LOCAL GOVERNMENT INFRASTRUCTURE PLAN SUPPORTING DOCUMENT PUBLIC PARKS

UPDATE 2016

TABLE OF CONTENTS

1.	INTRODUC	TION	2
	1.2.	PURPOSE OF THE PUBLIC PARKS STRATEGY	2
	1.3.	OVERVIEW	3
	1.4.	PREAMBLE	3
	1.5.	PUBLIC PARKS TRUNK INFRASTRUCTURE BACKGROUND	4
	1.6.	SCOPE	4
	1.7.	REVIEW ISSUES AND SCOPE OF STRATEGY	5
	1.8.	STRATEGY DEVELOPMENT PROCESS	7
2.	POPULATIO	ON GROWTH	10
	2.1.	GENERAL	10
3.	REVIEW O	F THE DESIRED STANDARDS OF SERVICE OF PUBLIC PARKS	16
	3.1.	OVERVIEW	16
	3.2.	FIT FOR PURPOSE	18
	3.3.	PUBLIC PARK TYPOLOGIES: HIERARCHIES AND SETTINGS	20
4.	REVIEW O	F THE PUBLIC PARKS NETWORK	26
	4.1.	GENERAL	26
	4.2.	OTHER CONSIDERATIONS	29
	4.3.	BENCHMARK PROVISION STANDARDS	30
	4.4.	THE 2016 PUBLIC PARKS EXISTING NETWORK	31
	4.5.	THE ULTIMATE PUBLIC PARKS NETWORK (PUBLIC PARKS WHICH HAVE BEEN ADJUSTED TO POPULATION GROWTH)	
	4.6.	NETWORK AMENDMENTS COMMENTARY	33
5.	THE PUBLIC	C PARKS NETWORK	38
	5.2.	UNIT RATE REVIEW	39
	5.3.	PARK EMBELLISHMENT COST REVIEW	39
	5.4.	STRATEGY IMPLEMENTATION	40
APP	ENDIX A - P	OPULATION PROJECTIONS 2016-2036 AND 'ULTIMATE'	41
APP	ENDIX B – D	PESIRED STANDARDS OF SERVICE	44
APP	ENDIX C – N	IETWORK PLANNING METHODOLOGY	62
APP	ENDIX D – D	OSS UNIT RATE REVIEW	65

1 Introduction

1. INTRODUCTION

- 1.1.1. Open space is a highly valued asset by residents and visitors to Ipswich City and is a significant contributor to Ipswich's character, lifestyle, health, biodiversity and economy.
- 1.1.2. Publicly accessible open space has far reaching health and wellbeing benefits and advantages to communities. Open space creates desirable neighbourhoods that lead to healthy and attractive places to live. Quality open space is also a basis for environmental protection, and can provide notable opportunities for economic development.
- 1.1.3. A key output of this strategy is to produce a plan for a public parks network, as a sub network of the City's Open Space Network, which services the ultimate population of Ipswich and its recreational needs. This strategy sets the strategic plan which ensures that the residents within the City have suitable and equitable access to public parks.

1.2. PURPOSE OF THE PUBLIC PARKS STRATEGY

- 1.2.1. This strategy is a review of the Public Parks Strategy Update 2009.
- 1.2.2. The intention of the Public Parks Strategy (from hereon in to referred to as the 'strategy') is to achieve the following overall community outcomes in relation to recreation (both active and passive):
 - Contribute to the health and wellbeing of the community.
 - Provide the community with equitable and convenient access to a diverse range of recreational experiences.
 - Provide parks that will meet multiple user requirements for recreational and social activities
 (with capacity for change to accommodate differing activities over time).
 - Ensure that a range of public parks are provided so that an array of settings and experiences (both in hierarchy and function) can be enjoyed by the community.
 - Ensure that sufficient land (area and suitability) is identified and protected to meet the needs of
 the future population of this fast growing area (again with capacity for change to accommodate
 differing activities over time).
 - Provide public parks having regard to any risks, safety, function and performance standards, life
 cycle costs, economic loss or periods of lost access (eg. flooding).
 - Ensure safe connectivity between public parks infrastructure, including to surrounding residential areas.

1.3. OVERVIEW

- 1.3.1. The Local Government Infrastructure Plan (LGIP) and this strategy details the trunk public parks network, as legislated by the Sustainable Planning Act (2009).
- 1.3.2. The figure below demonstrate Council's Open Space Policy framework. This strategy and the Local Government Infrastructure Plan (LGIP) together with the Open Space and Recreation Strategy 2014 and Ipswich Planning Scheme are the integral components which govern and integrate the planning and delivery of open space and public parks within Ipswich.



Figure 1: Council's integrated open space planning and delivery policy framework.

1.4. PREAMBLE

- 1.4.1. In 2003 the State Government passed the Integrated Planning and Other Legislation Amendment Act 2003 (IPOLAA). IPOLAA contained provisions completely overhauling the infrastructure provisions of the Integrated Planning Act 1997 (IPA) and the transitional provisions for obtaining developer infrastructure contributions. IPA as amended by IPOLAA also required that Council prepare a Priority Infrastructure Plan (PIP) for incorporation into the Planning Scheme
- 1.4.2. On 19 June 2012 Council adopted a Priority Infrastructure Plan (PIP) that came into force and effect on 9 July 2012.
- 1.4.3. On 1 July 2014 amendments (Sustainable Planning (Infrastructure Charges) and Other Legislation Amendment (SPICOLA)) to the Sustainable Planning Act 2009 (SPA) commenced that statutorily converted the PIP into a Local Government Infrastructure Plan (LGIP) and required that a 'new' LGIP

- be prepared within a prescribed timeframe. The amendments to the SPA were accompanied by Statutory Guideline 03/14 Local government infrastructure plans (LGIP Guideline).
- 1.4.4. This strategy has been prepared as the supporting strategy (extrinsic material) for the public parks trunk infrastructure network for the LGIP in accordance with the LGIP Guideline.

1.5. PUBLIC PARKS TRUNK INFRASTRUCTURE BACKGROUND

- 1.5.1. The State Government also adopted IPA Infrastructure Guidelines 1/04 Priority Infrastructure Plans and 2/04 Infrastructure Charges Schedules. The previous 2009 update provided information required pursuant to those guidelines.
- 1.5.2. The State Government also released draft Infrastructure Implementation Note 3 Local Public Parks Infrastructure and Local Community Land. The previous 2009 update took into account the planning principles and implementation issues outlined in the Implementation Note.
- 1.5.3. The State Government approved the South East Queensland Regional Plan 2005-2026 (SEQ RP 2026) and Infrastructure Plan 2007-2026 providing a framework to encourage increased rates of growth and development within the Western Corridor, particularly in the Ipswich LGA.

1.6. **SCOPE**

1.6.1. This strategy and review of the network only impacts those parks types which have a benchmark service level or provision (i.e. hectare per population). The following figure summarises which park types will remain unchanged and which ones will respond to growth.

	Recreation Parks	Waterside Parks	Sportsgrounds	Linear Parks
Citywide	Unchanged There are no benchmarks for Citywide Recreation Parks as these are located at urban centres, strategic or opportunistic locations.	Unchanged There are no benchmarks for Citywide Waterside Parks as these are located at urban centres, strategic or opportunistic locations.	Changed The benchmark provision has led to an increase in parks.	Unchanged Linear parks are associated with waterways (rivers and creeks) and gullies. These parks are already established and will remain.
District	Changed The benchmark provision has led to an increase in parks.	Unchanged There are no benchmarks for District Waterside Parks as these are located at urban centres, strategic or opportunistic locations.	NA	NA
Local	Changed The benchmark provision has led to an increase in parks.	NA	Changed The benchmark provision has led to an increase in parks.	Unchanged Linear parks are associated with waterways (rivers and creeks) and gullies. These parks are already established and will remain

Table 1.1: Table summarising the public parks which have been updated in response to the change in population projections.

1.7. REVIEW ISSUES AND SCOPE OF STRATEGY

1.7.1. The key output of this strategy is a revised plan for the 'ultimate' parks network in the Ipswich LGA (i.e. for the development capacity of the Ipswich Planning Scheme). This strategy involved a revised public parks network and update of the following issues and task areas:

1.7.2. SCOPE OF THE PUBLIC PARKS STRATEGY

- Only open space recognised as trunk public parks infrastructure or physically suitable for public
 parks has been included in the analysis. This has meant that land with a primary purpose of
 Landscape and Amenity, Conservation, Urban Bushland and Water Cycle Management has been
 excluded from this strategy.
- It should be noted that in relation to the open space not categorised as public parks
 infrastructure, it will continue to be managed for its primary function either by the Enviroplan
 Levy mechanism, Council's Capital Works Program (particularly for urban bushland, drainage
 reserves or otherwise constrained land) or, in the case of land within private ownership, by other
 management arrangements. However, this land will not be the subject of consideration in this
 strategy and has not been included in the establishment cost.

1.7.3. REVISED PUBLIC PARK PROVISION STRATEGIES

 Because of the revised population projections, spatial distribution of population growth (PIA), specific purpose recreational studies and adopted Land Use Concept Master Plans for the future urban zones, it was necessary to revise the priorities and opportunities for park provision and development.

1.7.4. REVIEW OF PLAN IMPLEMENTATION AND RESOURCES

- With regard to implementing the strategy, this revision has updated the project cost calculation sheets that determine the rate of Infrastructure Charges. The revision has also taken into account Developer's/Council's obligations under various Infrastructure Agreements.
- The strategy has also updated the costs associated with embellishments and land valuations.

1.7.5. SCHEDULE OF WORKS

• Based on the revised population projections, spatial distribution of population growth and desired standard of service, a schedule of works (for public park land acquisition or embellishment) has been developed for the period 2016 to ultimate development.

1.7.6. DESIRED STANDARDS OF SERVICE

- As part of the development of this strategy, the Desired Standards of Service (DSS) have been reviewed to ensure that provision of public parks continues to appropriately serve the community.
- The Desired Standard of Service (DSS) for the network includes a generic range of facility types (including functional components), catchment population ranges (benchmarks) and land areas.
 The recommended population catchment ranges (i.e. 'benchmark'), accessibility catchment (i.e.

drive-up and walk-up catchments where applicable) and land areas for each of the facility types (refer to Chapter 3) are identical to the Public Parks Strategy (update) 2009.

- The DSS were initially developed to reflect, to a large extent, the policy context outlined in the original IOSRDP Review. Recent and ongoing recreational studies have led to minor revision of the DSS.
- These DSS changes in this review are minor and do not affect the fundamental principles, cost, distribution or minimum embellishment standards prescribed in the strategy. Such changes simply improve the implementation and ongoing operation, site function (for example; minor field dimension changes to align with current industry standards with no net increase in establishment costs) and maintenance.
- The DSS have been used as the basis for overall strategic network design (including benchmarking) and costing. The DSS form a critical part of this strategy as they guide the form and scale of the public parks network to be developed. They also highlight to the community what Council intends to provide by way of public parks infrastructure to service the City.

1.7.7. LAND VALUES

 The establishment costs for the land for public parks trunk infrastructure network have been updated and have been calculated using the values in the Local Government Infrastructure Plan Land Valuation Study prepared for Ipswich City Council (May 2015), indexed to 30 June 2016 (the base date).

1.7.8. PROJECT TIMING

- All future public park projects have been assigned an indicative timeframe in which each project
 will be required to be completed to meet the desired standards of services. These timeframes,
 as required by the LGIP guideline, are as follows:
- Individual years:
 - 2016, 2017, 2018, 2019, 2020, 2021
- 5 Year cohorts:
 - 2026,
 - 2031,
 - 2036, and
 - 2041
- Projects that are required to service the ultimate forecast development have been assigned a 2041 delivery year, for the purpose of financial modeling. All public park project timings are included in the LGIP 'Schedule of Works' for trunk public park infrastructure and will be used by Council to inform investment planning, budgeting and agreements.

1.7.9. DISCOUNT CASH FLOW

 The Queensland Government has mandated a discounted cash flow (DCF) methodology be applied in the calculation of infrastructure charges. DCF is the finance principle that takes account of the changing value of money over time, to determine the Net Present Value (NPV) of both project costs and demands. Council's Finance and Corporate Services Department has developed a methodology and key assumptions that underpin Council DCF model calculations.

1.7.10. PLANNING HORIZON

This review considers the 'ultimate' trunk infrastructure networks required to cater for the
demands generated by the demographic (residential population) capacity of Ipswich in
accordance with the land-use outcomes of the Ipswich Planning Scheme. The Local Government
Infrastructure Plan Supporting Document – Planning Assumptions Summary Report 2016
provides details on the assumptions about population and employment.

• Ripley Valley

The public parks trunk infrastructure network in the Ripley Valley Priority Development Area (Ripley Valley PDA) has not been included in the LGIP in accordance with the LGIP Guideline, as infrastructure planning, charging and delivery in the Ripley Valley PDA is regulated under the Economic Development Act 2012. However, for the purpose of developing this supporting document, the population forecasting and network benchmarking includes the Ripley Valley PDA to ensure the proper consideration of the interrelationship between servicing development within and outside of the Ripley Valley PDA.

1.7.11. FIT FOR PURPOSE

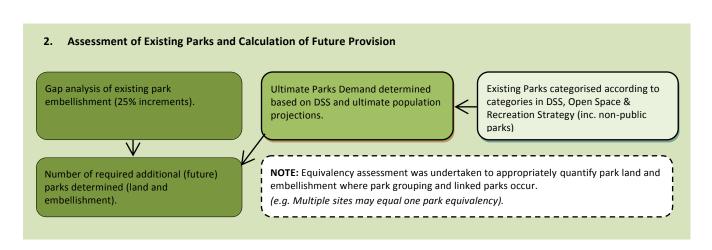
- This strategy revision includes a section (refer section 3.2) which sets clear principles concerning
 the provision of 'fit for purpose works' associated with delivery of public park land and
 embellishment.
- Underpinning this strategy is the DSS and associated costs to deliver park embellishment and hence establish a total network cost, delivery framework and funding model to deliver such a network.
- The establishment costs in this strategy exclude fit for purpose works. It is therefore prudent
 that this strategy include principles and details which differentiate between those works
 considered trunk (which attract an offset) and those works which are non-trunk works or
 associated with the internal works of a development to ensure consistency in network delivery
 across the city.
- Understanding these principles, inclusions and exclusions and differentiating between such costs is paramount when calculating project costs and infrastructure.

1.8. STRATEGY DEVELOPMENT PROCESS

The process of planning the parks network followed a specific progression. This staged progression is shown in figure 1.2. However, for a more detailed description of the strategy methodology refer to appendix C.

STRATEGY DEVELOPMENT METHODOLOGY

SPATIAL & NETWORKS ANALYSIS DESIRED STANDARDS OF SERVICE DEMAND ANALYSIS Review of Existing Parks Provision Review for currency: Public Parks Strategy 2009, DSS and unit rates, Strategies, and Planning Scheme. ICC owned/trustee land (including vacant crown land) and aerial photography (base information layers) accessed and inputted into GIS. Existing parks provision identified from DSS for parks reviewed for currency. base layers. Refer Chapter 3



3. Future Parks Planning

Siting and distribution of future and additional parks was undertaken.

NOTE: Cognisance given to existing infrastructure agreements and approved development applications.

4. Review of Network

Existing parks removed from future network to become existing parks. If a park no longer satisfies DSS requirements or surplus to network it is downgraded or deleted. Updated or new land parcels given a new spatial object and project number.

Table 1.2: Table summarising the public parks which are subject to change as part of this review.

2 Population Growth

2. <u>POPULATION GROWTH</u>

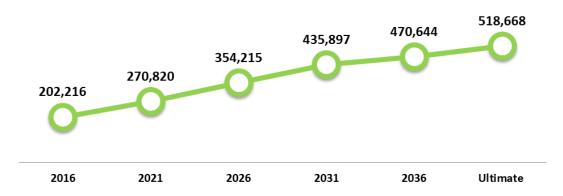


Figure 2: Graph summarising the projected growth within Ipswich between 2016 and Ultimate (2041). Source: Ipswich City Council Population Modeller.

2.1. GENERAL

- 2.1.1. The Ipswich LGA is planned to accommodate an additional 316,452 residents beyond its current population of 202,216 as at 2016.
- 2.1.1 As with previous supporting material to the Planning Scheme Policies and PIP, this supporting document has been developed using a demand stream or development pattern based on population projections.
- 2.1.2 The 2016 update considered forward projections to 'ultimate' being the development capacity of the Ipswich Planning Scheme. The advantage of using an 'ultimate' population is that planned infrastructure (including service corridors) can be identified and conceptually located so that network providers can confidently plan to deliver capacity to service development over the longer term. To ensure continuity, this supporting document uses the 'ultimate' population to determine the Public Parks trunk infrastructure network requirements for the City.
- 2.1.2. The Ipswich LGA has been divided into four (4) Planning Districts and separate divisions for the regionally significant business and industry areas. The Planning Districts are illustrated in Map 2.1. To enable analysis at the local level, the Planning Districts have been broken down into various sectors (identified as projection areas in the SOW). The sectors are illustrated in Map 2.2.
- 2.1.3. The detailed breakdown of the predicted population numbers for the years 2016, 2021, 2026, 2031, 2036 and 'ultimate' for the various planning districts and sectors is outlined in Table A.1 (refer to Appendix A).

POPULATION PROJECTIONS (RESIDENTIAL POPULATION)

Planning Districts	2016	2021	2026	2031	2036	'Ultimate'
Central (Barellan Point, Basin Pocket, Blacksoil, Blackstone, Booval, Brassall, Bundamba, Churchill, Chuwar, Coalfalls, Dinmore, East Ipswich, Eastern Heights, Ebbw Vale, Flinders View, Ipswich, Karalee, Leichhardt, Moores Pocket, Muirlea, Newtown, North Booval, North Ipswich, North Tivoli, One Mile, Pine Mountain, Raceview, Sadliers Crossing, Silkstone, Tivoli, West Ipswich, Woodend, Wulkuraka, Yamanto)	94,572	113,610	121,778	128,315	133,669	154,078
Eastern (Augustine Heights, Bellbird Park, Brookwater, Camira, Carole Park, Collingwood Park, Gailes, Goodna, Redbank, Redbank Plains, Riverview, Spring Mountain, Springfield, Springfield Central, Springfield Lakes)	87,749	119,015	148,527	164,811	171,899	185,202
Ripley (Deebing Heights, Flinders View, Goolman, Raceview, Ripley, South Ripley, Spring Mountain, White Rock)	6,752	23,201	57,088	83,389	103,092	112,824
Western (Ashwell, Blacksoil, Calvert, Ebenezer, Goolman, Grandchester, Haigslea, Ironbark, Karrabin, Lanefield, Lower Mount Walker, Marburg, Mount Forbes, Mount Marrow, Mount Mort, Mount Walker West, Mutdapilly, Peak Crossing, Purga, Rosewood, Tallegalla, Thagoona, The Bluff, Walloon, Willowbank, Woolshed, Wulkuraka)	12,688	14,549	26,411	58,998	61,628	66,514
Totals	202,215	270,820	354,216	435,897	470,644	518,668

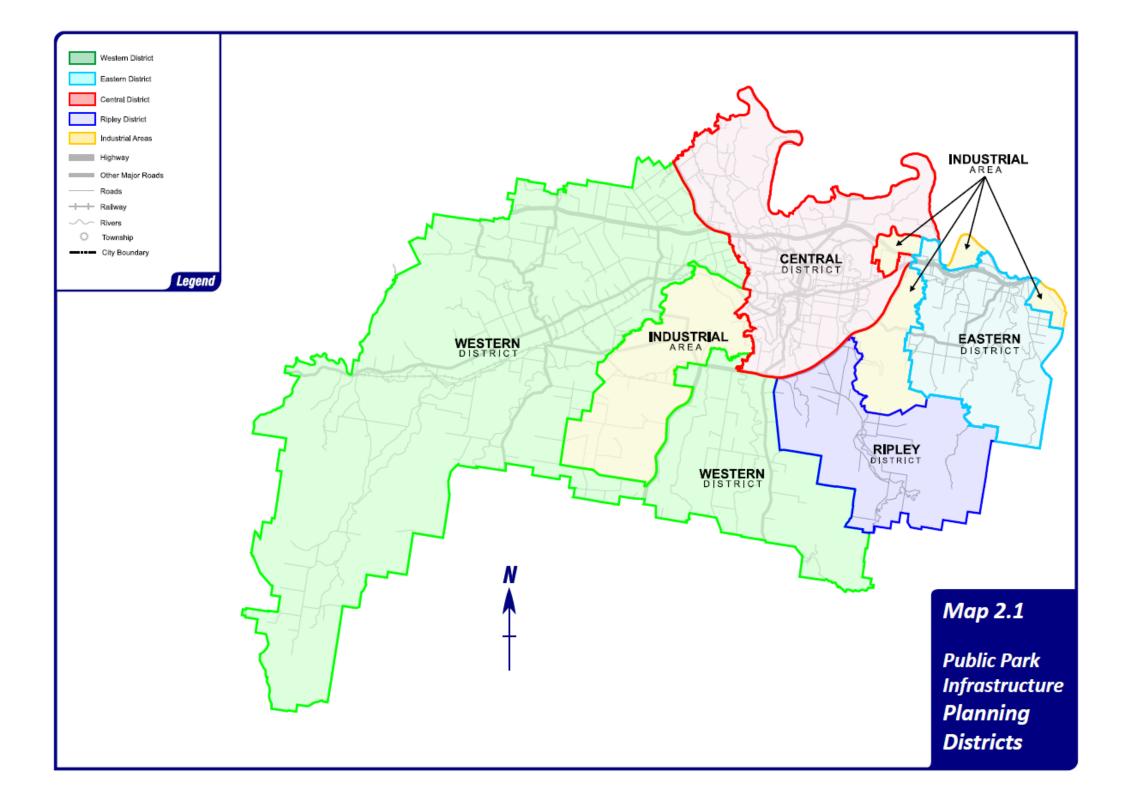
Table 2.1. Source: Ipswich City Council Population Modeller.

