



YOUR VISION.
YOUR FUTURE.

Draft Play Plan



HORNSBY
SHIRE COUNCIL

Contents

Executive Summary	i
Introduction.....	iii
Part A – Play Context.....	1
1 About Play	2
1.1 Play is for everyone.....	2
1.2 What is play?.....	2
1.3 What is deep play?.....	2
1.4 What is a play space?	2
1.5 Play space design	3
1.6 What are the types of play?	3
1.7 Context of play	5
1.8 Childhood health and wellbeing	6
1.9 Play trends	7
2 Strategic Context.....	9
2.1 Children’s right to play.....	9
2.2 Inclusive play.....	9
2.3 Open space and play	9
Part B – Local context	10
3 About the Hornsby Shire	11
3.1 The Bushland Shire.....	11
3.2 Hornsby Shire community	13
4 Community Consultation	15
4.1 Groups consulted	15
4.2 Consultation outcomes.....	16
Part C – Play space analysis	19
5 Existing Play Spaces.....	20
5.1 Quantity	20
5.2 Hierarchy	20
5.3 Distribution	21
5.4 Existing play space analysis	22
5.5 Play types analysis.....	24
5.6 Age breakdown	25
6 District Analysis	26
6.1 Analysis assumptions.....	26
6.2 District 1	28
6.3 Districts 2 and 2A	29
6.4 Districts 3 and 9.....	30
6.5 District 4	31
6.6 Districts 5 and 7.....	32
6.7 District 6	33
6.8 District 8	34

Part D – Plan for the future	35
7 Play Space Framework	36
7.1 Vision statement.....	36
7.2 Guiding principles.....	36
7.3 Play space design principles	37
7.4 Design considerations	38
7.5 Quality play provision	39
7.6 ‘Mosaic of play’ concept	44
7.7 Recommended hierarchy	47
7.8 Regional play space.....	48
7.9 District play space	49
7.10 Local play space	50
7.11 Pocket play space	51
7.12 Special purpose	52
8 Recommendations & Action Plan.....	59
8.1 High level recommendations.....	59
8.2 Action plan.....	59
8.3 Play space priority	60
8.4 Play space major changes	60
8.5 District 1: Action plan	61
8.6 Districts 2 and 2a: Action plan.....	63
8.7 Districts 3 and 9: Action plan.....	65
8.8 District 4: Action plan	67
8.9 Districts 5 and 7: Action plan.....	69
8.10 District 6: Action plan	71
8.11 District 8: Action plan	73
9 Conclusion.....	75
9.1 Current supply	75
9.2 Current demand	75
9.3 Recommendations	76
Part E – Appendix	78
Appendix A Design considerations	79
Appendix B Water splash parks.....	89

Tables

Table 1 – Summary of Australian Physical Activity Guidelines.....	6
Table 2 – Age Groups that met the Physical Activity Guidelines.....	7
Table 3 – Summary of community consultation activities and groups.....	15
Table 4 – Existing Play Spaces in Hornsby LGA.....	21
Table 5 – Play Provision for Different Age Groups.....	25
Table 6 – District 1 Population.....	28
Table 7 – District 1 Play Spaces.....	28
Table 8 – Districts 2 and 2A Population.....	29
Table 9 – Districts 2 and 2A Play Spaces.....	29
Table 10 – Districts 3 and 9 Population.....	30
Table 11 – Districts 3 and 9 Play Spaces.....	30
Table 12 – District 4 Population.....	31
Table 13 – District 4 Play Spaces.....	31
Table 14 – Districts 5 and 7 Population.....	32
Table 15 – Districts 5 and 7 Play Spaces.....	32
Table 16 – District 6 Population.....	33
Table 17 – District 6 Play Spaces.....	33
Table 18 – District 8 Population.....	34
Table 19 – District 8 Play Spaces.....	34
Table 20 – Guiding Principles.....	36
Table 21 – Design principles.....	38
Table 22 – Traditional versus Best Practice Play Types.....	40
Table 23 – Special Purpose Play Locations.....	58
Table 24 – High level recommendations.....	59
Table 25 – Action Heading Descriptions.....	59
Table 26 – Major changes in play spaces.....	60
Table 27 – District 1 Action Plan.....	62
Table 28 – Districts 2 and 2a Action Plan.....	64
Table 29 – Districts 3 and 9 Action Plan.....	66
Table 30 – District 4 Action Plan.....	68
Table 31 – Districts 5 and 7 Action Plan.....	70
Table 32 – District 6 Action Plan.....	72
Table 33 – District 8 Action Plan.....	74

Figures

Figure 1 – Hornsby Shire.....	12
Figure 2 – Play Provision for Different Age Groups.....	25
Figure 3 – Current Hornsby LGA playspaces.....	27
Figure 4 – Diagrammatic Distribution of Play Spaces in a District.....	44
Figure 5 – District Unique Features.....	45
Figure 6 – Distribution of Play Spaces with Unique District Features.....	45
Figure 7 – Zones of Play Within Districts.....	46
Figure 8 – Hierarchy of Play Spaces.....	47
Figure 9 – Regional Play Space Layout.....	48
Figure 10 – District Play Space Layout.....	49
Figure 11 – Local Play Space Layout.....	50
Figure 12 – Pocket Play Space Layout.....	51
Figure 13 – District 1 Play Spaces.....	61
Figure 14 – Districts 2 and 2A Play Spaces.....	63
Figure 15 – Districts 3 and 9 Play Spaces.....	65
Figure 16 – District 4 Play Spaces.....	67
Figure 17 – Districts 5 and 7 Play Spaces.....	69
Figure 18 – District 6 Play Spaces.....	71
Figure 19 – District 8 Play Spaces.....	73

Executive Summary

Introduction

Fiona Robbé Landscape Architects and Urbis were engaged by Hornsby Shire Council (Council) to provide an assessment of the current and future supply and demand for play spaces within Hornsby Shire and provide recommendations and an action plan to meet these demands.

In 2015 Council adopted the Active Living Hornsby Strategy (ALHS) which recommended a plan be developed to holistically consider all aspects of play across the Hornsby Shire. In 2018 Council adopted a Notice of Motion (NoM) to develop a Shire-wide Playground Strategy. This Play Plan is the result of the ALHS and NoM.

This Play Plan is also aligned with the goals of the Hornsby Community Strategic Plan – Your Vision | Your Future 2028.

Approach

This Play Plan was developed in four key stages, outlined below. Broad community consultation was undertaken to inform the development of this Play Plan. Sixteen consultation activities were undertaken, including with children, young people, older people and parents and carers of children with disabilities. The recommendations and action plan outlined in this Play Plan have been informed by the outcomes of the community consultation.

- ▶ **Stage 1 – Research:** Audit of existing play spaces, background documents and demographic data.
- ▶ **Stage 2 – Consultation:** Community consultation activities and summary report of consultation findings.
- ▶ **Stage 3 – Analysis:** Identification of relevant play space trends, current provision of play spaces and future demand for play spaces over the next ten years.
- ▶ **Stage 4 – Recommendations:** Development of a play space hierarchy, recommendations and action plan.

Report scope

There are currently 131 publicly accessible play spaces within the Hornsby Shire LGA. For the purpose of this Play Plan a play space is defined as a Council owned playground or other outdoor space with the primary purpose of play. Sport and recreation facilities, including sports fields, courts, swimming pools, mountain/BMX bike tracks and fitness stations have not been considered.

Current context

Based on the research undertaken for this Play Plan, the existing play space context in Hornsby Shire is summarised below:

- ▶ Hornsby Shire has a high level of play space provision when considered in relation to population size, however, there are variations in the quality of provision and accessibility to play spaces across different parts of the Local Government Area (LGA).
- ▶ The distribution of play spaces in Hornsby is generally aligned with the historical population and development pattern. Most play spaces are located around key centres in the south-eastern part of the LGA. Large areas of the western portion of the LGA, which include bushland and rural settings, do not have access to a play space without the use of a vehicle.

- ▶ Hornsby Shire play spaces are generally of high quality and well maintained. A high number of existing play spaces provide adequate shade, pathways and drinking fountains. Many play spaces also benefit from natural elements, including unique bushland and creek settings.
- ▶ Most existing play spaces are provided at the local and pocket level. Fagan Park is currently the only regional space in the Hornsby Shire, and it attracts people from all over Sydney.
- ▶ The age of existing play spaces ranges between 6 months and 30 years old. The designs generally reflect the trends in play from the era they were built in. As a result, there is duplication in the equipment and play experience provided in a number of the play spaces. A small number of play spaces are also non-compliant with current Australian Standards.

Key findings

The key findings of this Play Plan are:

- ▶ Hornsby's play spaces benefit from unique natural settings – a key asset that should be enhanced in future planning for play spaces. Bush play and nature play opportunities are a way to connect children with their natural environment and encourage time being active outdoors.
- ▶ Population growth will be driven by an increase in medium and high-density housing in the southern half of the Shire. Play space planning in Hornsby Shire will need to respond to this increase in population and prioritise play space and child friendly areas in an increasingly urban context.
- ▶ Hornsby Shire Council generally provides high quality play spaces. Future planning should focus on improving the diversity and inclusiveness of play spaces in line with the hierarchy outlined in this Play Plan. Future planning also needs to consider the equity of play space provision across the LGA.

