

Local Government Infrastructure Plan Amendment and Netserv Plan Major Amendment – Confidential Report

Objective Reference: A2207727
Reports and Attachments (Archives)

Attachment: [Attachment 1 – Part 4 Local Government Infrastructure Plan](#)
[Attachment 2 – LGIP Amendment - Schedule 2 Definitions](#)
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PURPOSE

To provide Council with a pre-consultation draft Local Government Infrastructure Plan amendment to be incorporated into the City Plan 2015 and consequential major amendment to the Water Netserv Plan Part A, and seek Council's approval to proceed to the planning Minister's review and public consultation pursuant to *Statutory Guideline 01/16 'Making and amending local planning instruments'* and the *South East Queensland Water (Distribution and Retail) Act 2009* respectively.

BACKGROUND

The former Priority Infrastructure Plan (PIP) was first adopted as an amendment to the Redlands Planning Scheme 2006 on 7 August 2012. Post 1 July 2011, infrastructure plans were tied statutorily to the introduction of the *Draft State planning regulatory provision (adopted charges)(SPRP)* which implemented a standard trunk infrastructure charging framework. Subsequent legislative reforms on 4 July 2014 introduced amendments to the *Sustainable Planning Act 2009 (SPA)* which turned existing PIPs into Transitional Local Government Infrastructure Plans (LGIPs). SPA changes also required that a new LGIP be prepared to comply with a new *Statutory Guideline 03/14 Local Government Infrastructure Plans* by a cut-off date of 1 July 2016. Redland City and most other councils subsequently sought a Ministerial extension. A general extension was given to 1 July 2018.

The *South East Queensland Water (Distribution and Retail) Act 2009* requires SEQ water service providers to have a Water Netserv Plan. These plans comprise two separate parts - Part A and Part B. Part A contains public information about Redland Water's water and wastewater services, while Part B is an internal planning document that informs the overall strategic direction of the provider.

Service providers are only required to carry out public consultation for Part A of a proposed Water Netserv Plan or major amendment. Following consultation for the mandatory 20 business days, the Redland Water Netserv Plan was adopted by Council on 17 September 2014.

ISSUES

Local Government Infrastructure Plan (LGIP)

The draft LGIP has seen a significant review of the infrastructure planning identified in the current Transitional LGIP. Infrastructure networks have been remodelled on an updated set of demographic assumptions (including land use yields identified in the draft City Plan), demand assumptions, trunk infrastructure inclusions/exclusions, costing and applied levels of service. This has resulted in a modified schedule of works that is more financially sustainable than the program in the current Transitional LGIP over the long term. It retains service levels that are compatible with the reasonable expectation of the Redlands community and whole of life cost of those future assets, particularly in relation to Council's ongoing maintenance requirements.

The draft LGIP has a 10 year planning horizon, rather than the 15 years shown in the current Transitional LGIP, to ensure a closer alignment with Council's Long Term Asset Management Plan and Long Term Financial Forecast as supported by the 10 year Capital Program. LGIPs are now required to demonstrate financial sustainability through the integration of these instruments and capability to demonstrate that any gap in funding between expenditure and infrastructure charges receipts can be funded from other Council revenue sources.

LGIP Review, Public Consultation and Approval Stages

On 9 October 2013 Council resolved to prepare a new planning scheme in accordance with the requirements of the then *Statutory Guideline 02/12 making and amending local planning instruments*. To remove any doubt that the decision to prepare a new planning scheme did not include a decision to begin making Part 4 (LGIP) of the scheme, Council resolved on 11 May 2016 to prepare a complying LGIP.

The development of the draft LGIP has since included the following regulated steps:

- preparation of planning assumptions, demand projections, servicing areas, levels of service, schedules of works, existing and future asset establishment costs, financial sustainability analysis and background studies and reports that informed the draft LGIP;
- consultation with the Department of Transport and Main Roads about transport matters in the draft LGIP;
- engagement of the required 3rd party reviewer (DILGP panel provider) to conduct a compliance check of the draft LGIP; and
- the reviewer has undertaken a evaluation of the draft LGIP against *Statutory Guideline 01/16 Making and amending local planning instruments* and standard planning scheme provisions, and completed a mandatory compliance checklist.

The process for amending the draft City Plan to include the LGIP from this point is identified in section 2.4B of *Statutory Guideline 01/16 Making and amending local planning instruments*, which includes:

- Council seeks Minister's approval to publicly consult following the Minister's first review of the draft LGIP for compliance with the guideline and Standard Planning Scheme Provisions (SPSP), which is informed by a statutory third party review undertaken on behalf of Council stating compliance;
- Council's compliance with any conditions of the Minister's approval before publicly consulting the draft LGIP;
- Minimum 30 business day consultation period;
- Council considers every properly made submission and decides if any changes it intends making are significant;
- Council re-engages the 3rd party reviewer to undertake a second compliance check including Minister's earlier conditions and significance of any changes proposed;
- Council seeks Minister's approval to adopt following the Minister's second review for compliance with the guideline and SPS.

Netserv Plan

The preparation of the draft LGIP has triggered a review and amendment of Part A of the Redland Water Netserv Plan to ensure alignment of planning assumptions (and subsequent schedules of work) between the two plans. The amendment of the Netserv Plan is intended to follow a parallel consultation and approval process to that of the draft LGIP.

STRATEGIC IMPLICATIONS

Legislative Requirements

SPA section 628A requires a local government's planning scheme to include a complying LGIP by 1 July 2018 or forfeit the power to levy infrastructure charges and impose conditions about trunk infrastructure.

The Under the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, Redland Water is required to have a Water Netserv Plan (a plan about its water and wastewater networks and providing its water service and wastewater service). Within each 5 year period from 1 October 2014, the Netserv Plan is be reviewed to ensure that it is consistent with the SEQ Regional Plan and the relevant (Redland City Council) planning assumptions. The draft LGIP includes updated planning assumptions which require the Netserv Plan to be amended to reflect those changes.

Risk Management

There are no risks associated with the proposed recommendation.

Financial

The LGIP approval process establishes the need for local governments to align their infrastructure plan with individual Asset Management Plans and Long Term Financial Forecast in order to demonstrate that they can fund the trunk infrastructure shown in their LGIP.

People

It is not anticipated that there will be significant impact on staff resources other than contributing to an effective consultation plan implementation phase.

Environmental

There are no known environmental implications.

Social

There are no social implications.

Alignment with Council's Policy and Plans

Finalising the draft LGIP for State review and approval to publicly consult is Strategic Outcome 5.1.1 of Council's Operation Plan 2016-17.

The current Transitional LGIP doesn't reflect current planning assumptions and infrastructure demands as shown in Council's latest demographics and type, scale and location of development identified through the draft City Plan land uses and controls. The LGIP Amendment would resolve this situation and provide for contemporary integrated infrastructure and land use planning instruments.

CONSULTATION

All relevant infrastructure network planners, Economic Sustainability & Major Projects Group, Corporate Finance Unit (Capital and Asset Accounting), Financial Planning Unit, and Strategic Planning Unit.

OPTIONS

Council's options are to:

1. Proceed with the LGIP and Netserv Plan amendment in accordance with the officer's recommendation.
2. Proceed with the LGIP and Netserv Plan amendment with further changes determined by Council.
3. Not proceed with the LGIP and/or Netserv Plan amendments.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. Proceed with the draft Local Government Infrastructure Plan amendment.
2. Submit the draft Local Government Infrastructure Plan amendment to the Department of Infrastructure Local Government and Planning seeking agreement from the Minister to publicly consult the proposed amendment.
3. Proceed with public consultation upon agreement from the Minister and where no conditions are imposed that materially affects the content of the Draft Local Government Infrastructure Plan Amendment.
4. Proceed with the draft Netserv Plan amendment and endorse this as being consistent with the planning assumptions of the Council.
5. Submit the draft Netserv Plan to the Department of Infrastructure Local Government and Planning seeking endorsement from the Minister that this is consistent with the South East Queensland Regional Plan.
6. Proceed with public consultation of the draft NetServ Plan upon endorsement from the Minister.
7. That report and attachments remain Confidential until such time as public consultation commences.

Amendment 0.4 – Local government infrastructure plan

Introduction:

This amendment is for the implementation of the Local Government Infrastructure Plan into Part 4 of the Redland City Plan.

Delete –

~~Editor's note-The Local Government Infrastructure Plan (LGIP) will form part of the Redland planning scheme on commencement.~~

Insert –

Part 4 **Local government infrastructure plan**

4 . 1 **Preliminary**

- (1) This local government infrastructure plan has been prepared in accordance with the requirements of the *Sustainable Planning Act 2009*.
- (2) The purpose of the local government infrastructure plan is to:
 - (a) integrate infrastructure planning with the land use planning identified in the planning scheme;
 - (b) provide transparency regarding a local government's intentions for the provision of trunk infrastructure;
 - (c) enable a local government to estimate the cost of infrastructure provision to assist its long term financial planning;
 - (d) ensure that trunk infrastructure is planned and provided in an efficient and orderly manner;
 - (e) provide a basis for the imposition of conditions about infrastructure on development approvals.
- (3) The local government infrastructure plan:
 - (a) states in Section 4.2 (planning assumptions) the assumptions about future growth and urban development including the assumptions of demand for each trunk infrastructure network;
 - (b) identifies in Section 4.3 (priority infrastructure area) the prioritised area to accommodate urban growth up to 2027;
 - (c) states in Section 4.4 (desired standards of service) for each trunk infrastructure network the desired standard of performance;
 - (d) identifies in Section 4.5 (plans for trunk infrastructure) the existing and future trunk infrastructure for the following networks:
 - (i) water supply;
 - (ii) sewerage;
 - (iii) stormwater;
 - (iv) transport;
 - (v) parks and land for community facilities.
- (4) provides a list of supporting documents that assist in the interpretation of the local government infrastructure plan in the Editor's note – Extrinsic material at the end of Part 4.

4 . 2 **Planning assumptions**

- (1) The planning assumptions state the assumptions about:
 - (a) population and employment growth;
 - (b) the type, scale, location and timing of development including the demand for each trunk infrastructure network.

- (2) The planning assumptions together with the desired standards of service form a basis for the planning of the trunk infrastructure networks and the determination of the priority infrastructure area.
- (3) The planning assumptions have been prepared for:
- (a) the base date (2016), the following projection years to accord with future Australian Bureau of Statistics census years and the network planning horizon:
 - (i) mid 2021;
 - (ii) mid 2026;
 - (iii) mid 2027;
 - (b) the LGIP development types in column 2 that include the uses in column 3 of Table 4.2.2—Population and employment assumptions summary;
 - (c) the projection areas identified on Local Government Infrastructure Plan Map LGIP-01 in Schedule 3—Local government infrastructure plan mapping and tables.

Table 4.2.1—Relationship between LGIP development categories, LGIP development types and uses

Column 1 LGIP development category	Column 2 LGIP development type	Column 3 Uses
Residential development	Attached dwelling	Community residence Dual occupancy Dwelling unit Multiple dwelling Nature-based tourism Relocatable home park Residential care facility Resort complex Retirement facility Rooming accommodation Short-term accommodation Tourist park
	Detached dwelling	Caretaker’s accommodation Dwelling house Home based business Rural workers’ accommodation
Non-residential development	Commercial	Office
	Community purpose	Cemetery Child care centre Community care centre Community use

Column 1 LGIP development category	Column 2 LGIP development type	Column 3 Uses
		Crematorium Detention facility Emergency services Educational establishment Funeral parlour Health care services Hospital Park Place of worship
	Industry	High impact industry Low impact industry Marine industry Medium impact industry Port services Research and technology industry Rural industry Special industry Transport depot Warehouse
	Other	Air services Animal husbandry Animal keeping Aquaculture Cropping Environment facility Extractive industry Indoor sport and recreation Intensive animal husbandry Intensive horticulture Landing Major electricity infrastructure Major sport, recreation and entertainment facility Motor sport facility Permanent plantation Roadside stall Substation

Column 1 LGIP development category	Column 2 LGIP development type	Column 3 Uses
		Telecommunications facility Utility installation Wholesale nursery Winery
	Retail	Adult store Agricultural supplies store Bar Brothel Car wash Club Bulk landscape supplies Food and drink outlet Function facility Garden centre Hardware and trade supplies Hotel Nightclub entertainment facility Market Outdoor sales Parking station Sales office Service industry Service station Shop Shopping centre Showroom Theatre Tourist attraction Veterinary services

(4) Details of the methodology used to prepare the planning assumptions are stated in the extrinsic material.

4.2.1 Population and employment growth

(5) A summary of the assumptions about population and employment growth for the planning scheme area is stated in Table 4.2.2—Population and employment assumptions

summary.

Table 4.2.2—Population and employment assumptions summary

Column 1 Description	Column 2 Assumptions				
	Base date (2016)	2021	2026	2027	Ultimate development
Population	153,666	163,418	174,346	175,565	188,413
Employment	37,554	39,909	42,654	43,182	50,599

- (6) Detailed assumptions about growth for each projection area and LGIP development type category are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:
- (a) for population, Table SC3.1.1—Existing and projected population;
 - (b) for employment, Table SC3.1.2—Existing and projected employees.

4.2.2 Development

- (7) The developable area is land zoned for urban purposes not affected by the development constraints stated in Table 4.2.3—Development constraints.

Table 4.2.3—Development constraints

Column 1 Development constraint	Column 2 Applicable components
Coastal protection (erosion prone areas) overlay	Erosion prone areas
Environmental significance overlay	Matter of state environmental significance areas Matter of local environmental significance areas
Flood and storm tide hazard overlay	Drainage constrained land* Defined storm tide event* Defined flood event* Note—* except where the land is zoned for residential, commercial or industrial purposes.
Landslide hazard overlay	Very high hazard High hazard

Regional infrastructure corridors and substations overlay	Water supply pipeline buffer Water quality facility buffer
Waterway corridors and wetlands overlay	Waterway corridors and wetlands

- (8) The planned density for future development is stated in Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network in Schedule 3—Local government infrastructure plan mapping and tables.
- (9) A summary of the assumptions about future residential and non-residential development for the planning scheme area is stated in Table 4.2.4—Residential dwellings and non-residential floor space assumptions summary.

Table 4.2.4—Residential dwellings and non-residential floor space assumptions summary

Column 1 Description	Column 2 Assumptions				
	Base date (2016)	2021	2026	2027	Ultimate development
Residential dwellings	53,838	58,192	63,272	64,471	76,883
Non-residential floor space (m2 GFA)	2,827,943	2,977,978	3,159,356	3,195,555	3,692,591

- (10) Detailed assumptions about future development for each projection area and LGIP development type are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:
- (a) for residential development, Table SC 3.1.4—Existing and projected residential dwellings;
 - (b) for non-residential development, Table SC 3.1.5—Existing and projected non-residential floor space.

4.2.3 Infrastructure demand

- (1) The demand generation rate for a trunk infrastructure network is stated in Column 4 of Table SC 3.1.3 in Schedule 3 Local government infrastructure plan mapping and tables.
- (2) A summary of the projected infrastructure demand for each service catchment is stated in:
- (c) for the water supply network, Table SC 3.1.6—Existing and projected demand for the water supply network;

- (d) for the sewerage network, Table SC 3.1.7—Existing and projected demand for the sewerage network;
- (e) for the stormwater network, Table SC 3.1.8—Existing and projected demand for the stormwater network;
- (f) for the transport network, Table SC 3.1.9—Existing and projected demand for the transport network;
- (g) for the parks and land for community facilities network, Table SC 3.1.10—Existing and projected demand for the parks and land for community facilities network.

4 . 3 **Priority infrastructure area**

- (3) The priority infrastructure area identifies the area prioritised for the provision of trunk infrastructure to service the existing and assumed future urban development up to 2027.
- (4) The priority infrastructure area is identified on Local Government Infrastructure Plan Map LGIP-01—Priority infrastructure area and projection areas map.

4 . 4 **Desired standards of service**

- (11) This section states the key standards of performance for a trunk infrastructure network.
- (12) Details of the standard of service for a trunk infrastructure network are identified in the extrinsic material.

4.4.1 **Water supply network**

- (13) The desired standard of service for the water supply network is to:
 - (a) ensure drinking water complies with the National Health and Medical Research Council Australian Drinking Water Guidelines 2004 drinking water guidelines for colour, turbidity and microbiology;
 - (b) convey potable water from the South East Queensland Water Grid supply points to premises in accordance with the Water Act 2000 and Water Supply (Safety and Reliability) Act 2008;
 - (c) minimise non-revenue water loss;
 - (d) design the water supply network in accordance with:
 - (i) the South East Queensland Water Supply and Sewerage Design and Construction Code 2013;
 - (ii) the key standards stated in Table 4.4.1—Key standards for the water supply network.

Table 4.4.1—Key standards for the water supply network

Column 1 Description of standard	Column 2 Standard
Average day demand	215 L/EP/day plus 15L/EP/day non-revenue water
Minimum service pressure – Operating conditions (PH)	22m at the property boundary
Maximum service pressure	55m at the property boundary

Column 1 Description of standard	Column 2 Standard
Fire flow (Urban)	Detached Res (<= 3 stories): 15L/s for 2hrs w background demand Multi storey Res (=> 4 levels): 30L/s for 4 hours w background demand Commercial/Industrial buildings: 30L/s for 4 hours w background demand Risk Hazard Buildings – assessed on needs basis
Fire flow (Rural and Small Communities)	Rural Residential only: 7.5L/s for 2 hours Rural Commercial: 15L/s for 2 hours

4.4.2 Sewerage network

- (14) The desired standard of service for the sewerage network is to:
- (a) provide a reliable network that collects, stores, treats and releases sewage from premises;
 - (b) design the sewerage network in accordance with:
 - (i) the South East Queensland Water Supply and Sewerage Design and Construction Code 2013;
 - (ii) the key standards stated in Table 4.4.2—Key standards for the sewerage network.

Table 4.4.2—Key standards for the sewerage network

Column 1 Description of Standard	Column 2 Standard
Average dry weather flow (ADWF)	210L/EP/day
Peak dry weather flow (PDWF)	$C2 \times ADWF$ where $C2 = 4.7 \times (EP)^{-0.105}$
Peak wet weather flow (PWWF) for RIGS	5 x ADWF
Minimum velocity	0.75m/s
Maximum velocity	3m/s
Preferred velocity	1.0-1.5m/s

4.4.3 Stormwater network

- (15) The desired standard of service for the stormwater network is to:
- (a) collect and convey stormwater flows for both major flood events (100yr ARI) and minor flood events from existing and future land use in a manner that protects life and does not cause nuisance or inundation of habitable rooms;
 - (b) design the stormwater network to comply with Planning Scheme Policy 2 – Infrastructure Works;

- (c) design stormwater quality treatment devices to comply with Planning Scheme Policy 2 – Infrastructure Works;
- (d) design road crossing structures to provide an appropriate level of flood immunity in accordance with Planning Scheme Policy 2 – Infrastructure Works and any other applicable codes or standards in a local planning instrument;
- (e) meet the water quality objectives for receiving waters at all times;
- (f) maintain environmental flows post development.

4.4.4 Transport network

4.4.4.1 Roads

- (16) The desired standard of service for the trunk road network is to:
- (a) provide a functional urban and rural hierarchy of roads that supports settlement patterns, commercial and economic activities, and freight movement;
 - (b) plan and design the network to ensure the operation of a trunk road or intersection is no worse than level of service C;
 - (c) design the local road network to comply with Council’s adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works;
 - (d) design road crossing structures to provide an appropriate level of flood immunity in accordance with Council’s adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works;
 - (e) transport corridors are planned to provide for future capacity needs.

Editor’s Note— Level of service C has been adopted as the minimum required level of service for major collector and arterial road infrastructure in urban conditions. Level of service C reflects volume to capacity ratio in the range of 0.55 to 0.70. This level of service has been used in the assessment of trunk road network deficiencies and the identification of required network improvements.

