$166,097	\$710,000
<b>RAINGARDEN</b>	\$2,030,918	\$0	\$2,030,918	\$0
<b>LANDSCAPING</b>	\$3,359,065	\$3,041,862	\$317,203	\$0
<b>PRELIMINARIES (10%)</b>	\$1,445,400	\$1,108,100	\$266,400	\$70,900
<b>MARGIN (8%)</b>	\$1,271,900	\$975,100	\$234,400	\$62,400
<b>Construction Total (Excl. Design, Contingency and GST)</b>	<b>\$17,170,498</b>	<b>\$13,163,362</b>	<b>\$3,163,836</b>	<b>\$843,300</b>
<b>PROJECT MANAGEMENT (3.5%)</b>	\$601,000	\$460,800	\$110,700	\$29,500
<b>DESIGN (10%)</b>	\$1,717,000	\$1,316,300	\$316,400	\$84,300
<b>CONTINGENCY (15%)</b>	\$2,923,300	\$2,241,100	\$538,600	\$143,600
<b>ESCALATION - From December 2023</b>	Excluded	Excluded	Excluded	Excluded
<b>Construction Total (Excl. GST and Escalation)</b>	<b>\$22,411,798</b>	<b>\$17,181,562</b>	<b>\$4,129,536</b>	<b>\$1,100,700</b>

E4.14 Jacqui Ave, Schofield  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>SOIL AND WATER MANAGEMENT</b>							
Supply all materials and construct sediment control devices, maintain for the duration of the contract and remove when instructed, to include but not limited to:							
Stabilised site access	1	No	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00		
Sediment fence	492	m	\$ 15.00	\$ 7,380.00	\$ 7,380.00		
Geotextile inlet filter	22	No	\$ 85.00	\$ 1,870.00	\$ 1,870.00		
Straw bale	15	No	\$ 55.00	\$ 825.00	\$ 825.00		
Maintenance of soil and erosion control devices	1	Item	\$ 1,600.00	\$ 1,600.00	\$ 1,600.00		
<b>TOTAL SOIL AND WATER MANAGEMENT</b>				<b>\$ 17,175.00</b>	<b>\$ 17,175.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EARTHWORKS</b>							
Allowance for clearing rubbish	1	Item	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00		
Dewater and desilt existing dams	1	Item	\$ 65,000.00	\$ 65,000.00	\$ 65,000.00		
Clear and grub	14,910	m <sup>2</sup>	\$ 3.50	\$ 52,185.00	\$ 52,185.00		
Strip topsoil and stockpile	2,982	m <sup>3</sup>	\$ 7.00	\$ 20,874.00	\$ 20,874.00		
Cut to fill	6,336	m <sup>3</sup>	\$ 12.00	\$ 76,032.00	\$ 76,032.00		
Cut to stockpile	19,700	m <sup>3</sup>	\$ 9.00	\$ 177,300.00	\$ 177,300.00		
Tip fees (VENM) - 80%	31,520	t	\$ 42.00	\$ 1,323,840.00	\$ 1,323,840.00		
Tip fees (GSW) - 10% (based on Council and Landcom work in Scheduled Lands)	3,940	t	\$ 225.00	\$ 886,500.00	\$ 886,500.00		
Tip fees (GSW special ACM including PPE, suppression, air monitors and hygienists) - 10%	3,940	t	\$ 285.00	\$ 1,122,900.00	\$ 1,122,900.00		
Respread topsoil to depth onsite	2,982	m <sup>3</sup>	\$ 10.00	\$ 29,820.00	\$ 29,820.00		
Trim and compact raingarden and batters	1,577	m <sup>2</sup>	\$ 6.00	\$ 9,462.00		\$ 9,462.00	
Trim and compact channel	730	m <sup>2</sup>	\$ 12.00	\$ 8,760.00	\$ 8,760.00		
<b>TOTAL EARTHWORKS</b>				<b>\$ 3,847,673.00</b>	<b>\$ 3,838,211.00</b>	<b>\$ 9,462.00</b>	<b>\$ -</b>
<b>DRAINAGE</b>							
Excavate for trenches and structures in all classes of material, supply, bed, lay, joint and backfill stormwater pipes							
Excavate, supply, bed, lay and joint stormwater pipes as specified:							
300mm dia. uPVC	165	m	\$ 170.00	\$ 28,050.00	\$ 28,050.00		
375mm dia. RRJ2	30	m	\$ 250.00	\$ 7,500.00	\$ 7,500.00		
375mm dia. RRJ3	23	m	\$ 260.00	\$ 5,980.00	\$ 5,980.00		
525mm dia. RRJ2	56	m	\$ 350.00	\$ 19,600.00	\$ 19,600.00		
600mm dia. RRJ2	14	m	\$ 390.00	\$ 5,460.00	\$ 5,460.00		
900mm dia. RRJ2	30	m	\$ 560.00	\$ 16,800.00	\$ 16,800.00		
1050mm dia. RRJ2	56	m	\$ 810.00	\$ 45,360.00	\$ 45,360.00		
CCTV inspection	209	m	\$ 8.00	\$ 1,672.00	\$ 1,672.00		
Excavate in all classes of material, supply all materials and construct RCBC culvert including base slab to detail:							
2400 x 900mm RCBC	5	m	\$ 3,475.00	\$ 17,375.00	\$ 17,375.00		
2500 x 900mm RCBC	14	m	\$ 3,530.00	\$ 49,420.00	\$ 49,420.00		
Excavate in all classes of material, supply all materials and construct standard drainage structures including sub-soil drainage connections and trench drainage facilities to detail:							
900x900mm Grated surface inlet pit	1	No.	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00		
900x900mm Junction pit	8	No.	\$ 4,500.00	\$ 36,000.00	\$ 36,000.00		
Custom pit	2	No	\$ 20,000.00	\$ 40,000.00	\$ 40,000.00		
Structural certification of pits	11	Each	\$ 170.00	\$ 1,870.00	\$ 1,870.00		
Excavate in all classes of material, supply all materials and construct bioretention pits including sub-soil drainage connections and trench drainage facilities to detail:							
Raingarden Outlet Pit combined system (3no. Precast 900x900 GSIP)	2	No.	\$ 17,500.00	\$ 35,000.00		\$ 35,000.00	
Bioretention inlet pit	3	No.	\$ 6,700.00	\$ 20,100.00		\$ 20,100.00	
Bioretention outlet pit	1	No.	\$ 6,500.00	\$ 6,500.00		\$ 6,500.00	
Bioretention upflow pit	5	No.	\$ 7,200.00	\$ 36,000.00		\$ 36,000.00	
225mm dia uPVC pipe.	9	m	\$ 110.00	\$ 990.00		\$ 990.00	
Construct 150mm concrete apron surrounding pit to detail	121	m <sup>2</sup>	\$ 140.00	\$ 16,940.00		\$ 16,940.00	
150mm Lean mix concrete (5%)	121	m <sup>2</sup>	\$ 95.00	\$ 11,495.00		\$ 11,495.00	
150mm Cement stabilised crushed granite	44	m <sup>2</sup>	\$ 75.00	\$ 3,300.00		\$ 3,300.00	
Supply, bed, lay, joint subsoil drainage pipes and structures as required:							
150mm dia slotted uPVC pipe subsoil drain including rodding eyes as required.	202	m	\$ 42.00	\$ 8,484.00		\$ 8,484.00	
Flush point including temporary concrete collar and connecting to subsoil with 150mm dia. non-slotted pipe	7	No	\$ 175.00	\$ 1,225.00		\$ 1,225.00	
Excavate in all classes of material, supply all materials, and construct rock headwalls complete (including rock erosion protection) to detail for:							
Precast concrete headwall to accommodate 2400 x 900mm RCBC	1	Item	\$ 9,500.00	\$ 9,500.00	\$ 9,500.00		
Precast concrete headwall to accommodate 600mm RCP	1	Item	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00		
Scour protection	1	Item	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00		
Pool Fence powder coated dulux	30	m	\$ 350.00	\$ 10,500.00	\$ 10,500.00		
<b>Construct GPT</b>							
Supply and construct gross pollutant trap Rocla GPT CDS1012 incl. access platform and clearing at the time of Practical Completion	2	No	\$ 133,000.00	\$ 266,000.00			\$ 266,000.00
<b>TOTAL DRAINAGE</b>				<b>\$ 709,921.00</b>	<b>\$ 303,887.00</b>	<b>\$ 140,034.00</b>	<b>\$ 266,000.00</b>
<b>RAINGARDEN</b>							
<b>Stage 1: Interim Raingarden</b>							
Trim and grade temporary sediment basin	1,067	m <sup>2</sup>	\$ 4.50	\$ 4,801.50		\$ 4,801.50	
Supply and place liner to detail including:							