Plan for the future

Based on the above key findings, this Play Plan sets out a plan for the future of play spaces in the Hornsby LGA, including a vision, guiding principles and detailed action plan. The

Action Plan is a guide only and regular reviews will assist in effective implementation.

▶ 7 x new play spaces:

- Westleigh Park (Local)
- Hornsby Quarry Crusher Plant (District)
- Hornsby Quarry Old Man's Valley (Regional)
- Hornsby Quarry Old Man's Valley (Special Use)
- Berry Park Play (Local)
- Arcadia (Local)
- Hornsby Town Centre (Special Use)

▶ 3 x play spaces to be removed:

- Kenley Park
- Nancy Place
- Myson Drive Park

▶ 8 x play spaces to be upgraded in hierarchy:

- Epping Oval
- Brickpit Park
- Wollundry Park
- Ulolo Community Park
- Hunt Reserve
- Warrina St Oval
- Moorfield Hill Reserve
- Edward Bennett Oval

▶ 5 x proposed special use play spaces at existing sites:

- Fagan park (Adventure Play)
- Brickpit Park (Youth)
- Erlestoke (Learn to Ride)
- Ruddock Park (Learn to Ride)
- Fagan Park (Water)

Introduction

Hornsby Shire Council recognises that play is an important part of a healthy and liveable community and provides benefits to people of all ages, abilities and backgrounds.

The purpose of this Play Plan is to guide the future planning, design and management of play spaces across the Hornsby Shire. This Play Plan establishes guiding principles for play in Hornsby Shire and provides recommendations and an action plan to guide future planning, design and management.

This Play Plan is aligned with the goals of the Hornsby Community Strategic Plan – Your Vision | Your Future 2028.

Strategic planning framework

This Play Plan has been developed to support and inform Council's Local Strategic Planning Statement (LSPS). The LSPS is a new strategic document which sets out Council's 20-year vision for land use in the LGA, the special character and values that are to be preserved, shared community values, and how Council will manage growth and change. Local Councils are required to prepare an LSPS under the NSW Environmental Planning and Assessment Act 1979.

The LSPS must in turn be consistent with the Greater Sydney Commission North District Plan. The LSPS is guided by four key themes – Liveable, Sustainable, Productive and Collaborative – which aligns with the direction of the Greater Sydney Commission District Plans.

The North District Plan sets out planning priorities and actions for improving the quality of life for residents in the district. In particular, the following Actions are pertinent to Hornsby Shire:

- ▶ Deliver social infrastructure that reflects the needs of the community now and in the future;
- ▶ Optimise the use of available public land for social infrastructure; and
- ▶ Design so that people of all ages and abilities can participate in community life.

Liveability in the Hornsby LGA

Council's Active Living Hornsby Strategy champions the directions for achieving liveability in the LGA. The development of this Play Plan was recommended by this strategy and is facilitated by the LSPS process.

The Play Plan provides a practical framework for planning, design and management, and for the future direction of individual parks and public play spaces.

This Play Plan aligns with the objectives of improving the liveability of Hornsby's neighbourhoods to better respond to the needs of the future community and to build a sense of place and pride. Together with Council's Walking and Cycling Strategy, the Play Plan supports the Active Living Hornsby Strategy 2016 which feeds directly into the LSPS.

Challenges for play

This Play Plan also responds to local and regional trends impacting on the Hornsby Shire. Key challenges this Play Plan has responded to include:

- ▶ Population growth: rapid population growth, increases in urban density and compact living;
- ▶ Community profile: changing demographics, including an aging population and increasing cultural diversity;
- ▶ Health trends: increasing focus on technology and decreasing time spent outdoors, along with the general concern that modern childhood is beset with health and wellbeing issues;
- ▶ Environment: the impacts of climate change on play, including hotter summers and the need for shade; and
- ▶ Play trends: the evolving nature of play spaces, including inclusive play, nature play and intergenerational play, and sharing of community play spaces.

Scope

Play spaces continually evolve. A play space is more than simply equipment – it is the entire setting used and enjoyed as part of the play experience. For the purpose of this Play Plan a play space is defined as a Council owned and managed play space or other outdoor space with the primary purpose of play.

This includes skate parks, practice basketball hoops, table tennis, bike tracks, and some bushland tracks. Sport and recreation facilities, including sports fields, courts, swimming pools, mountain/BMX bike tracks and fitness stations are not included.

This Play Plan addresses the outdoor play needs of all people who live in the Hornsby Shire, recognising that the groups of greatest need are children and young people.

Structure

This Play Plan is structured around four key sections:

Part A – Play context: an overview of play, including types of play, current challenges, and trends in play space planning and design;

Part B – Local context: an overview of the Hornsby Shire, the local community and outcomes of community consultation;

Part C – Play space analysis: an overview current play space provision, including distribution and quality; and

Part D – Plan for the future: recommendations and an action plan to guide future planning, design and management.

Methodology

This Play Plan was developed in four key stages. The stages and key tasks are outlined below:

Stage 1 – Research

- ▶ Audit of existing play spaces;
- ▶ Review of background documents and data;
- ▶ Analysis of current demographics; and
- ▶ Analysis of population projections.

Stage 2 – Consultation

- ▶ Community consultation activities; and
- ▶ Summary report of consultation findings.

Stage 3 – Analysis

- ▶ Identification of relevant play space trends;
- ▶ Analysis of current provision of play spaces; and
- ▶ Identification of gaps in provision and future demand for play spaces over the next ten years.

Stage 4 – Recommendations

- ▶ Development of a play space hierarchy;
- ▶ Development of recommendations and action plan to guide future planning, design and management of play spaces;
- ▶ Preparation of Draft Play Plan;
- ▶ Public Exhibition period;
- ▶ Preparation of Final Play Plan; and
- ▶ Adoption by Council.

Part A

Play context



1 About Play

The following section provides an overview of play, including the types of play and current trends in the planning and design of public play spaces.

1.1 Play is for everyone

Play is essential for a child's healthy development and is recognised in the UN Convention on the Rights of the Child as a universally accepted right. But play is not only beneficial for children – people of all ages are playful! Contemporary play spaces are inclusive for people of all ages, capabilities and backgrounds. The concept of the playful human ('Homo Ludens', Johan Huizinga 1938) recognises that we remain playful throughout our lives, and value playful opportunities as they may arise. Huizinga suggests that play is a primary and a necessary condition to the generation of culture.

The types of play that we engage with are likely to change over our lifetime. An effective play space supports different types of play and enables people of different ages and capabilities to play together.

1.2 What is play?

Play is easy to recognise, but hard to define. The most obvious characteristic of play is that it is fun and enjoyable. Play involves the exercise of autonomy and it can be the means by which the player engages physically, intellectually, emotionally, socially or morally in an activity. Play has the potential to take infinite forms, either in groups or alone. The key characteristics of play are enjoyment, uncertainty, challenge, flexibility and non-productivity.¹

Play allows for a state of mind that is uniquely suited to high-level reasoning, problem solving and creativity.

¹ UN Convention of the Rights of the Child

1.3 What is deep play?

Deep play is:

- ▶ Self-chosen and self-directed;
- ▶ Intrinsically motivating;
- ▶ Structured by rules which are not dictated, but emanate from the minds of players;
- ▶ Imaginative, non-literal;
- ▶ Engaging, involving an alert, non-stressed frame of mind; and
- ▶ Undertaken for pleasure and enjoyment.

Deep play is evident when children are not instructed what to do by adults and are wholly engaged in the play activity. It is valued because this form of interaction allows the child to explore concepts of the world on their own terms, at their developmental level, at their own pace, and is optimal for all aspects of a child's healthy development.

If play spaces are sensitively designed to be integrated into landscaped settings, deep play is a possible outcome. Deep play is the "Gold Standard" of play space provision and is what play space design aims to achieve.

1.4 What is a play space?

An area designed for play, including the site, natural features, built landscape and any manufactured equipment and surfacing.² A play space contains components with, or on which, people can play individually or in groups, according to their own reasons for playing, which can change at any time.

² AS 4685.0:2017 Play space Equipment and Surfacing

1.5 Play space design

Every play space should be designed to meet the particular needs of its likely users, including babies, toddlers, school students, young people, adults and older people.

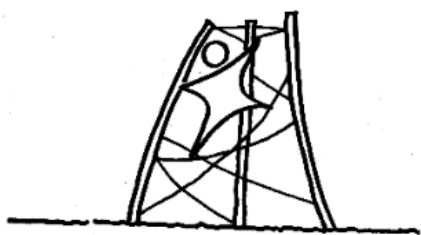
Great play spaces provide a diverse range of play activities, experiences and settings to users. They offer variety and should also vary from site to site in a known district. Play spaces should offer varying degrees of challenge and usability, to enable children of different ages and capabilities to participate autonomously at their own level.

Best practice play spaces are designed to include shrubs, trees, rocks and logs where possible for a sense of naturalness – the play space is integrated into the landscape.

