



# Griffith City Council

## *Development Servicing Plan*

### *For Sewerage 2012*

**Adopted by Council on  
27 November 2012**

## Summary

This Development Servicing Plan (DSP) covers sewerage developer charges for the areas served by Griffith City Council (GCC) including Griffith, Bilbul and Yenda.

The sewerage developer charges calculated for the area covered by this DSP and the Council's proposed charges are below:

| Sewerage              | Developer Charge Calculated 13/14 (\$ per ET) | Developer Charge Proposed by GCC 13/14 (\$ per ET) |
|-----------------------|---|--|
| Griffith City Council | \$5,165                                       | \$5,165  |

The charges will be indexed on 1<sup>st</sup> July each year on the basis of movements in the Consumer Price Index (CPI) for Sydney.

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2002) issued by the Minister for Land and Water Conservation pursuant to section 306 (3) of the Water Management Act 2000. This document is to be registered with the NSW Office of Water.

The development servicing zone areas covered by this DSP are shown in Appendix A.

The timing and expenditures for works serving the area covered by this DSP are shown in section 4.

Standards of service to be provided by Council are provided in section 5.

Developer charges relating to this DSP will be reviewed as described in section 7.4.

The developer shall be responsible for the full cost of the design and construction of sewerage reticulation works within subdivisions.

The timing of payment of developer charges is described in section 7.8.

The GCC Background Document for Water Supply DSP, in Appendix B, lists all the assets covered by this DSP and provides the detailed developer charges calculation.

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# 1 Introduction

Section 64 of the Local Government Act 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to section 306 of the Water Management Act 2000.

A Development Servicing Plan (DSP) is a document which details the water supply, sewerage and/or stormwater developer charges to be levied on development areas utilising a water utility's water supply, sewerage and/or stormwater infrastructure.

This DSP covers sewerage developer charges in Griffith, Bilbul and Yenda development areas, which are served by Griffith City Council (GCC), as the local water utility.

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2002) issued by the Minister for Land and Water Conservation pursuant to section 306 (3) of the Water Management Act 2000. This document is to be registered with the NSW Office of Water. The areas served by GCC have been considered as one service area, as GCC resolved to agglomerate the developer charges across the Griffith Local Government Area.

This DSP supersedes any other requirements related to sewerage developer charges for the area covered by this DSP.

## 2 Administration

| Griffith City Sewerage                  |   |
|---|---|
| <b>DSP Area</b>                         | The sewerage area covered by this DSP is shown on plans in Appendix A.  |
| <b>DSP Boundaries</b>                   | The basis for defining the DSP areas boundaries is the existing and future development served by Griffith City Council sewerage schemes. Any development outside the sewerage service area will require a special agreement with Griffith City Council.   |
| <b>Application of Developer Charges</b> | Developer charges will be levied to all land within the DSP area which is serviced, or is proposed to be serviced within one year by reticulated sewerage within 75 metres of the property boundary. (S552 LGA, 1993)   |
| <b>Assessment</b>                       | Assessment of Developer charges payable will be on the basis of Equivalent Tenements (ETs). Council will determine the number of ETs of each development in accordance with Council's adopted ET Policy.  |
| <b>Payment of Developer Charges</b>     | Payment of a developer charge is a precondition to the grant of a Compliance Certificate, which must be obtained in order to complete a development. A Compliance Certificate will not be issued until the developer charge payment has been received. Council may adopt a policy on the implementation and application of developer charges.   |
| <b>Time &amp; Payment</b>               | Council will issue a Notice of Payment – Developer Charges at the time of assessing development application or other type of application. If payment is made within three months of the date of the notice, no further charges will apply for the development. If payment is not received within three months, a payment will be required prior to issue of Compliance Certificate and the charge will be recalculated in accordance with the DSP valid at that time. |
| <b>Review</b>                           | Developer Charges relating to this DSP will be reviewed after a period of 5 years. A shorter review period is permitted if a major change in circumstances occurs.  |
| <b>Assessment</b>                       | Developments will be assessed in terms of their ET loadings on the sewerage system. GCC will make the final decision on the assessment.   |
| <b>Indexation</b>                       | The charges will be adjusted annually on the basis of movements in Consumer Price Index (CPI) for Sydney.   |

## 3 Demographic and Land Use Planning Information

### 3.1 Growth Projections

The number of assessments and Equivalent Tenements (ETs) projections in the Griffith sewerage scheme are shown in Table 1.

**Table 1: Growth Forecast**

|      | Assessments |                 | ETs         |                 |       |
|------|-------------|-----------------|-------------|-----------------|-------|
|      | Residential | Non-Residential | Residential | Non-Residential | Total |
| 2010 | 7999        | 837             | 7999        | 3825            | 11824 |
| 2015 | 8273        | 887             | 8273        | 4054            | 12327 |
| 2020 | 8746        | 958             | 8746        | 4380            | 13126 |
| 2025 | 9346        | 1058            | 9346        | 4837            | 14183 |
| 2030 | 9971        | 1183            | 9971        | 5408            | 15379 |
| 2035 | 10646       | 1333            | 10646       | 6093            | 16739 |
| 2040 | 11346       | 1508            | 11346       | 6893            | 18239 |

Note: 1 residential assessment = 1 ET (i.e. a standard urban fully detached dwelling)

1 non-residential assessment = 3.7 ET

(Source: GCC staff, email 18 October 2012)

The population estimated in 2040 is based on Census 2011 and 1% growth per annum.

**Table 2: Population Forecast**

|          | Census 2006* | Census 2011* | 2040   |
|----------|--------------|--------------|--------|
| Griffith | 16,182       | 17,616       | 23,509 |
| Yenda    | 1,064        | 1,021        | 1,363  |
| Bilbul   | 246          | 263          | 351    |

\* Source: Australian Bureau of Statistics website – Urban centre/locality demographic data.

### 3.2 Land Use Information

This DSP should be read in conjunction with the Griffith Local Environment Plan 2002.

## 4 Sewerage Infrastructure

### 4.1 Schemes Overview

The Griffith wastewater scheme comprises 170 km of reticulation and gravity mains, 60 km of rising mains, 29 pump stations and three wastewater treatment plants with total current capacity of 39,310 EP (future capacity 51,810 EP). The treatment plants are located at Griffith, Yenda and Bilbul. Details of the plants are shown below:

- Griffith STP: MBR Plant, commissioned in 2012

Current capacity: 37,500 EP

Future capacity: 50,000 EP

- Yenda STP: Oxidation Ponds mechanically aerated, built in 1981

Capacity: 34,000EP

- Bilbul STP: Oxidation Pond, built in 1990

Capacity: 310 EP

### 4.2 Assets

The existing and proposed sewerage assets serving the area covered by this DSP are listed in table 1 and 2 of the GCC 2012 DSP Background Document for Sewerage (See Appendix B).

### 4.3 Estimates of Capital Costs

Capital works comprising new works and renewals with an estimated value of \$43.8 M will be required over the next 30 years to provide sewerage services to the serviced areas.

Capital cost of works to upgrade and improve sewerage services is detailed in table 2 of the GCC 2012 Background Document for Sewerage DSP (See Appendix B).

The calculation of capital charges includes capital costs for growth only, with an estimated value of \$14.6 M.

#### 4.4 Timing of Works and Expenditure

The annual capital works expenditure for sewerage is shown graphically in Figure 1. Timing of works and expenditure are to be reviewed and updated when required.

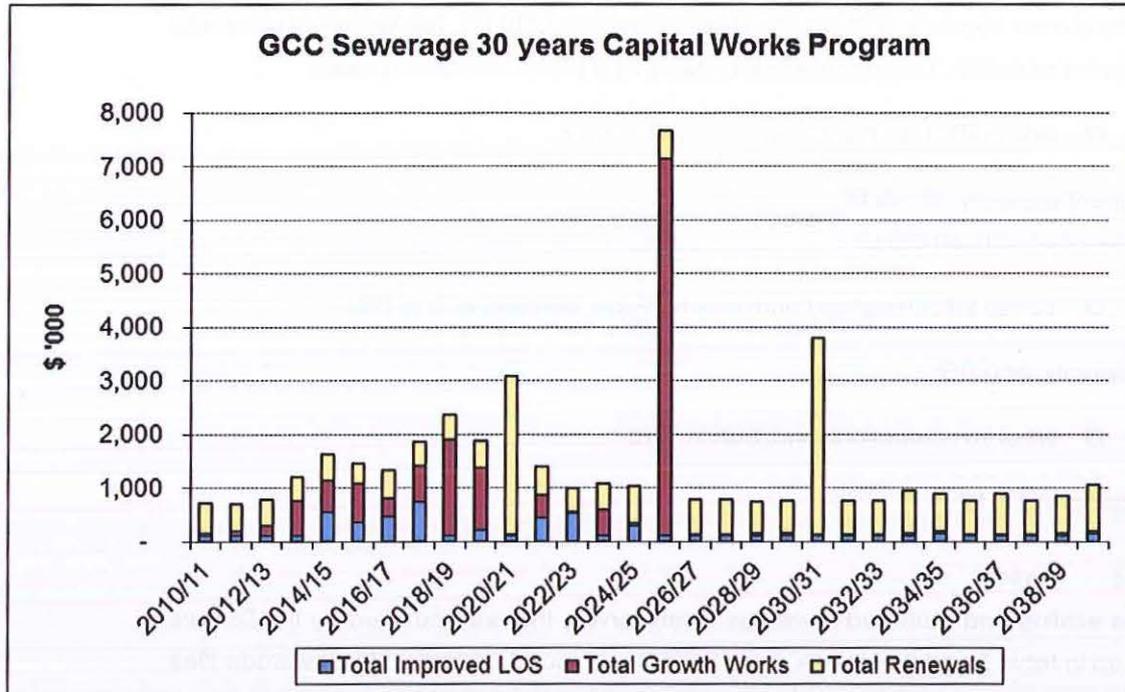


Figure 1: GCC 30 Sewerage Years Capital Works Program

## 5 Standards of Service

The Levels of Service (LOS) applied to GCC's sewerage schemes are the standard targets that GCC aims to achieve. They are not intended as a formal customer contract. GCC system design and operation are based on providing the following standards of service.

**Table 3: Sewerage Levels of Service**

| Description   | Unit         | Levels of Service                    |
|---|--------------|--------------------------------------|
| <b>Availability of Service</b>  |              |                                      |
| Extent of areas serviced.   | Service area | 100% within the defined service area |
| <b>System Failures</b>  |              |                                      |
| Category One:<br>Failure due to rainfall and deficient capacity (overflows).  | No./ 5 year  | 0                                    |
| Category Two:<br>- Failures due to pump or other breakdown including power failure.   | No /year     | 2                                    |
| Category Three:<br>- Failures due to main blockages and collapses (fat and tree roots).   | No /year     | 150                                  |
| <b>Response Times for System Failures (Defined as the maximum time to have staff on site to commence rectification)</b>                       |              |                                      |
| <b>Priority One:<br/>(Major spill, significant environmental or health impact, or affecting large number of consumers i.e. a major main).</b> |              |                                      |
| Response time during working hours  | Minutes      | 30                                   |
| Response time after hours   | Minutes      | 60                                   |

| Description   | Unit                | Levels of Service |
|---|---------------------|-------------------|
| <b>Priority Two:</b><br>(Moderate spill, some environmental or health impact, or affecting small number of consumers i.e. other mains). |                     |                   |
| Response time during working hours  | Minutes             | 30                |
| Response time after hours   | Minutes             | 60                |
| <b>Priority Three:</b><br>(Minor spill, little environmental or health impact, or affecting a couple of consumers).                     |                     |                   |
| Response time during working hours  | Hours               | 1                 |
| Response time after hours   | Hours               | 2                 |
| <b>Response Times for Complaints (General Complaints and Inquiries)</b>   |                     |                   |
| Written complaints.   | Working days        | 5                 |
| Oral complaints   | Working days        | 1                 |
| Note: times for 95% of complaints.  |                     |                   |
| <b>Odour Complaints</b>   |                     |                   |
| Treatment works   | No./ year           | <2                |
| Pumping Stations  | No./ year           | <4                |
| Effluent Discharge and Sludge Management Failure to meet licence limits and statutory requirements (100 percentile)                     | No. of samples/year | 0                 |

Source: Griffith City Council Strategic Business Plan for Water Supply and Sewerage Services, Dec 2009.

## 6 Design Parameters

Investigation and design of sewerage system components is based on:

- ❑ Council's levels of service (Refer to section 5 above).
- ❑ Manual of Practice: Sewer Design (1984) and the Manual of Practice: Sewage Pumping Station Design (1986). These Manuals were prepared by NSW Public Works and are now managed by the NSW Office of Water.
- ❑ Engineering Guidelines – Subdivisions and Development Standards, December 2008.

## 7 Calculated Developer Charges

### 7.1 Developer Charge Summary

The developer charge for the area covered by this DSP is calculated on the basis of the following capital charge and reduction amount.

|          | Capital Charge<br>10/11 (\$ per ET) | Reduction<br>Amount<br>(\$ per ET) | Calculated<br>Developer<br>Charge 13/14<br>(\$ per ET) | Adopted<br>Developer<br>Charge 11/12<br>(\$ per ET) |
|----------|-------------------------------------|------------------------------------|--|---|
| Sewerage | \$6,238                             | \$1,269                            | \$5,165  | \$5,165   |

The 2013/14 developer charge was calculated on the basis of 1.3% CPI for Sydney (June quarter 2011 to June 2012).

### 7.2 Capital Charge

The capital charge was calculated using the present value of existing and future assets serving the sewerage customers in the DSP area. The total cost of the assets is divided by the future capacity of the assets converted in ET. Detailed calculation is provided in Appendix B.

### 7.3 Reduction Amount

Council has adopted the NPV of Annual Charges method to calculate the Reduction Amount. This method calculates the reduction amount as the NPV of the future net income from annual charges (income less OMA) for the development area.

The reduction amount was calculated using a Financial Plan prepared using the FINMOD financial planning software and a reduction amount calculator developed by the NSW Office of Water which is based on a 30 year projection. Details of the reduction amount calculation are in Appendix C.

### 7.4 Reviewing/ Updating of Calculated Developer Charges

Developer charges relating to this DSP will be reviewed at no greater than 5-yearly intervals. In the period between any reviews, developer charges will be adjusted annually on the basis of movements in CPI for Sydney. Developer charges will be those charges determined by Council from time to time and will be published in Council's Annual Fees and Charges.

## 7.5 Exclusions

The developer charges do not cover the costs of reticulation works and assets commissioned pre 1970. The developer shall be responsible for the full cost of the design and construction of sewerage reticulation works within subdivisions, as well as works leading up to that subdivision.

## 7.6 Developments Requiring Forward Funding

Developments requiring the provision of infrastructure prior to Council's planning phase will require the developer to forward fund infrastructure at their own costs. These developers will be reimbursed within 10 years as Council receive developer charges from other developments reliant on that infrastructure in the area.

## 7.7 Determination of Developer Charges

Developer charges will be determined at the rate applicable at the time the development application is approved and indexed by CPI at 30 June each year until paid pursuant to Division 5.

Council may adopt a policy on the implementation and application of developer charges.