HDPE liner incl. temporary liner	1,310	m <sup>2</sup>	\$ 30.00	\$ 39,312.00		\$ 39,312.00	
'BIDIM A44' A44 geotextile liner (Temporary)	1,248	m <sup>2</sup>	\$ 5.00	\$ 6,240.00		\$ 6,240.00	
'BIDIM A44' geotextile liner (2 layers)	1,248	m <sup>2</sup>	\$ 10.00	\$ 12,480.00		\$ 12,480.00	
Supply and place Drainage Layer (Aggregate (200mm thick))	214	m <sup>3</sup>	\$ 205.00	\$ 43,870.00		\$ 43,870.00	
Supply and place Transition Layer [Coarse Sand (250mm thick)]	267	m <sup>3</sup>	\$ 190.00	\$ 50,730.00		\$ 50,730.00	
Supply and place recycled sand/foam media (150mm thick)	161	m <sup>3</sup>	\$ 210.00	\$ 33,810.00		\$ 33,810.00	
Supply and place sacrificial geotextile layer	1,067	m <sup>2</sup>	\$ 7.50	\$ 8,002.50		\$ 8,002.50	
Supply and place sacrificial turf layer	1,067	m <sup>2</sup>	\$ 12.00	\$ 12,804.00		\$ 12,804.00	
<b>Stage 2: Ultimate Raingarden</b>							
Remove interim geotextile, filter media and washed turf layer	1	Item	\$ 10,670.00	\$ 10,670.00		\$ 10,670.00	
Supply and place liner to detail including:							
Supply and place Transition Layer [Coarse Sand (450mm thick)]	481	m <sup>3</sup>	\$ 190.00	\$ 91,390.00		\$ 91,390.00	
Supply and place recycled sand/foam media (500mm thick)	534	m <sup>3</sup>	\$ 210.00	\$ 112,140.00		\$ 112,140.00	
Planting of bioretention garden (measured in Landscaping)		Note					
Escalation on ultimate raingarden and planting (estimated at 5-10 years - say 7 years at 3% p.a. after initial Stage 1 completion)	1	Item	\$ 60,000.00	\$ 60,000.00		\$ 60,000.00	
<b>TOTAL RAINGARDEN</b>				<b>\$ 486,250.00</b>	<b>\$ -</b>	<b>\$ 486,250.00</b>	<b>\$ -</b>

E4.14 Jacqui Ave, Schofield  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>LANDSCAPING</b>							
<b>Preliminaries</b>							
Contractors and suppliers, site establishment, site compound, amenities, insurances, sediment and erosion control, WAE survey, disposal of spoil off site. Assuming no contamination. Based on one contract for all stages of work.	1	Item	\$ 10,000.00	\$ 10,000.00	\$ 8,444.00	\$ 1,556.00	
<b>Topsoil</b>							
Ameliorate site topsoil	2,982	m <sup>3</sup>	\$ 4.00	\$ 11,928.00	\$ 11,928.00		
Allowance for upgrading existing soil with compost or imported topsoil (say 50%)	1,491	m <sup>3</sup>	\$ 45.00	\$ 67,095.00	\$ 67,095.00		
<b>Turf</b>							
Subgrade preparation inc cultivation & gypsum	10,243	m <sup>2</sup>	\$ 5.00	\$ 51,215.00	\$ 51,215.00		
Import 150mm topsoil (80/20)	1,536	m <sup>3</sup>	\$ 95.00	\$ 145,962.75	\$ 145,962.75		
Supply and lay couch turf	10,243	m <sup>2</sup>	\$ 12.00	\$ 122,916.00	\$ 122,916.00		
<b>Planting</b>							
<b>Raingarden</b>							
Subgrade preparation inc cultivation & gypsum	1,067	m <sup>2</sup>	\$ 5.00	\$ 5,335.00		\$ 5,335.00	
Import 250mm topsoil (Premium garden mix)	267	m <sup>3</sup>	\$ 95.00	\$ 25,342.00	\$ 25,342.00		
Mulching (75mm)	1,067	m <sup>2</sup>	\$ 8.00	\$ 8,536.00		\$ 8,536.00	
Macrophyte tubestock (Assume 8 per m <sup>2</sup> )	8,536	No.	\$ 3.65	\$ 31,157.00		\$ 31,157.00	
<b>Tree Planting</b>							
Allowance for 100L street tree planting including pit excavation, soil mix, ag line, stakes, trees and mulch.	111	No	\$ 415.00	\$ 46,065.00	\$ 46,065.00		
<b>Maintenance Track</b>							
Supply all materials and construct all weather access to detail:							
Trim, grade and compact subgrade to maintenance access track	1,293	m <sup>2</sup>	\$ 3.00	\$ 3,879.00	\$ 3,879.00		
150mm Concrete (25MPa) with SL82 Mesh and 30mm sand	1,293	m <sup>2</sup>	\$ 120.00	\$ 155,160.00	\$ 155,160.00		
Construct commercial vehicle crossing	6	m	\$ 190.00	\$ 1,140.00	\$ 1,140.00		
<b>Miscellaneous</b>							
Allowance for linemarking					Excluded		
Allowance for fence or bollards on street frontages (approx. 490m)	1	Item	\$ 122,500.00	\$ 122,500.00	\$ 122,500.00		
Floodway signage	4	No	\$ 425.00	\$ 1,700.00		\$ 1,700.00	
<b>Establishment Maintenance / Defects Liability</b>							
Watering and maintenance for 36 months defects liability period	36	mths	\$ 1,500.00	\$ 54,000.00	\$ 45,594.00	\$ 8,406.00	
<b>Fence</b>							
Allowance for pool fence to perimeter of basin					Excluded		
<b>TOTAL: LANDSCAPING</b>				\$ 863,931.00	\$ 781,899.00	\$ 82,032.00	\$ -
<b>PRELIMINARIES (10%)</b>							
				\$ 592,500.00	\$ 494,200.00	\$ 71,800.00	\$ 26,600.00
<b>MARGIN (8%)</b>							
				\$ 521,400.00	\$ 434,700.00	\$ 63,200.00	\$ 23,500.00
<b>TOTAL CONSTRUCTION WORKS</b>				\$ 7,038,850.00	\$ 5,870,072.00	\$ 852,778.00	\$ 316,100.00

E14.1 Albert St. Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>SOIL AND WATER MANAGEMENT</b>							
Supply all materials and construct sediment control devices, maintain for the duration of the contract and remove when instructed, to include but not limited to:							
Stabilised site access	1	No	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00		
Sediment fence	499	m	\$ 15.00	\$ 7,485.00	\$ 7,485.00		
Geotextile inlet filter	11	No	\$ 85.00	\$ 935.00	\$ 935.00		
Straw bale	15	No	\$ 55.00	\$ 825.00	\$ 825.00		
Maintenance of soil and erosion control devices	1	Item	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00		
<b>TOTAL SOIL AND WATER MANAGEMENT</b>				<b>\$ 16,245.00</b>	<b>\$ 16,245.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EARTHWORKS</b>							
Demolition or clearing rubbish on site							
Clear and grub	21,900	m <sup>2</sup>	\$ 3.50	\$ 76,650.00	\$ 76,650.00		
Strip topsoil and stockpile	4,380	m <sup>3</sup>	\$ 7.00	\$ 30,660.00	\$ 30,660.00		
Cut to fill, spread and compact	133	m <sup>3</sup>	\$ 14.00	\$ 1,862.00	\$ 1,862.00		
Cut to stockpile	41,800	m <sup>3</sup>	\$ 9.00	\$ 376,200.00	\$ 376,200.00		
Tip fees (VENM) - 80%	66,880	t	\$ 42.00	\$ 2,808,960.00	\$ 2,808,960.00		
Tip fees (GSW) - 10% (based on Council and Landcom work in Scheduled Lands)	8,360	t	\$ 225.00	\$ 1,881,000.00	\$ 1,881,000.00		
Tip fees (GSW special ACM including PPE, suppression, air monitors and hygienists) - 10%	8,360	t	\$ 285.00	\$ 2,382,600.00	\$ 2,382,600.00		
Respread topsoil to depth onsite	4,380	m <sup>3</sup>	\$ 10.00	\$ 43,800.00	\$ 43,800.00		
Trim and compact raingarden and batters	6,296	m <sup>2</sup>	\$ 6.00	\$ 37,776.00	\$ 37,776.00	\$ 37,776.00	
Trim and compact channel	123	m <sup>2</sup>	\$ 12.00	\$ 1,476.00	\$ 1,476.00		
Construct detention basin	3,481	m <sup>2</sup>	\$ 8.00	\$ 27,848.00	\$ 27,848.00		
<b>TOTAL EARTHWORKS</b>				<b>\$ 7,778,832.00</b>	<b>\$ 7,741,056.00</b>	<b>\$ 37,776.00</b>	<b>\$ -</b>
<b>DRAINAGE</b>							
Excavate for trenches and structures in all classes of material, supply, bed, lay, joint and backfill stormwater pipes							