4.4.4.2 Cycleways

- (17) The desired standard of service for the cycleway network is to:
- (a) provide a cycleway and shared path network that is safe, attractive and convenient, which links residential areas to major activity nodes, employment centres and public transport interchanges, thereby encouraging walking and cycling as acceptable travel alternatives;
 - (b) design the cycleway network to comply with Council’s adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works;
 - (c) ensure a minimum width of:
 - (i) for the Moreton Bay Cycleway, 3 metres;
 - (ii) for on-road trunk cycle lanes, 1.5 metres;
 - (iii) for other trunk cycleways or shared paths, 2.5 metres;
 - (d) provide lighting along paths to meet Council’s adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works to ensure visibility, safety and security;

- (e) design concrete or sealed cycleways or shared paths to provide an appropriate level of flood immunity in accordance with Council's adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works;
- (f) ensure the grade on shared paths and exclusive cycleways are kept to a minimum but are not less than 0.4%. Grades greater than 8% are undesirable over an extended path length;
- (g) ensure sealed shoulders intended for bicycle lanes are continuous through intersections.

4.4.4.3 Public transport (bus stops)

- (18) The desired standard of service for the public transport (bus stops) network is to:
- (a) provide public transport (bus stops) infrastructure to support future mode share in accordance with the Planning Scheme Part 3 Strategic framework – Theme: liveable communities and housing, Part 9 Development codes – Transport, servicing, access and parking code, and Zone codes;
 - (b) provide bus stops including bus stations, bays, shelters, seating and transport information in accordance with the Department of Transport and Main Roads' Public Transport Infrastructure Manual 2016;
 - (c) provide a public transport stop within approximately 400m of each dwelling in an urban area;
 - (d) provide an electrical connection to all new bus stops;
 - (e) gutter mesh is required for all new bus stops;
 - (f) ensure public transport infrastructure complies with the Disability Standards for Accessible Public Transport 2002 (Transport Standards).

4.4.5 Public parks and land for community facilities network

- (19) The desired standard of service for public parks and land for community facilities network is to:
- (a) provide a connected and accessible network of public parks, recreational facilities and community purpose land that meet the needs of residents through the implementation of the Redland Open Space Strategy 2026;
 - (b) design the public parks and land for community facilities network to comply with Council's adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works;
 - (c) new public parks will not be acceptable if they:
 - (i) have an overland drainage function;
 - (ii) predominately lie below the defined flood event level;
 - (iii) are wholly below 2.4m AHD;
 - (iv) have road frontage of less than 50% of the perimeter;
 - (v) are contaminated land;
 - (vi) are adjacent or close to noxious or noisy activities;
 - (vii) are less than 100m wide;

- (viii) have a gradient greater than 20% (recreation parks);
- (ix) comprise less than 60% flat to gentle slope (sports parks);
- (x) are the common property common property for a community titles scheme under the *Body Corporate and Community Management Act 1997*;
- (d) planning for land for community facilities will be undertaken as part of the preparation of a structure plan or precinct plan;
- (e) ensure public parks and land for community facilities meet the following standards:
 - (i) minimum public park land size and accessibility standards stated in Table 4.4.3—Minimum public park land size and accessibility standards;

Table 4.4.3—Minimum public park land size and accessibility standards

Column 1 Park type	Column 2 Minimum public park land size (ha)	Column 3 Accessibility standard (km)
Recreation park T1 – Destination	5.0 – 20.0 ha	5.0 – 10.0 km
Recreation park T2 - Community	2.0 – 10.0 ha	2.5 – 5.0 km
Recreation park T3 – Neighbourhood	0.5 – 2.0 ha	0.5 – 0.8 km
Recreation park T4 – Meeting place	Location specific	0.5 km
Recreation park T5 – Civic	Location specific	0.5 km
Sport park	5.0 – 20.0 ha	5.0 – 10.0 km

- (ii) rate of provision for public parks stated in Table 4.4.4—Rate of provision for public parks;

Table 4.4.4—Rate of provision for public parks

Column 1 Park type	Column 2 Rate of provision (ha per 1,000 persons)
Recreation park T1 – Destination	0.25
Recreation park T2 - Community	1.2
Recreation park T3 – Neighbourhood	1.2
Sport park	1.65

- (iii) land size and rate of provision for land for community facilities stated in Table 4.4.5—Land size and rate of provision for land for community facilities standards;

Table 4.4.5—Land size and rate of provision for land for community facilities standards

Column 1 Hierarchy	Column 2 Community facility	Column 3 Rate of provision (facility per persons)	Column 4 Land size (ha)
Local	Community meeting space	1:10,000	0.3
District	Multi-purpose community centre	1:30,000	1
	Branch library	1:35,000	0.5
	Arts and cultural space	1:50,000	0.5
Regional	Swimming pool	1:80,000	1

- (iv) embellishment standards for public parks and land for community facilities identified in Table 4.4.6—Embellishment standards for public parks and land for community facilities.

Table 4.4.6—Embellishment standards for public parks and land for community facilities

Column 1 Embellishment type	Column 2 Recreation park					Column 3 Sport park	Column 4 Land for community facilities
	T1	T2	T3	T4	T5		
Barbecues (electric)	✓	✓		✓			
Bicycle racks	✓	✓	✓	✓	✓	✓	
Bins	✓	✓		✓	✓		
Bus parking and turnaround	✓					✓	
Car parking	✓	✓		✓		✓	
Community Garden			✓				

Column 1 Embellishment type	Column 2 Recreation park					Column 3 Sport park	Column 4 Land for community facilities
	T1	T2	T3	T4	T5		
Community sport infrastructure		✓					
Cultural – historic	✓	✓	✓	✓	✓		
Cultural – public artwork	✓	✓	✓				
Dog off-leash park		One in each catchment	✓				
Fencing or bollards and lock rail	✓	✓	✓	✓	✓	✓	
Festivals and events space	There will be at least one festival and event space in each service catchment				✓		
Fields / Courts						✓	
Fields / Courts lighting						✓	
Footpaths (see also Paths)	✓	✓	✓	✓	✓	✓	
Goal posts / Line marking						✓	
Internal roads	✓					✓	
Irrigation	✓	✓				✓	
Kick-about space	✓	✓	✓				
Landscaping	✓	✓	✓	✓	✓	✓	
Lighting	✓	✓	If required		✓	✓	
Natural heritage	Across all park types heritage trees or other important natural heritage items (fauna and flora) will be provided						
Paths (see also Footpaths)	✓	✓	✓	✓	✓	✓	

Column 1 Embellishment type	Column 2 Recreation park					Column 3 Sport park	Column 4 Land for community facilities
	T1	T2	T3	T4	T5		
Physical Activity Stations—dynamic or static		✓					
Playspace—primary school level	✓	✓			✓	✓	
(3) Playspace—secondary school level	✓	✓	✓		✓		
(4) Playspace—toddler	✓	✓	✓		✓		
Public art						✓	
Public toilet	✓	✓			✓	✓	
Ramp park		✓					
Seating and tables	✓	✓	✓	✓	✓		
Shade	✓	✓	✓	✓	✓		
Signage	✓	✓	✓	✓	✓	✓	
Spectator seating						✓	
Storage facilities						✓	
Water connection	✓	✓	✓	✓	✓	✓	✓
Wedding space		A limited number of event spaces will be provided					

4 . 5 **Plans for trunk infrastructure**

- (20) The plans for trunk infrastructure identify the trunk infrastructure networks intended to service the existing and assumed future urban development at the desired standard of service up to 2027.

4.5.1 Plans for trunk infrastructure maps

- (21) The existing and future trunk infrastructure networks are shown on the following maps in Schedule 2—Mapping:
- (a) Local Government Infrastructure Plan Map LGIP-02 Plan for trunk water supply infrastructure;
 - (b) Local Government Infrastructure Plan Map LGIP-03 Plan for trunk sewerage infrastructure;
 - (c) Local Government Infrastructure Plan Map LGIP-04 Plan for trunk stormwater infrastructure;
 - (d) Local Government Infrastructure Plan Map LGIP-05 Plan for trunk transport infrastructure;
 - (e) Local Government Infrastructure Plan Map LGIP-06 Plan for trunk parks and land for community facilities infrastructure.
- (22) The State infrastructure forming part of transport trunk infrastructure network has been identified using information provided by the relevant State infrastructure supplier.

4.5.2 Schedules of works

- (23) Details of the existing and future trunk infrastructure networks are identified in the electronic Excel schedule of works model which can be viewed here: [<insert link to the website>](#).
- (24) The future trunk infrastructure is identified in the following tables in section SC3.2 Schedules of works in Schedule 3—Local government infrastructure plan mapping and tables:
- (a) for the water supply network, Table SC 3.2.1—Water supply network schedule of works;
 - (b) for the sewerage network, Table SC 3.2.2—Sewerage network schedule of works;
 - (c) for the stormwater network, Table SC 3.2.3—Stormwater network schedule of works;
 - (d) for the transport network, Table SC 3.2.4—Transport network schedule of works;
 - (e) for the parks and land for community facilities network, Table SC 3.2.5—Parks and land for community facilities network schedule of works.

Editor's note – Extrinsic material

The below table identifies the documents that assist in the interpretation of the local government infrastructure plan and are extrinsic material under the *Statutory Instruments Act 1992*.

List of extrinsic material

Column 1	Column 2	Column 3
Title of document	Date	Author
Background report on the planning assumptions for the Redland City Council Local Government Infrastructure Plan	March 2017	Redland City Council
Population, Dwelling and Employment Forecasts Redland City Council	May 2016	Urbis
Redland City Land Supply Review	November 2012	Urbis
Redland Water: Water Supply Master Plan 2016	October 2016	Redland Water
Redland Water: Sewer Network Master Plan 2016	August 2016	Redland Water
Redland City Council Road Infrastructure Planning: Traffic Forecasts and Assessments 2014	October 2014	Veitch Lister Consulting
Redlands Transport Plan 2016: Cycling and Pedestrian Strategy Technical Report	May 2004	Redland City Council
Redland City Centres & Employment Strategy Review	April 2013	Urbis
Redland Open Space Strategy 2026	December 2012	Redland City Council
Community Facilities Infrastructure Report 2013	September 2013	Redland City Council
Redland Sport Land Demand Study 2016	August 2016	Redland City Council
Extrinsic Material Report: Stormwater Network 2017	February 2017	Redland City Council
Kinross Road Structure Plan: Stormwater Infrastructure Concept Plan	June 2011	ENGEMY Water Management
Lower Tingalpa Creek Stormwater Infrastructure Plan	May 2013	ENGEMY Water Management

Column 1	Column 2	Column 3
Title of document	Date	Author
Native Dog Creek and Torquay Creek – Southern Redland Bay Catchment (Part 22): Integrated Waterways Planning Report	May 2010	ENGENY Water Management
SE Thornlands Structure Plan: Stormwater Infrastructure Concept Plan	October 2010	ENGENY Water Management
Stormwater Infrastructure Plan for Cleveland CBD Catchment	May 2013	ENGENY Water Management
Stormwater Quality Infrastructure Plan for Upper Eprapah Creek Catchment: Water Quality Analysis	May 2013	ENGENY Water Management
Weinam Creek Stormwater Quality Infrastructure Plan	May 2013	ENGENY Water Management
Redland City Council local infrastructure plan land value unit rates (letter)	4 November 2015	Harvey, Ehlers and Associates

Amendment Schedule 2/ SC1.2 Administrative definitions

Introduction:

This amendment is to update the administrative definitions in Table SC1.2.2 – Administrative Definitions in Schedule 1 Definitions of the Redland City Plan.

Insert –

Column 1 Term	Column 2 Definition
Equivalent person, EP	<i>The demand for infrastructure that is represented by an average person.</i>
Impervious area	<i>The area of the premises that is impervious to rainfall or overland flow that results in the discharge of stormwater from the premises.</i> <i>Note— For Part 4—Local government infrastructure plan, impervious area is measured in hectares, impervious hectares (imp ha).</i>
Planned density	<i>The realistic development potential assumed for a premises.</i>
Vehicle trips per day (vpd)	<i>For Part 4—Local government infrastructure plan, the demand unit for the transport network that is represented by vehicle trips per day.</i>

Amend –

Net developable area	Note— For the purpose of a priority infrastructure plan, net developable area is usually measured in hectares, net developable hectares (net dev ha).
Net developable area	Note—For the purpose of a local government infrastructure plan, net developable area is usually measured in hectares, net developable hectares (net dev ha).

Omit –

Projection area	The QPP definition is incorrect. It is sufficient to define these areas on the LGIP-01 maps.
Service catchment	(currently stated in section 4.7). The QPP definition is incorrect as it infers that all premises inside a service catchment boundary will be serviced. Whereas they are areas used for network planning studies. This definition conflicts with the Netserv connection areas etc. The service catchments for each network are adequately defined on service catchment maps.

Amendment 0.3.2 - Schedule 3 Local government infrastructure plan mapping

Introduction:

This amendment is for the implementation of the Local Government Infrastructure Plan Schedule 3 – Local government infrastructure plan mapping into Schedule 3 of the Redland City Plan.

Delete –

~~Editor's note—The Local Government Infrastructure Plan (LGIP) will form part of the Redland planning scheme on commencement.~~

Insert -

Local Government Infrastructure Plan Map LGIP-01 Priority infrastructure area and projection areas map

Local Government Infrastructure Plan Map LGIP-02 Plan for trunk water supply infrastructure

Local Government Infrastructure Plan Map LGIP-03 Plan for trunk sewerage infrastructure

Local Government Infrastructure Plan Map LGIP-04 Plan for trunk stormwater infrastructure

Local Government Infrastructure Plan Map LGIP-05 Plan for trunk transport infrastructure

Local Government Infrastructure Plan Map LGIP-06 Plan for trunk parks and land for community facilities infrastructure

Amendment 0.3.1 - Schedule 3 Local government infrastructure plan supporting material

Introduction:

This amendment is for the implementation of the Local Government Infrastructure Plan Schedule 3 – Local government infrastructure plan supporting material into Schedule 3 of the Redland City Plan.

Delete –

~~Editor's note – The Local Government Infrastructure Plan (LGIP) will form part of the Redland planning scheme on commencement.~~

Insert -

Schedule 3 – Local government infrastructure plan mapping and tables

SC3.1 Planning assumption tables

Table SC 3.1.1—Existing and projected population						
Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population				
		2016	2021	2026	2027	Ultimate development
Alexander Hills	Detached dwelling	17,075	17,457	17,777	17,763	17,505
	Attached dwelling	534	638	675	684	772
	Total	17,609	18,095	18,452	18,447	18,277
Birkdale	Detached	14,479	14,995	15,522	15,564	16,197
	Attached dwelling	1,004	1,137	1,333	1,362	1,583
	Total	15,483	16,132	16,855	16,925	17,780
Capalaba	Detached dwelling	15,129	15,394	15,616	15,695	16,951
	Attached dwelling	2,062	2,374	3,407	3,555	4,321
	Total	17,191	17,768	19,023	19,249	21,272
Cleveland	Detached dwelling	12,003	12,249	12,317	12,313	12,118

Table SC 3.1.1—Existing and projected population

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population				
		2016	2021	2026	2027	Ultimate development
	Attached dwelling	3,876	5,064	6,344	6,541	8,207
	Total	15,879	17,313	18,661	18,854	20,325
Ormiston	Detached dwelling	5,389	5,646	5,879	5,900	6,196
	Attached dwelling	819	937	1,117	1,142	1,243
	Total	6,208	6,583	6,996	7,042	7,439
Redland Bay	Detached dwelling	14,133	15,083	16,347	16,436	17,373
	Attached dwelling	352	709	1,164	1,240	1,542
	Total	14,485	15,792	17,511	17,675	18,915
Redland Islands	Detached dwelling	9,012	9,571	10,335	10,470	12,191
	Attached dwelling	664	698	826	839	891
	Total	9,676	10,269	11,161	11,309	13,082

Table SC 3.1.1—Existing and projected population

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population				
		2016	2021	2026	2027	Ultimate development
Sheldon - Mount Cotton	Detached dwelling	5,353	6,177	6,361	6,381	6,499
	Attached dwelling	11	11	12	12	12
	Total	5,364	6,188	6,373	6,393	6,511
Thorneside	Detached dwelling	3,104	3,131	3,143	3,143	3,151
	Attached dwelling	846	885	964	966	976
	Total	3,950	4,016	4,107	4,110	4,127
Thornlands	Detached dwelling	13,771	15,600	17,617	17,740	18,755
	Attached dwelling	394	653	922	1,008	3,465
	Total	14,165	16,253	18,539	18,748	22,220
Victoria Point	Detached dwelling	14,801	14,932	15,013	15,057	15,813
	Attached dwelling	1,393	1,525	1,883	1,924	2,512

Table SC 3.1.1—Existing and projected population

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population				
		2016	2021	2026	2027	Ultimate development
	Total	16,194	16,457	16,896	16,982	18,325
Wellington Point	Detached dwelling	11,438	11,855	12,375	12,396	12,628
	Attached dwelling	683	791	909	926	993
	Total	12,121	12,646	13,284	13,321	13,621
Inside priority infrastructure area (total)	Detached dwelling	135,687	142,090	148,302	148,857	155,377
	Attached dwelling	12,638	15,422	19,556	20,198	26,517
	Total	148,325	157,512	167,858	169,055	181,894
Outside priority infrastructure area (total)	Detached dwelling	5,268	5,732	6,202	6,196	6,091
	Attached dwelling	73	174	286	314	428
	Total	5,341	5,906	6,488	6,510	6,519
Redland City	Detached dwelling	140,955	147,822	154,504	155,052	161,468
	Attached dwelling	12,711	15,596	19,842	20,513	26,945

Table SC 3.1.1—Existing and projected population

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population				
		2016	2021	2026	2027	Ultimate development
	Total	153,666	163,418	174,346	175,565	188,413

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
Alexander Hills	Retail	574	574	579	580	594
	Commercial	357	372	374	375	377
	Industrial	278	278	278	278	278
	Community Purposes	1,001	1,009	1,017	1,019	1,025
	Total	2,210	2,233	2,248	2,251	2,274
Birkdale	Retail	470	472	474	474	480
	Commercial	417	440	446	450	502
	Industrial	351	351	351	351	351
	Community Purposes	724	736	745	746	757
	Total	1,962	1,999	2,016	2,021	2,090
Capalaba	Retail	4,255	4,739	5,223	5,320	6,675
	Commercial	1,580	1,644	1,701	1,712	1,912
	Industrial	3,008	3,018	3,026	3,028	3,050

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	953	977	1,001	1,005	1,101
	Total	9,796	10,378	10,951	11,065	12,738
Cleveland	Retail	2,715	3,255	3,795	3,903	5,415
	Commercial	2,104	2,116	2,121	2,124	2,154
	Industrial	2,054	2,101	2,148	2,157	2,289
	Community Purposes	2,345	2,363	2,678	2,785	3,900
	Total	9,218	9,835	10,742	10,969	13,758
Ormiston	Retail	241	241	241	241	241
	Commercial	333	363	384	388	437
	Industrial	222	222	222	222	222
	Community Purposes	390	404	416	418	440
	Total	1,186	1,230	1,263	1,268	1,340

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
Redland Bay	Retail	426	462	498	505	606
	Commercial	456	535	573	582	781
	Industrial	630	657	684	689	765
	Community Purposes	332	345	355	356	369
	Total	1,844	1,999	2,110	2,133	2,521
Redland Islands	Retail	554	570	586	589	635
	Commercial	272	284	285	285	288
	Industrial	305	305	305	305	305
	Community Purposes	270	283	289	290	319
	Total	1,401	1,442	1,465	1,470	1,547
Sheldon-Mount Cotton	Retail	137	182	227	236	362
	Commercial	191	244	280	280	280
	Industrial	0	0	0	0	0

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	169	184	191	192	218
	Total	497	610	698	708	860
Thornlands	Retail	233	249	265	268	313
	Commercial	420	516	554	560	585
	Industrial	510	510	510	510	510
	Community Purposes	693	742	799	810	936
	Total	1,856	2,017	2,128	2,148	2,344
Thorneside	Retail	65	65	65	65	65
	Commercial	93	114	134	138	194
	Industrial	149	153	157	158	169
	Community Purposes	37	37	37	37	37
	Total	344	369	393	398	465

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
Victoria Point	Retail	1,719	1,784	1,922	1,951	2,561
	Commercial	678	733	837	859	1,408
	Industrial	401	401	401	401	401
	Community Purposes	1,061	1,123	1,228	1,247	1,576
	Total	3,859	4,041	4,388	4,458	5,946
Wellington Point	Retail	444	456	468	470	504
	Commercial	307	322	327	327	449
	Industrial	210	210	210	210	210
	Community Purposes	676	694	710	712	735
	Total	1,637	1,682	1,715	1,719	1,898
Inside priority infrastructure area (total)	Retail	11,833	13,049	14,343	14,603	18,451
	Commercial	7,208	7,683	8,016	8,079	9,367
	Industrial	8,118	8,206	8,292	8,309	8,550

Table SC 3.1.2—Existing and projected employees

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	8,651	8,897	9,466	9,618	11,413
	Total	35,810	37,835	40,117	40,609	47,781
Outside priority infrastructure area (total)	Retail	61	200	395	407	466
	Commercial	77	243	494	514	652
	Industrial	1,350	1,351	1,352	1,352	1,355
	Community Purposes	254	278	294	297	343
	Total	1,742	2,072	2,535	2,571	2,816
Redland City	Retail	11,894	13,249	14,738	15,010	18,917
	Commercial	7,287	7,928	8,512	8,595	10,021
	Industrial	9,468	9,557	9,644	9,661	9,905
	Community Purposes	8,905	9,175	9,760	9,915	11,756
	Total	37,554	39,910	42,655	43,182	50,599

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Residential development								
Character residential zone	Detached dwelling	0	15	45.0	45.0	98.0	45.0	0.5
Emerging community zone	Detached dwelling, Attached dwelling	0	21	51.0	51.0	113.2	51.0	0.6
Low density residential zone	Detached dwelling	0	15	45.0	45.0	97.5	45.0	0.5
Precinct LDR1 Large lot residential	Detached dwelling	0	5	15.0	15.0	32.5	15.0	0.3
Precinct LDR2 Park residential	Detached dwelling	0	1.67	5.0	5.0	10.8	5.0	0.2
Precinct LDR3 Point Lookout residential	Detached dwelling	0	15	45.0	45.0	97.5	45.0	0.5

¹ The planned density and planned demand rates stated in Table SC 3.1.3 are subject to the maximum floor space and other restrictions on development under the Redland City Plan.