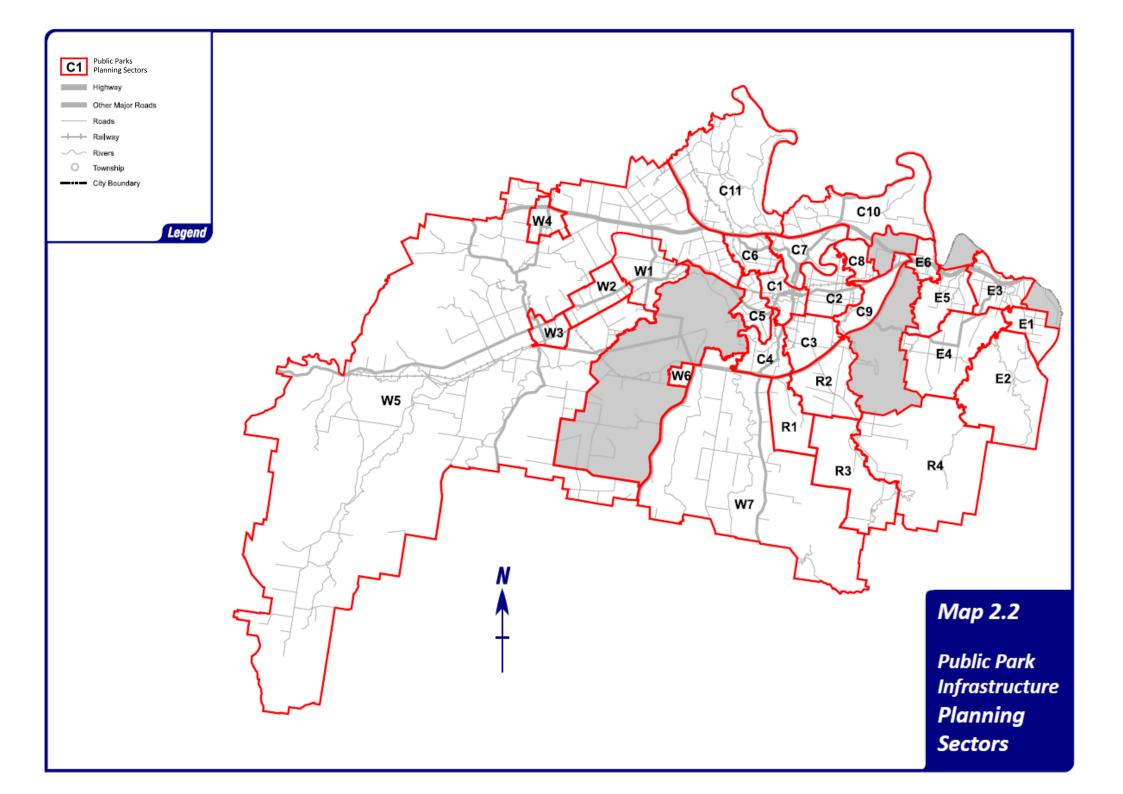
2.1.4. The key output from this supporting document is a revised Public Parks trunk infrastructure network for the Ipswich LGA for 'ultimate' development (i.e. meets the demand from the resident population when all the residential land in the Ipswich LGA is developed to the full capacity provided for in the Ipswich Planning Scheme). This supporting document is based on revised assumptions including:

2.1.5. Population Projections

The population projections used are based on the population projections in the South East Queensland Regional Plan 2009-2031 (SEQ RP 2031). The household occupancy rate used to determine the projected population is based upon dwelling occupancy rates from the SEQ RP 2031 averaged across detached and attached housing forms. The dwelling occupancy rates are as follows:

- Detached housing 2.74 persons per dwelling
- Attached housing 1.58 persons per dwelling
- 2.1.6. For further information about the population projections refer to the Local Government Infrastructure Plan Supporting Document Planning Assumptions Summary Report 2016.
- 2.1.7. Whilst the 'ultimate' population has been used to determine the public parks trunk infrastructure network requirements for the City, cognisance has been given to growth over the period to 2031 (15 years from the from the base date of the LGIP) in the Priority Infrastructure Area (PIA) as the SPA requires that the PIA identify the preferred growth areas for the City over the next 10-15 years together with those areas already serviced with development infrastructure.
- 2.1.8. The PIA prioritises those areas within the City where development is anticipated to occur over the 15 year period to 2031 (excluding the Ripley Valley PDA). Due to existing commitments and a more efficient provision of the necessary development infrastructure items, over the 15 year period the focus of the population growth will occur within the:
 - Central Planning District; and
 - Eastern Planning District.
- 2.1.9. Limited areas of the Western Planning District have also been included in the PIA, namely land which is committed to development by way of existing approvals or services.
- 2.1.10. The population projections together with the Desired Standards of Service (refer Chapter 3) generally determine the benchmark demand for the land for public parks trunk infrastructure network.
- 2.1.11. The revised network, land requirements and costs included in this supporting document have been used as inputs into the Schedule of Works (SOW) Model (except as outlined in 1.3.4 below) that has been developed for the period 2016 2036 and to 'ultimate' development in accordance with the LGIP Guideline. Full details of the establishment costs may be viewed in the SOW.





3 Review of the Desired Standards of Service (DSS)

3. REVIEW OF THE DESIRED STANDARDS OF SERVICE OF PUBLIC PARKS

3.1. OVERVIEW

- 3.1.1. As part of the development of this strategy, desired standards of service (DSS) have been developed to determine the type and extent of works required to serve the community for each park type. The DSS were initially developed to reflect, to a large extent, the policy context outlined in the previous IOSRDP Review. More recent trends and recreational studies, strategies and ongoing planning activities have informed the revision of the standards.
- 3.1.2. The revised DSS have been used as the basis for overall strategic network design (including benchmarking) and costing. The DSS form a critical part of this strategy as they guide the form and scale of the public parks network to be developed. They also highlight to the community what Council intends to provide by way of public parks infrastructure to service the City.
- 3.1.3. The DSS is provided in its entirety in Appendix B.
- 3.1.4. This strategy recognises that parks will have different levels of functionality based primarily on assumed catchment and 'importance' of the Park. A functional hierarchy for Parks has been developed based on the following categories:
 - Citywide Parks
 - District Parks
 - Local Parks
- 3.1.5. **Citywide Parks** Being those parks anticipated to be used by all residents of the City. These parks are significant either in terms of the constructed assets (eg. headquarter sports), the location of the park (eg. Ipswich CBD & Town Centre parks), the type of park (eg. Colleges Crossing Recreation Reserve, Riverheart parklands) or the intrinsic value of the park (eg. Kholo Botanic Gardens). These parks offer opportunities to ensure a range of open space activities, experiences and benefits can be gained by the LGA residents. Consequently, citywide parks should offer a diverse range of uses rather than duplicate each other and be serviced by an appropriate level of infrastructure recognising the increased capacity, sophistication, parking needs, etc. of these parks.
- 3.1.6. District Parks Being those parks anticipated to be used by those residents within the defined districts. For the purpose of the parks strategy the City has been divided into four districts to determine demand for and location of district level parks. These districts, which have been determined on the basis of a 'community of interest' for district level facilities, are Eastern Area, Central Area, Ripley Area and Western Area. It should be noted that the Western Planning Area includes towns and rural areas. The suburbs and localities that constitute the planning districts are outlined below: The suburbs and localities that constitute these districts are outlined in Table 3.1 below:

SUBURBS AND LOCALITIES WITHIN EACH PLANNING DISTRICT

Central Planning District

Barellan Point, Basin Pocket, Blacksoil,
Blackstone, Booval, Brassall, Bundamba,
Churchill, Chuwar, Coalfalls, Dinmore, East
Ipswich, Eastern Heights, Ebbw Vale, Flinders
View, Ipswich, Karalee, Leichhardt, Moores
Pocket, Muirlea, Newtown, North Booval,
North Ipswich, North Tivoli, One Mile, Pine
Mountain, Raceview, Sadliers Crossing,
Silkstone, Tivoli, West Ipswich, Woodend,
Wulkuraka, Yamanto

Eastern Planning District

Augustine Heights, Bellbird Park, Brookwater, Camira, Carole Park, Collingwood Park, Gailes, Goodna, Redbank, Redbank Plains, Riverview, Spring Mountain, Springfield, Springfield Central, Springfield Lakes

Ripley Planning District

Deebing Heights, Flinders View, Goolman, Raceview, Ripley, South Ripley, Spring Mountain, White Rock

Western Planning District

Ashwell, Blacksoil, Calvert, Ebenezer,
Goolman, Grandchester, Haigslea, Ironbark,
Karrabin, Lanefield, Lower Mount Walker,
Marburg, Mount Forbes, Mount Marrow,
Mount Mort, Mount Walker West, Mutdapilly,
Peak Crossing, Purga, Rosewood, Tallegalla,
Thagoona, The Bluff, Walloon, Willowbank,
Woolshed, Wulkuraka

Table 3.1:

- 3.1.7. Rosewood will contain the District facilities for the Western Planning District and cater for the town of Marburg and surrounding rural areas.
- 3.1.8. Similar to Citywide facilities, the District facilities need to be serviced by an appropriate level of transport infrastructure recognising that the majority of people who frequent these facilities gain access either by private motor vehicle or public transport rather than walking. They are also to provide flexible space, such as meeting rooms that can accommodate the needs of local service delivery.
- 3.1.9. For the rural areas of the Western planning district, the town of Marburg and localities/villages of Grandchester and Willowbank are to be 'centres' for the surrounding rural areas and contain all public parks infrastructure within or in close proximity to these areas.
- 3.1.10. To ensure equity of access to recreational opportunities, all district recreation parks, where possible, should provide similar type facilities. In the case of sporting reserves, the introduction

- of the 'headquarters' sportsground concept (being reserves of a citywide nature refer to section 4.4) has replaced the district level sportsground. However, all local sportsgrounds within a district are to service the residents of the district (and are cost apportioned accordingly).
- 3.1.11. Similar to citywide parks, the district level parks need to be serviced by an appropriate level of transport infrastructure recognising that the majority of people who frequent these parks gain access either by private motor vehicle or public transport rather than walk.
- 3.1.12. **Local Parks** Being those parks where it can be reasonably assumed will be used by the residents of only one (1) planning sector or employees within defined industrial areas. In some limited instances local sportsgrounds may be used for 'headquarter' sports (although cost apportioned at the district level).

3.2. FIT FOR PURPOSE

3.2.1. 'Fit for purpose' works are not included in the establishment cost of the Public Park trunk infrastructure network and do not attract an offset. Such works are considered to be associated with preparation of the land for its intended purpose. The following table (table 3.2) shows the key principles which determine fit for purpose works that will be applied by Council. These principles need to be carefully considered prior to the planning and design of open space and public parks as they can significantly impact the design outcome, cost and responsibilities of a project.

FIT FOR PURPOSE: KEY PRINCIPLES

Bulk Earthworks

• All bulk earthworks, stabilisation, retaining structures and drainage required for land which is to be dedicated to Council for Public Park purposes in considered fit for purpose works.

Stabilisation

- Undertake the necessary earthworks to stabilise the land form.
- Undertake necessary revegetation works to stabilise areas which are unstable or are potentially unstable.
- Ensure that disturbance to natural riparian systems is minimised including the minimisation of erosion and scour resulting from changed water regimes.
- Particular attention is to be given to the maintenance of bank stability within riparian areas and protecting against bank erosion and slumping.

Waterways and Stormwater Conveyance Corridors

- The Public Parks network does not include (nor include in the network establishment costs and area calculations) land occupied by a waterway channel or land which has a primary function of drainage. As such, all required works within a waterway channel or stormwater conveyance channel are considered fit for purpose (do not attract an offset) with the exception of the following elements subject to a case by case assessment:
 - o Public Park embellishment as specified in the DSS,
 - Pathways which are required to cross creeks, channels and gullies (not including the culvert, structure or earthworks to provide this pathway connection),
 - o Betterment revegetation planting to meet Council's desired planting outcomes (i.e. additional revegetation planting beyond appropriate stabilisation and rehabilitation requirements).
- Waterway channels extents are considered to be the landform from top of bank to top of bank (or otherwise ICC approved alternate extents).
- Generally, waterways and drainage corridors are to be constructed and rehabilitated to achieve a fully vegetated corridor outcome.
- Flood levels do not determine location or extent of fit for purpose works or offsets. This level of acceptability is determined by the DSS.
- Flood levels are to be used to determine land value and guide flood immunity (siting) of assets.

Planting & Weeds

- In public park land, planting on land greater than 1:6 or 15% is considered stabilisation vegetation (fit for purpose works that does not attract an offset) unless it is feature planting to provide a functional park outcome (e.g. key node, shade provision etc.).
- Revegetation is to be undertaken in all disturbed areas as a result of open space or adjacent residential stage development works.
- Unless otherwise determined by a weed/bushland management plan, all tree weed species (which do not present a risk to pedestrians once poisoned), including but not limited to Camphor laurel and Celtis sinensis, are to be poisoned in situ. Removal is not required.
- Woody weeds (shrubs and small trees), such as lantana or any other environmental weeds, are required to be removed or poisoned via Cut Stump method (or otherwise approved method) and off cuts removed.

Rubbish

• All rubbish is to be removed from land to be dedicated to Council.

3.3. PUBLIC PARK TYPOLOGIES: HIERARCHIES AND SETTINGS

- 3.3.1. Taking into account previous comments regarding the role or function of those open space types considered to be public parks infrastructure a total of four (4) public park categories or recreational settings have been identified. These settings have also been disaggregated into the three-tiered hierarchy of Citywide, District or Local function, where relevant.
- 3.3.2. The four (4) recreational settings and a brief description of the main elements of each setting are outlined in table 3.3. It should be noted that in some instances local residents might also use citywide and district parks for local park purposes. This is particularly the case for those residents within close proximity to the citywide sportsground and court reserves and linear parks, district recreation parks or district waterside parks.

TABLE 3.3: PUBLIC PARK TYPOLOGIES: HIERARCHIES AND SETTINGS

HIERARCHY OF		PUBLIC PARK CA	TEGORIES	
PARKS	SPORTSGROUND AND COURTS	RECREATION PARKS (refer note 1)	WATERSIDE PARKS	LINEAR PARKS
CITYWIDE	Larger parks (generally over 10ha) for organised sporting activities normally for a particular sporting code(s). Where possible reserves are to be multi-use, meaning that the facilities can be used by various sporting organizations Capable of providing a large number of fields/ovals, multi-purpose courts, athletics track and spectator seating or specific 'headquarter sports' grounds. In some instances it may be preferable to congregate 'facilities'. For example, rather than provide multi-purpose courts in each reserve a citywide courts park or parks might be established containing a large number of multi-purpose courts. Can be used for Special Events (e.g. fairs, shows, exhibitions). Examples include Redbank Plains Recreation Reserve, Limestone Park, Ivor Marsden Park	Except for specific formal parks or plazas in the CBD or Town Centres, these are larger parks (approx. 10 hectares) used for: -	The primary purpose of these parks and the orientation of facilities is towards the water. Includes those foreshore parks adjacent to the Brisbane and Bremer Rivers, providing: - • foreshore/water based activities (eg. swimming, boating, fishing); • special events (eg. festivals, exhibitions, carnivals); • major play and picnic parks; • sightseeing; and • cycling/walking. Examples include Colleges Crossing Recreation Reserve, Ipswich CBD Riverheart parklands.	The primary purpose of these parks is to provide a recreational trail network along the Bremer River (from Riverheart Parklands to Richardson Park), the City Centre rail trail (including North Ipswich wetlands) and along the major creeks and lakes within urban areas (e.g. Woogaroo, Bundamba, Deebing Creek etc). These parks will accommodate formalised walking/cycling paths and have connectivity with selected recreation and waterside parks.

HIERARCHY OF		PUBLIC PARK CATEGORIES						
PARKS	SPORTSGROUND AND COURTS	RECREATION PARKS (refer note 1)	WATERSIDE PARKS	LINEAR PARKS				
DISTRICT	Not applicable – refer to Citywide and Local Sportsgrounds. It should be noted that all local sportsgrounds within a planning district are to service the catchment of the district and not only the catchment of the sector in which the local sportsground is located.	These parks (usually a minimum of 4 ha) provide for outdoor informal recreation and leisure activities including play and picnic parks providing a great array of playground equipment, picnic shelters/barbeques, kick-about areas, toilet facilities and carparking. These parks may also provide some natural bushland areas or within established urban areas are more likely to be the 'traditional' square with extensive garden bedding, structures, visual and water features, plazas and other hard urban space areas. The facilities cater for larger catchments and may include adventure playground etc. Examples include Browns Park, Camerons Park, Lobley Park.	These parks are a smaller scale of the citywide waterside parks in those foreshore areas adjoining the Brisbane or Bremer Rivers, providing - • foreshore/water based activities; • play and picnic parks; and • cycling and walking paths. Examples include Joseph Brady Park.	Not applicable – refer to Citywide and Local Linear Parks.				

HIERARCHY OF	PUBLIC PARK CATEGORIES							
PARKS	SPORTSGROUND AND COURTS	RECREATION PARKS (refer note 1)	WATERSIDE PARKS	LINEAR PARKS				
LOCAL	5 ha in area & of dimensions to provide two (2) fields with cricket wicket in between and with the cricket oval area extending to encompass both rectangular fields, four (4) multipurpose courts, playground equipment and amenities. Where possible reserves are to be multi-use, meaning that the facilities can be used by various sporting organizations. In some instances it may be preferable to congregate 'facilities'. For example, rather than provide 4 multi-purpose courts in each reserve, a local courts park might be established containing a larger number of multi-purpose courts. Because of the specialized nature of some sports it may be necessary to provide local training facilities for the specific sports (e.g. softball/baseball training diamonds) rather than the more generic local sports ground and courts reserve.	These are the smaller scaled parks (5000m2) providing for outdoor informal recreation and leisure activities generally associated with urban residential areas. The parks are generally managed as open grassed areas allowing for unstructured recreation together with play parks (eg. playground equipment, shade, shelter, drinking fountain) and tree planting for shade and amenity and seats.	Not Applicable – refer to Linear Parks, which are those parks to be located on rivers, creeks or water bodies with a citywide or local catchment.	The primary purpose of these parks and the orientation of the recreation trail is along the length of the minor creeks, tributaries and linear linkages within the urban areas, accommodating walking/cycling paths having connectivity with selected local and district parks.				

- 1. NOTE 1: This strategy recognises that larger local parks are more appropriate than smaller, fragmented pocket parks in that the larger parks offer flexibility in function, potential multi-purpose activities, opportunities for more appropriate parkland embellishments and maintenance efficiencies. In other words, larger local parks offer a more realistic balance between quantity and quality.
- 2. As part of this strategy, urban bushland (unless part of a larger recreational park) has been excluded from the category of Recreation Parks. This is because urban bushland is predominantly associated with drainage lines (eg. gullies), electricity easements or is generally unusable/steep land. Consequently, the majority of this land is unsuitable for the development of park facilities. Notwithstanding, recreational/open space surveys have consistently noted that respondents consider natural bushland an important item, particularly from an aesthetic viewpoint. Therefore, whilst urban bushland is an important component of the integrated open space system, as these areas provide a dominant landscape/amenity function rather than a recreation function, it is considered appropriate that such land not be included in this strategy.

4 Review of the Public Parks Network

4. REVIEW OF THE PUBLIC PARKS NETWORK

4.1. GENERAL

4.1.1. The Open Space Network within the Ipswich City Council Local Government Area (LGA) is comprised of the following typologies:

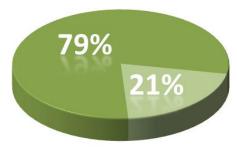
Open Space Classification	Hierarchy	Public Parks Trunk Infrastructure Network (Included in LGIP)
	Local	✓
Recreation Parks	District	✓
	Citywide	✓
Waterside Parks	District	✓
waterside Parks	Citywide	✓
Consideration of the Consideration	Local	✓
Sportsgrounds & Courts	Citywide	✓
Linear Parks	Local	✓
Lilledi Palks	Citywide	✓
	Local Bushland Reserves	Other*
Natural Areas	District Conservation Reserves	Other*
	Citywide Conservation Estates	Other*
Specialised Sport & Recreation Facilities	na	Other
Amenity Land	na	Other
Utility Land	na	Other
Unallocated Open Space	na	Other

Table 4.1: Council's complete open space network inclusive of the Public Park Trunk Infrastructure Network.

Notes:

^{*}Through site specific studies or master plans, some sites in the Natural Area Network have been identified as being able to accommodate Public Park infrastructure. This is based on investigations which have determined that the natural area environmental values will not be impacted and the site is the best available location to provide public park embellishment to service the community

- 4.1.2. This section of the strategy is concerned with the recreational settings and parkland securement /embellishment within the City for the period 2016 to 'ultimate' development (i.e. the development capacity of the Ipswich Planning Scheme). As previously stated, for the purpose of this strategy the three-tiered hierarchy for recreational settings is Citywide, District (being the Central, Eastern, Ripley and Western areas) and Local (being the thirty-seven (37) individual Planning sectors comprising 25 urban sectors, 1 town sector, 2 rural sectors and 9 industrial sectors refer to map 2.1 and map 2.2).
- 4.1.3. As per figure 4.1, the Public Parks Trunk Infrastructure network is a sub-network within the Open Space Network. As per this strategy, the total existing public park land area forms 21% of all the open space in Council's ownership or control.



- EXISTING OPEN SPACE NETWORK 9.068 ha
- EXISTING PUBLIC PARKS NETWORK 2,348 ha

Figure 4.1: Graph illustrating the breakdown of the existing public park network as a percentage of the overall existing open space network.

- 4.1.4. While the non-public park network is also expected to increase in time (e.g. natural area land acquisition etc.), the Public Park Network is anticipated to increase to more than 50% of the Open Space Network at the City's ultimate development population.
- 4.1.5. Table 4.2 provides a summary of the total network costs captured in this strategy illustrating the existing and future expansion of the network.

LGIP PUBLIC PARKS NETWORKS COSTS

Existing Public Parks Land and Embellishment	\$342,763,012
Future Public Parks Land and Embellishment	\$891,607,381
Total network Value (included in the LGIP)	\$1,234,370,393

Table 4.2: Table showing the total costs of the existing and future public parks network.