Excavate, supply, bed, lay and joint stormwater pipes as specified:							
300mm dia. uPVC	125	m	\$ 170.00	\$ 21,250.00	\$ 21,250.00		
600mm dia. RRJ2	19	m	\$ 390.00	\$ 7,410.00	\$ 7,410.00		
900mm dia. RRJ2	25	m	\$ 560.00	\$ 14,000.00	\$ 14,000.00		
1050mm dia. RRJ2	30	m	\$ 810.00	\$ 24,300.00	\$ 24,300.00		
CCTV inspection	74	m	\$ 8.00	\$ 592.00	\$ 592.00		
Excavate in all classes of material, supply all materials and construct RCBC culvert including base slab to detail:							
1500 x 900mm RCBC	60	m	\$ 3,200.00	\$ 192,000.00	\$ 192,000.00		
2400 x 900mm RCBC	42	m	\$ 3,475.00	\$ 145,950.00	\$ 145,950.00		
Excavate in all classes of material, supply all materials and construct standard drainage structures including sub-soil drainage connections and trench drainage facilities to detail:							
Kerb inlet pits							
900x900mm Grated surface inlet pit	3	No.	\$ 4,000.00	\$ 12,000.00	\$ 12,000.00		
Structural certification of pits	3	Each	\$ 170.00	\$ 510.00	\$ 510.00		
Excavate in all classes of material, supply all materials and construct bioretention pits including sub-soil drainage connections and trench drainage facilities to detail:							
Raingarden Outlet Pit combined system (3no. Precast 900x900 GSIP)	8	No.	\$ 17,500.00	\$ 140,000.00	\$ 140,000.00	\$ 140,000.00	
Construct 150mm concrete apron surrounding pit to detail	88	m <sup>2</sup>	\$ 140.00	\$ 12,320.00	\$ 12,320.00	\$ 12,320.00	
150mm Lean mix concrete (5%)	88	m <sup>2</sup>	\$ 95.00	\$ 8,360.00	\$ 8,360.00	\$ 8,360.00	
150mm Cement stabilised crushed granite	32	m <sup>2</sup>	\$ 75.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	
Supply, bed, lay, joint subsoil drainage pipes and structures as required:							
150mm dia slotted uPVC pipe subsoil drain including rodding eyes as required.	231	m	\$ 42.00	\$ 9,702.00	\$ 9,702.00	\$ 9,702.00	
Flush point including temporary concrete collar and connecting to subsoil with 150mm dia. non-slotted pipe	8	No	\$ 175.00	\$ 1,400.00	\$ 1,400.00	\$ 1,400.00	
Excavate in all classes of material, supply all materials, and construct rock headwalls complete (including rock erosion protection) to detail for:							
Precast concrete headwall to accommodate 1500 x 900mm RCBC	1	Item	\$ 8,900.00	\$ 8,900.00	\$ 8,900.00		
Precast concrete headwall to accommodate 2400 x 900mm RCBC	1	Item	\$ 9,500.00	\$ 9,500.00	\$ 9,500.00		
Scour protection	1	Item	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00		
Pool Fence powder coated dulux	30	m	\$ 350.00	\$ 10,500.00	\$ 10,500.00		
<b>Construct GPT</b>							
Supply and construct gross pollutant trap Rocla GPT CDS3018 incl. access platform and cleaning at the time of Practical Completion	1	No	\$ 355,000.00	\$ 355,000.00			\$ 355,000.00
<b>TOTAL DRAINAGE</b>				<b>\$ 979,094.00</b>	<b>\$ 449,912.00</b>	<b>\$ 174,182.00</b>	<b>\$ 355,000.00</b>
<b>RAINGARDEN</b>							
<b>Stage 1: Interim Raingarden</b>							
Trim and grade temporary sediment basin	913	m <sup>2</sup>	\$ 4.50	\$ 4,108.50	\$ 4,108.50	\$ 4,108.50	
Supply and place liner to detail including:							
HDPE liner incl. temporary liner	1,105	m <sup>2</sup>	\$ 30.00	\$ 33,138.00	\$ 33,138.00	\$ 33,138.00	
'BIDIM A44' A44 geotextile liner (Temporary)	1,052	m <sup>2</sup>	\$ 5.00	\$ 5,260.00	\$ 5,260.00	\$ 5,260.00	
'BIDIM A44' geotextile liner (2 layers)	1,052	m <sup>2</sup>	\$ 10.00	\$ 10,520.00	\$ 10,520.00	\$ 10,520.00	
Supply and place Drainage Layer [Aggregate (200mm thick)]	183	m <sup>3</sup>	\$ 205.00	\$ 37,515.00	\$ 37,515.00	\$ 37,515.00	
Supply and place Transition Layer [Coarse Sand (250mm thick)]	229	m <sup>3</sup>	\$ 190.00	\$ 43,510.00	\$ 43,510.00	\$ 43,510.00	
Supply and place recycled sand/loam media (150mm thick)	137	m <sup>3</sup>	\$ 210.00	\$ 28,770.00	\$ 28,770.00	\$ 28,770.00	
Supply and place sacrificial geotextile layer	913	m <sup>2</sup>	\$ 7.50	\$ 6,847.50	\$ 6,847.50	\$ 6,847.50	
Supply and place sacrificial turf layer	913	m <sup>2</sup>	\$ 12.00	\$ 10,956.00	\$ 10,956.00	\$ 10,956.00	
<b>Stage 2: Ultimate Raingarden</b>							
Remove interim geotextile, filter media and washed turf layer	1	Item	\$ 9,130.00	\$ 9,130.00	\$ 9,130.00	\$ 9,130.00	
Supply and place liner to detail including:							
Supply and place Transition Layer [Coarse Sand (450mm thick)]	411	m <sup>3</sup>	\$ 190.00	\$ 78,090.00	\$ 78,090.00	\$ 78,090.00	
Supply and place recycled sand/loam media (500mm thick)	457	m <sup>3</sup>	\$ 210.00	\$ 95,970.00	\$ 95,970.00	\$ 95,970.00	
Planting of bioretention garden (measured in Landscaping)		Note					
Escalation on ultimate raingarden and planting (estimated at 5-10 years - say 7 years at 3% p.a. after initial Stage 1 completion)	1	Item	\$ 52,000.00	\$ 52,000.00	\$ 52,000.00	\$ 52,000.00	
<b>TOTAL RAINGARDEN</b>				<b>\$ 415,815.00</b>	<b>\$ -</b>	<b>\$ 415,815.00</b>	<b>\$ -</b>

E14.1 Albert St. Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>LANDSCAPING</b>							
<b>Preliminaries</b>							
Contractors and suppliers, site establishment, site compound, amenities, insurances, sediment and erosion control, WAE survey, disposal of spoil off site. Assuming no contamination. Based on one contract for all stages of work.	1	Item	\$ 10,000.00	\$ 10,000.00	\$ 9,000.00	\$ 1,000.00	
<b>Topsoil</b>							
Ameliorate site topsoil	4,380	m <sup>3</sup>	\$ 4.00	\$ 17,520.00	\$ 17,520.00		
Allowance for upgrading existing soil with compost or imported topsoil (say 50%)	2,190	m <sup>3</sup>	\$ 45.00	\$ 98,550.00	\$ 98,550.00		
<b>Turf</b>							
Subgrade preparation inc cultivation & gypsum	14,178	m <sup>2</sup>	\$ 5.00	\$ 70,890.00	\$ 70,890.00		
Import 150mm topsoil (80/20)	2,127	m <sup>3</sup>	\$ 95.00	\$ 202,036.50	\$ 202,036.50		
Supply and lay couch turf	14,178	m <sup>2</sup>	\$ 12.00	\$ 170,136.00	\$ 170,136.00		
<b>Planting</b>							
<b>Raingarden</b>							
Subgrade preparation inc cultivation & gypsum	913	m <sup>2</sup>	\$ 5.00	\$ 4,565.00		\$ 4,565.00	
Import 250mm topsoil (Premium garden mix)	228	m <sup>3</sup>	\$ 95.00	\$ 21,684.00		\$ 21,684.00	
Mulching (75mm)	913	m <sup>2</sup>	\$ 8.00	\$ 7,304.00		\$ 7,304.00	
Macrophyte tubestock (Assume 8 per m <sup>2</sup> )	7,304	No.	\$ 3.65	\$ 26,660.00		\$ 26,660.00	
<b>Tree Planting</b>							
Allowance for 100L street tree planting including pit excavation, soil mix, ag line, stakes, trees and mulch	168	No	\$ 415.00	\$ 69,720.00	\$ 69,720.00		
<b>Maintenance Track</b>							
Supply all materials and construct all weather access to detail.							
