



Dedicated to a better Brisbane

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1.0 INTRODUCTION

Parks in Brisbane play an important role in defining the character and livability of the city. They contribute to our health, environment, lifestyle and identity. Brisbane residents value their outdoor lifestyle and Council is seeking to protect open space values on private land and within public spaces. Protecting and enhancing these values in the face of growth requires innovative solutions, to provide a network of safe, well utilised, diverse and environmentally sustainable parks that meet community needs. This chapter sets out a uniform and consistent approach for Council, lessees of parkland and the development industry, to achieve the best possible outcome when enhancing existing parks and developing new parks in the City.

2.0 PLANNING AND DESIGN

2.1 PRINCIPLES

Parks should be planned and designed to achieve the following objectives.

Community needs and cultural values

- Provide recreation opportunities and facilities that respond to the expected community profile (demographics) but ensure sufficient flexibility to cater for changing community needs.
- Provide a diverse range of recreation opportunities in the local area and avoid duplicating facilities available in nearby parks. (Note: Forward planning documents, such as Local Plans and Infrastructure Charges Plans, usually provide guidance in the development of parks).
- Maximise opportunities for multiple use of park facilities and activity spaces.
- Where appropriate, develop the park as a focal point for the local community, incorporating features such as public art, and providing for activities, festivals and events.
- The type of facilities and level of maintenance required should reflect the Park Type (refer to Glossary) and the capacity of Council to maintain the park.
- Conserve and enhance indigenous and non-indigenous cultural heritage values.

Access and circulation

- Access to and within the park should be safe and convenient for all visitors.
- Provide a hierarchy of pedestrian and bicycle paths within the park, and where appropriate, links to other components of the public open space system.
- Ensure vehicular access does not conflict with non-vehicular circulation or impact on the park's open space values.
- Provide entry nodes that highlight safe access points and provide path connections to major activity spaces and facilities.
- Provide features, including signs, to help orientate park visitors and promote easy access to facilities and other components of the public open space system.

Character and visual amenity

- Enhance the area's local identity by developing a park that contributes to local landscape character, visual amenity and a sense of place.
- Protect and enhance significant views and vistas.
- Screen areas of poor visual quality.
- Capitalise on landmarks such as significant trees, rocky outcrops and escarpments.



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- Ensure park furniture and facilities contribute to high visual quality and have consistent character.

Safety and user comfort

- Maximise visitor safety and minimise vandalism and unintended uses. This includes incorporating Crime Prevention Through Environmental Design (CPTED) principles, such as the facilitation of casual community surveillance through layout and design.
- Identify features that may cause potential hazards and remove or manage through landscape treatments.
- Separate active (eg ball games) and passive (eg picnic node) recreation areas.
- Maximise shade, particularly in high use areas and along paths.
- Planting to reduce glare and reflected radiant heat from hard surfaces.
- Minimise the impact of stormwater on the use and maintenance of park facilities and activity spaces.
- Incorporate fire management measures that are in harmony with the maintenance of biodiversity values and consistent with Council fire management guidelines.

Environmental sustainability

Adopt a multi-disciplinary process that ensures the key principles of environmental sustainability are achieved throughout the planning, design construction and maintenance stages:

- **Resource efficiency**, including water conservation and reuse, use of recycled materials and materials that can be recycled, efficient manufacture and transportation of materials, material robustness and longevity, energy efficiency, use of renewable energy sources, waste minimisation, provision for alternative modes of transport that require little or no energy, and park maintenance requiring low resource demands (eg extent of mowing).
- **Protect biodiversity** through habitat protection and enhancement to ensure the long-term integrity of natural systems and the diversity of flora and fauna they support.
- **Build the community** through community involvement in planning, design, construction and maintenance, use of local products and materials, drawing on local knowledge and history of the site, and creating locally distinctive places that foster social interaction and are accessible for the entire community.

2.2 APPROVAL PROCESS

As well as complying with the relevant City Plan codes and polices, the applicant should comply with the following specific requirements to have a park approved and accepted by Council:

1. Identify either at Pre-lodgement or prior to lodging the Development Application whether a new park is proposed or an existing park upgraded. (Note: Details of future park requirements across the City are specified in forward planning documents, such as City Plan 2000, Local Plans and Infrastructure Charges Plans.)
2. Identify the existing or proposed Park Type (refer to Glossary) as defined in Council's Parks Classification System, and plan the park accordingly.
3. Ensure the park planning, design and management objectives are considered before the Development Application is submitted.



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4. If required, prepare a Landscape Concept Plan for the proposed park detailing the conceptual park layout, and submit to Council. A Landscape Concept Plan may be required:
 - Prior to Development Approval where details of the park contribution have been indicated in a Local Plan or Infrastructure Charges Plan (ICP) and/or agreed to at the Pre-lodgement stage.
 - To demonstrate compliance with City Plan codes.
 - To ensure future park requirements specified in forward planning documents are incorporated into the design.
 - To ensure the park layout concept is consistent with the requirements of this chapter, and best practice in park planning, design and management.
5. Prepare a Landscape Management & Siteworks Plan, in accordance with Chapter 2 of Part D of this document, if conditioned as part of the development approval.

3.0 WORKS IN EXISTING PARKS

Specific written approval is required where ancillary works are proposed in existing parks, such as the construction of utility services or stormwater discharge through a park into a waterway. Approval for this work should be obtained prior to the operational works application stage and a construction permit should be obtained from the Council Delegate prior to commencement of works.

The construction work should be carried out in a manner that minimises disturbance such as altering alignments and utilising boring techniques or Council approved methods. The inherent values associated with the City's parks should be protected and public useability of parks maintained throughout the construction period.

4.0 PARK PREPARATION WORKS

4.1 GENERAL

This section sets out the basic preparation works required to achieve the minimum standard for parkland in Brisbane. The Development Approval Conditions and/or the approved Landscape Management & Siteworks Plan overrides any conflict or ambiguity with this document.

The *Reference Specifications for Civil Engineering Works* define default provisions acceptable to Council for typical situations and designs. The following reference specifications are of particular relevance to park preparation works.

- S110 General Requirements
- S140 Earthworks
- S160 Drainage
- S170 Stonework
- S190 Landscaping
- S210 Masonry

4.2 SITE CLEARING

All debris, including builder rubble, footings of any unwanted structures, barbed wire fences and noxious weeds, should be removed from the park site. Items such as disused wells or septic tanks should be removed or filled. Any items to be retained on site, as agreed by Council, should be made safe for public use and appropriately integrated into the park development.



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4.3 DECONTAMINATION

Areas of the park listed on the Environmental Protection Agency's (EPA) Environmental Management Register or Contaminated Land Register, should be appropriately remediated in accordance with the approved Landscape Management & Siteworks Plan and/or an approved EPA Site Management Plan, to meet EPA and Council requirements. Completed Site Investigations and evidence of removal from the Contaminated Land Register of the EPA should be provided, if applicable.

4.4 EARTHWORKS

Earthworks may be undertaken to stabilise the landform of the park site and make it safe for public use.

Park activity spaces

Batters, mounds, artificial embankments or retaining structures should not encroach onto park activity spaces. Open activity areas should have a slope of less than 1V:20H and greater than 1V:150H to suit proposed recreational functions, accessibility standards and to encourage grass cover and drainage.

Sporting fields

Fields for ball sports should drain to the perimeter with a gradient of 1V:100H. De-compaction, topsoiling and laser guided levelling plant should be used to achieve the required standards and finished levels.

Maintained parkland

For ease of maintenance, new areas should be constructed with gradients no steeper than 1V:4H if grassed and approximately 1V:3H for unmown vegetated areas (subject to local conditions, maintenance demands and safety risk). However a gradient of no steeper than 1V:6H is preferred for vegetated and grassed areas.

Batters and earth retaining structures should conform to the requirements set out in Schedule 5 of the *Standard Building Regulation 1993*. For example, fill batters steeper than 1V:4H and retaining walls greater than 1.0 m in height will require the lodgement of building applications.

4.5 RETAINING EARTH STRUCTURES

Retaining structures should generally be avoided in and immediately adjacent to parks, particularly at entrance nodes and along boundaries to the park. They may only be constructed in the following circumstances:

- To avoid the creation of extensive, unusable slopes and embankments when stabilising the landform of a park site.
- Where pathways with low gradients are required, for example, to provide an accessible path of travel.
- Where a structure is necessary to retain the natural ground level and protect tree roots around the drip line of existing vegetation.
- Where space is limited and planted embankments are not a reasonable alternative.

Where a retaining structure cannot be avoided along the boundary of parkland, a low or stepped retaining structure is acceptable. The structure should be located wholly within the adjacent lot(s), and include associated landscaping (refer to Chapter 3 of Part B of this document).



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Retaining structures in parks are to be designed and constructed in accordance with AS 4678. The design life shall be between 30 and 90 years, based on the consequences of failure after taking into account the purpose of the retaining.

A barrier or balustrade may be required at the top of retaining structures adjacent to park activity areas. AS 2156.2 *Walking Tracks - Infrastructure Design* provides a suitable guide for the placement of barriers, based on risk assessment. The subsoil drainage system behind the walls should be directed to recharge planting areas where possible or connected to soakage trenches or the stormwater system.

4.5.1 Boulder Walls

Boulder walls may only be constructed where rock formations are a feature of the park site and/or the surrounding landscape, and the proposed retaining structure is no more than 1.0 m high.

Boulder retaining walls should be constructed in accordance with Standard Drawing UMS 734 and the following general requirements:

- Ensure boulders are of sufficient size and weight to prevent inadvertent or deliberate displacement by park visitors, or alternatively, ensure that boulders are mortared in place.
- Minimise creation of large voids that may attract vermin or weeds or cause erosion.
- Install a landscaped strip of no less than 0.6 m wide, along both the base and the top of a wall, to promote integration with the surrounding landscape. Construct edging around the landscaping, as described in Section 4.8.2.
- Lay geotextile fabric behind the wall to prevent the escape of retained material from voids between boulders.

4.5.2 Masonry and Stone Walls

Masonry and stone walls are preferred as retaining structures where the park is located in a formal landscape setting, and masonry/stone forms part of the approved features of a park, such as a stone entry statement.

Reinforced masonry and stone retaining walls should be RPEQ certified, and constructed in accordance with Standard Drawings UMS 411, UMS 412, UMS 413 or UMS 735 and the following general requirements:

- Use design elements such as landscaped recesses to provide visual relief in walls longer than 10.0 m.
- Install edging and a landscaped strip of no less than 0.6 m wide (1.2 m preferred) around the base of the wall, to reduce the risk of graffiti.
- Ensure walls are finished to a high visual quality eg bag render or split face finish of sandstone or other approved stone or replica material.
- Integrate signage and/or artwork in a wall where appropriate.

4.5.3 Timber Sleeper Walls

Treated hardwood timber sleeper walls (refer Standard Drawing UMS 733) may only be constructed where the park is located in a natural bushland setting and treated timber forms part of the approved features (eg furniture) of a park. Timber walls are not acceptable to retain land along the boundary of parkland. Timber sleeper walls should be preservative treated to hazard class 5 in accordance with AS 1604 for protection against decay, insect or marine borer attack.



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4.6 SITE DRAINAGE

Grassed areas and other open, non-vegetated areas should be trimmed to ensure even grade falls to direct overland flow evenly and efficiently to landscaped areas, stormwater inlets or to infiltration areas (eg natural wetlands, recharge areas). Site drainage should not be directed towards batters and earth retaining structures, visitor and recreation facilities, or neighbouring residential properties.

Drainage swales and drains should not impede maintenance operations and the recreational function of a park. The construction of turf swale drains, and gravel/dry creek swale drains through landscaping and rehabilitation areas (if required by Council), should generally comply with Standard Drawing UMS 762. If required, robust agricultural drains should be installed under shallow swales, to accommodate low flows and maximise useability and ease of maintenance. Where possible recharge soil profiles by directing subsoil drainage or swale drains to planting areas, with provision for overflow to the stormwater system.