4.1.6. The four (4) recreational settings subject to this strategy and a brief description of the main elements of each setting (as outlined in the desired standards of service) are as follows:

4.1.7. RECREATION PARKS

4.1.8. At the Citywide level these parks are site specific, being the Ipswich (Kholo) Botanic Gardens, Queens Park, Ipswich City Mall/D'Arcy Doyle Place, Springfield Town Centre Park and Ripley Town Centre Park. At the District level these parks (usually a minimum of 4 ha) provide a great array of playground equipment, picnic shelters/barbeques, kick-about areas, toilet facilities and carparking. They may also provide some natural bushland areas or within the Town or Major Centres are more likely to be the 'traditional' square with extensive garden bedding, structures, visual and water features, plazas and other hard urban space areas. For the urban areas the benchmark is approx 1:10000 persons. At the local level these smaller scaled recreation parks (between 0.5ha – 1.0ha) are associated with urban residential areas and are generally managed as open grassed areas allowing for unstructured recreation together with play equipment. For the urban areas the benchmarks are approximately 1:1000 persons. Also, these or other suitable parks should be located within 500m of most homes. Within the town of Marburg the local Recreation Park also serves both the town and surrounding rural areas.

4.1.9. SPORTSGROUND AND COURTS

4.1.10. At the Citywide level these parks (approx. 15ha), within urban areas, provide a large number of fields, multi-purpose courts, spectator seating or specific 'headquarter sports' grounds. Ideally one (1) 'headquarter sports facility' should be provided for each sport within the City. For the urban areas the benchmark is approx 1:16000. For the Towns and rural areas these facilities (about 5 ha in area) are planned to have a level of development about that of the local sportsground and courts, namely, two (2) fields with cricket wicket in between (i.e. 1 oval overlapping the two fields), four (4) multi-purpose courts, playground equipment and facilities. It is expected that the Town of Marburg will provide one (1) sportsground and courts reserve to service the town and surrounding rural areas. Because the sporting organisations have catchments generally related to the LGA boundaries and in some instances further afield (eg. balance of Western Corridor), a separate category of District level sportsgrounds and courts was not considered appropriate. Consequently, requirements for such facilities have been included in the Citywide category. At the local level these parks (about 5 ha) provide facilities such as two (2) fields with cricket wicket in between (i.e. 1 oval overlapping the two fields), four (4) multi-purpose courts, playground equipment and public amenities. For the urban areas the benchmark is approximately 1:9000. Within the town of Marburg the Citywide Sportsground and Courts reserve is also to serve as the local sporting reserve. As the local sports reserves have a tendancy to be used as training grounds for the local area, district junior sports and as additional fields for the local schools, their catchment is often larger than the sector in which the local sportsground is located. Consequently, local sportsground and court reserves are cost apportioned at the district catchment level.

4.1.11. WATERSIDE PARKS

4.1.12. These parks primarily adjoin, within the urban areas, specific areas of the Brisbane or Bremer River foreshores. This recreational setting includes parks of varying scales, from the district park along certain sections of the Bremer River to the Citywide Riverheart parkland development adjacent to the Ipswich CBD. At the Citywide level the majority of these parks are developed and located adjacent to the navigatable sections of the Brisbane and Bremer river systems. At the district level the waterside

parks are generally limited to some (not all) of the master planned community lake systems or those river foreshore areas primarily left in their natural state.

4.1.13. LINEAR PARKS

4.1.14. The parks included in this category are the Citywide or Local level parks that adjoin the Brisbane and Bremer Rivers, the major creek systems and the City Centre Rail Trail. At the local level these parks adjoin minor tributaries or local linkages. Both the Citywide and Local parks will require the construction of formalised recreation trails. It is anticipated that about half of the proposed linear parkland will have a purpose other than public parks (eg. conservation areas, drainage reserves) or provided as part of the internal works of development. Consequently, both acquisition and embellishment costs have been reduced by fifty percent to account for these constrained lands.

4.2. OTHER CONSIDERATIONS

4.2.1. As part of this strategy a number of issues affecting the provision of public parks infrastructure required further consideration. These issues and a brief description of the outcomes are outlined below:

PARKLAND GROUPING

4.2.2. Because of the number or relatively small size of existing local parks, an important issue relating to the development of local recreation parks has been the concept of 'parkland grouping'. This concept groups a number of local parks into one (1) local park serving a particular catchment area within a Planning Sector. The catchment area was usually determined taking into account the criteria relating to 500m distances to local parks or any major severance issues (e.g. rivers, major roads etc.). In a number of instances the existing local parks within a catchment area were well below the designated minimum area for a local park (5000m2) or, if large, topographically difficult to develop. Thus these parks could not provide individually the range of amenities desired for a local park. Therefore, the concept of parkland grouping enables (notwithstanding the parks physical separation) facilities to be shared (not duplicated) between reserves within a local catchment.

CONSERVATION RESERVES AND PUBLIC PARKS

4.2.3. A small amount of land controlled by Council within the Conservation Reserve has also been nominated for parks. Some land already has an existing park area on the site whereas others represent a potential future park coexisting with the conservation designation – this is often the case where a conservation designation exists over the entire land parcel but the vegetated area only covers part of the land. It is generally considered that the parks located on an existing conservation designation are capable of successfully coexisting with the conservation purpose of the land.

RECREATION TRAILS

4.2.4. The City's recreational trail networks, bikeways and inter-suburban pathway links have been considered in this strategy as part of individual waterside parks or as part of the citywide linear parks.

NETWORK PLANNING METHODOLOGY

4.2.5. In addition to using benchmarks, the process of planning the parks network followed a specific progression. This staged progression is outlined in Appendix D and elaborated in more detail within this section of the strategy.

4.3. BENCHMARK PROVISION STANDARDS

4.3.1. The following table (table 3) shows the approximate provision standards for each park type and the respective benchmark (measured in quantity/hectare). These benchmarks remain identical to the PPS Update 2009. The benchmarks are identical to Public Parks Strategy Update 2009.

PARK BENCHMARK STANDARDS						
Citywide Sportsgrounds	Local Sportsgrounds	District Recreation Parks	Local Recreation Parks			
1 x 10-15ha / per 16,000 population	1 x 5ha / per 9,000 population	1 x 4ha / per 10,000 population	1 x 0.5ha / per 1,000 population			

Table 4.3: Table showing the four park types which have a benchmark provision standard.

4.3.2. Table 4.4 provides a summary of the ultimate population projection changes between the PIP 2009 and the LGIP 2016 review.

Planning District	PIP - PPS 2009 Ultimate Residential	LGIP - PPS 2016 Ultimate Residential	GROWTH
CENTRAL	141032	154,078	13,046
EAST	152337	185,201	32,864
INDUSTRIAL	NA	NA	NA
RIPLEY	101366	112,825	11,459
WESTERN	64923	66,514	1,591
TOTAL	459658	518,668	59,010

Table 4.4: The ultimate population projections comparison between 2009 PIP and 2016 LGIP.

4.3.3. Table 4.5 (below) provides a summary of the number (benchmark) of parks that need to be provided for each park type within the planning districts to meet the City's 'ultimate' population. This table illustrates the change in Public Parks in response to the increased population projections. These changes are summarized in the following table:

	Citywide Sportsgrounds		Local Spor	Local Sportsgrounds Rec		District Recreation Parks		cal on Parks
	PIP 2009	LGIP 2016	PIP 2009 LGIP F		P 2009 PIP 2009		PIP 2009	LGIP 2016
Benchmark	29	33	51 57 ¹		46	52	460	519
Actual	35	36	45 57	39	64	465	605	
Equivalency	28.5	33.5	42	52.5	NA	56	NA	547
DIFFERENCE BETWEEN 2009 & 2016 EQUIVALENCY	5*		10.5		17		82	

Table 4.5: Benchmark and actual comparisons for PIP 2009 and LGIP 2016 ultimate populations.

Notes:

4.4. THE 2016 PUBLIC PARKS EXISTING NETWORK

4.4.1. The following table (table 4.6) illustrates the ultimate benchmark and equivalency comparisons to demonstrate how and where the network has been planned to meet growth.

^{*} The provision of Citywide Sportsgrounds takes into account site equivalency and the ability to provide a standard DSS field/oval/court configuration. While the actual difference between 2016 and 2009 is an increase in 1, there is an overall equivalency increase to achieve the benchmark requirement of 33 (2016) sites compared to the benchmark of 28.5 (2009).

¹ The 2016 LGIP benchmark for Local Sportsgrounds is 58 however. However, in the western planning district, the population increase, distribution of residents and demand is expected to be more than adequately serviced by the three citywide sportsgrounds in the District. Within the large lot residential areas, the geographic spread of the population and the absence of an identifiable centre (such as a rural town) means that local facilities, where possible, should be co-located with other recreational settings or located at other activity areas. As such, the total shall remain one less in the western district resulting to a total of 57 local sportsground for the City.

4.5. THE ULTIMATE PUBLIC PARKS NETWORK (PUBLIC PARKS WHICH HAVE BEEN ADJUSTED DUE TO POPULATION GROWTH)

			Local Recre	eation Parks	District Rec	reation Park	Local Spor	rtsgrounds	Citywide Sp	ortsgrounds
	Planning Unit Sector	Ultimate Residential	Benchmark Ultimate	Actual Ultimate Equivalency	Benchmark Ultimate	Actual Ultimate Equivalency	Benchmark Ultimate	Actual Ultimate Equivalency	Benchmark Ultimate	Actual Ultimate Equivalency
	C1	20,561	21	19	2		2.3		1.3	
	C10	14,414	14	28	1		1.6		0.9	
	C11	2,662	3	23	0		0.3		0.2	
	C2	27,814	28	12	3		3.1		1.7	
_	C3	22,372	22	13	2		2.5		1.4	
₹	C4	9,243	9	12	1	15.0	1.0	13.5	0.6	15.0
CENTRAL	C 5	9,940	10	14	1		1.1		0.6	
J	C6	14,730	15	4	1		1.6		0.9	
	C7	16,606	17	15	2		1.8		1.0	
	C8	4,507	5	19	0		0.5		0.3	
	C9	11,229	11	4	1		1.2		0.7	
	SUB TOTAL	154,078	154	163	15	15.0	17.1	13.5	9.6	15.0
	E1	7,042	7	9	1		0.8		0.4	
_	E2	83,881	84	91	8		9.3		5.2	
ER	E3	18,285	18	21	2	20.0	2.0	20.0	1.1	10.25
EASTERN	E4	52,056	52	53	5		5.8		3.3	
S S	E5	19,284	19	20	2		2.1		1.2	
	E6	4,653	5	7	0		0.5		0.3	
	SUB TOTAL	185,201	185	201	19	20.0	20.6	20.0	11.6	10.25
	I1	-	-		-		-		-	
	12	-	-		-		-		-	
_	I3A	3	0		0		0.0		0.0	
₹	13B	1	0		0		0.0		0.0	
IST	I3C	3	0		0		0.0		0.0	
INDUSTRIAL	14	2	0		0		0.0		0.0	
=	15	-	-		-		-		-	
	16 17	-	0		0		-		-	
	SUB TOTAL	40 49	0	-	0	-	0.0	_	0.0	-
	R1	14,260	14	13	1	-	1.6	-	0.0	-
	R2	53,404	53	60	5		5.9		3.3	
RIPLEY	R3	15,291	15	18	2	14.0	1.7	13.0	1.0	6.0
문	R4	29,870	30	33	3		3.3		1.9	
	SUB TOTAL	112,825	113	124	11	14.0	12.5	13.0	7.1	6.0
	W1	22,761	23	23	2		2.5		1.4	•
	W2	20,802	21	21	2		2.3		1.3	
7	W3	8,862	9	9	1		1.0		0.6	
WESTERN	W4	1,105	1	4	0	7.0	0.1	6.0	0.1	2.25
EST	W5	7,272	7	-	1		-		0.5	
₹	W6	4,312	4	2	0		0.5		0.3	
	W7	1,401	1	-	0		0.2		0.1	
	SUB TOTAL	66,514	67	59	7	7.0	6.6	6.0	4.2	2.25
	TOTAL	518,668	519	547	52	56.0	56.8	52.5	32.4	33.5

Table 4.6: Benchmark and actual equivalencies for parks which have changed in response to population projection increases.

4.6. NETWORK AMENDMENTS COMMENTARY

4.6.1. SPORTSGROUNDS

- 4.6.2. Wherever possible and practical, in urban areas it is Council's preference to avoid utilising Citywide Sportsgrounds to simultaneously function as a Local Sportsground with no net increase in service provision and land above the standard Citywide Sportsground DSS requirements (i.e. planning to use a Citywide as both a Citywide and a Local if only one Citywide equivalency is provided). This is to ensure that the Citywide Sportsground network capacity is not compromised or artificially inflated when assessing the complete network capacity, operation and user demand levels. A 'by exception' approach should be taken when planning and assessing a Citywide Sportsground's capacity to have a dual function. Therefore, as discussed below, the planning assumptions in the PPS 2009 have been reviewed and require re-siting of previously planned sportsgrounds that cannot be delivered as previously planned.
- 4.6.3. The benchmark requirement for Citywide Sportsgrounds is one 10-15ha park per 16,000 people. With a total population of 518,668, this benchmark requires thirty-three (33) Citywide sportsgrounds to service the City. From a distribution and land area perspective, this means that thirty-three citywide sportsground 'equivalencies' are required. The term 'equivalency' means a 10-15ha site which can accommodate four rectangular fields and two ovals (courts are assumed to be accommodated). It's worth noting however, that some existing and future sites are planned to accommodate a premier or headquarter facility (e.g. a single oval of field or multiple hard court facility).
- 4.6.4. Existing sites (outside of rural areas or townships) which do not meet the DSS requirements or have capacity to function as a premier or headquarter facility have been downgraded to a local level sportsground.
- 4.6.5. An analysis of the City's current and future planned network identified what existing and future equivalency and capacity can be delivered. There were three (3) existing sites that were assessed as not meeting the Citywide Sportsground DSS service levels (generic configuration or head quarter/premier facility capability) and have been removed from the Citywide calculations. These were:
 - Rotary Park (Knights) and Thomas Purnel (single Citywide Sportsground change to one local)
 - Chuwar Landfill (change to one local)
 - Camira Landfill (change to one local)
- 4.6.6. These three sites have been absorbed into the Local Sportsground calculations to meet growth requirements.
- 4.6.7. Following a desktop spatial analysis, future sites generally meet the DSS requirements. Further, with the current and future equivalencies assessed, the 2009 PIP equated to 28.5 equivalencies. Therefore several new sites have been added to the ultimate Citywide Sportsground network to satisfy the required demand for 33 equivalencies. These new sites are:

Citywide Sportsgrounds 2016 LGIP - Proposed additional future sites and equivalency		Equivalency
1	North Booval (80/85 Oxford Street North Booval)	2
2	Additional STCIA Citywide Sportsground - external to STC	1
3	Wards Road: Upper Bundamba Creek (outside PDA)	1.5
		4.5

Table 4.5: The ultimate population projections comparison between 2009 PIP and 2016 LGIP.

- 4.6.8. 36 sites (33.5 equivalents) have been identified to achieve the network requirements of 33 equivalencies. While head quarter and premier facilities are essential for the operation and success of sport and physical activity, these highly embellished facilities utilise land otherwise identified for standard fields, ovals and courts and therefore must be suitably accommodated in the network. As such, when planning a potential Headquarter or Premier facility, consideration of network capacity and demand assumptions is needed as this may restrict Council's ability to provide the required number of standard configurations and the overall quantities of ovals, fields and courts.
- 4.6.9. Within the context of this strategy and the LGIP, network capacity and site equivalency for local and citywide sportsgrounds is calculated as two separate park types (i.e. citywide sportsground fields cannot included local sportsground fields or vise versa).
- 4.6.10. For example, where a premier facility (e.g. such as an AFL facility or criterium track etc.) is provided, this restricts the ability the standard fields configuration yet is considered an equivalent in embellishment cost.
- 4.6.11. At the time of this strategy's development, it is expected that the Ripley district will continue to experience challenges to secure the minimum land area and suitability for Citywide Sportsgrounds. This further reinforces the need to secure additional land to the above mentioned requirements to accommodate uncertainty, flexibility and growth in the open space network and sport and physical activity trends and demand.
- 4.6.12. To ensure benchmark equivalency is maintained and with the likely development of future premier facilities or stadiums throughout the City, additional land acquisition in the greater Ripley Valley (where existing potential opportunities exist) should continue to be pursued.

LOCAL SPORTSGROUNDS

- 4.6.13. The PPS 2009 had a Local Sportsground ultimate benchmark provision of 51 and an ultimate actual provision of 45 (equivalency of 42). This equivalency of 42 was based on the assumption that 7 additional equivalent sites were able to be absorbed into other sites which have since been confirmed as not being able to increase their capacity beyond their primary function and accommodate additional local level sportsground demand (e.g. Citywide Sportsgrounds with limited capacity, heavily constrained or unable to be acquired etc.).
- 4.6.14. In essence, this equates to a total of 49 Local Sportsground equivalencies (7 + 42) of the 51 (benchmark) that were planned to be provided. On the basis that the planning assumptions, capacity and feasibility of these 7 sites has changed since 2009, the new proposed new Local Sportsgrounds network is have been modified to meet the benchmark equivalency requirements, and is based on the following:

- Existing confirmed sites (existing Council land),
- Future planned and feasible sites (future land with no foreseeable constraints),
- Sites removed from the network (existing and future) that are not feasible, and
- Inclusion of proposed new additional and feasible sites to meet growth.
- 4.6.15. The benchmark requirement for Local Sportsgrounds is one 5ha park per 9,000 people. With a total population of 518,668, this benchmark equates to fifty-seven (57) Local Sportsgrounds to service the City compared to the PIP 2009 total of 45 (51 benchmark).
- 4.6.16. Currently there are 21 existing (embellished to a usable capacity) Local Sportsgrounds providing 18 equivalents. There are currently 25 future local sportsgrounds planned which equate to a total of 41.5 equivalencies local sportsgrounds planned in the PIP 2009. (Woogaroo Street Landfill has been removed from future consideration due to site constraints).
- 4.6.17. To meet the LGIP 2016 population requirements, eleven (11) new sites (11 equivalencies) have been identified to add to the network equating to 57 sites with an equivalency of 52.5. Hence, there is a gap of 4.5 equivalencies which need to be secured via alternate agreements (e.g. school partnerships and lease agreements etc.) to meet the benchmark demand of 57 equivalencies (despite 57 sites being identified).

DISTRICT RECREATION PARKS

- 4.6.18. The benchmark requirement for District Recreation Parks is one 4ha park per 10,000 people. With a total population of 518,668, this benchmark equates to 52 District Recreation Parks being required to service the City compared to the PIP 2009 total of 39 (benchmark 46). To meet this benchmark, 52 District Recreation parks are planned in the 2016 review.
- 4.6.19. This increase from 39 to 52 planned sites results in 13 new sites being identified, all located on existing Council owned land in areas where there is a poor service level of district recreation parks.
- 4.6.20. Three (3) District Recreation embellishment equivalencies are planned to be located in the Central Planning District within the land identified as future stages of River Heart Parklands in the vicinity of the Woolen Mills re-development to enhance the open space, recreation and urban design outcomes in close proximity to the Bremer River.
- 4.6.21. The increase in District Recreation parks (i.e. equal sites to benchmark requirements versus the 2009 planned actual of 39 compared to a benchmark of 46) is based on aiming to satisfy the DSS access requirements. In the PPS 2009, District Waterside Parks were viewed to substitute for District Recreation Parks. However, these sites do not satisfy the access, carparking and road frontage requirements to appropriately function or service the district as District Recreation parks will. Therefore, new District Parks are identified which satisfy the provision standard of 1 park per 10,000 people, are located on existing ICC land, and more appropriately and realistically meet community needs from am access and recreation perspective.
- 4.6.22. Two district recreation parks have been removed from the public parks network. These site and justification are as follows:

REMOVED - DISTRICT RECREATION PARKS

PARK AND I.D.			PLANNING DISTRICT	JUSTIFICATION	
	270			Classification (District Conservation	
1	514	Denmark Hill & Keogh Street Reserve (Denmark Hill Conservation Reserve)	CENTRAL	Reserve) • Environmental values, • Topography, • Site constraints heavily restrict DSS from being achieved.	
	493			Classification (District Conservation	
	752	Bertha Street Bushland		Reserve)	
2	1140	Reserve (Ric Nattrass Environmental Park)	EAST	 Location, environmental values, topography, sites constraints heavily restrict DSS from being achieved. 	

Table 4.6: District Recreation parks from the PIP 2009 which have been removed from the LGIP 2016.

LOCAL RECREATION PARKS

4.6.23. The benchmark requirement for Local Recreation Parks is one 0.5ha park per 1,000 people. With a total population of 518,668, this benchmark equates to 519 Local Recreation Parks being required to service the City compared to the PIP 2009 total of 465. This increase results in 56 new sites being identified, all located on existing Council owned land, planned recreation zone areas with a key focus on integrating this site into the open space network through highly connected linear park land corridors.

5 The 2016 LGIP Public Parks Network

5. THE PUBLIC PARKS NETWORK

5.1.1. The output of the previous sections shows that a total of 1,070 parks (including groupings of parks) and 2,499 hectares of linear parks constitute the public parks infrastructure network for an ultimate population of 518,668 persons. The purpose of this section is to explain how the cost of this network is established. The cost of a park is simply calculated as the sum of the land costs and embellishment costs (at base date).

	EX	ISTING	ULTIMATE		
	QTY	Area (ha)	QTY	Area (ha)	
Citywide Recreation Park	4	73	5	181	
District Recreation Park	35	214	56	409	
Local Recreation Park	385	309	547	448	
Citywide Sportsground	19	236	36	605	
Local Sportsground	32	198	58	379	
Citywide Waterside	3	557	4	580	
District Waterside	5	57	6	75	
Citywide Linear*	81	423	170	1,712	
Local Linear*	122	282	188	787	
TOTALS	686	2,347.85	1070	5,176.12	

Table 5.1: Network quantity and area breakdown.