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Precinct LDR4 Kinross Road	Detached dwelling	0	6.25	18.8	18.8	40.6	18.8	0.3
Low-medium density residential zone	Detached dwelling, Attached dwelling	0	21	51.0	51.0	113.2	51.0	0.6
Precinct LMDR1 SE Thornlands	Detached dwelling, Attached dwelling	0	21	51.0	51.0	113.2	51.0	0.6
Precinct LMDR2 Kinross Road	Detached dwelling, Attached dwelling	0	21	51.0	51.0	113.2	51.0	0.6
Medium density residential zone	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8
Precinct MDR1 Park living, Capalaba	Attached dwelling	0	80	136.0	136.0	320.0	136.0	0.8

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Precinct MDR2 Mount Cotton Road, Capalaba	Attached dwelling	0	60	102.0	102.0	240.0	102.0	0.8
Precinct MDR3 Shore Street East, Cleveland	Attached dwelling	0	80	136.0	136.0	320.0	136.0	0.8
Precinct MDR4 Cleveland	Attached dwelling	0	60	102.0	102.0	240.0	102.0	0.8
Precinct MDR5 Esplanade, Redland Bay	Attached dwelling	0	60	102.0	102.0	240.0	102.0	0.8
Precinct MDR6 SE Thornlands	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8
Precinct MDR7 Erapah Creek, SE Thornlands	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8
Precinct MDR8 Kinross and	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Boundary Roads								
Precinct MDR9 Kinross Road	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8
Tourist accommodation zone	Attached dwelling	0	44	74.8	74.8	176.0	74.8	0.8
Non-residential development and mixed development²								
Local centre zone	Commercial, Retail, Attached dwelling	0.45	6	45.9	62.0	2,112.0	10.2	1.0
District centre zone	Commercial, Retail, Attached dwelling	0.6	44	70.8	92.8	2,112.0	10.2	1.0
Major centre zone (Victoria Point)	Commercial, Retail	1	0	105.2	142.5	3,610.0	0.0	1.0
Mixed use zone	Retail	0.5	0	59.0	80.0	2,000.0	0.0	0.9

1. Table SC 3.1.3 Mixed development is development that includes residential development and non-residential development.

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Principal centre zone (Cleveland)	Commercial, Retail, Attached dwelling	2	124	151.6	196.2	4,649.6	21.1	1.0
Principal centre zone (Capalaba)	Commercial, Retail, Attached dwelling	2.5	124	184.2	240.2	5,799.6	21.1	1.0
Specialised centre zone (Redland Hospital)	Commercial, Retail, Community purpose (Hospital)	0.7	0	269.7	269.7	1,112.9	0.0	0.9
Low impact industry zone	Retail, Industrial (low impact)	0.6	0	21.9	22.5	720.0	0.0	0.9
Medium impact industry zone	Retail, Industrial (medium impact)	0.6	0	28.1	28.6	555.0	0.0	0.9
Waterfront and marine industry zone	Retail, Industrial	0.5	0	22.5	23.1	542.3	0.0	0.9

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
Precinct CF1 cemeteries and crematoria	Community purpose	0.1	0	6.0	6.0	100.0	0.0	0.1
Precinct CF2 community facilities	Community purpose	0.24	0	43.0	27.0	240.0	0.0	0.5
Precinct CF3 educational establishments	Community purpose (secondary school/college/primary school)	0.2	0	100.0	94.0	400.0	0.0	0.5
Precinct CF4 emergency services	Community purpose	0.2	0	36.0	23.0	200.0	0.0	0.9
Precinct CF5 places of worship	Community purpose	0.24	0	43.0	27.0	240.0	0.0	0.5
Precinct CF6 infrastructure	(no density outcome nominated)							
Precinct CF7 future transport/green	(no density outcome nominated)							

Table SC 3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development types	Column 3 Planned density ¹		Column 4 Demand generation rate for a trunk infrastructure network ¹				
		Total non-residential plot ratio	Residential density (dwellings/net dev ha)	Water supply network (EP/net dev ha)	Sewerage network (EP / net dev ha)	Transport network (vpd / net dev ha)	Parks and land for community facilities network (EP/net dev ha)	Stormwater network (imp ha/net dev ha)
space/trail corridors								
Precinct CF8 Commonwealth facilities	Community purpose	0.1	0	18.0	11.0	100.0	0.0	0.1
Precinct CF9 passenger ferry terminals	Community purpose	0.1	0	18.0	11.0	100.0	0.0	0.9

Table SC 3.1.4—Existing and projected residential dwellings

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings				
		2016	2021	2026	2027	Ultimate development
Alexander Hills	Detached dwelling	5,296	5,448	5,559	5,615	6,136
	Attached dwelling	314	375	397	402	454
	Total	5,610	5,823	5,956	6,017	6,590
Birkdale	Detached dwelling	4,301	4,491	4,672	4,737	5,472
	Attached dwelling	590	669	784	801	931
	Total	4,891	5,160	5,456	5,538	6,403
Capalaba	Detached dwelling	4,620	4,742	4,834	4,914	5,875
	Attached dwelling	1,213	1,397	2,004	2,091	2,542
	Total	5,833	6,139	6,838	7,004	8,417
Cleveland	Detached dwelling	3,919	4,069	4,186	4,233	4,660
	Attached dwelling	2,280	2,979	3,732	3,848	4,828

Table SC 3.1.4—Existing and projected residential dwellings

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings				
		2016	2021	2026	2027	Ultimate development
	Total	6,199	7,048	7,918	8,081	9,488
Ormiston	Detached dwelling	1,694	1,794	1,886	1,914	2,229
	Attached dwelling	482	551	657	672	731
	Total	2,176	2,345	2,543	2,586	2,960
Redland Bay	Detached dwelling	4,424	4,729	5,124	5,209	6,073
	Attached dwelling	207	417	685	729	907
	Total	4,631	5,146	5,809	5,938	6,980
Redland Islands	Detached dwelling	5,646	6,049	6,586	6,756	8,754
	Attached dwelling	391	411	486	494	524
	Total	6,037	6,460	7,072	7,249	9,278
Sheldon - Mount Cotton	Detached dwelling	1,621	1,879	1,936	1,964	2,212
	Attached dwelling	6	7	7	7	7

Table SC 3.1.4—Existing and projected residential dwellings

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings				
		2016	2021	2026	2027	Ultimate development
	Total	1,627	1,886	1,943	1,971	2,219
Thorneside	Detached dwelling	1,055	1,072	1,080	1,090	1,179
	Attached dwelling	498	521	567	568	574
	Total	1,553	1,593	1,647	1,658	1,753
Thornlands	Detached dwelling	4,066	4,639	5,259	5,360	6,371
	Attached dwelling	232	384	542	593	2,038
	Total	4,298	5,023	5,801	5,953	8,409
Victoria Point	Detached dwelling	4,611	4,693	4,744	4,815	5,649
	Attached dwelling	819	897	1,108	1,132	1,478
	Total	5,430	5,590	5,852	5,947	7,127
Wellington Point	Detached dwelling	3,478	3,628	3,801	3,849	4,333

Table SC 3.1.4—Existing and projected residential dwellings

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings				
		2016	2021	2026	2027	Ultimate development
	Attached dwelling	402	466	534	544	584
	Total	3,880	4,094	4,335	4,393	4,917
Inside priority infrastructure area (total)	Detached dwelling	44,731	47,233	49,667	50,456	58,943
	Attached dwelling	7,434	9,074	11,503	11,881	15,598
	Total	52,165	56,307	61,170	62,337	74,541
Outside priority infrastructure area (total)	Detached dwelling	1,630	1,783	1,934	1,950	2,090
	Attached dwelling	43	102	168	185	252
	Total	1,673	1,885	2,102	2,134	2,342
Redland City	Detached dwelling	46,361	49,016	51,601	52,405	61,033
	Attached dwelling	7,477	9,176	11,671	12,066	15,850
	Total	53,838	58,192	63,272	64,471	76,883

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
Alexander Hills	Retail	44,198	44,198	44,583	44,660	45,738
	Commercial	8,925	9,300	9,350	9,365	9,425
	Industrial	31,970	31,970	31,970	31,970	31,970
	Community Purposes	72,072	72,648	73,224	73,339	73,800
	Total	157,165	158,116	159,127	159,334	160,933
Birkdale	Retail	36,190	36,344	36,498	36,529	36,960
	Commercial	10,425	11,000	11,150	11,245	12,550
	Industrial	40,365	40,365	40,365	40,365	40,365
	Community Purposes	52,128	52,992	53,640	53,726	54,504
	Total	139,108	140,701	141,653	141,865	144,379
Capalaba	Retail	327,635	364,903	402,171	409,625	513,975
	Commercial	39,500	41,100	42,525	42,795	47,800
	Industrial	345,920	347,070	347,990	348,174	350,750

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	68,616	70,344	72,072	72,389	79,272
	Total	781,671	823,417	864,758	872,982	991,797
Cleveland	Retail	209,055	250,635	292,215	300,531	416,955
	Commercial	52,600	52,900	53,025	53,090	53,850
	Industrial	236,210	241,615	247,020	248,101	263,235
	Community Purposes	168,840	170,136	192,816	200,534	280,800
	Total	666,705	715,286	785,076	802,256	1,014,840
Ormiston	Retail	18,557	18,557	18,557	18,557	18,557
	Commercial	8,325	9,075	9,600	9,695	10,925
	Industrial	25,530	25,530	25,530	25,530	25,530
	Community Purposes	28,080	29,088	29,952	30,067	31,680
	Total	80,492	82,250	83,639	83,849	86,692

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
Redland Bay	Retail	32,802	35,574	38,346	38,900	46,662
	Commercial	11,400	13,375	14,325	14,555	19,525
	Industrial	72,450	75,555	78,660	79,281	87,975
	Community Purposes	23,904	24,840	25,560	25,646	26,568
	Total	140,556	149,344	156,891	158,383	180,730
Redland Islands	Retail	42,658	43,890	45,122	45,368	48,895
	Commercial	6,800	7,100	7,125	7,130	7,200
	Industrial	35,075	35,075	35,075	35,075	35,075
	Community Purposes	19,440	20,376	20,808	20,894	22,968
	Total	103,973	106,441	108,130	108,468	114,138
Sheldon-Mount Cotton	Retail	10,549	14,014	17,479	18,172	27,874
	Commercial	4,775	6,100	7,000	7,000	7,000
	Industrial	0	0	0	0	0

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	12,168	13,248	13,752	13,838	15,696
	Total	27,492	33,362	38,231	39,010	50,570
Thornlands	Retail	17,941	19,173	20,405	20,651	24,101
	Commercial	10,500	12,900	13,850	13,995	14,625
	Industrial	58,650	58,650	58,650	58,650	58,650
	Community Purposes	49,896	53,424	57,528	58,334	67,392
	Total	136,987	144,147	150,433	151,631	164,768
Thorneside	Retail	5,005	5,005	5,005	5,005	5,005
	Commercial	2,325	2,850	3,350	3,450	4,850
	Industrial	17,135	17,595	18,055	18,147	19,435
	Community Purposes	2,664	2,664	2,664	2,664	2,664
	Total	27,129	28,114	29,074	29,266	31,954

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
Victoria Point	Retail	132,363	137,368	147,994	150,196	197,197
	Commercial	16,950	18,325	20,925	21,475	35,200
	Industrial	46,115	46,115	46,115	46,115	46,115
	Community Purposes	76,392	80,856	88,416	89,813	113,472
	Total	271,820	282,664	303,450	307,599	391,984
Wellington Point	Retail	34,188	35,112	36,036	36,221	38,808
	Commercial	7,675	8,050	8,175	8,175	11,225
	Industrial	24,150	24,150	24,150	24,150	24,150
	Community Purposes	48,672	49,968	51,120	51,264	52,920
	Total	114,685	117,280	119,481	119,810	127,103
Inside priority infrastructure area (total)	Retail	911,141	1,004,773	1,104,411	1,124,416	1,420,727
	Commercial	180,200	192,075	200,400	201,970	234,175
	Industrial	933,570	943,690	953,580	955,558	983,250

Table SC 3.1.5—Existing and projected non-residential floor space (m² GFA)

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2016	2021	2026	2027	Ultimate development
	Community Purposes	622,872	640,584	681,552	692,510	821,736
	Total	2,647,783	2,781,122	2,939,943	2,974,454	3,459,888
Outside priority infrastructure area (total)	Retail	4,697	15,400	30,415	31,354	35,882
	Commercial	1,925	6,075	12,350	12,860	16,300
	Industrial	155,250	155,365	155,480	155,503	155,825
	Community Purposes	18,288	20,016	21,168	21,384	24,696
	Total	180,160	196,856	219,413	221,101	232,703
Redland City	Retail	915,838	1,020,173	1,134,826	1,155,770	1,456,609
	Commercial	182,125	198,150	212,750	214,830	250,475
	Industrial	1,088,820	1,099,055	1,109,060	1,111,061	1,139,075
	Community Purposes	641,160	660,600	702,720	713,894	846,432
	Total	2,827,943	2,977,978	3,159,356	3,195,555	3,692,591

Table SC 3.1.6—Existing and projected demand for the water supply network

Column 1 Service catchment ³	Column 2 Existing and projected demand (EP)				
	2016 (base date)	2021	2026	2027	Ultimate development
Alexandra Hills	89,613	93,713	97,959	98,710	102,719
Mount Cotton	21,165	21,890	22,965	23,164	24,250
Dunwich	1,372	1,575	1,607	1,612	1,636
Amity Point	841	885	903	909	935
Point Lookout	1,132	1,132	1,132	1,132	1,132
Southern Moreton Bay Islands	6,804	8,153	9,511	9,780	12,148
Heinemann Road	47,714	52,069	55,198	55,631	58,047

³ Table SC 3.1.6 Column 1 – The service catchments for the water supply network are identified on Local Government Infrastructure Plan Map LGIP-02 Plan for trunk water supply infrastructure in SC3.3 Local government infrastructure plan maps. The water supply network service catchments are not the water service areas under the *Water Act 2000*.

Table SC 3.1.7—Existing and projected demand for the sewerage network

Column 1 Service catchment ⁴	Column 2 Existing and projected demand (EP)				
	2016 (base date)	2021	2026	2027	Ultimate development
Capalaba	28,110	28,900	29,786	29,958	30,997
Cleveland	41,053	45,071	47,964	48,489	51,381
Thorneside	42,615	44,268	45,840	46,043	47,470
Victoria Point	30,721	32,940	34,813	35,099	36,642
Mount Cotton	4,205	5,314	5,352	5,363	5,494
Dunwich	1,003	1,564	1,572	1,573	1,614
Point Lookout	1,834	7,116	7,600	7,600	7,600

³ Table SC 3.1.7 Column 1 – The service catchments for the sewerage network are identified on Local Government Infrastructure Plan Map LGIP-03 Plan for trunk sewerage infrastructure in SC3.3 Local government infrastructure plan maps. The sewerage network service catchments are not the service areas under the *Water Act 2000*.

Table SC 3.1.8—Existing and projected demand for the stormwater network

Column 1 Service catchment ⁵	Column 2 Existing and projected demand (imp ha)				
	2016	2021	2026	2027	Ultimate development
Cleveland CBD	121.88	132.88	143.23	144.79	156.00
Kinross Road Precinct	28.36	32.54	37.11	37.74	44.48
Lower Tingalpa Creek	34.61	36.66	38.69	39.09	45.00
Native Dog Creek	28.79	33.22	34.95	34.95	34.95
SE Thornlands Precinct	20.25	23.24	26.51	26.96	31.77
Torquay Creek	27.36	29.83	33.08	33.49	35.73
Upper Eprapah Creek	30.43	30.93	31.75	31.82	34.44
Weinam Creek	58.01	63.25	70.13	71.01	75.76
Redlands Balance	2,089.17	2,215.39	2,359.80	2,421.31	3,531.35

⁵ Table SC 3.1.8 Column 1 - The service catchments for the stormwater network are identified on Local Government Infrastructure Plan Map LGIP-04 Plan for trunk stormwater infrastructure in SC3.3 Local government infrastructure plan maps.

Table SC 3.1.9—Existing and projected demand for the transport network

Column 1 Service catchment ⁶	Column 2 Existing and projected demand (vehicle trips per day, vpd)				
	2016	2021	2026	2027	Ultimate development
Redland City	653,750	687,603	721,458	728,229	961,196

Table SC 3.1.10—Existing and projected demand for the parks and land for community facilities network

Column 1 Service catchment ⁷	Column 2 Existing and projected demand (EP)				
	2016	2021	2026	2027	Ultimate development
Catchment 1	31,553	32,795	34,246	34,356	35,528
Catchment 2	35,506	36,565	38,172	38,387	40,172
Catchment 3	22,159	23,970	25,730	25,969	27,837
Catchment 4	46,762	51,005	56,036	56,549	62,932
Catchment 5	7,930	8,741	8,925	8,920	8,794
Catchment 6	9,752	10,345	11,236	11,384	13,149
Citywide	153,662	163,421	174,346	175,565	188,412

⁶ Table SC 3.1.9 Column 1 - The service catchments for the transport network are identified on Local Government Infrastructure Plan Map LGIP-05 Plan for trunk transport infrastructure in SC3.3 Local government infrastructure plan maps.

⁷ Table SC 3.1.10 Column 1 - The service catchments for the parks and land for community facilities network are identified on Local Government Infrastructure Plan Map LGIP-06 Plan for trunk parks and land for community facilities infrastructure in SC3.3 Local government infrastructure plan maps.