## 7.8 Timing of Payment of Developer Charges

Payment of developer charges must be finalised at the following stages:

- Development consents for subdivisions – the calculation and timing of payment of developer contribution is to be made in accordance with Councils "Contribution Assessment Policy".
- Development consents involving building work – prior to the issue of the construction certificate
- Development consents where no construction certificate is required – at the time of issue of the notification of consent, or prior to the commencement of approved development as may be determined by Council

## 7.9 Determining Developer Charges to be paid

All new and redeveloped properties subject for payment of sewerage charges are liable for paying developer charges.

An Equivalent Tenement (ET) is the basic unit of measure to quantify the loading on sewerage systems. One ET represents the equivalent loading from a standard residential household.

Griffith City Council will assess the additional demand on the sewerage system from new development and redevelopment in ET units. The developer charge will be calculated by multiplying the additional loading in ET by the developer charge per ET.

Credit for existing use is inherent in the calculation of the ET loading, as the developer charges are levied for the additional ET loadings a development will place on the infrastructure. For example, if a single residential lot is subdivided into four residential lots, the development has a credit of one ET from the existing use. The developer charges will be applied for the three additional ETs.

### **7.10 Developments outside Boundaries of DSP**

After the adoption of DSP, an unforeseen new development may occur outside the boundaries of the DSP (see Appendix A). If the planning authorities approve the development, Griffith City Council as the local water utility may either:

- Apply the developer charges adopted for the DSP to the new development, or
- Prepare a new DSP for the new development

Such a development is likely to require the construction of specific assets. Provided that there are no other constraints to the development, Griffith City Council may approve construction of the essential assets ahead of time. In such cases the assets will be sized by Council in accordance with the requirements of the DSP, and the full capital cost would be met by the developer, in addition to the developer charges levied on the development.

If the asset funded by this developer will serve other future development, the developer may be reimbursed when Council collects developer charges from the future development. Council and the developer must enter into an agreement stating how the developer will be reimbursed in the future.

### **7.11 Cross Subsidy**

Council has determined to charge the calculated developer charge as show in this document, thus cross-subsidy is not required.

## 8 Reference Documents

Background information and calculations relating to this DSP are contained in the following documents:

- ❑ Developer Charges for Water Supply, Sewerage and Stormwater Guidelines, December 2002.
- ❑ GCC 2012 DSP Background Document for Sewerage (These background documents contain detailed calculations for the capital charges and developer charges, including asset commissioning dates, size/length of assets, MEERA valuation of assets, 30 years capital works program, assets current and future capacities).

## 9 Other Related Plans

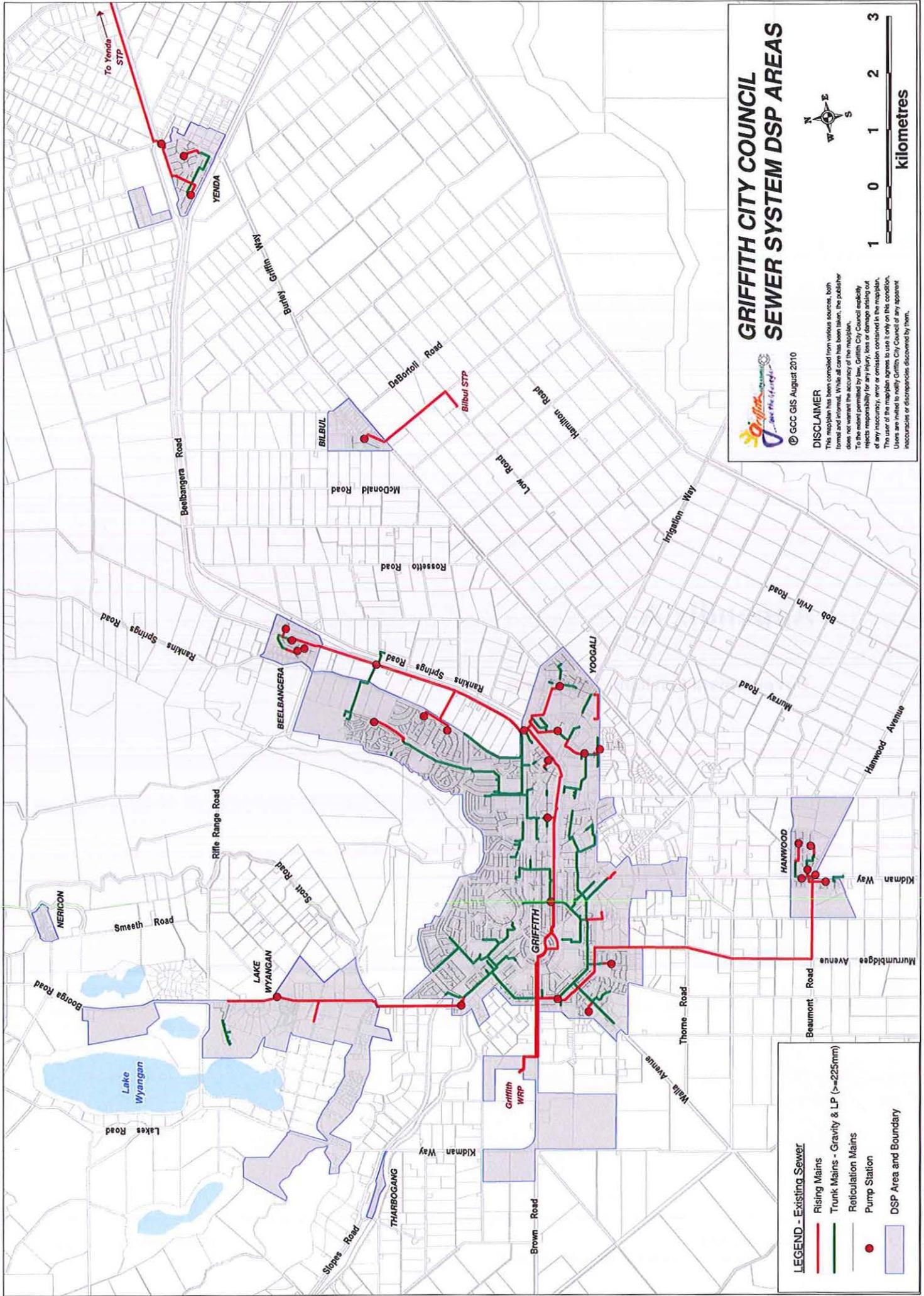
- ❑ Griffith City Council DSP for Water Supply 2012
- ❑ Section 94 Contribution Plans 2001 (Amendment 2010)
- ❑ Section 94A Development Contributions Plan 2010
- ❑ Griffith Local Environmental Plan 2002

## 10 Glossary

|                  |  |
|------------------|--|
| Capital Cost     | The present Value (MEERA basis) of assets used to service the development  |
| Capital Charge   | Capital cost of assets per ET x Return on Investment (ROI) factor.   |
| GCC              | Griffith City Council  |
| CPI              | Consumer Price Index   |
| Developer Charge | A charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development.   |
| DSP              | Development Servicing Plan   |
| EP               | Equivalent Person  |
| ET               | Equivalent Tenement  |
| LEP              | Local Environment Plan   |
| MEERA            | Modern Equivalent Engineering Replacement Asset  |
| NPV              | Net Present Value  |
| OMA              | Operation, maintenance and administration (costs)  |
| Post 1996 Asset  | An Asset that was commissioned by a water utility on or after 1st January 1996 or that is yet to be commissioned.  |
| Pre-1996 Asset   | An Asset that was commissioned by a water utility before 1st January 1996.   |
| Reduction Amount | The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the present value of the capital contribution that will be paid by the occupier of a development as part of future annual charges. |
| ROI              | Return on investment. Represents the income that is, or could be, generated by investing money.  |
| Service Area     | An area served by a separate water supply system, a separate small town or village, or a new development of over 500 lots.   |

# Appendix A

## Development Servicing Zone Areas



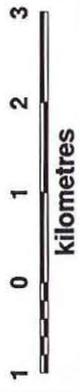
# GRIFFITH CITY COUNCIL SEWER SYSTEM DSP AREAS

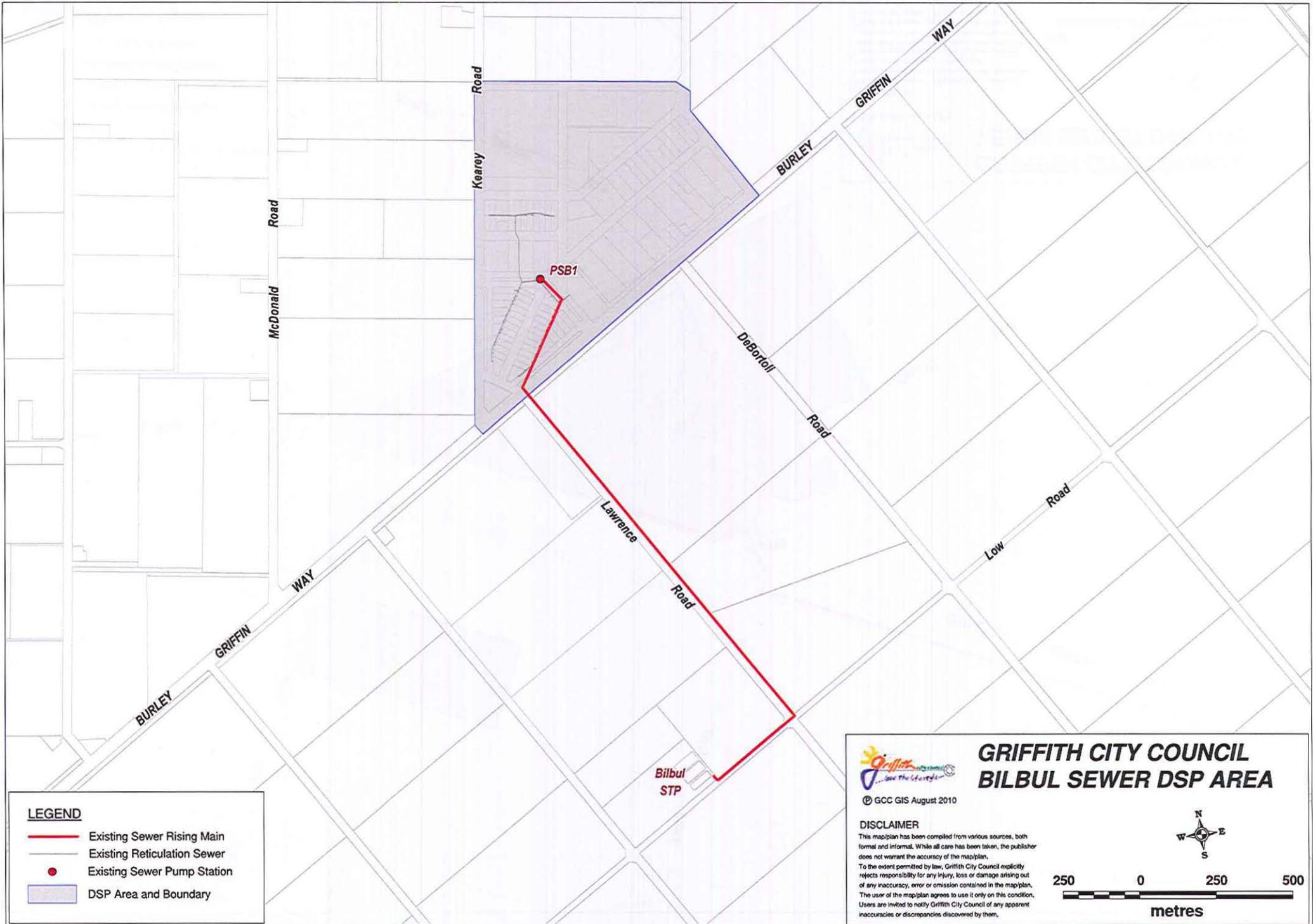


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- LEGEND - Existing Sewer**
- Rising Mains
  - Trunk Mains - Gravity & LP (>=225mm)
  - Reticulation Mains
  - Pump Station
  - DSP Area and Boundary





**LEGEND**

-  Existing Sewer Rising Main
-  Existing Reticulation Sewer
-  Existing Sewer Pump Station
-  DSP Area and Boundary

**Griffith City Council**  
*...use the Grange!*

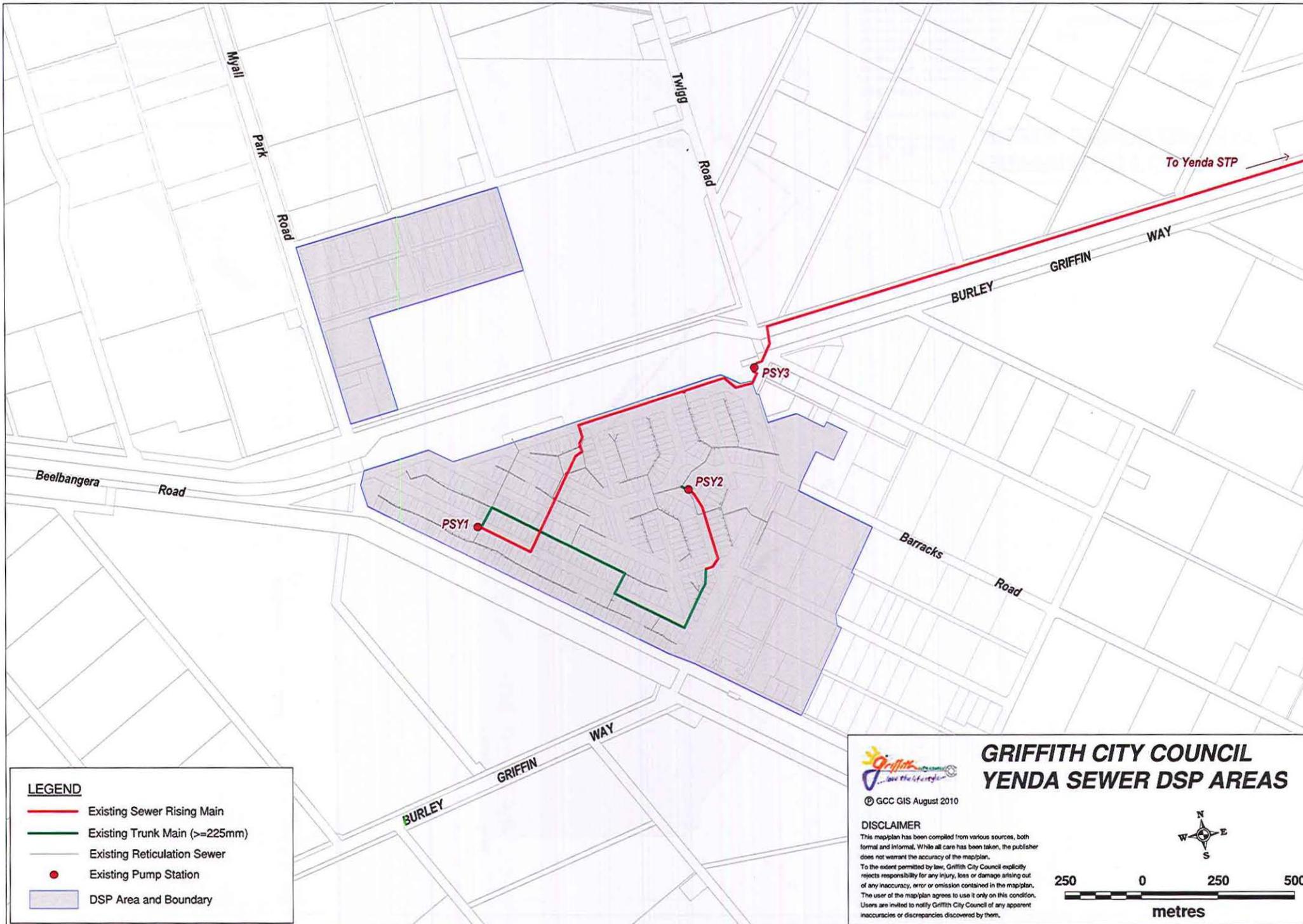
**GRIFFITH CITY COUNCIL  
 BILBUL SEWER DSP AREA**

