	in accordance with the principles and guidelines of the Burra Charter; 2. Developing a detailed Heritage Strategy for the Fraser Coast which includes the following: – a heritage register of places of cultural heritage significance; and – processes for managing and conserving cultural heritage places; and 3. Undertaking community consultation on potential sites for inclusion in the heritage register.

4.6 Integrated Land Use and Infrastructure

4.6.1 Sustainable Essential Utility Infrastructure Strategy

4.6.1.1 Purpose

The purpose of the Sustainable Essential Utility Infrastructure Strategy (encompassing water cycle management, solid waste management, energy and telecommunications) is to:

1. describe the preferred future networks for these infrastructure types for the Fraser Coast; and
2. identify the key infrastructure elements required to deliver it.

4.6.1.2 Strategy Overview

The Fraser Coast will continue to experience significant urban growth to 2031 and infrastructure planning is required to ensure that land will be reserved and protected in the right places for key uses, infrastructure and services which are needed in the long term.

It is important that future growth is not limited or compromised by short term objectives. In this regard, the urban development sequence for the Fraser Coast relies on the efficient and cost effective provision of infrastructure. In particular, infrastructure required to support future growth is not intended to impact unduly on the existing rate payers and will be funded through infrastructure charges or negotiated Infrastructure Agreements as intended by the *Sustainable Planning Act 2009.*

Pressures on our environment, including potential risks from climate change, flooding, storm surge and water supply across the region are key drivers to finding more sustainable ways to provide services to communities, particularly in the cities of Hervey Bay and Maryborough.

These pressures are driving an overhaul of the approach to the delivery of water, wastewater and stormwater services. Best practice approaches suggest that these elements should be viewed as integrated, rather than separate, services. A holistic approach offers the opportunity to reuse and recycle to maximise the availability of water as a precious resource. ‘Water Cycle Management’ recognises that:

1. the holistic management of the region’s high quality water supply is supported by the identification, protection and management of the water storage greater catchment areas;
2. both stormwater and effluent are a valuable resource that need to be managed effectively;

3. the re-use of stormwater and effluent after treatment reduces demand on the potable water resource and reduces waste generation and disposal;
4. where possible, reuse of treated effluent as a resource provides the added benefit of a solution to disposing of the treated effluent; and
5. water sensitive urban design principles that apply to the collection and conveyance of stormwater must be integrated into the design of cities, neighbourhoods and individual lots.

The projected significant population growth on the Fraser Coast to 2031 will also result in increased volumes of solid waste and a need to upgrade and provide new refuse and recycling facilities and collection services. It will be important to protect the long term expansion opportunities of the existing landfill and transfer station facilities, while also implementing waste reduction initiatives. This will assist in reducing demands on waste transportation and land based waste storage and management.

In terms of energy supply, the projected population growth will provide an excellent opportunity to incorporate sustainable energy supplies from renewable sources, so as to reduce reliance on energy sourced from the traditional coal fired power grid. This will enable the Fraser Coast as a whole to reduce energy consumption and greenhouse gas emissions in a meaningful way.

The Sustainable Essential Utility Infrastructure Strategy is intended to meet the draft WBB Regional Plan objectives and outcomes in manner that supports and is consistent with the planning vision for the Fraser Coast.