Eliminate hollows to prevent ponding or provide field gullies in low spots in accordance with Standard Drawings UMS 337 and UMS 761, with connections to the stormwater system or infiltration areas as appropriate. The creation of potential trip hazards, by the siting of raised inlets in open grassed areas, should be avoided.

The design of roads, car parks and pavement areas should incorporate the principles of Water Sensitive Urban Design. Where required by Council, install bio-retention swales to polish and disperse drainage from pavements and car parks, generally in accordance with Standard Drawings UMS 763 and UMS 764. More detailed information can be found in Council's *Water Sensitive Urban Design Engineering Guidelines: Stormwater*.

4.7 VEGETATION MANAGEMENT

Remnant natural vegetation should be protected during the planning, design and construction of the park. Weed control is required to comply with State legislation and Council Local Law. Rehabilitation works may be required to achieve vegetation cover on steep, bare areas of the park site, to enhance habitat values and to make the park safe for public use.

4.7.1 Existing Vegetation

Remnant vegetation (other than weeds) should generally be retained and protected on the park site. Remnant natural vegetation may only be removed in the following situations:

- Where agreed in the Conditions of the Development Permit and/ or the approved Landscape Management & Siteworks Plan/ Vegetation Management Plan.
- The vegetation is not identified as significant under Council Natural Assets Local Law.
- The site is not listed on the Natural Assets Register of the Natural Assets Planning Scheme Policy or the Heritage Register Planning Scheme Policy, or the Queensland Heritage Register.
- Where open activity areas are required.
- To create useable park activity spaces.
- Where vegetation within or close to activity spaces, active recreation nodes, or pathways presents a public safety risk. In assessing risk, take into account the health and potential life of the vegetation, and preferred alternative treatments such



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as the removal of lower limbs to improve visibility, and pruning and dead-wooding of hazardous trees in accordance with *AS 4373 Pruning of Amenity Trees*.

- Where the visibility of the park from surrounding streets needs to be improved.

The removal of natural vegetation to construct a firebreak to protect neighbouring properties is only acceptable in a park where no reasonable alternative is available. The construction of fire breaks and building setbacks on the private lot adjoining the park is preferred, particularly where:

- There are very steep slopes within the park.
- Continuous natural vegetation should be retained across the boundary between the park and the private property.
- Vehicle access to the proposed firebreak is restricted and future maintenance would only be possible using handheld equipment.
- The firebreak has no strategic value for fire suppression or prescribed burning operations.

4.7.2 Weed Control

Technical advice should be obtained prior to the commencement of the weed control program. Removal of all proclaimed and noxious weeds is required from the site during park preparation, and weed control works should continue during the park maintenance period. Proclaimed and noxious weeds are designated under the Land Protection (Pest and Stock Route Management) Act and Council Natural Assets Local Law.

Other environmental weeds (refer to glossary for Council *Pest Management Plan*) should be removed from the park site, subject to the following requirements:

- Environmental weeds in the understorey may be removed progressively throughout the park establishment and maintenance period and replaced with desirable species, when they have been identified as essential in stabilising erosion prone areas, or providing habitat for fauna.
- Large trees on the park site that are technically defined as environmental weeds should be assessed to determine whether they possess other values, such as landscape amenity or heritage values. Valuable trees may be retained and appropriately integrated in the park development.

4.7.3 Rehabilitation

General

Erosion prone and degraded areas in the park site (eg bare areas with a steep gradient, unstable slopes, compacted ground, habitat areas invaded by environmental weeds) should be stabilised and enhanced through rehabilitation works. Proposed habitat corridors between the park and adjoining vegetation (eg bushland areas, creek and riparian zones) may also require rehabilitation. Rehabilitation works should comply with the provisions of an approved Landscape Management & Siteworks Plan or a Vegetation Management/Rehabilitation Plan. The Plan should also include details of any rehabilitation works on the adjacent road verge.

Erosion prone areas

Rip the soil to a depth of 300 mm parallel to contours, to encourage stormwater infiltration and strong root development. Cover the area with erosion control matting that allows stormwater infiltration, to maintain a stable surface until satisfactory plant establishment is achieved. A mixture of tube stock and plants in pots up to 140 mm should be planted over the area, at sufficient density to achieve rapid surface cover. Water and weed the site to ensure the surface is stabilised at the time of the Off Maintenance Inspection.



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Hydromulching followed by tube stock planting is an acceptable form of erosion control in areas with a gradient less than 1V:3H. Turfing is acceptable as an erosion control treatment on areas with a gradient less than 1V:4H.

Habitat rehabilitation

Technical advice should be obtained prior to the commencement of the habitat rehabilitation program. Where the existing habitat values are highly degraded, spray the site with glyphosate herbicide to remove competition from existing grasses and weeds, then rip the soil to a depth of 300 mm parallel to contours, to encourage stormwater infiltration and strong root development. Avoid ripping near waterways and within the drip line of retained trees and remnant vegetation. Where remnants of vegetation will be retained, environmental weeds should be selectively controlled prior to enhancement planting within the remnant (refer Section 4.7.2).

Weed-free mulch should be laid evenly to a nominal thickness of 100 mm over the prepared subsoil, except along waterways subject to flooding where erosion control matting or similar materials are preferred.

Select plants that are indigenous to the local area, and include a range of canopy forming and shrub species. Groundcover species such as native grasses should only be added to the plant selection where the site is devoid of natural groundcovers, and when competitive weeds such as *Panicum maxicum* and *Paspalum spp.* are under control. In areas of high disturbance and high fertility (such as along waterways) groundcover species are unlikely to compete successfully with weeds until a full tree and shrub canopy is established.

Plant a mixture of tube stock and plants in pots up to 140 mm, to achieve the maximum survival potential. Plant at sufficient density (recommended average density of 3 to 4 plants per m², with the tree component spaced at about 4 to 6 m centres) to achieve substantial cover of the ground surface at the time of the Off Maintenance Inspection. Water and weed the rehabilitation area to ensure the site is well established at the time of the inspection, with plants conditioned to survive dry periods without supplementary watering. An approved temporary fence (eg capped star picket and plain wire with safety ribbons to increase visibility) may be required around rehabilitation areas.

4.7.4 Mulching

Organic mulch should be provided in the park in the following situations:

- Where moisture retention and weed suppression is required in garden beds and around the base of trees.
- Where grass performance is poor or mowing is impractical (eg around the base of mature figs).
- Where the space between trees or other structures (eg signs) is less than 3 m and mowing is impractical.
- Where a non-grassed surface is required (eg around and under some visitor facilities).
- Where habitat rehabilitation is desired and/or grassing is not desired.

In overland flow paths or areas subject to regular inundation, organic mulch should be replaced with a more appropriate mulch treatment, such as riparian planting over an approved erosion control matting or coarse gravel or stones over an approved erosion control fabric.



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4.7.5 Grassing

Open areas of the park should be grassed in accordance with the Conditions of the Development Permit and/or the approved Landscape Management & Siteworks Plan. At least 80% grass cover should be achieved prior to the Practical Completion inspection.

Stones and boulders that could become a hazard if thrown by mowing equipment should be removed, or alternatively the hazardous items are covered with at least 100 mm of topsoil. Topsoil profiles prepared for turfing or grassing should be free of deleterious material eg sticks, tree roots, and stones greater than 20 mm in diameter. Ensure new areas are married into existing levels and set-downs for hard surfaces are specified. Holes and depressions should be filled and trip hazards rectified during the establishment and maintenance period.

Grassed open activity areas should be larger than 10 m x 10 m. Where possible, provide a minimum gap of 3 m between trees and/or other structures (eg signs) in grassed areas to allow for mowing. Use a grass species that best suits the local conditions and proposed level of use. Stabilising strips of turf should be laid in overland flow paths or areas subject to regular inundation, alongside pathways, and around visitor facilities and sport and recreation facilities.

Grassing of ovals and sporting fields should be based on Council approved site-specific standards and specifications covering site preparation, drainage, topsoiling, fertiliser application and seeding.

4.8 PARK LANDSCAPING

4.8.1 Landscape Beds and Gardens

Landscaping is used to:

- Discourage graffiti on walls, for example, retaining walls and acoustic barrier fences.
- Break up large areas of hard landscaping, for example, car parks.
- Add visual interest and structure to extensive open areas.
- Create new spaces, nodes or buffers within the open space.
- Provide screening along site boundaries.
- Enhance areas of retained vegetation.

Plants should be selected to match the intended level of park maintenance and to reinforce the design with strong planting structure. Maintain visibility and the opportunity for surveillance along paths, and near facilities such as toilets, playgrounds and recreation nodes. Incorporate CPTED principles in the park landscape planning.

Gardens and hedges requiring regular maintenance should only be provided in high profile locations such as landmark/signature points, and parks with cultural heritage components or formal design themes (eg monuments, urban common parks). Temporary ornate landscaping used as part of sales and marketing strategy, will not be approved within parks.

Standard Drawing UMS 792 provides details of park planting beds.



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4.8.2 Edging

Edging should be installed in accordance with Standard Drawing UMS 794 at the interface of grassed and mulched landscape areas (excluding individual trees and remnant natural vegetation). A concrete edge should be constructed around gardens and landscape beds where there is no adjacent wall, pathway and/or pavement area. A timber edge can only be installed where the tree and shrub canopy will extend well beyond the mulched edge as plants mature. For example, a timber edge is acceptable around habitat rehabilitation areas, and landscaping that includes a prominent tree canopy (urban forests), but not garden beds.

Mulched areas that adjoin grassed areas should be shaped to allow easy mowing by tractor-drawn mowing equipment. The edging should be straight, or with long sweeping curves. Corners should be between 45° and 90°. Acute corners and repetitive short radius (snake-like) bends should be avoided.

4.8.3 Tree Planting

General

Tree planting is required in parkland to provide shade and to enhance landscape and habitat values. Tree planting requires careful planning to ensure long term benefits for future generations. Indiscriminate planting should be avoided. A planting plan that has explicit design intent with strong spatial definition should be prepared and forms part of the approved Landscape Management & Siteworks Plan.

Planting opportunities

The parkland environment provides many opportunities in the selection of tree species.

Trees for open parkland should be selected to provide visual interest through seasonal colour or form. Where possible, select tree species that cannot be used in street or private garden planting, because of size, spreading habit or root invasion potential. Existing mature trees should be integrated into the park design and planting plan.

For amenity planting, groups or avenues of trees of a single species or a combination of two or three species should be used, rather than scattered planting of multiple species. Where a park has a landscape character derived from existing vegetation, similar tree species should be planted to add to the character.

Canopy trees should be planted to provide future shade in car parks and near playgrounds, seats, and active recreation nodes such as basketball and netball facilities. As a minimum, shade trees should be incorporated every sixth car park bay.

Species selection

Tree species selection is critical in achieving a quality outcome for the planting scheme in a park. Particular attention should be paid to the following criteria when selecting tree species for a site.

- Soil type and structure.
- Aspect.
- Local and preferred park character.
- Natural or cultural heritage values on or adjacent to the site.
- Maintenance regimes.



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There are a number of attributes that should be evaluated when selecting trees for parks. The following have the potential to pose risks or cause damage to property if trees are planted in the wrong location:

- Toxicity.
- Fruits and seeds.
- Thorns.
- Limb shedding.
- Invasive roots.

Specimen trees planted within mown areas and car parks, and near paths and recreation facilities, should be of single trunk form and with lower branches that can be trimmed as the tree grows. This is to facilitate access by mowing equipment, to accommodate vehicle and pedestrian sight lines, and to maintain opportunities for passive surveillance.

The selection of trees should also reflect the purpose/function required. For example, to provide shade with the required maintenance character, select species that provide a shade canopy without creating potential hazards such as excessive limb fall. Adequate space should be provided around trees to avoid damage to pavements and park facilities by tree roots.

Hydraulic constraints should be considered in the selection of suitable species and spacing of trees in areas subject to flooding, such as land in the vicinity of waterways. Trees of single trunk form are preferred in these areas.