1.6 What are the types of play?

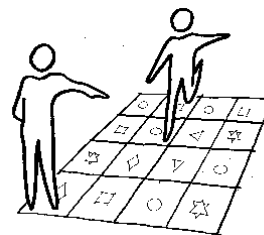
There are many different types of play – an effective play space supports as many different types of play as possible. Variety and choice are the hallmarks of quality play provision: the more types of play, the better the play space, and the more Deep Play becomes possible.

Physical



Play which promotes both fine and gross motor skills. This includes large muscle strength, coordination and sense of balance, as well as dexterity and use of small muscles.

Cognitive



Play which develops symbolic thought, reasoning abilities, memory, sequencing, logical thought, and understanding cause and effect (I do this, and that happens).

Social

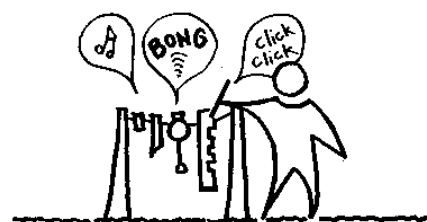


Play which directly involves co-operation with others, playing towards a shared goal.

Play which directly involves social skills like group play, sharing, taking turns, “pretending” in a group scenario, cooperation (e.g. turning a tap on and operating a sluice gate), and games.

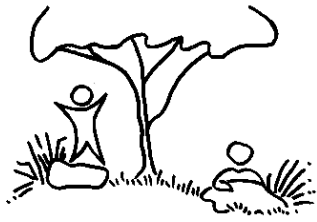
Social play promotes communication skills; children learn how to use language.

Sensory play



Play which stimulates the senses through specifically designed activities.

Nature play



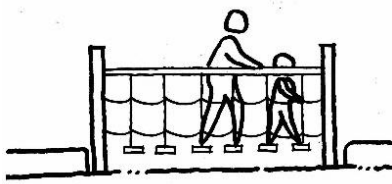
Play activities which involve playing with or on natural, non-manufactured items such as logs, boulders, plants, sand, mulch, and water.

Solo / solitary



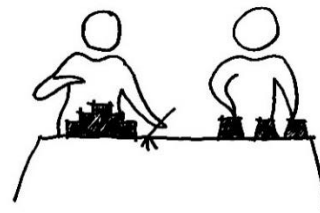
Independent play without involvement from others, playing at one's own pace.

Intergenerational



Play activities which are planned for intentional interaction between different age groups from infants to older people (e.g. "You and Me" swing). It can also include play activities which work well for various people to use independently of others, in a side-by-side manner (e.g. Burmese bridge).

Parallel play



Play alongside other children, without active interaction or co-operation with them. Also called side-by-side play.

Imaginative



Play where an object is used symbolically to stand in for something, or children become different characters, pretending they are in specific locations and times.

Constructive play



Using materials creatively to construct objects or settings, which may involve some imaginative play outcome e.g. building a stick enclosure, pretending it is a cave.

Play experiences

While a best practice play space has as many types of play as possible, there are a range of different individual play experiences within each play type. For example, physical play can include the experiences of jumping, climbing, sliding, spinning, crawling, rocking, hanging, etc. These are sometimes referred to as 'play events'.

1.7 Context of play

Australian standards

Public play spaces within the Hornsby Local Government Area are designed, built, managed, and maintained to meet the current relevant Australian Standards. Specifically, the relevant standards include:

- ▶ AS 4685: Play space equipment and surfacing (full suite);
- ▶ AS 4422: Play space surfacing – Specifications, requirements and test method;
- ▶ AS 1428: Design for access and mobility (full suite);
- ▶ AS/NZS ISO 31000: Risk management – Principles and guidelines; and
- ▶ AS 4586: Slip resistance classification of new pedestrian surface materials.

Shade provision

Play spaces should be designed with areas of effective summer shade from either trees or built elements, or both. The design should also take into account the reflected U.V. radiation index of various surfaces and materials to minimise UV exposure.

Shade should be provided in accordance with the Cancer Council NSW's 'Guidelines to Shade: A Practical Guide for Shade Development in NSW'. This document assists with understanding the types of U.V. radiation, The process of Risk Benefit Assessment recognises that providers can make sound judgements about many of the risks and benefits relating to play provision, and that these considerations (and the underlying evidence base) need to be systematically

the U.V. Index, understanding the U.V.

Radiation grades, and how to conduct a shade inventory of a site, and conducting a shade audit. These are all relevant to play spaces.

Natural shade from canopy trees is preferred as trees provide effective and attractive shade. Trees should be selected for their density of shade provided in summer. Natural shade creates a pleasant cool environment for playground users, provides environmental benefits such as habitat for local wildlife and can assist with temperature control, privacy and wind protection.

Built shade sails will be installed at District and Regional level playgrounds where shade is inadequate, and trees cannot provide shade within a suitable timeframe. Sails are to be located over areas where the need is greatest such as slides, sandpits, and toddler play areas.

Risk and play

It is recognised that risk-taking is an essential feature of play provision and of all environments in which children legitimately spend time playing. Best practice play provision aims to offer children the chance to encounter acceptable risks as part of a stimulating and challenging learning environment. Good play provision manages the balance between the need to offer risk and the need to keep children safe from serious harm.³

In this Play Plan the happily and healthy development of children and young people would be compromised without the opportunities for risk taking.

Risk Benefit Assessment

A Risk Benefit Assessment is a tool to aid risk management that explicitly brings together consideration of the benefits as well as the risks of play in a single judgement.

recorded. As the nature of benefits and risk in play provision are different, the accepted best practice approach is through written descriptions, rather than numerical measurements. For example, increase in self-

³ AS 4685.0:2017 Play space equipment and surfacing – page 4, paragraph 3

confidence cannot be measured, but can be described.

This process is endorsed by Standards Australia and Play Australia. Play Australia provides further guidance on this topic in 'Getting The Balance Right – Risk Management for Play'.

Inclusive play

Play spaces provide an opportunity to create public environments which are welcoming and inclusive to all anticipated users, including people of different ages, capabilities, genders, and cultures.

Guidelines for inclusive play

The NSW Government "Everyone Can Play" Guideline (2019) provides guidance on inclusive design for play spaces. Guidance is also provided by the "Advisory Note on Streetscape, Public Outdoor Areas, Fixtures, Fittings and Furniture" (NSW Human Rights Commission [HRC], 2013). Specifically, Clause 7-10 of the NSW HRC document specifically mentions the, "Accessible Play Areas: A summary of Accessibility Guidelines for Play Areas" (USA Access Board, 2005).

Australian Standard 4685.0: "Play Space Equipment and Surfacing" addresses design for access and inclusion in play spaces in both the Forward and Clause 6.3.3, encouraging providers to consider the needs of all potential play space users.

Safety Management System

All play spaces in the Hornsby Shire operate under a systematic safety management system (SMS), as required by AS 4685.0.

The SMS contains the procedures to assess, maintain and document actions aimed at injury prevention in Council's play spaces.

1.8 Childhood health and wellbeing

Australians are failing to achieve the benchmarks set in the Australian Physical Activity Levels developed for the nation. Play spaces are valuable public assets for inviting children and young people to be more active more often, hence contributing to achieving the set benchmarks.

Summary of Australian Physical Activity Guidelines

Table 1 – Summary of Australian Physical Activity Guidelines⁴

AGE GROUP	PHYSICAL ACTIVITY	STRENGTH
2 - 5*	60 mins per day	N/A
5 - 17**	60 mins per day	3 times a week
18 - 64	150 mins per week	2 times a week
65+	30 mins per week	Incorporate muscle strengthening activities

* This group includes those aged 5 who are not yet in full-time schooling (for example, pre-schoolers).

** This group includes those aged 5 who are in full-time schooling.

While toddlers and pre-schoolers are generally achieving the set benchmark of 60 minutes a day of physical activity, the rest of the population are falling short of the benchmark levels. Most worrying, teenagers are the least physically active group (8%), closely followed by primary aged children (26%).

This indicates the importance of providing incentives, activities and venues to encourage children and young people to be more active, with regularity.

⁴ Australian Institute of Health and Welfare

Table 2 – Age Groups that met the Physical Activity Guidelines

AGE GROUP	PHYSICAL ACTIVITY GUIDELINE MET
2 - 5	61%
5 - 12	26%
13 - 17	8%
18 - 64	45%
65+	28%

Play spaces in public parks or other public venues are valuable assets in that all people are given encouragement to be active when in a play space. Play spaces tend to make being active fun, inadvertently bringing about healthier lifestyles for the whole community. Through sophisticated design, exercise stations and activity pods can be added to play space settings.

1.9 Play trends

Play spaces evolve to respond to changes in our social, environmental and political context. The current best practice trends in the planning and design of play spaces relevant to the Hornsby Local Government Area are outlined in this section.

These trends look beyond traditional play space play provision in metropolitan areas, asking the question: how can responsible city planners provide more rich, engaging, and diverse play opportunities in the public domain? The importance of providing this broader context is a response to the worsening statistics on childhood health and wellbeing. Planners and designers are encouraged to think of ways in which children, young people, and older people, can be encouraged to be more active, more often through play.

The play space trends listed below are incorporated into Section 7 and 8.

