



**BARUNGA WEST DISTRICT COUNCIL**

**UPDATE STATEMENT OF STORMWATER  
ASSET MANAGEMENT PLAN**

9 APRIL 2015

**GAYLER PROFESSIONAL ENGINEERING PTY LTD**  
5/186 Main Road BLACKWOOD SA 5051  
Ph: +61 8 8278 7796  
Email: [rgayler@bigpond.com](mailto:rgayler@bigpond.com)  
Mobile: +61 417 861 952



## **CONTENTS**

Council's prevailing Stormwater Asset Management Plan dates from July 2010 (Gilbert and Associates Consulting Civil Engineers).

This update statement

- reviews what the Plan identified as Capital Renewal Works required between 2010 and 2015
- adds in Bute's stormwater infrastructure;
- uses the 1 July 2014 GPE completed /expanded Asset Register and Revaluation to update the Capital Renewal Expenditure estimates for the next ten years for inclusion in the Long Term Financial Plan; and
- comments on the appropriate level of maintenance expenditure required to protect the infrastructure and to carry out preventative maintenance.



### **1. What the 2010 Asset Management Plan identified as Capital Renewal Works required between 2010 and 2015**

Staff confirmed that none of the works recommended in the following table and text have been carried out to date.

The Asset Register has been updated accordingly, but stipulating these works as high priority for the immediate future. Inspection of key elements confirms the very short useful life expectancy of these elements.

The table includes items identified in the 2010 report, with prices updated to present day figures.

### **2. Bute's stormwater infrastructure**

GPE identified Capital Renewal Works which should be undertaken in Bute within the ten year plan. These are also listed in the following table.

### **3. Total Capital Renewal Cost Estimates for the next Ten Years.**

The table and graph overleaf show the estimated total expenditure requirements for Capital Renewal for the period of the next Ten Year Long Term Financial Plan.

**However** the recommendation of the 2010 Plan should be followed, to have the Oval Pump Station mechanical and electrical components investigated and tested by specialist providers in order to obtain a better estimate of the remaining lives of these expensive items; visual inspection does not give reliable life estimates for such items.



<b>PORT BROUGHTON ASSETS</b>		<b>COST</b>	<b>Year</b>	<b>Total</b>	<b>Combined</b>	
					<b>Yr</b>	<b>Cost</b>
<b>Oval pump station</b>						
Pump	Pump	\$ 7,080.00	1		1	\$ 25,387.70
Valves		\$ 9,440.00	1		2	\$ 57,950.63
Control switchgear		\$ 7,080.00	1	\$ 23,600.00	3	\$ -
<b>Line 3- Duffield Road</b>					4	\$ -
Flood Gate	Flood gate BC	\$ 8,764.21	2		5	\$ 930.67
<b>Duffield Road</b>					6	\$ 949.90
Control & switchgear	Control Box	\$ 20,650.00	2		7	\$ 596.37
Valves		\$ 9,440.00	2		8	\$ 944.00
Pumps	Pumps	\$ 12,980.00	2		9	\$ -
<b>Laterals East Tce</b>					10	\$ -
	SEP	\$ 2,462.07	2			\$ 86,759.26
	SEP	\$ 2,462.07	2			
<b>Line 11</b>						
Outfall headwall to sea	HW to beach 300	\$ 596.37	2	\$ 57,354.73		
<b>Line 1 - Caravan park</b>						
Outfall headwall to sea	HW at beach 375	\$ 596.37	7	\$ 596.37		
<b>BUTE ASSETS</b>						
<b>BUTE KULPARA ROAD</b>						
Crosspipe midpoint Everard & Florence Sts West end	Head Wall	\$ 595.90	1			
Crosspipe midpoint Everard & Florence Sts East end	Head Wall	\$ 595.90	1			
Sth of Frederick St West end	Head Wall	\$ 595.90	1	\$ 1,787.70		
<b>NORTH WEST TCE</b>						
West of Second St	Head Wall	\$ 595.90	2	\$ 595.90		
<b>GEORGE ST</b>						
Adjacent Everard St to North	Box Culvert	\$ 930.67	5	\$ 930.67		
Driveway Diagonal George&Everard Sts	Box Culvert	\$ 944.00	8	\$ 944.00		
<b>BUTE KULPARA ROAD</b>						
Under Comer Gate Park Access	Stormwater Pipe	\$ 354.00	6			
Sth of Frederick St West end	Head Wall	\$ 595.90	6	\$ 949.90		
				\$ 86,759.26		





#### **4. Appropriate Level of Maintenance Expenditure**

In the 2010 Asset Management Plan, the recommended level of maintenance expenditure was \$10,000 pa.

That figure appears to be too low for an asset with an overall value of approximately \$2.75 million, with approximately \$35,000 Annual Depreciation Expense.

The main areas of essential maintenance effort are;

- Maintaining pipes clear of sand, soil and foreign material build up, to ensure hydraulic capacity is maintained (\$5,000 for two vac truck visits);
- Attention to any areas of efflorescence in concrete due to the saline working environment, particularly along the sea front (flap valves and the like) (\$2,500);
- Preventative maintenance on exposed metal surfaces (\$1,500);
- Replacement of broken SEP lids (\$1,200);
- Replacing seals on flap valves (\$300);
- Maintaining areas around headwalls and clear flow paths into and exiting from pipes under roads (\$3,000);
- Regular checking of electrical components (eg, the Oval Pump Station) (\$1,000); and
- Contingency for minor, unspecified and/or unplanned works (\$3,000).

Council is best placed to determine the cost of these activities, but it is very hard to believe that the annual figure for effective routine and preventative maintenance could be as low as \$10,000.

Plausible figures for the primary activities are given in the dot-points above, these being regarded as the barest minimum consistent with preventative maintenance practice. The total is not less than \$17,500 pa.

#### **RICHARD GAYLER**

BE Civil, MIE Aust, CP Eng 85260  
Principal Engineer/Managing Director

#### **GAYLER PROFESSIONAL ENGINEERING PTY LTD**

5/186 Main Road BLACKWOOD SA 5051

Ph: +61 8 8278 7796

Email: [rgayler@bigpond.com](mailto:rgayler@bigpond.com)

Mobile: +61 417 861 952

CIVIL DESIGN, PROJECT AND ASSET MANAGEMENT ENGINEERS