SC3.2 Schedules of works

Table SC 3.2.1—Water supply network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost ⁸
DMA210	Thornlands PRV	2021	\$96,584
DMA214	Ziegenfusz PRV	2021	\$83,902
PIP_IC14A	DN300 Trunk Main Good Soil Urban	2017	\$214,871
PIP_IC13_P1	DN300 Trunk Main Good Soil Urban	2021	\$145,401
PIP_IC13_P2	DN300 Trunk Main Good Soil Urban	2021	\$393,236
PIP_NEWAUG14_P2	DN200 Trunk Main Sand Rural	2020	\$476,389
PIP_NEWAUG14_P1	DN200 Trunk Main Acid Sulphate Rural	2020	\$771,877
PIP_IC9_Opt2	DN250 Trunk Main Good Soil HDU	2020	\$248,694
Total			\$2,430,954

Table SC 3.2.2—Sewerage network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost ⁹
FGM_CL_13	Gravity Main DN150 Good Soil Rural	2016	\$13,300
FGM_CL_10	Gravity Main DN150 Good Soil HDU	2016	\$20,137
FGM_CL_11	Gravity Main DN150 Good Soil HDU	2016	\$15,245
SPS12	Pump Station Pump Station Upgrade	2017	\$130,813
SPS35	Pump Station Pump Station Upgrade	2017	\$3,162,500
SPS138	Pump Station Pump Station Upgrade	2017	\$136,922
CAP_STP_17	Treatment Plant STP Upgrade	2017	\$133,759
FGM_CA_03	Gravity Main DN225 Good Soil Rural	2017	\$2,871
FGM_CA_04	Gravity Main DN225 Good Soil Rural	2017	\$32,404

Note—⁸ Table SC 3.2.1 Column 4 – The establishment cost is expressed in current cost terms as at the base date.

Note—⁹ Table SC 3.2.2 Column 4 – The establishment cost is expressed in current cost terms as at the base date.

Table SC 3.2.2—Sewerage network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost⁹
FGM_CL_03	Gravity Main DN300 Good Soil Rural	2017	\$123,267
FGM_CL_04	Gravity Main DN300 Good Soil Rural	2017	\$246,379
FGM_CL_07	Gravity Main DN300 Good Soil Rural	2017	\$93,850
FGM_CL_12	Gravity Main DN150 Good Soil HDU	2017	\$23,714
FRM_TH_03	Rising Main DN300 Good Soil Urban	2017	\$3,017
FRM_TH_01	Rising Main DN450 Good Soil Rural	2017	\$582,327
FRM_TH_02	Rising Main DN200 Good Soil Rural	2017	\$4,126
FGM_TH_01	Gravity Main DN675 Poor Soil Rural	2017	\$19,546
FRM_MC_01	Rising Main DN225 Good Soil Rural	2017	\$33,218
FRM_MC_02	Rising Main DN225 Good Soil Rural	2017	\$93,510
FRM_MC_03	Rising Main DN225 Good Soil Rural	2017	\$274,630
FRM_MC_04	Rising Main DN225 Good Soil Urban	2017	\$60,117
FGM_PT_08	Gravity Main DN150 Urban Sand Island	2017	\$107,655
FGM_PT_11	Gravity Main DN150 Urban Sand Island	2017	\$82,825
FGM_PT_09	Gravity Main DN150 Urban Sand Island	2017	\$45,202
FGM_PT_02	Gravity Main DN225 Urban Sand Island	2017	\$224,832
FGM_PT_04	Gravity Main DN150 Urban Sand Island	2017	\$42,142
FGM_PT_07	Gravity Main DN150 Urban Sand Island	2017	\$77,420
FGM_PT_05	Gravity Main DN150 Urban Sand Island	2017	\$25,574
FGM_PT_01	Gravity Main DN225 Urban Sand Island	2017	\$152,641
FGM_PT_03	Gravity Main DN225 Urban Sand Island	2017	\$49,822
FGM_PT_06	Gravity Main DN150 Urban Sand Island	2017	\$45,788
FGM_PT_10	Gravity Main DN150 Urban Sand Island	2017	\$51,304
CAP_STP_18	Treatment Plant STP Upgrade	2018	\$1,228,919

Table SC 3.2.2—Sewerage network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost⁹
CLE_STP_18	Treatment Plant STP Upgrade	2018	\$17,250
MC_STP_18	Treatment Plant STP Upgrade	2018	\$28,750
CLE_STP_19	Treatment Plant STP Upgrade	2019	\$155,250
THORNE_STP_19	Treatment Plant STP Upgrade	2019	\$129,375
MC_STP_19	Treatment Plant STP Upgrade	2019	\$669,875
CLE_STP_20	Treatment Plant STP Upgrade	2020	\$567,813
THORNE_STP_20	Treatment Plant STP Upgrade	2020	\$510,313
MC_STP_20	Treatment Plant STP Upgrade	2020	\$431,250
SPS68	Pump Station Pump Station Upgrade	2021	\$136,922
MC_STP_21	Treatment Plant STP Upgrade	2021	\$4,240,625
DUN_STP_21	Treatment Plant STP Upgrade	2021	\$0
FGM_TH_02	Gravity Main DN525 Good Soil Urban	2021	\$97,281
FGM_VP_22	Gravity Main DN450 Hdu Good Soil	2021	\$45,119
FGM_VP_23	Gravity Main DN450 Hdu Good Soil	2021	\$32,295
FGM_VP_24	Gravity Main DN375 Hdu Good Soil	2021	\$173,955
CLE_STP_22	Treatment Plant STP Upgrade	2022	\$215,625
MC_STP_22	Treatment Plant STP Upgrade	2022	\$8,855,000
CLE_STP_23	Treatment Plant STP Upgrade	2023	\$6,933,063
MC_STP_23	Treatment Plant STP Upgrade	2023	\$7,848,750
FRM_PT_01	Rising Main DN225 Urban Sand Island	2023	\$1,205,295
MC_STP_24	Treatment Plant STP Upgrade	2024	\$747,500
CLE_STP_25	Treatment Plant STP Upgrade	2025	\$3,113,625
SPS69	Pump Station Pump Station Upgrade	2026	\$71,875
SPS70	Pump Station Pump Station Upgrade	2026	\$71,875

Table SC 3.2.2—Sewerage network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost⁹
SPS71	Pump Station Pump Station Upgrade	2026	\$6,296,250
SPS72	Pump Station Pump Station Upgrade	2026	\$71,875
CAP_STP_26	Treatment Plant STP Upgrade	2026	\$209,875
FGM_CL_08	Gravity Main DN150 Good Soil CBD	2026	\$53,669
FGM_CL_14	Gravity Main DN225 Good Soil Urban	2026	\$143,514
Total			\$50,413,640

Table SC 3.2.3—Stormwater network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹⁰
SW-P-25	Kinross GPT C	2017	\$55,754
SW-A-305	Bioretention Basin C	2017	\$228,159
SW-P-8	Kinross GPT D	2017 - 2020	\$77,237
SW-A-199	Wetland System	2017 - 2021	\$2,434,605
SW-A-257	Bioretention A	2017 - 2021	\$466,925
SW-A-258	Infiltration Bioretention B	2017 - 2021	\$119,003
SW-A-262	Infiltration Bioretention A	2017 - 2021	\$290,578
SW-A-263	Infiltration Bioretention A	2017 - 2021	\$290,578
SW-A-264	Infiltration Bioretention A	2017 - 2021	\$290,578
SW-A-266	Infiltration Bioretention B	2017 - 2021	\$119,003
SW-A-267	Infiltration Bioretention B	2017 - 2021	\$119,003
SW-A-268	Infiltration Bioretention B	2017 - 2021	\$119,003
SW-A-269	Bioretention C	2017 - 2021	\$97,278
SW-A-272	Bio retention Basin D	2017 - 2021	\$100,146

Note—¹⁰ Table SC 3.2.3 Column 4 – The establishment cost is expressed in current cost terms as at the base date.

Table SC 3.2.3—Stormwater network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹⁰
SW-A-279	Bioretention Basin D	2017 - 2021	\$861,897
SW-A-287	Kinross	2017 - 2021	\$750,513
SW-P-26	Kinross GPT J	2019	\$55,754
SW-A-306	Bioretention Basin J	2019	\$837,885
SW-L-17	South East Thornlands Drainage System 1 (pipes, pits & headwall)	2021 - 2026	\$1,320,329
SW-A-198	Wetland System	2021 - 2026	\$1,565,401
SW-A-275	Wetland C (including inlet pond)	2021 - 2026	\$1,721,820
SW-P-3	South East Thornlands GPT D	2022 - 2026	\$67,417
SW-P-16	South East Thornlands Scour Protection Works	2022 - 2026	\$22,216
SW-A-294	Bio-retention basin - Native Dog Creek	2026	\$484,378
SW-A-297	Bio-retention basin - Native Dog Creek	2026	\$294,840
SW-A-302	Bio-retention basin - Native Dog Creek	2026	\$494,791
SW-A-303	Bio-retention basin - Native Dog Creek	2026	\$494,791
SW-A-304	Bio-retention basin - Thornlands	2026	\$494,791
SW-A-200	Bioretention Basin System	2026 - 2031	\$407,382
SW-A-201	Bioretention Basin System	2026 - 2031	\$327,487
SW-A-202	Bioretention Basin System	2026 - 2031	\$742,499
SW-A-249	Wetland	2026 - 2031	\$851,445
SW-A-250	Sediment Basin	2026 - 2031	\$274,986
Total			\$16,878,472

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-111	Beveridge Rd: Upgrade collector Redland Bay Rd to Rachow St, new 3way and upgraded 3way intersection	2018	\$2,381,390
TR-L-91	German Church Rd: Seal widening Cleveland Redland Bay to Gordon Rd and realignment School of Arts Rd	2019	\$3,304,685
TR-L-105	Panorama Drive (Arterial Road): Upgrade from 2 to 4 lanes from Boundary Road to Wellington Rd	2020	\$9,825,972
TR-P-8	Long Street (Trunk Collector Road): Intersection upgrade at Smith Street	2021	\$1,102,912
TR-P-9	Ziegenfusz Road (Trunk Collector Road): New single lane roundabout at Trundle Street	2021	\$735,275
TR-P-14	Passage Street (Trunk Collector Road): Intersection upgrade at Princess Street	2021	\$52,520
TR-P-15	Collingwood Road (Trunk Collector Road): Intersection upgrade at Spoonbill Street	2021	\$502,688
TR-P-16	Collingwood Road (Trunk Collector Road): Intersection upgrade at Lorna Street	2021	\$1,102,912
TR-P-6	Mount Cotton Road: Change priority at existing signalised intersection at Redland Bay Road	2026	\$727,772
TR-P-7	Starkey Street (Trunk Collector Road): Channelisation improvements at Old Cleveland Road	2026	\$748,679
TR-P-11	Hardy Road (Trunk Collector Road): Intersection upgrade at Collingwood	2026	\$502,688
TR-P-10	Benfer Road (Trunk Collector Road): Signalisation of intersection at Link Road	2027	\$300,112
TR-P-12	Old Cleveland Road East (Sub Arterial Road): Signals at Randall Road	2027	\$300,112
TR-P-13	Old Cleveland Road East (Sub Arterial Road): Signals at Barron Street	2027	\$300,112
TR-P-21	Northern Arterial Road (Arterial Road): Upgrade and signalisation of intersection at Sturgeon Street	2027	\$727,772

Note—¹¹ Table SC 3.2.4 Column 4 – The establishment cost is expressed in current cost terms as at the base date.

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-P-26	Northern Arterial Road (Arterial Road): Roundabout at Wellington Street	2027	\$735,275
TR-L-92	School of Arts Road: Seal widening and channelisation from German Church Road to Collins Street	2017 - 2019	\$6,835,279
TR-L-297	New 2.5m Off-Road Cycle Path	2017 - 2020	\$107,160
TR-P-17	Pitt Road (Trunk Collector Road): Intersection upgrade at Nelson Street	2017 - 2021	\$502,688
TR-P-19	Broadwater Terrace (Trunk Collector Road): Intersection upgrade Stradbroke Street	2017 - 2021	\$727,772
TR-P-20	Heinemann Road (Sub Arterial Road): Intersection upgrade at Double Jump Road	2017 - 2021	\$555,208
TR-L-115	Double Jump Rd: Realignment Heinemann to Kingfisher, new intersection Heinemann, roundabout Bunker	2017 - 2021	\$3,278,190
TR-L-100	Kinross Road: Divided trunk collector w/ breakdowns from Boundary Rd to 3rd new roundabout	2017 - 2021	\$7,052,897
TR-L-103	Dinwoodie Road: Upgrade to 2 lane trunk collector Cleveland-Redland Bay Road to Boundary Rd	2017 - 2021	\$6,397,616
TR-L-110	Main Road (Sub Arterial Road): Seal widening to divided 2 lane sub arterial from Plumer to Duncan St	2017 - 2021	\$1,638,612
TR-L-112	Meissner Street: Seal widening and intersection upgrade at Weinam Street Government Road	2017 - 2021	\$805,201
TR-L-114	New 2.5m Off-Road Cycle Path	2017 - 2021	\$1,805,035
TR-L-78	New Trunk Collector - South East Thornlands: 2 lane collector Boundary Rd to Cleveland-Redland Bay	2017 - 2021	\$5,369,884
TR-L-79	New 2.5m Off-Road Cycle Path	2017 - 2021	\$2,109,558
TR-L-124	New 2.5m Off-Road Cycle Path	2017 - 2021	\$52,691
TR-L-125	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$15,670
TR-L-126	New 2.5m Off-Road Cycle Path	2017 - 2021	\$96,971
TR-L-127	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$269,806

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-128	New 2.5m Off-Road Cycle Path	2017 - 2021	\$86,274
TR-L-129	New 2.5m Off-Road Cycle Path	2017 - 2021	\$76,848
TR-L-133	New 2.5m Off-Road Cycle Path	2017 - 2021	\$98,000
TR-L-134	New 2.5m Off-Road Cycle Path	2017 - 2021	\$53,540
TR-L-135	New 2.5m Off-Road Cycle Path	2017 - 2021	\$162,189
TR-L-136	New 2.5m Off-Road Cycle Path	2017 - 2021	\$109,841
TR-L-137	New 2.5m Off-Road Cycle Path	2017 - 2021	\$108,498
TR-L-138	New 2.5m Off-Road Cycle Path	2017 - 2021	\$103,123
TR-L-139	New 2.5m Off-Road Cycle Path	2017 - 2021	\$226,364
TR-L-140	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$75,715
TR-L-141	New 2.5m Off-Road Cycle Path	2017 - 2021	\$34,325
TR-L-142	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$80,136
TR-L-143	New 2.5m Off-Road Cycle Path	2017 - 2021	\$84,284
TR-L-144	New 2.5m Off-Road Cycle Path	2017 - 2021	\$38,311
TR-L-145	New 2.5m Off-Road Cycle Path	2017 - 2021	\$82,512
TR-L-146	New 2.5m Off-Road Cycle Path	2017 - 2021	\$96,512
TR-L-147	New 2.5m Off-Road Cycle Path	2017 - 2021	\$146,285
TR-L-148	New 2.5m Off-Road Cycle Path	2017 - 2021	\$54,142
TR-L-149	New 2.5m Off-Road Cycle Path	2017 - 2021	\$101,844
TR-L-150	New 2.5m Off-Road Cycle Path	2017 - 2021	\$50,468
TR-L-151	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$45,199
TR-L-152	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$183,835
TR-L-153	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$237,373
TR-L-154	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$33,435

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-155	New 2.5m Off-Road Cycle Path	2017 - 2021	\$107,586
TR-L-156	New 2.5m Off-Road Cycle Path	2017 - 2021	\$119,783
TR-L-157	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$33,074
TR-L-158	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$105,323
TR-L-159	New 2.5m Off-Road Cycle Path	2017 - 2021	\$53,814
TR-L-160	New 2.5m Off-Road Cycle Path	2017 - 2021	\$112,155
TR-L-161	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$64,939
TR-L-162	New 2.5m Off-Road Cycle Path	2017 - 2021	\$42,477
TR-L-163	New 2.5m Off-Road Cycle Path	2017 - 2021	\$29,343
TR-L-164	New 2.5m Off-Road Cycle Path	2017 - 2021	\$86,965
TR-L-165	New 2.5m Off-Road Cycle Path	2017 - 2021	\$90,360
TR-L-166	New 2.5m Off-Road Cycle Path	2017 - 2021	\$42,630
TR-L-185	New 2.5m Off-Road Cycle Path	2017 - 2021	\$54,413
TR-L-186	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$185,372
TR-L-187	New 2.5m Off-Road Cycle Path	2017 - 2021	\$67,124
TR-L-189	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$32,201
TR-L-190	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$149,988
TR-L-191	New 2.5m Off-Road Cycle Path	2017 - 2021	\$406,745
TR-L-193	New 2.5m Off-Road Cycle Path	2017 - 2021	\$226,152
TR-L-194	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$453,185
TR-L-195	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$466,561
TR-L-196	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$171,424
TR-L-197	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$304,768
TR-L-198	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$215,915

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-199	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$213,868
TR-L-200	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$347,423
TR-L-201	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$116,030
TR-L-234	New 2.5m Off-Road Cycle Path	2017 - 2021	\$560,771
TR-L-235	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$312,613
TR-L-236	New 2.5m Off-Road Cycle Path	2017 - 2021	\$238,516
TR-L-249	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$230,137
TR-L-254	New 2.5m Off-Road Cycle Path	2017 - 2021	\$452,314
TR-L-255	New 2.5m Off-Road Cycle Path	2017 - 2021	\$70,132
TR-L-256	New 2.5m Off-Road Cycle Path	2017 - 2021	\$400,891
TR-L-257	New 2.5m Off-Road Cycle Path	2017 - 2021	\$366,358
TR-L-258	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$206,785
TR-L-259	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$366,851
TR-L-261	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$260,096
TR-L-263	New 2.5m Off-Road Cycle Path	2017 - 2021	\$128,404
TR-L-264	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$84,205
TR-L-266	New 2.5m Off-Road Cycle Path	2017 - 2021	\$145,914
TR-L-267	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$42,384
TR-L-268	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$167,317
TR-L-270	New 2.5m Off-Road Cycle Path	2017 - 2021	\$318,166
TR-L-271	New 2.5m Off-Road Cycle Path	2017 - 2021	\$306,399
TR-L-275	New 2.5m Off-Road Cycle Path	2017 - 2021	\$335,241
TR-L-276	New 2.5m Off-Road Cycle Path	2017 - 2021	\$335,196
TR-L-277	New 2.5m Off-Road Cycle Path	2017 - 2021	\$244,007

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-278	New 2.5m Off-Road Cycle Path	2017 - 2021	\$97,759
TR-L-279	New 2.5m Off-Road Cycle Path	2017 - 2021	\$163,853
TR-L-280	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$163,584
TR-L-288	New 2.5m Off-Road Cycle Path	2017 - 2021	\$168,087
TR-L-289	New 2.5m Off-Road Cycle Path	2017 - 2021	\$53,531
TR-L-290	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$137,347
TR-L-291	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$45,595
TR-L-292	New 2.5m Off-Road Cycle Path	2017 - 2021	\$103,993
TR-L-293	New 2.5m Off-Road Cycle Path	2017 - 2021	\$31,627
TR-L-294	New 2.5m Off-Road Cycle Path	2017 - 2021	\$89,099
TR-L-295	New 2.5m Off-Road Cycle Path	2017 - 2021	\$77,338
TR-L-296	New 2.5m Off-Road Cycle Path	2017 - 2021	\$228,593
TR-L-298	New 2.5m Off-Road Cycle Path	2017 - 2021	\$290,719
TR-L-299	New 2.5m Off-Road Cycle Path	2017 - 2021	\$291,825
TR-L-300	New 2.5m Off-Road Cycle Path	2017 - 2021	\$474,133
TR-L-301	New 2.5m Off-Road Cycle Path	2017 - 2021	\$47,312
TR-L-302	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$38,265
TR-L-303	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$91,777
TR-L-304	New 2.5m Off-Road Cycle Path	2017 - 2021	\$66,863
TR-L-305	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$142,467
TR-L-306	New 2.5m Off-Road Cycle Path	2017 - 2021	\$208,748
TR-L-307	New 2.5m Off-Road Cycle Path	2017 - 2021	\$118,850
TR-L-308	New 2.5m Off-Road Cycle Path	2017 - 2021	\$99,609
TR-L-309	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$92,133