Trim, grade and compact subgrade to maintenance access track	390	m <sup>2</sup>	\$ 3.00	\$ 1,170.00	\$ 1,170.00		
150mm Concrete (25MPa) with SL62 Mesh and 30mm sand	390	m <sup>2</sup>	\$ 120.00	\$ 46,800.00	\$ 46,800.00		
Construct commercial vehicle crossing	6	m	\$ 190.00	\$ 1,140.00	\$ 1,140.00		
<b>Miscellaneous</b>							
Allowance for linemarking				Excluded			
Allowance for fence or bollards on street frontages (approx. 495m)	1	Item	\$ 123,750.00	\$ 123,750.00	\$ 123,750.00		
Floodway signage	2	No	\$ 425.00	\$ 850.00		\$ 850.00	
<b>Establishment Maintenance / Defects Liability</b>							
Watering and maintenance for 36 months defects liability period	36	mths	\$ 1,500.00	\$ 54,000.00	\$ 48,599.00	\$ 5,401.00	
<b>Fence</b>							
Allowance for pool fence to perimeter of basin				Excluded			
<b>TOTAL: LANDSCAPING</b>				<b>\$ 926,776.00</b>	<b>\$ 859,312.00</b>	<b>\$ 67,464.00</b>	<b>\$ -</b>
<b>PRELIMINARIES (10%)</b>				<b>\$ 1,011,700.00</b>	<b>\$ 906,700.00</b>	<b>\$ 69,600.00</b>	<b>\$ 35,500.00</b>
<b>MARGIN (8%)</b>				<b>\$ 890,300.00</b>	<b>\$ 797,900.00</b>	<b>\$ 61,200.00</b>	<b>\$ 31,200.00</b>
<b>TOTAL CONSTRUCTION WORKS</b>				<b>\$ 12,018,762.00</b>	<b>\$ 10,771,125.00</b>	<b>\$ 826,037.00</b>	<b>\$ 421,700.00</b>

F19.1 Hamilton St. Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>SOIL AND WATER MANAGEMENT</b>							
Supply all materials and construct sediment control devices, maintain for the duration of the contract and remove when instructed, to include but not limited to:							
Stabilised site access	1	No	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00		
Sediment fence	956	m	\$ 15.00	\$ 14,340.00	\$ 14,340.00		
Geotextile inlet filter	14	No	\$ 85.00	\$ 1,190.00	\$ 1,190.00		
Straw bale	9	No	\$ 55.00	\$ 495.00	\$ 495.00		
Maintenance of soil and erosion control devices	1	Item	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00		
<b>TOTAL SOIL AND WATER MANAGEMENT</b>				<b>\$ 23,725.00</b>	<b>\$ 23,725.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EARTHWORKS</b>							
Demolition or clearing rubbish on site							
Clear and grub	1	Item	\$ 185,000.00	\$ 185,000.00	\$ 185,000.00		
Strip topsoil and stockpile	36,835	m <sup>2</sup>	\$ 3.50	\$ 128,923.00	\$ 128,923.00		
Cut to fill, spread and compact	7,367	m <sup>3</sup>	\$ 7.00	\$ 51,569.00	\$ 51,569.00		
Cut to stockpile	2,500	m <sup>3</sup>	\$ 14.00	\$ 35,000.00	\$ 35,000.00		
Tip fees (VENM) - 80%	62,600	m <sup>3</sup>	\$ 8.00	\$ 500,800.00	\$ 500,800.00		
Tip fees (GSW) - 10% (based on Council and Landcom work in Scheduled Lands)	100,160	t	\$ 42.00	\$ 4,206,720.00	\$ 4,206,720.00		
Tip fees (GSW special ACM including PPE, suppression, air monitors and hygienists) - 10%	12,520	t	\$ 225.00	\$ 2,817,000.00	\$ 2,817,000.00		
Allowance for retaining wall to perimeters due to constricted site (could be over 3m height)	12,520	t	\$ 285.00	\$ 3,568,200.00	\$ 3,568,200.00		
Respread topsoil to depth onsite	750	m	\$ 2,550.00	\$ 1,912,500.00	\$ 1,912,500.00		
Trim and compact raingarden and batters	7,367	m <sup>3</sup>	\$ 10.00	\$ 73,670.00	\$ 73,670.00		
<b>TOTAL EARTHWORKS</b>	19,842	m <sup>2</sup>	\$ 6.00	<b>\$ 119,052.00</b>	<b>\$ 119,052.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>DRAINAGE</b>							
Excavate for trenches and structures in all classes of material, supply, bed, lay, joint and backfill stormwater pipes							
Excavate, supply, bed, lay and joint stormwater pipes as specified:							
375mm dia. RRJ2	185	m	\$ 250.00	\$ 46,250.00	\$ 46,250.00		
450mm dia. RRJ2	142	m	\$ 310.00	\$ 44,020.00	\$ 44,020.00		
600mm dia. RRJ2	86	m	\$ 390.00	\$ 33,540.00	\$ 33,540.00		
900mm dia. RRJ2	185	m	\$ 560.00	\$ 103,600.00	\$ 103,600.00		
1050mm dia. RRJ2	344	m	\$ 810.00	\$ 278,640.00	\$ 278,640.00		
CCTV inspection	942	m	\$ 8.00	\$ 7,536.00	\$ 7,536.00		
Excavate in all classes of material, supply all materials and construct RCBC culvert including base slab to detail:							
1500 x 900mm RCBC	29	m	\$ 3,135.00	\$ 90,915.00	\$ 90,915.00		
Excavate in all classes of material, supply all materials and construct standard drainage structures including sub-soil drainage connections and trench drainage facilities to detail:							
Kerb inlet pits							
900x900mm Grated surface inlet pit							
Structural certification of pits	14	No.	\$ 4,000.00	\$ 56,000.00	\$ 56,000.00		
	14	Each	\$ 170.00	\$ 2,380.00	\$ 2,380.00		
Excavate in all classes of material, supply all materials and construct bioretention pits including sub-soil drainage connections and trench drainage facilities to detail:							
Raingarden Outlet Pit combined system (3no. Precast 900x900 GSIP)	1	No.	\$ 17,500.00	\$ 17,500.00	\$ 17,500.00		
Construct 150mm concrete apron surrounding pit to detail	11	m <sup>2</sup>	\$ 140.00	\$ 1,540.00	\$ 1,540.00		
150mm Lean mix concrete (5%)	11	m <sup>2</sup>	\$ 95.00	\$ 1,045.00	\$ 1,045.00		
150mm Cement stabilised crushed granite	4	m <sup>2</sup>	\$ 75.00	\$ 300.00	\$ 300.00		
Supply, bed, lay, joint subsoil drainage pipes and structures as required:							
150mm dia slotted uPVC pipe subsoil drain including rodding eyes as required.							