Planting and maintenance program

Tree planting should be undertaken in accordance with Standard Drawings UMS 791 and UMS 793. A weed-free mulched zone should be provided around trees planted within mown areas. Water and weed to ensure the trees are well established at the time of the Off Maintenance inspection, with trees conditioned to survive dry periods without supplementary watering.

4.8.4 Irrigation

Irrigation systems should be designed to an agreed life, either short term to assist with landscape establishment, or long term for ongoing park maintenance. Systems providing ongoing maintenance will only be accepted in high profile metropolitan parks and sport parks or landmark/signature point parks. The system should comply with a Council approved design, manufactured and installed to highest Council and industry standards. Irrigation systems that make use of recycled water or stormwater are preferred. 'As constructed' plans of the irrigation system should be provided to facilitate future Council maintenance.

At least one tap should be installed adjacent to or within each landscaped area and garden bed that will require periodic watering (refer Section 5.6.3).



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5.0 INFRASTRUCTURE REQUIREMENTS

5.1 GENERAL

This section defines the standards of park infrastructure that are acceptable to Council. Park infrastructure items should be provided in accordance with the Conditions of the Development Permit and/or the approved Landscape Management & Siteworks Plan. Infrastructure provision will vary in each park. The level and nature of infrastructure required or considered suitable in a park will depend on the agreed park type and its significance, which is established in the park design and development assessment process.

All infrastructure construction works, including use of hard and soft landscape materials and quality of workmanship, should comply with Australian Standards (eg *AS 1428 Design for Access and Mobility*) and the *Building Code of Australia* where relevant. The requirements of legislation such as the *Federal Disability Discrimination Act* and *Queensland Anti Discrimination Act* should also be met.

Infrastructure materials should be vandalism and graffiti resistant (refer to Council *Grffiti Prevention Guidelines*).

The use of innovative technologies and methodologies in the provision of park infrastructure, that contribute to environmental sustainability and the achievement of Council's Desired Environmental Outcomes, is encouraged (eg the use of stored stormwater for irrigation of landscaping and sporting fields or public toilet flushing).

The *Reference Specifications for Civil Engineering Works* define default provisions acceptable to Council for typical situations and designs. The following reference specifications are of particular relevance to park infrastructure.

- S110 General Requirements
- S150 Roadworks
- S180 Unit Paving
- S200 Concrete Work
- S210 Masonry
- S220 Woodwork

5.2 COLOURS

Unless otherwise specified and approved by Council, colours of park infrastructure (eg fences, seats, lighting, etc) should match the existing precinct or BCC region selection (supplied by Council). Colours should be based on Council's corporate palette for graffiti management as defined in Table B8.1.



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TABLE B8.1 BRISBANE CITY COUNCIL CORPORATE COLOUR PALETTE

BCC corporate colour	AS2700 standard colour*
Grey 1 Grey 2 Grey 3 Grey 4	N25 Birch Grey N45 Koala Grey N65 Graphite Grey X62 Dark Earth
Blue 1 Blue 2 Blue 3 Blue 4 Blue 5	B64 Charcoal B43 Grey Blue B62 Midnight Blue B41 Bluebell B23 Bright Blue
Red 1 Red 2 Red 3 Red 4	R54 Raspberry R52 Terracotta X53 Golden Tan R13 Signal Red
Green 1 Green 2 Green 3 Green 4 Green 5	G12 Holly G54 Mist Green T44 Blue Gum G33 Lettuce G26 Apple Green
Yellow 1 Yellow 2 Yellow 3 Yellow 4 Yellow 5	X31 Raffia Y24 Straw Y45 Manilla X21 Pale Ochre Y11 Canary
White 1 White 2 White 3 White 4	N11 Pearl Grey Y35 Off White X34 Driftwood Y34 Cream

* These colours are approximate matches only. Refer to Brisbane City Council Corporate Colour Palette for original colours. Standard Drawing UMS 113 includes colour swatches that have been scanned from the original corporate palette.

5.3 PARK ACCESS

5.3.1 Maintenance & Emergency Vehicle Access Points

One or more controlled maintenance (service) vehicle access points should be provided at strategic locations along the road frontages or internal roads and car parks of a park, to enable access for park maintenance and emergency purposes.

A driveway should be formed to the access point for occasional access by an industrial refuse collection vehicle, a medium rigid vehicle with trailer, and emergency vehicle. A controlled access facility, such as a removable bollard or lock rail (refer Section 5.4), should be installed at each driveway. A 3.5 m wide Type A reinforced concrete driveway (refer Standard Drawing UMS 221) should be provided between the road and the park boundary. However, Council may require alternative all weather access materials to be used in certain situations, for example in a bushland setting.



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If the maintenance access point is located on a major road or any road with a speed environment of > 50 km/h, a setback or queuing area should be provided between the road and the controlled access facility. The setback should be sufficient to allow an industrial refuse collection vehicle or a medium rigid vehicle with trailer to park next to the controlled access facility without obstructing traffic flow. Alternatively, locate the access facility on a minor road with a speed limit of 50 km/h or less.

5.3.2 Internal Park Maintenance & Emergency Access

Internal access for park maintenance and emergency vehicles should be planned and located in accordance with the following principles:

- Provide for vehicular access to park facilities and areas requiring regular cleaning and ongoing maintenance (toilets, playgrounds, refuse bins, barbecues, mown areas, firebreaks, etc). Wherever possible, a 3.5 m wide all weather access should be provided to these facilities and areas. The access would normally follow grassed areas and internal tracks, but a formed track (preferably with a permeable surface) may be needed through wet areas.
- Provide maintenance access to service other infrastructure, such as utilities, manholes and stormwater quality improvement devices.
- Where possible separate maintenance access from recreational pathways, such as bikeways.
- Ensure bridges and culverts are designed for maintenance vehicles.
- Emergency vehicle access should be provided to high use activity spaces in a park, including those that are remote.

5.3.3 Primary Public Access Point

One or more primary public access points should be provided at strategic locations along the road frontages of a park, to enable pedestrian and, in some instances, vehicular access to the park. Primary public access points should be designed and located generally in accordance with the following principles:

- Separate pedestrian and vehicular access points.
- Separate from residences where possible.
- Pedestrian access should be designed to *AS 1428 Design for Access and Mobility* (eg continuous accessible path of travel). The Human Rights Commission Advisory Notes on Access to Premises (including parks) should be used as a guide (refer to Glossary).
- Integrate park access with adjacent developments such as transport nodes, schools, shops and community facilities, path and road networks, and anticipated desire lines of travel.
- Incorporate other elements to emphasise entry points such as signage.
- Where a public access road or car park may be closed at night (eg to reduce park vandalism and nuisance to neighbours), a metal lock gate should be installed in accordance with Standard Drawing UMS 728.



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5.3.4 Pathways/Pavement Areas

Pathways and pavement areas may be provided in a park, to provide all weather pedestrian access to park activity areas and key-park features and facilities (eg lookouts, toilets), as well as non-motorised commuter access through a park. The type of pathway and pavement area in a park should be consistent with the park type and its significance, and any unique park characteristics, such as heritage values.

The standards for provision of pathways and pavement areas in parks are listed in Table B8.2. Pathways and pavement areas should be designed and located in accordance with the following principles:

- Reflect anticipated pedestrian desire lines where appropriate.
- Provide convenient links to pedestrian infrastructure in the surrounding area (eg footpath network, public transport node, shopping centres).
- Provide access for all where feasible. The minimum path width is 1.2 m (desirable 1.5 to 1.8 m). Class 2 and 3 tracks and trails (as defined in *AS 2156 Walking Tracks series*) are generally of a lower standard where the topography is unsuitable or because of other constraints.
- Take advantage of park attributes (eg internal and external views, special features).
- Minimise impacts on existing landform and vegetation.
- Incorporate other park infrastructure along pathways and within pavement areas where appropriate (eg signage, lighting, park furniture, shade trees).
- Incorporate appropriate drainage and land stabilisation infrastructure as required.
- Where possible incorporate a level 0.6 m shoulder (maximum crossfall of 1V:40H) along both sides of a pathway.
- Pathways and pavement areas adjacent to watercourses, should generally achieve at least a 2y ARI flood immunity standard for all flooding sources except Brisbane River. In the case of Brisbane River and the Moreton Bay area, the design level should be a minimum of 2.1 mAHD. Where the site is subject to more than one type of flooding sources, the more stringent criteria will apply. Council approval is required for lesser standards.
- Pedestrian paths in parks with an informal design theme, and tracks and trails in natural areas, should incorporate long sweeping bends and meanders, with crests and gentle rises and falls, to create interest and assist drainage. Long straight flat sections, unvarying grades, short zigzags and unnatural repetitive snake-like bends should be avoided.
- Where appropriate incorporate existing tracks and clearings into the pathway network in natural areas, to reduce the requirement for clearing of existing vegetation.
- Where unavoidable, steps and/or timber stairs and ramps may be installed in conjunction with pathways. The tread and/or riser materials used for steps should match the connecting pathway, generally in accordance with Standard Drawings UMS 741 and UMS 742.



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Part B Infrastructure Elements
Chapter 8 Parks

TABLE B8.2 PATHWAY/PAVEMENT AREA REQUIREMENTS

Park type	Setting	Standard
Local or district parks: Informal use, sport, landscape amenity and corridor links	Low to moderate use pathways through natural vegetation (including Class 2 walking track as defined in AS 2156)	Decomposed granite with timber edge restraint (Standard Drawing UMS 744)
	Low to moderate use pathways alongside vegetated waterways	Decomposed granite is only acceptable where: <ul style="list-style-type: none"> ▪ There is a well developed canopy of natural vegetation ▪ High velocity overland flow is unlikely to cause path erosion ▪ The trail will not be subject to regular inundation (ie trail is located above the 5y ARI flood level) In other areas the standard for moderate to high use pathways applies
	Moderate to high use pathways and pavement areas including paths through natural vegetation and along waterways	Asphalt with timber or other acceptable edge restraint (Standard Drawing UMS 745)
		Coloured aggregate spray seal with timber or other acceptable edge restraint (Standard Drawing UMS 746)
		Broom finish concrete (Standard Drawing UMS 743)
Moderate to high use pathways and pavement areas in parks with formal design themes	Exposed aggregate concrete (Standard Drawing UMS 743) Other pathways/pavement areas of a higher standard may be acceptable, if designed to complement any unique park or precinct characteristics	
Urban common parks	Suburban Centre Improvement Precincts	Paved pathways/pavement areas to comply with Council's <i>Centres Detail Design Manual</i>
	Other settings	Subject to Council approval, other pathway specifications may be acceptable where intended to match any special type used in the adjacent suburban centre
Metropolitan parks: Informal use and sport		In accordance with Council approved park specific standards and specifications



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Park type	Setting	Standard
Natural areas	Low use pedestrian tracks and trails (Class 3 walking tracks as defined in AS 2156)*	Earth or decomposed granite pathway with timber or natural rock edge restraint where required (Standard Drawing UMS 747). Tracks and trails with gradients steeper than 1V:20H are to incorporate water bars (at spacings based on the track gradient and surface material) and include other drainage treatments as appropriate, to reduce the susceptibility of the surface to erosion A maximum grade of 1V:6H and crossfall of 1V:18H is preferred (only to be exceeded for short sections) Steps may be required on steeper sections
	Moderate to high use pedestrian paths and tracks (Class 1 and 2 walking tracks as defined in AS 2156)*	Any pavement listed above except concrete and natural earth walking track Exposed aggregate concrete is generally restricted to pavement areas around visitor facilities Hardwood timber boardwalk for formal access to natural features and to cross wetlands (refer Section 5.3.8)

* Refer *Standard Walking Track Construction Manual* (Brisbane City Council, October 1998) for specifications on pathways in Natural Areas. A copy can be provided on request to assist with track planning and design.