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-310	New 2.5m Off-Road Cycle Path	2017 - 2021	\$69,954
TR-L-311	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$244,220
TR-L-312	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$71,489
TR-L-313	New 2.5m Off-Road Cycle Path	2017 - 2021	\$109,351
TR-L-314	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$159,174
TR-L-315	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$128,317
TR-L-316	New 2.5m Off-Road Cycle Path	2017 - 2021	\$114,430
TR-L-317	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$92,781
TR-L-318	New 2.5m Off-Road Cycle Path	2017 - 2021	\$45,042
TR-L-347	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$18,406
TR-L-348	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$69,945
TR-L-349	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$16,156
TR-L-350	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$21,830
TR-L-352	New 2.5m Off-Road Cycle Path	2017 - 2021	\$41,433
TR-L-353	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$55,635
TR-L-354	Upgrade 2.5m Off-Road Cycle Path	2017 - 2021	\$15,533
TR-L-356	New 2.5m Off-Road Cycle Path	2017 - 2021	\$58,724
TR-L-357	New 2.5m Off-Road Cycle Path	2017 - 2021	\$31,753
TR-L-370	Upgrade 3m Off-Road Cycle Path	2017 - 2021	\$220,730
TR-L-371	Upgrade 3m Off-Road Cycle Path	2017 - 2021	\$79,379
TR-L-372	New 3m Off-Road Cycle Path	2017 - 2021	\$354,628
TR-L-387	New 3m Off-Road Cycle Path	2017 - 2021	\$199,459
TR-L-388	New 3m Off-Road Cycle Path	2017 - 2021	\$351,650
TR-L-389	New 3m Off-Road Cycle Path	2017 - 2021	\$168,399

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-390	Upgrade 3m Off-Road Cycle Path	2017 - 2021	\$40,114
TR-L-392	New 3m Off-Road Cycle Path	2017 - 2021	\$270,096
TR-L-393	Upgrade 3m Off-Road Cycle Path	2017 - 2021	\$180,906
TR-L-394	New 3m Off-Road Cycle Path	2017 - 2021	\$253,110
TR-L-400	Upgrade 1.5m On-Road Cycle Lane	2017 - 2021	\$17,143
TR-L-401	Upgrade 1.5m On-Road Cycle Lane	2017 - 2021	\$10,381
TR-L-402	Upgrade 1.5m On-Road Cycle Lane	2017 - 2021	\$9,954
TR-L-403	Upgrade 1.5m On-Road Cycle Lane	2017 - 2021	\$17,911
TR-L-416	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$9,446
TR-L-417	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$8,186
TR-L-418	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$6,730
TR-L-419	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$1,560
TR-L-420	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,700
TR-L-421	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$1,347
TR-L-422	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$16,920
TR-L-423	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$1,440,538
TR-L-425	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$10,677
TR-L-426	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$10,224
TR-L-427	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$6,331
TR-L-428	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,409
TR-L-429	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$3,556
TR-L-430	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,087
TR-L-431	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,315
TR-L-432	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,532

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-433	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$2,120
TR-L-434	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$3,672
TR-L-435	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$6,533
TR-L-436	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$3,628
TR-L-437	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$6,415
TR-L-438	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$7,810
TR-L-439	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$3,691
TR-L-442	New 2.5m Off-Road Cycle Path	2017 - 2021	\$220,212
TR-L-445	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$11,168
TR-L-446	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$13,519
TR-L-457	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$1,953,730
TR-L-458	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$585,219
TR-L-459	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$810,303
TR-L-462	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$270,101
TR-L-463	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$1,440,538
TR-L-464	Upgrade 2m On-Road Cycle Lane	2017 - 2021	\$733,774
TR-P-28	Cleveland - Middle Street Major Bus Stop	2019 - 2021	\$0
TR-P-27	Capalaba Bus Interchange	2021 - 2023	\$0
TR-L-102	Pitt Street: Seal widening and channelisation from Weinam Street to Hamilton Street	2021 - 2026	\$1,490,057
TR-P-4	Upgrade to existing intersection Road A and Road B	2022 - 2024	\$565,409
TR-L-80	New Trunk Collector Stub: 2 lane undivided trunk collector off Panorama Drive	2022 - 2026	\$1,089,550
TR-L-84	Mount Cotton Rd: Upgrade 2 lanes w/ breakdowns, intersection upgrades Moreton Bay Rd to Howlett Rd	2022 - 2026	\$16,074,712
TR-L-93	Serpentine Creek Road: seal widening and channelisation from Collins St to Cleveland Redland	2022 - 2026	\$3,618,752

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
	Bay Rd		
TR-L-94	Sturgeon Street: upgrade with auxiliary lanes from Northern Arterial Road to Starkey Street	2022 - 2026	\$7,974,067
TR-L-95	McDonald Road (Sub Arterial Road): Seal widening from Finucane Road to McMillan Road	2022 - 2026	\$909,115
TR-L-96	Weinam Street: seal widening and chanelisation from Meissner Street to Pitt Street	2022 - 2026	\$939,126
TR-L-97	Kingfisher Road: Seal widening and intersection upgrade from Erapah Creek to Realignment	2022 - 2026	\$2,123,294
TR-L-98	Hamilton Street: Seal widening and channelisation from Pitt Street to Peel Street	2022 - 2026	\$1,375,264
TR-L-99	Springacre Road: Seal widening and intersection upgrade from Erapah Creek to Erapah Road	2022 - 2026	\$745,779
TR-L-104	Wellington Street: upgrade 2 to 4 lanes from Enterprise Street to Russell Street	2022 - 2026	\$16,165,242
TR-L-106	Bunker Road (Sub Arterial Road): Seal widening from Brookvale Drive to Realignment	2022 - 2026	\$1,708,388
TR-L-107	Springacre Road: Seal widening and intersection upgrade from Boundary Road to Erapah Road	2022 - 2026	\$2,663,495
TR-L-108	Double Jump Road: Seal widening from Cleveland-Redland Bay Road to Heinemann Road	2022 - 2026	\$3,468,096
TR-L-109	Gordon Road: Intersection upgrades from Cleveland Redland Bay Road to Government Road	2022 - 2026	\$1,958,232
TR-L-120	New 2.5m Off-Road Cycle Path	2022 - 2026	\$114,084
TR-L-121	New 2.5m Off-Road Cycle Path	2022 - 2026	\$42,054
TR-L-122	New 2.5m Off-Road Cycle Path	2022 - 2026	\$61,654
TR-L-123	New 2.5m Off-Road Cycle Path	2022 - 2026	\$59,258
TR-L-130	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$137,418
TR-L-131	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$178,512

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-132	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$97,667
TR-L-167	New 2.5m Off-Road Cycle Path	2022 - 2026	\$37,207
TR-L-168	New 2.5m Off-Road Cycle Path	2022 - 2026	\$56,316
TR-L-169	New 2.5m Off-Road Cycle Path	2022 - 2026	\$198,384
TR-L-170	New 2.5m Off-Road Cycle Path	2022 - 2026	\$91,772
TR-L-171	New 2.5m Off-Road Cycle Path	2022 - 2026	\$93,911
TR-L-172	New 2.5m Off-Road Cycle Path	2022 - 2026	\$79,771
TR-L-173	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$53,914
TR-L-174	New 2.5m Off-Road Cycle Path	2022 - 2026	\$29,569
TR-L-175	New 2.5m Off-Road Cycle Path	2022 - 2026	\$54,103
TR-L-176	New 2.5m Off-Road Cycle Path	2022 - 2026	\$32,587
TR-L-179	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$167,666
TR-L-180	New 2.5m Off-Road Cycle Path	2022 - 2026	\$111,279
TR-L-181	New 2.5m Off-Road Cycle Path	2022 - 2026	\$48,630
TR-L-182	New 2.5m Off-Road Cycle Path	2022 - 2026	\$93,190
TR-L-183	New 2.5m Off-Road Cycle Path	2022 - 2026	\$216,092
TR-L-184	New 2.5m Off-Road Cycle Path	2022 - 2026	\$69,462
TR-L-202	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$90,635
TR-L-203	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$103,067
TR-L-204	New 2.5m Off-Road Cycle Path	2022 - 2026	\$203,376
TR-L-205	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$201,771
TR-L-206	New 2.5m Off-Road Cycle Path	2022 - 2026	\$251,005
TR-L-207	New 2.5m Off-Road Cycle Path	2022 - 2026	\$39,237
TR-L-208	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$44,778

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-209	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$102,699
TR-L-210	New 2.5m Off-Road Cycle Path	2022 - 2026	\$211,738
TR-L-211	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$71,281
TR-L-212	New 2.5m Off-Road Cycle Path	2022 - 2026	\$406,448
TR-L-213	New 2.5m Off-Road Cycle Path	2022 - 2026	\$83,345
TR-L-214	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$480,597
TR-L-215	New 2.5m Off-Road Cycle Path	2022 - 2026	\$156,574
TR-L-216	New 2.5m Off-Road Cycle Path	2022 - 2026	\$532,357
TR-L-217	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$310,296
TR-L-218	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$151,143
TR-L-219	New 2.5m Off-Road Cycle Path	2022 - 2026	\$118,097
TR-L-220	New 2.5m Off-Road Cycle Path	2022 - 2026	\$190,339
TR-L-221	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$169,604
TR-L-222	New 2.5m Off-Road Cycle Path	2022 - 2026	\$228,866
TR-L-223	New 2.5m Off-Road Cycle Path	2022 - 2026	\$377,247
TR-L-224	New 2.5m Off-Road Cycle Path	2022 - 2026	\$225,214
TR-L-225	New 2.5m Off-Road Cycle Path	2022 - 2026	\$142,167
TR-L-226	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$43,300
TR-L-227	New 2.5m Off-Road Cycle Path	2022 - 2026	\$131,913
TR-L-228	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$17,091
TR-L-229	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$126,261
TR-L-243	New 3m Off-Road Cycle Path	2022 - 2026	\$98
TR-L-244	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$9
TR-L-246	New 3m Off-Road Cycle Path	2022 - 2026	\$16

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-247	New 3m Off-Road Cycle Path	2022 - 2026	\$99
TR-L-272	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$249,822
TR-L-273	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$302,450
TR-L-274	New 2.5m Off-Road Cycle Path	2022 - 2026	\$153,289
TR-L-285	New 2.5m Off-Road Cycle Path	2022 - 2026	\$298,173
TR-L-286	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$162,184
TR-L-287	New 2.5m Off-Road Cycle Path	2022 - 2026	\$278,168
TR-L-320	New 2.5m Off-Road Cycle Path	2022 - 2026	\$78,217
TR-L-321	New 2.5m Off-Road Cycle Path	2022 - 2026	\$119,187
TR-L-323	New 2.5m Off-Road Cycle Path	2022 - 2026	\$103,436
TR-L-330	New 2.5m Off-Road Cycle Path	2022 - 2026	\$215,428
TR-L-332	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$17,863
TR-L-333	New 2.5m Off-Road Cycle Path	2022 - 2026	\$152,780
TR-L-334	New 2.5m Off-Road Cycle Path	2022 - 2026	\$177,743
TR-L-336	New 2.5m Off-Road Cycle Path	2022 - 2026	\$191,970
TR-L-337	New 2.5m Off-Road Cycle Path	2022 - 2026	\$144,047
TR-L-338	New 2.5m Off-Road Cycle Path	2022 - 2026	\$80,166
TR-L-339	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$91,360
TR-L-340	New 2.5m Off-Road Cycle Path	2022 - 2026	\$81,424
TR-L-341	New 2.5m Off-Road Cycle Path	2022 - 2026	\$93,336
TR-L-342	New 2.5m Off-Road Cycle Path	2022 - 2026	\$75,880
TR-L-345	New 2.5m Off-Road Cycle Path	2022 - 2026	\$117,142
TR-L-346	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$14,344
TR-L-358	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$21,815

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-359	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$44,989
TR-L-361	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$23,846
TR-L-362	New 2.5m Off-Road Cycle Path	2022 - 2026	\$73,914
TR-L-363	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$17,493
TR-L-365	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$257,759
TR-L-366	New 3m Off-Road Cycle Path	2022 - 2026	\$72,212
TR-L-367	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$262,653
TR-L-368	New 3m Off-Road Cycle Path	2022 - 2026	\$391,340
TR-L-369	New 3m Off-Road Cycle Path	2022 - 2026	\$307,063
TR-L-373	New 3m Off-Road Cycle Path	2022 - 2026	\$137,951
TR-L-374	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$166,768
TR-L-375	New 3m Off-Road Cycle Path	2022 - 2026	\$146,279
TR-L-376	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$646,598
TR-L-377	New 3m Off-Road Cycle Path	2022 - 2026	\$263,296
TR-L-379	New 2.5m Off-Road Cycle Path	2022 - 2026	\$107,740
TR-L-382	New 3m Off-Road Cycle Path	2022 - 2026	\$316,475
TR-L-383	New 3m Off-Road Cycle Path	2022 - 2026	\$192,856
TR-L-384	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$204,065
TR-L-385	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$66,169
TR-L-386	Upgrade 3m Off-Road Cycle Path	2022 - 2026	\$71,103
TR-L-391	New 3m Cycle Boardwalk	2022 - 2026	\$293,369
TR-L-395	New 3m Off-Road Cycle Path	2022 - 2026	\$325,776
TR-L-396	New 3m Off-Road Cycle Path	2022 - 2026	\$298,047
TR-L-397	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$2,855

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-398	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$28,042
TR-L-399	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$7,589
TR-L-404	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$2,306
TR-L-405	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$1,935
TR-L-407	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$2,973
TR-L-408	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$6,395
TR-L-409	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$4,356
TR-L-410	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$1,404
TR-L-411	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$1,496
TR-L-412	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$8,956
TR-L-413	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$3,838
TR-L-414	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$15,566
TR-L-415	Upgrade 0m Cycle Bridge	2022 - 2026	\$180,067
TR-L-441	New 2.5m Off-Road Cycle Path	2022 - 2026	\$90,627
TR-L-443	New 2.5m Off-Road Cycle Path	2022 - 2026	\$198,907
TR-L-444	New 2.5m Off-Road Cycle Path	2022 - 2026	\$61,335
TR-L-448	New 2.5m Off-Road Cycle Path	2022 - 2026	\$213,065
TR-L-449	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$1,289
TR-L-450	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$1,750
TR-L-451	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$7,854
TR-L-452	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$1,729
TR-L-453	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$2,852
TR-L-454	New 2.5m Cycle Boardwalk	2022 - 2026	\$104,905
TR-L-455	New 2.5m Cycle Boardwalk	2022 - 2026	\$2,022,606

Table SC 3.2.4—Transport network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹¹
TR-L-456	New 2.5m Cycle Bridge	2022 - 2026	\$957,208
TR-L-460	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$738,276
TR-L-461	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$1,305,488
TR-L-465	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$8,386
TR-L-466	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$6,547
TR-L-468	Upgrade 2m On-Road Cycle Lane	2022 - 2026	\$4,051,514
TR-L-469	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$17,606
TR-L-470	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$17,250
TR-L-471	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$45,484
TR-L-472	Upgrade 1.5m On-Road Cycle Lane	2022 - 2026	\$1,935,723
TR-L-473	New 1.5m On-Road Cycle Lane	2022 - 2026	\$495,185
TR-L-474	Upgrade 2.5m Off-Road Cycle Path	2022 - 2026	\$149,490
TR-L-83	German Church Road: Seal widening from Cleveland-Redland Bay Road to Heinemann Road	2027 - 2031	\$1,876,987
TR-L-85	Woodlands Drive: Seal widening and intersection upgrade from Taylor Road to Boundary Road	2027 - 2031	\$4,301,808
TR-L-86	Woodlands Drive: Seal widening and intersection upgrade from Mt Cotton Road to Taylor Road	2027 - 2031	\$2,257,144
TR-L-87	Wellington Street: Upgrade to 2 lanes plus breakdowns from South Street to Panorama Drive	2027 - 2031	\$6,010,346
TR-L-90	Giles Road: Road improvement and upgraded intersection from Heinemann to Cleveland-Redland Bay Rd	2027 - 2031	\$2,296,158
TR-L-101	Ney Road (Sub Arterial Road): Seal widening from Wildflower Street to Mt Cotton Road	2027 - 2031	\$462,867
TR-L-113	Future Northern Public Transport corridor	2027 - 2031	\$0
Total			\$195,693,508

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5945	Thornlands - Thornlands Community Park Upgrade	2017	\$2,542,171
C4N43	New Rec Park T3 Redland Bay	2017	\$686,273
5217	Cleveland - Cleveland Point Recreation Reserve Upgrade	2018	\$33,803
5913	Russell Island - Russell Island Sport & Recreation Park Upgrade	2018	\$4,747,118
5274	Ormiston - Raby Esplanade Park Upgrade	2019	\$594,633
5319	Coochiemudlo Island - Pioneer Park (Coochie) Upgrade	2019	\$259,672
5416	Point Lookout - Headland Park Upgrade	2019	\$78,362
5772	Macleay Island - Macleay Island Community Park Upgrade	2019	\$1,205,399
5028	Keith Surridge Sportsfields	2019	\$128,299
5237	Cleveland - Henry Ziegenfusz Park Upgrade	2020	\$1,205,363
5303	Cleveland - Wellington Street Park Upgrade	2020	\$785,161
5421	Point Lookout - Point Lookout Oval Upgrade	2020	\$15,365
5443	Redland Bay - Fielding Park Upgrade	2020	\$308,840
5485	Redland Bay - Denham Boulevard Park Upgrade	2020	\$3,243,592
5586	Thornlands - Manning Esplanade Foreshore Upgrade	2020	\$80,667
5831	Redland Bay - Grevillea Street Park Upgrade	2020	\$65,302
5833	Redland Bay - Cliftonville Place Park Upgrade	2020	\$65,302
5089	Birkdale - Judy Holt Recreation Reserve Upgrade	2021	\$2,046,925
5350-16	Lamb Island - Pioneer Park (Lamb) Upgrade	2021	\$1,223,838
5367	Mount Cotton - Mount Cotton Community Park Upgrade	2021	\$4,662,568
5432	Redland Bay - Charlie Buckler Sportsfield Upgrade	2021	\$2,478,020
5508	Russell Island - Jock Kennedy Park Upgrade	2021	\$322,669
5644	Victoria Point - Cascades Gardens Upgrade	2021	\$61,461

Note—¹² Table SC 3.2.5 Column 4 – The establishment cost is expressed in current cost terms as at the base date.