Flush point including temporary concrete collar and connecting to subsoil with 150mm dia. non-slotted pipe	216	m	\$ 42.00	\$ 9,072.00	\$ 9,072.00		
Excavate in all classes of material, supply all materials, and construct rock headwalls complete (including rock erosion protection) to detail for:	8	No	\$ 175.00	\$ 1,400.00	\$ 1,400.00		
Precast concrete headwalls	5	No	\$ 8,900.00	\$ 44,500.00	\$ 44,500.00		
Scour protection	1	Item	\$ 34,155.00	\$ 34,155.00	\$ 34,155.00		
Pool Fence powder coated dulux	65	m	\$ 350.00	\$ 22,750.00	\$ 22,750.00		
<b>Construct GPT</b>							
Supply and construct gross pollutant trap Rocla GPT CDS3018 incl. access platform and cleaning at the time of Practical Completion	3	No	\$ 355,000.00	\$ 1,065,000.00			\$ 1,065,000.00
<b>Spillway</b>							
Construct spillway	713	m <sup>2</sup>	\$ 190.00	\$ 135,470.00	\$ 135,470.00		
<b>TOTAL DRAINAGE</b>				<b>\$ 1,995,613.00</b>	<b>\$ 899,756.00</b>	<b>\$ 30,857.00</b>	<b>\$ 1,065,000.00</b>
<b>RAINGARDEN</b>							
<b>Stage 1: Interim Raingarden</b>							
Trim and grade temporary sediment basin	1,486	m <sup>2</sup>	\$ 4.50	\$ 6,687.00	\$ 6,687.00		
Supply and place liner to detail including:							
HDPE liner incl. temporary liner	1,651	m <sup>2</sup>	\$ 30.00	\$ 49,518.00	\$ 49,518.00		
'BIDIM A44' A44 geotextile liner (Temporary)	1,572	m <sup>2</sup>	\$ 5.00	\$ 7,860.00	\$ 7,860.00		
'BIDIM A44' geotextile liner (2 layers)	1,572	m <sup>2</sup>	\$ 10.00	\$ 15,720.00	\$ 15,720.00		
Supply and place Drainage Layer [Aggregate (200mm thick)]	298	m <sup>3</sup>	\$ 205.00	\$ 61,090.00	\$ 61,090.00		
Supply and place Transition Layer [Coarse Sand (250mm thick)]	372	m <sup>3</sup>	\$ 190.00	\$ 70,680.00	\$ 70,680.00		
Supply and place recycled sand/loam media (150mm thick)	223	m <sup>3</sup>	\$ 210.00	\$ 46,830.00	\$ 46,830.00		
Supply and place sacrificial geotextile layer	1,486	m <sup>2</sup>	\$ 7.50	\$ 11,145.00	\$ 11,145.00		
Supply and place sacrificial turf layer	1,486	m <sup>2</sup>	\$ 12.00	\$ 17,832.00	\$ 17,832.00		
<b>Stage 2: Ultimate Raingarden</b>							
Remove interim geotextile, filter media and washed turf layer	1	Item	\$ 14,860.00	\$ 14,860.00	\$ 14,860.00		
Supply and place liner to detail including:							
Supply and place Transition Layer [Coarse Sand (450mm thick)]	669	m <sup>3</sup>	\$ 190.00	\$ 127,110.00	\$ 127,110.00		
Supply and place recycled sand/loam media (500mm thick)	743	m <sup>3</sup>	\$ 210.00	\$ 156,030.00	\$ 156,030.00		
Planting of bioretention garden (measured in Landscaping)		Note					
Escalation on ultimate raingarden and planting (estimated at 5-10 years - say 7 years at 3% p.a. after initial Stage 1 completion)	1	Item	\$ 84,000.00	\$ 84,000.00	\$ 84,000.00		
<b>TOTAL RAINGARDEN</b>				<b>\$ 669,362.00</b>	<b>\$ -</b>	<b>\$ 669,362.00</b>	<b>\$ -</b>



F19.1 Hamilton St. Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>LANDSCAPING</b>							
<b>Preliminaries</b>							
Contractors and suppliers, site establishment, site compound, amenities, insurances, sediment and erosion control, WAE survey, disposal of spoil off site. Assuming no contamination. Based on one contract for all stages of work.	1	Item	\$ 10,000.00	\$ 10,000.00	\$ 8,691.00	\$ 1,309.00	
<b>Topsoil</b>							
Ameliorate site topsoil	7,367	m <sup>3</sup>	\$ 4.00	\$ 29,468.00	\$ 29,468.00		
Allowance for upgrading existing soil with compost or imported topsoil (say 50%)	3,684	m <sup>3</sup>	\$ 45.00	\$ 165,780.00	\$ 165,780.00		
<b>Turf</b>							
Subgrade preparation inc cultivation & gypsum	14,214	m <sup>2</sup>	\$ 5.00	\$ 71,070.00	\$ 71,070.00		
Import 150mm topsoil (80/20)	2,132	m <sup>3</sup>	\$ 95.00	\$ 202,549.50	\$ 202,549.50		
Supply and lay couch turf	14,214	m <sup>2</sup>	\$ 12.00	\$ 170,568.00	\$ 170,568.00		
<b>Planting</b>							
<b>Raingarden</b>							
Subgrade preparation inc cultivation & gypsum	1,486	m <sup>2</sup>	\$ 5.00	\$ 7,430.00		\$ 7,430.00	
Import 250mm topsoil (Premium garden mix)	372	m <sup>3</sup>	\$ 95.00	\$ 35,293.00		\$ 35,293.00	
Mulching (75mm)	1,486	m <sup>2</sup>	\$ 8.00	\$ 11,888.00		\$ 11,888.00	
Macrophyte tubestock (Assume 8 per m <sup>2</sup> )	11,888	No.	\$ 3.65	\$ 43,392.00		\$ 43,392.00	
<b>Tree Planting</b>							
Allowance for 100L street tree planting including pit excavation, soil mix, ag line, stakes, trees and mulch	283	No	\$ 415.00	\$ 117,445.00	\$ 117,445.00		
<b>Maintenance Track</b>							
Supply all materials and construct all weather access to detail.							
Trim, grade and compact subgrade to maintenance access track	1,293	m <sup>2</sup>	\$ 3.00	\$ 3,879.00	\$ 3,879.00		
150mm Concrete (25MPa) with SL62 Mesh and 30mm sand	1,293	m <sup>2</sup>	\$ 120.00	\$ 155,160.00	\$ 155,160.00		
Construct commercial vehicle crossing	6	m	\$ 190.00	\$ 1,140.00	\$ 1,140.00		
<b>Miscellaneous</b>							
Allowance for linemarking				Excluded			
Allowance for fence or bollards on street frontages (approx. 580m)	1	Item	\$ 145,000.00	\$ 145,000.00	\$ 145,000.00		
Floodway signage	2	No	\$ 425.00	\$ 850.00		\$ 850.00	
<b>Establishment Maintenance / Defects Liability</b>							
Watering and maintenance for 36 months defects liability period	36	mths	\$ 1,850.00	\$ 66,600.00	\$ 57,880.00	\$ 8,720.00	
<b>Fence</b>							
Allowance for pool fence to perimeter of basin				Excluded			
<b>TOTAL: LANDSCAPING</b>				<b>\$ 1,237,513.00</b>	<b>\$ 1,128,631.00</b>	<b>\$ 108,882.00</b>	<b>\$ -</b>
<b>PRELIMINARIES (10%)</b>				<b>\$ 1,752,500.00</b>	<b>\$ 1,553,200.00</b>	<b>\$ 92,900.00</b>	<b>\$ 106,400.00</b>
<b>MARGIN (8%)</b>				<b>\$ 1,542,200.00</b>	<b>\$ 1,366,600.00</b>	<b>\$ 81,700.00</b>	<b>\$ 93,800.00</b>
<b>TOTAL CONSTRUCTION WORKS</b>				<b>\$ 20,819,347.00</b>	<b>\$ 18,451,294.00</b>	<b>\$ 1,102,753.00</b>	<b>\$ 1,265,200.00</b>

F23.1 Woodland St, Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>SOIL AND WATER MANAGEMENT</b>							
Supply all materials and construct sediment control devices, maintain for the duration of the contract and remove when instructed, to include but not limited to:							
Stabilised site access	1	No	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00		
Sediment fence	580	m	\$ 15.00	\$ 8,700.00	\$ 8,700.00		
Geotextile inlet filter	15	No	\$ 85.00	\$ 1,275.00	\$ 1,275.00		
Straw bale	9	No	\$ 55.00	\$ 495.00	\$ 495.00		
Maintenance of soil and erosion control devices	1	Item	\$ 1,600.00	\$ 1,600.00	\$ 1,600.00		
<b>TOTAL SOIL AND WATER MANAGEMENT</b>				<b>\$ 17,570.00</b>	<b>\$ 17,570.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EARTHWORKS</b>							
