

Part 4 Priority Infrastructure Plan

4.1 Preliminary

4.1.1 Introduction

- (1) This priority infrastructure plan has been prepared in accordance with the requirements of the Act.
- (2) This priority infrastructure plan may be referred to the Yarrabah Priority Infrastructure Plan 2013 ('YPIP 2013').

4.1.2 Purpose

- (1) The purpose of the YPIP 2013 is to:
 - (a) integrate and coordinate land use planning and infrastructure planning;
 - (b) ensure that trunk infrastructure is planned and provided in an efficient and orderly manner;
 - (c) implement the policy direction set in the Strategic Framework, in particular:
 - (i) Theme 2 Infrastructure, Element 3.5.2 Urban infrastructure.

4.1.3 Structure of the priority infrastructure plan

- (1) YPIP 2103:
 - (a) states in section 4.2 (planning assumptions), how the town and population will grow and the demand on the truck infrastructure network, which have informed the preparation of the priority infrastructure plan;
 - (b) identifies in section 4.3 (priority infrastructure area), the prioritised area to accommodate urban growth for 10 to 15 years;
 - (c) states in section 4.4 (desired standards of service), the desired standard of performance for each network of development infrastructure;
 - (d) identifies in section 4.5 (plans for trunk infrastructure) and Schedule 2 (mapping), the existing and planned trunk infrastructure for the following networks:
 - (i) water supply;
 - (ii) waste water;
 - (iii) storm water;
 - (iv) transport;
 - (v) public parks and land for community facilities.

4.2 Planning assumptions

- (1) Table 4.2.1.a shows the number of people projected to be in Yarrabah at 2031. The number of people expected to be in Yarrabah at 2026 is used for the purposes of YPIP 2013. The planning assumptions have been prepared for the following time periods to align with Australian Bureau of Statistics (ABS) census years:
 - (a) 2011-2016;
 - (b) 2016-2021;
 - (c) 2021-2026;
 - (d) 2025-2031.

Table 4.2.1.a Population projections – Yarrabah Aboriginal Shire Council

	2011	2016	2021	2026	2031
Population	2389	2535	2691	2857	3032

- (2) These expectations are based on land use planning provisions in the planning scheme and the expected growth in population in the services boundary as shown on Yarrabah Priority Infrastructure Area Map YPIP-001. These expectations form the basis for how the infrastructure network has been planned.
- (3) Further detailed background information concerning the planning assumptions is referenced in section 4.7 – Further extrinsic material.

Notes –

1. The future population is listed above, rather than a projected number of dwellings as occupancy rates are averaging 5.6 persons per households which represents possible overcrowding and a potential undersupply of housing. As housing in the community is largely paid for by the government, the supply of housing is directly related to the availability of government funds. It is therefore difficult to project a future housing supply.
2. Due to a lack of data relating to employment information and a high degree of population transience and statistical employment anomalies, floor space projections have not been prepared.

4.3 Priority infrastructure area

4.3.1 Purpose

- (1) The priority infrastructure area (PIA) is the area where suitable and adequate development infrastructure exists, or where it can be provided most efficiently.
- (2) The PIA identifies the area where Yarrabah Shire Council gives priority to trunk infrastructure for development up to 2026.

4.3.2 The PIA

- (1) The PIA is identified in Schedule 2 Yarrabah Priority Infrastructure Area Map YPIP-001.
- (2) The inclusion of the above PIA assists the community to meet its stated strategic outcomes for infrastructure development. Specifically security is underpinned by:
 - (i) reliable and affordable infrastructure;
 - (ii) ensuring infrastructure meets community and economic needs;
 - (iii) cost efficiency; and
 - (iv) consistency with environmental, social and economic values of Yarrabah.
- (3) Infrastructure provision outside the PIA is provided at no cost impost to Council.

4.4 Desired standards of service

4.4.1 Purpose

- (1) The desired standard of service (DSS) details the standards that comprise an infrastructure network most suitable for the local context.
- (2) The desired standard of service is supported by the more detailed network design standards included in planning scheme policies, legislation, statutory guidelines and other relevant controlled documents about design standards identified in sections 4.4.2 – 4.4.6 below.

4.4.2 Water supply

Table 4.4.2.a Desired standards of service for water supply

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Reliability/continuity of supply	All development receives a reliable source of potable water with minimal interruptions to their service.	<ul style="list-style-type: none"> • Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual • Compliance with the '<i>Water Supply (Safety and Reliability) Act 2008</i>' and/or '<i>Water Act 2000</i>'.
Adequacy of supply	All development is provided with water supply that is adequate for the intended use.	Compliance with the relevant design guidelines and the Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Quality of water	Provide uniform water quality in accordance with recognised standards that safe-guards community health and is free from objectionable taste and odour.	The <i>Australian Drinking Water Guidelines</i> developed by the National Health and Medical Research Council
Environmental impacts	The environmental impacts of the water supply network are minimised in accordance with community expectations.	Compliance with the relevant requirements of the <i>Environmental Protection Act 1994</i> and associated Environmental Protection Policies and the <i>Water Act 2000</i> .
Pressure and leakage management	The water supply network is monitored and managed to maintain the reliability and adequacy of supply and to minimise environmental impacts.	Approved System Leakage Management Plan <i>Water Act 2000</i> .
Infrastructure design/ planning standards	Design of the water supply network will comply with established codes and standards.	<ul style="list-style-type: none"> • Water Supply Code of Australia – Water Services Association of Australia WSA 03-2002. • The <i>Australian Drinking Water Guidelines</i> developed by the National Health and Medical research Council. • <i>Planning Guidelines for Water Supply and Sewerage</i> – Department of Environment and Resource Management.