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250 0 250 500  
 metres



**LEGEND**

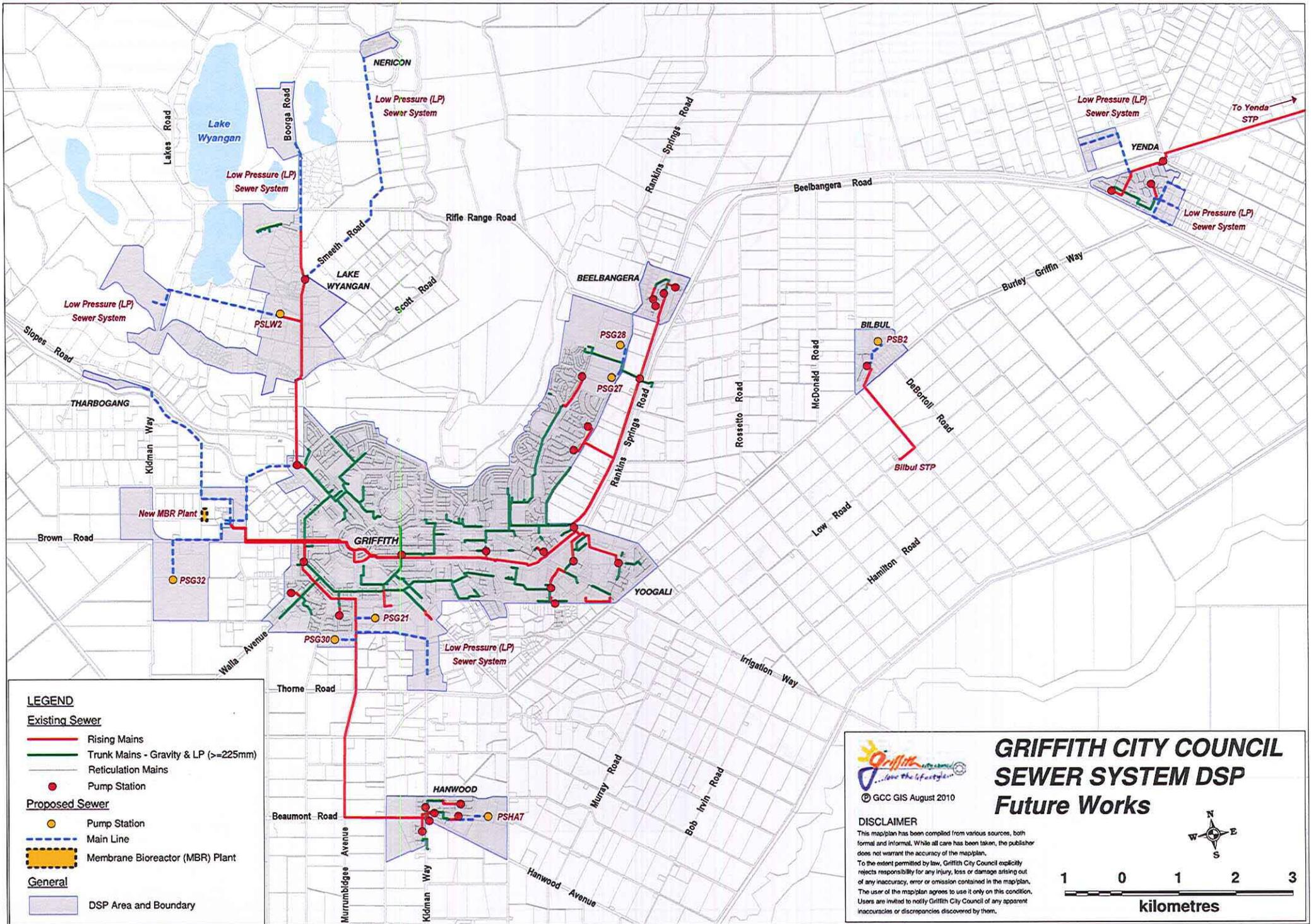
- Existing Sewer Rising Main
- Existing Trunk Main (>=225mm)
- Existing Reticulation Sewer
- Existing Pump Station
- DSP Area and Boundary

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## GRIFFITH CITY COUNCIL YENDA SEWER DSP AREAS

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250 0 250 500  
metres



**LEGEND**

**Existing Sewer**

- Rising Mains
- Trunk Mains - Gravity & LP (>=225mm)
- Reticulation Mains
- Pump Station

**Proposed Sewer**

- - - Main Line
- Membrane Bioreactor (MBR) Plant

**General**

- DSP Area and Boundary



GCC GIS August 2010

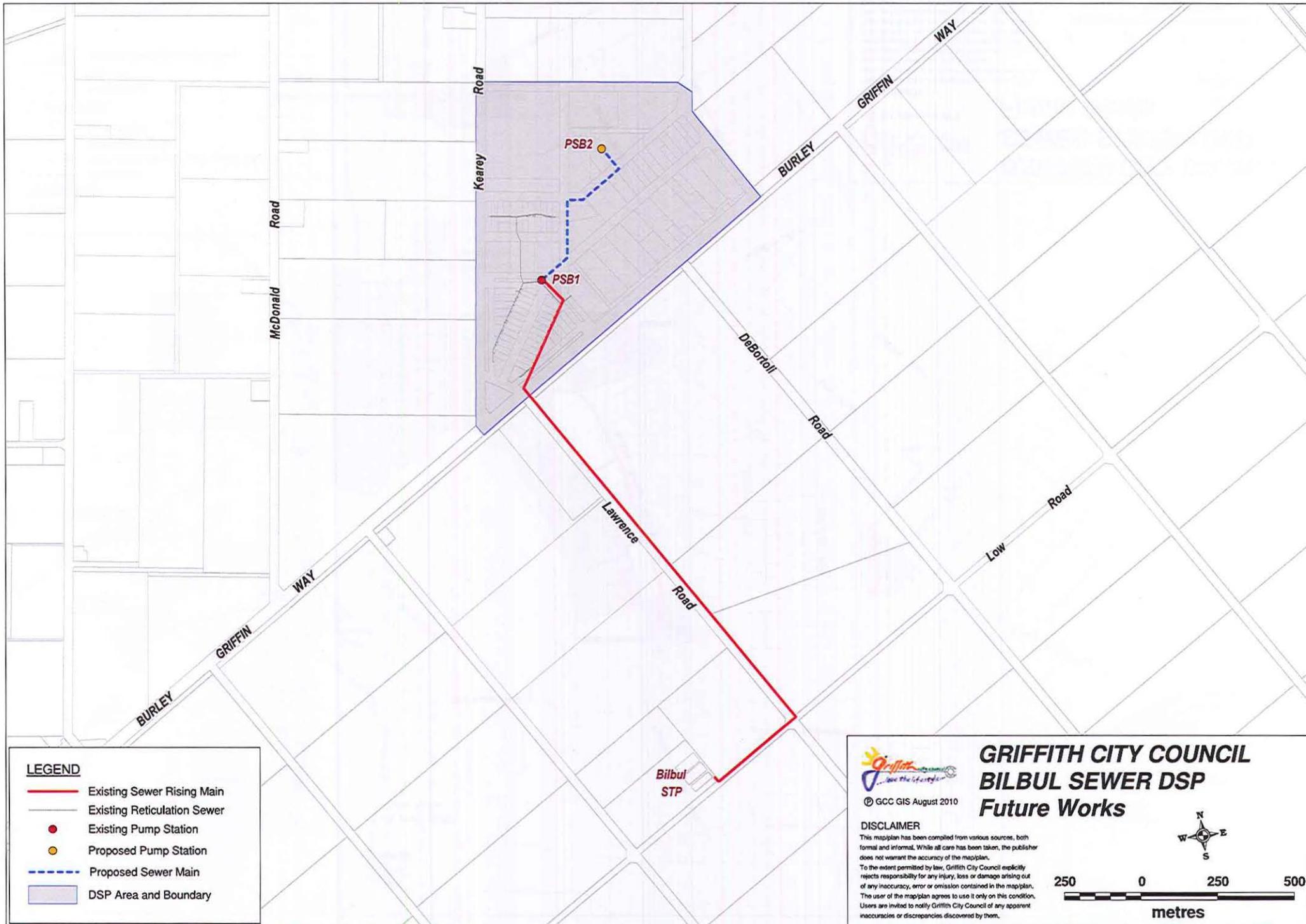
## GRIFFITH CITY COUNCIL SEWER SYSTEM DSP Future Works



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1 0 1 2 3  
kilometres



**LEGEND**

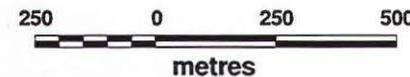
- Existing Sewer Rising Main
- Existing Reticulation Sewer
- Existing Pump Station
- Proposed Pump Station
- - - Proposed Sewer Main
- DSP Area and Boundary

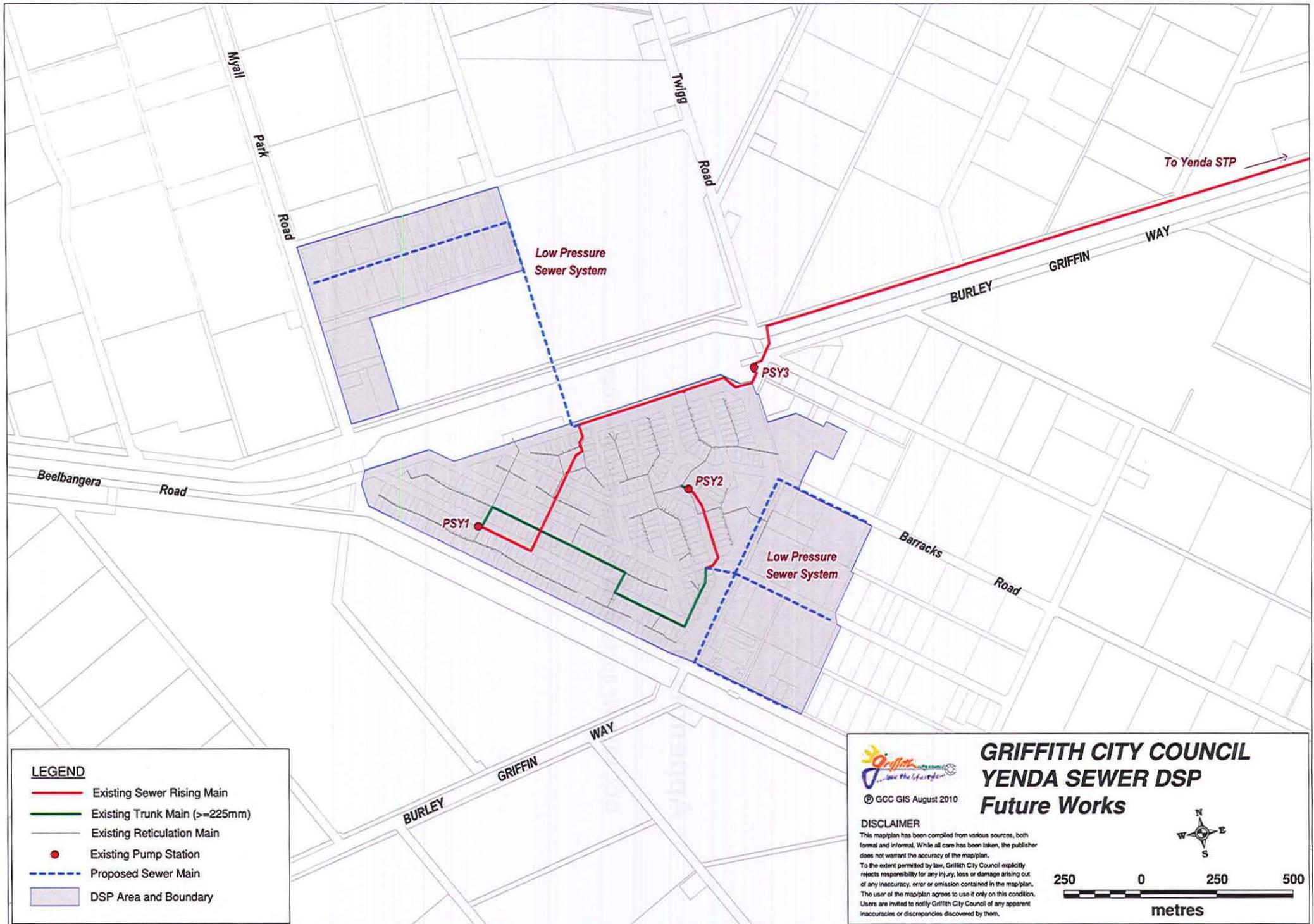


**GRIFFITH CITY COUNCIL  
BILBUL SEWER DSP  
Future Works**

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**LEGEND**

- Existing Sewer Rising Main
- Existing Trunk Main (>=225mm)
- Existing Reticulation Main
- Existing Pump Station
- - - Proposed Sewer Main
- DSP Area and Boundary