Demolition or clearing rubbish on site							
Clear and grub	17,865	m <sup>2</sup>	\$ 3.50	\$ 62,528.00	\$ 62,528.00		
Strip topsoil and stockpile	3,573	m <sup>3</sup>	\$ 7.00	\$ 25,011.00	\$ 25,011.00		
Cut to fill, spread and compact	500	m <sup>3</sup>	\$ 14.00	\$ 7,000.00	\$ 7,000.00		
Cut to stockpile	18,500	m <sup>3</sup>	\$ 8.00	\$ 148,000.00	\$ 148,000.00		
Tip fees (VENM) - 80%	29,600	t	\$ 42.00	\$ 1,243,200.00	\$ 1,243,200.00		
Tip fees (GSW) - 10% (based on Council and Landcom work in Scheduled Lands)	3,700	t	\$ 225.00	\$ 832,500.00	\$ 832,500.00		
Tip fees (GSW special ACM including PPE, suppression, air monitors and hygienists) - 10%	3,700	t	\$ 285.00	\$ 1,054,500.00	\$ 1,054,500.00		
Respread topsoil to depth onsite	3,573	m <sup>3</sup>	\$ 10.00	\$ 35,730.00	\$ 35,730.00		
Trim and compact raingarden and batters	2,862	m <sup>2</sup>	\$ 6.00	\$ 17,172.00	\$ 17,172.00	\$ 17,172.00	
Trim and compact channel	1,128	m <sup>2</sup>	\$ 12.00	\$ 13,536.00	\$ 13,536.00		
<b>TOTAL EARTHWORKS</b>				<b>\$ 3,539,177.00</b>	<b>\$ 3,522,005.00</b>	<b>\$ 17,172.00</b>	<b>\$ -</b>
<b>DRAINAGE</b>							
Excavate for trenches and structures in all classes of material, supply, bed, lay, joint and backfill stormwater pipes							
Excavate, supply, bed, lay and joint stormwater pipes as specified:							
375mm dia. RRJ2	160	m	\$ 250.00	\$ 40,000.00	\$ 40,000.00		
450mm dia. RRJ2	47	m	\$ 310.00	\$ 14,570.00	\$ 14,570.00		
600mm dia. RRJ2	66	m	\$ 390.00	\$ 25,740.00	\$ 25,740.00		
CCTV inspection	273	m	\$ 8.00	\$ 2,184.00	\$ 2,184.00		
Excavate in all classes of material, supply all materials and construct RCBC culvert including base slab to detail:							
2400 x 1200mm RCBC	55	m	\$ 5,830.00	\$ 320,650.00	\$ 320,650.00		
Excavate in all classes of material, supply all materials and construct standard drainage structures including sub-soil drainage connections and trench drainage facilities to detail:							
Kerb inlet pits							
900x900mm Grated surface inlet pit							
14	No.	\$ 4,000.00	\$ 56,000.00	\$ 56,000.00	\$ 56,000.00		
Splitter pit							
1	No.	\$ 13,000.00	\$ 13,000.00	\$ 13,000.00	\$ 13,000.00		
Structural certification of pits							
15	Each	\$ 170.00	\$ 2,550.00	\$ 2,550.00	\$ 2,550.00		
Excavate in all classes of material, supply all materials and construct bioretention pits including sub-soil drainage connections and trench drainage facilities to detail:							
Raingarden Outlet Pit combined system (3no. Precast 900x900 GSIP)							
3	No.	\$ 17,500.00	\$ 52,500.00	\$ 52,500.00	\$ 52,500.00		
Construct 150mm concrete apron surrounding pit to detail							
33	m <sup>2</sup>	\$ 140.00	\$ 4,620.00	\$ 4,620.00	\$ 4,620.00		
150mm Lean mix concrete (5%)							
33	m <sup>2</sup>	\$ 95.00	\$ 3,135.00	\$ 3,135.00	\$ 3,135.00		
150mm Cement stabilised crushed granite							
12	m <sup>2</sup>	\$ 75.00	\$ 900.00	\$ 900.00	\$ 900.00		
Supply, bed, lay, joint subsoil drainage pipes and structures as required:							
150mm die slotted uPVC pipe subsoil drain including rodding eyes as required.							
255	m	\$ 42.00	\$ 10,710.00	\$ 10,710.00	\$ 10,710.00		
Flush point including temporary concrete collar and connecting to subsoil with 150mm dia. non-slotted pipe							
9	No	\$ 175.00	\$ 1,575.00	\$ 1,575.00	\$ 1,575.00		
Excavate in all classes of material, supply all materials, and construct sandstone headwalls complete (including rock erosion protection) to detail for:							
Sandstone log to accommodate 2400 x 1200mm RCBC							
1	Item	\$ 20,700.00	\$ 20,700.00	\$ 20,700.00	\$ 20,700.00		
Scour protection							
1	Item	\$ 8,190.00	\$ 8,190.00	\$ 8,190.00	\$ 8,190.00		
<b>Construct GPT</b>							
Supply and construct gross pollutant trap Rocla GPT CDS3018 incl. access platform and cleaning at the time of Practical Completion							
1	No	\$ 355,000.00	\$ 355,000.00	\$ 355,000.00	\$ 355,000.00		\$ 355,000.00
<b>TOTAL DRAINAGE</b>				<b>\$ 932,024.00</b>	<b>\$ 503,584.00</b>	<b>\$ 73,440.00</b>	<b>\$ 355,000.00</b>
<b>Stage 1: Interim Raingarden</b>							
Trim and grade temporary sediment basin							
1,155	m <sup>2</sup>	\$ 4.50	\$ 5,197.50	\$ 5,197.50	\$ 5,197.50		
Supply and place liner to detail including:							
HDPE liner incl. temporary liner							
1,310	m <sup>2</sup>	\$ 30.00	\$ 39,312.00	\$ 39,312.00	\$ 39,312.00		
"BIDIM A44" A44 geotextile liner (Temporary)							
1,248	m <sup>2</sup>	\$ 5.00	\$ 6,240.00	\$ 6,240.00	\$ 6,240.00		
"BIDIM A44" geotextile liner (2 layers)							
1,248	m <sup>2</sup>	\$ 10.00	\$ 12,480.00	\$ 12,480.00	\$ 12,480.00		
Supply and place Drainage Layer [Aggregate (200mm thick)]							
231	m <sup>3</sup>	\$ 205.00	\$ 47,355.00	\$ 47,355.00	\$ 47,355.00		
Supply and place Transition Layer [Coarse Sand (250mm thick)]							
289	m <sup>3</sup>	\$ 190.00	\$ 54,910.00	\$ 54,910.00	\$ 54,910.00		
Supply and place recycled sand/loam media (150mm thick)							
174	m <sup>3</sup>	\$ 210.00	\$ 36,540.00	\$ 36,540.00	\$ 36,540.00		
Supply and place sacrificial geotextile layer							
1,155	m <sup>2</sup>	\$ 7.50	\$ 8,662.50	\$ 8,662.50	\$ 8,662.50		
Supply and place sacrificial turf layer							
1,155	m <sup>2</sup>	\$ 12.00	\$ 13,860.00	\$ 13,860.00	\$ 13,860.00		
<b>Stage 2: Ultimate Raingarden</b>							
Remove interim geotextile, filter media and washed turf layer							
1	Item	\$ 11,550.00	\$ 11,550.00	\$ 11,550.00	\$ 11,550.00		
Supply and place liner to detail including:							
Supply and place Transition Layer [Coarse Sand (450mm thick)]							
520	m <sup>3</sup>	\$ 190.00	\$ 98,800.00	\$ 98,800.00	\$ 98,800.00		
Supply and place recycled sand/loam media (500mm thick)							
578	m <sup>3</sup>	\$ 210.00	\$ 121,380.00	\$ 121,380.00	\$ 121,380.00		
Escalation on ultimate raingarden and planting (estimated at 5-10 years - say 7 years at 3% p.a. after initial Stage 1 completion)							
1	Item	\$ 65,000.00	\$ 65,000.00	\$ 65,000.00	\$ 65,000.00		
Planting of bioretention garden (measured in Landscaping)							
		Note					
<b>TOTAL RAINGARDEN</b>				<b>\$ 521,287.00</b>	<b>\$ -</b>	<b>\$ 521,287.00</b>	<b>\$ -</b>

F23.1 Woodland St, Riverstone  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>LANDSCAPING</b>							
<b>Preliminaries</b>							
Contractors and suppliers, site establishment, site compound, amenities, insurances, sediment and erosion control, WAE survey, disposal of spoil off site. Assuming no contamination. Based on one contract for all stages of work.	1	Item	\$ 10,000.00	\$ 10,000.00	\$ 8,478.00	\$ 1,522.00	
<b>Topsoil</b>							
Ameliorate site topsoil	3,573	m <sup>3</sup>	\$ 4.00	\$ 14,292.00	\$ 14,292.00		