5.3.5 Internal Park Roads

Roads may be provided in a park to provide vehicular access to park activity areas and other key park features. Road design and layout should not impact on the park useable space. Roads and parking areas should usually be kept to the edges of parks to minimise the impacts, such as conflicts with pedestrians and reduced visual amenity. In larger parks internal roads may extend into the park to create a sense of arrival, without impacting on park values.

Subject to the anticipated level of use by large vehicles such as tourist buses, a reduced pavement width and a reduction in design speed is preferred in parkland, by elimination of the allowance for parking lanes where appropriate, and the use of speed control treatments. Unless specified otherwise by Council, a 5.5 m wide pavement designed and constructed to the standard of a Neighbourhood Access road (minimum traffic loading of 1.5×10^5 ESA as defined in Chapter 1 of Part B of this document), should be provided.

Asphalt roads should have a concrete edge restraint or kerb only (Standard Drawing UMS 748), incorporating principles of Water Sensitive Urban Design where required by Council (refer Section 4.6). Kerb and channel (refer Standard Drawing UMS 211) is only required where runoff from the road pavement could erode the road shoulders, or could compromise maintenance operations and/or values of the adjacent parkland.



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5.3.6 Car Parks

Car parking spaces within a park should be provided in accordance with Table B8.3, to facilitate off street parking for park visitors and convenient pedestrian access to park activity areas and other key park features. Council may approve a variation to the number of car spaces where the demand for car parking or site constraints necessitate a different standard.

Install concrete edging to car parks (Standard Drawing UMS 748). Car stops should be specified where there is no kerb and channel, bollards or barriers adjacent to car park bays, and an improperly parked car could damage adjacent vegetation or infrastructure or interfere with pedestrian movements. Tree planting should be undertaken to provide future shade (refer Section 4.8.3), and incorporate Water Sensitive Urban Design features into the drainage plan where required by Council (refer Section 4.6)

TABLE B8.3 CAR PARK REQUIREMENTS

Park type and setting	Standard
Local informal use parks, landscape amenity and corridor link parks	Car parking spaces not required
District parks with informal recreation facilities such as picnic nodes and dog off leash areas	10-20 car parking spaces
District parks with high use facilities such as major playgrounds. Metropolitan parks with large scale informal recreation facilities	30-50 car parking spaces + 2 bus parking spaces
Parks with sporting facilities	In accordance with Transport, Access, Parking and Servicing Planning Scheme Policy
Natural areas within the designated conservation area under City Plan	Up to 10 parking spaces unless otherwise approved in a Natural Area Management Plan
Parks in industrial areas	Truck pull-up area

5.3.7 Bikeways

Bikeways may be provided in a park, to provide cyclist access to park activity areas and other key park features, as well as non-motorised commuter access through a park. Where there is no specific requirement listed in the *Bicycle Brisbane Plan*, any proposal to construct a bikeway in a park should be assessed carefully to determine whether a pedestrian path could provide a satisfactory alternative. This is particularly so where a wide pavement could compromise other park values (such as biodiversity, landscape amenity, park visitor safety), the pathway is not connected to a district network, and the level of expected cyclist use will be low.

Bikeway network planning and design are described in Chapter 1 of Part B of this document. Bikeways and high use pathways in parks should incorporate threshold treatments, signage, and textured surface materials where appropriate, to warn cyclists and pedestrians of intersections and other hazards. Shared bikeways in parks should provide for disability access, as specified in *AS 1428 Design for Access and Mobility*.



5.3.8 Boardwalks and Pedestrian Bridges

Boardwalks and bridges may be provided in a park, to provide pedestrian and cyclist access to park activity areas and other key park features, as well as non-motorised commuter access through a park. All boardwalks and pedestrian bridges, including quality of workmanship should comply with AS 2156.2 *Walking Tracks Infrastructure Design*, and the requirements detailed in Chapter 5 of Part B of this document.

5.4 FENCING AND BARRIERS

Fencing and barriers should be provided along road frontages of a park, to prevent illegal vehicle access and provide protection from potential hazards. Safety fencing may also be required in association with infrastructure such as some playgrounds. The type of fence or barrier to be provided in a park should be consistent with the park type and its significance, generally in accordance with Table B8.4.

All fences and barriers should be square and true to line. Fence rails and the tops of bollards should generally follow the slope of the land, without dips and bumps. Bollards are preferred at tight corners along the road frontage boundaries. Hydraulic constraints should be considered in the design and placement of a fence below the flood regulation line or across an overland flow path (refer to Chapter 3 Part B of this document).

TABLE B8.4 FENCING AND BARRIER REQUIREMENTS

Location/setting	Fencing standard
Road frontage: Local informal use and corridor link parks	Timber log barrier fence (Standard Drawing UMS 244) <u>and/or</u> dome bollards (Standard Drawing UMS 722) One or more lock rails (Standard Drawings UMS 729)
Road frontage: District and metropolitan informal use and sport parks, landscape amenity parks	Hardwood timber post and rail barrier fencing (Standard Drawing UMS 732) <u>and/or</u> hardwood angle topped bollards (Standard Drawing UMS 722) One or more lock rails (Standard Drawings UMS 730 and 731) Other fences/barriers of a higher standard, if designed to complement any particular park or precinct character
Road frontage: Urban common parks	Cast aluminium bollard barriers in accordance with the Brisbane City Council's <i>Centres Detail Design Manual</i>
Natural areas	Hardwood bollard barriers (Standard Drawing UMS 722) <u>and/or</u> hardwood timber post and rail barrier fencing (Standard Drawing UMS 732) along road frontage near public entrances and facilities. One or more lock rails (Standard Drawings UMS 730 and 731) All other boundary fencing to be of an approved design to deter illegal access and allow the safe movement of fauna
Parks with heritage values or character	Heritage bollard barriers (Standard Drawing UMS 721) on road frontages Other boundary fences in accordance with the provisions of an approved Heritage Plan <u>and/or</u> a heritage citation in the State Heritage Place register
Entrances to pedestrian pathways/pavement areas	Where maintenance vehicle access is required, removable bollards with posts to match park fencing/barrier type <u>or</u> other approved lockable barrier (refer Standard Drawing UMS 724)



Location/setting	Fencing standard
Unfenced park boundary	Boundary markers where the park boundary is not clearly defined and the park could be perceived as private property (Standard Drawing UMS 723), refer to Chapter 3 Part B of this document for cost sharing of boundary fencing
Dog off leash areas (refer Section 5.10.5)	PVC coated chain mesh fence, 0.9 m high*, with galvanised pipe top and bottom rail and posts in accordance with Standard Drawing UMS 726 Incorporate one or more self-closing single pedestrian and dog access gates, and double maintenance vehicle access gates in accordance with Standard Drawing UMS 727 Vehicle access gates for maintenance should be padlocked
Safety fencing	Galvanised tubular handrail with chainwire (Standard Drawing UMS 241) where there is a danger of children gaining access to high risk areas (eg around stormwater drain head walls, outlets and stormwater quality improvement devices) or where the drop height exceeds 1.0 m Where the drop height exceeds 1.5 m, a powder coated steel fence (hunter rod top or approved equivalent colour BCC Grey 3) capable of sustaining the imposed actions specified in AS 1170. Fence off hazards in district and metropolitan parks with an approved fence to AS 1926 (eg BCC Grey 3 powder coated steel pool fencing, refer Standard Drawing UMS 247) Waterways, playgrounds, detention basins, lakes and constructed wetlands in parks are not fenced, except where unusual or unexpected hazards exist (eg refer to Section 5.7.1)

* A 1.2 m high fence may be required where the off leash area is subject to heavy use and/or dog escapes could cause a particular hazard eg near playgrounds, schools, and bikeways

5.5 SIGNAGE

General

Signage is provided in a park to promote safe and appropriate use. Where suitable, signs should be co-located on the same set of posts. Signage should be mounted at or below eye level except where parked vehicles could obstruct viewing, with consideration given to ease of reading from a wheelchair. Placing signage in front of vegetation or other background will reduce the landscape impact. Prominent signage silhouetted against the sky should be avoided. Letter size should be based on the proximity of the sign to the intended position of the reader.

Signage should be kept to a minimum in parks, and convey positive messages for visitors wherever possible.



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Regulatory and warning signage

Standard BCC regulatory signs (eg ordinance signage) may be provided at the park's primary public access point/s and at strategic locations along the road frontages of the park and at activity nodes if appropriate. Traffic signs should be provided generally in accordance with the *Manual of Uniform Traffic Control Devices* (MUTCD, Queensland Department of Main Roads).

Warning signs should be installed at sites of potential public risk in the park, such as creeks liable to flooding. Symbol signs should be in accordance with *AS 2899 Public Information Symbol Signs*. All traffic and warning signs should be installed before a park is accepted 'On Maintenance'.

Advisory signage

Directional signs may be provided at the park's primary public access point/s and other key points of access in the park, such as entry/ exit points to major recreational pathways. Walking track markers in natural areas should comply with *AS 2156.1 Walking Tracks Classification and Signage*.

Descriptive and interpretative signage

A standard BCC park name sign may be provided at the park's primary public access point/s, in accordance with Standard Drawings UMS 771, UMS 772, and UMS 774. Minor park name signs (Standard Drawing UMS 773) may be provided at secondary entrances to larger parks. The park name should be determined in accordance with the Park Naming Policy, and Council approval of the name is required prior to the installation of the sign.

Active and Healthy park name signs (refer Standard Drawings UMS 771, UMS 772, UMS 773 and UMS 774) are installed in selected parks only. Active and Healthy signage requires the specific approval of Council. Further details are provided in the Active and Healthy Precincts and Parks Signage Manual (Brisbane City Council, 2003).

Information signs may be provided at the park's primary public access point/s and any sites of special interest in the park, such as heritage sites. The content of proposed descriptive and interpretative signage should be submitted for approval with the Landscape Management & Siteworks Plan.

Advertising signage

Advertising signage is generally prohibited in parks, except for limited signage erected to promote activities on leased parkland. All advertising signage requires the specific approval of Council.

5.6 UTILITIES

5.6.1 Water Supply

A 25 mm water service connection is required at the park boundary with a water meter and at least one vandal proof water tap (refer Section 5.6.3). Water supply connections should be located within 25 m of a maintenance vehicle access point (refer Section 5.3.1) to enable easy access for maintenance purposes. Water supply connections should be located, designed and constructed to minimise impacts on existing landform and vegetation. Locate water supply connections and back-flow prevention devices away from public access points and within garden or landscape beds where possible, to maintain visual qualities.



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5.6.2 Rainwater Tanks

Rainwater tanks are required on buildings and shelters. They must be designed and installed to the standards described in the Australian Standards publication *HB 230 – 2006 Rainwater Tank Design and Installation Handbook*, and *The Water Supply Code of Australia WSA 03 - 2002 Supplement 1.1 Integrated Rainwater Tank Systems*, published by the Water Services Association of Australia.

5.6.3 Maintenance Taps

Taps are provided in a park to facilitate cleaning and maintenance of infrastructure, turf and landscaping. Maintenance taps (Standard Drawing UMS 715) are required where a reticulated water supply or pressurised potable water is available. Taps should include a 20 mm Council vandal proof hose tap fitting.

Taps should be located near the edge of the landscaping, turf or infrastructure to be maintained. The tap should not pose a trip hazard or interfere with maintenance activities such as grass mowing. Maintenance taps may be attached to drinking fountains where appropriate (refer to Section 5.8.1).

5.6.4 Electricity

An electricity supply pillar of adequate capacity to meet the existing and future power demands of the park is required on at least one park frontage to cater for future embellishments. Electricity may be required for internal park lighting and other electrical facilities such as barbecues. Electricity supply connections should be located within 25 m of a maintenance vehicle access point (refer Section 5.3.1) to enable easy access for maintenance purposes. The electricity connections should be located, designed and constructed to minimise impacts on existing landform and vegetation.

5.6.5 Sewerage and Drainage

Sewerage and stormwater drainage connections should be provided at the park boundary if public toilets or buildings are planned in the park. The sewerage and stormwater connections should be located at the closest point to the proposed development site in the park and denoted by permanent markers .