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5915	Norm Price Park	2021	\$4,440,541
5046	Alexandra Hills - Valantine Park Upgrade	2022	\$771,333
5049	Alexandra Hills - Windemere Road Park Upgrade	2022	\$548,537
5061	Birkdale - Bailey Road Park Upgrade	2022	\$819,733
5353	Macleay Island - Corroboree Place Park Upgrade	2022	\$125,226
5382	Mount Cotton - Valley Way Drainage Reserve Upgrade	2022	\$65,302
5425	Redland Bay - Bedarra Street Park Upgrade	2022	\$143,665
5453	Redland Bay - Jack Gordon Park Upgrade	2022	\$48,400
5454	Redland Bay - Jack Gordon Pathway (Esplanade) Upgrade	2022	\$95,264
5456	Redland Bay - Junee Street Park Upgrade	2022	\$66,070
5457	Redland Bay - Lanyard Place Park Upgrade	2022	\$15,365
5460	Redland Bay - Point Talburpin Park Upgrade	2022	\$207,430
5467	Redland Bay - Nev Stafford Park Upgrade	2022	\$48,400
5471	Redland Bay - Orchard Beach Foreshore (South) Upgrade	2022	\$61,461
5476	Redland Bay - Pinelands Circuit Park Upgrade	2022	\$113,702
5540	Thornlands - Abbotsleigh Street Park Upgrade	2022	\$161,335
5542	Thornlands - Anniversary Park Upgrade	2022	\$4,610
5553	Thornlands - Conley Avenue Park Upgrade	2022	\$160,566
5570	Thornlands - Lorikeet Drive Park Upgrade	2022	\$211,271
5583	Thornlands - Robert Mackie Park Upgrade	2022	\$65,302
5584	Thornlands - Percy Ziegenfusz Park Upgrade	2022	\$145,969
5590	Thornlands - Tindappah Drive Foreshore Upgrade	2022	\$160,566
5592	Thornlands - Tuna Court Park Upgrade	2022	\$270,427
5630	Victoria Point - Aspect Drive Pathway Upgrade	2022	\$65,302
5636	Victoria Point - Bill Scudamore-Smith Park Upgrade	2022	\$65,302

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5639	Victoria Point - Brookvale Drive Park Upgrade	2022	\$271,196
5641	Victoria Point - Bunker Road Bushland Refuge Upgrade	2022	\$275,037
5652	Victoria Point - Duncan Jenkins Eucalypt Park Upgrade	2022	\$4,610
5656	Victoria Point - Glen Road Park Upgrade	2022	\$310,377
5659	Victoria Point - Holly Road Urban Habitat Upgrade	2022	\$65,302
5665	Victoria Point - Les Moore Park Upgrade	2022	\$207,430
5672	Victoria Point - Orana Esplanade Foreshore Park Upgrade	2022	\$565,439
5675	Victoria Point - Parklands Court Park Upgrade	2022	\$65,302
5681	Victoria Point - Poinciana Avenue Park Upgrade	2022	\$477,857
5689	Victoria Point - Sandy Drive Creek Corridor Upgrade	2022	\$80,667
5690	Victoria Point - Schmidt Street Road Reserve Upgrade	2022	\$270,427
5704	Victoria Point - Victoria Point Recreation Reserve Upgrade	2022	\$786,698
5705	Victoria Point - W H Yeo Park Upgrade	2022	\$191,297
5773	Redland Bay - Moogurrapum Creek Corridor - Pelorus Street Upgrade	2022	\$61,461
5777	Redland Bay - Lime Street Wetlands Upgrade	2022	\$95,264
5778	Redland Bay - Azure Park Upgrade	2022	\$145,969
5780	Thornlands - George Thorn Drive Foreshore Upgrade	2022	\$19,975
5819	Thornlands - Ribonwood Street Park Upgrade	2022	\$65,302
5821	Thornlands - Primrose Drive Wetlands Upgrade	2022	\$145,969
5822	Thornlands - Primrose Drive Park Upgrade	2022	\$80,667
5828	Redland Bay - Emperor Drive Bushland Refuge Upgrade	2022	\$48,400
5899	Victoria Point - Bob & Delphine Douglas Reserve Upgrade	2022	\$15,365
5908	Thornlands - Baythorn Drive Nature Belt Upgrade	2022	\$261,977
NDCF1	Multi-Purpose Community Centre (Cleveland) - Cleveland Civic Precinct	2022	\$1,369,012

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5578	Pinklands Sporting Complex	2022	\$2,922,493
C4N0	New Sport Park City Redland Bay	2022 - 2032	\$39,174,529
C6N56	New Rec Park T3 Karragarra Island Esplanade	2023	\$854,560
C6N54-5	New Rec Park T3 Golden Sands Foreshore Park	2024	\$1,004,371
C6N57-9	New Rec Park T3 Trevanna Ave Park	2024	\$571,072
5150	Redland Baseball	2024	\$2,605,937
5487	Redland Bay - Sel Outridge Park Upgrade	2025	\$1,361,356
C4N29	New Rec Park T2 Kinross Road - Kinross Community *	2025	\$2,666,218
C4N29-1	New Rec Park T3 Kinross Road	2025	\$879,938
C4N29-2	New Rec Park T3 Kinross Road	2025	\$879,938
C4N29-3	New Rec Park T3 Kinross Road	2025	\$879,938
C4N32-1	New Rec Park T3 Se Thornlands	2025	\$879,938
C4N35-2	New Rec Park T3 Se Thornlands	2025	\$879,938
5655	Ern And Alma Dowling Sportsfield	2025	\$1,361,356
5400	Redland Softball	2025	\$1,315,261
5048	Alexandra Hills - Wimborne Road Park Upgrade	2026	\$629,205
5337	Karragarra Island - Karragarra Island Foreshore (North) Upgrade	2026	\$270,427
5340	Karragarra Island - Karragarra Island Urban Habitat Upgrade	2026	\$65,302
5350-21	Lamb Island - Pioneer Park (Lamb) Upgrade	2026	\$145,969
5687	Victoria Point - Rosebud Esplanade Park Upgrade	2026	\$98,337
5703	Victoria Point - Victoria Point Bushland Refuge Upgrade	2026	\$19,975
5751	Wellington Point - Sovereign Waters Foreshore Upgrade	2026	\$98,337
5852	Victoria Point - Cleveland Redland Bay Road Reserve Upgrade	2026	\$153,652

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5906	Wellington Point - Bibury Street Road Reserve Upgrade	2026	\$145,969
5924	Russell Island - High Street Nature Belt Upgrade	2026	\$270,427
5930	Russell Island - Vista Street Park Upgrade	2026	\$76,826
5934	Mount Cotton - Baradine Street Park Upgrade	2026	\$209,735
5942	Thornlands - Redland Bay Road Bushland Refuge Upgrade	2026	\$304,999
5947	Macleay Island - Pecan Street Park Upgrade	2026	\$65,302
5948	Macleay Island - Beelong Street Park Upgrade	2026	\$208,967
5949	Macleay Island - Yacht Street Park Upgrade	2026	\$143,665
5950	Russell Island - Toolona Avenue Park Upgrade	2026	\$208,967
5951	Russell Island - Cowderoy Drive Park Upgrade	2026	\$365,692
5952	Russell Island - Monaco Avenue Park Upgrade	2026	\$95,264
5953	Russell Island - Villa Wood Road Park Upgrade	2026	\$289,634
5954	Macleay Island - Aruma Street Park Upgrade	2026	\$306,536
5955	Russell Island - Centre Road Park Upgrade	2026	\$289,634
5956	Russell Island - Cutler Drive Park Upgrade	2026	\$895,022
5957	Ormiston - Hilliards Creek Platypus Corridor Park Upgrade	2026	\$142,128
5958	Birkdale - Harrogate Park Upgrade	2026	\$65,302
5959	Thornlands - Luke Street Park Upgrade	2026	\$285,793
5960	Redland Bay - Gordon Road Park Upgrade	2026	\$65,302
5961	Ormiston - Dundas Street Park Upgrade	2026	\$15,365
5962	Redland Bay - Potts Place Park Upgrade	2026	\$63,766
SDCF4	Multi-Purpose Community Centre (Redland Bay) - Community Well-Being Hub Redland Bay Youth Space	2026	\$2,091,186
5334	Ron Stark Oval	2026	\$777,479
5005	Alexandra Hills - Babiana Street Park Upgrade	2027	\$48,400

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5025	Alexandra Hills - Hyde Court Park Upgrade	2027	\$4,610
5038	Alexandra Hills - Princeton Avenue Park Upgrade	2027	\$65,302
5044	Alexandra Hills - Snowdon Street Park Upgrade	2027	\$15,365
5051	Alexandra Hills - Workington Street Park Upgrade	2027	\$65,302
5053	Amity Point - Amity Point Recreation Reserve Upgrade	2027	\$61,461
5083	Birkdale - Goodge Court Park Upgrade	2027	\$113,702
5087	Birkdale - Juanita Street Park Upgrade	2027	\$270,427
5090	Birkdale - Lachlan Street Park Upgrade	2027	\$76,826
5111	Birkdale - Robinson Park Upgrade	2027	\$4,610
5125	Birkdale - William Taylor Memorial Park Upgrade	2027	\$175,163
5132	Capalaba - Blarney Street Park Upgrade	2027	\$65,302
5133	Capalaba - Bowen Street Park Upgrade	2027	\$65,302
5156	Capalaba - Howletts Road Park Upgrade	2027	\$160,566
5158	Capalaba - Jacaranda Road Park Upgrade	2027	\$15,365
5159	Capalaba - John Frederick Park Upgrade	2027	\$918,522
5161	Capalaba - Jupiter Street Park Upgrade	2027	\$270,427
5167	Capalaba - Lawlor Reserve Upgrade	2027	\$65,302
5168	Capalaba - Little Killarney Park Upgrade	2027	\$19,975
5172	Capalaba - Coolnwynpin Creek Corridor - Macquarie Street Upgrade	2027	\$65,302
5177	Capalaba - Nangando Street Park Upgrade	2027	\$68,375
5179	Capalaba - Quentin Street Road Reserve Upgrade	2027	\$65,302
5190	Capalaba - Tauris Road Park Upgrade	2027	\$341,107
5192	Capalaba - Wentworth Drive Park Upgrade	2027	\$868,133
5194	Capalaba - Winter Memorial Park Upgrade	2027	\$4,610

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5209	Cleveland - Bloomfield Street Park Upgrade	2027	\$33,803
5226	Cleveland - Donald Simpson Park Upgrade	2027	\$4,610
5230	Cleveland - G J Walter Park Upgrade	2027	\$58,388
5234	Cleveland - Haggup Street Park Upgrade	2027	\$289,634
5240	Cleveland - Janlaw Street Park Upgrade	2027	\$65,302
5249	Cleveland - Long Street Park Upgrade	2027	\$61,461
5261	Cleveland - Nandeebie Park Upgrade	2027	\$196,674
5265	Cleveland - Oyster Point Park Upgrade	2027	\$195,138
5277	Cleveland - Scott Street Park Upgrade	2027	\$4,610
5296	Cleveland - Vassi Concord Park Upgrade	2027	\$65,302
5305	Cleveland - William Ross Park Upgrade	2027	\$97,569
5579	Wellington Point - Plantation Place Park Upgrade	2027	\$63,766
5605	Thorneside - Alma Street Park Upgrade	2027	\$261,977
5608	Thorneside - Beth Boyd Park Upgrade	2027	\$195,138
5610	Thorneside - Jack And EDNa Finney Reserve Upgrade	2027	\$925,753
5618	Thorneside - Gradi Court Park Upgrade	2027	\$275,037
5621	Thorneside - Railway Parade Park Upgrade	2027	\$4,610
5626	Thorneside - Willard-Weber Foreshore Upgrade	2027	\$211,271
5627	Thorneside - William Taylor Memorial Sportsfield Upgrade	2027	\$1,375,271
5722	Wellington Point - Egw Wood Sportsfield Upgrade	2027	\$822,038
5726	Wellington Point - Goodall Street Park Upgrade	2027	\$429,457
5729	Wellington Point - Jacob Street Nature Belt Upgrade	2027	\$15,365
5731	Wellington Point - Liner Street Park Upgrade	2027	\$113,702
5764	Wellington Point - Wellington Point Recreation Reserve Upgrade	2027	\$476,321

Table SC 3.2.5—Parks and land for community facilities schedule of works

Column 1 Map reference	Column 2 Trunk Infrastructure	Column 3 Estimated timing	Column 4 Establishment cost¹²
5768	Cleveland - Norm Dean Park Upgrade	2027	\$61,461
5775	Birkdale - Tarradarrapin Creek Corridor - Collingwood Road Upgrade	2027	\$4,610
5801	Thorneside - Willard-Weber Reserve Upgrade	2027	\$211,271
5804	Wellington Point - Saranah Place Park Upgrade	2027	\$76,826
5838	Cleveland - Shelduck Street Park Upgrade	2027	\$65,302
5859	Birkdale - Hardy Road Park Upgrade	2027	\$145,969
5872	Cleveland - Ronnie Street Park Upgrade	2027	\$48,400
5905	Wellington Point - Hilliards Creek Corridor - Bibury Street Upgrade	2027	\$2,307,084
5627	William Taylor Memorial Sportsfields (50 Car Spaces)	2027	\$1,375,271
Total			\$123,137,038

SC3.3 Local government infrastructure plan maps

Local Government Infrastructure Plan Map LGIP-01 Priority infrastructure area and projection areas map

Local Government Infrastructure Plan Map LGIP-02 Plan for trunk water supply infrastructure

Local Government Infrastructure Plan Map LGIP-03 Plan for trunk sewerage infrastructure

Local Government Infrastructure Plan Map LGIP-04 Plan for trunk stormwater infrastructure

Local Government Infrastructure Plan Map LGIP-05 Plan for trunk transport infrastructure

Local Government Infrastructure Plan Map LGIP-06 Plan for trunk parks and land for community facilities infrastructure

Appendix D – LGIP Checklist

Appendix D is part of Statutory Guideline 03/14 – Local government infrastructure plans

Review principles:									
<ul style="list-style-type: none"> A reference in the checklist to the LGIP Template is taken to include a relevant reference to the SPA, statutory guideline for LGIPs, statutory guideline for MALPI or the Queensland Planning Provisions (QPP). Compliance requirements are not limited to the requirements listed in the checklist. 									
Local government infrastructure plan (LGIP) checklist				To be completed by local government		To be completed by appointed reviewer			
LGIP guideline outcome	LGIP component	Number	Requirement	Requirement met (yes/no)	Local government comments	Compliant (yes/no)	Justification	Corrective action description	Recommendation
The LGIP is consistent with the legislation and statutory guideline for LGIPs	All	1.	The LGIP sections are ordered in accordance with the LGIP template.	Yes	LGIP sections are ordered in accordance with the LGIP template	Yes	LGIP sections are ordered in accordance with the LGIP template	NA	LGIP may proceed
		2.	The LGIP sections are correctly located in the planning scheme.	Yes	The LGIP sections are correctly located in the planning scheme.	Yes	The LGIP sections are correctly located in the planning scheme.	NA	LGIP may proceed
		3.	The content and text complies with the mandatory components of the LGIP template.	Yes	The content and text complies with the mandatory components of the LGIP template.	Yes	The content and text complies with the mandatory components of the LGIP template.	Reference to website must be inserted when LGIP is inserted into planning scheme	LGIP may proceed
		4.	Text references to numbered paragraphs, tables and maps are correct.	Yes	Text references to numbered paragraphs, tables and maps are correct.	Yes	Text references to numbered paragraphs, tables and maps are correct.	NA	LGIP may proceed
	Definitions	5.	Additional definitions (to those in the QPP) do not conflict with statutory requirements.	Yes	Additional definitions to QPP are proposed for: <ul style="list-style-type: none"> Equivalent person Impervious area Planned density Vehicle trips per day These definitions do not conflict with statutory requirements. An amendment to the net developable area QPP definition to replace Priority infrastructure plan with Local government infrastructure plan is simply to update the reference to the current name of the document.	Yes	The additional definitions are either consistent with the QPP or do not conflict with the QPP or other statutory requirements.	NA	LGIP may proceed
	Preliminary section	6.	The drafting of the Preliminary section is consistent with the LGIP template.	Yes	The Preliminary section is consistent with the LGIP template	Yes	The Preliminary section is consistent with the LGIP template.	NA	LGIP may proceed
		7.	All five trunk networks included in the LGIP. If not, which networks are excluded? Why have these networks been excluded?	Yes	All five trunk networks are included in the LGIP.	Yes	All five trunk networks are included in the LGIP.	NA	LGIP may proceed
	Planning assumptions - structure	8.	The drafting of the Planning assumptions section is consistent with the LGIP template.	Yes	The drafting of the planning assumptions section is mostly consistent with the LGIP template except for: <ol style="list-style-type: none"> The insertion of “and the network planning horizon” in clause 4.2.3(a) The omitting of the reference	Yes	The planning assumptions section has been drafted in accordance with the LGIP template. The only exception to this is 4.2.2(1) which provides a definition of the developable area with reference to the planning scheme overlays rather than	NA	LGIP may proceed

				to a developable area map in clause 4.2.2(1) and replacement with a definition of the developable area (<i>"The developable area is land zoned for urban purposes not affected by the development constraints stated in Table 4.2.3—Development constraints."</i> And insertion of a new Table 4.2.3. The former of these changes helps in the understanding of the projection years, and the latter removes the need to prepare a new map which is simply a conglomeration of existing planning scheme overlay maps by simply referencing the same overlays in the inserted table. These changes help in the understanding and are generally in keeping with the LGIP template.		a developable area map. This change to the template enables the developable area to be explained more effectively and is considered acceptable.			
		9.	All the projection areas listed in the tables of projections are shown on the relevant maps and vice versa.	Yes	All projection areas are shown on relevant maps and vice versa. The PIA boundary and outside PIA are shown on the relevant maps and vice versa.	Yes	All the projection areas listed in the tables of projections are shown on the relevant maps and vice versa.	NA	LGIP may proceed
		10.	All the service catchments listed in the tables of projected infrastructure demand are identified on the relevant PFTI maps and vice versa.	Yes	All catchments are shown on relevant maps and vice versa.	Yes	All catchments are shown on relevant maps and vice versa	NA	LGIP may proceed
	Planning assumptions - methodology	11.	The population and dwelling projections reflect those prepared by the Qld Government Statistician (as available at the time of preparation).	Yes	The Urbis compiled population and dwelling data was benchmarked to QTT 2015 projections.	Yes	The original residential projections produced by Urbis in 2012 were based on the QGSO 2011 edition projections. These original projections were later updated by Urbis in 2015/16 based on the 2015 QGSO edition projections of residential population and dwellings and the 2015 National Institute of Economic and Industry Research (NIEIR) employment forecasts for Redland City. As part of this update, it was determined that the original 2012 projections of population adequately reflected the new 2016	NA	LGIP may proceed

						projections of population between 2011 and 2026. Hence the only difference between the original 2012 Urbis projections and the updated 2016 projections is the projections post 2026.			
		12.	The employment and non-residential development projections align with the available economic development studies, other reports about employment or historical rates for the area.	Yes	<p>Employment and non-residential development projections are based on the following data sources:</p> <ul style="list-style-type: none"> • NIEIR Scenario 2 (2015); • ABS 2011 Census Place or Work; • Inventory of total, vacant and inconsistent use of employment generating land in the City; • Current and approved development applications; and • Dwelling and population projections. 	Yes	<p>Urbis prepared projections of employment based on the 2015 National Institute of Economic and Industry Research (NIEIR) employment scenario 2 forecasts for Redland City and the ABS 2011 Census Place of Work data.</p> <p>These were calibrated against the existing level of development, an inventory of total, vacant and current inconsistently used employment generating land in Redland City local government area as well as Current and approved development applications for employment generating developments in Redland City local government area from July 2011 to present.</p> <p>RCC benchmarked GFA conversion rates against Brisbane's conversion rate (sqm GFA/employee) for the 'City – remainder' and various centres to come up with retail (77), Commercial (25), Industrial (115) and Community (72) which is made up of Urbis health and education sectors. RCC also used local knowledge and sampled a couple of Redland centres to compare actual 2011 GFA to existing employment. The retail rates reflects a predominant large format retail composition in most Redland centres.</p> <p>These conversion rates are considered appropriate and are within accepted ranges.</p>	NA	LGIP may proceed
		13.	The developable area excludes all areas	Yes	The developable area is	Yes	Yes. The developable area	NA	LGIP may proceed

		affected by absolute constraints such as steep slopes, conservation and flooding.		<p>defined as land zoned for urban purposes not affected by the development constraints:</p> <ul style="list-style-type: none"> -Erosion prone areas -Matter of state environmental significance -Matter of local environmental significance -Drainage constrained land* -Defined storm tide event* -Defined flood event* <p>Note—* except where the land is zoned for residential, commercial or industrial purposes.</p> <ul style="list-style-type: none"> -Very high landslide hazard -High landslide hazard -Water supply pipeline buffer -Water quality facility buffer -Waterway corridors and wetlands 		excludes land affected by constraints in accordance with planning scheme codes.		
	14.	The planned densities reflect realistic levels and types of development having regard to the planning scheme provisions and current development trends.	Yes	<p>Planned densities reflect the yield available under the draft City Plan as notified, and benchmarked to current:</p> <ul style="list-style-type: none"> • Dw per hectare; and • Plot ratios. 	Yes	<p>The future densities reflect realistic levels and types of development for each of the zones and precincts and have been determined based on planning scheme provisions (including zoning provisions and overlays), the SEQ Koala Habitat Values Mapping 2010 and current development trends (see Urbis 2012 report).</p> <p>The planned densities stated in Table SC3.1.3 are considered to reflect realistic levels and types of development for each area classification.</p>	NA	LGIP may proceed
	15.	The planned densities account for land required for local roads and other infrastructure.	Yes	Planned densities reflect the yield available under the draft City Plan for preferred uses in zones/precincts.	Yes	The planned densities stated in Table SC3.1.3 reflect realistic yields taking into consideration land required for local roads and other infrastructure.	NA	LGIP may proceed
	16.	The population and employment projection tables identify “ultimate development” in accordance with the QPP definition.	Yes	The population and employment projections at ultimate development have been calculated in accordance with the planned densities in the LGIP and the draft City Plan.	Yes	Population and employment projections have been provided for ultimate development. These have been calculated having regard to the realistic densities that can be achieved on premises.	NA	LGIP may proceed