4.6.1.3 Mapping

Figure 16 – Infrastructure Regional Overview – Fraser Coast

Figure 17 – Sewer Infrastructure – Maryborough

Figure 18 – Sewer Infrastructure – Hervey Bay

Figure 19 – Sewer Infrastructure – Howard / Torbanlea / Burrum Heads / Toogoom

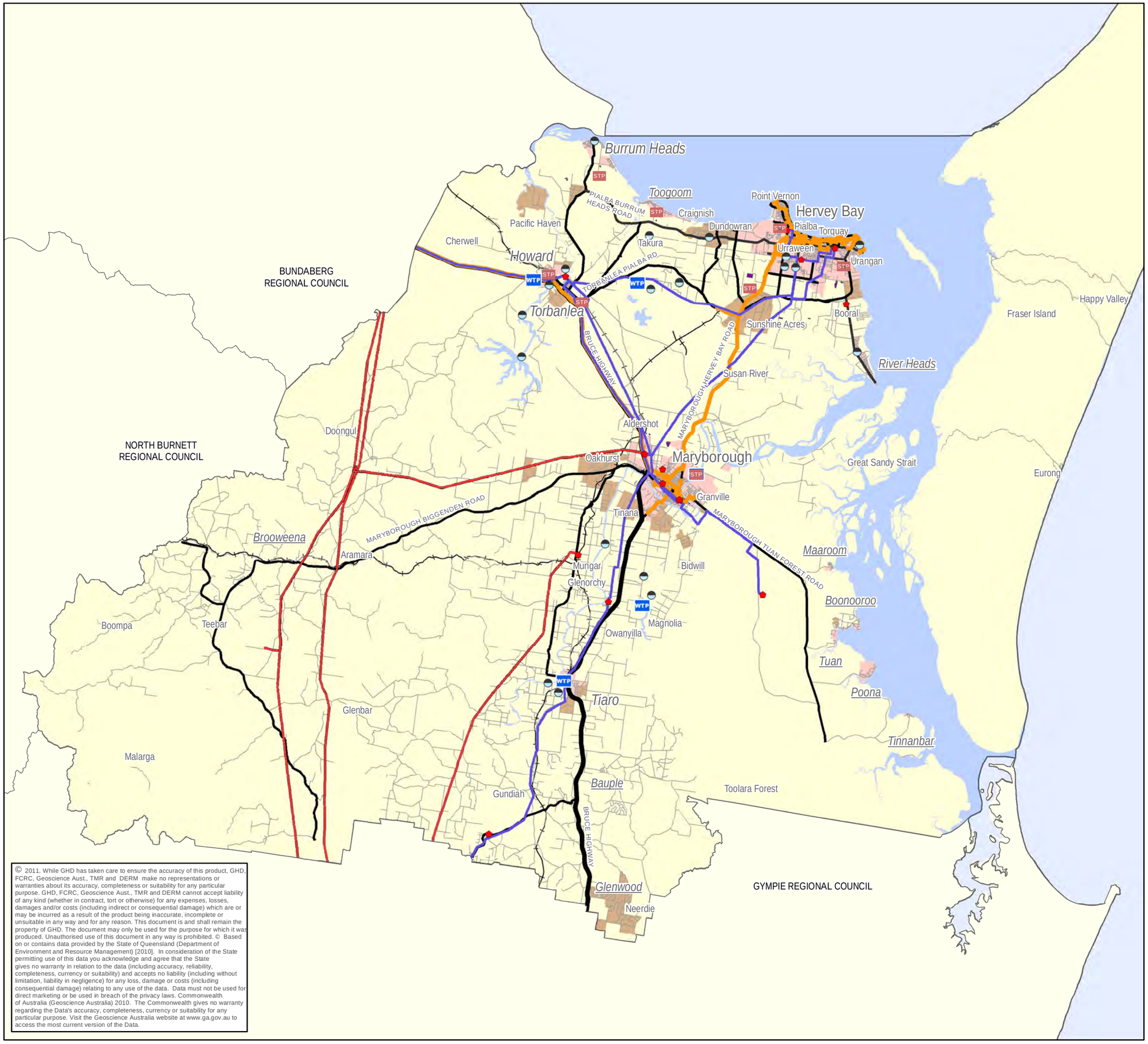
Figure 20 – Water Infrastructure – Maryborough

Figure 21 – Water Infrastructure – Hervey Bay

Figure 22 – Water Infrastructure – Tiaro / Burrum Heads / Toogoom

Figure 23 – Power and Gas Infrastructure – Maryborough

Figure 24 – Power and Gas Infrastructure - Hervey Bay



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LEGEND

- Gas Main

Powerline

- 132kV
- 66kV
- Zone Substation
- Sewer Treatment Plant
- Effluent Lagoon
- Water Treatment Plant
- Water Reservoir

Road

- Highway
- Arterial & Sub Arterial
- Local Street
- Railway
- Watercourse/body

Fraser Coast Regional Council Proposed Settlement Pattern

- Urban Footprint
- Regional Landscape & Rural Production Area
- Rural Living Area

N

0 2 4 8 12 16 20
Kilometres

1:400,000 (at A3)

Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia
Grid: Map Grid of Australia 1994, Zone 56

Fraser Coast REGIONAL COUNCIL

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Buckley Vann TOWN PLANNING CONSULTANTS