5.6.6 Lighting

Lighting may be provided in a park to facilitate safe use of infrastructure, without encouraging inappropriate after hour use to the detriment of neighbours and/or park amenity. Lighting should incorporate a time switch where extended after hours use is discouraged. Lighting systems should be readily maintainable and approved by Council. Alternative technologies, such as the use of solar lighting where mains power is not available, should be applied as appropriate. Bollard lighting should be considered where shadows from overhead lighting could cause a safety risk, and the lights will not be subject to a high level of vandalism.

Amenity lighting (eg spot lighting of signature trees, monuments, artwork and signage) and the lighting of sporting fields (whether or not in accordance with *AS 2560 Sports Lighting*) requires the specific approval of Council.

Lighting systems (roads, car parks, pathways and outdoor areas) should provide adequate illumination in accordance with *AS/NZS 1158 Road Lighting* and Energex Policies and Standard Work Practices (refer to Chapter 7 Part B of this document). Lighting systems should not cause nuisance to surrounding properties in accordance with *AS 4282 Control of the Obtrusive Effects of Outdoor Lighting*.



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Lighting should generally be provided in high use activity areas such as:

- Along pathways and bikeways where use is expected to exceed 30 persons per hour between dusk and 7:00 pm and 20 persons per hour between 7:00 pm and 9:00 pm (or similar levels of use in the early morning in winter before sunrise).
- Where hazards exist at a site that is likely to be visited after hours.
- At picnic nodes, recreation facilities and high use playgrounds in district and metropolitan parks.
- Outside public toilets that are not locked after sunset.
- Roads and car parks.
- Urban common parks.

5.7 PLAYGROUNDS

5.7.1 General

Playgrounds in parks should be designed, located and constructed in accordance with the following requirements:

- Certification is required that the play equipment, impact attenuation surfacing and associated landscaping comply with the relevant Australian Standards (AS/NZS 4442, AS/NZS 4486, AS 4685.1, AS4685.2, AS4685.3, AS4685.4, AS4685.5 and AS4685.6) and the play equipment manufacturer's specifications.
- Subject to spatial and other site constraints, playgrounds should comply with the design principles outlined in Standard Drawing UMS 754.
- Ensure play elements complement and enhance other recreation opportunities in a park. Where possible playgrounds should be linked to other areas of play including open activity areas, natural areas and recreation facilities such as bicycle paths and basketball half courts.
- Ensure play equipment is readily maintainable and approved by Council. A list of preferred Council suppliers can be provided to assist with the selection of suitable equipment. Refer to Standard Drawing UMS 711 for contact details of Council's Local Asset Services park technical officers.
- Playground design should achieve a balance between carer supervision and independent play. Carer involvement in the play of young children is essential to reduce the risk and severity of accidents. However, older children need to be able to play without constant adult supervision, to maximise opportunities for social development.
- Provide a safety fence (refer Section 5.4) between playgrounds and a main road, a drain or water body with standing water, or a commuter bikeway, when play elements are less than 20 m from the road frontage, bikeway or drain/water body.
- Play spaces for toddlers may be fenced as a separate space within a district or metropolitan playground, to reduce the likelihood of intimidation by the more boisterous play of older children.
- Apart from the circumstances described above, the fencing of playgrounds is not encouraged. Carers can develop a false perception of safety within a fenced playground.
- CCA treated timber must not be used in the construction of play equipment and should be avoided as a component of fencing, furniture and landscaping installed within playgrounds.



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- The installation of water play elements is encouraged within district and metropolitan playgrounds, but requires specific involvement and approval of Council during the concept development stage to undertake risk analysis and to plan for sustainable water use.
- Use alternative technologies where appropriate for playgrounds, such as recycled materials.
- Incorporate shade (refer Section 5.7.3) and seating and other park furniture (refer Section 5.8.1).

The type of playground provided in a park should be consistent with the park type and its significance, established during the park design and development assessment process and any unique park characteristics, such as natural values. The standards for provision of playgrounds in parks are listed in Table B8.5.

TABLE B8.5 PLAYGROUND REQUIREMENTS

Playground type and setting	Standard
Local playground: Within a local or district informal use park, or as a subsidiary development within a sport park	<p>Locate playground within 500 m of 95% of residences</p> <p>Provide play elements suitable for children up to 6 years of age (up to 9 years preferred), this requirement may be varied where the demographics of the surrounding suburb include a high proportion of older age groups (refer Section 5.10.1)</p> <p>Siting and design requirements to comply with Standard Drawing UMS 753</p> <p>Refer Standard Drawing UMS 754 for general guidance on playground design for children of various ages and children with a disability</p>
<p>District playground: Attractive setting in district or metropolitan park, with appropriate infrastructure (toilets, parking, picnic node, links to district pathway network, open activity areas) to complement play experience</p> <p>Not located near large sport and other facilities that can generate high demand on infrastructure at peak times</p>	<p>Intended for residents within a 2-5 km radius</p> <p>Catering for families and suitable for play by all age groups including 10 years and over</p> <p>Provision for social, creative and physical play</p> <p>Proximity to suburbs with young families</p> <p>Generally complies with design principles listed in Standard Drawing UMS 754</p>
<p>Metropolitan playground: Metropolitan park with supporting infrastructure for intended level of use</p> <p>Not located near large sport and other facilities</p>	<p>Intended to benefit all the residents and visitors to Brisbane, or generally within a 10-25 km radius</p> <p>Play elements are of a larger scale, providing more activities and a greater challenge, and catering for higher visitor numbers than district playgrounds</p> <p>Located in proximity to public transport (where possible)</p> <p>Complies fully with design principles listed in Standard Drawing UMS 754</p>



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5.7.2 Undersurfacing

Undersurfacing of playgrounds should comply with Standard Drawing UMS 755 and the following Council requirements.

- Grade the site to produce a gentle fall (maximum 1V:50H) towards the perimeter of the playground to enhance drainage, particularly away from fall zones and areas of high traffic or activity. A shallow swale or low bund may be required at strategic locations around the playground to divert overland flow.
- Typical drainage treatment will include the installation of a robust plastic agricultural drain, fitted with a filter sock, around the outer edge or below the undersurfacing area and draining to the stormwater system, soakage pit or dispersal structure.
- Construct an extruded concrete edge around the perimeter of the playground undersurfacing and fill the entire area with an appropriate impact attenuation material, in accordance with *AS/NZS 4422*. The edge must be set back at least 2.5 m from any item of play equipment to provide adequate circulation and maintenance space.
- All features within 1.0 m of the proposed playground (eg shade structure posts, seats and trees), should be incorporated within the boundary of the undersurfacing by at least 0.5 m, to enhance the aesthetics of the playground and for ease of maintenance of the park. (Note: Such features should not be located within the fall zone of play equipment.)
- Impact attenuation should be provided over the entire fall zone and circulation space around play equipment, as specified in the *AS 4685 series*, and/or by the equipment manufacturer.
- Loose fill (softfall) impact attenuation material should be screened 5 mm to 10 mm pine bark, installed to a minimum depth of 250 mm uncompacted or 200 mm compacted. Where fixings or anchors are required they should be completely concealed. The loose fill material should be inspected regularly throughout the maintenance period and further fill added if necessary, to maintain the required depth.
- Solid impact attenuation surfacing may be pre-formed matting or wet pour synthetic surfacing. As a minimum solid impact attenuation surfacing should be installed under swings, scale swings, slippery dip exits, fireman's poles, and at the entrance and exits of flying foxes. Coverage should extend the length and width of a flying fox unit. Solid impact attenuation may also be required around water play and in playgrounds that provide access for disabled children.
- All finished grass and impact attenuation surfaces should be flush with the concrete edge and internal solid surfacing if applicable, to avoid trip hazards.



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5.7.3 Shade

Shade should be provided around playgrounds to reduce the harmful effects of UV radiation, and to reduce heat. Radiation is at peak levels about four hours either side of midday, whereas heat from the sun can impact on play for longer periods. In Brisbane the source of shade should be offset slightly to the north and west of the play elements, to maximise the benefits.

The siting of playgrounds and infrastructure such as seating should take into account the relationship to existing mature trees. Clever use of planting should be used to supplement natural shade (in conjunction with temporary shade structures if required whilst the planting becomes established). Advanced stock of suitable tree species (refer Section 4.8.3) should be planted to provide future shade around playgrounds.

More permanent shade structures such as shade sails are often required over larger play elements in district and metropolitan playgrounds. Shade structures are not desirable within local playgrounds, except where the park is totally devoid of natural shade.

Shade structures should be RPEQ certified, designed and constructed in accordance with relevant Australian Standards, and readily maintainable and approved by Council. A list of preferred Council suppliers can be provided to assist with the selection of a suitable structure. Refer to Standard Drawing UMS 711 for contact details of Council's Local Asset Services park technical officers.

5.8 VISITOR FACILITIES

5.8.1 Park Furniture

Furniture in parks should be designed, located and constructed in accordance with relevant Australian Standards, and the following requirements:

- Ensure park furniture complements and enhances the recreation opportunities.
- Ensure park furniture is readily maintainable and approved by Council. Council advice should be obtained on a suitable suite of furniture for installation in parks. A list of preferred Council suppliers can be provided to assist with the selection of park furniture. Special requirements exist for parks such as urban common parks, parkland along the inner reaches of the Brisbane River, foreshore parks, and informal use metropolitan parks. Refer Standard Drawing UMS 711 for contact details of Council's Local Asset Services park technical officers.
- Where appropriate furniture from the Brisbane City Council *Centres Detail Design Manual* (or furniture of an equivalent approved standard) should be selected for high profile parkland with a formal design theme.
- Provide a continuous accessible path of travel to furniture.
- Use alternative technologies where appropriate, eg recycled materials.



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Bench seats

Bench seats should be located to provide an interesting outlook and to maximise summer and midday shade. Seats should be provided in close proximity to a playground or active recreation node, around sporting fields, at viewpoints, and at resting points along pathways. Care should be taken when siting seats along isolated pathways to minimise opportunities for assailants to use the seat to conduct a surprise attack. In these locations, seats should be set well back from the pathway.

Rubbish bins

The high cost of servicing means a limit is placed on rubbish bin numbers. Rubbish bins are only provided under exceptional circumstances in local, corridor link, and landscape amenity parks, and in natural areas. Park visitors are encouraged to take their litter home in these parks (refer Table B8.6).

Where possible, bins should be located near a road or the perimeter of the park where they can be serviced without the need to drive the refuse collection truck into the park. A bin enclosure with a 250 litre wheelie bin is the preferred standard bin type for parks. Special bin types are required in dog off leash areas and high profile locations.

Barbecues

The high cost of servicing and high capital cost of barbecues means a limit is placed on their numbers. Barbecues are not provided in local, corridor link and landscape amenity parks where demand is low, unless a special need can be demonstrated. Park visitors are encouraged to bring their own portable barbecue to local parks if required. Where barbecues are provided, they usually form part of a picnic node (refer Section 5.8.2).

Shelters and gazebos

A covered picnic table or equivalent facility may be provided in conjunction with a playground or other activity space. Gazebos may be provided in attractive park settings for weddings and group functions. The minimum shelter size (preferred) is 15 m². However, the maximum footprint of shelters and gazebos (the sum of all such structures within a park) is 25 m² in a local park and 100 m² in district and metropolitan parks.

All shelters and gazebos with a roof catchment area exceeding 15 m² are to include guttering, downpipes and stormwater pipe connection to an underground concrete rainwater storage tank (refer Section 5.6.2). The tank is to be of at least 5000 litre capacity, and located where all-weather access is available to make it possible for park maintenance vehicles to draw water from the tank.

Drinking fountains and bubblers

Drinking fountains or bubblers should be provided along district and metropolitan pathway and bikeway networks. Drinking fountains or bubblers are also required near playgrounds and active recreation nodes where visitor use is high. A dog drinking bowl is added where dogs are exercised, but not near playgrounds and other areas of active recreation activity.