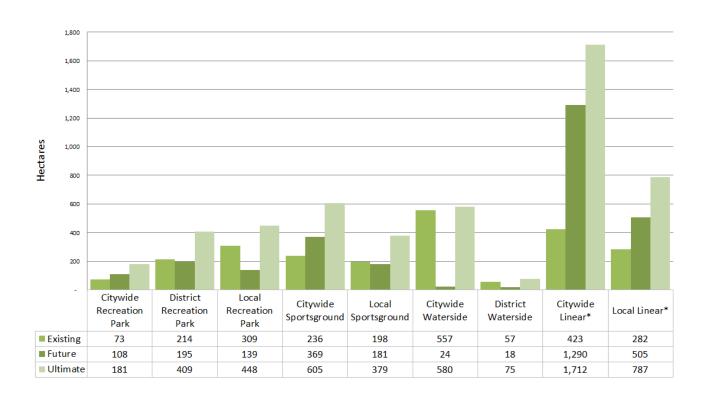


Table 5.2: Network quantity and area breakdown. This table highlights how much the linear park elements will expend in the future and ultimately grow to the largest land area within the public park network.

5.2. UNIT RATE REVIEW

- 5.2.1. Key to the review of the Public Parks Strategy 2009 (PPS 2009) is the update of the DSS and units rates to current industry costs.
- 5.2.2. The table below summarises the rate changes from the 2009 update to the 2016 update. In addition to land values, these unit rates form the basis for the individual cost of each park type which is used in the SOW to generate the complete networks costs.

5.2.3. PUBLIC PARKS STRATEGY 2009 UNIT RATE REVIEW

	20	015 Review ¹	PPS 2009		Percentage Increase
Park Type	Unit	Rate	Unit	Rate	%
Citywide Sportsgrounds	ea	\$ 9,950,300.00	ea	\$ 9,317,642.00	7
Local Sportsgrounds	ea	\$ 2,790,396.00	ea	\$ 2,999,893.00	-7
Citywide Recreation parks	ea	\$ 6,229,415.00	ea	\$ 5,356,485.00	16
District Recreation	ea	\$ 2,814,955.00	ea	\$ 2,435,350.00	16
Local Recreation Parks	ea	\$ 565,141.00	ea	\$ 446,536.00	27
Citywide Waterside Parks	ea	\$ 4,801,026.00	ea	\$ 4,454,562.00	8
District Waterside Parks	ea	\$ 2,052,097.00	ea	\$ 2,022,048.00	1
Citywide Linear Parks	ha	\$ 224,789.00	ha	\$ 155,846.00	44
Local Linear Parks	ha	\$ 142,976.00	ha	\$ 88,625.00	61

Table 5.1: Outcomes of the DSS unit rate review (Turner and Townsend, May 2015)

Notes:

5.3. PARK EMBELLISHMENT COST REVIEW

- 5.3.1. As per the Turner and Townsend Unit Rate review (refer appendix D), prices have increased across all park types with the exception of Local Sportsgrounds. Upon review of the rate increase for each item comprising the scope of works, the rate increases align with the changes in landscape construction industry construction costs.
- 5.3.2. For instance, linear park prices have increased significantly more than the other parks. This is largely due to the increase in rates for landscaping, concreting and furniture which form the majority of works in these park types.
- 5.3.3. Based on a broad assessment public park delivery, internal and external of Council, the price increase in the unit rates highlighted in table 5.1 were considered an appropriate reflection on present day construction costs.

¹ The Turner and Townsend Unite Rate Review established the base rate for embellishment costs. Refer to the SOW for indexed embellishment rates used in the establishment costs.

5.4. STRATEGY IMPLEMENTATION

5.4.1. SCHEDULE OF WORKS (SOW)

- 5.4.2. To support the LGIP a Schedule of Works (SOW) Model has been prepared and published in accordance with the LGIP Guideline and includes further information regarding the costs of the land for public parks trunk infrastructure network and infrastructure charges.
- 5.4.3. For the land costs (current value at base date) used as inputs into the SOW, refer to Local Government Infrastructure Plan Land Valuation Study prepared for Ipswich City Council (May 2015).

5.4.4. 10 YEAR INVESTMENT PRIORITISATION

5.4.5. PUBLIC PARK OPERATIONAL PLANNING - PROJECT IDENTIFICATION

Council's forward and operational planning (necessary master planning and site planning to
precede capital delivery) utilises the planning, costs and population demand assumptions in the
LGIP (including this strategy) to identify and prioritise these works.

5.4.6. PUBLIC PARK CAPITAL PORTFOLIO DEVELOPMENT

 Council's public park capital delivery program is prioritised and guided by the planning, costs and population demand assumptions in the LGIP (including this strategy) to identify and prioritise these works.

6 Appendices

<u>APPENDIX A - POPULATION PROJECTIONS 2016-2036 AND 'ULTIMATE'</u>

Table A.1.1: POPULATION PROJECTIONS 2016-2036 AND 'ULTIMATE': BY PLANNING SECTOR

Eastern Planning District

Planning Sectors	2016	2021	2026	2031	2036	'Ultimate'
Sector E1: Camira	6,893	6,905	6,918	6,930	6,943	7,042
Sector E2: Augustine Heights, Brookwater, Spring Mountain, Springfield, Springfield Central, Springfield Lakes	26,762	40,847	61,900	73,352	78,778	83,881
Sector E3: Camira, Carole Park, Gailes, Goodna, Redbank	13,526	15,741	16,081	16,420	16,759	18,285
Sector E4: Augustine Heights, Bellbird Park, Redbank Plains	28,034	35,472	42,615	46,424	47,281	52,057
Sector E5: Collingwood Park, Goodna, Redbank, Redbank Plains	9,129	16,325	17,151	17,686	18,002	19,283
Sector E6: Riverview	3,404	3,724	3,862	3,999	4,137	4,653
TOTAL	87,749	119,015	148,527	164,811	171,899	185,202

Central Planning District

Planning Sectors	2016	2021	2026	2031	2036	'Ultimate'
Sector C1: Coalfalls, Ipswich, Sadliers Crossing, West Ipswich, Woodend	6,738	8,853	10,969	13,062	15,139	20,561
Sector C2: Basin Pocket, Booval, Bundamba, East Ipswich, Eastern Heights, Newtown, North Booval, Silkstone	18,071	19,779	21,089	22,399	23,709	27,814
Sector C3: Eastern Heights, Flinders View, Ipswich, Raceview	17,509	19,834	20,193	20,502	20,732	22,372
Sector C4: Churchill, Yamanto	7,125	7,967	8,083	8,200	8,316	9,243
Sector C5: Leichhardt, One Mile, Wulkuraka	7,386	8,585	8,734	8,858	8,980	9,940
Sector C6: Brassall	9,604	12,964	13,299	13,535	13,771	14,730
Sector C7: Brassall, Moores Pocket, North Ipswich, North Tivoli, Tivoli	8,581	10,959	11,697	12,433	13,169	16,606
Sector C8: Bundamba	3,347	3,838	3,969	4,101	4,232	4,507
Sector C9: Blackstone, Bundamba, Dinmore, Ebbw Vale	5,584	7,775	9,402	9,597	9,792	11,229
Sector C10: Barellan Point, Chuwar, Karalee, North Ipswich, Tivoli	8,551	10,755	11,995	13,236	13,390	14,414
Sector C11: Blacksoil, Muirlea, Pine Mountain	2,077	2,301	2,348	2,394	2,440	2,662
TOTAL	94,572	113,610	121,778	128,315	133,669	154,078

Ripley Planning District

Planning Sectors	2016	2021	2026	2031	2036	'Ultimate'
Sector R1: Deebing Heights, Goolman	3,023	6,569	14,029	14,101	14,144	14,260
Sector R2: Deebing Heights, Flinders View, Raceview, Ripley, South Ripley	2,609	9,399	24,385	37,770	50,370	53,405
Sector R3: South Ripley	90	89	5,107	10,396	13,048	15,291
Sector R4: South Ripley, Spring Mountain, White Rock	1,031	7,143	13,566	21,121	25,530	29,869
TOTAL	6,752	23,201	57,088	83,389	103,092	112,824

Western Planning District

Planning Sectors	2016	2021	2026	2031	2036	'Ultimate'
Sector W1: Haigslea, Karrabin, Walloon	1,598	1,736	8,432	21,372	21,593	22,761
Sector W2: Mount Marrow, Rosewood, Thagoona, Walloon	1,116	1,117	2,728	19,594	20,714	20,802
Sector W3: Rosewood	3,004	4,401	6,488	8,097	8,301	8,862
Sector W4: Marburg	646	653	1,043	1,049	1,055	1,105
Sector W5: Ashwell, Blacksoil, Calvert, Ebenezer, Grandchester, Haigslea, Ironbark, Karrabin, Lanefield, Lower Mount Walker, Marburg, Mount Forbes, Mount Marrow, Mount Mort, Mount Walker West, Mutdapilly, Rosewood, Tallegalla, Thagoona, The Bluff, Walloon, Woolshed, Wulkuraka	4,195	4,199	4,938	5,764	6,502	7,272
Sector W6: Willowbank	1,302	1,594	1,841	2,089	2,336	4,312
Sector W7: Goolman, Mutdapilly, Peak Crossing, Purga, Willowbank	827	848	941	1,034	1,127	1,401
TOTAL	12,688	14,549	26,411	58,998	61,628	66,514

 $Source: \ Ipswich \ City \ Council \ Population \ Modeller.$

<u>APPENDIX B – DESIRED STANDARDS OF SERVICE</u>

Table B.1: Desired Standards of Service

CITYWIDE SPORTS	CITYWIDE SPORTSGROUNDS & COURTS						
DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹				
CITY WIDE	ACCESS:	FACILITIES (urban areas excluding township areas):	PLANTING:				
Redbank Plains Recreation Reserve Limestone Park Ivor Marsden Park	 Preferably on or within 250 metres of an arterial road or within 400 metres of a railway station or bus stop serviced by regular public transport. Preferably located on or within 250 metres of the bikeways network. At least two sides and 50% of the perimeter length of the park has direct frontage to a public road with an additional 25% of the perimeter length of the park having direct frontage to a road or a public place. AREA AND TOPOGRAPHY: Dependent on sport being accommodated, but the site is to be approximately 15ha of functional recreation area and regular in shape. The site area should exclude land below the Q20 flood level unless such land can be filled to the Q20 level and is made useable and stable. The site should also include adequate land above the Q100 design flood level for the location of buildings and other expensive facilities. The site should be principally flat land, 3% gradient or less so that site development should not entail major cut/fill or drainage construction. DISTRIBUTION: Ensure only one (1) 'headquarters facility' for each sport within the City. Ideally, close to major adjoining recreation area of non-structured nature, (e.g. recreation or waterside parks) and sited generally within or adjacent to major urban areas except where use dictates an alternative location. Ensure maximum travelling time of 20 – 30 minutes for 	 Generally, citywide sporting venues should provide facilities capable of holding regional level competition. Adjacent to the main field, oval or court, provide spectator seating or earthbank/tiered seating (shaded by trees or structure) and public amenities building incorporating 5 x cubicles (unisex and disabled) each with toilet and washbasin). All fields, courts and wickets are to be capable of a north/south orientation. Constructed pathway (2200mm wide concrete) circuit incorporating distance markers to park perimeter integrated with bikeway/pathway network. Internal pathway (2200mm wide concrete) connection providing access to major activity areas (to follow contours if possible or minimum 1:20 grade). 4 x rectangular fields 132m x 82m capable of providing 2 cricket ovals 70m radius centre of pitch (lit to 250 lux) or 1 premier field or oval (AFL size 173m x 143m) including training field (lit to 250 lux). For at least one citywide facility in each district, incorporate an athletics track around perimeter of field or oval. Field gradient: 1:70 – 1:100 8 x multipurpose courts (concrete with synpave over). Associated infrastructure: — Perimeter or inter court fencing, nets or goal posts, line marking, lighting to 250 lux. 1 x Double Practice Wicket (netted) 1 x Freestanding Public Amenities Building incorporating 5 x cubicles (unisex and disabled) each with toilet and wash basin. 1 x Play space (nominal size: 20 x 15m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 – 12; shade structure and soft-fall. 	 Internal shade tree planting to oval/field surrounds. Shade trees around playground areas and carpark. Street tree planting to all park/road frontages, internal roads and pathways. Species compatible with local street planting. If adjoining creek or environmental areas – native planting only. Accent planting/feature garden at park entry point/s and major activity nodes with in-ground automatic irrigation system (recycled water to be used where possible). Consideration to drought tolerant species. DRAINAGE: On-site detention (i.e. collect drainage from sportsfields) with discharge through natural filter (e.g. wetland) to river or creek. All drainage away from adjoining residential areas or direct discharge to creek or adjoining bushland. Minimum Q20 design flood level for ovals and fields and Q50 design flood level for courts (Q100 design flood level if courts fenced). All buildings or playgrounds to be located above the Q100 design flood level. VIEWS: Retain attractive middle and distant views 				

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

most residents to at least one sportsground reserve.

Benchmark: Approximately 1:16000 persons (urban areas).

 For the town of Marburg, the sportsground and courts reserve will also service the surrounding rural and rural residential areas. However, unlike the larger and more expensive citywide parks within the urban areas, the township sports reserve is only planned to have a level of facilities generally that of a local sportsground and courts facility.

- 3 x paved concessionary areas (nominal size each area: 5m x 8m) adjacent to internal roads in close proximity to activity areas or as extension to carpark.
- 3 x Drinking fountains (Disabled Compliant)

CAR PARKING:

- Minimum 500 car spaces on site, split if necessary to reduce visual impact.
- Sealed internal road network providing access to buildings and parking areas. Parking areas for at least 250 x cars (to incorporate disabled car spaces) and 4 x coaches to be paved, line-marked and signed. Grassed overflow parking areas for an additional 250 cars to be provided adjacent to formal parking areas. This number of spaces can be reduced by the number of on street parking bays provided on streets adjacent to the sportsground/site.
 Installation of 'access control' barrier to all accessible park boundaries/frontages (i.e. bollards @ 1.5m centres).

SIGNAGE:

 Park entry information signage at main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual).

LIGHTING:

- All internal roads, parking areas and primary pedestrian paths to be lit to provide security and functionality.
- Power Box (external) 3 Phase power

ESTIMATED EMBELLISHMENT COST: \$ 9,950,300.00 each park

where possible/relevant.

SCREENING:

- Minimise impact on surrounding residents through screening facilities, particularly for night lighting.
- NB. Screening must not obscure views into park.

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹
LOCAL	ACCESS:	FACILITIES (including township areas):	PLANTING:
Stallard Park Bob Gibbs Oval	 On or close to distributor road/trunk collector street and within approximately 10 minute walk from bus stop or railway station. Preferably located on or close to bikeways/pathways network. At least 50% of the perimeter length of the park has direct frontage to a public road with an additional 25% of the perimeter length of the park having direct frontage to a road or public place. AREA AND TOPOGRAPHY: The functional recreation area is to be a minimum of 5ha and regular in shape. The site should be principally flat land, 3% gradient or less so that site development should not entail major cut and fill. The site area should exclude land below the Q10 flood level unless such land can be filled to the Q10 level and is made useable and stable. The site should also include adequate land above the Q100 design flood level for the location of buildings and other expensive facilities. NUMBERS AND DISTRIBUTION: Adequate coverage throughout Citywide for maximum 10 minute drive or 20 minute cycle ride. Where possible these facilities are to be in close proximity to proposed neighbourhood centres or close to major recreation areas (e.g. 	 All fields, courts and wickets are to be capable of a north/south orientation. Constructed pathway (2200mm wide concrete) circuit to park perimeter integrated with bikeway/pathway network. Internal pathway (2200mm wide concrete) connection providing access to major activity areas (to follow contours if possible or minimum 1:20 grade). 2 x rectangular fields 132 x x82m capable of providing 1 cricket oval 70m radius centre of pitch (lit to 250 lux). Field gradient: 1:70 – 1:100 4 x multipurpose courts (concrete with synpave over. Associated infrastructure: perimeter or inter court fencing, nets or goal posts, line marking, lighting to 250 lux). 1 x public amenities building incorporating 5 x cubicles (unisex and disabled) each with toilet and wash basin. 1 x Play space (nominal size: 20 x 15 m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 12; shade structure and soft-fall. 1 x Drinking fountain (Disabled compliant) CAR PARKING: Minimum 150 on site car spaces with sealed internal road access to buildings. Parking areas for at least 100 cars (to incorporate disabled car spaces) and 4 coaches to be sealed, line-marked and signed. Grassed overflow parking areas for an additional 50 cars to be provided adjacent to formal parking areas. This number of spaces can be reduced by the number of on – street parking bays provided on streets adjacent to the 	 Internal shade tree planting to oval/field surrounds. Shade trees around playground areas and carpark. Street tree planting to all park/road frontages, internal roads and pathways. Species compatible with Local Street planting. If adjoining creek or environmental areas – native planting only. Accent planting/feature garden at park entry point/s and major activity nodes with in-ground automatic irrigation system (recycled water to be used where possible). Consideration to drought tolerant species. DRAINAGE: On-site detention (i.e. collect drainage from sportsfields) with discharge through natural filter (e.g. wetland) to river or creek or street stormwater system. All drainage away from adjoining residential areas or direct discharge to creek or adjoining bushland. Minimum Q10 design flood level for ovals and fields and Q50 design flood level for courts (Q100 design flood level if courts fenced). All buildings or playgrounds to be located above the Q100 design flood level. SCREENING: Minimise impact on surrounding residents

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

district recreation parks or waterside parks).

BENCHMARK:

- Approximately 1:9000 persons (urban areas)
- Within the town of Marburg, the Citywide sportsground and courts reserve will also serve as the local sporting reserve.

NOTE

 Benchmark standards only provide a guide to the provision of sports facilities. The actual pro vision of sportsground and courts should take into account the conclusions of any Facilities Study or comments from the individual sporting associations. sportsground/site.

 Installation of 'access control' barrier to all accessible park boundaries/frontages (i.e. bollards @1.5m centres).

LIGHTING:

- All internal roads, parking areas and primary pedestrian paths to be lit to provide security and functionality.
- Power Box (external) 3 Phase power.

SIGNAGE:

 Park entry information signage at main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual).

ESTIMATED EMBELLISHMENT COST: \$ 2,790,396.00 each park

through screening facilities (inc. screen planting) particularly for night lighting.

NB. Screening must not obscure views into park.

VIEWS:

- Emphasise location by distinctive street-front planting.
- Retain attractive views where possible.

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

CITYWIDE RECREATION PARKS						
DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹			
CITY WIDE	ACCESS:	FACILITIES (urban areas):	PLANTING: • Use of native species to achieve 40% site			
Queens Park Ipswich City	On or close (min 400 metres) to arterial road on major bus route or railway station or within or adjoining a Town Centre.	Constructed pathway (2200mm wide concrete) circuit to park perimeter integrated with pedestrian/cycle network. Internal pathway (2200mm wide concrete) connection providing access to major activity areas at minimum 1:20 grade.	coverage (excluding plazas, squares and other hard urban spaces). Street tree planting compatible with local street planting.			
Mall/Darcy Doyle	Located on or close to bikeways network. At least three sides and 75% of the perimeter length of the park has direct frontage to a	12 x shaded picnic areas incorporating tables and bench seats ranging in size to accommodate both small (8 x 1 Table and 2 bench seats) and large groups	 Feature/avenue shade tree planting using native species or deciduous/exotic species. Re-vegetation areas to use native tree and 			
• Place	public road or public place. AREA AND TOPOGRAPHY:	(4 x 4 Tables and 8 bench seats). 50% of picnic facilities to be in close proximity to car-parking areas.	groundcover species. • Accent planting/feature garden at park entry			
Ipswich Botanic	Minimum 10ha except for CBD plazas, parks and other hard surfaced areas, which are to be	 6 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 	point/s and major activity nodes with in-ground automatic irrigation system (recycled water to be used where possible). Consideration to			
Gardens (Kholo)	determined by primary use needs. Topography to avoid major cut and fill and to provide about 30% of area at 5% gradient or less, with topographic variation to provide for a range of play and user interest.	 1 x large kick-a-bout area (nominal size: 50 x 70m) 2 x small kick-a-bout areas (nominal size: 30 x 40m) 	drought tolerant species. DRAINAGE: Where possible drain into feature lake or creek through natural filter (e.g. wetland) or street stormwater system.			
	NUMBERS AND DISTRIBUTION: To be located within the Ipswich City Centre, Springfield and Ripley Town Centres and the	 1 x enhanced natural or constructed water feature (example lake/creek feature) with formal edge treatments to the perimeter. Identity, directional and interpretative signage. 	 All drainage away from adjoining residential areas or direct discharge to creek or adjoining bushland. Except where the intrinsic character of the park or location makes it impractical (e.g. 			
	Ipswich Botanic Gardens. Preferably, these parks will have linkages with other park settings (e.g. sportsgrounds, waterside parks, linear parks or other recreation parks).	 1 x themed adventure playground (nominal size: 100 x 100m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 – 12; shade structure; seating (2 x 1 Table and 2 bench seats); soft-fall; 1 drinking fountain and fenced toddler play area. 	adjacent to a watercourse) all these parks are to be located above the Q100 design flood level. In all circumstances, areas containing buildings or playgrounds are to be located above the Q100 design flood level.			
		Child cycle circuit	SCENIC QUALITY:			
		 3 x Drinking fountains (Disabled compliant) 2 x Public Amenities Building incorporating 5 x cubicles (unisex and disabled) 	 Provide some intimate areas. Opportunity for seasonal colour using 			
		each with toilet and wash basin.	variations in planting. • Protect all natural features.			
		3 x Concessionary Hardstand Area (nominal size each area 5m x 8m to accommodate a mobile food van) with adjacent water and power supply	Frame views both within and into the park and retain attractive views beyond the park			

	points.	HERITAGE:
	CAR PARKING:	Retain and refurbish historic features/buildings/structures, etc.
	Minimum 150 cars on site, split if necessary to reduce visual impact.	 Protect heritage trees and program replacement planting if necessary. Explain history of park through interpretive
	Sealed internal road network providing access to key points of visitor interest or concessionary areas. Parking areas for at least 150 x cars (to incorporate)	signage. SCREENING:
	disabled car spaces) and 4 x coaches to be paved, line-marked and signed. Installation of 'access control' barrier to all accessible park boundaries/frontages (i.e. bollards @ 1.5m centres)	Minimise impact on surrounding residents through screening facilities without limiting casual surveillance opportunities.
	LIGHTING:	
	 All internal roads, parking areas and primary pedestrian paths to be lit to provide security and functionality. 	
	SIGNAGE:	
	Park entry information signage to main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual)	
	ESTIMATED EMBELLISHMENT COST: \$ 6,229,415.00 each park	