**GRIFFITH CITY COUNCIL**  
**YENDA SEWER DSP**  
**Future Works**

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250    0    250    500

metres

# Appendix B

## GCC 2012 DSP Background Document for Sewerage



Griffith City Council

Existing Assets

2012 DSP Background Document for Sewerage

Table 1: GCC Sewerage Existing Sewerage Assets

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$2,690.66                      | \$0.00                    | \$0      | \$2,691         |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$40,359.95                     | \$0.00                    | \$0      | \$40,360        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$41,317.40                     | \$0.00                    | \$0      | \$41,317        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$41,813.30                     | \$0.00                    | \$0      | \$41,813        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$42,652.91                     | \$0.00                    | \$0      | \$42,653        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$18,662.79                     | \$0.00                    | \$0      | \$18,663        |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 300  | mm        | \$7,855.95                      | \$7,855.95                | \$7,856  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$16,468.04                     | \$0.00                    | \$0      | \$16,468        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$27,034.29                     | \$0.00                    | \$0      | \$27,034        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$26,882.09                     | \$0.00                    | \$0      | \$26,882        |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$29,356.71                     | \$0.00                    | \$0      | \$29,357        |
| Griffith        | Trunk Mains (excluding reticulation) | 1999                                     | 300  | mm        | \$13,188.18                     | \$13,188.18               | \$13,188 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1999                                     | 300  | mm        | \$25,119.40                     | \$25,119.40               | \$25,119 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$42,783.89                     | \$42,783.89               | \$42,784 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$39,087.75                     | \$39,087.75               | \$39,088 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$36,088.93                     | \$36,088.93               | \$36,089 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$39,453.61                     | \$39,453.61               | \$39,454 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$33,158.92                     | \$33,158.92               | \$33,159 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$36,088.93                     | \$36,088.93               | \$36,089 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$36,088.93                     | \$36,088.93               | \$36,089 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$35,463.53                     | \$35,463.53               | \$35,464 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$35,601.12                     | \$35,601.12               | \$35,601 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1963                                     | 300  | mm        | \$21,318.60                     | \$0.00                    | \$0      | \$21,319        |
| Griffith        | Trunk Mains (excluding reticulation) | 1963                                     | 300  | mm        | \$22,472.74                     | \$0.00                    | \$0      | \$22,473        |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$19,359.38                     | \$19,359.38               | \$19,359 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 375  | mm        | \$20,601.92                     | \$20,601.92               | \$20,602 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 375  | mm        | \$46,380.70                     | \$0.00                    | \$0      | \$46,381        |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 375  | mm        | \$21,207.37                     | \$21,207.37               | \$21,207 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 375  | mm        | \$40,209.56                     | \$40,209.56               | \$40,210 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$23,527.70                     | \$0.00                    | \$0      | \$23,528        |
| Griffith        | Trunk Mains (excluding reticulation) | 1963                                     | 300  | mm        | \$28,287.57                     | \$0.00                    | \$0      | \$28,288        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$27,945.74                     | \$0.00                    | \$0      | \$27,946        |
| Griffith        | Trunk Mains (excluding reticulation) | 1959                                     | 375  | mm        | \$27,378.51                     | \$0.00                    | \$0      | \$27,379        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$30,032.39                     | \$30,032.39               | \$30,032 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1971                                     | 300  | mm        | \$30,028.11                     | \$30,028.11               | \$30,028 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$37,742.26                     | \$37,742.26               | \$37,742 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,312.37                     | \$32,312.37               | \$32,312 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,316.05                     | \$32,316.05               | \$32,316 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1983                                     | 300  | mm        | \$27,949.42                     | \$27,949.42               | \$27,949 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 300  | mm        | \$27,949.42                     | \$27,949.42               | \$27,949 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$62,355.83                     | \$62,355.83               | \$62,356 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$63,958.34                     | \$63,958.34               | \$63,958 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$63,958.34                     | \$63,958.34               | \$63,958 | \$0             |



Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$67,447.93                     | \$67,447.93               | \$67,448 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$50,142.26                     | \$50,142.26               | \$50,142 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$61,299.96                     | \$61,299.96               | \$61,300 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$59,390.42                     | \$59,390.42               | \$59,390 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$59,390.42                     | \$59,390.42               | \$59,390 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$59,382.93                     | \$59,382.93               | \$59,383 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$60,356.42                     | \$60,356.42               | \$60,356 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$48,155.89                     | \$48,155.89               | \$48,156 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$37,448.53                     | \$37,448.53               | \$37,449 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 450  | mm        | \$56,325.86                     | \$56,325.86               | \$56,326 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$20,751.38                     | \$0.00                    | \$0      | \$20,751        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$21,378.12                     | \$21,378.12               | \$21,378 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 450  | mm        | \$40,727.41                     | \$40,727.41               | \$40,727 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$27,060.90                     | \$27,060.90               | \$27,061 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 450  | mm        | \$40,258.02                     | \$40,258.02               | \$40,258 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$52,938.15                     | \$52,938.15               | \$52,938 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1994                                     | 450  | mm        | \$54,149.01                     | \$54,149.01               | \$54,149 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$51,699.84                     | \$51,699.84               | \$51,700 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$38,217.23                     | \$38,217.23               | \$38,217 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$59,420.37                     | \$59,420.37               | \$59,420 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$61,007.92                     | \$61,007.92               | \$61,008 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$34,059.04                     | \$0.00                    | \$0      | \$34,059        |
| Griffith        | Trunk Mains (excluding reticulation) | 1996                                     | 300  | mm        | \$34,338.07                     | \$34,338.07               | \$34,338 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 300  | mm        | \$30,853.16                     | \$30,853.16               | \$30,853 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1985                                     | 300  | mm        | \$38,975.34                     | \$38,975.34               | \$38,975 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$24,575.19                     | \$0.00                    | \$0      | \$24,575        |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$29,177.07                     | \$29,177.07               | \$29,177 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$29,188.09                     | \$29,188.09               | \$29,188 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$75,052.49                     | \$75,052.49               | \$75,052 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 375  | mm        | \$43,084.99                     | \$43,084.99               | \$43,085 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$34,314.93                     | \$34,314.93               | \$34,315 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1973                                     | 450  | mm        | \$63,516.53                     | \$63,516.53               | \$63,517 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1973                                     | 450  | mm        | \$50,741.33                     | \$50,741.33               | \$50,741 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1973                                     | 450  | mm        | \$59,210.70                     | \$59,210.70               | \$59,211 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$56,378.94                     | \$56,378.94               | \$56,379 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 375  | mm        | \$50,763.27                     | \$50,763.27               | \$50,763 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 375  | mm        | \$51,518.69                     | \$0.00                    | \$0      | \$51,519        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 375  | mm        | \$50,346.67                     | \$0.00                    | \$0      | \$50,347        |
| Griffith        | Trunk Mains (excluding reticulation) | 1964                                     | 375  | mm        | \$50,679.94                     | \$0.00                    | \$0      | \$50,680        |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 375  | mm        | \$38,881.34                     | \$38,881.34               | \$38,881 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$6,439.19                      | \$6,439.19                | \$6,439  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$50,757.71                     | \$50,757.71               | \$50,758 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$14,861.66                     | \$0.00                    | \$0      | \$14,862        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$22,309.65                     | \$0.00                    | \$0      | \$22,310        |



## Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$19,686.84                     | \$19,686.84               | \$19,687 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1964                                     | 450  | mm        | \$36,040.38                     | \$0.00                    | \$0      | \$36,040        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 450  | mm        | \$27,566.60                     | \$27,566.60               | \$27,567 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1963                                     | 300  | mm        | \$23,809.13                     | \$0.00                    | \$0      | \$23,809        |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 300  | mm        | \$23,809.13                     | \$23,809.13               | \$23,809 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$19,453.19                     | \$19,453.19               | \$19,453 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1971                                     | 300  | mm        | \$28,143.56                     | \$28,143.56               | \$28,144 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 300  | mm        | \$30,198.89                     | \$0.00                    | \$0      | \$30,199        |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 375  | mm        | \$31,777.73                     | \$31,777.73               | \$31,778 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 375  | mm        | \$26,223.49                     | \$26,223.49               | \$26,223 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 375  | mm        | \$37,682.24                     | \$37,682.24               | \$37,682 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1994                                     | 375  | mm        | \$17,169.19                     | \$17,169.19               | \$17,169 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1994                                     | 375  | mm        | \$28,028.39                     | \$28,028.39               | \$28,028 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$50,841.02                     | \$50,841.02               | \$50,841 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 375  | mm        | \$21,940.57                     | \$21,940.57               | \$21,941 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1960                                     | 375  | mm        | \$17,508.29                     | \$0.00                    | \$0      | \$17,508        |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 375  | mm        | \$32,160.99                     | \$32,160.99               | \$32,161 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 375  | mm        | \$39,120.88                     | \$39,120.88               | \$39,121 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$47,584.47                     | \$47,584.47               | \$47,584 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1961                                     | 375  | mm        | \$81,780.01                     | \$0.00                    | \$0      | \$81,780        |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 375  | mm        | \$48,702.51                     | \$48,702.51               | \$48,703 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 375  | mm        | \$42,689.86                     | \$0.00                    | \$0      | \$42,690        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 450  | mm        | \$49,147.48                     | \$0.00                    | \$0      | \$49,147        |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$9,549.65                      | \$9,549.65                | \$9,550  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$36,781.38                     | \$36,781.38               | \$36,781 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1970                                     | 450  | mm        | \$1,166.05                      | \$0.00                    | \$0      | \$1,166         |
| Griffith        | Trunk Mains (excluding reticulation) | 1960                                     | 450  | mm        | \$36,601.99                     | \$0.00                    | \$0      | \$36,602        |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 450  | mm        | \$1,787.94                      | \$1,787.94                | \$1,788  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$23,475.91                     | \$23,475.91               | \$23,476 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 450  | mm        | \$35,271.69                     | \$35,271.69               | \$35,272 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 450  | mm        | \$59,958.47                     | \$59,958.47               | \$59,958 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 450  | mm        | \$31,256.11                     | \$31,256.11               | \$31,256 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 450  | mm        | \$14,309.51                     | \$0.00                    | \$0      | \$14,310        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 450  | mm        | \$1,901.55                      | \$0.00                    | \$0      | \$1,902         |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$28,972.44                     | \$28,972.44               | \$28,972 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$36,484.46                     | \$0.00                    | \$0      | \$36,484        |
| Griffith        | Trunk Mains (excluding reticulation) | 1996                                     | 300  | mm        | \$40,223.49                     | \$40,223.49               | \$40,223 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1959                                     | 300  | mm        | \$26,739.82                     | \$0.00                    | \$0      | \$26,740        |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 450  | mm        | \$38,013.15                     | \$0.00                    | \$0      | \$38,013        |
| Griffith        | Trunk Mains (excluding reticulation) | 1971                                     | 450  | mm        | \$45,176.33                     | \$45,176.33               | \$45,176 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 450  | mm        | \$48,836.15                     | \$48,836.15               | \$48,836 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 450  | mm        | \$58,768.00                     | \$58,768.00               | \$58,768 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1996                                     | 450  | mm        | \$54,012.96                     | \$54,012.96               | \$54,013 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 450  | mm        | \$63,332.58                     | \$0.00                    | \$0      | \$63,333        |



Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 450  | mm        | \$54,361.82                     | \$0.00                    | \$0      | \$54,362        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$35,136.52                     | \$35,136.52               | \$35,137 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$34,707.24                     | \$34,707.24               | \$34,707 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1994                                     | 300  | mm        | \$30,624.80                     | \$30,624.80               | \$30,625 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$47,652.49                     | \$47,652.49               | \$47,652 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 375  | mm        | \$56,372.76                     | \$56,372.76               | \$56,373 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 375  | mm        | \$43,697.84                     | \$43,697.84               | \$43,698 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 375  | mm        | \$44,203.31                     | \$0.00                    | \$0      | \$44,203        |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 450  | mm        | \$19,155.30                     | \$19,155.30               | \$19,155 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1971                                     | 300  | mm        | \$3,239.59                      | \$3,239.59                | \$3,240  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 300  | mm        | \$17,805.26                     | \$17,805.26               | \$17,805 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 300  | mm        | \$23,887.31                     | \$23,887.31               | \$23,887 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 300  | mm        | \$28,840.50                     | \$28,840.50               | \$28,841 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 450  | mm        | \$17,074.63                     | \$17,074.63               | \$17,075 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1991                                     | 300  | mm        | \$24,332.60                     | \$24,332.60               | \$24,333 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 300  | mm        | \$34,183.53                     | \$34,183.53               | \$34,184 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$29,493.18                     | \$29,493.18               | \$29,493 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1985                                     | 300  | mm        | \$29,382.91                     | \$29,382.91               | \$29,383 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$26,912.89                     | \$0.00                    | \$0      | \$26,913        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$28,022.93                     | \$28,022.93               | \$28,023 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$34,054.75                     | \$0.00                    | \$0      | \$34,055        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$34,273.68                     | \$34,273.68               | \$34,274 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 375  | mm        | \$30,678.47                     | \$30,678.47               | \$30,678 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1939                                     | 375  | mm        | \$43,070.17                     | \$0.00                    | \$0      | \$43,070        |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 375  | mm        | \$27,172.98                     | \$27,172.98               | \$27,173 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1995                                     | 300  | mm        | \$25,707.23                     | \$25,707.23               | \$25,707 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1996                                     | 300  | mm        | \$26,277.01                     | \$26,277.01               | \$26,277 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$47,630.49                     | \$47,630.49               | \$47,630 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$34,441.76                     | \$34,441.76               | \$34,442 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 375  | mm        | \$35,554.83                     | \$35,554.83               | \$35,555 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 375  | mm        | \$38,775.32                     | \$38,775.32               | \$38,775 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$32,509.81                     | \$32,509.81               | \$32,510 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$43,705.92                     | \$43,705.92               | \$43,706 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1981                                     | 450  | mm        | \$45,386.23                     | \$45,386.23               | \$45,386 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1970                                     | 450  | mm        | \$38,832.43                     | \$0.00                    | \$0      | \$38,832        |
| Griffith        | Trunk Mains (excluding reticulation) | 1970                                     | 450  | mm        | \$13,771.34                     | \$0.00                    | \$0      | \$13,771        |
| Griffith        | Trunk Mains (excluding reticulation) | 1970                                     | 450  | mm        | \$35,956.17                     | \$0.00                    | \$0      | \$35,956        |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$49,141.50                     | \$49,141.50               | \$49,141 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$37,664.20                     | \$37,664.20               | \$37,664 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 450  | mm        | \$45,667.28                     | \$45,667.28               | \$45,667 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 450  | mm        | \$46,946.94                     | \$0.00                    | \$0      | \$46,947        |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 450  | mm        | \$49,888.97                     | \$49,888.97               | \$49,889 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1994                                     | 375  | mm        | \$50,679.94                     | \$50,679.94               | \$50,680 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 375  | mm        | \$50,879.91                     | \$0.00                    | \$0      | \$50,880        |



## Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$44,549.75                     | \$44,549.75               | \$44,550 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$52,381.29                     | \$52,381.29               | \$52,381 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$52,388.78                     | \$52,388.78               | \$52,389 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1977                                     | 450  | mm        | \$53,795.27                     | \$53,795.27               | \$53,795 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$51,285.10                     | \$51,285.10               | \$51,285 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1974                                     | 450  | mm        | \$60,356.42                     | \$60,356.42               | \$60,356 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1982                                     | 450  | mm        | \$41,208.61                     | \$41,208.61               | \$41,209 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 450  | mm        | \$49,659.27                     | \$49,659.27               | \$49,659 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1976                                     | 450  | mm        | \$47,482.43                     | \$47,482.43               | \$47,482 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1962                                     | 300  | mm        | \$42,502.96                     | \$0.00                    | \$0      | \$42,503        |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$28,305.79                     | \$28,305.79               | \$28,306 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$34,277.97                     | \$34,277.97               | \$34,278 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 450  | mm        | \$53,876.91                     | \$53,876.91               | \$53,877 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$17,356.28                     | \$17,356.28               | \$17,356 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$5,517.10                      | \$5,517.10                | \$5,517  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$12,339.06                     | \$12,339.06               | \$12,339 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$28,809.51                     | \$28,809.51               | \$28,810 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$7,582.80                      | \$7,582.80                | \$7,583  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$11,777.69                     | \$11,777.69               | \$11,778 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$16,097.98                     | \$16,097.98               | \$16,098 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$33,348.90                     | \$33,348.90               | \$33,349 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,937.23                     | \$32,937.23               | \$32,937 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$43,931.14                     | \$43,931.14               | \$43,931 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$43,931.14                     | \$43,931.14               | \$43,931 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$43,925.58                     | \$43,925.58               | \$43,926 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$22,575.66                     | \$22,575.66               | \$22,576 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$36,238.66                     | \$36,238.66               | \$36,239 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$29,242.16                     | \$29,242.16               | \$29,242 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$16,169.82                     | \$16,169.82               | \$16,170 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$18,899.71                     | \$18,899.71               | \$18,900 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$28,656.02                     | \$28,656.02               | \$28,656 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$7,639.31                      | \$7,639.31                | \$7,639  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$5,922.58                      | \$5,922.58                | \$5,923  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$2,861.22                      | \$2,861.22                | \$2,861  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$8,596.18                      | \$8,596.18                | \$8,596  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$5,738.08                      | \$5,738.08                | \$5,738  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$27,230.09                     | \$27,230.09               | \$27,230 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$8,980.80                      | \$8,980.80                | \$8,981  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$12,820.78                     | \$12,820.78               | \$12,821 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$28,534.06                     | \$28,534.06               | \$28,534 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$22,292.53                     | \$22,292.53               | \$22,293 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$19,897.23                     | \$19,897.23               | \$19,897 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$17,161.08                     | \$17,161.08               | \$17,161 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$20,284.98                     | \$20,284.98               | \$20,285 | \$0             |



Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|----------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$10,184.71                     | \$10,184.71               | \$10,185 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$4,052.61                      | \$4,052.61                | \$4,053  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$19,672.08                     | \$19,672.08               | \$19,672 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$6,579.25                      | \$6,579.25                | \$6,579  | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$18,708.00                     | \$18,708.00               | \$18,708 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,837.92                     | \$24,837.92               | \$24,838 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$11,266.65                     | \$11,266.65               | \$11,267 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$21,820.28                     | \$21,820.28               | \$21,820 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$15,660.11                     | \$15,660.11               | \$15,660 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,828.54                     | \$24,828.54               | \$24,829 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$25,100.59                     | \$25,100.59               | \$25,101 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,844.17                     | \$24,844.17               | \$24,844 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$12,317.34                     | \$12,317.34               | \$12,317 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$28,993.73                     | \$28,993.73               | \$28,994 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$934.98                        | \$934.98                  | \$935    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$42,820.22                     | \$42,820.22               | \$42,820 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$33,622.05                     | \$33,622.05               | \$33,622 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$33,622.05                     | \$33,622.05               | \$33,622 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$13,191.76                     | \$13,191.76               | \$13,192 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$11,220.10                     | \$11,220.10               | \$11,220 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$38,502.67                     | \$38,502.67               | \$38,503 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$43,931.14                     | \$43,931.14               | \$43,931 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$35,274.64                     | \$35,274.64               | \$35,275 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$33,930.85                     | \$33,930.85               | \$33,931 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$26,159.39                     | \$26,159.39               | \$26,159 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$17,935.30                     | \$17,935.30               | \$17,935 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$17,767.88                     | \$17,767.88               | \$17,768 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$39,369.22                     | \$39,369.22               | \$39,369 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$53,157.68                     | \$53,157.68               | \$53,158 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$51,371.87                     | \$51,371.87               | \$51,372 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$29,199.13                     | \$29,199.13               | \$29,199 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$38,527.01                     | \$38,527.01               | \$38,527 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$26,418.24                     | \$26,418.24               | \$26,418 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 375  | mm        | \$38,507.54                     | \$38,507.54               | \$38,508 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,926.20                     | \$32,926.20               | \$32,926 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,933.56                     | \$32,933.56               | \$32,934 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$22,770.47                     | \$22,770.47               | \$22,770 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$19,293.33                     | \$19,293.33               | \$19,293 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$29,371.88                     | \$29,371.88               | \$29,372 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$26,056.47                     | \$26,056.47               | \$26,056 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,248.07                     | \$24,248.07               | \$24,248 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$30,503.97                     | \$30,503.97               | \$30,504 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$30,687.76                     | \$30,687.76               | \$30,688 | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$31,239.10                     | \$31,239.10               | \$31,239 | \$0             |



## Griffith City Council

## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType                            | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith    | assets excluded |
|-----------------|--------------------------------------|--|------|-----------|---------------------------------|---------------------------|-------------|-----------------|
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 300  | mm        | \$20,054.18                     | \$20,054.18               | \$20,054    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$12,307.95                     | \$12,307.95               | \$12,308    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,837.92                     | \$24,837.92               | \$24,838    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,997.40                     | \$24,997.40               | \$24,997    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$25,041.17                     | \$25,041.17               | \$25,041    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$24,794.15                     | \$24,794.15               | \$24,794    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$32,837.99                     | \$32,837.99               | \$32,838    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$6,876.32                      | \$6,876.32                | \$6,876     | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$33,951.71                     | \$33,951.71               | \$33,952    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1975                                     | 300  | mm        | \$29,066.80                     | \$29,066.80               | \$29,067    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1990                                     | 375  | mm        | \$2,986.30                      | \$2,986.30                | \$2,986     | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 600  | mm        | \$12,223.21                     | \$12,223.21               | \$12,223    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2000                                     | 450  | mm        | \$1,372.87                      | \$1,372.87                | \$1,373     | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 2002                                     | 300  | mm        | \$50.03                         | \$50.03                   | \$50        | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$3,637.50                      | \$3,637.50                | \$3,638     | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$37,310.87                     | \$37,310.87               | \$37,311    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1980                                     | 300  | mm        | \$31,900.08                     | \$31,900.08               | \$31,900    | \$0             |
| Griffith        | Trunk Mains (excluding reticulation) | 1971                                     | 300  | mm        | \$19,506.46                     | \$19,506.46               | \$19,506    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1991                                     | 300  | mm        | \$1,819.93                      | \$1,819.93                | \$1,820     | \$0             |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 600  | mm        | \$28,090.98                     | \$28,090.98               | \$28,091    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 600  | mm        | \$1,434,956.48                  | \$1,434,956.48            | \$1,434,956 | \$0             |
| Griffith        | Sewer Rising Mains                   | 1958                                     | 200  | mm        | \$22,969.46                     | \$0.00                    | \$0         | \$22,969        |
| Griffith        | Sewer Rising Mains                   | 1991                                     | 300  | mm        | \$605,175.30                    | \$605,175.30              | \$605,175   | \$0             |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 500  | mm        | \$156,114.22                    | \$156,114.22              | \$156,114   | \$0             |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 300  | mm        | \$1,128.07                      | \$1,128.07                | \$1,128     | \$0             |
| Griffith        | Sewer Rising Mains                   | 1958                                     | 200  | mm        | \$128,363.34                    | \$0.00                    | \$0         | \$128,363       |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 500  | mm        | \$641,995.53                    | \$641,995.53              | \$641,996   | \$0             |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 450  | mm        | \$1,165,314.45                  | \$0.00                    | \$0         | \$1,165,314     |
| Griffith        | Sewer Rising Mains                   | 1975                                     | 150  | mm        | \$23,832.83                     | \$23,832.83               | \$23,833    | \$0             |
| Griffith        | Sewer Rising Mains                   | 2002                                     | 225  | mm        | \$35,415.93                     | \$35,415.93               | \$35,416    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 300  | mm        | \$12,359.99                     | \$0.00                    | \$0         | \$12,360        |
| Griffith        | Sewer Rising Mains                   | 1958                                     | 200  | mm        | \$131,565.10                    | \$0.00                    | \$0         | \$131,565       |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 300  | mm        | \$12,823.46                     | \$0.00                    | \$0         | \$12,823        |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 300  | mm        | \$279.25                        | \$0.00                    | \$0         | \$279           |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 300  | mm        | \$335,373.65                    | \$0.00                    | \$0         | \$335,374       |
| Griffith        | Sewer Rising Mains                   | 1970                                     | 300  | mm        | \$336,188.79                    | \$0.00                    | \$0         | \$336,189       |
| Griffith        | Sewer Rising Mains                   | 1980                                     | 600  | mm        | \$482,017.14                    | \$482,017.14              | \$482,017   | \$0             |
| Griffith        | Sewer Rising Mains                   | 1991                                     | 600  | mm        | \$1,787,097.54                  | \$1,787,097.54            | \$1,787,098 | \$0             |
| Griffith        | Sewer Rising Mains                   | 2007                                     | 450  | mm        | \$38,745.75                     | \$38,745.75               | \$38,746    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1975                                     | 200  | mm        | \$96,547.78                     | \$96,547.78               | \$96,548    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1975                                     | 195  | mm        | \$48,090.28                     | \$48,090.28               | \$48,090    | \$0             |
| Griffith        | Sewer Rising Mains                   | 1975                                     | 300  | mm        | \$489,121.10                    | \$489,121.10              | \$489,121   | \$0             |
| Griffith        | Sewer Rising Mains                   | 2005                                     | 180  | mm        | \$49,911.08                     | \$49,911.08               | \$49,911    | \$0             |
| Griffith        | Sewer Rising Mains                   | 2005                                     | 160  | mm        | \$27,532.31                     | \$27,532.31               | \$27,532    | \$0             |



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## 2012 DSP Background Document for Sewerage

| DSP Area Served | AssetType          | ConstructionDate / Year of Commissioning | Size | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith  | assets excluded |
|-----------------|--------------------|--|------|-----------|---------------------------------|---------------------------|-----------|-----------------|
| Griffith        | Sewer Rising Mains | 2002                                     | 100  | mm        | \$56,511.29                     | \$56,511.29               | \$56,511  | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 180  | mm        | \$31,643.25                     | \$31,643.25               | \$31,643  | \$0             |
| Griffith        | Sewer Rising Mains | 1990                                     | 150  | mm        | \$4,715.22                      | \$4,715.22                | \$4,715   | \$0             |
| Griffith        | Sewer Rising Mains | 1995                                     | 100  | mm        | \$82,841.78                     | \$82,841.78               | \$82,842  | \$0             |
| Griffith        | Sewer Rising Mains | 1981                                     | 195  | mm        | \$186,997.58                    | \$186,997.58              | \$186,998 | \$0             |
| Griffith        | Sewer Rising Mains | 1999                                     | 150  | mm        | \$81,579.01                     | \$81,579.01               | \$81,579  | \$0             |
| Griffith        | Sewer Rising Mains | 1977                                     | 150  | mm        | \$12,644.68                     | \$12,644.68               | \$12,645  | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 100  | mm        | \$48,457.84                     | \$48,457.84               | \$48,458  | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 50   | mm        | \$23,504.24                     | \$23,504.24               | \$23,504  | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 150  | mm        | \$746,857.46                    | \$746,857.46              | \$746,857 | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 180  | mm        | \$168,098.99                    | \$168,098.99              | \$168,099 | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 50   | mm        | \$39,003.88                     | \$39,003.88               | \$39,004  | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 50   | mm        | \$16,538.71                     | \$16,538.71               | \$16,539  | \$0             |
| Griffith        | Sewer Rising Mains | 1995                                     | 100  | mm        | \$93,034.33                     | \$93,034.33               | \$93,034  | \$0             |
| Griffith        | Sewer Rising Mains | 1998                                     | 100  | mm        | \$18,967.85                     | \$18,967.85               | \$18,968  | \$0             |
| Griffith        | Sewer Rising Mains | 1958                                     | 200  | mm        | \$1,188.39                      | \$0.00                    | \$0       | \$1,188         |
| Griffith        | Sewer Rising Mains | 1991                                     | 225  | mm        | \$797,161.22                    | \$797,161.22              | \$797,161 | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 100  | mm        | \$28,413.37                     | \$28,413.37               | \$28,413  | \$0             |
| Griffith        | Sewer Rising Mains | 1975                                     | 80   | mm        | \$25,132.60                     | \$25,132.60               | \$25,133  | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 300  | mm        | \$799,269.43                    | \$799,269.43              | \$799,269 | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 250  | mm        | \$271.01                        | \$271.01                  | \$271     | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 250  | mm        | \$97,169.54                     | \$97,169.54               | \$97,170  | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 250  | mm        | \$666,003.14                    | \$666,003.14              | \$666,003 | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 300  | mm        | \$227,446.92                    | \$227,446.92              | \$227,447 | \$0             |
| Griffith        | Sewer Rising Mains | 1991                                     | 225  | mm        | \$634,907.04                    | \$634,907.04              | \$634,907 | \$0             |
| Griffith        | Sewer Rising Mains | 1981                                     | 200  | mm        | \$1,102.95                      | \$1,102.95                | \$1,103   | \$0             |
| Griffith        | Sewer Rising Mains | 2005                                     | 180  | mm        | \$116,181.41                    | \$116,181.41              | \$116,181 | \$0             |
| Griffith        | Sewer Rising Mains | 2008                                     | 90   | mm        | \$114,073.69                    | \$114,073.69              | \$114,074 | \$0             |
| Griffith        | Sewer Rising Mains | 2005                                     | 180  | mm        | \$72,908.12                     | \$72,908.12               | \$72,908  | \$0             |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$7,971.49                      | \$0.00                    | \$0       | \$7,971         |
| Griffith        | Sewer Rising Mains | 2007                                     | 225  | mm        | \$35,415.93                     | \$35,415.93               | \$35,416  | \$0             |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$20,795.18                     | \$0.00                    | \$0       | \$20,795        |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$14,672.60                     | \$0.00                    | \$0       | \$14,673        |
| Griffith        | Sewer Rising Mains | 1980                                     | 600  | mm        | \$11,852.88                     | \$11,852.88               | \$11,853  | \$0             |
| Griffith        | Sewer Rising Mains | 1980                                     | 300  | mm        | \$2,218.26                      | \$2,218.26                | \$2,218   | \$0             |
| Griffith        | Sewer Rising Mains | 1980                                     | 300  | mm        | \$1,480.93                      | \$1,480.93                | \$1,481   | \$0             |
| Griffith        | Sewer Rising Mains | 1958                                     | 200  | mm        | \$129,592.44                    | \$0.00                    | \$0       | \$129,592       |
| Griffith        | Sewer Rising Mains | 1980                                     | 300  | mm        | \$2,707.72                      | \$2,707.72                | \$2,708   | \$0             |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$1,606.44                      | \$0.00                    | \$0       | \$1,606         |
| Griffith        | Sewer Rising Mains | 1958                                     | 300  | mm        | \$771.84                        | \$0.00                    | \$0       | \$772           |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$1,666.05                      | \$0.00                    | \$0       | \$1,666         |
| Griffith        | Sewer Rising Mains | 1958                                     | 300  | mm        | \$1,060.50                      | \$0.00                    | \$0       | \$1,060         |
| Griffith        | Sewer Rising Mains | 1970                                     | 300  | mm        | \$2,127.27                      | \$0.00                    | \$0       | \$2,127         |
| Griffith        | Sewer Rising Mains | 2008                                     | 110  | mm        | \$17,984.38                     | \$17,984.38               | \$17,984  | \$0             |