Allowance for upgrading existing soil with compost or imported topsoil (say 50%)	1,787	m <sup>3</sup>	\$ 45.00	\$ 80,415.00	\$ 80,415.00		
<b>Turf</b>							
Subgrade preparation inc cultivation & gypsum	11,013	m <sup>2</sup>	\$ 5.00	\$ 55,065.00	\$ 55,065.00		
Import 150mm topsoil (80/20)	1,652	m <sup>3</sup>	\$ 95.00	\$ 156,935.25	\$ 156,935.25		
Supply and lay couch turf	11,013	m <sup>2</sup>	\$ 12.00	\$ 132,156.00	\$ 132,156.00		
<b>Planting</b>							
<b>Raingarden</b>							
Subgrade preparation inc cultivation & gypsum	1,155	m <sup>2</sup>	\$ 5.00	\$ 5,775.00		\$ 5,775.00	
Import 250mm topsoil (Premium garden mix)	289	m <sup>3</sup>	\$ 95.00	\$ 27,432.00		\$ 27,432.00	
Mulching (75mm)	1,155	m <sup>2</sup>	\$ 8.00	\$ 9,240.00		\$ 9,240.00	
Macrophyte tubestock (Assume 8 per m <sup>2</sup> )	9,240	No.	\$ 3.65	\$ 33,726.00		\$ 33,726.00	
<b>Tree Planting</b>							
Allowance for 100L street tree planting including pit excavation, soil mix, ag line, stakes, trees and mulch	134	No	\$ 415.00	\$ 55,610.00	\$ 55,610.00		
<b>Maintenance Track</b>							
Supply all materials and construct all weather access to detail:							
Trim, grade and compact subgrade to maintenance access track	1,707	m <sup>2</sup>	\$ 3.00	\$ 5,121.00	\$ 5,121.00		
150mm Concrete (25MPa) with SL62 Mesh and 30mm sand	1,707	m <sup>2</sup>	\$ 120.00	\$ 204,840.00	\$ 204,840.00		
Construct commercial vehicle crossing	6	m	\$ 190.00	\$ 1,140.00	\$ 1,140.00		
<b>Miscellaneous</b>							
Allowance for linemarking				Excluded			
Allowance for fence or bollards on street frontages (approx. 420m)	1	Item	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00		
Floodway signage	3	No	\$ 425.00	\$ 1,275.00		\$ 1,275.00	
<b>Establishment Maintenance / Defects Liability</b>							
Watering and maintenance for 36 months defects liability period	36	mths	\$ 2,000.00	\$ 72,000.00	\$ 61,037.00	\$ 10,963.00	
<b>Fence</b>							
Allowance for pool fence to perimeter of basin				Excluded			
<b>TOTAL: LANDSCAPING</b>				<b>\$ 970,023.00</b>	<b>\$ 880,090.00</b>	<b>\$ 89,933.00</b>	<b>\$ -</b>
<b>PRELIMINARIES (10%)</b>				<b>\$ 598,100.00</b>	<b>\$ 492,400.00</b>	<b>\$ 70,200.00</b>	<b>\$ 35,400.00</b>
<b>MARGIN (8%)</b>				<b>\$ 526,300.00</b>	<b>\$ 433,300.00</b>	<b>\$ 61,800.00</b>	<b>\$ 31,200.00</b>
<b>TOTAL CONSTRUCTION WORKS</b>				<b>\$ 7,104,481.00</b>	<b>\$ 5,848,949.00</b>	<b>\$ 833,832.00</b>	<b>\$ 421,600.00</b>

F24.1 Victoria Street  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>SOIL AND WATER MANAGEMENT</b>							
Supply all materials and construct sediment control devices, maintain for the duration of the contract and remove when instructed, to include but not limited to:							
Stabilised site access	1	No	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00		
Sediment fence	2,400	m	\$ 15.00	\$ 36,000.00	\$ 36,000.00		
Geotextile inlet filter	22	No	\$ 85.00	\$ 1,870.00	\$ 1,870.00		
Straw bale	30	No	\$ 55.00	\$ 1,650.00	\$ 1,650.00		
Maintenance of soil and erosion control devices	1	Item	\$ 4,600.00	\$ 4,600.00	\$ 4,600.00		
<b>TOTAL SOIL AND WATER MANAGEMENT</b>				<b>\$ 49,620.00</b>	<b>\$ 49,620.00</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EARTHWORKS</b>							
Demolition or clearing rubbish on site							
Clear and grub	85,600	m <sup>2</sup>	\$ 3.50	\$ 299,600.00	\$ 299,600.00		
Strip topsoil and stockpile	17,120	m <sup>3</sup>	\$ 7.00	\$ 119,840.00	\$ 119,840.00		
Cut to fill, spread and compact	11,335	m <sup>3</sup>	\$ 14.00	\$ 158,690.00	\$ 158,690.00		
Excavation in shale	2,440	m <sup>3</sup>	\$ 16.00	\$ 39,040.00	\$ 39,040.00		
Disposal of surplus VENM from site	36,505	m <sup>3</sup>	\$ 8.00	\$ 292,040.00	\$ 292,040.00		
Tip fees (VENM) - 80%	58,408	t	\$ 42.00	\$ 2,453,136.00	\$ 2,453,136.00		
Tip fees (GSW) - 10% (based on Council and Landcom work in Scheduled Lands)	7,301	t	\$ 225.00	\$ 1,642,725.00	\$ 1,642,725.00		
Tip fees (GSW special ACM including PPE, suppression, air monitors and hygienists) - 10%	7,301	t	\$ 285.00	\$ 2,080,785.00	\$ 2,080,785.00		
Respread topsoil to depth onsite	17,120	m <sup>3</sup>	\$ 10.00	\$ 171,200.00	\$ 171,200.00		
Trim and compact raingarden and batters	24,803	m <sup>2</sup>	\$ 6.00	\$ 148,818.00	\$ 148,818.00	\$ 148,818.00	
Trim and compact channel	1,516	m <sup>2</sup>	\$ 12.00	\$ 18,192.00	\$ 18,192.00		
Construct detention basins	16,591	m <sup>2</sup>	\$ 6.00	\$ 99,546.00	\$ 99,546.00		
<b>TOTAL EARTHWORKS</b>				<b>\$ 7,698,612.00</b>	<b>\$ 7,549,794.00</b>	<b>\$ 148,818.00</b>	<b>\$ -</b>
<b>DRAINAGE</b>							
Excavate for trenches and structures in all classes of material, supply, bed, lay, joint and backfill stormwater pipes							
Excavate, supply, bed, lay and joint stormwater pipes as specified:							
375mm dia. RRJ2	120	m	\$ 250.00	\$ 30,000.00	\$ 30,000.00		
450mm dia. RRJ2	135	m	\$ 310.00	\$ 41,850.00	\$ 41,850.00		
600mm dia. RRJ2	31	m	\$ 390.00	\$ 12,090.00	\$ 12,090.00		
675mm dia. RRJ2	220	m	\$ 355.00	\$ 78,100.00	\$ 78,100.00		
750mm dia. RRJ2	66	m	\$ 440.00	\$ 29,040.00	\$ 29,040.00		
1200mm dia. RRJ2	80	m	\$ 1,020.00	\$ 81,600.00	\$ 81,600.00		
CCTV inspection	652	m	\$ 8.00	\$ 5,216.00	\$ 5,216.00		
Excavate in all classes of material, supply all materials and construct standard drainage structures including sub-soil drainage connections and trench drainage facilities to detail:							
900x900mm Grated surface inlet pit	18	No.	\$ 4,000.00	\$ 72,000.00	\$ 72,000.00		
Splitter pit	1	No.	\$ 13,000.00	\$ 13,000.00	\$ 13,000.00		
Custom pit	3	No	\$ 16,000.00	\$ 48,000.00	\$ 48,000.00		
Structural certification of pits	22	Each	\$ 170.00	\$ 3,740.00	\$ 3,740.00		
Excavate in all classes of material, supply all materials and construct bioretention pits including sub-soil drainage connections and trench drainage facilities to detail:							
Raingarden Outlet Pit combined system (3no. Precast 900x900 GSIP)	6	No.	\$ 17,500.00	\$ 105,000.00	\$ 105,000.00	\$ 105,000.00	
225mm dia uPVC pipe.	27	m	\$ 110.00	\$ 2,970.00	\$ 2,970.00	\$ 2,970.00	
Construct 150mm concrete apron surrounding pit to detail	66	m <sup>2</sup>	\$ 140.00	\$ 9,240.00	\$ 9,240.00	\$ 9,240.00	
150mm Lean mix concrete (5%)	66	m <sup>2</sup>	\$ 95.00	\$ 6,270.00	\$ 6,270.00	\$ 6,270.00	
150mm Cement stabilised crushed granite	24	m <sup>2</sup>	\$ 75.00	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00	
Supply, bed, lay, joint subsoil drainage pipes and structures as required:							
150mm dia slotted uPVC pipe subsoil drain including rodding eyes as required.							