The type of park furniture should be consistent with the park type and its significance, established during the park design and development assessment process and any unique park characteristics. The standards for provision of park furniture are listed in Table B8.6.



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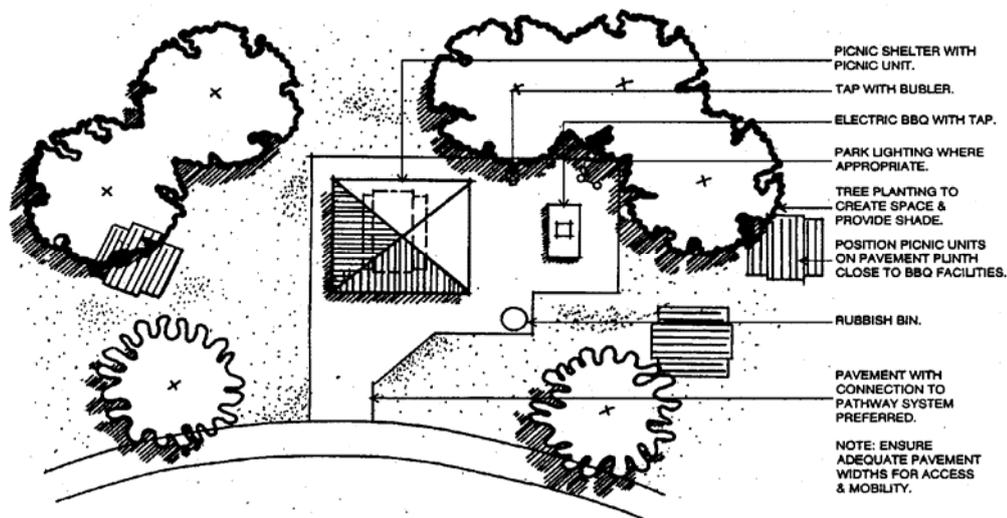
TABLE B8.6 PARK FURNITURE REQUIREMENTS

Park type	Setting	Standard
Local parks	Activity space (eg playground)	At least 2 bench seats
	Local playgrounds where space is available and usage is high	1 x shelter and picnic table (Standard Drawings UMS 756, UMS 757 and UMS 760)
	Near activity spaces with regular usage (eg playground)	At least one bubbler per park <u>without</u> dog bowl (Standard Drawing UMS 714)
	Parks located in industrial areas and adjacent to community facilities	At least one shelter and 2 picnic tables (Standard Drawings UMS 756, UMS 757 and UMS 760)
	Along pathways linked to a district network	1 x tap & bubbler <u>with</u> dog bowl (Standard Drawing UMS 714)
District parks	Activity space – viewpoint, playground, recreation node, sporting field	At least 2 bench seats per activity space
	Activity space with regular usage – playground, recreation node, sporting field	At least one bubbler <u>without</u> dog bowl per park (Standard Drawing UMS 714) <u>or</u> at least one drinking fountain per park in parks with a formal design theme (Standard Drawing UMS 716)
	Picnic area where the anticipated level of use does not justify the complete set of picnic node furniture (refer Section 5.8.2)	A picnic shelter and 2 picnic tables, one of the tables to be undercover within the shelter (Standard Drawings UMS 758, UMS 759 and UMS 760) If appropriate at least 1 rubbish bin (Standard Drawing UMS 712)
Parks with a dog off leash area	Within the off leash area	At least 2 bench seats At least 1 tap & bubbler with dog bowl (Standard Drawing UMS 714)
	Outside the off leash area	At least 1 dog rubbish bin near the entrance (Standard Drawing UMS 713)
District informal use parks District sport parks Corridor link and landscape amenity parks	Along pedestrian pathways and bikeways	At least one bench seat per 500 m of pedestrian pathway or bikeway, and up to one bench seat per 60 m in areas of high use by people with ambulatory disabilities
	Along district and metropolitan pathway and bikeway networks where reticulated water is available	At spacings of less than one km: 1 x bubbler with dog bowl (Standard Drawing UMS 714) <u>or</u> 1 x drinking fountain in parks with a formal design theme (Standard Drawing UMS 716) <u>or</u> 1 x drinking fountain to a higher standard, where required to match existing park or precinct furniture

Park type	Setting	Standard
Local and district parks	Within or adjoining industrial areas, parks with a barbecue, and parks near a shop, school or community facility likely to generate a large volume of litter in the park	At least one rubbish bin (Standard Drawing UMS 712), smaller bins (Standard Drawing UMS 713) are only acceptable where space is limiting (eg on a boardwalk) or expected litter volumes do not justify the larger capacity bin
Urban common parks	Near suburban centres	Adequate provision of high quality park furniture (bench seats, rubbish bins, drinking fountains, etc) consistent with the anticipated level of park use
Metropolitan parks and natural areas	All settings	Furniture in accordance with park specific requirements (supplied by Council)

5.8.2 Picnic Nodes

Picnic nodes should be located at attractive, shady and accessible locations in district and metropolitan parks and natural areas. They usually incorporate a shelter, tables, barbecue, refuse bin, tap and drinking fountain. The indicative layout plan (Figure B8.1) and Standard Drawing UMS 751 show a preferred relationship between facilities and items of furniture in a picnic node.



INDICATIVE PICNIC NODE

FIGURE B8.1



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Picnic nodes in parks should be designed, located and constructed in accordance with relevant Australian Standards, and the following general requirements:

- Locate picnic nodes at focal points or adjoining features or places of special interest in a park, but not where they will detract from that feature.
- In natural areas, picnic nodes are located in accordance with the approved Natural Area Management Plan.
- Ensure picnic nodes complement and enhance other recreation opportunities in a park. They should be sited in conjunction with playgrounds and/or other activity spaces with links to facilities such as bicycle paths.
- Ensure picnic nodes have continuous accessible path of travel from car parks or adjoining roads and park facilities.
- Ensure picnic nodes have all weather vehicle access for regular cleaning and maintenance.
- Ensure the infrastructure provided in picnic nodes is readily maintainable and approved by Council.
- Use alternative technologies where appropriate (eg solar energy where mains power is not readily available, rainwater harvesting).

The type of picnic node provided in a park should be consistent with the park type and its significance, established during the park design and development assessment process and any unique park characteristics, such as natural values. The standards for provision of furniture in picnic nodes are listed in Table B8.7.

TABLE B8.7 PICNIC NODE REQUIREMENTS

Park type	Standard
District informal use and sports parks	1 x single or 1 x double electric barbecue* (Standard Drawings UMS 717 and UMS 718) 1 x picnic shelter (Standard Drawings UMS 758, UMS 759 and UMS 760) 3 x picnic units (tables) per barbecue plate, at least one of the picnic units is located undercover within the shelter 1 x rubbish bin (generally in accordance with Standard Drawing UMS 712) 1 x light (only within parks where after hours use is encouraged) 1 x tap and bubbler (generally in accordance with Standard Drawing UMS 714) <u>or</u> 1 x drinking fountain in parks with a formal design theme (generally in accordance with Standard Drawing UMS 716)
Metropolitan parks	Multiple modules of a district park picnic node as required
Natural areas	Picnic node furniture in accordance with area specific requirements (supplied by Council)
Landscape amenity parks/ corridor link parks/ local parks	Picnic nodes usually not provided Individual items of park furniture may be required (refer Section 5.8.1)

* Council will only accept wood burning rather than the standard electric barbecues in picnic nodes where mains power is not available, where smoke will not interfere with neighbours, where the risk of bushfire is low, and where fuel collection will not cause environmental harm



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5.9 BUILDINGS

Buildings in parks, including toilet buildings (refer Section 5.9.1), should be sited, designed and constructed in accordance with the Building Code, Australian Standards and the following general requirements:

- Building siting and design in parks requires the specific approval of Council. All proposed buildings in parks require separate development approval. Only a few exceptions apply in district and metropolitan parks (not local parks) within the Parkland Area under City Plan 2000. Self assessment applies to public toilets, minor ancillary buildings such as storage maintenance sheds less than 25 m², and kiosks less than 100 m².
- Buildings should be sited:
 - To avoid nuisance to neighbours.
 - Where applicable, within reasonable proximity to a car park.
 - On suitable terrain to facilitate a continuous accessible path of travel.
 - In close proximity to a road, gate or internal maintenance access for servicing.
 - Where casual surveillance is possible from surrounding streets and/or other sites of regular people presence, to reduce the incidence of vandalism and inappropriate behaviour.
 - Where unobtrusive in the landscape.
 - Where the building will not discourage pedestrian movement between park facilities and activity spaces.
- Unless otherwise specified, buildings should be designed by an architect in a contemporary style, in keeping with the park or precinct character and Brisbane's sub-tropical climate. The building should be of robust construction using materials that are resistant to vandalism, incorporating features that promote sustainable energy and water use.
- Roof water from all park buildings is to be collected in one or more concrete storage tanks, located where all-weather access is available to make it possible for park maintenance vehicles to draw water from the tanks. The rainwater tank size is to be based on the catchment area of the roof, and sited underground unless otherwise approved by Council (refer Section 5.6.2).

5.9.1 Public Toilets

Public toilet buildings are only provided in parks after an objective assessment of potential demand, and where applicable, consideration of the availability of conveniently located alternative non-Council facilities. Anticipated demand is categorised as follows:

- High-level. High and generally consistent level of everyday toilet use by park visitors, throughout week.
- Peak-period. Lower overall level of use, with a peak at weekends or during park functions, sporting events, etc.
- Low-level. Low or sporadic public use.
- Group. Use is primarily associated with the activities of a single club, group, tenant or lessee. Lessees will usually provide a toilet within a clubhouse or other community building for group use.

Based on demand, there is a requirement for toilets in many metropolitan (destination) parks, and to a lesser extent in district and sport parks, where high-level or peak-period demand exists. Toilets are not required (nor are they desirable) in small local parks, landscape amenity and corridor link parks. Visitors travel less distance to reach local parks, the usual length of stay is short, most visitors are able to return to their homes if necessary, and tourists and vehicle based workers are less likely to use these parks.



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Public toilet buildings in parks are sited, designed and constructed in accordance with the Brisbane City Council *Public Toilets Design Guidelines*, Standard Drawing UMS 752, and the following guidelines.

- Ensure the fixtures and fittings in toilet blocks are readily maintainable and approved by Council.
- Use alternative technologies where appropriate (eg solar energy, rainwater harvesting).
- Proposals to install automatic cleaning or composting toilets require specific approval of Council. Composting toilets can be susceptible to fire in the composting chamber and require careful siting.
- If required, make arrangements for the toilet to be locked at night.

The type of a public toilet building provided in a park should be consistent with the park type and its significance, established during the park design and development assessment process and any unique park characteristics, such as natural values. The standards for provision of public toilets in parks should comply with Table B8.8.

TABLE B8.8 PUBLIC TOILET REQUIREMENTS

Park type and setting	Standard
District park with high-level or peak-period use	<p>One toilet block with three cubicles, at least one with disabled access</p> <p>Temporary toilets are provided to supplement capacity for special functions and events</p> <p>Lesser standards will only be approved where visitor numbers do not justify three cubicles, for example toilets in remote locations</p>
Metropolitan park (destination park)	<p>As for district parks, except capacity should be increased (greater than three cubicles) where anticipated use is likely to cause queues to regularly form, in excess of the following queue standards</p> <ul style="list-style-type: none"> ▪ High-level demand: Design capacity should meet usual demand with queues no longer than two people per cubicle ▪ Peak-period demand: Design capacity should meet usual demand with queues no longer than two people per cubicle, during peak periods longer queues may form for no more than half an hour a week ▪ Special provision to accommodate the needs of women, particularly in respect to capacity during peak periods
Parks on the foreshore and near water play	Incorporate external shower facilities and change rooms adjacent to swimming areas and major water play facilities



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5.10 RECREATION AND SPORTING FACILITIES

5.10.1 Youth Spaces

Provision should be made in parks for the progression of children to young adults. Youth spaces are identified during the park planning phase, to accommodate the inevitable change in suburban demographics over time. Young adults are more mobile and independent than children, and need a central meeting place that is accessible by bicycle and skateboards with linkages to the bikeway network and corridor link parks. Youth spaces can be identified and developed in a way that suggests some prior planning without trying to make full provision that may be inappropriate or unwanted.