Griffith City Council

2012 DSP Background Document for Sewerage

Existing Assets

| DSP Area Served | AssetType               | ConstructionDate / Year of Commissioning | Size  | SizeUnits | CurrentReplacem entCost 2010 \$ | Assets excluding pre 1970 | Griffith      | assets excluded |
|-----------------|-------------------------|--|-------|-----------|---------------------------------|---------------------------|---------------|-----------------|
| Griffith        | Sewer Rising Mains      | 2008                                     | 110   | mm        | \$114.89                        | \$114.89                  | \$115         | \$0             |
| Griffith        | Sewer Rising Mains      | 1991                                     | 225   | mm        | \$656,919.89                    | \$656,919.89              | \$656,920     | \$0             |
| Griffith        | Sewer Rising Mains      | 2000                                     | 225   | mm        | \$19,781.69                     | \$19,781.69               | \$19,782      | \$0             |
| Griffith        | Sewer Rising Mains      | 1958                                     | 200   | mm        | \$23,539.52                     | \$0.00                    | \$0           | \$23,540        |
| Griffith        | Sewer Rising Mains      | 1980                                     | 600   | mm        | \$670,307.32                    | \$670,307.32              | \$670,307     | \$0             |
| Griffith        | Sewer Rising Mains      | 1981                                     | 200   | mm        | \$248,489.47                    | \$248,489.47              | \$248,489     | \$0             |
| Griffith        | Sewer Rising Mains      | 1981                                     | 195   | mm        | \$640,917.04                    | \$640,917.04              | \$640,917     | \$0             |
| Griffith        | Sewer Rising Mains      | 1981                                     | 100   | mm        | \$41,533.13                     | \$41,533.13               | \$41,533      | \$0             |
| Griffith        | Sewer Rising Mains      | 1991                                     | 150   | mm        | \$355,394.05                    | \$355,394.05              | \$355,394     | \$0             |
| Griffith        | Sewage Treatment Plant  | 2010                                     | 37500 | EP        | \$33,479,000.00                 | \$33,479,000.00           | \$33,479,000  | \$0             |
| Griffith        | Sewage Treatment Plant  | 1983                                     | 1500  | EP        | \$3,613,375.00                  | \$3,613,375.00            | \$3,613,375   | \$0             |
| Griffith        | Sewage Treatment Plant  | 1991                                     | 310   | EP        | \$1,003,305.00                  | \$1,003,305.00            | \$1,003,305   | \$0             |
| Griffith        | Sewage Pumping Stations | 1938                                     | 39200 | EP        | \$922,281.00                    | \$0.00                    | \$0           | \$922,281       |
| Griffith        | Sewage Pumping Stations | 1958                                     | 39200 | EP        | \$946,018.50                    | \$0.00                    | \$0           | \$946,019       |
| Griffith        | Sewage Pumping Stations | 1961                                     | 39200 | EP        | \$736,601.00                    | \$0.00                    | \$0           | \$736,601       |
| Griffith        | Sewage Pumping Stations | 1977                                     | 39200 | EP        | \$1,885,496.00                  | \$1,885,496.00            | \$1,885,496   | \$0             |
| Griffith        | Sewage Pumping Stations | 1981                                     | 39200 | EP        | \$234,210.00                    | \$234,210.00              | \$234,210     | \$0             |
| Griffith        | Sewage Pumping Stations | 1984                                     | 39200 | EP        | \$168,272.50                    | \$168,272.50              | \$168,273     | \$0             |
| Griffith        | Sewage Pumping Stations | 1977                                     | 39200 | EP        | \$100,647.00                    | \$100,647.00              | \$100,647     | \$0             |
| Griffith        | Sewage Pumping Stations | 1994                                     | 39200 | EP        | \$112,674.00                    | \$112,674.00              | \$112,674     | \$0             |
| Griffith        | Sewage Pumping Stations | 1994                                     | 39200 | EP        | \$174,075.00                    | \$174,075.00              | \$174,075     | \$0             |
| Griffith        | Sewage Pumping Stations | 1998                                     | 39200 | EP        | \$184,625.00                    | \$184,625.00              | \$184,625     | \$0             |
| Griffith        | Sewage Pumping Stations | 1998                                     | 39200 | EP        | \$225,137.00                    | \$225,137.00              | \$225,137     | \$0             |
| Griffith        | Sewage Pumping Stations | 2000                                     | 39200 | EP        | \$174,919.00                    | \$174,919.00              | \$174,919     | \$0             |
| Griffith        | Sewage Pumping Stations | 2004                                     | 39200 | EP        | \$183,359.00                    | \$183,359.00              | \$183,359     | \$0             |
| Griffith        | Sewage Pumping Stations | 2004                                     | 39200 | EP        | \$155,929.00                    | \$155,929.00              | \$155,929     | \$0             |
| Griffith        | Sewage Pumping Stations | 2008                                     | 39200 | EP        | \$125,334.00                    | \$125,334.00              | \$125,334     | \$0             |
| Griffith        | Sewage Pumping Stations | 2010                                     | 39200 | EP        | \$133,352.00                    | \$133,352.00              | \$133,352     | \$0             |
| Griffith        | Sewage Pumping Stations | 2010                                     | 39200 | EP        | \$743,775.00                    | \$743,775.00              | \$743,775     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$229,779.00                    | \$229,779.00              | \$229,779     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$104,023.00                    | \$104,023.00              | \$104,023     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$125,123.00                    | \$125,123.00              | \$125,123     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$111,619.00                    | \$111,619.00              | \$111,619     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$226,614.00                    | \$226,614.00              | \$226,614     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$91,785.00                     | \$91,785.00               | \$91,785      | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$99,170.00                     | \$99,170.00               | \$99,170      | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$89,675.00                     | \$89,675.00               | \$89,675      | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 39200 | EP        | \$96,005.00                     | \$96,005.00               | \$96,005      | \$0             |
| Griffith        | Sewage Pumping Stations | 1983                                     | 2530  | EP        | \$151,709.00                    | \$151,709.00              | \$151,709     | \$0             |
| Griffith        | Sewage Pumping Stations | 1983                                     | 2530  | EP        | \$118,582.00                    | \$118,582.00              | \$118,582     | \$0             |
| Griffith        | Sewage Pumping Stations | 2000                                     | 2530  | EP        | \$149,599.00                    | \$149,599.00              | \$149,599     | \$0             |
| Griffith        | Sewage Pumping Stations | 1991                                     | 414   | EP        | \$127,655.00                    | \$127,655.00              | \$127,655     | \$0             |
|                 |                         |  |       |           | \$ 72,328,500                   | \$ 65,688,502             | \$ 65,688,502 | \$ 6,639,997    |



Table 2: GCC Sewerage 30 years Capital Works Program

| Project   | Improved LOS | Growth | Renewals | Project Total     | 2010/11        | 2011/12        | 2012/13        | 2013/14          | 2014/15          | 2015/16          | 2016/17          | 2017/18          | 2018/19          | 2019/20          | 2020/21          |
|---|--------------|--------|----------|-------------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Griffith</b>   |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Griffith WRP Construction -Stage 1 - this is in the existing assets | 0%           | 100%   | 0%       | 0                 | 0              | 0              |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Griffith WRP - Landscaping/ Weather                                 | 0%           | 100%   | 0%       | 45,000            |                | 35,000         | 10,000         |                  |                  |                  |                  |                  |                  |                  |                  |
| Griffith WRP Construction - Stage 2                                 | 0%           | 100%   | 0%       | 7,000,000         |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Griffith WRP Membrane Replacement                                   | 0%           | 0%     | 100%     | 5,500,000         |                |                |                |                  |                  |                  |                  |                  |                  |                  | 2,500,000        |
| Replacement of GWRP Elec /Mech Equipment                            | 0%           | 0%     | 100%     | 1,090,000         |                |                |                |                  | 50,000           |                  | 50,000           |                  | 50,000           |                  |                  |
| GWRP Effluent Reuse Project   | 0%           | 100%   | 0%       | 850,000           |                |                | 100,000        | 250,000          | 250,000          | 250,000          |                  |                  |                  |                  |                  |
| Biosolids Strategy  | 0%           | 100%   | 0%       | 40,000            |                |                | 40,000         |                  |                  |                  |                  |                  |                  |                  |                  |
| Griffith WRP - Various  | 50%          | 0%     | 50%      | 260,000           |                |                |                |                  | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           |
| Upgrade of Pump Stations (civil & electrical)                       | 20%          | 0%     | 80%      | 1,740,000         |                | 30,000         | 200,000        | 30,000           | 30,000           | 30,000           | 30,000           | 30,000           | 100,000          | 100,000          | 30,000           |
| Pump Station G21 (E of Murrumb Av)                                  | 0%           | 100%   | 0%       | 430,000           |                |                |                |                  |                  | 430,000          |                  |                  |                  |                  |                  |
| Pump Station G27 ( Farm 9 Collina)                                  | 0%           | 100%   | 0%       | 387,000           |                |                |                | 387,000          |                  |                  |                  |                  |                  |                  |                  |
| Pump Station G28 ( Farm 12 Collina)                                 | 0%           | 100%   | 0%       | 446,000           |                |                |                |                  | 0                |                  |                  |                  |                  |                  |                  |
| Pump Station G30 (Gronn Rd area)                                    | 0%           | 100%   | 0%       | 374,000           |                |                |                |                  |                  |                  |                  |                  |                  | 374,000          |                  |
| Pump Station G32 ( S of GWRP)                                       | 0%           | 100%   | 0%       | 1,112,000         |                |                |                | 0                |                  |                  |                  | 500,000          | 612,000          |                  |                  |
| Lakes Rd - Betts Land   | 0%           | 100%   | 0%       | 300,000           |                | 0              |                |                  |                  |                  |                  |                  |                  | 300,000          |                  |
| Kidman Way Hwy Corridor (South)                                     | 0%           | 100%   | 0%       | 315,000           |                |                |                |                  | 315,000          |                  |                  |                  |                  |                  |                  |
| <b>Bilbul</b>   |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Pump Station PSB2 (Bilbul)  | 0%           | 100%   | 0%       | 384,000           |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Yenda</b>  |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Upgrade of Yenda S.T.P equipment (Yenda)                            | 0%           | 0%     | 100%     | 90,000            |                |                |                |                  |                  |                  |                  |                  |                  | 30,000           |                  |
| Golf Course Rd Area Sewer (Yenda)                                   | 0%           | 100%   | 0%       | 143,000           |                |                |                |                  |                  |                  |                  | 143,000          |                  |                  |                  |
| Curan Rd Area Sewer (Yenda)   | 0%           | 100%   | 0%       | 300,000           |                |                |                |                  |                  |                  | 300,000          |                  |                  |                  |                  |
| <b>Lake Wyangan &amp; Nericon</b>                                   |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Sewering Lake Wyangan Village                                       | 100%         | 0%     | 0%       | 680,000           |                | 0              |                |                  | 400,000          | 280,000          |                  |                  |                  |                  |                  |
| Sewering Nericon Village  | 100%         | 0%     | 0%       | 977,000           |                |                |                |                  |                  |                  | 350,000          | 627,000          |                  |                  |                  |
| Rising Main (G7 To GWRP)  | 0%           | 100%   | 0%       | 850,000           |                |                |                |                  |                  |                  |                  |                  | 850,000          |                  |                  |
| Pump Station ( LW2 Druitt Rd )                                      | 0%           | 100%   | 0%       | 450,000           |                |                |                |                  |                  |                  |                  |                  |                  | 450,000          |                  |
| <b>Tharboqang</b>   |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Sewerage for Tharboqang village                                     | 100%         | 0%     | 0%       | 761,000           |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Hanwood</b>  |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Pump Station HA7  | 0%           | 100%   | 0%       | 300,000           |                |                |                |                  |                  |                  |                  |                  | 300,000          |                  |                  |
| <b>Mains Renewals</b>   |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Sewers Retic Renewals   | 0%           | 0%     | 100%     | 11,574,000        | 324,000        | 350,000        | 300,000        | 300,000          | 300,000          | 300,000          | 300,000          | 300,000          | 300,000          | 300,000          | 300,000          |
| <b>Miscellaneous</b>  |              |        |          |                   |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |
| Sundry Tools  | 40%          | 10%    | 50%      | 300,000           | 10,000         | 10,000         | 10,000         | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           | 10,000           |
| Upgrade of SCADA & Telemetry Systems                                | 100%         | 0%     | 0%       | 700,000           | 10,000         | 10,000         | 10,000         | 10,000           | 50,000           | 10,000           | 10,000           | 10,000           | 10,000           | 100,000          | 10,000           |
| Plant & Equipment   | 20%          | 0%     | 80%      | 3,097,000         | 290,000        | 151,000        | 13,000         | 113,000          | 102,000          | 34,000           | 162,000          | 119,000          | 13,000           | 100,000          | 100,000          |
| Salaries Capitalised  | 25%          | 50%    | 25%      | 1,824,000         | 74,000         | 70,000         | 60,000         | 60,000           | 60,000           | 60,000           | 60,000           | 60,000           | 60,000           | 60,000           | 60,000           |
| Capital - various   | 90%          | 0%     | 10%      | 1,469,000         | 19,000         | 50,000         | 50,000         | 50,000           | 50,000           | 50,000           | 50,000           | 50,000           | 50,000           | 50,000           | 50,000           |
|   |              |        |          | <b>43,788,000</b> | <b>727,000</b> | <b>706,000</b> | <b>793,000</b> | <b>1,210,000</b> | <b>1,627,000</b> | <b>1,464,000</b> | <b>1,332,000</b> | <b>1,859,000</b> | <b>2,365,000</b> | <b>1,884,000</b> | <b>3,070,000</b> |

|                    | \$'000    |     |     |     |     |     |     |     |     |       |       |       |  |  |  |
|--------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|--|--|--|
| Total Improved LOS | \$ 6,114  | 108 | 113 | 117 | 103 | 545 | 372 | 467 | 736 | 102   | 209   | 105   |  |  |  |
| Total Growth Works | \$ 14,668 | 38  | 71  | 181 | 668 | 596 | 711 | 331 | 674 | 1,793 | 1,155 | 31    |  |  |  |
| Total Renewals     | \$ 23,007 | 581 | 522 | 495 | 439 | 486 | 381 | 534 | 449 | 470   | 520   | 2,934 |  |  |  |