NOTES:

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

DISTRICT RECREAT	DISTRICT RECREATION PARKS						
DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹				
DISTRICT	ACCESS:	FACILITIES (urban areas):	PLANTING:				
EXISTING EXAMPLE(S) Browns Park Camerons Park Lobley Park	On or close to distributor road or trunk collector street and near (e.g. within 400 metres) a bus stop or railway station. Preferably located on or close to bikeways network. Regular public transport should service the site. At least three sides and 75% of the perimeter length of the park has direct frontage to a public road or a public place.	 6 x shaded picnic facilities incorporating tables and bench seats for both small (4 x 1 Table and 2 bench seats) and large groups (2 x 4 Tables and 8 bench seats). 50% of picnic facilities to be in close proximity to car-parking areas. 3 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 1 x kick-a-bout area (nominal size: 50 x 70m) plus 1 x multi-purpose % court 	 Use of native species to achieve 20% site coverage. Street tree planting compatible with local street planting. Feature/avenue shade tree planting using 				
	AREA AND TOPOGRAPHY:	 1 x kick-a-bout area (nominal size: 50 x 70m) plus 1 x multi-purpose ½ court with hoop and backboard or 1 x rebound wall and court. 	native species or deciduous/exotic species.				
	Minimum 4ha except that for parks in the Commercial zones, areas are to be determined by primary use needs. Topography to avoid major cut and fill and to provide about 30% of area at 5% gradient or less, with topographic variation to provide for a range of play and user interest. DISTRIBUTION: Ensure access is approximately about 15-20 minutes	 Constructed pathway (2200mm wide concrete) circuit to park perimeter integrated with pedestrian/cycle network. Internal pathway (2200mm wide concrete) connection providing access (1:20 maximum grade) to the major activity area. 1 x themed adventure playground (nominal size: 60 x 40m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 – 12; shade structure; seating (2 x 1 Table and 2 bench seats); soft-fall; 1 drinking fountain and fenced toddler play area. 	 Re-vegetation areas to use native tree and groundcover species. Accent planting/feature garden at park entry point/s and major activity nodes with in-ground automatic irrigation system (recycled water to be used where possible). Consideration to drought tolerant species. 				
	drive in private car or 30 minutes by public transport (non-peak hour) from all areas within the planning	Identity, directional and interpretive signage.	 Preference for planting along creeks and as shade for paths and activity areas. 				
	districts. Ideally, close to major adjoining recreation area of non-structured nature, (e.g. linear or waterside parkland) and sited generally within urban	 1 x Public Amenities Building incorporating 5 x cubicles (unisex and disabled) each with toilet and wash basin. 	DRAINAGE:				
	areas. BENCHMARK: Approximately 1:10,000 persons (urban areas).	 1 x Concessionary Hardstand Area (nominal size 5m x 8m to accommodate a mobile food van) with adjacent water and power supply points. 2 x Drinking fountains (Disabled compliant). 	 Where possible drain into water feature or creek through natural filter (e.g. wetland) or street stormwater system. All drainage away from adjoining residential areas or direct 				
	NOTE	CAR PARKING:	discharge to creek or adjoining bushland. Except where the intrinsic character of the park				
	Benchmark standards only provide a guide to the provision of recreation parks. The actual provision of such parks has taken into account the development	Minimum 50 on site car spaces, split if necessary to reduce visual impact. Parking areas to accommodate 50 x cars as well as 1 x coach.	or location makes it impractical (e.g. adjacent to a watercourse) all these parks are to be located above the Q100 design flood level. In				

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

of existing unused reserves and the construction of	The parking areas are to be sealed, line-marked and signed and incorporate	all circumstances, areas containing buildings or
additional facility development on existing reserves.	disabled car spaces.	playgrounds are to be located above the Q100 design flood level.
	Installation of 'access control' barrier to all accessible park boundaries (frontages (i.e. ballands @ 1.5 m centrol)	
	boundaries/frontages (i.e. bollards @ 1.5m centres)	SCENIC QUALITY:
	LIGHTING:	Attractive and interesting for children and
	The primary pedestrian paths to be lit to provide security and functionality.	appealing to family groups.
	SIGNAGE:	Provide some intimate areas.
	Park entry information signage to main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual).	 Opportunity for seasonal colour using variations in planting.
	ESTIMATED EMBELLISHMENT COST: \$ 2,814,955.00 each park	Protect all natural features.
		VIEWS:
		Frame views both within and into the park and retain attractive views beyond park.
		HERITAGE:
		Retain and refurbish historic
		features/building/structures, etc.
		Protect heritage trees and program
		replacement planting if necessary.
		 Explain history of park through interpretive signage.
		SCREENING:
		Minimise impact on surrounding residents through screening facilities without limiting.
		through screening facilities without limiting casual surveillance opportunities.

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹
LOCAL	ACCESS:	FACILITIES (urban areas):	PLANTING:
LOCAL	ACCESS:	FACILITIES (urban areas):	PLANTING:
EXISTING EXAMPLE(S)	In urban areas, short walk, 5 mins from each dwelling. Ideally located on collector street or trunk	1 x shaded picnic facility incorporating 1 table and 2 bench seats.	Street tree planting compatible with local street planting.
Numerous Suburban	collector street. Preferably located on or close to	1 x play space (nominal size 20 x 15m) on either a flat (1:50 maximum grade)	
Parks	bikeways network. The perimeter length of the park has direct frontage to a public road or a public place (i.e. a road or public land is to front all park	or terraced site incorporating: a range of play equipment for children aged 2 – 12; shade and soft-fall.	 Feature shade tree planting using native species.
	boundaries). Within towns, located adjacent or within the 'township area'. For large lot residential	Constructed pathway (2200mm wide concrete) circuit to park perimeter integrated with pedestrian/cycle network.	Re-vegetation areas to use native tree and groundcover species.
	areas located near intersections servicing the majority of the development.	1 x kick-a-bout area (nominal size: 30 x 20m) plus 1 x multi-purpose ½ court with hoop and backboard or 1 x rebound wall and court.	 Formal/informal tree planting to provide shade and amenity and enable good visual access
	AREA AND TOPOGRAPHY:	1 x Drinking fountain (Disabled compliant)	both to and within the park setting. Consideration to drought tolerant species.
	5000m2 – 1ha (see note 2). Topography to avoid	sievi es	
	major cut and fill to provide about 50% of area at 5%	SIGNAGE:	DRAINAGE:
	gradient or less, with topographic variation to	Park name sign.	Where possible drain into creek through
	provide for a range of play and user interest.	• Falk Hallie Sight.	
	NUMBERS AND DISTRIBUTION:	ESTIMATED EMBELLISHMENT COST: \$ 565,141.00 each park	natural filter (e.g. wetland) or street stormwater system. All drainage away from adjoining residential areas or direct discharge
	Distribution so as to meet access requirement i.e.	CAR PARKING: No formal parking on site. Ensure room for on street parking	to creek or adjoining bushland. Except where
	within 500m of most (i.e. 90%) houses. Ideally, part	along park frontage.	the intrinsic character of the park or location
	of or adjacent to waterside or linear parkland or		makes it impractical (e.g. adjacent to a
	sports grounds and courts.		watercourse) all these parks are to be located
	BENCHMARK:		above the Q100 design flood level. In all circumstances, areas containing buildings or
	Approximately 1:1000 persons although the		playgrounds are to be located above the Q100
	pedestrian catchment concept of a park within 500		design flood level.
	metres of most dwellings is the preferred		SCENIC QUALITY:
	benchmark.		
			Attractive and interesting for children and

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

NOTE:

The above benchmarks are to be used as a guide rather than prescriptive targets. The process of determining the need for additional parks should take into account the amount of parkland already existing in the area; whether access could be improved to existing parks; any barriers to access; spatial location of future urban growth; and,

appealing to family groups.

VIEWS:

• Clear views into park from street and frame views within the park.

HERITAGE:

• Retain and protect any features of cultural heritage significance.

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

² Provided topography is suitable to include all required facilities the minimum land area can be 5000m2. However, where the topography is such that additional land is required to achieve the required recreational facilities and setting, the land area can be increased up to 1 hectare. In these circumstances the land value is taken to be the cost @ 5000m2 (i.e. there is no additional cost attributable for the additional land as this is required to achieve the required recreational facilities and setting).

 Colleges Crossing Colleges Crossing Colleges Crossing Metres) of an arterial or distributor road and a regular bus route and bus stop. Located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPHY: Min 10ha. Topography suitable for waterside walking trail and boat/canoe launching opportunity, with minimal areas of cut and fill to achieve an area no less than 30% of the site which is of a gradient 10% or less, with some topographic variation to provide interest. N.B. In some instances a boardwalk may be required as a substitute for a constructed pathway. DISTRIBUTION: depth of water for launch/recovery) or canoe launch area. Constructed pathway (2200mm wide concrete) circuit for the length of the park has direct front length of the park (preferably adjacent to water body) integrated with pedestrian/cycle network. Internal pathway (2200mm wide concrete) connection providing access to major activity areas at minimum 1:20 grade. 12 x shaded picnic areas incorporating tables and bench seats ranging in size to accommodate both small (8 x 1 Table and 2 bench seats) and large groups (8 x 4 Tables and 8 bench seats). 50% of picnic facilities to be in close proximity to care-parking areas. 6 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 6 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 2 x kick-a-bout areas (nominal size: 50 x 70m) 3 x themed adventure playground (nominal size: 100 x 100m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play 4 Modified riverbank at key locations only (e.g. 	CITYWIDE WATER	CITYWIDE WATERSIDE PARKS									
EXISTING EXAMPLE(S) Where possible, on or close to (i.e. within 400 metres) of an arterial or distributor road and a regular bus route and bus stop. Located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPH: Min 10ha. Topography suitable for waterside walking trail and boat/cance launching opportunity, with minimal areas of cut and fill to achieve an area no less than 30% of the site which is of a gradient 10% or less, with some topographic variation to provide interest. N.B. in some instances a boardwalk may. DISTRIBUTION: About 20 minute drive in private vehicle or 30 minute bus ride from most areas of the City. These parks are to adjoin a substantial permanent water body or navigatable section of the Brisbane or B remer Rivers. As a possible on or close to (i.e. within 400 metres) of an arterial or distributor road and a regular bus route and bus stop. 1 x boat ramp including boat trailer turning/washdown area (ensure adequate depth of water for launch/recovery) or cance launching-operating functions and place of providing in gradient to water body) integrated with pedstrancy/cle network. Internal pathway (2200mm wide concrete) circuit for the length of the park has direct frontage of path (preferably adjacent to water body) integrated with pedstrancy/cle network. Internal pathway (2200mm wide concrete) circuit for the length of the park has direct frontage of path (preferably adjacent to water body) integrated with pedstrancy/cle network. Internal pathway (2200mm wide concrete) circuit for the length of the park (preferably adjacent to water body) integrated with pedstrancy/cle network. Internal pathway (2200mm wide concrete) circuit for the length of the park has direct polarical and back placent in the park (preferably adjacent to water body) integrated with pedstranc/cycle pathway. 1 x shaded picnic areas incorporating tables and bench seats and large groups (8 x 4 Tables and 2 bench se	DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹							
metres) of an arterial or distributor road and a regular bus route and bus stop. Located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPHY: Min 10ha. Topography suitable for waterside walking trail and boat/canoe launching opportunity, with minimal areas of cut and fill to achieve an area no less than 30% of the site which is of a gradient 10% or less, with some topographic variation to provide interest. N.B. In some instances a boardwalk may be required as a substitute for a constructed pathway. DISTRIBUTION: About 20 minute bus ride from most areas of the City. These parks are to adjoin a substantial permanent water body or navigatable section of the Brisbane or Bremer Rivers. Metres of an arterial or distributor road and a regular bus counted and bus stops. Constructed pathway (2200mm wide concrete) circuit for the length of the park has direct frontage to a public road or a public place. Constructed pathway (2200mm wide concrete) connection providing access to major activity areas at minimum 1:20 grade. 1 2 x shaded picnic areas incorporating tables and bench seats ranging in size to accommodate both small (8 x 1 Table and 2 bench seats) and large groups (8 x 4 Tables and 8 bench seats) 5.0% of picnic facilities to be in close proximity to car-parking areas. 6 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 9 2 x kick-a-bout areas (nominal size: 50 x 70m) 1 x themed adventure playground (nominal size: 100 x 100m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 - 12; shade; seating (2 x 1 Table and 2 benchseats; soft-fall; 1 drinking fountain and fenced toddier play area. 1 identity, directional and interpretive signage. 2 identity areas a minimum 1:20 grade. 3 x Drinking fountain in five pretive signage. 3 x Drinking fountains (Disabled compl	CITYWIDE	ACCESS:	FACILITIES (urban areas):	PLANTING:							
 Sealed internal road network providing access to key points of visitor interest. Parking areas for at least 150 x cars (to incorporate disabled car spaces), 20 x Minimise impact on surrounding residents through		metres) of an arterial or distributor road and a regular bus route and bus stop. Located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPHY: Min 10ha. Topography suitable for waterside walking trail and boat/canoe launching opportunity, with minimal areas of cut and fill to achieve an area no less than 30% of the site which is of a gradient 10% or less, with some topographic variation to provide interest. N.B. In some instances a boardwalk may be required as a substitute for a constructed pathway. DISTRIBUTION: About 20 minute drive in private vehicle or 30 minute bus ride from most areas of the City. These parks are to adjoin a substantial permanent water body or navigatable section of the Brisbane or	 depth of water for launch/recovery) or canoe launch area. Constructed pathway (2200mm wide concrete) circuit for the length of the park (preferably adjacent to water body) integrated with pedestrian/cycle network. Internal pathway (2200mm wide concrete) connection providing access to major activity areas at minimum 1:20 grade. 12 x shaded picnic areas incorporating tables and bench seats ranging in size to accommodate both small (8 x 1 Table and 2 bench seats) and large groups (8 x 4 Tables and 8 bench seats). 50% of picnic facilities to be in close proximity to car-parking areas. 6 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 2 x kick-a-bout areas (nominal size: 50 x 70m) 1 x themed adventure playground (nominal size: 100 x 100m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 – 12; shade; seating (2 x 1 Table and 2 benchseats; soft-fall; 1 drinking fountain and fenced toddler play area. Identity, directional and interpretive signage. 2 x Public Amenities Building incorporating 5 x cubicles (unisex and disabled) each with toilet and wash basin. 3 x Drinking fountains (Disabled compliant) VEHICULAR ACCESS AND PARKING: Sealed internal road network providing access to key points of visitor interest. 	All planting predominantly local excepting feature trees as native or exotic. Shrub and native grass species on boundaries. Consideration to drought tolerant species. DRAINAGE: 'Soft' engineering constructions with natural filter (e.g. wetlands) to river. Where possible, buildings and playgrounds are to be located above the Q100 design flood level. In all instances, buildings or playgrounds are to be located above the Q20 design flood level. SCENIC QUALITY: Modified riverbank at key locations only (e.g. adjoining boat/canoe launch point) with balance of riverbank left in natural state. VIEWS: Retain and frame all long distance views. Ensure waterfront planting does not obscure views. HERITAGE: Protect and interpret relevant features.							

SUPPORTING DOC	UMENT - IPSWICH PUBLIC PARKS UPDATE 2016	
	trailers and 4 x coaches to be paved, line-marked and signed. Parking areas may need to be split to reduce visual impact. Grassed overflow parking areas for an additional 100 x cars to be provided adjacent to formal sealed parking areas. Installation of 'access control' barrier to all accessible park boundaries/frontages (i.e. bollards @ 1.5m centres).	without limiting casual surveillance opportunities.
	 Park entry information signage at main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual). ESTIMATED EMBELLISHMENT COST: \$ 4,801,026.00 each park 	

NOTES:

1 Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

DISTRICT WATERSIDE PARKS									
DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹						
DISTRICT	ACCESS:	FACILITIES (urban areas):	PLANTING:						
Joseph Brady Park	Where possible, on or close to (i.e. within 400 metres) of a trunk collector street/collector street and bus route. Located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPHY: Min Sha. At navigatable sections of waterside parks topography suitable for boat/canoe launching opportunity. For nonnavigatable waterbodies topography must be suitable for waterside walking/cycling route. N.B. In some instances a boardwalk may be required as a substitute for a constructed pathway. DISTRIBUTION: Accessible within 10-15 minute drive from any suburb/locality within the nominated district. These parks are to adjoin a permanent water body or the Brisbane or Bremer Rivers.	 1 x boat ramp including boat trailer turning/washdown area (ensure adequate depth of water for launch/recovery) or canoe access point. 6 x shaded picnic facilities incorporating tables and bench seats for both small (4 x 1 Table and 2 bench seats) and large groups (2 x 4 Tables and 8 bench seats). 50% of picnic facilities to be in close proximity to car-parking areas. 3 x BBQ areas (sheltered single BBQ only) with watering points (taps) located in close proximity to sheltered picnic areas. 1 x kick-a-bout area (nominal size: 50 x 70m) Constructed pathway (2200mm wide concrete) circuit for the length of the park (adjacent to water body) integrated with pedestrian/cycle network, including access (1:20 grade maximum grade) to the major activity node. 1 x themed adventure playground (nominal size: 60 x 40m) on either a flat (1:50 maximum grade) or terraced site incorporating: a range of play equipment for children aged 2 – 12 years; shade; seating (1 x 1 Table and 2 bench seats); soft-fall; 1 drinking fountain and fenced toddler play area. Identity, directional and interpretive signage. 1 x Public Amenities Building incorporating 3 x cubicles (unisex and disabled) each with toilet and wash basin. 1 Concessionary Hardstand Area (nominal size 5m x 8m to accommodate a mobile food van and bicycle/boat/canoe hire activities) with adjacent water and power supply points. 2 x Drinking fountains (Disabled compliant) VEHICULAR ACCESS AND PARKING: 	 Use of native species to achieve 20% site coverage. All planting native and predominantly local planting. Consideration to drought tolerant species. DRAINAGE: All 'soft' engineering with natural filter to river. Where possible, buildings and playgrounds are to be located above the Q100 design flood level. In all instances, buildings or playgrounds are to be located above the Q20 design flood level. SCENIC QUALITY: Modified riverbank at key locations only (e.g. adjoining boat/canoe launch point). Natural riverbank throughout remainder. VIEWS: Retain and frame all long distance views. Ensure waterfront planting does not obscure views. HERITAGE: 						

SUPPORTING DOCUMENT - IPSWICH PU	BLIC PARKS UPDATE 2016	
	 Parking areas to accommodate 50 x cars (minimum), 1 x coach and 10 x trailers (where boat ramp provided). The parking areas are to be sealed, line-marked and signed and incorporate disabled car spaces. Installation of 'access control' barrier to all accessible park boundaries/frontages (i.e. bollards @ 1.5m centres). SIGNAGE: Park entry information signage at main entries to include site layout plan. (Refer to Ipswich City Council Parks and Reserves Signage Manual). ESTIMATED EMBELLISHMENT COST: \$ 2,052,097.00 each park 	Protect and interpret relevant features.

NOTES:

1 Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

CITYWIDE LINEAR	PARKS		
DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹
CITYWIDE EXISTING EXAMPLE(S)	ACCESS: Close (i.e. within 400m) to collector streets and located on or close to bikeways network. Where practicable, the perimeter length of the park has direct frontage to a public road or a public place. AREA AND TOPOGRAPHY: To be located outside of the waterway channel wherever practically possible. Area and topography varies depending on land availability, flooding characteristics and topography. However, parkland to be a minimum of 30 metres in width. No criteria for topography except that it must be capable of accommodating walking/cycling path and maintenance access (preferably vehicular). DISTRIBUTION: These parks are to adjoin the Brisbane and Bremer Rivers, Woogaroo, Opossum, Mountain, Goodna, Six Mile, Bundamba and Deebing Creeks. Also, this category of parkland includes the City Centre Rail Trail (incorporating the North Ipswich wetlands).	 FACILITIES (urban areas): Opportunity to provide for where applicable: Constructed pathway (2200mm wide concrete) for the length of the park (preferably adjacent to river or creek) integrated with pedestrian/cycle network. Minimum 1:20 grade for pathway. Provision of 1 Park Table and bench seats every hectare. Provision of 2 x bench seat adjacent to pathway every hectare. Provision of 1 drinking fountain (disabled compliant) adjacent to pathway every hectare. Identity, directional and interpretative signage. ESTIMATED EMBELLISHMENT COST: \$ 224,789 per hectare CAR PARKING: No formal parking on site. Ensure room for on street parking along park frontage. 	PLANTING: Achieve a fully vegetated corridor using endemic species. Achieve an average density of three plants per square metre re-establishing or enhancing the vegetation requirements of the waterway corridor. Turf is generally not supported with the exception of key nodes. DRAINAGE: 'Soft' engineering constructions with natural filter. SCENIC QUALITY: Shade the majority of creekbank as tree canopy, whilst exploiting any attractive water views. VIEWS: Exploit all mid to long distance views. HERITAGE: Protect and interpret relevant features.

Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

DEVELOPMENT LEVEL	OPEN SPACE AND LINKS	RECREATION RANGE & OPPORTUNITY	ANCILIARY SITE WORKS ¹
LOCAL EXISTING EXAMPLE(S)	ACCESS: Adjoining collector or access streets with the perimeter length of the park having direct frontage to a public road or a public place, where practicable. AREA AND TOPOGRAPHY: Varies depending on land availability, flooding characteristics and topography. Linear parkland to be a minimum of 15 metres in width. No criteria for topography except that it must be capable of accommodating walking/cycling path and maintenance access (preferably vehicular). DISTRIBUTION: Nominated tributaries and local linkages and only as opportunities arise to secure land.	FACILITIES (urban areas): Opportunity to provide for where applicable: Constructed pathway (2200mm wide concrete) for the length of the park (preferably adjacent to creek) integrated with pedestrian/cycle network. Provision of 1 x drinking fountain (disabled compliant) adjacent to pathway every 2 kilometres. Identity, directional and interpretative signage. ESTIMATED EMBELLISHMENT COST: \$ 142,976 per hectare CAR PARKING: No formal parking on site. Ensure room for on street parking along park frontage.	PLANTING: Achieve a fully vegetated corridor using endemic species. Achieve an average density of three plants pe square metre re-establishing or enhancing the vegetation requirements of the waterway corridor. Turf is generally not supported with the exception of key nodes. DRAINAGE: 'Soft' engineering constructions with natural filter. SCENIC QUALITY: Shade the majority of creekbank as tree canopy, whilst exploiting any attractive water views. VIEWS: Exploit all mid to long distance views. HERITAGE: Protect and interpret relevant features.