		17.	Based on the information in the projection tables and other available material, it is possible to verify the remaining capacity to accommodate growth, for each projection area.	Yes	The projection tables and supporting information allow the remaining capacity to accommodate growth in each projection area to be verified.	Yes	The projection tables and supporting information allow the remaining capacity to accommodate growth in each projection area to be verified. Some projection areas are projected to experience a minor decline in population capacity over time due to projected decreases in average occupancy rates.	NA	LGIP may proceed
		18.	The planning assumptions reflect an efficient, sequential pattern of development.	Yes	Sequencing maps demonstrate no further expansion to the urban area that was identified to be serviced under the existing PIP/LGIP	Yes	The planning assumptions reflect an efficient pattern of growth and includes growth in areas where development has been approved. Projected growth in the Toondah Harbour and Weinam Creek PDAs has been taken into consideration in the preparation of the planning assumptions. These PDAs are located adjacent to existing urban areas and are projected to accommodate some employment growth. The Double Jump Rd Emerging Communities area is not expected to development until after 2027. The Redland Bay South Investigation Area (known as Shoreline through the development application submitted in 2014) is not zoned for urban purposes under the draft City Plan and is outside the urban footprint. There is a preliminary approval over this area and an infrastructure agreement that requires the development to provide its own wastewater transport and treatment due to very high servicing costs. For these reasons, this area was left outside the PIA and development was not	NA	LGIP may proceed

						projected to occur prior to 2027.			
		19.	Has the Department of Transport and Main Roads or any relevant distributor-retailer been consulted in the preparation of the LGIP? What was the outcome of the consultation?	Yes	Only TMR is relevant. TMR was consulted on 1 May 2015 and provided a copy of a Transitional Interim LGIP Amendment package which included forecasts and assessments that provided for an update of the roads schedule of works in the existing PIP. Council did not proceed with this interim amendment but the local road component is mirrored in the draft LGIP. TMR's Program Delivery and Operations Metropolitan Region reviewed and subsequently supported the amendment (ref. email response).	Yes	The Department of Transport and Main Roads was consulted in the preparation of the LGIP and has supported the proposed road program. RCC has provided an email from DTMR dated 4/06/2015 to confirm that the proposed SOW in this draft LGIP is supported. There is no water distributor-retailer for the Redland local government area.	NA	LGIP may proceed
	Planning assumptions - demand	20.	The infrastructure demand projections are based on the projections of population and employment growth.	Yes	Demand projections are derived from projections of population and employment growth by applying relevant conversion factors as necessary.	Yes	Transport Network – Transport network models were prepared for 2011 based on existing level of development from ABS data and the 2012 Urbis projections of population and employment for 2031. However the VLC projections are slightly lower than that projected by Urbis at 2031, with a total population of 179,450 people. This compares very well against the updated Urbis projection for 2031 of 180,923. In terms of employment, the updated Urbis projection was 45,294 at 2031. Whereas the VLC target employment in 2031 was 48,906. This represents an additional 3,600 jobs at 2031. The Veitch Lister 2014 (Redland City Council: Road Infrastructure Planning – Traffic Forecasts and Assessments) reviewed the previous (2011) Urbis employment projections, noting the total jobs only included those jobs within the Census "Place of Work" database and not jobs for	NA	LGIP may proceed

						<p>which the location was “Not Stated”, ‘Undefined’ or had ‘No Fixed Address”.</p> <p>VLC’s practice is to apportion the extra jobs of ‘uncertain location’ over the top of those which the location was stated, in turn raising the number of jobs. This is appropriate as these “footloose” jobs which do not generate urban development, they do create additional trips on the network.</p> <p>Total vehicle trips were determined for 2016, 2021, 2026, 2027 and ultimate based upon the adopted projections of population and employment growth.</p> <p>Water supply and sewerage networks-</p> <p>The water supply network and sewerage network demand projections were derived using the existing level of development and the updated Urbis projections of population and employment/GFA.</p> <p>Stormwater network –</p> <p>The infrastructure demand projections for the stormwater network outside the growth service catchments were calculated based on the existing level of development and the ultimate level of development based on the zoning of the catchment. The timing of growth up to the planning horizon was determined based on the projections of residential and non-residential growth within the catchment.</p> <p>The infrastructure demand projections for the stormwater network outside the growth service catchments were calculated based on the existing level of</p>		
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						<p>development and the projections of residential and non-residential growth.</p> <p>Parks and LFCF network- Parks demand is population driven. The Open Space strategy to service demand was based on the 2012 Urbis projections (2011 QGSO projections). These projections assumed a 2026 population of 174,346. The final updated Urbis projections adopted the 2012 projections for growth up to 2026 and only changed projections after 2026. Hence the adopted population projection for 2026 is 174,346. The demand projections for the parks network were based on the adopted projections of population growth.</p> <p>The above methodologies are considered to provide appropriate projections of infrastructure demand across the networks.</p>			
		21.	The demand generation rates align with accepted rates and/or historical data.	Yes	Demand generation rates stated in Table SC3.1.3 were calculated by applying conversion rates to the planned densities for each area using best practice industry standards and local historical data.	Yes	The demand generation rates stated in Table SC3.1.3 reflect best practice industry standard conversion rates or local historical data.	NA	LGIP may proceed
		22.	The service catchments used for infrastructure demand projections are identified on relevant PFTI maps and demand tables.	Yes	The service catchments used for infrastructure demand projections are identified on relevant PFTI maps and demand tables.	Yes	The service catchments used for infrastructure demand projections are identified on relevant PFTI maps and demand tables.	NA	LGIP may proceed
		23.	The service catchments for each network cover, at a minimum, the PIA.	No	The service catchments for the water supply, stormwater, transport and stormwater networks cover the PIA at a minimum. However the service catchments for the sewerage network do not cover some areas of low density residential inside the PIA. However, these areas have	Yes	The service catchments for the water supply, stormwater, transport and stormwater networks cover the PIA at a minimum. However the service catchments for the sewerage network do not cover some areas of low density residential inside the PIA. Because these areas have	NA	LGIP may proceed

				been prioritised for the provision of the 4 other networks and have therefore been included in the PIA.		been prioritised for the provision of the four other trunk infrastructure networks, it is reasonable to include these areas in the PIA.		
	24.	The Asset Management Plan and Long Term Financial Forecast align with the LGIP projections of growth and demand. If not, is there a process underway to achieve this?	Yes	RCCs LTAMP contains statements of citywide population projections at 2021 and 2031. These citywide projections are similar (but not the same) as those stated in the draft LGIP. The LTAMP does not include projections of demand.	Yes	RCCs LTAMP contains statements of citywide population projections at 2021 and 2031. These citywide projections are similar (but not the same) as those stated in the draft LGIP. The LTAMP does not include projections of demand. RCC has advised that there is a process underway to achieve alignment between the projections of growth and demand in the LTAMP and its LGIP in its letter dated 2 March 2017. RCC has provided its Financial Strategy which includes extracts from its LTFF. This document does not include projections of population growth and demand. Consequently, it is not possible to determine whether there is alignment with the LGIP. RCC has advised however that there is a process underway to achieve alignment between the projections of growth and demand in the LTFF and the LGIP in its letter dated 2 March 2017.	NA	LGIP may proceed
Priority infrastructure area (PIA)	25.	The drafting of the PIA section is consistent with the LGIP template.	Yes	The drafting of the PIA section is consistent with the LGIP template.	Yes	The drafting of the PIA section is consistent with the LGIP template.	NA	LGIP may proceed
	26.	Text references to PIA map(s) are correct.	Yes	Text references to LGIP 01-Priority infrastructure area and projection areas maps are correct.	Yes	Text references to LGIP 01-Priority infrastructure area and projection areas maps are correct.	NA	LGIP may proceed

		27.	The PIA boundary shown on the PIA map is legible at a lot level and the planning scheme zoning is also shown on the map.	No	The PIA boundary shown on the PIA map is legible at a lot level and the planning scheme zoning is also shown on the map.	Yes	The PIA map does not show the PIA boundary legible at the lot level. However, the PIA map does show the zoning and the PIA is shown legible at the lot level on the PFTI maps. This is considered acceptable for users of the LGIP. The PIA boundary will also be available for interrogation on the draft City Plan interactive mapping site.	NA	LGIP may proceed
		28.	The PIA includes all areas of existing urban development serviced by all relevant trunk infrastructure networks at the time the LGIP was prepared.	Yes	The PIA includes all areas of existing urban development serviced by all relevant trunk infrastructure networks at the time the LGIP was prepared.	Yes	The PIA includes all areas of existing urban development serviced by all relevant trunk infrastructure networks at the time the LGIP was prepared.	NA	LGIP may proceed
		29.	The PIA accommodates growth for at least 10 years but no more than 15 years.	Yes	<p>The PIA identifies the area that Council intends to prioritise for the provision of all trunk infrastructure networks to service urban growth up to 2027.</p> <p>The main difference between the existing LGIP PIA and the draft LGIP PIA is that all of the Double Jump Rd Emerging Communities area is now outside the PIA. This is also reflected in the population and dwelling projections. This is because this area is not expected to development until after 2027.</p>	Yes	<p>The PIA accommodates growth for at least 10 years. The PIA identifies the area that Council intends to prioritise for the provision of trunk infrastructure to service urban growth for a minimum of 10 years. This is consistent with the PIA horizon of 2027 stated in section 4.3 of the LGIP (11 years from the LGIP base date). The ultimate development capacity of the PIA can accommodate at least 10 years of residential and non-residential growth projected for RCC. The PIA by definition must include existing urban areas. Due to the significant expanse of the existing urban area and the increased densities that may be achieved in these areas under the planned densities, the PIA has significant capacity to accommodate both non-residential GFA and dwellings growth past 2027 and even 2032.</p>	NA	LGIP may proceed
		30.	Are there areas outside the PIA for which the planning assumptions identify urban growth within the next 10 to 15 years? If so, why have these areas been excluded from the PIA?	Yes	The PIA identifies the area that Council intends to prioritise for the provision of all trunk infrastructure networks to service urban	Yes	The PIA identifies the area that Council intends to prioritise for the provision of all trunk infrastructure networks to service urban	NA	LGIP may proceed

				<p>growth up to 2027.</p> <p>The Double Jump Rd Emerging Communities area is outside the PIA because this area is not expected to development until after 2027 which is also reflected in the population and dwelling projections.</p> <p>The Redland Bay South Investigation Area (known as Shoreline through the development application submitted in 2014) is not including in the PIA because it has not been zoned for urban purposes under the Draft City Plan and is not projected to develop prior to 2027.</p> <p>The following PDAs are outside of the planning scheme area and have therefore not been included in the PIA:</p> <ul style="list-style-type: none"> • Toondah Harbour Priority Development Area (PDA) • Weinam Creek PDA. <p>However projected growth in these PDAs has been taken into consideration in the preparation of the planning assumptions for outside the PIA.</p>		<p>growth up to 2027.</p> <p>The Double Jump Rd Emerging Communities area is outside the PIA because this area is not expected to development until after 2027 which is also reflected in the population and dwelling projections.</p> <p>There is limited new dwellings projected to occur outside the PIA up to 2027 (~500 dwellings).</p> <p>Growth projected to occur outside the PIA up to 2027 (mainly in the PDAs), has been taken into account when preparing the planning assumptions for inside and outside the PIA.</p>			
		31.	The PIA achieves an efficient, sequential pattern of development.	Yes	<p>The PIA achieves an efficient, sequential pattern of development up to 2027. It only differs from the existing LGIP PIA in that it excludes the Double Jump Rd emerging community area.</p> <p>It also excludes the Redland Bay South Investigation Area as these are not expected to develop until after 2027.</p> <p>The PDAs have also been excluded from the PIA.</p>	Yes	<p>The PIA identifies the area that Council intends to prioritise for the provision of all trunk infrastructure networks to service urban growth up to 2027. This includes infill growth in existing urban areas and takes into consideration greenfield areas approved for development.</p> <p>The Double Jump Rd Emerging Communities area is outside the PIA because this area is not expected to development until after 2027 because it has not undergone structure</p>	NA	LGIP may proceed

						<p>planning and is not considered to achieve an efficient pattern of growth.</p> <p>The Redland Bay South Investigation Area (known as Shoreline through the development application submitted in 2014) is also not prioritised for development prior to 2027. This helps achieve a more efficient and sequential pattern of growth.</p> <p>The following PDAs are not subject to the planning scheme and have not been included in the PIA:</p> <ul style="list-style-type: none"> • Toondah Harbour Priority Development Area (PDA) • Weinam Creek PDA. <p>However projected growth in these PDAs has been taken into consideration in the preparation of the planning assumptions for outside the PIA.</p>		
Desired standards of service (DSS)	32.	The drafting of the DSS section is consistent with the LGIP template.	Yes	The drafting of the DSS section is consistent with the LGIP template.	Yes	The drafting of the DSS section is consistent with the LGIP template.	NA	LGIP may proceed
	33.	The DSS section states the key planning and design standards for each network.	Yes	The DSS section states the key planning and design standards for each network.	Yes	The DSS section states the key planning and design standards for each network and provides suitable reference to Council's adopted standards identified in Planning Scheme Policy 2 – Infrastructure Works.	NA	LGIP may proceed
	34.	The DSS reflects the key, high level industry standards, regulatory and statutory guidelines and codes, and planning scheme policies about infrastructure.	Yes	The DSS reflects the key, high level industry standards, regulatory and statutory guidelines and codes, and planning scheme policies about infrastructure.	Yes	The DSS reflects the key, high level industry standards, regulatory and statutory guidelines and codes, and planning scheme policies about infrastructure. Further explanation and benchmarking are provided within the memorandum titled Draft LGIP Review – Desired Standards of Service dated 2 March 2016.	NA	LGIP may proceed
	35.	There is alignment between the relevant levels of service stated in the local government's Long Term Asset Management Plan (LTAMP) and the LGIP. If not, is there a process underway to achieve this?	Yes	Council has a process underway to achieve alignment between the relevant levels of service stated in the local government's LTAMP and the LGIP	Yes	The levels of service in the LTAMP are generally not stated in a manner which allows alignment with the LGIP DSS to be determined. An overview of the alignment of these technical levels of	NA	LGIP may proceed

						<p>service and the LGIP standards of service for each trunk infrastructure network is provided as follows.</p> <p>Water supply network The technical levels of service for the water supply network stated in the Water Supply and Wastewater Asset and Service Management Plan are planning and design standards and are similar to, but not completely the same as the DSS stated in the LGIP. The differences result from a revision of the DSS by Redland Water subsequent to the preparation of the Water Supply and Wastewater Asset and Service Management Plan.</p> <p>RCC has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the levels of service stated in the LTAMP and its LGIP.</p> <p>Sewerage network The technical levels of service for the sewerage network stated in the Water Supply and Wastewater Asset and Service Management Plan Revision 4 are planning and design standards and are similar to, but not completely the same, as the DSS stated in the LGIP. The differences result from a revision of the DSS by Redland Water subsequent to the preparation of the Water Supply and Wastewater Asset and Service Management Plan.</p> <p>RCC has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the levels of service stated in the LTAMP and its</p>		
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						<p>LGIP.</p> <p>Transport network Roads The technical levels of service for the roads network stated in the Roads and Bridges Asset & Service Management Plan 2016/17 are not planning and design standards, but rather measures for the frequency of maintaining or renewing the infrastructure. It is not possible to compare these with the DSS stated in the draft LGIP.</p> <p>RCC has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the levels of service stated in the LTAMP and its LGIP.</p> <p>Cycleways The Footpaths and Cycleways Asset & Service Management Plan 2016/17 refers to the technical levels of service for the cycleways network as being contained in Planning Scheme Policy 9 – Infrastructure Works. These are planning and design standards and are consistent with the draft LGIP which refers to the same planning scheme policy for the planning and design of the cycleways network. On this basis, it is concluded that there is alignment between the standards of service stated in the LGIP and those stated in the Footpaths and Cycleways Asset & Service Management Plan 2016/17.</p> <p>Stormwater network The technical levels of service for the stormwater network stated in the Stormwater Quality Asset & Service Management Plan 2016/17 and Stormwater</p>		
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						<p>Drainage Asset & Service Management Plan 2016/17 are not planning and design standards, but rather measures for the frequency of maintenance or the attainment of high level performance targets. It is not possible to compare these with the planning and design DSS stated in the draft LGIP.</p> <p>RCC has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the levels of service stated in the LTAMP and its LGIP.</p> <p>Parks and land for community facilities network</p> <p>The desired technical levels of service for the parks and land for community facilities network stated in the Open Space Asset & Service Management Plan 2016/17 are predominately measures of performance concerning recreation and sporting activities provided within the parks rather than planning and design standards for the parkland itself. The one exception is a standard relating to the rate of provision of sporting parkland, which is consistent with the standard stated in the LGIP DSS. Aside from this standard, it is not possible to compare the standards of service in the draft LGIP with the Open Space Asset & Service Management Plan 2016/17.</p> <p>RCC has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the levels of service stated in the LTAMP and its LGIP.</p>		
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Plans for trunk infrastructure (PFTI) – structure and text	36.	The drafting of the PFTI section is consistent with the LGIP template.	Yes	The drafting of the PFTI section is consistent with the LGIP template.	Yes	The drafting of the PFTI section is consistent with the LGIP template.	NA	LGIP may proceed
	37.	PFTI maps are identified for all networks listed in the Preliminary section.	Yes	PFTI maps are identified for all networks listed in the Preliminary section.	Yes	PFTI maps are identified for all networks listed in the Preliminary section.	NA	LGIP may proceed
	38.	PFTI schedule of works summary tables for future infrastructure are included for all networks listed in the Preliminary section.	Yes	Schedule of works summary tables for future infrastructure are included for all networks listed in the Preliminary section.	Yes	Schedule of works summary tables for future infrastructure are included for all networks listed in the Preliminary section including the water supply, sewerage, stormwater, transport and parks and LFCF networks.	NA	LGIP may proceed
PFTI – Maps <i>[Add rows to the checklist to address these items for each of the networks]</i>	39.	The maps clearly identify the existing and future trunk infrastructure networks distinct from each other.	Yes	The maps clearly identify the existing and future trunk infrastructure networks distinct from each other.	Yes	The maps clearly identify the existing and future trunk infrastructure networks distinct from each other.	NA	LGIP may proceed
	40.	The service catchments referenced in the SOW model and infrastructure demand summary tables are shown clearly on the maps.	Yes	The service catchments referenced in the SOW model and infrastructure demand summary tables are shown clearly on the maps.	Yes	The service catchments referenced in the SOW model and infrastructure demand summary tables are shown clearly on the maps.	NA	LGIP may proceed
	41.	Future trunk infrastructure components are identified (at summary project level) clearly on the maps including a legible map reference.	Yes	Trunk infrastructure components are identified (at summary project level) clearly on the maps including a legible map reference.	Yes	Trunk infrastructure components are identified (at summary project level) clearly on the maps including a legible map reference.	NA	LGIP may proceed
	42.	The infrastructure map reference is shown in the SOW model and summary schedule of works table in the LGIP.	Yes	The infrastructure map reference is shown in the SOW model and summary schedule of works table in the LGIP.	Yes	Trunk infrastructure components are identified (at summary project level) clearly on the maps including a legible map reference.	NA	LGIP may proceed
Schedules of works <i>[Add rows to the checklist to address these items for each of the networks]</i>	43.	The schedule of works tables in the LGIP complies with the LGIP template.	Yes	The schedule of works tables in the LGIP complies with the LGIP template.	Yes	The schedule of works tables in the LGIP comply with the LGIP template.	NA	LGIP may proceed
	44.	The identified trunk infrastructure is consistent with the SPA and LGIP guideline.	Yes	The identified trunk infrastructure in the SOW is consistent with the SPA and LGIP guideline.	Yes	The future trunk infrastructure identified in the schedules of works is consistent with the SPA and LGIP guideline. All works items are consistent with the SPA and the guideline and only land has been included for community facilities.	NA	LGIP may proceed
	45.	The existing and future trunk infrastructure identified in the LGIP is adequate to service at least the area of the PIA.	Yes	The existing and future trunk infrastructure identified in the LGIP is adequate to service at least the area of the PIA.	Yes	The existing and future trunk infrastructure identified in the LGIP is adequate to service at least the area of the PIA.	NA	LGIP may proceed
	46.	Is there alignment of the scope, estimated cost and planned timing of proposed trunk capital works contained within the Schedule of Works and the relevant inputs of the LTAMP and LTFF?		Council has obtained advice regarding an appropriate process to achieve alignment between the scope, estimated cost and planned	Yes	RCC's LTAMP provides 'an overarching summary of the position of the Asset Management practice within RCC at present and aims to	NA	LGIP may proceed