Best Practice Trends in Play Spaces

Play streets

Play Streets make play areas by temporarily closing streets to through traffic so children and their communities can play outside. This can occur on quiet roads with no public transport routes, regularly or annually, and is insured and permitted by Council. Play Streets are designed to combat shrinking backyards or lack of adequate green space within communities. This strategy is aimed to encourage children to be more independently active outside the home and enhance community connections.

A Play Streets Toolkit is available at playstreetsaustralia.com, which contains promotional posters as well as step-by-step guides for checking street eligibility, submitting Council permit applications and templates, implementing risk and safety plans, and more.

Child Friendly Cities (CFC)

A CFC is an urban centre in which the voices, needs, priorities and rights of children are an integral part of public policies, programmes and decisions. A CFC recognises that the space constraints of higher-density areas require redefining the idea of a play space to include play opportunities integrated into unexpected places such as train stations, bus stops, footpaths, city squares, shopping centres and rooftops. The CFC initiative is led by UNICEF.

Adventure play

Adventure play advocates for unrestricted and unstructured play, valuing the importance of encouraging creativity and responsibility in children. Adventure play spaces incorporate elements such as loose tyres, blocks of wood and lengths of rope, and tools are provided allowing children to build (or destroy) their own environment. These play spaces encourage children to assess risks for themselves and offer challenges children may not traditionally be accustomed to which fosters independence and problem-solving skills. This form of play is supervised.

Nature play

Nature play involves play activities which utilise natural, non-manufactured items, materials, or settings. Opportunities for activities involve building stick cubbies, nature walks, animal surveys, nature treasure hunts, sand and mud play, or simply playing in a natural setting. Outdoor nature play fosters an awareness and respect of the natural environment and our impact on it, whilst simultaneously improving the wellbeing and the learning capabilities of children involved.

Shared-use school play spaces

Opening school play spaces during school holidays and out of school hours allows for the whole community to enjoy these play spaces, and maximises the use of public assets. Shared use can provide additional play infrastructure in small communities and help respond to space constraints in urban areas. Refer to the “Share Our Space” program, NSW Government.

Intergenerational play

Intergenerational play is a planned or designed intentional interaction of different age groups, playing together.

Intergenerational play provides benefits for both young and old. Research shows that children display higher levels of language and problem-solving skills when they have lots of contact with adults.

As our population ages, play can encourage older people to stay active and socially connected.

Water play

Water play and dedicated water parks are growing in popularity. Water Play can take many forms: pumps and runnels, creeks (natural or artificially constructed), interactive water sculptures etc., as well as comprising zero-depth splash pads with sprays, water equipment, and a water management system.

Play spaces as community hubs

Play spaces are increasingly being valued as safe, natural places where the entire community are invited to have fun, be active, and enjoy each other’s company, hence building happier, healthy connected communities. Play space design is evolving to encompass spaces which serve the needs of diverse groups.

High density play – Privately Owned, Publicly-Accessible Spaces (POPS)

In order to meet the needs and benchmarks of open spaces in areas of high density living, private developers are encouraged to include POPS in their Development Application. POPS can include play spaces (or spaces where children are welcome) and are spaces where the public are welcomed, but the area is privately owned. POPS are usually pocket-sized play spaces.

2 Strategic Context

Play is guided by a broader international, national and state policy framework. The following section provides an overview of the three key policy areas influencing play and the key guiding documents that have informed the development of this Play Plan.

2.1 Children's right to play

The UN Convention on the Rights of the Child 1989 sets out the universally accepted rights for children. Article 31 of the Convention affirms the right to engage in play activities appropriate to the age of the child. Article 12 of the Convention also establishes that children should be given the opportunity to have a say in how public play environments are planned and designed with and for them.

2.2 Inclusive play

The UN Convention on the Rights of Person with Disabilities 2006 affirms that persons with disabilities are entitled to the full spectrum of human rights and fundamental freedoms without discrimination. Article 7 states that children with disabilities have the right to participate in play, recreation, leisure and sporting activities with other children.

At a state level, the NSW Government's Everyone Can Play Guideline 2019 is a practical guide for creating play spaces that are designed to be inclusive of everyone in the community and are delivered according to best practice principles.

2.3 Open space and play

The (Draft) Greener Places Policy produced by the Government Architect NSW recognises that a key social benefit of green infrastructure is that it provides more opportunities and places for children to play.

Key implications for this play plan:

- ▶ Play is a universally recognised right for children and there is a responsibility at all levels of government to provide opportunities for children to play;
- ▶ Children with disabilities have the right to participate in play and contemporary play spaces should aim to be inclusive of everyone in the community; and
- ▶ Play is an important function of open space and is best planned as a part of an open space network that considers accessibility, distribution, size and shape, quantity, quality and diversity of spaces.

A photograph of two young children sitting against the trunk of a large tree in an autumn setting. The tree's bark is light-colored with dark, peeling patches. The ground is covered with fallen brown leaves. The child in the foreground is wearing a green and blue striped sweater and blue pants, looking off to the side. The child behind them is wearing a grey sweater and blue pants, also looking in the same direction. The background is a soft-focus view of a park with more trees and foliage.

Part B

Local context

3 About the Hornsby Shire

The following section provides an overview of the Hornsby Shire's characteristics, including a community profile, local characteristics and how these may influence the planning and design of play space.

3.1 The Bushland Shire

“Our Bushland Shire is a place for people. It has impressive places and wonderful environments and offers a great lifestyle for all members of our community”

*Hornsby Shire Vision Statement
- Your Vision | Your Future 2028.*

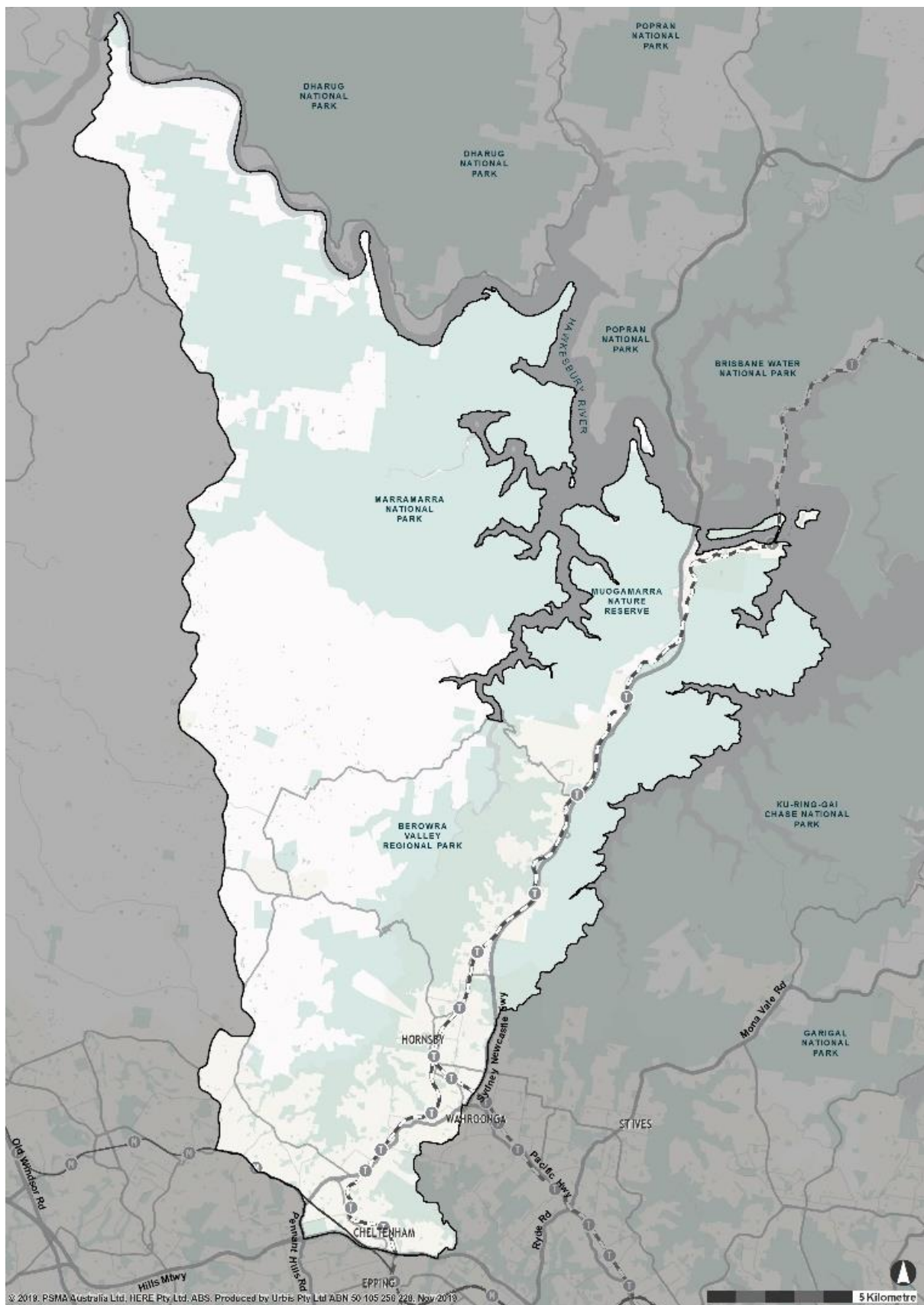
Hornsby Shire is known as the bushland shire; two-thirds of the area comprises national park and bushland, along with major waterways providing unique settings for nature-based play. The Bushland Shire enjoys the benefits and convenience of city living with enviable access to pristine bushland and waterways. It is the place where the city meets the bush.