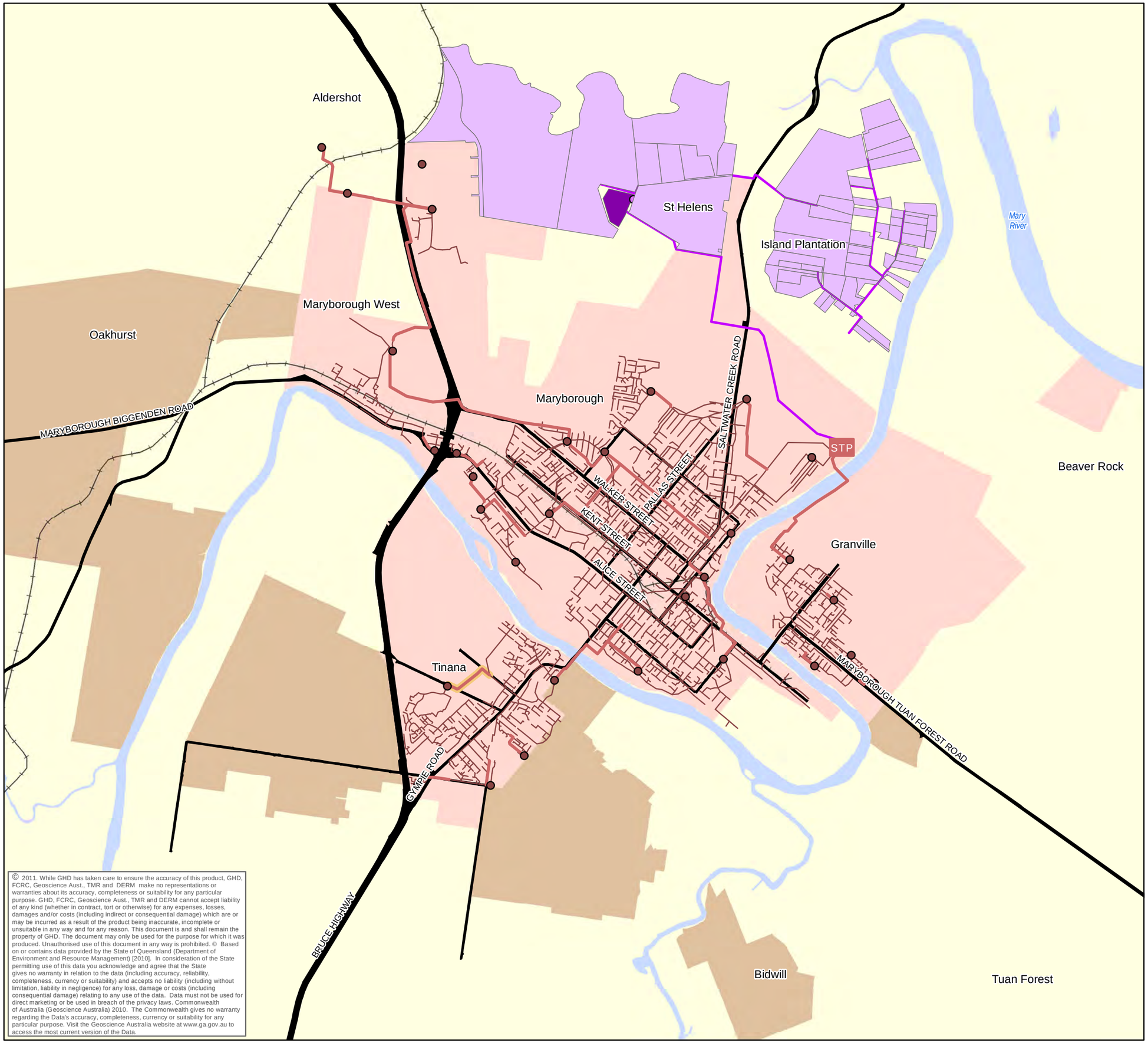
Fraser Coast Regional Council
Sustainable Growth Strategy 2031

Infrastructure Regional Overview - Fraser Coast

Figure 16

Date: 11 July 2011 Rev: D

58 Channon St Gympie QLD 4570 T 61 7 5480 6200 F 61 7 5480 6200 E gymmail@ghd.com W www.ghd.com



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LEGEND

Existing Sewer Trunk Infrastructure

- STP Sewer Treatment Plant
- Sewer Pump Station
- Sewer Trunk Gravity Main
- Sewer Rising Main

Existing Effluent Reuse Infrastructure

- Effluent Pump Station
- Effluent Main
- Effluent Lagoon
- Existing Irrigated Block

Future Sewer Trunk Infrastructure

- Sewer Trunk Infrastructure Augmentation

Road

- Highway
- Arterial & Collector Street
- Railway
- Watercourse/body

Fraser Coast Regional Council Proposed Settlement Pattern

- Urban Footprint
- Regional Landscape and Rural Production Area
- Rural Living Area

N

0 0.25 0.5 1 1.5 2 2.5
Kilometres

1:50,000 (at A3)

Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia
Grid: Map Grid of Australia 1994, Zone 56

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Sustainable Growth Strategy 2031

Sewer Infrastructure - Maryborough

Figure 17

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