¹ Refer to section 3.2 for details concerning works which are considered fit for purpose works, trunk (attract an offset) and non-trunk (do not attract an offset) works.

SUPPORTING DOCUMENT - IPSWICH PUBLIC PARKS UPDATE 2016

Table B.2: Public Parks Desired Standards of Service Facilities and Embellishment Summary

Fushallishus and trus	F	Recreation parl	ks	Waters	ide parks	de parks Linea		Sport	parks
Embellishment type	Local	District	Citywide	District	Citywide	Local	Citywide	District	Citywide
Internal access roads		✓	✓	✓	✓			✓	✓
Parking		✓	✓	✓	✓			✓	✓
Fencing/bollards	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lighting		✓	✓	✓	✓			✓	✓
Toilets		✓	✓	✓	✓			✓	✓
Paths (pedestrian/cycle)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seating	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shade structures	✓	✓	✓	✓	✓			✓	✓
Uncovered seatings and table	✓	✓	✓	✓	✓		✓		
Covered seatings and table	✓	✓	✓	✓	✓				
Tap/bubbler	✓	✓	✓	✓	✓	✓	✓	✓	✓
BBQ		✓	✓	✓	✓				
Landscaping (including earthworks, irrigation, turfing and revegetation)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Signage	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activity areas (playgrounds, soft fall, safety fencing)	✓	✓	✓	✓	✓			✓	✓
Kick-a-bout areas	✓	✓	✓	✓	✓				
Ovals/fields (including turf, irrigation, posts, nets)								✓	✓
Netted double practice wicket									✓
Basic spectator seating									✓
Courts	✓	✓						✓	✓
Boat ramps				✓	✓				
Concessionary hardstand areas		✓	✓	✓					✓
Provision of services	✓	✓	✓	✓	✓	See Note 1	See Note 1	✓	✓
Drainage (feature)		✓	✓						

¹ Connection of drinking fountain to services only.

APPENDIX C - NETWORK PLANNING METHODOLOGY

1) Review of Existing Parks Provision

- a) The first task in the project involved ascertaining the existing levels of park provision across the City.
 This involved identifying existing parks provision based on the Council owned or trustee GIS layer.
 Additionally, all vacant crown land and other Council land was included in the data set. This was done with the support of a range of aerial photography and other attribute mapping, namely:
 - (1) Aerial Photography
 - (2) Existing parks mapping;
 - (3) Zoning Information
 - (4) Land attribute mapping
- b) The purpose of examining this range of divergent sources was to ensure that all land serving as a public park (and land with the ability to serve as a public park) was recorded for further analysis. A number of land parcels designated as park within the above layers (whether accepted as a contributed asset or otherwise) was not accepted as park for the purpose of this strategy owing to the presence of physical constraints likely to affect the successful use of the land for public recreation. Constraints (partial and total) included:
 - Location/orientation of the land in relation to surrounding streets and land uses;
 - ii) Lack of an active street frontage providing opportunities for passive surveillance of the park;
 - iii) The predominance of drainage structures;
 - iv) Insufficient land area to serve a public park function;
 - v) Presence of bushland (including Conservation designation);
 - vi) Unsuitable topography (e.g. too much steep land);
 - vii) The presence of non-park structures on parkland; and
 - viii) The use of land for other purposes e.g. Council utilities and services.
- c) The product of this task was a mapping layer that initially categorised land as definite parks, questionable parks and not park areas.

2) Desired Standards of Service Review

a) Concurrently with the mapping of existing park areas, the Desired Standards of Service (DSS) for parks were determined (refer to chapter 3 and Appendix B for DSS).

3) Assessment of Existing Parks and Calculation of Future Provision

- a) Using the DSS, the existing parks categorised as definite parks in the previous step were reviewed and allocated a recreational setting based on the DSS classifications.
- b) The park provision benchmarks of the DSS were also used in order to determine the benchmark level of parks provision required across the City. These estimates were based on the population projections for 'ultimate' development (refer to chapter 2 'Population Growth' for further details).
- c) The ultimate level of parks provision was then compared to the existing parks provision to determine the additional parks required between existing and ultimate population based on the DSS.
- d) Also, a qualitative analysis regarding the provision of local recreation parks and local sportsgrounds was undertaken for each planning sector to determine the likely need for additional facilities (refer to

IPSWICH STRATEGY UPDATE 2009

chapter 4 'Review of the Public Parks Network'). This analysis also took into account the presence of existing citywide or district facilities, equivalencies and inability to meet DSS etc..

4) Future Parks Planning

- a) In response to the identified parkland requirements and qualitative analysis, together with existing infrastructure agreements or approved development applications known at the time, sites for future parks were nominated. These parks were sited to achieve the standards outlined in the DSS classifications and were located on both Council owned/trustee land and, where necessary, privately owned land.
- b) In some planning sectors there are a number of 'residual' parks, which are future local recreation parks that can be either located on Council owned or trustee land or on land to be secured for other recreational settings or used to provide additional embellishments for certain local recreation parks, particularly those located near or within the major or town centres.

5) Review of Network

- a) A small number of existing parks, most notably local recreation parks, were in excess of requirements after taking into account the benchmarks, qualitative analysis and parkland groupings. Some local recreation parks have been delivered since the 2009 review which:
 - i) Were not previously identified or included in the trunk network,
 - ii) Functionally represent the DSS requirements,
- b) Therefore, if a site was functioning as a public park, these site were integrated into the network.
- c) However, surplus parks were removed from the future network if they were unembellished, or sparsely embellished yet had a primary purpose not related to public park use (e.g. urban bushland or drainage reserve).

6) SUMAMRY NOTES ON ASSESSING EXISTING PUBLIC PARKS QUANTITIES AND EQUIVALENCIES TO PLAN ULTIMATE NETWORK REQUIREMENTS

- The following outlines the methodology and process used to undertake a review and update of the public parks network.
 - (1) Assess all open space in Council ownership/trusteeship to classify according to public park type or other (refer to classification framework in the Open Space and Recreation Strategy).
 - (2) Review classifications for accuracy and consistency
 - (3) Embellishment Gap analysis (Existing Parks)
 - (4) Quantify level of embellishment per public park type in 25% increments.
 - (a) This will inform embellishment cost to be apportioned to a park type.
 - (b) This gives an accurate baseline from which to identify theoretical shortfalls against current population and establish a prioritised delivery of parks and embellishment.
 - (5) Sportsgrounds:

IPSWICH STRATEGY UPDATE 2009

- (a) Active Balance analysis (Existing and Future)
- (b) Equivalency Assessment
- (6) Local and Citywide Sportsgrounds have been quantified in the following forms:
 - (a) Number of physical sites (e.g. Redbank Plains Recreation Reserve equals one site)
 - (b) Number of site equivalencies
 - (c) The term 'equivalency' refers to how many standard configurations can be achieved on the site. (e.g. Redbank Plains Recreation Reserve equals three Citywide Sportsgrounds)
 - (d) Simplified measurement for identifying the ultimate capacity of the network.
 - (e) In reality, the type and number of fields is determined by demand, trends, participation levels and operational sustainability. Planning for the securement of land to meet benchmark requirements is fundamental for achieving a network which has the ability to accommodate:
 - (f) A range of sports with varying field geometry,
 - (g) Various levels of competition from premier to local training facilities, and
 - (h) Diverse infrastructure requirements.
 - (i) Calculating the actual and cumulative number (and equivalency for sportsgrounds) of each type of park, within planning districts and sectors against the ultimate population projection. Review the network and identify potential parks which could be relocated, altered, consolidated or deleted etc. (land optimisation analysis based on service levels and ability to meet DSS requirements).
 - (j) Future Parks Planning
 - (k) Siting of required future parks undertaken.

<u>APPENDIX D – DSS UNIT RATE REVIEW</u>



- Rate adjusted based on similar trade / work completed recently As existing, No adjustment Adjustment of 10% increased since 2009 Rate adjusted based on quotation

	STANDARD UNIT COST RATES							
	Description	Unit	Rate Update 2009	Rate 2nd Q 2015	Comments			
1	Soil Cultivation / Shaping / Excavation							
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	\$6.10	* \$6.30	Rate adjusted based on similar trade / work completed recently			
2	On Site Vegetation Clearing							
	Clear existing LIGHT COVER vegetation by machine	m2	\$1.10	× \$1.10	Based on existing rate where we currently forecasting minimal price increases			
3	Soil Improvements Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	\$9.00	* \$9.20	Rate adjusted based on similar trade / work completed recently			
	Supply & install BEDDING SAND (75mm depth)	m2	\$5.40	x \$5.40	Based on existing rate where we currently forecasting minimal price increases			
4	Grass							
	Turf areas - STOLONISING > 350m2	m2	\$4.00	q \$7.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC			
5	Park Planting & Street Trees							
	Planting 100 litre container	no	\$250.00	* \$261.00	Rate adjusted based on similar trade / work completed recently			
	Perimeter planting - 100 litre container	no	\$250.00	* \$261.00	Rate adjusted based on similar trade / work completed recently			
	Street trees - 100 litre container	no	\$250.00	* \$261.00	Rate adjusted based on similar trade / work completed recently			
	PLANTING - Groundcover & mulch (2x140mm/m2)	m2	\$25.00	* \$27.00	Rate adjusted based on similar trade / work completed recently. The \$27/m2 is based on 75mm thick gravel mulch bed			
	Park Planting (T&T Note May 2015: Rate Update 2009 priced as item only)	item	\$2,688.00	xx \$2,956.80	We currently forecasting +/- 10% price increases against year 2009 based rate.			
6	Irrigation Systems							
	COMMERCIAL GRADE Pipes, fittings, POP-UP heads & nozzles (turf areas)	m2	\$20.00	* \$20.00	Rate adjusted based on similar trade / work completed recently			
	COMMERCIAL GRADE Pipes, fittings, POP- UP heads & nozzles (turf & planting areas) to planting areas	m2	\$20.00	* \$20.00	Rate adjusted based on similar trade / work completed recently			
7	Asphalt/Concrete Pathways							
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	\$180.00	* \$95.00	Rate adjusted based on similar trade / work completed recently			
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	\$180.00	* \$95.00	Rate adjusted based on similar trade / work completed recently			
	Concrete Kerb & Channel	m	\$40.00	* \$57.00	Rate adjusted based on similar trade / work completed recently			
	Adventure cycle circuit - Asphalt pathways: Detail SP.32 40mm ASPHALT PAVEMENT over 100mm COMPACTED ROADBASE	m	\$36.00	* \$205.00	Rate adjusted based on similar trade / work completed recently			
	Concessionary Concrete Pavement: 2200mm x 125mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints, Boxing up	m2	\$115.00	* \$110.00	Rate adjusted based on similar trade / work completed recently			
	Perimeter Concrete Pavement: 2200 x 125mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints, Boxing up	m2	\$115.00	* \$110.00	Rate adjusted based on similar trade / work completed recently			
	Concrete pathway -2200mm width / 100mm thick	m	\$115.00	* \$226.60	Rate adjusted based on similar trade / work completed recently			
	Perinteter Path - In-situ Concrete pathways: Detail SP.33: 100mm thick R/I CONCRETE FOOTPATH - 2200mm wide w/- Control & E-JOINTS (includes	m	\$102.00	* \$226.60	Rate adjusted based on similar trade / work completed recently			
	Hardstand Area - Concrete pathways: SP.34 100mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints	m2	\$60.00	* \$103.00	Rate adjusted based on similar trade / work completed recently			
	Multipurpose half court with hoop and backboard or rebound wall and court	Item	\$5,000.00	xx \$5,500.00	We currently forecasting +/- 10% price increases against year 2009 based rate.			
	In-situ Concrete pathways to pedestrian/bike path: Detail SP.33:100mm thick R/I CONCRETE FOOTPATH - 2200mm wide w/- Control & E-JOINTS (includes flexible joint filler)	m	\$115.00	* \$226.60	Rate adjusted based on similar trade / work completed recently			
	Concrete pathways to boat/canoe ramp: SP.34 100mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints	m2	\$120.00	* \$103.00	Rate adjusted based on similar trade / work completed recently			
8	Metal Fencing Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	\$55.00	* \$60.00	Rate adjusted based on similar trade / work completed recently			
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	\$1,250.00	* \$1,300.00	Rate adjusted based on similar trade / work completed recently			
9	Sporting Fields / Courts							

						1
	Combination Soccer / Rugby Goal Posts - PAIR (supply & installed)	Item	\$4,800.00	q	\$5,300.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	AFL Goal Posts - PAIR (supply & installed)	Item	\$6,000.00	q	\$7,000.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Multipurpose courts - $30 \times 15m$ with linemarking (See Q1 response - 2015 estimate based on SP.69, exld sports specific items)	Item	\$90,000.00	*	\$75,000.00	Rate adjusted based on similar trade / work completed recently
	Running track - 8 lanes, synthetic rubber on concrete base	m2	\$180.00	q	\$340.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Netted double practice wicket, concrete pitch	Item	\$7,000.00	q	\$35,000.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
10	Park and Sport Lighting					We currently forecasting +/- 10% price
	Sports field lighting to general fields - 100 x 50m	Item	\$130,000.00	xx	\$143,000.00	increases against year 2009 based rate.
	Internal Road Lighting - Watchman light (Pole & fitting supply & install only - connection extra)	Item	\$2,400.00	xx	\$2,640.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
	Lighting to Multipurpose courts	Item	\$10,000.00	xx	\$11,000.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
11	Park / Street Furniture					
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	\$850.00	q	\$3,950.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Connection of drinking fountain to services	no	\$1,000.00	*	\$1,000.00	Rate adjusted based on similar trade / work completed recently
	Park Furniture: drinking fountain – Detail 11-12: DRINK TAP (connection extra)	no	\$850.00	q	\$3,800.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Connection of drinking fountain to services	no	\$1,000.00	*	\$1,000.00	Rate adjusted based on similar trade / work completed recently
	Bollard - Timber	m	\$65.00	*	\$100.00	Rate adjusted based on similar trade / work completed recently
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	\$900.00	q	\$950.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Signage	Item	\$40,000.00	xx	\$44,000.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
	Electric BBQ: Detail SP.61 Brick surround / Stainless Steel Bench-top with CFC sheeting under/Single Hot Plate	Item / No	\$9,100.00	q	\$9,000.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	\$2,200.00	q	\$5,200.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5 x 4)	no	\$8,800.00	q	\$5,200.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
12	GOSSI PARK "Riverside Seat" with P/C Flange Leg (Colour: DULUX Claret) and CLEAR ANODISED ALUMINIUM SLATS. Fixed to and including concrete pad with chemset MASONRY ANCHORS. Structures	no	\$900.00	q	\$5,200.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle)	Item	\$150,000.00	q	\$100,500.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	SPECTATOR SEATING - Roofed Timber 4 - tiered structure (60-70 people)	Item	\$15,000.00	q	\$15,000.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	no	\$10,800.00	*	\$11,000.00	Rate adjusted based on similar trade / work completed recently
	Bollard Timber	m	\$65.00	*	\$100.00	Rate adjusted based on similar trade / work completed recently
13	Playground Equipment Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	\$25,000.00	q	\$50,000.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Playground equipment: MEGATOY 'Comet' (CSM-218) Supply & Install (Toddler playground)	Item	\$10,800.00		Excluded	Asumed excluded and not required now
	Synthetic surfacing - coloured insitu rubber	m2	\$110.00	q	\$80.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Bark funes - 300mm depth	m2	\$18.00	*	\$45.00	Rate adjusted based on similar trade / work completed recently
	Shade cloth / sail structures with P/C steel posts	m2	\$78.00	q	\$78.00	Rate adjusted based on quotation recently obtained from supplier nominated by ICC
	Dirt Bike Deterrent / Entry Point	Item / No	\$1,700.00	xx	\$1,870.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
14	Service Reticulation Electrical reticulation including 3 phase power for events	Item	\$80,000.00	xx	\$88,000.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
	Water reticulation	Item	\$50,000.00	xx	\$55,000.00	We currently forecasting +/- 10% price increases against year 2009 based rate.
	Special Features					



	Lake - including excavation, membranes, pumps	m2	\$140.00	xx	\$154.00
	Creek - including excavition	m	\$550.00	xx	\$605.00
16	Lighting				
	Pole-top lights - Heritage theme	Item / No	\$3,600.00	xx	\$3,960.00

We currently forecasting +/- 10% price increases against year 2009 based rate.
We currently forecasting +/- 10% price increases against year 2009 based rate.
We currently forecasting +/- 10% price increases against year 2009 based rate.



- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- xx Adjustment of 10% increased since 2009
- q Rate adjusted based on quotation

3	portsground - Citywide (per par	K)					
	Description	Unit	Qty	Rate	e 2nd Q 2015	Construction Cost	Establishment Cost1
3	Soil Cultivation / Shaping / Excavation	SUB-TOT	AL			\$246,960.00	\$286,473.60
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	39200	*	\$6.30	\$246,960.00	\$286,473.60
4	On Site Vegetation Clearing	SUB-TOT	AL			\$220,000.00	\$255,200.00
	Clear existing LIGHT COVER vegetation by machine	m2	200000	x	\$1.10	\$220,000.00	\$255,200.00
5	Soil Improvements	SUB-TOT	AL			\$1,034,671.26	\$1,200,218.66
	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	89500	*	\$9.20	\$822,991.26	\$954,669.86
	Supply & install BEDDING SAND (75mm depth)	m2	39200	х	\$5.40	\$211,680.00	\$245,548.80
6	Grass	SUB-TOT	AL			\$1,253,000.00	\$1,453,480.00
	Turf areas - STOLONISING > 350m2	m2	179000	q	\$7.00	\$1,253,000.00	\$1,453,480.00
7	Park Planting & Street Trees	SUB-TOT	AL			\$113,127.93	\$131,228.40
	Planting 100 litre container	no	250	*	\$261.00	\$65,250.14	\$75,690.16
	Perimeter planting - 100 litre container	no	65	*	\$261.00	\$16,965.04	\$19,679.44
	Street trees - 100 litre container	no	15	*	\$261.00	\$3,915.01	\$4,541.41
	PLANTING - Groundcover & mulch (2x140mm/m2)	m2	1000	*	\$27.00	\$26,997.74	\$31,317.38
8	Irrigation Systems	SUB-TOT	AL			\$810,635.10	\$940,336.72
	COMMERCIAL GRADE Pipes, fittings, POP-UP heads & nozzles (turf areas)	m2	39200	*	\$20.00	\$784,033.95	\$909,479.38
	COMMERCIAL GRADE Pipes, fittings, POP- UP heads & nozzles (turf & planting areas) to planting areas	m2	1330	*	\$20.00	\$26,601.15	\$30,857.34
9	Asphalt/Concrete Pathways	SUB-TOT	AL			\$1,452,370.54	\$1,684,749.83
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	4445	*	\$95.00	\$422,275.00	\$489,839.00
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	4200	*	\$95.00	\$399,000.00	\$462,840.00
	Concrete Kerb & Channel	m	1400	*	\$57.00	\$79,795.54	\$92,562.83
	Adventure cycle circuit - Asphalt pathways: Detail SP.32 40mm ASPHALT PAVEMENT over 100mm COMPACTED ROADBASE	m	500	*	\$205.00	\$102,500.00	\$118,900.00
	Concessionary Concrete Pavement: 2200mm x 125mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints, Boxing up	m2	120	*	\$110.00	\$13,200.00	\$15,312.00
	Perimeter Concrete Pavement: 2200 x 125mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints, Boxing up	m2	3960	*	\$110.00	\$435,600.00	\$505,296.00
0	Metal Fencing !	SUB-TOTA	L	1		\$5,500.00	\$6,380.00
	STEEL CHAIN/WELD MESH, HWD POSTS & TOP PAII GATE: 3000mm x 1200mm HDG STEEL 3"	m	70	*	\$60.00	\$4,200.00	\$4,872.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	1	*	\$1,300.00	\$1,300.00	\$1,508.00
L	Sporting Fields / Courts	SUB-TOTA	L	1		\$2,023,200.00	\$2,346,912.00
	Combination Soccer / Rugby Goal Posts - PAIR (supply & installed)	Item	4	q	\$5,300.00	\$21,200.00	\$24,592.00
	AFL Goal Posts - PAIR (supply & installed)	Item	1	q	\$7,000.00	\$7,000.00	\$8,120.00
	Multipurpose courts - 30 x 15m with linemarking (See Q1 response - 2015 estimate based on SP.69, exld sports specific items)	Item	8	*	\$75,000.00	\$600,000.00	\$696,000.00
	Running track - 8 lanes, synthetic rubber on concrete base	m2	4000	q	\$340.00	\$1,360,000.00	\$1,577,600.00
	Netted double practice wicket, concrete	Item	1	q	\$35,000.00	\$35,000.00	\$40,600.00