Formed in 1916, the Hornsby Shire is the largest council in Metropolitan Sydney by land area, covering around 45,500 ha. Hornsby Shire forms part of the Northern Suburbs, being located approximately 25 kilometres north of the Sydney CBD. The Shire stretches from North Epping in the south to Wisemans Ferry in the north and Brooklyn in the east.

Hornsby Shire includes 45 suburbs, towns and localities across a diverse range of settings - from densely populated Hornsby Town Centre in the urban sector, to sparsely populated Maroota in the rural sector.

The traditional inhabitants of the Shire are the Aboriginal people of the Darug, Guringai and Darkinjung language groups. Aboriginal people continue to live in Hornsby Shire, still caring for Country.

Figure 1 – Hornsby Shire



3.2 Hornsby Shire community

The Play Plan is tailored to respond to the unique features of the Hornsby Shire community. The following section provides a snapshot of the key demographic characteristics of Hornsby Shire LGA and how these characteristics have shaped the planning and design thinking in the Play Plan.

- ▶ Hornsby Shire is home to around 150,000 people living in a diverse mix of settings, from semi-rural properties in the north to high density urban settings around Hornsby Town Centre;
- ▶ The population is projected to grow by 15% to around 170,000 people by 2028, driven by an increase in medium and high-density housing in the southern half of the Shire;
- ▶ Hornsby Shire is a popular location for families, with nearly 70% of all households identifying as families with children. The Play Plan considers the needs of children as well as their parents, grandparents and carers to provide a comfortable experience for everyone;
- ▶ Hornsby Shire has an older population with a median age of 40 compared to 36 for the Greater Sydney area. The population will continue to age over the next 10 years, in some areas more than others;
- ▶ Hornsby Shire is culturally and linguistically diverse, with a third of the population speaking a non-English language at home. Hornsby Shire is also home to around 664 Aboriginal or Torres Strait Islander people;

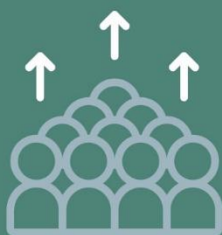
- ▶ Large areas of the Shire are not well connected to public transport and are dependent on car travel, with 18% of the population owning 3 or more vehicles; and
- ▶ There are 6,204 people in the Shire who need assistance in their day-to-day lives due to disability.

Key implications for this play plan:

- ▶ Hornsby Shire is made of a diverse range of settings - from urban to rural - and play space planning and design should respond to these differences;
- ▶ Population growth is concentrated in the southern half of the shire and planning will need to respond to this increased demand;
- ▶ Hornsby Shire is home to a diverse range of people, so opportunities for people of all ages, abilities and backgrounds to play and stay should be planned for;
- ▶ Intergenerational play is a great way to support physical and mental health for an aging population;
- ▶ Play spaces should celebrate culture and diversity in a way that's fun; and
- ▶ Walkable play spaces can help reduce car usage but recognising that not all areas of Hornsby are walkable neighbourhoods.



Population
150,000
in 2018



Growing to
170,000
by 2028



Aging population
median age of **40**
compared to **36** for
Greater Sydney



**Family
destination**
70% of all
households are
families with
children



**High car
ownership**
18% own three
or more cars



**Culturally
diverse**
37% of people
were born
overseas



**Linguistically
diverse**
1/3 households
speak a non-
English language



Disability
6,204 people
identify as having
a disability



Indigenous
664 identify
as Aboriginal
and/or Torres
Strait Islander

4 Community Consultation

Community consultation has been key to the development of the Hornsby Play Plan to ensure it reflects the needs of the local community. The following section outlines the community consultation activities and summary of key findings from across all consultation activities.

The detailed description of the community consultation process and results are provided in a separate report, titled the “Hornsby Shire Play Plan Community Consultation and Community Consultation Design Brief”.

This Draft Play Plan and Community Consultation and Community Consultation Design Brief (March 2020) are both out for public exhibition for further feedback from the community.

4.1 Groups consulted

Broad community consultation was undertaken, with a total 1,011 people (including 156 children and 83 young people) across 16 separate consultations, as outlined in Table 3. The outcomes of this broad community engagement have informed the development of this Play Plan.

Table 3 – Summary of community consultation activities and groups

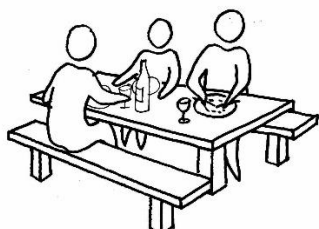
GENERAL COMMUNITY	COMMUNITY ONLINE SURVEY
Primary Schools	<ul style="list-style-type: none">▶ Waitara Public School;▶ Waitara Park Opening; and▶ Arcadia Public School Play Patrol.
High Schools	<ul style="list-style-type: none">▶ Cherrybrook Technical High School; and▶ Battle of Berowra Skatepark Event.
Pre-schools	<ul style="list-style-type: none">▶ Beecroft Playgroup;▶ Galston Playgroup; and▶ Waitara Park Opening.
Disability Sector	<ul style="list-style-type: none">▶ Warrah Special School outing to Fagan Park;▶ Parent of a child with cerebral palsy; and▶ Warrah Special School parent survey.
Older People	<ul style="list-style-type: none">▶ Probus Group.
Indigenous Representatives	<ul style="list-style-type: none">▶ Kuringai Nation

4.2 Consultation outcomes

The detailed process and outcomes of community consultation are provided in a separate report, titled “Hornsby Shire Play Plan Community Consultation and Community Consultation Design Brief”.

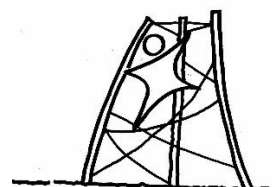
The below provides a summary of the key consultation outcomes from across all activities

Current play spaces



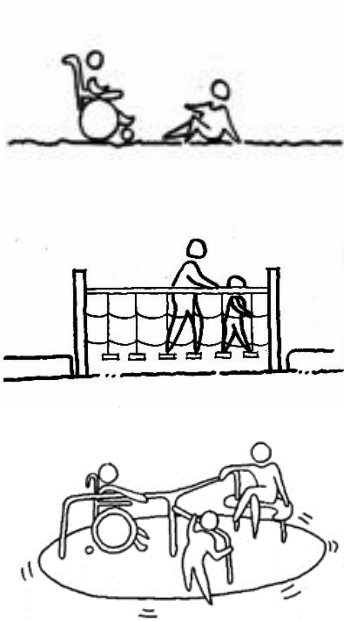
- ▶ **Popular spaces** – Fagan Park, Waitara Park, Asquith Park, and Ruddock Park are the most popular play spaces in the Hornsby Shire - Fagan Park is the clear community favourite which aligns with its status as a regional play space;
- ▶ **Maintenance** – Residents are generally satisfied with play space maintenance – areas for improvement include shade provision, fixing damaged equipment, poor amenities (e.g. fences and toilets) and general cleanliness;
- ▶ **Crowding** – Residents are generally satisfied with the number of play spaces, however there is some overcrowding of popular play spaces, eg. Fagan Park. The semi-rural suburbs of Arcadia, Berrilee and Fiddletown do not have any play spaces and residents are dissatisfied with having to pay to use Fagan Park; and
- ▶ **Information** – There is a need for improved information about Hornsby’s play spaces, particularly which current play spaces are inclusive and future planning for specific play spaces needs to be communicated.

More challenging and novel play experiences



- ▶ **We’re up for a challenge** – The community would like play spaces that go beyond the core experiences of traditional play spaces. They would like a variety of play spaces, providing more challenging and sophisticated play types;
 - **Adventure play** – Adventure play is the standout favourite for future play provision in the Hornsby LGA;
 - **Water play** – There is strong community demand for a water park. There are currently no waterplay parks in the LGA and there is frustration about having to drive long distances to find waterplay experiences; and
 - **Biking** – Biking is very popular across all age groups, and there is demand for more cycling opportunities. This includes “learn to ride” tracks for young children, more challenging BMX and mountain bike tracks, and bush-based cycling tracks.

Inclusive play



- ▶ **Something for everyone** – The community places high value on play spaces that cater for the whole family in one outing. However, there were consistent requests for play spaces with separate spaces for very young children and for young people, with equipment and experiences scaled to their size, skills and interests;
- ▶ **Inclusive play** – All ages and interest groups consulted are keen to see more accessible and inclusive play spaces where everyone can play together, regardless of ability or age, with no separate activities or items; and
- ▶ **Intergenerational play** – Older people enjoy visiting play spaces with their grandchildren and to see children play. They value intergenerational play equipment and opportunities to “have a go” themselves on equipment such as flying foxes and swings. Additional support such as handrails and benches with backrests are desirable whilst supervising children. Older people also value engaging experiences within their capabilities and interests, e.g. large chess sets.