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| 2021/22   | 2022/23 | 2023/24   | 2024/25   | 2025/26   | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31   | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40   |
|-----------|---------|-----------|-----------|-----------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         |           |           | 7,000,000 |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
| 100,000   |         |           | 100,000   |           | 120,000 | 120,000 |         |         | 300,000   |         |         |         | 120,000 |         |         | 120,000 |         | 140,000   |
|           |         |           |           |           |         |         |         |         | 120,000   |         |         |         |         |         |         |         |         |           |
| 10,000    | 10,000  | 10,000    | 10,000    | 10,000    | 10,000  | 10,000  | 10,000  | 10,000  | 10,000    | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000    |
| 30,000    | 30,000  | 100,000   | 100,000   | 30,000    | 30,000  | 30,000  | 100,000 | 100,000 | 30,000    | 30,000  | 30,000  | 100,000 | 100,000 | 30,000  | 30,000  | 30,000  | 100,000 | 100,000   |
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         | 446,000   |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
| 384,000   |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         |           |           |           |         |         |         |         | 30,000    |         |         |         |         |         |         |         |         | 30,000    |
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
| 340,000   | 421,000 |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
|           |         |           |           |           |         |         |         |         |           |         |         |         |         |         |         |         |         |           |
| 300,000   | 300,000 | 300,000   | 400,000   | 400,000   | 400,000 | 400,000 | 400,000 | 400,000 | 400,000   | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000   |
| 10,000    | 10,000  | 10,000    | 10,000    | 10,000    | 10,000  | 10,000  | 10,000  | 10,000  | 10,000    | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000  | 10,000    |
| 10,000    | 10,000  | 10,000    | 200,000   | 10,000    | 10,000  | 10,000  | 10,000  | 10,000  | 10,000    | 10,000  | 10,000  | 10,000  | 50,000  | 10,000  | 10,000  | 10,000  | 10,000  | 50,000    |
| 100,000   | 100,000 | 100,000   | 100,000   | 100,000   | 100,000 | 100,000 | 100,000 | 100,000 | 100,000   | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000   |
| 60,000    | 60,000  | 60,000    | 60,000    | 60,000    | 60,000  | 60,000  | 60,000  | 60,000  | 60,000    | 60,000  | 60,000  | 60,000  | 60,000  | 60,000  | 60,000  | 60,000  | 60,000  | 60,000    |
| 50,000    | 50,000  | 50,000    | 50,000    | 50,000    | 50,000  | 50,000  | 50,000  | 50,000  | 50,000    | 50,000  | 50,000  | 50,000  | 50,000  | 50,000  | 50,000  | 50,000  | 50,000  | 50,000    |
| 1,394,000 | 991,000 | 1,086,000 | 1,030,000 | 7,670,000 | 790,000 | 790,000 | 740,000 | 770,000 | 3,790,000 | 770,000 | 770,000 | 960,000 | 880,000 | 770,000 | 890,000 | 770,000 | 840,000 | 1,050,000 |
| 445       | 526     | 119       | 309       | 105       | 105     | 105     | 119     | 119     | 105       | 105     | 105     | 119     | 159     | 105     | 105     | 105     | 119     | 159       |
| 415       | 31      | 477       | 31        | 7,031     | 31      | 31      | 31      | 31      | 31        | 31      | 31      | 31      | 31      | 31      | 31      | 31      | 31      | 31        |
| 534       | 434     | 490       | 690       | 534       | 654     | 654     | 590     | 620     | 3,654     | 634     | 634     | 810     | 690     | 634     | 754     | 634     | 690     | 860       |



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Table 3: GCC Sewerage Assets Capacities

| Component                                | Existing Capacity <sup>2</sup><br>(Native Units) | Future Capacity | Total Capacity | Conversion<br>(occupancy rate) | Unit    | Capacity of Assets in 30 years (ET) |
|--|--|-----------------|----------------|--------------------------------|---------|-------------------------------------|
| <b>Griffith</b>                          |  |                 |                |                                |         |                                     |
| Treatment Plant                          | 37,500   | 12,500          | 50,000         |                                |         |                                     |
| <b>Bilbul</b>                            |  |                 |                |                                |         |                                     |
| Treatment Plant                          | 310  |                 | 310            |                                |         |                                     |
| <b>Yenda</b>                             |  |                 |                |                                |         |                                     |
| Treatment Plant                          | 1,500  |                 | 1,500          |                                |         |                                     |
| <b>Total treatment plants capacities</b> |  |                 |                |                                |         |                                     |
|  |  |                 | 51,810         | 2.3                            | EP / ET | 22,526                              |



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# Capital Charge Calculation

| Return on Investment Factor Approach |      |       |
|--------------------------------------|------|-------|
| ROI Before                           | 1996 | 3%    |
| ROI after                            |      | 7%    |
| Cap                                  | 30   | years |
| Year when capacity is taken up       | 2040 |       |

Table 4: GCC Sewerage Capital Charges Calculations

| Asset                       | Year of Commissioning | Capital Cost (\$'000) | Base Year for PV | PV capital cost | Discount Rate | Take-up period | ROI Factor | Capital Charge + ROI (09/10) | Capacity (ETs) | Capital Charge/ET (09/10) |
|-----------------------------|-----------------------|-----------------------|------------------|-----------------|---------------|----------------|------------|------------------------------|----------------|---------------------------|
| <b>GRIFFITH</b>             |                       |                       |                  |                 |               |                |            |                              |                |                           |
| <b>Existing (pre 1996)</b>  |                       |                       |                  |                 |               |                |            |                              |                |                           |
| Assets commissioned in 1970 | 1970                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1971 | 1971                  | \$126,094             | 2010             | \$126,094       | 3%            | 30             | 1.5        | \$187,375                    |                |                           |
| Assets commissioned in 1972 | 1972                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1973 | 1973                  | \$173,469             | 2010             | \$173,469       | 3%            | 30             | 1.5        | \$257,774                    |                |                           |
| Assets commissioned in 1974 | 1974                  | \$818,348             | 2010             | \$818,348       | 3%            | 30             | 1.5        | \$1,216,063                  |                |                           |
| Assets commissioned in 1975 | 1975                  | \$3,407,400           | 2010             | \$3,407,400     | 3%            | 30             | 1.5        | \$5,063,388                  |                |                           |
| Assets commissioned in 1976 | 1976                  | \$273,394             | 2010             | \$273,394       | 3%            | 30             | 1.5        | \$406,263                    |                |                           |
| Assets commissioned in 1977 | 1977                  | \$2,052,583           | 2010             | \$2,052,583     | 3%            | 30             | 1.5        | \$3,050,134                  |                |                           |
| Assets commissioned in 1978 | 1978                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1979 | 1979                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1980 | 1980                  | \$3,979,687           | 2010             | \$3,979,687     | 3%            | 30             | 1.5        | \$5,913,806                  |                |                           |
| Assets commissioned in 1981 | 1981                  | \$1,607,560           | 2010             | \$1,607,560     | 3%            | 30             | 1.5        | \$2,388,831                  |                |                           |
| Assets commissioned in 1982 | 1982                  | \$288,784             | 2010             | \$288,784       | 3%            | 30             | 1.5        | \$429,132                    |                |                           |
| Assets commissioned in 1983 | 1983                  | \$3,911,615           | 2010             | \$3,911,615     | 3%            | 30             | 1.5        | \$5,812,652                  |                |                           |
| Assets commissioned in 1984 | 1984                  | \$168,273             | 2010             | \$168,273       | 3%            | 30             | 1.5        | \$250,053                    |                |                           |
| Assets commissioned in 1985 | 1985                  | \$68,358              | 2010             | \$68,358        | 3%            | 30             | 1.5        | \$101,580                    |                |                           |
| Assets commissioned in 1986 | 1986                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1987 | 1987                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1988 | 1988                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1989 | 1989                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1990 | 1990                  | \$523,294             | 2010             | \$523,294       | 3%            | 30             | 1.5        | \$777,613                    |                |                           |
| Assets commissioned in 1991 | 1991                  | \$8,505,334           | 2010             | \$8,505,334     | 3%            | 30             | 1.5        | \$12,638,908                 |                |                           |
| Assets commissioned in 1992 | 1992                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1993 | 1993                  | \$0                   | 2010             | \$0             | 3%            | 30             | 1.5        | \$0                          |                |                           |
| Assets commissioned in 1994 | 1994                  | \$467,400             | 2010             | \$467,400       | 3%            | 30             | 1.5        | \$694,556                    |                |                           |
| Assets commissioned in 1995 | 1995                  | \$344,947             | 2010             | \$344,947       | 3%            | 30             | 1.5        | \$512,590                    |                |                           |
|                             |                       | <b>\$26,716,539</b>   |                  |                 |               |                |            | <b>\$39,700,720</b>          |                |                           |



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# Capital Charge Calculation

| Asset                       | Year of Commissioning | Capital Cost (\$'000) | Base Year for PV | PV capital cost | Discount Rate | Take-up period | ROI Factor | Capital Charge + ROI (09/10) | Capacity (ETs) | Capital Charge/ET (09/10) |
|-----------------------------|-----------------------|-----------------------|------------------|-----------------|---------------|----------------|------------|------------------------------|----------------|---------------------------|
| <b>Existing (post 1996)</b> |                       |                       |                  |                 |               |                |            |                              |                |                           |
| Assets commissioned in 1996 | 1996                  | \$154,852             | 2010             | \$154,852       | 7%            | 30             | 2.3        | \$349,876                    |                |                           |
| Assets commissioned in 1997 | 1997                  | \$0                   | 2010             | \$0             | 7%            | 30             | 2.3        | \$0                          |                |                           |
| Assets commissioned in 1998 | 1998                  | \$428,730             | 2010             | \$428,730       | 7%            | 30             | 2.3        | \$968,686                    |                |                           |
| Assets commissioned in 1999 | 1999                  | \$119,887             | 2010             | \$119,887       | 7%            | 30             | 2.3        | \$270,876                    |                |                           |
| Assets commissioned in 2000 | 2000                  | \$892,999             | 2010             | \$892,999       | 7%            | 30             | 2.3        | \$2,017,670                  |                |                           |
| Assets commissioned in 2001 | 2001                  | \$0                   | 2010             | \$0             | 7%            | 30             | 2.3        | \$0                          |                |                           |
| Assets commissioned in 2002 | 2002                  | \$91,977              | 2010             | \$91,977        | 7%            | 30             | 2.3        | \$207,816                    |                |                           |
| Assets commissioned in 2003 | 2003                  | \$0                   | 2010             | \$0             | 7%            | 30             | 2.3        | \$0                          |                |                           |
| Assets commissioned in 2004 | 2004                  | \$339,288             | 2010             | \$339,288       | 7%            | 30             | 2.3        | \$766,598                    |                |                           |
| Assets commissioned in 2005 | 2005                  | \$266,533             | 2010             | \$266,533       | 7%            | 30             | 2.3        | \$602,213                    |                |                           |
| Assets commissioned in 2006 | 2006                  | \$0                   | 2010             | \$0             | 7%            | 30             | 2.3        | \$0                          |                |                           |
| Assets commissioned in 2007 | 2007                  | \$74,162              | 2010             | \$74,162        | 7%            | 30             | 2.3        | \$167,563                    |                |                           |
| Assets commissioned in 2008 | 2008                  | \$2,247,409           | 2010             | \$2,247,409     | 7%            | 30             | 2.3        | \$5,077,868                  |                |                           |
| Assets commissioned in 2009 | 2009                  | \$0                   | 2010             | \$0             | 7%            | 30             | 2.3        | \$0                          |                |                           |
| Assets commissioned in 2010 | 2010                  | \$34,356,127          | 2010             | \$34,356,127    | 7%            | 30             | 2.3        | \$77,625,328                 |                |                           |
|                             |                       | <b>\$38,971,963</b>   |                  |                 |               |                |            | <b>\$88,054,496</b>          |                |                           |
| <b>Future</b>               |                       |                       |                  |                 |               |                |            |                              |                |                           |
| Assets planned for 2010     | 2010                  | \$38,000              | 2010             | \$38,000        | 7%            | 30             | 2.3        | \$85,858                     |                |                           |
| Assets planned for 2011     | 2011                  | \$71,000              | 2010             | \$66,355        | 7%            | 29             | 2.2        | \$146,478                    |                |                           |
| Assets planned for 2012     | 2012                  | \$181,000             | 2010             | \$158,092       | 7%            | 28             | 2.2        | \$340,855                    |                |                           |
| Assets planned for 2013     | 2013                  | \$668,000             | 2010             | \$545,287       | 7%            | 27             | 2.1        | \$1,147,903                  |                |                           |
| Assets planned for 2014     | 2014                  | \$596,000             | 2010             | \$454,686       | 7%            | 26             | 2.1        | \$934,267                    |                |                           |
| Assets planned for 2015     | 2015                  | \$711,000             | 2010             | \$506,933       | 7%            | 25             | 2.0        | \$1,016,360                  |                |                           |
| Assets planned for 2016     | 2016                  | \$331,000             | 2010             | \$220,559       | 7%            | 24             | 2.0        | \$431,335                    |                |                           |
| Assets planned for 2017     | 2017                  | \$674,000             | 2010             | \$419,733       | 7%            | 23             | 1.9        | \$800,404                    |                |                           |
| Assets planned for 2018     | 2018                  | \$1,793,000           | 2010             | \$1,043,542     | 7%            | 22             | 1.9        | \$1,939,747                  |                |                           |
| Assets planned for 2019     | 2019                  | \$1,155,000           | 2010             | \$628,243       | 7%            | 21             | 1.8        | \$1,137,925                  |                |                           |
| Assets planned for 2020     | 2020                  | \$31,000              | 2010             | \$15,759        | 7%            | 20             | 1.8        | \$27,804                     |                |                           |
| Assets planned for 2021     | 2021                  | \$415,000             | 2010             | \$197,164       | 7%            | 19             | 1.7        | \$338,736                    |                |                           |
| Assets planned for 2022     | 2022                  | \$31,000              | 2010             | \$13,764        | 7%            | 18             | 1.7        | \$23,019                     |                |                           |
| Assets planned for 2023     | 2023                  | \$477,000             | 2010             | \$197,938       | 7%            | 17             | 1.6        | \$322,108                    |                |                           |
| Assets planned for 2024     | 2024                  | \$31,000              | 2010             | \$12,022        | 7%            | 16             | 1.6        | \$19,030                     |                |                           |
| Assets planned for 2025     | 2025                  | \$7,031,000           | 2010             | \$2,548,358     | 7%            | 15             | 1.5        | \$3,922,374                  |                |                           |
| Assets planned for 2026     | 2026                  | \$31,000              | 2010             | \$10,501        | 7%            | 14             | 1.5        | \$15,710                     |                |                           |
| Assets planned for 2027     | 2027                  | \$31,000              | 2010             | \$9,814         | 7%            | 13             | 1.5        | \$14,266                     |                |                           |
| Assets planned for 2028     | 2028                  | \$31,000              | 2010             | \$9,172         | 7%            | 12             | 1.4        | \$12,950                     |                |                           |
| Assets planned for 2029     | 2029                  | \$31,000              | 2010             | \$8,572         | 7%            | 11             | 1.4        | \$11,752                     |                |                           |
| Assets planned for 2030     | 2030                  | \$31,000              | 2010             | \$8,011         | 7%            | 10             | 1.3        | \$10,660                     |                |                           |



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# Capital Charge Calculation

| Asset                              | Year of Commissioning | Capital Cost (\$'000) | Base Year for PV | PV capital cost | Discount Rate | Take-up period | ROI Factor | Capital Charge + ROI (09/10) | Capacity (ETs) | Capital Charge/ET (09/10) |
|------------------------------------|-----------------------|-----------------------|------------------|-----------------|---------------|----------------|------------|------------------------------|----------------|---------------------------|
| Assets planed for 2031             | 2031                  | \$31,000              | 2010             | \$7,487         | 7%            | 9              | 1.3        | \$9,666                      |                |                           |
| Assets planed for 2032             | 2032                  | \$31,000              | 2010             | \$6,997         | 7%            | 8              | 1.3        | \$8,761                      |                |                           |
| Assets planed for 2033             | 2033                  | \$31,000              | 2010             | \$6,539         | 7%            | 7              | 1.2        | \$7,938                      |                |                           |
| Assets planed for 2034             | 2034                  | \$31,000              | 2010             | \$6,112         | 7%            | 6              | 1.2        | \$7,190                      |                |                           |
| Assets planed for 2035             | 2035                  | \$31,000              | 2010             | \$5,712         | 7%            | 5              | 1.1        | \$6,510                      |                |                           |
| Assets planed for 2036             | 2036                  | \$31,000              | 2010             | \$5,338         | 7%            | 4              | 1.1        | \$5,891                      |                |                           |
| Assets planed for 2037             | 2037                  | \$31,000              | 2010             | \$4,989         | 7%            | 3              | 1.1        | \$5,330                      |                |                           |
| Assets planed for 2038             | 2038                  | \$31,000              | 2010             | \$4,662         | 7%            | 2              | 1.0        | \$4,820                      |                |                           |
| Assets planed for 2039             | 2039                  | \$31,000              | 2010             | \$4,357         | 7%            | 1              | 1.0        | \$4,357                      |                |                           |
|                                    |                       | <b>\$14,668,000</b>   |                  |                 |               |                |            | <b>\$12,760,004</b>          |                |                           |
| <b>TOTAL ASSETS CAPITAL CHARGE</b> |                       |                       |                  |                 |               |                |            | <b>\$ 140,515,219</b>        | <b>22,526</b>  | <b>\$ 6,238</b>           |

Notes:

Backlog assessments are added to residential assessments.