Flush point including temporary concrete collar and connecting to subsoil with 150mm dia. non-slotted pipe	29	No	\$ 175.00	\$ 5,075.00	\$ 5,075.00	\$ 5,075.00	
Excavate in all classes of material, supply all materials, and construct rock headwalls complete (including rock erosion protection) to detail for:							
Precast concrete headwall to accommodate 2 x 1500mm RCP	1	Item	\$ 16,000.00	\$ 16,000.00	\$ 16,000.00		
Scour protection	1	Item	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00		
Pool Fence powder coated dulux	15	m	\$ 350.00	\$ 5,250.00	\$ 5,250.00		
<b>Construct GPT</b>							
Supply and construct gross pollutant trap Rocla GPT CDS3018 incl. access platform and cleanina at the time of Practical Completion	2	No	\$ 355,000.00	\$ 710,000.00			\$ 710,000.00
<b>TOTAL DRAINAGE</b>				<b>\$ 1,314,983.00</b>	<b>\$ 438,886.00</b>	<b>\$ 166,097.00</b>	<b>\$ 710,000.00</b>
<b>RAINGARDEN</b>							
<b>Stage 1: Interim Raingarden</b>							
Trim and grade temporary sediment basin	4,511	m <sup>2</sup>	\$ 4.50	\$ 20,299.50		\$ 20,299.50	
Supply and place liner to detail including:							
HDPE liner incl. temporary liner	5,046	m <sup>2</sup>	\$ 30.00	\$ 151,389.00		\$ 151,389.00	
"BIDIM A44" A44 geotextile liner (Temporary)	4,806	m <sup>2</sup>	\$ 5.00	\$ 24,030.00		\$ 24,030.00	
"BIDIM A44" geotextile liner (2 layers)	4,806	m <sup>2</sup>	\$ 10.00	\$ 48,060.00		\$ 48,060.00	
Supply and place Drainage Layer [Aggregate (200mm thick)]	903	m <sup>3</sup>	\$ 205.00	\$ 185,115.00		\$ 185,115.00	
Supply and place Transition Layer [Coarse Sand (250mm thick)]	1,128	m <sup>3</sup>	\$ 190.00	\$ 214,320.00		\$ 214,320.00	
Supply and place recycled sand/loam media (150mm thick)	677	m <sup>3</sup>	\$ 210.00	\$ 142,170.00		\$ 142,170.00	
Supply and place sacrificial geotextile layer	4,511	m <sup>2</sup>	\$ 7.50	\$ 33,832.50		\$ 33,832.50	
Supply and place sacrificial turf layer	4,511	m <sup>2</sup>	\$ 12.00	\$ 54,132.00		\$ 54,132.00	
<b>Stage 2: Ultimate Raingarden</b>							
Remove interim geotextile, filter media and washed turf layer	1	Item	\$ 45,110.00	\$ 45,110.00		\$ 45,110.00	
Supply and place liner to detail including:							
Supply and place Transition Layer [Coarse Sand (450mm thick)]	2,030	m <sup>3</sup>	\$ 190.00	\$ 385,700.00		\$ 385,700.00	
Supply and place recycled sand/loam media (500mm thick)	2,256	m <sup>3</sup>	\$ 210.00	\$ 473,760.00		\$ 473,760.00	
Planting of bioretention garden (measured in Landscaping)		Note					
Escalation on ultimate raingarden and planting (estimated at 5-10 years - say 7 years at 3% p.a. after initial Stage 1 completion)	1	Item	\$ 253,000.00	\$ 253,000.00		\$ 253,000.00	
<b>TOTAL RAINGARDEN</b>				<b>\$ 2,030,918.00</b>	<b>\$ -</b>	<b>\$ 2,030,918.00</b>	<b>\$ -</b>

F24.1 Victoria Street  
 Cost Estimate - January 2024

DESCRIPTION	QUANTITY	UNIT	RATE	SUBTOTAL	Basin	Bio-retention	GPT
<b>LANDSCAPING</b>							
<b>Preliminaries</b>							
Contractors and suppliers, site establishment, site compound, amenities, insurances, sediment and erosion control, WAE survey, disposal of spoil off site. Assuming no contamination. Based on one contract for all stages of work.	1	Item	\$ 12,500.00	\$ 12,500.00	\$ 10,876.00	\$ 1,624.00	
<b>Topsoil</b>							
Ameliorate site topsoil	17,120	m <sup>3</sup>	\$ 4.00	\$ 68,480.00	\$ 68,480.00		
Allowance for upgrading existing soil with compost or imported topsoil (say 50%)	8,560	m <sup>3</sup>	\$ 45.00	\$ 385,200.00	\$ 385,200.00		
<b>Turf</b>							
Subgrade preparation inc cultivation & gypsum	51,030	m <sup>2</sup>	\$ 5.00	\$ 255,150.00	\$ 255,150.00		
Import 150mm topsoil (80/20)	7,655	m <sup>3</sup>	\$ 95.00	\$ 727,177.50	\$ 727,177.50		
Supply and lay couch turf	51,030	m <sup>2</sup>	\$ 12.00	\$ 612,360.00	\$ 612,360.00		
<b>Planting</b>							
<b>Raingarden</b>							
Subgrade preparation inc cultivation & gypsum	4,511	m <sup>2</sup>	\$ 5.00	\$ 22,555.00		\$ 22,555.00	
Import 250mm topsoil (Premium garden mix)	1,128	m <sup>3</sup>	\$ 95.00	\$ 107,137.00		\$ 107,137.00	
Mulching (75mm)	4,511	m <sup>2</sup>	\$ 8.00	\$ 36,088.00		\$ 36,088.00	
Macrophyte tubestock (Assume 8 per m <sup>2</sup> )	36,088	No.	\$ 3.65	\$ 131,722.00		\$ 131,722.00	
<b>Tree Planting</b>							
Allowance for 100L street tree planting including pit excavation, soil mix, ag line, stakes, trees and mulch	649	No	\$ 415.00	\$ 269,335.00	\$ 269,335.00		
<b>Maintenance Track</b>							
Supply all materials and construct all weather access to detail:							
Trim, grade and compact subgrade to maintenance access track	3,740	m <sup>2</sup>	\$ 3.00	\$ 11,220.00	\$ 11,220.00		
150mm Concrete (25MPa) with SL62 Mesh and 30mm sand	3,740	m <sup>2</sup>	\$ 120.00	\$ 448,800.00	\$ 448,800.00		
Construct commercial vehicle crossing	6	m	\$ 190.00	\$ 1,140.00	\$ 1,140.00		
<b>Miscellaneous</b>							
Allowance for linemarking				Excluded			
Allowance for fence or bollards on street frontages (approx. 570m)	1	Item	\$ 142,500.00	\$ 142,500.00	\$ 142,500.00		
Allowance for linemarking				Excluded			
Floodway signage	4	No	\$ 425.00	\$ 1,700.00		\$ 1,700.00	
<b>Establishment Maintenance / Defects Liability</b>							
Watering and maintenance for 36 months defects liability period	36	mths	\$ 3,500.00	\$ 126,000.00	\$ 109,623.00	\$ 16,377.00	
<b>Fence</b>							
Allowance for pool fence to perimeter of basin				Excluded			
<b>TOTAL: LANDSCAPING</b>				<b>\$ 3,359,065.00</b>	<b>\$ 3,041,862.00</b>	<b>\$ 317,203.00</b>	<b>\$ -</b>
<b>PRELIMINARIES (10%)</b>				<b>\$ 1,445,400.00</b>	<b>\$ 1,108,100.00</b>	<b>\$ 266,400.00</b>	<b>\$ 70,900.00</b>
<b>MARGIN (8%)</b>				<b>\$ 1,271,900.00</b>	<b>\$ 975,100.00</b>	<b>\$ 234,400.00</b>	<b>\$ 62,400.00</b>
<b>TOTAL CONSTRUCTION WORKS</b>				<b>\$ 17,170,498.00</b>	<b>\$ 13,163,362.00</b>	<b>\$ 3,163,836.00</b>	<b>\$ 843,300.00</b>