Play space settings



- ▶ **The Bushland Shire** – Hornsby’s natural bush setting is highly valued. The community would like to see this leveraged to provide more nature play opportunities, including accessible nature trails and activities to allow everyone to participate in nature;
- ▶ **Shade and shelter** – Across the community there were concerns about provision of additional shade and shelter, especially in the context of climate change and increasing temperatures. Shade trees are highly valued by the community; and
- ▶ **Safety and security** – It is important to provide safe play spaces with equipment that is properly maintained, including softfall to prevent injury and lighting to extend play hours safely. Bark chips currently used in some play spaces are sharp and hurt to walk or fall on.

Age appropriate play



- ▶ **Play spaces for young people** – Young people and their parents would like more challenging equipment and group interaction (e.g. group swings). They value places where they can hang out with friends, with interesting things to do, and within easy access of school, home and shops; and
- ▶ **Play spaces for young children** – There was a strong message from carers of children aged 0-4 years that there is insufficient play provision scaled for very small children and infants to support development and social interaction.

Key implications for this play plan:

- ▶ There is a desire for more diversity of play types and experiences that are challenging and go beyond traditional play spaces;
- ▶ There are currently no water play spaces in Hornsby Shire and this needs to be addressed;
- ▶ Play spaces should provide opportunities for people of all ages, including children, young people and older people, with age appropriate settings, spaces and equipment;
- ▶ Play spaces should provide integrated play opportunities for people with varying disabilities and needs;
- ▶ Improved communications about play spaces across the Hornsby area would be appreciated to inform residents about specific features and future planning; and
- ▶ Consider equity of access to play spaces across Hornsby Shire, in future planning and design.

Part C

Play space analysis



5 Existing Play Spaces

The following section provides an overview of existing play spaces in the Hornsby Shire, including the quantity, quality, distribution, and hierarchy of play spaces.

To inform this analysis an evaluation of all public play spaces in the Hornsby Shire was undertaken between January 2019 and May 2019. The aim of the play space evaluation process was to determine the:

- ▶ Quality and condition of each play space;
- ▶ Range of play types and play experiences in each space;
- ▶ Context and surrounding supportive features;
- ▶ Quantity of play spaces on offer in terms of local resident population;
- ▶ Improvements and potential for upgrades; and
- ▶ Classification using the recommended play space hierarchy.

5.1 Quantity

There are currently 131 Council-managed, publicly accessible play spaces within the Hornsby Shire LGA. Based on the current population of 150,000 people this equates to a provision of 1 play space per 1,145 people.

The State of the Sector Report on Play spaces 2014, found that the median provision by Local Government across Australia is 1:1,000 people, with inner urban areas averaging 1:2,000 people.

Based on this analysis, in overall terms, Hornsby Shire has an adequate level of provision for the current population distribution across the LGA. However, there are current shortfalls in play space provision in some districts across the LGA, and furthermore, as the population increases overtime, additional play spaces (or larger play spaces) will be needed to meet demand. Refer section 6.

5.2 Hierarchy

In Australia, play spaces are classified within a hierarchical framework. While there is no national or state policy document establishing the basis of the framework, there is universal

agreement amongst Councils on the hierarchical system. There are constant adjustments to the hierarchy, making play space provision a dynamic process. For example: 20 years ago, most Councils had one Regional Play space, and now, more are common.

To date, Hornsby Shire Council has not adopted a formal play space hierarchy and has instead loosely worked within a framework established through the annual inspection process. This Play Plan formalises the play space hierarchy, which provides a practical planning, design and management tool.

Council's play spaces are proposed to be grouped according to a four-tier hierarchy of provision, including Regional, District, Local and Pocket. A further category has been included for Special Use play spaces which includes learn to ride tracks, water parks, etc.

Existing play spaces were reviewed and determined to fall into the following categories:

- ▶ **Regional Play Space:** Large, generous scale, serves whole Local Government Area, and people stay for a number of hours;
- ▶ **District Play Space:** Medium size, serves a larger district, and people stay for up to two hours;
- ▶ **Local Play Space:** Small play space which serves local residents who will walk or drive for a short visit (up to an hour);
- ▶ **Pocket Play Space:** Modest play space which serves local residents within walking distance, for short stay visit (less than 1 hour); and
- ▶ **Special Use Play Space:** Unique play provision e.g. learn to ride bike track, not replicated in other play spaces.

Refer Section 7: Play Space Framework for more details about the proposed hierarchy. The play space evaluation determined the hierarchy of all the play spaces in the Local Government Area. Most existing play spaces are provided at the local and pocket level.

Fagan Park is currently the only regional play space in the Hornsby Shire, which attracts people from all over Sydney and is often at capacity on weekends and public holidays. An

additional regional play space is planned as part of the Hornsby Quarry redevelopment.

Table 4 – Existing Play Spaces in Hornsby LGA

HIERARCHY	NO. OF CURRENT PLAY SPACES IN THE HORNSBY LGA
Regional	1
District	7
Local	71
Pocket	46
Special Use	6
Total	131

Refer to Section 7 for the distribution and hierarchy of existing play spaces.

Refer Section 8 for planned upgrades to play space hierarchies.

5.3 Distribution

Play space distribution in the Hornsby area is generally aligned with the historical population size and development pattern. Most play spaces are located around key centres in the south-eastern corridor of the LGA. Many play spaces are in parks co-located with sports facilities.

Equitable distribution of play spaces in each District of the LGA provides residents with great local play experiences, no matter where they live.

The variability of the terrain and uneven density of population means that different measures of distribution have been used across the LGA:

Semi-rural and suburban areas

In semi-rural and suburban areas travel time in cars or public transport was applied as follows:

- ▶ Pocket and Local play spaces: 5 to 10 minutes;
- ▶ District play spaces: 10 to 20 minutes; and
- ▶ Regional play spaces: up to one hour.

Medium to high density areas

The Governments Architects Draft Open Space for Recreation Guide 2019

(unpublished at the time of writing this document) has overall performance criteria for outdoor recreation, of which playgrounds are a type of recreation. The guide differentiates playgrounds by age, each group having different criteria. An 'access radius' is assigned to each age group, based on walkability. For medium to low density areas, the access radius for 5 to 12-year olds has been set at 400m for 80% of homes, and 500m for 100% of homes.

For the Hornsby Play Plan, a walking catchment of 400m from residential areas to play spaces has been applied to Districts 1,2+2a,4 and 8.

For higher density areas, (60-100 dwellings per ha), the access radius for 5 to 12-year old's has been set at 200m for 80% of homes and 300m for 100% of homes.

For the Hornsby Play Plan, a walking catchment of 300m from residential homes to play spaces has been applied to Districts 3 and 9.

Quality

The age of the existing play spaces range between 6 months to 30 years old. The design of play spaces in Hornsby LGA generally reflect the trends in play from the era. The older play spaces tend to be of low quality due to wear and tear over time, having long outlived their expected lifespan. But generally, most of the play spaces are very well maintained, and present as adequate to high quality venues for play.

A noticeable pattern of play space provision across the Shire is duplication of play equipment manufacturers and play types and experiences. This repetition detracts from the high quality of the spaces generally.

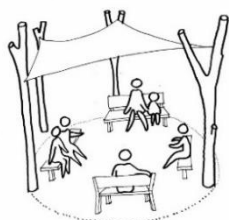
Hornsby Shire play spaces are unique in many ways, with the standout hallmarks being:

- ▶ A high percentage of play spaces benefit from bushland (41%) and creek (15%) settings;
- ▶ A high percentage of play spaces are fenced (49%), have a path leading into the play space (68%) and have seating;
- ▶ A high percentage of play spaces have adequate shade (70%); and
- ▶ A high percentage of play spaces have amenities nearby (34%).

5.4 Existing play space analysis

The following infographics provide a snapshot of existing play types and facilities in the Hornsby LGA.

PLAY SPACES WITH ADEQUATE SHADE



70%

PATHS LEADING FROM FOOTPATH TO PLAY SPACE



68%

PLAY SPACES WITH DRINKING FOUNTAINS (NOT TAPS)



67%

FENCED PLAY SPACES



49%

PLAY SPACES WITH PICNIC SHELTERS NEARBY



48%

PLAY SPACES ADJACENT TO BUSHLAND AREAS



41%

PLAY SPACES WITH PATHS TO RIDE BIKES



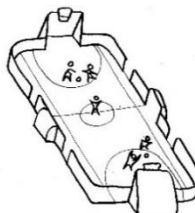
40%

PLAY SPACES WITH AMENITIES NEARBY



34%

PLAY SPACES ADJACENT TO SPORTING FACILITIES



26%

PLAY SPACES WITH BBQ FACILITIES



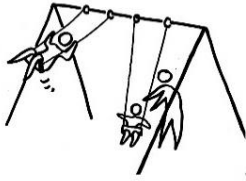
19%

PLAY SPACES NEAR CREEKS



15%

PLAY SPACES WITH SWINGS



89%

PLAY SPACES WITH BALANCING



34%

PLAY SPACES WITH SLIDES



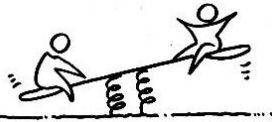
80%

PLAY SPACES WITH SPINNING



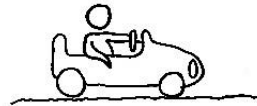
32%

PLAY SPACES WITH ROCKERS



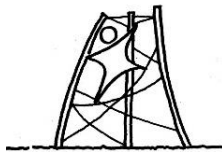
62%

PLAY SPACES WITH IMAGINATIVE PLAY



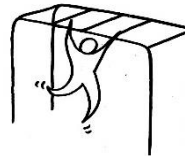
24%

PLAY SPACES WITH CLIMBING



62%

PLAY SPACES WITH MONKEY BARS



12%

PLAY SPACES WITH BIKE TRACK
(PATH)



40%

5.5 Play types analysis

Physical play

Swings are well provided across the LGA – 89% of play spaces have swing sets.