			If not, is there a process underway to achieve this?		timing of proposed trunk capital works contained within the Schedule of Works and the relevant inputs of the LTAMP and LTFF. Council will undertake a process to achieve this alignment.		<p><i>provide a structure for improvement of that practice over the short to medium term.</i></p> <p>Specific details of the requirements for each asset class are contained in a series of individual Asset and Service Management Plans which <i>'provide some guidance as to the understanding of the current levels of service and, where possible desired levels of service provided by the existing assets'</i>.</p> <p>A review of the individual asset and service management plans reveals that the plans provide both Community Levels of Service and Technical Levels of Service. The technical levels of service are the closest equivalent of the LGIP standards of service. The plans do not provide the scope, estimated cost and planned timing of proposed trunk capital works.</p> <p>PIE Solutions was provided with a copy of RCC's Financial Strategy 2016-2026. The strategy refers to RCC's LTFF but does not contain the scope, estimated cost and planned timing of future trunk infrastructure. As a consequence, it has not been possible to determine alignment between the LGIP and the LTFF.</p> <p>There is alignment however between the capital works program and the first 3yrs of the LGIP SOWs.</p> <p>Council has advised in its letter dated 2 March 2017 that there is a process underway to achieve alignment between the LGIP and LTAMP and LTFF.</p>		
		47.	The cost of trunk infrastructure identified in the SOW model and schedule of works	Yes	The base cost for future trunk infrastructure works	Yes	Work construction costs – water supply, sewerage,	NA	LGIP may proceed.

			<p>tables is consistent with legislative requirements.</p>	<p>have been costed using unit rates from RCC's asset management database. The only exception to this is stormwater detention and quality infrastructure items which were costed by qualified engineers using the Music software.</p> <p>Land was costed using suburb based englobo urban land values and constrained land values prepared by a registered valuer.</p> <p>The contingencies and on-costs applied to future trunk infrastructure are consistent with the SOW model user manual allowable ranges.</p>	<p>transport and parks and land for community facilities Future trunk infrastructure for the water supply, sewerage, transport and parks and land for community facilities networks were costed using the unit rates adopted in RCC's assets management database. These unit rates were prepared by suitably qualified consultants who analysed the actual cost of constructing similar items.</p> <p>The existing trunk infrastructure items' replacement values for these networks were taken directly from RCC's asset management database.</p> <p>Stormwater network – Future stormwater pipes and associated infrastructure (manholes, inlets etc) have been costed using the unit rates from RCC's asset management database. Stormwater detention and quality infrastructure has been costed by qualified engineers using the Music modelling software. The existing trunk stormwater infrastructure items' replacement values were taken from RCC's asset management database.</p> <p>Contingencies and On-costs for all network works All contingencies and on-costs that were included in the costings provided in the infrastructure planning reports have been removed from the base infrastructure works costs for the future trunk infrastructure across all networks.</p> <p>On-costs of 15% and a contingency rate of 25% were applied to base construction costs for future</p>		
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						<p>projects. This contingency rate is considered acceptable with reference to the costing methodology adopted (i.e. master planning unit rates).</p> <p>The on-cost and contingency rates applied are within the allowable ranges included within the SOW model user manual.</p> <p>Land Costs – The cost of acquiring land for future trunk infrastructure has been estimated using land valuation unit rates prepared by a certified practicing valuer. These rates were defined for each suburb and different rates were determined for constrained and unconstrained land.</p> <p>Contingencies and On-costs for land An on-cost of 3% was applied to future land costs for all networks. This on-cost is considered appropriate to account for Council’s cost of acquiring the land.</p> <p>No contingency was applied to land costs.</p>		
SOW model	48.	The submitted SOW model is consistent with the model included with the statutory guideline for LGIPs.		The submitted SOW model is consistent with the model included with the statutory guideline for LGIPs.	Yes	Please refer to memorandum titled ‘Schedule of Works Model – First Appointed Review’ prepared by PIE Solutions and dated 3 March 2017.	NA	LGIP may proceed
	49.	The SOW model has been prepared and populated consistent with the statutory guideline for LGIPs and its User manual for the SOW model.		The submitted SOW model is consistent with the model included with the statutory guideline for LGIPs.	Yes	Please refer to memorandum titled ‘Schedule of Works Model – First Appointed Review’ prepared by PIE Solutions and dated 3 March 2017.	NA	LGIP may proceed
Extrinsic material	50.	All relevant background studies and reports in relation to the preparation of the LGIP are available and identified in the list of extrinsic material in the LGIP guideline.	Yes	All relevant background studies and reports in relation to the preparation of the LGIP are available and identified in the list of extrinsic material in the LGIP guideline.	Yes	All relevant background studies and reports in relation to the preparation of the LGIP are available and identified in the list of extrinsic material in the LGIP guideline. However full details of the planning assumptions methodology is not provided in the current	NA	LGIP may proceed

							extrinsic material reports.		
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First Compliance Check of Redland City Council's Local Government Infrastructure Plan

Appointed Reviewer Statement

Prepared by: PIE Solutions Pty Ltd

Version	Date	Reviewer name and signature	
Final	6 March 2017	ALISON WOLFENDEN	

1.1 Introduction

PIE Solutions has been engaged by Redland City Council to undertake a first compliance check of its proposed Local Government Infrastructure Plan (LGIP).

PIE Solutions is required to:

- (1) evaluate whether a proposed LGIP complies with the requirements outlined under the statutory guideline for making and amending planning instruments (MALPI) and Statutory guideline 03/14 – Local government infrastructure plans, including the LGIP template, the SOW model and the LGIP Checklist.
- (2) provide a written statement and the completed checklist to the local government detailing the findings of the compliance check.

Scope exclusions

The following items are outside the scope of this review:

- A verification of the accuracy of individual inputs used in the preparation of an LGIP.
- A review of the local government's Long Term Financial Forecast (LTFF) or asset management plan (LTAMP) other than to determine the extent of their alignment with the LGIP.

Compliance check process

The process used to undertake the compliance check comprised the following steps:

Stage	Description
<u>Engaged</u>	<ul style="list-style-type: none"> The draft LGIP, SOW Models and other information were provided by Redland City Council in November 2016.
<u>Review</u>	<ul style="list-style-type: none"> PIE Solutions commenced a review of the draft LGIP between November and December 2016. RCC was advised on 29 November 2016 that further information was required to enable compliance with the requirements of the SPA and LGIP guideline to be determined. RCC subsequently provided the further information The review of the draft RCC LGIP was finalised on 3 March 2017
<u>Final report</u>	<ul style="list-style-type: none"> The final report was issued on 3 March 2017

The following local government personnel were involved in the compliance check:

Name	Title	Date of discussion (s)	Scope of discussion
Giles Tyler	Principal Adviser Infrastructure Planning and Charging Unit Redland City Council (Project Manager)	Numerous over course of preparation of LGIP and during review	All aspects of the draft RCC LGIP were discussed with RCC staff
Infrastructure Planning and Charging Unit staff members	As required by RCC Project Manager		
Infrastructure Network Partners	As required by RCC Project Manager		

Compliance check findings

In the process of preparing their LGIP, Redland City Council has consulted with the Department of Transport and Main Roads (DTMR).

Redland City Council has prepared a LGIP which is compliant with the requirements of the *Sustainable Planning Act 2009*, Statutory Guideline 03/14, the schedule of works model (SOW) and the LGIP checklist.

Detailed commentary has been provided for each item of the checklist. A separate memorandum has been provided in relation to the checklist requirements for the DSS and SOW model. These memorandums are referenced in the relevant sections of the checklist.

Conclusions

Redland City Council has prepared a LGIP which is compliant with the requirements of the *Sustainable Planning Act 2009*, Statutory Guideline 03/14, the schedule of works model (SOW) and the LGIP checklist.




Recommendations

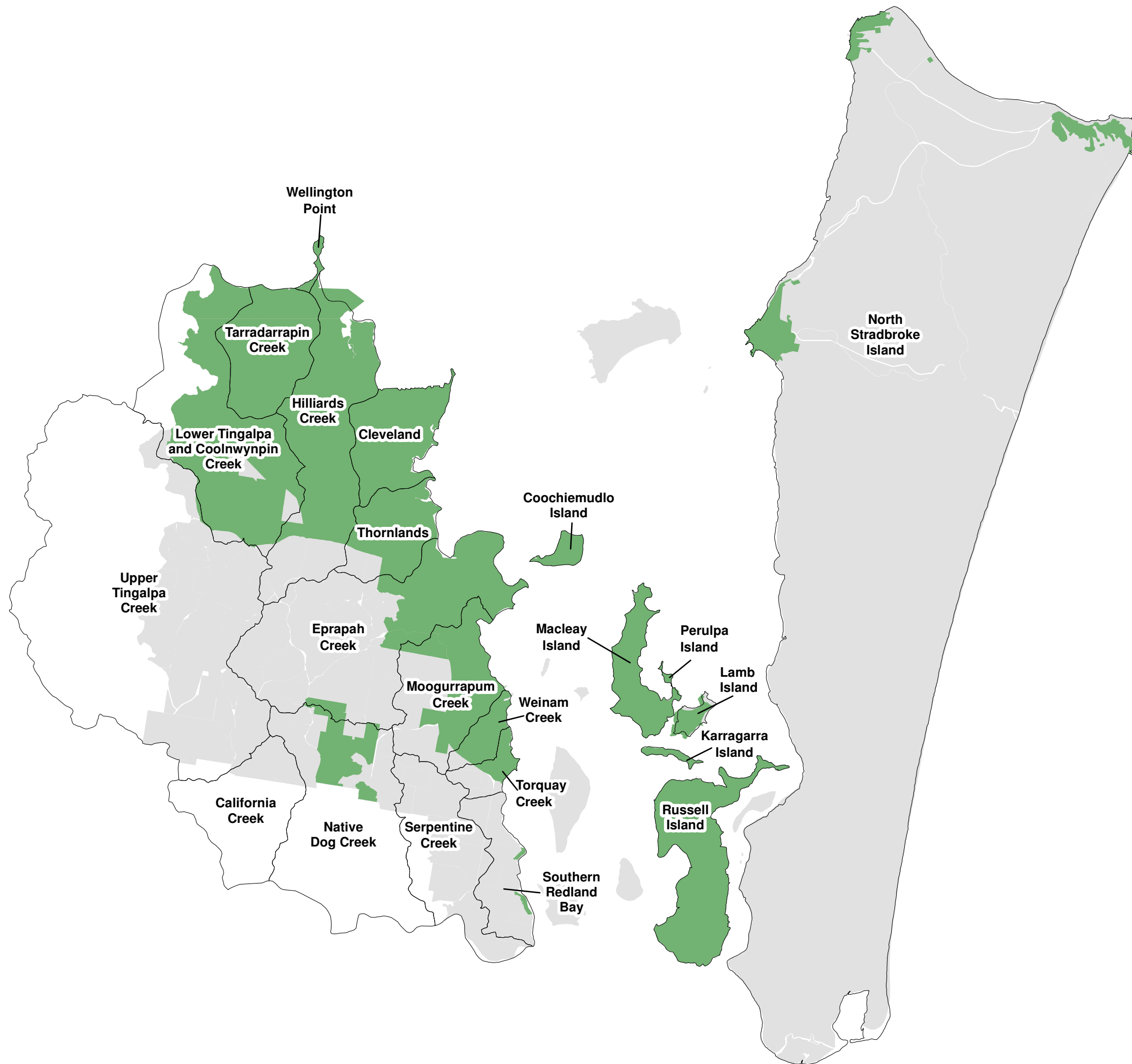
PIE Solutions recommends to Redland City Council that the LGIP should proceed unchanged.

Recommended conditions to be imposed

There are no conditions to be imposed.

Legend

-  Stormwater Service Catchments
-  Priority Infrastructure Area
-  LGA Boundary



Approximate Scale at A3

1:150,000

0 1,500 3,000 6,000



Meters

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Stormwater Service Catchments

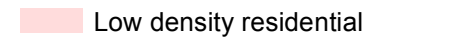
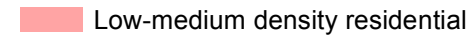
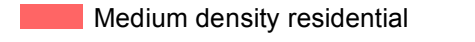
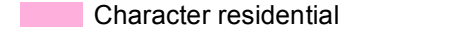
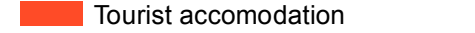
Map A5




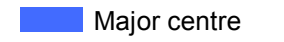
Legend
Projection area

-  Projection area
-  PIA



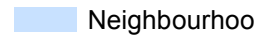
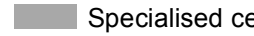
Residential zones

-  Low density residential
-  Low-medium density residential
-  Medium density residential
-  Character residential
-  Tourist accomodation

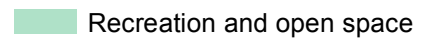
Centre zones

-  Principal centre
-  Major centre

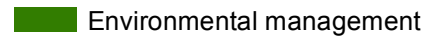
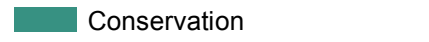
District centre

-  District centre
-  Local centre
-  Neighbourhood centre
-  Specialised centre

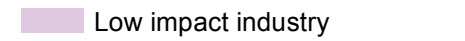

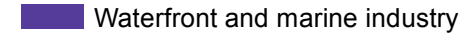
Recreation zones

-  Recreation and open space

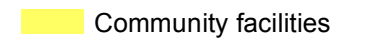
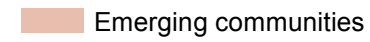



Environmental zones

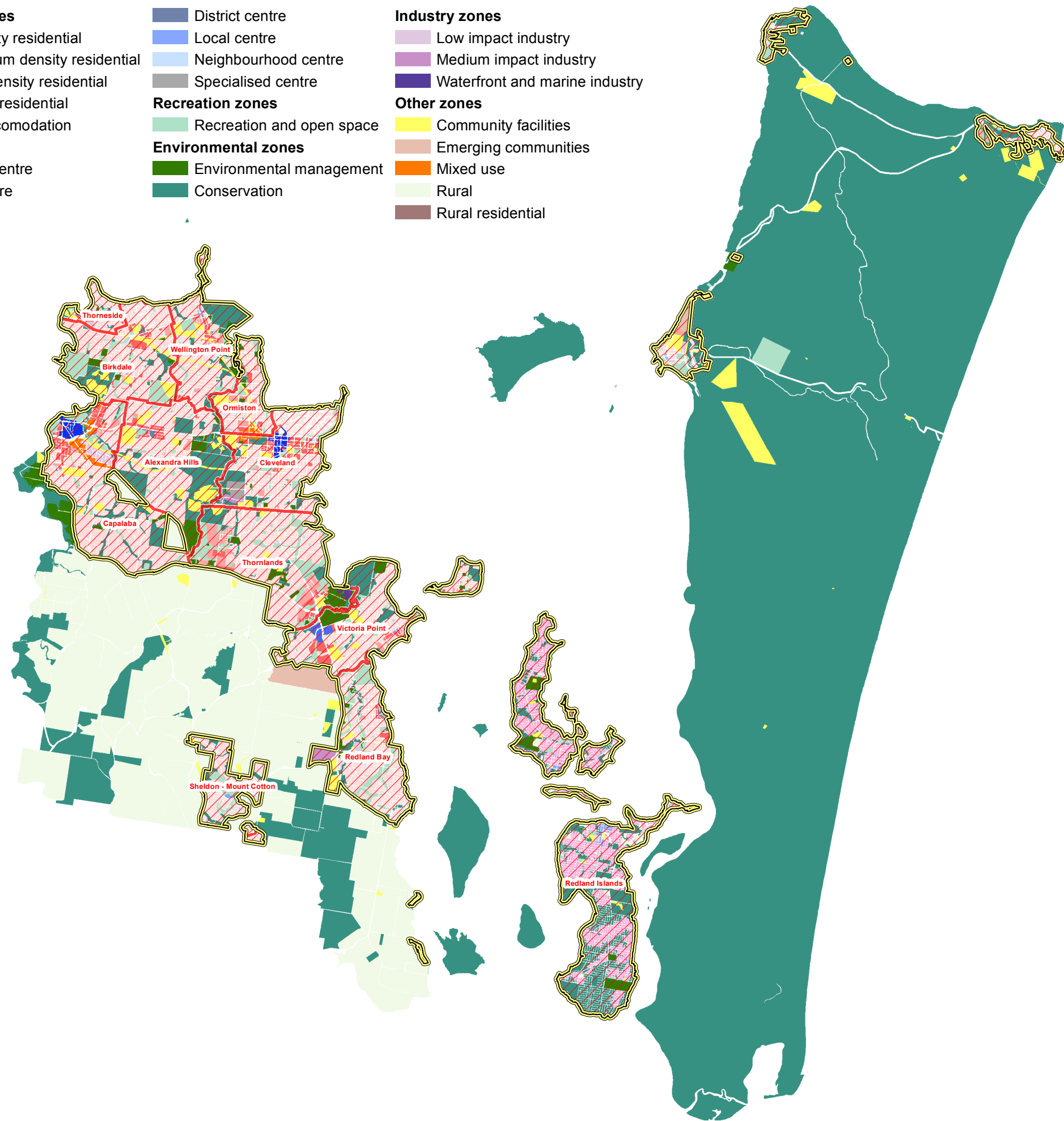
-  Environmental management
-  Conservation

Industry zones

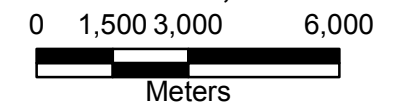
-  Low impact industry
-  Medium impact industry
-  Waterfront and marine industry

Other zones

-  Community facilities
-  Emerging communities
-  Mixed use
-  Rural
-  Rural residential



Approximate Scale at A3
 1:150,000


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Priority infrastructure area
 and projection areas map

Map LGIP-01