"Residential assessments" includes both pensioner and non-pensioner assessments.

Aggregate  
conversion  
factor

|  |      |
|--|------|
| No. ETs per residential assessment     | 1.00 |
| No. ETs per non-residential assessment | 4.57 |

Table 5: 30 years Growth Projections

| Financial<br>Year end | New Assessments in<br>year |                     | Assessments at end of<br>year |                     | ETs         |                     |                    |
|-----------------------|----------------------------|---------------------|-------------------------------|---------------------|-------------|---------------------|--------------------|
|                       | Residential                | Non-<br>residential | Residential                   | Non-<br>residential | Residential | Non-<br>residential | Total<br>Hydraulic |
| 2010                  |                            |                     | 7999                          | 837                 | 7999        | 3825                | 11824              |
| 2011                  |                            |                     | 8021                          | 847                 | 8021        | 3871                | 11892              |
| 2012                  | 22                         | 10                  | 8,043                         | 857                 | 8043        | 3917                | 11960              |
| 2013                  | 60                         | 10                  | 8103                          | 867                 | 8103        | 3962                | 12065              |
| 2014                  | 80                         | 10                  | 8183                          | 877                 | 8183        | 4008                | 12191              |
| 2015                  | 90                         | 10                  | 8273                          | 887                 | 8273        | 4054                | 12327              |
| 2016                  | 95                         | 14                  | 8368                          | 901                 | 8368        | 4119                | 12486              |
| 2017                  | 95                         | 14                  | 8462                          | 916                 | 8462        | 4184                | 12646              |
| 2018                  | 95                         | 14                  | 8557                          | 930                 | 8557        | 4249                | 12806              |
| 2019                  | 95                         | 14                  | 8651                          | 944                 | 8651        | 4314                | 12966              |
| 2020                  | 95                         | 14                  | 8746                          | 958                 | 8746        | 4380                | 13126              |
| 2021                  | 120                        | 20                  | 8866                          | 978                 | 8866        | 4471                | 13337              |
| 2022                  | 120                        | 20                  | 8986                          | 998                 | 8986        | 4562                | 13548              |
| 2023                  | 120                        | 20                  | 9106                          | 1018                | 9106        | 4654                | 13760              |
| 2024                  | 120                        | 20                  | 9226                          | 1038                | 9226        | 4745                | 13971              |
| 2025                  | 120                        | 20                  | 9346                          | 1058                | 9346        | 4837                | 14183              |
| 2026                  | 125                        | 25                  | 9471                          | 1083                | 9471        | 4951                | 14422              |
| 2027                  | 125                        | 25                  | 9596                          | 1108                | 9596        | 5065                | 14661              |
| 2028                  | 125                        | 25                  | 9721                          | 1133                | 9721        | 5179                | 14900              |
| 2029                  | 125                        | 25                  | 9846                          | 1158                | 9846        | 5294                | 15140              |
| 2030                  | 125                        | 25                  | 9971                          | 1183                | 9971        | 5408                | 15379              |
| 2031                  | 135                        | 30                  | 10106                         | 1213                | 10106       | 5545                | 15651              |
| 2032                  | 135                        | 30                  | 10241                         | 1243                | 10241       | 5682                | 15923              |
| 2033                  | 135                        | 30                  | 10376                         | 1273                | 10376       | 5819                | 16195              |
| 2034                  | 135                        | 30                  | 10511                         | 1303                | 10511       | 5956                | 16467              |
| 2035                  | 135                        | 30                  | 10646                         | 1333                | 10646       | 6093                | 16739              |
| 2036                  | 140                        | 35                  | 10786                         | 1368                | 10786       | 6253                | 17039              |
| 2037                  | 140                        | 35                  | 10926                         | 1403                | 10926       | 6413                | 17339              |
| 2038                  | 140                        | 35                  | 11066                         | 1438                | 11066       | 6573                | 17639              |
| 2039                  | 140                        | 35                  | 11206                         | 1473                | 11206       | 6733                | 17939              |
| 2040                  | 140                        | 35                  | 11346                         | 1508                | 11346       | 6893                | 18239              |



# Developer Charge Calculation

Griffith City Council

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Sydney CPI June 2012

1.3%

Table 6: GCC Sewerage Developer Charge Calculation

| Sewerage serviced areas     | Capital Charge (10/11 \$) | Reduction Amount (\$/ET) | Developer Charge (\$/ET) 10/11\$ | Developer Charge (\$/ET) 13/14 \$ |
|-----------------------------|---------------------------|--------------------------|----------------------------------|-----------------------------------|
| Griffith, Bilbull and Yenda | \$6,238                   | \$1,269                  | \$4,969                          | \$5,165                           |



**Table Wastewater - Calculation of Developer Charges using the NPV of Annual Charges Method  
Based on Input Reduction Amounts of \$1,296 /ET (2nd iteration)**

Griffith City Council

| Year  | Year No.   | 1            | 2            | 3            | 4            | 5            | 6          | 7          | 8          | 9         | 10          | 11          | 12         | 13         | 14         | 15         | 16         | 17         | 18         | 19         | 20         |        |
|---|--|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|-----------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------|
|   | Year   | 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    | 2024/25    | 2025/26    | 2026/27    | 2027/28    | 2028/29    | 2029/30    |        |
| <b>Developer Charges</b>  |  |              |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Year 1   | 2010/11      |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Base Year  | 2010/11      |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Average Capital Charges per ET (2010/11\$)                                     | 6,238        | 6,238        | 6,238        | 6,238        | 6,238        | 6,238      | 6,238      | 6,238      | 6,238     | 6,238       | 6,238       | 6,238      | 6,238      | 6,238      | 6,238      | 6,238      | 6,238      | 6,238      | 6,238      | 6,238      |        |
|   | Inflation from Base year to Year 1 (%)   | 0.00%        |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Capital Charge (2010/11\$)   | 6,240        | 6,240        | 6,240        | 6,240        | 6,240        | 6,240      | 6,240      | 6,240      | 6,240     | 6,240       | 6,240       | 6,240      | 6,240      | 6,240      | 6,240      | 6,240      | 6,240      | 6,240      | 6,240      | 6,240      |        |
|   | <b>Input Reduction Amounts (2010/11\$)</b>                                     | <b>1,296</b> | <b>1,296</b> | <b>1,296</b> | <b>1,296</b> | <b>1,296</b> | <b>758</b> | <b>548</b> | <b>321</b> | <b>79</b> | <b>-177</b> | <b>-448</b> | <b>950</b> | <b>925</b> | <b>905</b> | <b>887</b> | <b>864</b> | <b>840</b> | <b>915</b> | <b>982</b> | <b>998</b> |        |
|   | Developer Charge per ET (2010/11\$)  | 4,940        | 4,940        | 4,940        | 4,940        | 4,940        | 5,480      | 5,690      | 5,920      | 6,160     | 6,420       | 6,690       | 5,290      | 5,320      | 5,340      | 5,350      | 5,380      | 5,400      | 5,320      | 5,260      | 5,240      |        |
|   | Developer Charges per assessment - Residential (2010/11\$)                     | 4,940        | 4,940        | 4,940        | 4,940        | 4,940        | 5,480      | 5,690      | 5,920      | 6,160     | 6,420       | 6,690       | 5,290      | 5,320      | 5,340      | 5,350      | 5,380      | 5,400      | 5,320      | 5,260      | 5,240      |        |
|   | Developer Charges per assessment - Non-Residential (2010/11\$)                 | 22,230       | 22,230       | 22,230       | 22,230       | 22,230       | 24,660     | 25,605     | 26,640     | 27,720    | 28,890      | 30,105      | 23,805     | 23,940     | 24,030     | 24,075     | 24,210     | 24,300     | 23,940     | 23,670     | 23,580     |        |
| <b>Assessments &amp; ETs</b>  |  |              |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Residential Assessments at year end  | 8,070        | 8,151        | 8,233        | 8,315        | 8,398        | 8,482      | 8,567      | 8,653      | 8,740     | 8,827       | 8,915       | 9,004      | 9,094      | 9,185      | 9,277      | 9,370      | 9,464      | 9,559      | 9,655      | 9,752      | 9,850  |
|   | Non Residential Assessments at year end  | 991          | 1,001        | 1,011        | 1,021        | 1,031        | 1,041      | 1,051      | 1,062      | 1,073     | 1,084       | 1,095       | 1,106      | 1,117      | 1,128      | 1,139      | 1,150      | 1,162      | 1,174      | 1,186      | 1,198      | 1,210  |
|   | Backlog Assessments at year end  | -            | -            | -            | -            | -            | -          | -          | -          | -         | -           | -           | -          | -          | -          | -          | -          | -          | -          | -          | -          | -      |
|   | Total Assessments at year end  | 9,061        | 9,152        | 9,244        | 9,336        | 9,429        | 9,523      | 9,618      | 9,715      | 9,813     | 9,911       | 10,010      | 10,110     | 10,211     | 10,313     | 10,416     | 10,520     | 10,628     | 10,733     | 10,841     | 10,950     | 11,060 |
|   | ET per Residential Assessment  | 1            |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | ET per Non Residential Assessment  | 4.5          |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Total ETs  | 12,530       | 12,656       | 12,783       | 12,910       | 13,038       | 13,167     | 13,297     | 13,432     | 13,569    | 13,705      | 13,843      | 13,981     | 14,121     | 14,261     | 14,403     | 14,545     | 14,693     | 14,842     | 14,992     | 15,143     | 15,295 |
|   | New ETs per year (excluding backlog)   | -            | 126          | 127          | 127          | 128          | 129        | 130        | 136        | 137       | 138         | 139         | 140        | 141        | 142        | 143        | 148        | 149        | 150        | 151        | 151        | 152    |
|   | Cumulative New ETs (excluding backlog)   | -            | 126          | 253          | 380          | 508          | 637        | 767        | 903        | 1,039     | 1,176       | 1,313       | 1,452      | 1,591      | 1,732      | 1,873      | 2,016      | 2,164      | 2,313      | 2,463      | 2,614      | 2,766  |
|   | <b>PV (new ETs excluding backlog) 30 years @ 7% pa</b>                         | -            | 1,827        | 1,842        | 1,856        | 1,872        | 1,887      | 1,902      | 1,918      | 1,928     | 1,939       | 1,950       | 1,960      | 1,971      | 1,981      | 1,991      | 2,000      | 2,009      | 2,012      | 2,015      | 2,017      | 2,018  |
| <b>Revenue and Expenditure</b>  |  |              |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
| Rates & Charges Revenue, Trade Waste Charges, Other Sales and Charges, Pensioner Rebate Grant |  |              |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |
|   | Revenue (\$'000) (2010/11\$)   | 7,370        | 7,450        | 7,524        | 7,595        | 7,672        | 7,759      | 7,838      | 7,915      | 7,997     | 8,076       | 8,157       | 8,242      | 8,331      | 8,424      | 8,520      | 8,619      | 8,722      | 8,829      | 8,940      | 9,055      | 9,174  |
|   | OMA Expenditure (\$'000) (2010/11\$)   | 3,474        | 3,644        | 3,742        | 3,794        | 3,848        | 3,901      | 3,956      | 4,009      | 4,066     | 4,123       | 4,212       | 4,271      | 4,331      | 4,392      | 4,453      | 4,518      | 4,622      | 4,798      | 4,869      | 4,938      | 5,008  |
|   | Revenue less OMA Expenditure (\$'000)  | 3,896        | 3,806        | 3,782        | 3,801        | 3,824        | 3,858      | 3,882      | 3,906      | 3,931     | 3,953       | 1,705       | 1,711      | 1,713      | 1,711      | 1,716      | 1,711      | 1,636      | 1,564      | 1,563      | 1,560      |        |
|   | Revenue less OMA Expenditure for new ETs (\$'000)                              | 39           | 75           | 111          | 148          | 185          | 223        | 261        | 299        | 337       | 375         | 177         | 193        | 208        | 223        | 238        | 252        | 255        | 257        | 270        | 282        |        |
|   | <b>PV (Revenue less OMA Expenditure for new ETs) 30 years @ 7% pa (\$'000)</b> | 2,939        | 2,648        | 2,366        | 2,069        | 1,737        | 1,376      | 978        | 539        | 65        | -442        | -884        | 1,815      | 1,774      | 1,738      | 1,708      | 1,666      | 1,638      | 1,767      | 1,922      | 1,933      |        |
|   | Output (calculated) Reduction Amounts  | 1,608        | 1,438        | 1,275        | 1,106        | 920          | 723        | 510        | 279        | 34        | -227        | -502        | 921        | 895        | 873        | 854        | 830        | 814        | 877        | 953        | 957.6      |        |
|   | Average Calculated Reduction for a 5 yr Period                                 | 1,269        | 1,269        | 1,269        | 1,269        | 1,269        | 723        | 510        | 279        | 34        | -227        | -502        | 921        | 895        | 873        | 854        | 830        | 814        | 877        | 953        | 957.6      |        |
|   | % Difference Between the Input and Output                                      |              |              |              |              |              |            |            |            |           |             |             |            |            |            |            |            |            |            |            |            |        |

**General Notes:**

- Approximately three iterations of the financial planning model are normally required until the Output Reduction Amount for the first 5 years is within 2% of the Input Reduction Amount.

|               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Developer Cha | 4,971 | 4,971 | 4,971 | 4,971 | 4,971 | 5,517 | 5,730 | 5,961 | 6,206 | 6,467 | 6,742 | 5,319 | 5,345 | 5,367 | 5,386 | 5,410 | 5,426 | 5,363 | 5,287 | 5,282 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|



Based in Sydney and Byron Bay, HydroScience Consulting (HSc) is an Australian consultancy dedicated to serving the water industry in Australia.

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