NOTES

- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- Adjustment of 10% increased since 2009

q Rate adjusted based on quotation

16	Electrical reticulation including 3 phase power for events Water reticulation	Item Item	1	xx	\$55,000.00	\$55,000.00 \$8,577,844.83	\$63,800.00 \$9,950,300.00
16	power for events			xx	\$55,000.00	\$55,000.00	\$63,800.00
10		Item	-				
10		- .	1	xx	\$88,000.00	\$88,000.00	\$102,080.00
4.0	Service Reticulation	SUB-TOTA	L			\$143,000.00	\$165,880.00
	Shade cloth / sail structures with P/C steel posts	m2	300	q	\$78.00	\$23,400.00	\$27,144.00
	Bark funes - 300mm depth	m2	150	*	\$45.00	\$6,750.00	\$7,830.00
	Synthetic surfacing - coloured insitu rubber	m2	150	q	\$80.00	\$12,000.00	\$13,920.00
	Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	1	q	\$50,000.00	\$50,000.00	\$58,000.00
15	Playground Equipment	SUB-TOTA	L			\$92,150.00	\$106,894.00
	SPECTATOR SEATING - Roofed Timber 4 - tiered structure (60-70 people)	Item	1	q	\$15,000.00	\$15,000.00	\$17,400.00
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle)	Item	2	q	\$100,500.00	\$201,000.00	\$233,160.00
14	Structures	SUB-TOTA	L			\$216,000.00	\$250,560.00
	Signage	Item	1	xx	\$44,000.00	\$44,000.00	\$51,040.00
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	10	q	\$950.00	\$9,500.00	\$11,020.00
	Bollard - Timber	m	1500	*	\$100.00	\$150,000.00	\$174,000.00
	Connection of drinking fountain to services	no	3	*	\$1,000.00	\$3,000.00	\$3,480.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	3	q	\$3,950.00	\$11,850.00	\$13,746.00
13	Park / Street Furniture	SUB-TOTA	L			\$218,350.00	\$253,286.00
	Lighting to Multipurpose courts	Item	6	xx	\$11,000.00	\$66,000.00	\$76,560.00
	Internal Road Lighting - Watchman light (Pole & fitting supply & install only - connection extra)	Item	42	xx	\$2,640.00	\$110,880.00	\$128,620.80
	Sports field lighting to general fields - 100 x 50m	Item	4	xx	\$143,000.00	\$572,000.00	\$663,520.00

Source: Turner & Townsend – Construction and Management Consultants

S	portsground - Local (per park)						
	Description	Unit	Qty		Rate 2nd Q 201	Construction Cost	Establishment Cost1
3	Soil Cultivation / Shaping / Excavation	SUB-TOTA	L			\$123,480.00	\$143,236.80
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	19600	*	\$6.30	\$123,480.00	\$143,236.80
4	On Site Vegetation Clearing	SUB-TOTA	L			\$55,000.00	\$63,800.00
	Clear existing LIGHT COVER vegetation by machine	m2	50000	×	\$1.10	\$55,000.00	\$63,800.00
5	Soil Improvements	SUB-TOTA	L			\$301,196.97	\$349,388.49
	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	21245	*	\$9.20	\$195,356.97	\$226,614.09
	Supply & install BEDDING SAND (75mm denth)	m2	19600	х	\$5.40	\$105,840.00	\$122,774.40
6	Grass	SUB-TOTA	L			\$297,430.00	\$345,018.80
	Turf areas - STOLONISING > 350m2	m2	42490	q	\$7.00	\$297,430.00	\$345,018.80
7	Park Planting & Street Trees	SUB-TOTA	L			\$68,757.83	\$79,759.09
	Planting 100 litre container	no	120	*	\$261.00	\$31,320.07	\$36,331.28
	Perimeter planting - 100 litre container	no	30	*	\$261.00	\$7,830.02	\$9,082.82
	Street trees -100 litre container	no	10	*	\$261.00	\$2,610.01	\$3,027.61
	PLANTING -Groundcover & mulch (2x140mm/m2)	m2	1000	*	\$27.00	\$26,997.74	\$31,317.38
9	Asphalt/Concrete Pathways	SUB-TOTA	L			\$591,269.36	\$685,872.46
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	1970	*	\$95.00	\$187,150.00	\$217,094.00
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	600	*	\$95.00	\$57,000.00	\$66,120.00



NOTES

- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- Adjustment of 10% increased since 2009

q Rate adjusted based on quotation

15	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth Shade cloth / sail structures with P/C steel posts Service Reticulation Electrical reticulation Water reticulation	m2 m2 m2 m2 sub-tota Item Item	1 150 150 300 L 1	q q * q xx xx	\$50,000 \$80.00 \$45.00 \$78.00 \$55,000.00 \$38,500.00	\$50,000.00 \$12,000.00 \$6,750.00 \$23,400.00 \$93,500.00 \$55,000.00 \$38,500.00 \$2,405,514.17	\$58,000.00 \$13,920.00 \$7,830.00 \$27,144.00 \$108,460.00 \$63,800.00 \$44,660.00 \$2,790,396.44
15	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth Shade cloth / sail structures with P/C steel posts Service Reticulation Electrical reticulation	m2 m2 m2 SUB-TOTA	150 150 300 L	q * q xx	\$80.00 \$45.00 \$78.00 \$55,000.00	\$12,000.00 \$6,750.00 \$23,400.00 \$93,500.00 \$55,000.00	\$13,920.00 \$7,830.00 \$27,144.00 \$108,460.00 \$63,800.00
15	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth Shade cloth / sail structures with P/C steel posts Service Reticulation	m2 m2 m2 SUB-TOTA	150 150 300 L	q * q	\$80.00 \$45.00 \$78.00	\$12,000.00 \$6,750.00 \$23,400.00 \$93,500.00	\$13,920.00 \$7,830.00 \$27,144.00 \$108,460.00
15	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth Shade cloth / sail structures with P/C steel posts Service Reticulation	m2 m2 m2 SUB-TOTA	150 150 300 L	q * q	\$80.00 \$45.00 \$78.00	\$12,000.00 \$6,750.00 \$23,400.00 \$93,500.00	\$13,920.00 \$7,830.00 \$27,144.00 \$108,460.00
	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth Shade cloth / sail structures with P/C steel posts	m2 m2 m2	150 150 300	q *	\$80.00 \$45.00	\$12,000.00 \$6,750.00 \$23,400.00	\$13,920.00 \$7,830.00 \$27,144.00
	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth	m2 m2	150 150	q	\$80.00 \$45.00	\$12,000.00	\$13,920.00 \$7,830.00
	'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber			q			
	'Bushkids' Combo type (DBK-229) Supply &	Item	1	q	\$50,000	\$50,000.00	\$58,000.00
	Playground equipment: MEGATOY						
L5	Playground Equipment	SUB-TOTA	L			\$92,150.00	\$106,894.00
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle)	Item	1	q	\$1,300.00	\$1,300.00	\$1,508.00
14	Structures	SUB-TOTA	L			\$1,300.00	\$1,508.00
	Signage	Item	1	xx	\$33,000.00	\$33,000.00	\$38,280.00
	CONCRETE SLAB Bollard - timber	m	600	*	\$100.00	\$60,000.00	\$69,600.00
	Detail SP.57 PARK BENCH over	no	6	q	\$950.00	\$5,700.00	\$6,612.00
	Connection of drinking fountain to services	no	1	*	\$1,000.00	\$1,000.00	\$1,160.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	1	q	\$3,950.00	\$3,950.00	\$4,582.00
L3	Park / Street Furniture	SUB-TOTA	L			\$103,650.00	\$120,234.00
	Lighting to multipurpose courts	Item	4	xx	\$11,000.00	\$44,000.00	\$51,040.00
	Internal Road Lighting - Watchman light (Pole & fitting supply & install only - connection extra)	Item	12	xx	\$2,640.00	\$31,680.00	\$36,748.80
	Sports field lighting to general fields - 100 x 50m	Item	2	xx	\$143,000.00	\$286,000.00	\$331,760.00
.2	Park and Sport Lighting	SUB-TOTA	L			\$361,680.00	\$419,548.80
	Multipurpose courts - 30 x 15m with linemarking	Item	4	*	\$75,000.00	\$300,000.00	\$348,000.00
	Combination Soccer / Rugby Goal Posts - PAIR (supply & installed)	Item	2	q	\$5,300.00	\$10,600.00	\$12,296.00
.1	Sporting Fields / Courts	SUB-TOTA	L			\$310,600.00	\$360,296.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	1	*	\$1,300.00	\$1,300.00	\$1,508.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	70	*	\$60.00	\$4,200.00	\$4,872.00
.0	Metal Fencing	SUB-TOTA	L			\$5,500.00	\$6,380.00
	Perimeter Concrete Pavement: 2200 x 125mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints, Boxing up	m2	2640	*	\$110.00	\$290,400.00	\$336,864.00
	100mm thick	m	200	*	\$226.60	\$45,320.00	\$52,571.20
	Concrete Kerb & Channel Concrete pathway -2200mm width /	m	200	*	\$57.00	\$11,399.36	\$13,223.26

Source: Turner & Townsend - Construction and Management Consultants

R	ecreation Parks - Citywide (pe	r park)					
	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost1
3	Soil Cultivation / Shaping / Excavation	SUB-TOTA	L			\$37,170.00	\$43,117.20
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	5900	*	\$6.30	\$37,170.00	\$43,117.20
4	On Site Vegetation Clearing	SUB-TOTA	L			\$110,000.00	\$127,600.00
	Clear existing LIGHT COVER vegetation by machine	m2	100000	x	\$1.10	\$110,000.00	\$127,600.00
5	Soil Improvements	SUB-TOTA	L			\$380,642.77	\$441,545.62
	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	37930	*	\$9.20	\$348,782.77	\$404,588.02
	Supply & install BEDDING SAND (75mm depth)	m2	5900	х	\$5.40	\$31,860.00	\$36,957.60



NOTES

- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- xx Adjustment of 10% increased since 2009

Rate adjusted based on quotation

6	Grass	SUB-TOTA	L		nace aujubica	\$531,020.00	\$615,983.20
	Turf areas - STOLONISING > 350m2	m2	75860	q	\$7.00	\$531,020.00	\$615,983.20
7	Park Planting & Street Trees	SUB-TOTA	L			\$202,765.81	\$235,208.34
	Planting 100 litre container	no	150	*	\$261.00	\$39,150.08	\$45,414.10
	Perimeter planting - 100 litre container	no	100	*	\$261.00	\$26,100.06	\$30,276.07
	Street trees - 100 litre container	no	320	*	\$261.00	\$83,520.18	\$96,883.41
	PLANTING - Groundcover & mulch (2x140mm/m2)	m2	2000	*	\$27.00	\$53,995.49	\$62,634.77
8	Irrigation Systems	SUB-TOTA	L	<u> </u>		\$169,407.34	\$196,512.51
	COMMERCIAL GRADE Pipes, fittings, POP-UP			*	+20.00		
	heads & nozzles (turf areas) COMMERCIAL GRADE Pipes, fittings, POP- UP	m2	5900	*	\$20.00	\$118,005.11	\$136,885.93
	heads & nozzles (turf & planting areas) to	m2	2570	*	\$20.00	\$51,402.23	\$59,626.58
9	planting areas Asphalt/Concrete Pathways	SUB-TOTA	L			\$1,407,309.36	\$1,632,478.86
	Perimeter Path - In-situ Concrete pathways: Detail SP.33: 100mm thick R/I CONCRETE FOOTPATH - 2200 mm wide w/- Control & E-JOINTS (includes flexible joint filler)	m	4000	*	\$226.60	\$906,400.00	\$1,051,424.00
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	3020	*	\$95.00	\$286,900.00	\$332,804.00
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	600	*	\$95.00	\$57,000.00	\$66,120.00
	Concrete Kerb & Channel	m	200	*	\$57.00	\$11,399.36	\$13,223.26
	Adventure cycle circuit - Asphalt pathways: Detail SP.32 40mm ASPHALT PAVEMENT over 100mm COMPACTED ROADBASE	m	650	*	\$205.00	\$133,250.00	\$154,570.00
	Hardstand Area - Concrete pathways: SP.34 100mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints	m2	120	*	\$103.00	\$12,360.00	\$14,337.60
10	Metal Fencing	SUB-TOTA	L			\$29,200.00	\$33,872.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	400	*	\$60.00	\$24,000.00	\$27,840.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	4	*	\$1,300.00	\$5,200.00	\$6,032.00
11	Special Features	SUB-TOTA	L			\$535,150.00	\$620,774.00
	Lake - including excavation, membranes, pumps	m2	3200	xx	\$154.00	\$492,800.00	\$571,648.00
	Creek - including excavition	m	70	xx	\$605.00	\$42,350.00	\$49,126.00
12	Lighting	SUB-TOTA	L			\$166,320.00	\$192,931.20
	Pole-top lights - Heritage theme	Item	42	xx	\$3,960.00	\$166,320.00	\$192,931.20
13	Park / Street Furniture	SUB-TOTA	L			\$292,200.00	\$338,952.00
	Electric BBQ: Detail SP.61 Brick surround / Stainless Steel Bench-top with CFC sheeting under/Single Hot Plate	Item	6	q	\$9,000.00	\$54,000.00	\$62,640.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	4	q	\$3,950.00	\$15,800.00	\$18,328.00
	Connection of drinking fountain to services	no	4	*	\$1,000.00	\$4,000.00	\$4,640.00
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	8	q	\$950.00	\$7,600.00	\$8,816.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	10	q	\$5,200.00	\$52,000.00	\$60,320.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5 x 4)	no	4	q	\$5,200.00	\$20,800.00	\$24,128.00
	Bollard Timber	LM	1000	*	\$83.00	\$83,000.00	\$96,280.00
	Signage	Item	1	xx	\$55,000	\$55,000.00	\$63,800.00
14	Structures	SUB-TOTA				\$311,000.00	\$360,760.00
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle)	Item	2	q	\$100,500.00	\$201,000.00	\$233,160.00
	PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	no	10	*	\$11,000.00	\$110,000.00	\$127,600.00



NOTES

Rate adjusted based on similar trade / work completed

recently

x As existing, No adjustment

xx Adjustment of 10% increased since 2009

Rate adjusted based on quotation

15	Playground Equipment	SUB-TOTA	L		-	\$1,027,500.00	\$1,191,900.00
	Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	2	q	\$50,000.00	\$100,000.00	\$116,000.00
	Playground equipment: MEGATOY 'Comet' (CSM-218) Supply & Install (Toddler playground)				Exclude - assumed only set required	Exclude - assumed only set required	Exclude - assumed only set required
	Synthetic surfacing - coloured insitu rubber	m2	2500	q	\$80.00	\$200,000.00	\$232,000.00
	Bark funes - 300mm depth	m2	7500	*	\$45.00	\$337,500.00	\$391,500.00
	Shade cloth / sail structures with P/C steel posts	45	5000	q	\$78.00	\$390,000.00	\$452,400.00
15	Service Reticulation	SUB-TOTA	L			\$170,500.00	\$197,780.00
	Electrical reticulation	Item	1	xx	\$82,500.00	\$82,500.00	\$95,700.00
	Water reticulation	Item	1	xx	\$88,000.00	\$88,000.00	\$102,080.00
			\$5,370,185.28	\$6,229,414.93			
Tota	al	Construction Cost	Establishment Cost				

Source: Turner & Townsend – Construction and Management Consultants

Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost
Soil Cultivation / Shaping / Excavation	SUB-TOTA	NL			\$22,050.00	\$25,578.00
Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	3500	*	\$6.30	\$22,050.00	\$25,578.00
On Site Vegetation Clearing	SUB-TOTA	ĬL.			\$55,000.00	\$63,800.00
Clear existing LIGHT COVER vegetation by machine	m2	50000	x	\$1.10	\$55,000.00	\$63,800.00
Soil Improvements	SUB-TOTA	\L			\$221,475.39	\$256,911.45
Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	22030	*	\$9.20	\$202,575.39	\$234,987.45
Supply & install BEDDING SAND (75mm depth)	m2	3500	х	\$5.40	\$18,900.00	\$21,924.00
Grass	SUB-TOTA	ĬL .			\$308,210.00	\$357,523.60
Turf areas - STOLONISING > 350m2	m2	44030	q	\$7.00	\$308,210.00	\$357,523.60
Park Planting & Street Trees	SUB-TOTA	ÅL.			\$184,495.77	\$214,015.09
Planting 100 litre container	no	100	*	\$261.00	\$26,100.06	\$30,276.07
Perimeter planting - 100 litre container	no	100	*	\$261.00	\$26,100.06	\$30,276.07
Street trees - 100 litre container	no	300	*	\$261.00	\$78,300.17	\$90,828.20
PLANTING - Groundcover & Mulch (2x140mm/m2)	m2	2000	*	\$27.00	\$53,995.49	\$62,634.77
Irrigation Systems	SUB-TOTA	\L			\$120,005.20	\$139,206.03
COMMERCIAL GRADE Pipes, fittings, POP-UP heads & nozzles (turf areas)	m2	3500	*	\$20.00	\$70,003.03	\$81,203.52
COMMERCIAL GRADE Pipes, fittings, POP- UP heads & nozzles (turf & planting areas) to garden beds	m2	2500	*	\$20.00	\$50,002.17	\$58,002.51
Asphalt/Concrete Pathways	SUB-TOTA	ĀL .			\$575,969.36	\$668,124.46
Perimeter Path - In-situ Concrete pathways: Detail SP.33: 100mm thick R/I CONCRETE FOOTPATH - 2200mm wide w/- Control & E-JOINTS (includes flexible joint filler)	m	1200	*	\$226.60	\$271,920.00	\$315,427.20
Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	980	*	\$95.00	\$93,100.00	\$107,996.00
Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	600	*	\$95.00	\$57,000.00	\$66,120.00
Concrete Kerb & Channel	m	200	*	\$57.00	\$11,399.36	\$13,223.26
Adventure cycle circuit - Asphalt pathways: Detail SP.32 40mm ASPHALT PAVEMENT over 100mm COMPACTED ROADBASE	m	650	*	\$205.00	\$133,250.00	\$154,570.00
Hardstand area - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	40	*	\$95.00	\$3,800.00	\$4,408.00



NOTES

- Rate adjusted based on similar trade / work completed
- recentl
- x As existing, No adjustment
- xx Adjustment of 10% increased since 2009

q Rate adjusted based on quotation

	Multipurpose half court with hoop and backboard or rebound wall and court	Item	1	xx	\$5,500.00	\$5,500.00	\$6,380.00
10	Metal Fencing	SUB-TOTA	L			\$14,600.00	\$16,936.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	200	*	\$60.00	\$12,000.00	\$13,920.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	2	*	\$1,300.00	\$2,600.00	\$3,016.00
11	Special Features	SUB-TOTA	L			\$42,350.00	\$49,126.00
	Creek - including excavition	m	70	XX	\$605.00	\$42,350.00	\$49,126.00
12	Lighting	SUB-TOTA		1		\$126,720.00	\$146,995.20
	Pole-top lights - Heritage theme	Item	32	XX	\$3,960.00	\$126,720.00	\$146,995.20
13	Park / Street Furniture	SUB-TOTA	L	1		\$125,600.00	\$145,696.00
	Electric BBQ: Detail SP.61 Brick surround / Stainless Steel Bench-top with CFC sheeting under/Single Hot Plate	Item	3	q	\$9,000.00	\$27,000.00	\$31,320.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	3	q	\$3,950.00	\$11,850.00	\$13,746.00
	Connection of drinking fountain to services	no	3	*	\$1,000.00	\$3,000.00	\$3,480.00
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	9	q	\$950.00	\$8,550.00	\$9,918.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	4	q	\$5,200.00	\$20,800.00	\$24,128.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5 x 4)	no	2	q	\$5,200.00	\$10,400.00	\$12,064.00
	Signage	Item	1	xx	\$44,000.00	\$44,000.00	\$51,040.00
14	Structures	SUB-TOTA	L			\$144,500.00	\$167,620.00
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle)	Item	1	q	\$100,500.00	\$100,500.00	\$116,580.00
	PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	no	4	*	\$11,000.00	\$44,000.00	\$51,040.00
15	Playground Equipment	SUB-TOTA	L	1		\$359,210.00	\$416,683.60
	Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	1	q	\$50,000.00	\$50,000.00	\$58,000.00
	Playground equipment: MEGATOY 'Comet' (CSM-218) Supply & Install (Toddler playground)	Item	1		Exclude - assumed only set required	Exclude - assumed only set required	Exclude - assumed only set required
	Synthetic surfacing - coloured insitu rubber	m2	1200	q	\$80.00	\$96,000.00	\$111,360.00
	Bark funes - 300mm depth	m2	1200	*	\$45.00	\$54,000.00	\$62,640.00
	Shade cloth / sail structures with P/C steel posts	m2	1200	q	\$78.00	\$93,600.00	\$108,576.00
	Timber fence: Detail SP.42 Sawn timber Post and Rail	LM	1000	*	\$60.00	\$60,000.00	\$69,600.00
	Dirt Bike Deterrent / Entry Point	Item	3	xx	\$1,870.00	\$5,610.00	\$6,507.60
15	Service Reticulation	SUB-TOTA	L	1		\$126,500.00	\$146,740.00
	Electrical reticulation	Item	1	xx	\$55,000.00	\$55,000.00	\$63,800.00
	Water reticulation	Item	1	xx	\$71,500.00	\$71,500.00 \$2,426,685,72	\$82,940.00 \$2,814,955.43
Tet	1						
Tota	1	Construction Cost	Establishment Cost				

Source: Turner & Townsend – Construction and Management Consultants

Re	creation Parks - Local (per parl	()					
	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost1
3	Soil Cultivation / Shaping / Excavation	SUB-TOTA	L			\$3,780.00	\$4,384.80
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	600	*	\$6.30	\$3,780.00	\$4,384.80
4	On Site Vegetation Clearing	SUB-TOTA	L	•		\$5,500.00	\$6,380.00
	Clear existing LIGHT COVER vegetation by machine	m2	5000	×	\$1.10	\$5,500.00	\$6,380.00
5	Soil Improvements	SUB-TOTA	L			\$22,872.25	\$26,531.81



NOTES

- Rate adjusted based on similar trade / work completed
- recently
- As existing, No adjustment
- Adjustment of 10% increased since 2009 Rate adjusted based on quotation