4.4.3 Waste water

Table 4.4.3.a Desired standards of service for waste water

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Reliability	All development has access to a reliable sewage collection, conveyance, treatment and disposal system.	Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Quality of treatment	Ensures the health of the community and the safe and appropriate level of treatment and disposal of effluent.	Compliance with the relevant design guidelines and the Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Environmental impacts	The environmental impacts of the water supply network are minimised in accordance with community expectations.	<ul style="list-style-type: none"> • <i>National Water Quality Guidelines – National Water Quality Strategy.</i> • <i>Queensland Water Quality Guidelines 2009 – Department of Environment and Resource Management.</i> • <i>Compliance with the Environmental Protection (Water) Policy 2009.</i>
Infrastructure design/ planning standards	Design of the sewerage network will comply with established codes and standards.	<ul style="list-style-type: none"> • <i>Planning Guidelines for Water Supply and Sewerage – Department of Environment and Resource Management.</i> • <i>Sewerage Code of Australia – Water Services Association of Australia – WSA 02-2002.</i> • <i>Sewerage Pumping Station Code of Australia – Water Services Association of Australia – WSA 04 – 2005.</i> • <i>Compliance with the relevant design guidelines and the Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.</i>

4.4.4 Storm water

Table 4.4.4.a Desired standards of service for storm water

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Quantity	Collect and convey storm water in natural and engineered channels, a piped drainage network and system of overland flow paths to a lawful point of discharge, in a safe manner that minimises the inundation of habitable rooms and protects life.	<ul style="list-style-type: none"> • <i>Queensland Urban Drainage Manual</i> – Department of Environment and Resource Management • Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Quality	The water quality of urban catchments and waterways is managed to protect and enhance environmental values and pose no risk to human health.	<ul style="list-style-type: none"> • <i>National Water Quality Guidelines – National Water Quality Strategy</i>. • <i>Queensland Water Quality Guidelines 2009</i> – Department of Environment and Resource Management. • Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Environmental impacts	Adopt water-sensitive urban design principles and on-site water quality management to achieve EPA water quality objectives.	<ul style="list-style-type: none"> • Environmental Protection (Water) Policy 2009. • Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Infrastructure design/ planning standards	Design of storm water network will comply with established codes and standards.	<ul style="list-style-type: none"> • <i>Queensland Urban Drainage Manual</i> – Department of Environment and Resource Management • Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual..

4.4.5 Transport

Table 4.4.5.a Desired standards of service for transport

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Road network design/planning standard	The road network supports settlement patterns, commercial and economic activities.	Compliance with the relevant design guidelines and Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.
Cycle-way and pathway design/planning standards	Cycle-ways and pathways provide a safe and convenient network that encourage walking and cycling as acceptable alternatives.	Compliance with the relevant design guidelines and the Far North Queensland Regional Organisation of Councils' (FNQROC) Development Manual.

4.4.6 Public parks and land for community facilities

- (1) Quantitative standards or benchmarks for parkland provisions have been avoided, where possible, as it is considered unlikely to satisfy community requirements. The cultural and lifestyle of Yarrabah is defined by strong connections to land and sea, and the importance of maintaining this access to land and waterways goes beyond the 'traditional' provision of a set rate in terms of parkland per head of population.
- (2) Given this cultural significance and the relatively low intensity of planned development within the Shire, it is considered that by development ensuring maintenance of, and in some cases, providing further protection of the Shire's natural landscape beauty, flora and fauna, wetlands, creeks and the sea and ensuring that access to and views of country are maintained, that sufficient open space will be provided and maintained.
- (3) Where Council seeks to require land for parks and open space, the following provisions are intended to apply.

Table 4.4.6.a Desired standards of service for public parks and land for community facilities

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Functional network	A network of parks and community land is established to provide a full range of recreational and sporting activities and pursuits.	<ul style="list-style-type: none"> • Informal parks for recreation – provision of 1.0-1.2ha/1000 residents. • Parks for active recreation – provision of 0.8-1.9ha/1000 residents.
Land quality/suitability area/maximum grade	Public parks will be provided to a standard that supports a diverse range of recreational, sporting and health outcomes. This includes ensuring that land is of an appropriate size, configuration and slope.	<ul style="list-style-type: none"> • Informal parks – maximum slope of 1 in 4. • Sporting parks – maximum slope of 1 in 200. • Land for parks must be generally flat and useable – minimum of 70% of park unconstrained.
Facilities/embellishments	Public parks contain a range of embellishments to complement the type and purpose of the park.	No quantitative standards or provision rates are prescribed.

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Infrastructure design/ planning standards	Maximise opportunities to co-locate recreational parks in proximity to other community infrastructure, hubs and valued environmental and cultural assets.	No quantitative standards or provision rates are prescribed.
Accessibility	Public parks will be located to ensure adequate pedestrian, cycle and vehicle access.	No quantitative standards or provision rates are prescribed.

4.5 Plans for trunk infrastructure

- (1) The plans for trunk infrastructure identify the existing and proposed trunk infrastructure networks intended to service the assumed development at the desired standard of service stated in the priority infrastructure plan.
- (2) The plans for trunk infrastructure are identified in Schedule 2.

4.6 Further extrinsic material

The following material provides detailed background information relevant to the preparation of the YPIP 2013.

- Australian Bureau of Statistics – 2011 census Quickstats: Yarrabah (S) (Local Government Area). 2011 Census Quickstats available at www.censusdata.abs.gov.au
- Far North Queensland Development Manual – Far North Queensland Organisation of Councils. Available at <http://www.fnqroc.qld.gov.au/regional-programs/regional-development-manual.html>