A degree of separation from obvious adult supervision is desirable, but the facility will need to be visible from surrounding streets to provide casual surveillance and a safe environment for young adults to meet. Youth spaces should be aligned to other areas of activity including shopping centres, public transport and the sport and recreation facilities described in this section that are relevant to young adults.

5.10.2 Ball Sports

Facilities for ball sports in parks (eg basketball and netball courts, tennis courts, rebound walls, cricket practice nets, boules courts, grassed fields, ovals, cricket pitches) are designed, located and constructed in accordance with standard sporting field dimensions (refer to Glossary), and the following general requirements:

- Ensure the facility complements and enhances other recreation opportunities in a park. All facilities should be set apart to allow ball sports to take place without intrusion and conflicts with adjoining activities.
- Ensure the facility is readily maintainable and approved by Council.
- Ensure the facility is setback from surrounding properties with screening and landscaping as appropriate. Consultation with neighbours, in conjunction with the Ward Councillor, is required if the facility is proposed near existing or future residences. Small local parks are usually unsuitable for facilities for ball sports.
- Key ways/goal circles (combined basketball and netball ring or a facility with minimum court area) are not acceptable due to risks associated with these facilities.
- Maximise opportunities for casual surveillance of courts and rebound walls from surrounding streets and/or other sites of regular people presence.
- Provide half courts and tennis rebound walls within cycling distance (approximately 2-5 km of most residences).
- Tennis courts and boules courts (bocce/petanque) are not usually provided outside leased areas in parks. An exception is where a community group or agency can undertake minor court maintenance, care for equipment such as nets, and supervise court bookings.
- Cricket practice nets should be located to minimise potential hazards caused by mishit cricket balls. Practice nets should not be located along road frontages, to minimise potential hazards and to maintain the visual appeal of the park.
- Bench seats, drinking fountains and tree planting for shade are provided in conjunction with facilities for ball sports, to the standards described in Section 4.8.3 and Section 5.8.1.



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The type of facility provided for ball sports in a park should be consistent with the park type and its significance, established during the park design and development assessment process and any unique park characteristics. The standards for provision of facilities for ball sports in parks are given in Table B8.9.

TABLE B8.9 BALL SPORT FACILITY REQUIREMENTS

Park type	Setting	Standard
Large local informal use parks (> 1 hectare)	Where sufficient space is available to allow adequate separation from residences (to moderate the noise nuisance)	A basketball half court may be provided (refer Standard Drawings UMS 783 and UMS 784)
Landscape amenity parks/ corridor link parks/ natural areas	All settings	Facility not required
Sport parks	Council designated locations	Sporting fields and ovals in accordance with park specific requirements (supplied by Council and developed in consultation with the community) Other facilities for ball sports such as tennis rebound walls (Standard Drawings UMS 781 and UMS 782), half and full basketball courts (Standard Drawings UMS 783 and UMS 784), netball courts, cricket pitches (Standard Drawings UMS 786 and UMS 787) may be required
	In proximity to a cricket oval, or less commonly in conjunction with other sporting fields	Cricket practice nets may be required (refer Standard Drawings UMS 785 and UMS 787)
District informal use parks	Activity space (recreation node)	Half basketball and netball courts and tennis rebound walls may be required
Metropolitan parks	Council designated locations	In accordance with specific requirements of Council



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5.10.3 Skateboarding and BMX

General

A district skateboarding/BMX facility may be provided within cycling or skating distance for youths (approximately 2-5 km of most residences). District facilities include a basic collection and range of elements, catering for novice skaters through to those seeking a higher degree of challenge.

Metropolitan skateboard/BMX facilities cater for a wide ability range, from novice to experienced skaters/cyclists seeking the highest degree of challenge that is possible in an open public setting. They incorporate a greater range of advanced skating/cycling elements than district facilities, and are located within a radius of up to 25 km of most residences.

There are no current Australian standards for skating and BMX facilities. Publications such as the *Skate Facility Guide* (refer to Glossary) should be used as reference documents.

Skateboarding and BMX facilities in parks are designed, located and constructed in accordance with the following general requirements:

- Siting and design of the facility is undertaken in consultation with Council (including risk management), local youth and the community (eg schools, community groups).
- Ensure the facility is readily maintainable and approved by Council.

Siting

Siting of the skateboarding and BMX facilities in parks should comply with the following requirements:

- Locate district skateboarding/BMX facilities in suburbs where the local community includes families with youths.
- Locate district and metropolitan skateboarding/BMX facilities in parks with appropriate infrastructure (toilets, parking, picnic nodes, links to district pathway network) to complement the skating and BMX experience.
- Where possible locate facilities near public transport.
- Skateboarding/BMX facilities are not suitable for local informal use, corridor link and landscape amenity parks.
- The facility should be setback from surrounding properties with appropriate screening and landscaping. Consultation with neighbours, in conjunction with the Ward Councillor is essential. Avoid siting the facility near existing and proposed residences, or near a venue that may cause potential conflicts eg elderly citizens club, hotel.
- Maximise opportunities for casual surveillance of a skateboarding/BMX facility from surrounding streets and/or other sites of regular people presence.
- Ensure the facility complements and enhances other recreation opportunities in a park.
- Emergency vehicle access (refer Section 5.3.2) is required. If possible locate the facility in the vicinity of a telephone and/or first aid services.



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Design

Design of the skateboarding and BMX facilities in parks should comply with the following requirements:

- Variety is desirable in the design of the skate facility network in parks, through specific design responses to each site. An experienced skate facility designer should be engaged to undertake the design work.
- The maximum fall height should be less than 0.9 m unless barriers are provided to restrict direct public access.
- The “lip” or top of bowls/ pipes and vertical walls should be highlighted (eg paint, coloured concrete) to improve visibility.
- Elements should not have sharp corners.
- Steps to half pipes are not considered necessary in parks. Access to the half pipe platform is controlled by skating ability. (Note: Access must be available for maintenance eg cleaning, and for emergency access in case of accident.)
- Bowl/ pipe and street elements should be located in separate zones.
- The minimum spacing between skating elements is 7 m (10 m preferred), to reduce the risk of collisions. Skating elements and barriers should be at least 3 m apart.
- Skating elements should be at least 0.9 m from the perimeter of the pad.
- Fencing may be required to direct users to safe entry and exit points (openings rather than gates).
- Safe seating and viewing areas should be provided, and sited at least 7 m from the perimeter to avoid risks from flying skate boards.

Construction

- An experienced skate facility contractor should be engaged to construct the concrete skating surfaces. Ensure that the gradients, curves and angles meet specifications, and avoid water pooling and uneven surfaces.
- Tree planting for shade is required around skateboarding/BMX facilities. Site trees to avoid potential hazards caused by fallen branches on the skating surface.
- Safety signage should be installed before the facility is opened.

5.10.4 Bicycle Parking

Bicycle parking facilities in parks should be designed, located and constructed in accordance with the *Bicycle Brisbane Plan*, *Austrroads Guide to Traffic Engineering Practice Part 14 – Bicycles*, and *AS 2890.3 Parking Facilities – Bicycle Parking Facilities*. The provision of bicycle parking in parks should comply with Table B8.10. Unless specified otherwise by Council, the bike rack should be a Class 3 floor or pavement mounted rail in accordance with AS 2890.3.

TABLE B8.10 BICYCLE PARKING

Park type	Setting	Requirement
District parks	Parks with skateboarding and/or other youth recreation facilities Urban common parks	6 bike racks
	Parks with sporting facilities	12 bike racks
Metropolitan parks	Parks with informal recreation facilities and located on a bikeway network	Minimum 6 bike racks
	Parks with sporting facilities	Minimum 12 bike racks

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5.10.5 Dog Off Leash Areas

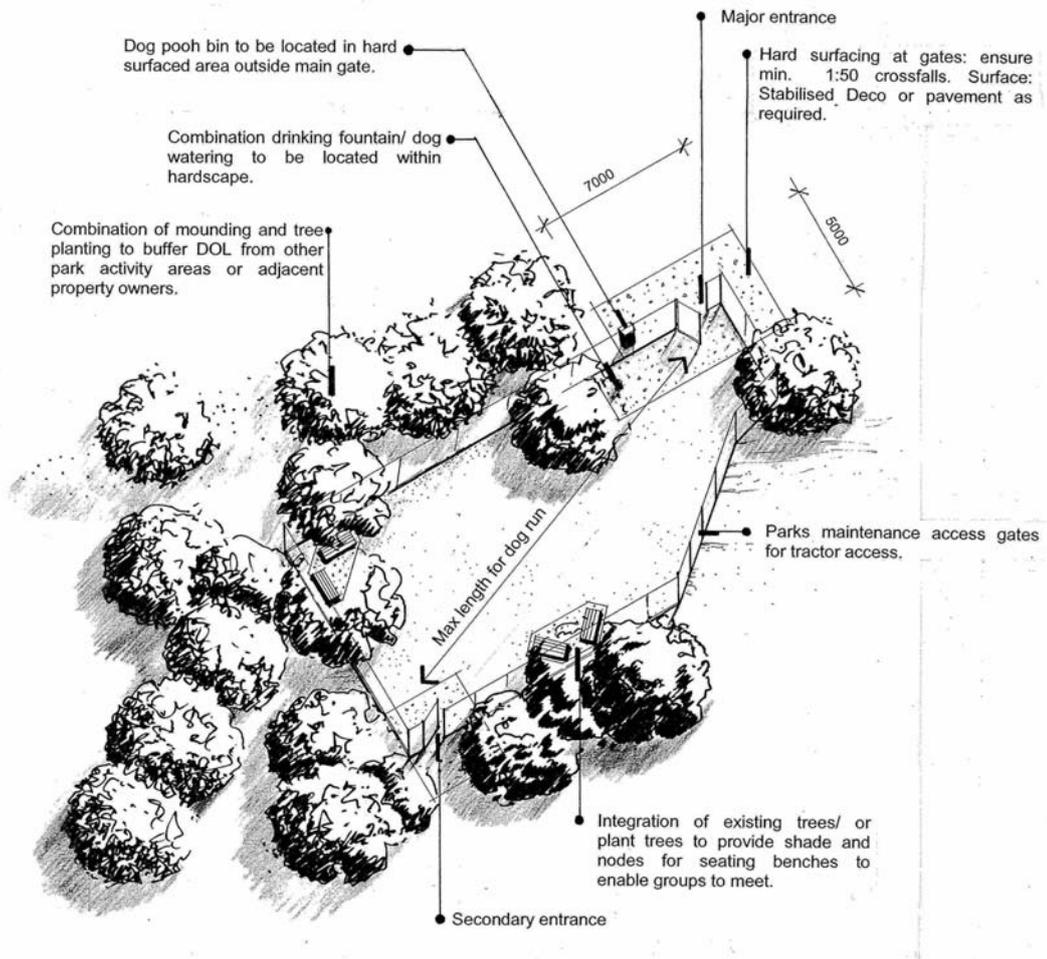
Dog off leash areas in parks should be designed, located and constructed in accordance with the following general requirements:

- Ensure a dog off leash area complements and enhances other recreation opportunities in a park.
- Ensure a dog off leash area does not cause nuisance to surrounding properties.
- Ensure a dog off leash area is readily maintainable and approved by Council.
- Where an off leash area is created within a larger area of open space, it should be clearly defined within a fence, in accordance with Section 5.4.
- The site should be clearly signed at every entry point to the off leash area. Standard BCC signage should be used.
- The area should be hospitable for people and dogs, with an open area of useable space, shade, seating and drinking water for people and dogs. Tree planting is used to supplement the shade over time.
- The area should be free of hazards. Holes, depressions, irregular or stony surfaces, constantly wet areas or any other feature of an area which may contribute to an injury are remedied or a more suitable area chosen.
- Provide safe parking nearby.
- Access should be located so that a conflict will not arise between users accessing the off leash area with their dogs, neighbour's dogs, and users of other park facilities.
- At least one bin should be provided for dog faeces (refer Section 5.8.1).
- At least one anti-vandal tap, fountain and drinking bowl should be provided (refer Section 5.8.1).
- The off leash area should be of a size appropriate for the intended use and anticipated demand.
- The local Councillor should be in full agreement with the establishment of an off leash area in the park.