	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	2135	*	\$9.20	\$19,632.25	\$22,773.41
	Supply & install BEDDING SAND (75mm depth)	m2	600	х	\$5.40	\$3,240.00	\$3,758.40
6	Grass	SUB-TOTA	L			\$29,890.00	\$34,672.40
	Turf areas - STOLONISING > 350m2	m2	4270	q	\$7.00	\$29,890.00	\$34,672.40
7	Park Planting & Street Trees	SUB-TOTA		*	+264.00	\$84,417.87	\$97,924.73
	Planting 100 litre container	no	75		\$261.00	\$19,575.04	\$22,707.05
	Perimeter planting - 100 litre container	no	120	*	\$261.00	\$31,320.07	\$36,331.28
	Street trees - 100 litre container	no	25	*	\$261.00	\$6,525.01	\$7,569.02
	PLANTING - Groundcover & mulch (2x140mm/m2)	m2	1000	*	\$27.00	\$26,997.74	\$31,317.38
9	Asphalt/Concrete Pathways	SUB-TOTA	L			\$96,140.00	\$111,522.40
	Concrete pathway -2200mm width / 100mm thick	m	400	*	\$226.60	\$90,640.00	\$105,142.40
	Multipurpose half court with hoop and backboard or rebound wall and court	Item	1	xx	\$5,500.00	\$5,500.00	\$6,380.00
10	Metal Fencing	SUB-TOTA	\L			\$5,500.00	\$6,380.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	70	*	\$60.00	\$4,200.00	\$4,872.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	1	*	\$1,300.00	\$1,300.00	\$1,508.00
13	Park / Street Furniture	SUB-TOTA	\L			\$22,900.00	\$26,564.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	1	q	\$3,800.00	\$3,800.00	\$4,408.00
	Connection of drinking fountain to services	no	1	*	\$1,000.00	\$1,000.00	\$1,160.00
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	2	q	\$950.00	\$1,900.00	\$2,204.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	1	q	\$5,200.00	\$5,200.00	\$6,032.00
	Signage	Item	1	XX	\$11,000.00	\$11,000.00	\$12,760.00
14	Structures	SUB-TOTA	\L			\$11,000.00	\$12,760.00
	PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	no	1	*	\$11,000.00	\$11,000.00	\$12,760.00
15	Playground Equipment	SUB-TOTA	L			\$113,890.00	\$132,112.40
	Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	1	q	\$50,000.00	\$50,000.00	\$58,000.00
	Synthetic surfacing - coloured insitu rubber	m2	150	q	\$80.00	\$12,000.00	\$13,920.00
	Bark funes - 300mm depth	m2	150	*	\$45.00	\$6,750.00	\$7,830.00
	Shade cloth / sail structures with P/C steel posts	m2	300	q	\$78.00	\$23,400.00	\$27,144.00
	Timber fence: Detail SP.42 Sawn timber Post and Rail	LM	300	*	\$60.00	\$18,000.00	\$20,880.00
	Dirt Bike Deterrent / Entry Point	Item	2	xx	\$1,870.00	\$3,740.00	\$4,338.40
15	Service Reticulation	SUB-TOTA	\L			\$91,300.00	\$105,908.00
	Electrical reticulation	Item	1	xx	\$41,800.00	\$41,800.00	\$48,488.00
	Water reticulation	Item	1	xx	\$49,500.00	\$49,500.00	\$57,420.00
						\$487,190.12	\$565,140.54
Tota	al .					Construction Cost	Establishment Cost

Source: Turner & Townsend - Construction and Management Consultants

Wa	Naterside Parkland - Citywide (per park)									
	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost1			
3	Soil Cultivation / Shaping / Excavation	SUB-TOTA	L			\$44,100.00	\$51,156.00			
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	7000	*	\$6.30	\$44,100.00	\$51,156.00			
4	On Site Vegetation Clearing	SUB-TOTA	L			\$110,000.00	\$127,600.00			
	Clear existing LIGHT COVER vegetation by machine	m2	100000	x	\$1.10	\$110,000.00	\$127,600.00			
5	Soil Improvements	SUB-TOTA	\L			\$421,801.28	\$489,289.49			
	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	41760	*	\$9.20	\$384,001.28	\$445,441.49			



- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- x Adjustment of 10% increased since 2009 Rate adjusted based on quotation

	Cumply 9 in shall DEDDING CAND 15			q	Rate adjusted	based on quotation	
	Supply & install BEDDING SAND (75mm denth)	m2	7000	х	\$5.40	\$37,800.00	\$43,848.00
6	Grass	SUB-TOTA				\$584,500.00	\$678,020.00
7	Turf areas - STOLONISING > 350m2 Park Planting & Street Trees	m2 SUB-TOTA	83500	q	\$7.00	\$584,500.00 \$69,613.99	\$678,020.00 \$80,752.23
,	Planting & Street Trees Planting 100 litre container	no	150	*	\$261.00	\$39,613.99	\$45,414.10
	Street trees - 100 litre container	no	65	*	\$261.00	\$16,965.04	\$19,679.44
	PLANTING - Groundcover & mulch						
	(2x140mm/m2)	m2	500	*	\$27.00	\$13,498.87	\$15,658.69
8	Irrigation Systems	SUB-TOTA	L	1		\$154,306.68	\$178,995.75
	COMMERCIAL GRADE Pipes, fittings, POP-UP heads & nozzles (turf & planting areas)	m2	7000	*	\$20.00	\$140,006.06	\$162,407.03
	COMMERCIAL GRADE Pipes, fittings, POP- UP heads & nozzles (turf & planting areas) to planting areas	m2	715	*	\$20.00	\$14,300.62	\$16,588.72
9	Asphalt/Concrete Pathways	SUB-TOTA	L			\$827,543.47	\$959,950.43
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	3275	*	\$95.00	\$311,125.00	\$360,905.00
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	1440	*	\$95.00	\$136,800.00	\$158,688.00
	Concrete Kerb & Channel	m	480	*	\$57.00	\$27,358.47	\$31,735.83
	Concrete pathways to boat/canoe ramp: SP.34 100mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints	m2	120	*	\$103.00	\$12,360.00	\$14,337.60
	In-situ Concrete pathways to pedestrian/bike path: Detail SP.33:100mm thick R/I CONCRETE FOOTPATH - 2200mm wide w/- Control & E-JOINTS (includes flexible joint filler)	m	1500	*	\$226.60	\$339,900.00	\$394,284.00
10	Metal Fencing	SUB-TOTA	L	ı		\$29,200.00	\$33,872.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	400	*	\$60.00	\$24,000.00	\$27,840.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	4	*	\$1,300.00	\$5,200.00	\$6,032.00
12	Lighting	SUB-TOTA	L	l		\$198,000.00	\$229,680.00
	Pole-top lights - Heritage theme	Item	50	xx	\$3,960.00	\$198,000.00	\$229,680.00
13	Park / Street Furniture	SUB-TOTA	L			\$184,750.00	\$214,310.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	3		\$3,950.00	\$11,850.00	\$13,746.00
	Connection of drinking fountain to services	no	3		\$1,000.00	\$3,000.00	\$3,480.00
	Detail SP.57 PARK BENCH over CONCRETE	no	10		\$950.00	\$9,500.00	\$11,020.00
	SLAB Electric BBQ: Detail SP.61 Brick surround / Stainless Steel Bench-top with CFC sheeting under/Single Hot Plate	no	6	q	\$9,000.00	\$54,000.00	\$62,640.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	8	q	\$5,200.00	\$41,600.00	\$48,256.00
	Detail SP:60 Park Table and Bench Seats						
	over Concrete Slab (4.1 x 4.5 x 4)	no	4	q	\$5,200.00	\$20,800.00	\$24,128.00
		no Item	1	q xx	\$5,200.00 \$44,000.00	\$20,800.00 \$44,000.00	\$24,128.00
14	over Concrete Slab (4.1 x 4.5 x 4)		1				
14	over Concrete Slab (4.1 x 4.5 x 4) Signage	Item	1			\$44,000.00	\$51,040.00
14	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE /	Item	1 L	xx	\$44,000.00	\$44,000.00 \$350,000.00	\$51,040.00 \$406,000.00
14	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS,	Item SUB-TOTA Item	1 L	xx q	\$44,000.00	\$44,000.00 \$350,000.00 \$201,000.00	\$51,040.00 \$406,000.00 \$233,160.00
	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	Item SUB-TOTA Item no	1 L 2 6 1000	q *	\$44,000.00 \$100,500.00 \$11,000.00	\$44,000.00 \$350,000.00 \$201,000.00 \$66,000.00	\$51,040.00 \$406,000.00 \$233,160.00 \$76,560.00
	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT Bollard Timber Playground Equipment Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item SUB-TOTA Item no Item	1 L 2 6 1000	q *	\$44,000.00 \$100,500.00 \$11,000.00	\$44,000.00 \$350,000.00 \$201,000.00 \$66,000.00 \$83,000.00	\$51,040.00 \$406,000.00 \$233,160.00 \$76,560.00 \$96,280.00
	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT Bollard Timber Playground Equipment Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber	Item SUB-TOTA Item no Item SUB-TOTA Item m2	1 2 6 1000 L 2 2500	xx q * * q q	\$44,000.00 \$100,500.00 \$11,000.00 \$83.00 \$50,000.00 \$80.00	\$44,000.00 \$350,000.00 \$201,000.00 \$66,000.00 \$83,000.00 \$1,027,500.00 \$100,000.00 \$200,000.00	\$51,040.00 \$406,000.00 \$233,160.00 \$76,560.00 \$96,280.00 \$1,191,900.00 \$116,000.00 \$232,000.00
	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT Bollard Timber Playground Equipment Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber Bark funes - 300mm depth	Item SUB-TOTA Item no Item SUB-TOTA Item m2 m2	1	xx q	\$44,000.00 \$100,500.00 \$11,000.00 \$83.00 \$50,000.00 \$80.00 \$45.00	\$44,000.00 \$350,000.00 \$201,000.00 \$66,000.00 \$83,000.00 \$1,027,500.00 \$100,000.00 \$200,000.00 \$337,500.00	\$51,040.00 \$406,000.00 \$233,160.00 \$76,560.00 \$96,280.00 \$1,191,900.00 \$116,000.00 \$232,000.00 \$391,500.00
15	over Concrete Slab (4.1 x 4.5 x 4) Signage Structures BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (5 cubicle) BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT Bollard Timber Playground Equipment Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install Synthetic surfacing - coloured insitu rubber	Item SUB-TOTA Item no Item SUB-TOTA Item m2	1	xx q * * q q	\$44,000.00 \$100,500.00 \$11,000.00 \$83.00 \$50,000.00 \$80.00	\$44,000.00 \$350,000.00 \$201,000.00 \$66,000.00 \$83,000.00 \$1,027,500.00 \$100,000.00 \$200,000.00	\$51,040.00 \$406,000.00 \$233,160.00 \$76,560.00 \$96,280.00 \$1,191,900.00 \$116,000.00 \$232,000.00



NOTES

- Rate adjusted based on similar trade / work completed
- recently
- x As existing, No adjustment
- xx Adjustment of 10% increased since 2009

q Rate adjusted based on quotation

Tota	Construction Cost	Establishment Cost				
					\$4,138,815.43	\$4,801,025.90
Water reticulation	Item	1	xx	\$55,000.00	\$55,000.00	\$63,800.00
Electrical reticulation	Item	1	xx	\$82,500.00	\$82,500.00	\$95,700.00

Source: Turner & Townsend - Construction and Management Consultants

Wa	terside Parkland - District (per	park)					
	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cos
3	Soil Cultivation / Shaping / Excavation	SUB-TOTA	L			\$22,050.00	\$25,578.00
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	3500	*	\$6.30	\$22,050.00	\$25,578.00
ŀ	On Site Vegetation Clearing	SUB-TOTA	L			\$55,000.00	\$63,800.00
	Clear existing LIGHT COVER vegetation by	m2	50000	x	\$1.10	\$55,000.00	\$63,800.00
5	machine Soil Improvements	SUB-TOTA	L		<u> </u>	\$226,486.90	\$262,724.80
	Supply & spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	22575	*	\$9.20	\$207,586.90	\$240,800.80
	Supply & install BEDDING SAND (75mm depth)	m2	3500	х	\$5.40	\$18,900.00	\$21,924.00
5	Grass	SUB-TOTA				\$316,085.00	\$366,658.60
1	Turf areas - STOLONISING > 350m2	m2 SUB-TOTA	45155	q	\$7.00	\$316,085.00	\$366,658.60
	Park Planting & Street Trees Planting 100 litre container	no	120	*	\$261.00	\$51,119.53 \$31,320.07	\$59,298.66 \$36,331.28
	Street trees - 100 litre container	no	50	*	\$261.00	\$13,050.03	\$15,138.03
	PLANTING - Groundcover (2x140mm/m2)	m2	250	*	\$27.00	\$6,749.44	\$7,829.35
	Irrigation Systems	SUB-TOTA	L			\$78,403.39	\$90,947.94
	COMMERCIAL GRADE Pipes, fittings, POP-UP heads & nozzles (turf & planting areas)	m2	3500	*	\$20.00	\$70,003.03	\$81,203.52
	COMMERCIAL GRADE Pipes, fittings, POP- UP heads & nozzles (turf & planting areas) to planting areas	m2	420	*	\$20.00	\$8,400.36	\$9,744.42
	Asphalt/Concrete Pathways	SUB-TOTA	L			\$256,154.36	\$297,139.06
	Carpark - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	1145	*	\$95.00	\$108,775.00	\$126,179.00
	Road - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	600	*	\$95.00	\$57,000.00	\$66,120.00
	Concrete Kerb & Channel	m	200	*	\$57.00	\$11,399.36	\$13,223.26
	Hardstand area - ASPHALTIC CONCRETE PAVEMENT (300mm excavation, 300mm ROAD BASE, 30mm AC)	m2	40	*	\$95.00	\$3,800.00	\$4,408.00
	Concrete pathways to boat/canoe ramp: SP.34 100mm thick CONCRETE - BROOM FINISH, reinforced with C& E Joints	m2	60	*	\$103.00	\$6,180.00	\$7,168.80
	In-situ Concrete pathways to pedestrian/bike path: Detail SP.33: 100mm thick R/I CONCRETE FOOTPATH - 2200mm wide w/- Control & E-JOINTS (includes flexible joint filler)	m	600	*	\$115.00	\$69,000.00	\$80,040.00
0	Metal Fencing	SUB-TOTA	L			\$14,600.00	\$16,936.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAIL	m	200	*	\$60.00	\$12,000.00	\$13,920.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	2	*	\$1,300.00	\$2,600.00	\$3,016.00
2	Lighting	SUB-TOTA	L			\$99,000.00	\$114,840.00
	Pole-top lights - Heritage theme	Item	25	xx	\$3,960.00	\$99,000.00	\$114,840.00
3	Park / Street Furniture	SUB-TOTA	L	1		\$136,150.00	\$157,934.00
	Park furniture: drinking fountain- Detail 11-12: DRINK TAP (connection extra)	no	3	q	\$3,950.00	\$11,850.00	\$13,746.00
	Connection of drinking fountain to services	no	3	*	\$1,000.00	\$3,000.00	\$3,480.00
	•			•		•	



NOTES

Rate adjusted based on similar trade / work completed

recently

x As existing, No adjustment

xx Adjustment of 10% increased since 2009 q Rate adjusted based on quotation

		Total					
						\$1,769,049.19	\$2,052,097.06
	Water reticulation	Item	1	xx	\$44,000.00	\$44,000.00	\$51,040.00
	Electrical reticulation	Item	1	xx	\$77,000.00	\$77,000.00	\$89,320.00
15	Service Reticulation	SUB-TOTA	L			\$121,000.00	\$140,360.00
	Shade cloth / sail structures with P/C steel posts	m2	1200	q	\$78.00	\$93,600.00	\$108,576.00
	Bark funes - 300mm depth	m2	1200	*	\$45.00	\$54,000.00	\$62,640.00
	Synthetic surfacing - coloured insitu rubber	m2	1200	q	\$80.00	\$96,000.00	\$111,360.00
	Playground equipment: MEGATOY 'Bushkids' Combo type (DBK-229) Supply & Install	Item	1	q	\$50,000.00	\$50,000.00	\$58,000.00
	Playground Equipment	SUB-TOTA	L	•		\$293,600.00	\$340,576.00
	BBQ PAVILLION - 4x4m HIPPED ROOF with CONCRETE SLAB, TABLE + BENCH SEATS, LIGHT	no	3	*	\$11,000.00	\$33,000.00	\$38,280.00
	BRICK TOILET: 1 x MALE + 1 x FEMALE / DISABLED composting unit (3 Cubicle)	Item	1	q	\$66,400.00	\$66,400.00	\$77,024.00
14	Structures	SUB-TOTA	L	•		\$99,400.00	\$115,304.00
	Signage	Item	1	xx	\$33,000.00	\$33,000.00	\$38,280.00
	Bollard Timber	Item	100	*	\$83.00	\$8,300.00	\$9,628.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5 x 4)	no	2	q	\$5,200.00	\$10,400.00	\$12,064.00
	Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	6	q	\$5,200.00	\$31,200.00	\$36,192.00
	Electric BBQ: Detail SP.61 Brick surround / Stainless Steel Bench-top with CFC sheeting under/Single Hot Plate	no	3	q	\$9,000.00	\$27,000.00	\$31,320.00
	Detail SP.57 PARK BENCH over CONCRETE SLAB	no	12	q	\$950.00	\$11,400.00	\$13,224.00

Source: Turner & Townsend – Construction and Management Consultants

Lin	ear – Citywide (per hectare)						
	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost1
3	Soil Cultivation/ Shaping/ Excavation	SUB-TOTA	L			\$22,050.00	\$25,578.00
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	3500	*	\$6.30	\$22,050.00	\$25,578.00
4	On site Vegetation Clearing	SUB-TOTA	L			\$11,000.00	\$12,760.00
	Clear existing LIGHT COVER vegetation by machine	2 m	10000	х	\$1.10	\$11,000.00	\$12,760.00
5	Soil Improvements	SUB-TOTA	L			\$31,773.61	\$36,857.38
	Supply & Spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	1400	*	\$9.20	\$12,873.61	\$14,933.38
	Supply & Install BEDDING SAND (75mm depth)	2 m	3500	х	\$5.40	\$18,900.00	\$21,924.00
6	Grass	SUB-TOTA	L			\$9,800.00	\$11,368.00
	Turf areas - STOLONISING > 350m2	m2	1400	q	\$7.00	\$9,800.00	\$11,368.00
7	Park Planting	SUB-TOTA	L			\$13,949.73	\$16,181.69
	Planting 100 litre container	no	40	*	\$261.00	\$10,440.02	\$12,110.43
	Planting – Groundcover (2x140mm/m2)	m2	130	*	\$27.00	\$3,509.71	\$4,071.26
9	Concrete Pathways	SUB-TOTA	L			\$79,310.00	\$91,999.60
	Concrete pathway -2200mm width / 100mm thick	m	350	*	\$226.60	\$79,310.00	\$91,999.60
10	Metal Fencing	SUB-TOTA	L			\$5,500.00	\$6,380.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAII	m	70	*	\$60.00	\$4,200.00	\$4,872.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	1	*	\$1,300.00	\$1,300.00	\$1,508.00
13	Park Furniture	SUB-TOTA	L		•	\$20,400.00	\$23,664.00



NOTES

Rate adjusted based on similar trade / work completed

recently

x As existing, No adjustment

xx Adjustment of 10% increased since 2009

Rate adjusted based on quotation

GOSSI PARK "Riverside Seat" with P/C Flange Leg (Colour: DULUX Claret) and CLEAR ANODISED ALUMINIUM SLATS. Fixed to and including concrete pad with chemset MASONRY ANCHORS.	no	2	q	\$5,200.00	\$10,400.00	\$12,064.00
Detail SP:60 Park Table and Bench Seats over Concrete Slab (4.1 x 4.5)	no	1	q	\$5,200.00	\$5,200.00	\$6,032.00
Park Furniture: drinking fountain – Detail 11-12: DRINK TAP (connection extra).	no	1	q	\$3,800.00	\$3,800.00	\$4,408.00
Connection of drinking fountain to services	no	1	*	\$1,000.00	\$1,000.00	\$1,160.00
		•			\$193,783.34	\$224,788.67
Tota		Construction Cost	Establishment Cost			

Source: Turner & Townsend – Construction and Management Consultants

Includes 16% planning, design and contingency costs.

	Description	Unit	Qty		Rate 2nd Q 2015	Construction Cost	Establishment Cost
3	Soil Cultivation/ Shaping/ Excavation	SUB-TOTA	L			\$3,780.00	\$4,384.80
	Removal of 300mm top layer of clay type earth, with machinery (inc. removal of spoil)	m2	600	*	\$6.30	\$3,780.00	\$4,384.80
4	On site Vegetation Clearing					\$11,000.00	\$12,760.00
	Clear existing LIGHT COVER vegetation by	2	10000	xx	\$1.10	\$11,000.00	\$12,760.00
5	machine Soil Improvements	m SUB-TOTA	L			\$9,676.80	\$11,225.09
	Supply & Spread IMPORTED TOPSOIL to TURF and GARDEN AREAS (150mm depth)	m2	700	*	\$9.20	\$6,436.80	\$7,466.69
	Supply & Install BEDDING SAND (75mm depth)	2 m	600	х	\$5.40	\$3,240.00	\$3,758.40
6	Grass	SUB-TOTA	L	•		\$4,900.00	\$5,684.00
	Turf areas - STOLONISING > 350m2	m2	700	q	\$7.00	\$4,900.00	\$5,684.00
7	Park Planting	SUB-TOTA	L			\$2,688.00	\$3,118.08
	Park Planting (T&T Note May 2015: Rate Update 2009 priced as item only)	item	1	xx	\$2,688.00	\$2,688.00	\$3,118.08
9	Concrete Pathways	SUB-TOTA	L			\$79,310.00	\$91,999.60
	Concrete pathway -2200mm width / 100mm thick	m	350	*	\$226.60	\$79,310.00	\$91,999.60
10	Metal Fencing	SUB-TOTA	L			\$5,500.00	\$6,380.00
	Timber/Metal fence: 1200mm high HDG STEEL CHAIN/WELD MESH, HWD POSTS & TOP RAII	m	70	*	\$60.00	\$4,200.00	\$4,872.00
	GATE: 3000mm x 1200mm HDG STEEL 3" RHS frame with LATCH, concrete filled/reinforced.	Item	1	*	\$1,300.00	\$1,300.00	\$1,508.00
13	Park Furniture	SUB-TOTA	L			\$6,400.00	\$7,424.00
	GOSSI PARK "Riverside Seat" with P/C Flange Leg (Colour: DULUX Claret) and CLEAR ANODISED ALUMINIUM SLATS. Fixed to and including concrete pad with chemset MASONRY ANCHORS.	no	1	q	\$5,200.00	\$5,200.00	\$6,032.00
	Park Furniture: drinking fountain – Detail 11-12: DRINK TAP (connection extra).	no	0.3	q	\$3,800.00	\$950.00	\$1,102.00
	Connection of drinking fountain to services	no	0.3	*	\$1,000.00	\$250.00	\$290.00
						\$123,254.80	\$142,975.57
	TOTA					Construction Cost	Establishment Cost

Source: Turner & Townsend - Construction and Management Consultants