Council aims to provide a dog off leash area within walking distance for adults (approximately 2 km) of most residences. District and metropolitan informal use parks are the preferred location. Open space, other than parkland, is also acceptable. Natural areas, corridor links and waterways are not preferred. Refer Figure B8.2 or Standard Drawing UMS 725 for indicative layout



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5.10.6 Fitness Equipment

Fitness equipment may be installed along pathways in parks and around activity spaces, to encourage physical activity. The equipment should be set back from bikeways and pathways to provide circulation space but close enough to encourage use. The preferred distance is 2.5 m. Under surfacing eg rubber matting, is required where the ground surface will deteriorate as a result of equipment use.

The demand for fitness equipment and the most suitable types of equipment for installation in parks is yet to be fully determined by Council. All proposals to install new equipment will require specific Council approval, based on an analysis of community demographics and potential demand. There are no specific Australian Standards that currently apply to fitness equipment in parks, including equipment that can be used by children as well as adults. It is therefore recommended that the design and installation of fitness equipment take into account relevant sections of the playground standards AS/NZS 4422 and AS 4685 series.



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5.11 WATER BODIES, WATER QUALITY MANAGEMENT AND STORMWATER INFRASTRUCTURE

Lakes, ponds, constructed wetlands, detention basins, energy dissipaters, and stormwater treatment devices may only be constructed in a park under exceptional circumstances at the discretion of Council. Detention basins, ponds, constructed wetlands and other water quality management structures are discounted when calculating the park contribution. Such facilities should be located away from park activity areas unless specifically designed for recreation use. The facilities should not impede the recreational function of a park, and where possible, complement and enhance recreation opportunities and the park landscape.

Subject to a detailed assessment, Council may accept a lake as part of the parkland contribution. A lake is defined as a large body of open water with the primary function of providing visual and/or recreational amenity. This definition does not apply where stormwater treatment is proposed to be a significant function of the water body.

Chapter 2 Part B (Stormwater Drainage) and Part C (Water Quality Management) of this document provide detailed information on Council requirements relating to water bodies, detention basins and water quality management structures. The relevant requirements of these chapters should be met before a facility of this type could be considered in parkland.

Stormwater discharge across and into parks (pipes, energy dissipaters, outlets, drop structures and open drainage channels) should be designed in accordance with Chapter 2 of Part B of this document, and Council publication *Stormwater Outlets in Parks and Waterways* (2003).

Where possible protect existing natural vegetation during the planning, design and construction of water bodies, water quality management structures and stormwater infrastructure in parks (refer Section 4.7.1). Install safety barriers or fencing around unusual or unexpected hazards (refer Section 5.4).

5.12 POWER, GAS AND OIL PIPELINE EASEMENTS

Power, gas and oil pipeline easements are not accepted as part of the park contribution. Park landscaping may extend across the easement but should comply with the requirements of the easement owner. For example, tree planting is usually restricted on easements. Limited recreation activities may be permitted on easements that run through a park. Transient activities (pathways, bikeways) may cross easements, but activity spaces, sporting fields and similar uses are generally not acceptable.

The Gas Pipeline code of City Plan 2000 applies where construction activities are planned near the existing Roma Gas Pipeline, which runs through several parks and streets on the south side of Brisbane.

Agility (a subsidiary of the Australian Gas Light Company) should be contacted where works are planned in the vicinity of an AGL gas pipeline. Energex or Powerlink should be contacted where works are planned near high voltage power transmission lines in parks, or an underground gas pipeline owned by Energex.

Underground services through parks should be clearly marked and include appropriate safety measures such as signage and fencing.



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5.13 CULTURAL HERITAGE ITEMS AND ARTWORK

5.13.1 Cultural Heritage

Cultural heritage items include buildings and/ or features with cultural or natural heritage significance listed in the Heritage Register Planning Scheme Policy, or the Queensland Heritage Register, as well as any other items of potential heritage interest identified during planning and design of the park. Cultural heritage items in a park should be retained, protected and interpreted in accordance with the Conditions of the Development Permit and/or the approved Landscape Management & Siteworks Plan, and the following documents where applicable.

- Relevant Australian Standards.
- The Burra Charter.
- Conservation studies.

5.13.2 Public Art

The inclusion of public art in parks can enrich the cultural life and distinction of places. It can be in response to the environment, to celebrate history, local character and community and add visual appeal to a place. The provision of public art should be in accordance with the Conditions of the Development Permit and/or the approved Landscape Management & Siteworks Plan, and the following Council documents.

- Developer's Handbook, Percent for Art Contribution.
- Artist's Guide, BCC Initiated projects.

A generic Commission agreement for Artist/Craftsperson and Commissioners is available from the Arts Law Centre of Australia. The artwork should complement and enhance other design elements in a park. Where appropriate, the artist should work with the local community (eg schools, community groups) in the design and location of public artwork. As a guide, allow at least 0.25% of the total cost of park development for artwork in urban commons parks and metropolitan parks.

Public art or artefacts (from the site) could be appropriate in activity spaces, at entrances to create entrance statements and gateways, to provide landmarks and features of interest within the site or open space corridor, or away from the park but connected visually.

Siting factors to be considered include:

- Site context, including history, established uses and values.
- Public safety.
- Potential visual impact.



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5.13.3 Safety

Public art or artefacts should be located outside of the obstacle free zone of pathways. Items should not have any protrusions or sharp edges that could be a hazard to park visitors. Items should be designed to prevent neck or head entrapment (refer Appendix B and Appendix C of AS 1924.2).

Public art can be feature lit. Lighting requires specific approval of Council and should be considered separately from the requirement for pedestrian lighting.

5.13.4 Maintenance

A detailed maintenance report, incorporating As Constructed drawings, installation method, cleaning and re-finishing schedule as well as a list of key contacts such as fabricator(s), artist(s) and suppliers should be provided to Council prior to final approval and acceptance of the finished work.

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GLOSSARY

Activity space	A relatively small area within a larger park or natural area, which is designed to concentrate visitor use and facilities and to act as a focal point.
Amenity	Agreeable aspects or features of a park or landscape.
Biodiversity	The natural diversity of wildlife (plants and animals), together with the environmental conditions necessary for their survival.
Heritage item	Buildings and/ or features with cultural or natural heritage significance listed in the Heritage Register Planning Scheme Policy.
Human Rights & Equal Opportunity Commission	Federal body responsible for the <i>Disability Discrimination Act</i> . Refer to advisory note on access to premises (which includes parks). Go to www.hreoc.gov.au . Click on the “Disability Rights” tab. Select “Access to Premises”.
Infrastructure	Land, facilities, services and works used for supporting park management and meeting environmental needs. Environmental needs include community needs.
Natural Assets Local Law	Council Local Law introduced to protect natural vegetation. Refer to Council Booklet <i>A Guide to the Local law – Protecting Our Natural Assets</i> (August 2002).
Open activity area	A grassed area within a larger park where informal activities such as ball games, Tai Chi and social events can safely take place, without detriment to other park visitors and to park values.
Open space	Network of spaces, with no or few built structures, that contribute to recreation opportunities, community health, biodiversity and the landscape setting or “green” fabric of the City. Open space includes wetlands, bushlands, beaches, lakes, dams, culturally significant places, parks and outdoor recreation areas.
Park hierarchy	<p>Different types of parks and facilities provided to respond to levels of community need and the geographic area in which people can benefit from a park or facility. The park hierarchy reflects the distance people are willing to travel to use a park.</p> <ul style="list-style-type: none">▪ Metropolitan parks or facilities are intended to serve or benefit all the residents and visitors across Brisbane, or generally within a 25 km radius.▪ District parks or facilities are intended to serve an area within a 2 to 5 km radius.▪ Local parks or facilities service residents or workers within 500 m or easy walking distance, without physical barriers to access (such as a railway line). <p>In the case of Natural Areas, Sport parks and Informal Use parks, the intended service catchment is influenced by the capacity of the park for sustained visitation.</p>
Park types¹	<p>Informal use park: A park intended to provide a variety of casual recreational opportunities such as play, picnicking, and large social or community gatherings. Informal use parkland may also protect or enhance landscape amenity values.</p> <p>Natural area: Area (> 5 ha) of relatively intact native bushland, riparian and dryland habitat or wetland managed primarily for protection and enhancement of biodiversity values and, where appropriate, opportunities for recreation in a natural setting.</p> <p>Sports park: A park intended to provide a variety of structured or formal recreation opportunities, such as team competitions, physical skills development and training. Often includes multi-purpose community facilities.</p> <p>Corridor link park: An area providing connections for recreation and commuter use. An indirect benefit can be connections for maintenance of biodiversity.</p> <p>Landscape amenity park: A park intended to protect and /or enhances an area’s scenic or visual amenity value, such as scenic outlooks, landmarks and attractive vegetation along transport corridors.</p>

¹ Parks may provide several recreation opportunities or functions but are classified according to their primary function.



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Park sub types	<p>Urban common parks: A category of informal use park, provided for intensive community use and located within highly urbanised settings, such as the CBD, major commercial centres, civic spaces and community hubs.</p> <p>Landmark/signature point: A category of landscape amenity park, located in proximity to a main thoroughfare, and includes parks that:</p> <ul style="list-style-type: none">▪ Provide “Green gateways” to the city or city centre and may include ornamental gardens, floral displays and manicured lawns.▪ Display monuments and memorials along major transport routes.▪ Contain landmarks and help orientate people moving through the city.
Pathway types	<p>Bikeway: A type of pathway set aside for cyclists, or designated as a shared facility for cyclists and pedestrians.</p> <p>Path: A pathway with a fully constructed hard wearing surface providing pedestrian access in high use areas. Cyclists may use paths with care but unlike bikeways they are not designated for cyclist use.</p> <p>Track: A formed and surfaced pathway (or maintenance access road) providing pedestrian, bicycle, horse and maintenance vehicle access within a park. The wearing surface is usually gravel, sand, deco or similar and may be stabilised.</p> <p>Trail: As for Track but usually narrower with a natural earth surface and providing access to remote areas of a park.</p>
Pest Management Plan	<p>The Pest Management Plan is prepared by Council and approved by the State Government under the provisions of the <i>Land Protection (Pest and Stock Route Management) Act</i>. The plan stipulates a coordinated approach within Brisbane to the management of declared noxious and environmental weeds. Lists of weed species in each of these categories are available on the Council web site www.brisbane.qld.gov.au. Starting at the “residents” tab, go to “environment”, “pest and weed control” and “weeds”.</p>
Recreation	<p>Any activity that a person chooses to undertake in their free time for enlightenment, enjoyment, personal development, health etc.</p>
Skate Facility Guide	<p>Skateboarding and BMX facilities design guidelines as described in the <i>Skate Facility Guide</i> (available from Sport and Recreation Victoria at www.sport.vic.gov.au). Starting at the “publications and research” tab, go to “publications” and “facility development”.</p>
Sport	<p>Any physical activity performed in accordance with set rules. It may take place indoors or outdoors, in water, on land or in the air. It can be either competitive or non-competitive and can involve individuals or teams.</p>
Sporting Field Dimensions	<p>As described in <i>Australian Sports Facilities – Sports Dimensions for Playing Areas</i> (available at www.ausport.gov.au/index.asp). Starting at “Information/Research” go to “Topics in Sport”, “Facilities”, and “Rules and Dimensions”.</p>