Slides, rocking equipment and climbing opportunities are also well represented at 80%, 62% and 62% respectively. However, most climbing equipment is 2-dimensional, when 3-dimensional climbing is preferred. See Section 7.5: Quality Play Provision for examples.

Bike riding, balancing and spinning settings are moderately well represented at 40%, 34% and 32% respectively.

Monkey bars, track rides, and flying foxes are less evident at 12%, 6% and 4% respectively.

Sensory play

Specific sensory play is poorly represented:

- ▶ 7% of play spaces have sound or music equipment.
- ▶ 4% of play spaces have sandpits, and;
- ▶ 2% of play spaces have some form of water play provision.

This is somewhat offset against 41% of play spaces being directly adjacent to bushland areas, and 3% of play spaces near streams or water bodies. However, more sensory play types could be considered in the future.

Solo play

Individual one-child play opportunities are offered throughout the LGA, especially for young children (e.g. individual rockers or spinners).

Parallel play

Side-by-side play offers are provided in every swing set, and in some instances, slide and climbing provision.

More opportunities could be considered in double flying foxes and paired play equipment offers e.g. 2 rockers, 2 spinners, double slides etc.

Constructive play

Very few play spaces contain sand (4%), however this is offset by Council-provided loose branches and trunks, which encourage cubby building in numerous play spaces. This is considered best practice, with obvious take-up from the community.

More opportunities for sand play could be considered.

Social play

Most play spaces offer a combination unit of some sort, which encourages social play and games.

Many play spaces offer cubby-like spaces with shopfronts which stimulates social opportunities.

Cognitive play

Few play spaces offer cognitive play challenges – this is an obvious area for future improvement. While a number of play spaces have activity panels, many of them are aimed at toddlers. The opportunity is to extend this to older age groups.

Imaginative play

24% of play spaces offer individual items to support imaginative play e.g. shopfronts, small cars, and spider web climbers. This could be improved. Overall themed settings could be considered more often. E.g. farm setting or bushland flora setting etc.

Nature play

41% of play spaces are directly adjacent to bushland areas, providing a natural setting for play. This has an impressive positive impact on the quality of the play space provision. A number of newer spaces include natural materials and items (e.g. boulders). This level of play provision could be considered more often.

Intergenerational play

This fairly new concept in play provision has not yet been applied to play spaces in the Hornsby Shire – this is also an obvious area for future improvement.

5.6 Age breakdown

The current Hornsby Shire play spaces provide for toddlers and primary school aged children. Babies and young people are under-catered for. Play for adults and older people is a relatively new concept in play, hence provision is currently low (4%).

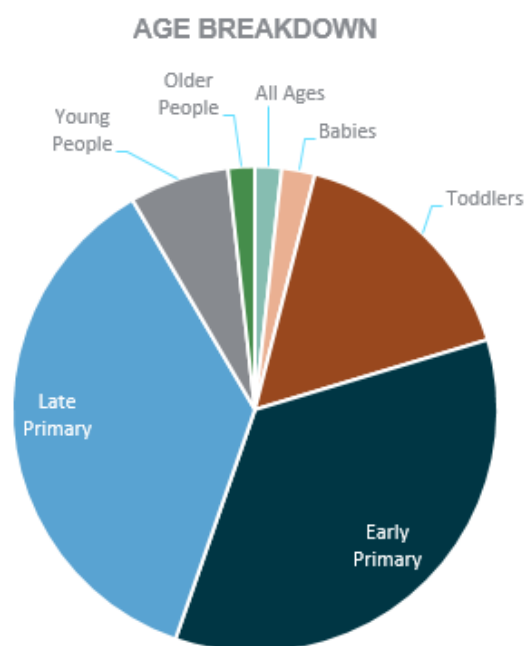
The majority of play spaces are designed for toddlers and primary school aged children, while babies, infants, and young people are under catered for (e.g. only 4% of play spaces contain sandpits for babies and infants).

Table 5 – Play Provision for Different Age Groups

AGE GROUP	AMOUNT PROVIDED	% OF 136*
All Ages	6	4%
Babies	7	5%
Toddlers	50	37%
Early Primary	107	79%
Late Primary	111	82%
Young People	21	15%
Older People	6	4%

* Many play spaces cater for multiple age groups

Figure 2 – Play Provision for Different Age Groups



Key implications for this Play Plan:

- ▶ Hornsby Shire has a good number of play spaces, with reasonable distribution across the LGA. However, there are some gaps in provision across the LGA which need to be addressed;
- ▶ Hornsby Shire play spaces benefit from many natural elements, including adjacent bushland and creek settings;
- ▶ Hornsby Shire play spaces are generally high quality and well maintained in terms of their settings and comfort levels;
- ▶ Hornsby Shire play spaces generally need improvement in the diversity of play types and experiences;
- ▶ Hornsby Shire play spaces need to diversify to cater for more varied age groups.

6 District Analysis

The following section provides a detailed analysis of current play space provision and future need at a district level. Hornsby Shire Council uses Plan of Management (POM) districts to manage their network of open spaces, and for consistency, the POM districts have been used as planning boundaries for this Play Plan.

While these boundaries provide a useful tool for assessing current and future needs, in reality people will move across these boundaries and utilise play spaces in other parts of the Hornsby Shire and other local government areas. The analysis is a guide only and regular reviews will assist in effective implementation.

There are seven planning districts used for this analysis.

6.1 Analysis assumptions

The following analysis uses a population benchmark of 1 play space per 1,400 people, determined in consultation with Council and population forecasts from Forecast.id data. This also considers the local context, consultation outcomes and other research undertaken for this Play Plan. See Section 5.1 Quantity for a further explanation on quantity of play spaces.

Destination parks

Hornsby's Active Living Strategy adopts a hierarchy for the LGA's open space which is based on the 'drawcard effect'. This

categorises open space based on how far people are willing to travel to access the facility. As part of this approach, the Active Living Strategy recognises that Hornsby has a unique opportunity to draw on its diverse landscapes to provide a selection of 'destination' parklands.

Destination parklands attract people from a district catchment (2 – 5km from most residences) or regional catchment (visitors from the Sydney sub-region or further). Destination parklands offer the broadest spectrum of recreation opportunities whilst also catering for large visitor numbers.

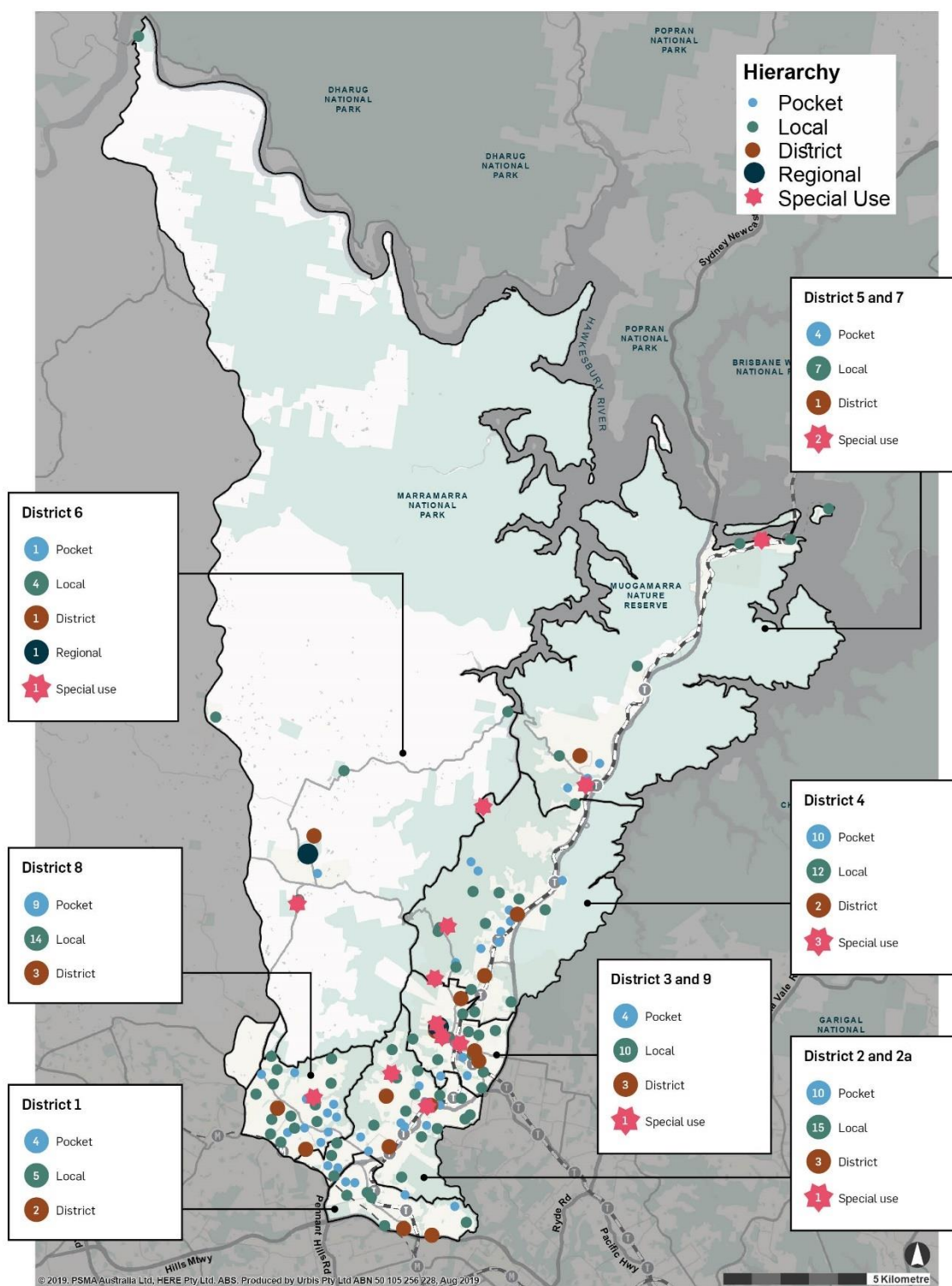
Destination parklands should include some or all of the following facilities and amenities:

- ▶ Toilets (open to the public);
- ▶ Dog off leash area;
- ▶ Generous kickabout space;
- ▶ Seating;
- ▶ Hit up wall/half ball court;
- ▶ Playground;
- ▶ Circuit path (including children's cycle);
- ▶ BBQ/picnic;
- ▶ Links into bushland (including signed short circuit loop to and from park); and
- ▶ Café or kiosk.

This Play Plan identifies the location of all play spaces, some within destination parklands.

Figure 3 – Current Hornsby LGA playspaces

Current Hornsby playspaces



6.2 District 1

District 1 contains the suburbs of Cheltenham, North Epping and part of Beecroft, Pennant Hills and West Pennant Hills.

This District is projected to experience population growth of nearly 10% over the next 10 years which will be concentrated in Beecroft and Cheltenham.

Table 6 – District 1 Population

	2018	2028
Population	14,365	15,768
Play Space Provision Ratio	1:1,305	1:1,433
% Growth	-	9.8

District 1 has a total of 11 play spaces, or 1 for every 1,305 people. There are currently no Regional, District or Special Use play opportunities within District 1.

Table 7 – District 1 Play Spaces

	2020	2035	
Pocket	4	4	Epping Oval upgrade
Local	7	6	
District	0	1	
Regional	0	0	
Special Use	0	0	
Total	11	11	

Key implications for this play plan:

- ▶ This District currently has no District sized play spaces and will require one in the future. An Inclusive District level play space recommended at Epping Oval Playground;
- ▶ Beecroft is well supplied with play spaces;
- ▶ North Epping is isolated from surrounding suburbs and is served by 3 play spaces;
- ▶ This District requires play opportunities for young people

Refer Section 8.5 for District 1 Action Plan

6.3 Districts 2 and 2A

Districts 2 and 2A contains suburbs of Thornleigh and Westleigh and parts of Beecroft, Hornsby, Normanhurst, Pennant Hills, Wahroonga and West Pennant Hills.

Pennant Hills is a key local centre which is accessible via a bus and rail network. The District has the second largest existing population and will experience nearly 10% growth in the next ten years. Population growth will be focused in Thornleigh with the development of medium and high-density housing and to a lesser extent in West Pennant Hills.

Table 8 – Districts 2 and 2A Population

	2018	2028
Population	30,827	33,802
Play Space Provision Ratio	1:1,063	1:1,165
% Growth	-	9.6

District 2 and 2A currently has 29 play spaces, or 1:1,063 people. This District has one Special Use play space, provided at Thornleigh Skate Park. The majority of play spaces in this District are pocket and local play spaces, generally located along the western side of the railway corridor.

Table 9 – Districts 2 and 2A Play Spaces

	2020	2035	
Pocket	10	9	Kenley Park removal Westleigh Park (new) Brickpit & Wollundry Park upgrades
Local	17	16	
District	1	3	
Regional	0	0	
Special Use	1	1	
Total	29	29	

Key implications for this play plan:

- ▶ Population suggests this District requires 2-3 District sized play spaces. Upgrades suggested are Wollundry Park and Brickpit Park. Ruddock Park remains district level;
- ▶ Brickpit Park with its co-located facilities is a good venue for a youth space. Improved access and upgrade in playground hierarchy works to be provided;
- ▶ Kenley Park is recommended to be removed as it is small, underutilised and of low quality;
- ▶ Ruddock Park can be upgraded to include a dedicated learn-to-ride track;
- ▶ Surrounding bush should be used for nature play programs and bush trails;
- ▶ A new local level play space is proposed at Westleigh Park.

Refer Section 8.6 for Districts 2 and 2A Action Plan

6.4 Districts 3 and 9

Districts 3 and 9 contain the suburb of Waitara, plus parts of Hornsby, Wahroonga and Normanhurst. This District has the largest existing population and second highest forecast growth in the Hornsby Shire, driven by medium and high-density dwelling development in the Hornsby Town Centre.

This district is the most culturally and linguistically diverse and there is a younger population, with higher numbers of young people attracted by access to the Town Centre environment, including employment opportunities and connectivity provided by Hornsby train station.

Table 10 – Districts 3 and 9 Population

	2018	2028
Population	35,567	41,687
Play Space Provision Ratio	1:2,092	1:1,985
% Growth	-	17.2

District 3 and 9 currently has 17 play spaces, or 1:2,092 people. Hornsby Town Centre is the civic and population centre of Hornsby Shire. Plans for a regional recreation precinct including a play space at the Hornsby Quarry are proposed and are likely to be completed by once the site has been remediated.

Table 11 – Districts 3 and 9 Play Spaces

	2020	2035	
Pocket	4	4	
Local	10	10	
District	3	4	Crusher Plant (new)
Regional	0	1	Old Man's Valley (new)
Special Use	0	2	Hornsby Youth Space & Hornsby Splashpad (new)
Total	17	21	

Key implications for this play plan:

- ▶ Current play provision is lower than average. Forecasted population growth requires more play spaces to be provided;
- ▶ There are currently 3 District level play spaces, and a fourth is recommended at Hornsby Quarry - Crusher Plant precinct.
- ▶ A Regional play space is recommended at Hornsby Quarry - Old Mans Valley precinct;
- ▶ Central location and denser population means this district is ideal for a dedicated 'splashpad' water play space. This is suggested in the Hornsby Quarry precinct;
- ▶ The new town centre configuration requires a dedicated youth space;
- ▶ Wallarobba Arts and Cultural Centre offers an ideal venue for an art play program;
- ▶ Privately Owned Publicly Accessible Spaces (POPS) shall be provided whenever current distribution of play space is insufficient; and
- ▶ Hornsby, Asquith and Waitara could join the Play Street program.

Refer Section 8.7 for Districts 3 and 9 Action Plan

6.5 District 4

District 4 contains the suburbs of Asquith, Hornsby Heights, Mt Colah, Mt Ku-ring-gai and parts of Berowra and Hornsby. The forecasted population growth is the highest in the Hornsby Shire, with increases across all age categories.

The greatest growth will occur in Asquith, which will see an additional 2,200 dwellings built. This is expected to attract a young workforce, parents and homebuilders as well maintaining a growing elderly population.

Table 12 – District 4 Population

	2018	2028
Population	21,010	25,678
Play Space Provision Ratio	1:840	1:988
% Growth	-	22.2

District 4 currently has 25 play spaces, or 1 for every 840 people, and will maintain a high level of provision with projected high level of growth. This District has one District and no Regional level play spaces, even though it will have the third largest population in the Hornsby Shire.

Table 13 – District 4 Play Spaces

	2020	2035	
Pocket	11	10	Ulolo Community Park upgrade & Berry Park (new)
Local	12	13	
District	1	2	
Regional	0	0	Hunt Reserve upgrade
Special Use	1	1	
Total	25	26	

Key implications for this play plan:

- ▶ Current provision of play spaces in District 4 is good, and will remain so in the future;
- ▶ District 4 has one District level play space. One extra is suggested at Hunt Reserve (hierarchy upgrade);
- ▶ A new local play space is recommended at Berry Park as local residents are land-locked between the freeway and railway line;
- ▶ Mills Park and Ulolo Community Park are unique venues for activities for older people and young people.
- ▶ 7 schools in this district offer possible sites for shared use programs;

Refer Section 8.8 for District 4 Action Plan

6.6 Districts 5 and 7

Districts 5 and 7 contain the suburbs of Berowra Heights, Cowan, Brooklyn, Dangar Island and Milsons Passage, plus parts of Berowra and Berowra Waters. The area is predominately semi-rural and consists of bushland, several creeks and the Hawkesbury River. The District is projected to experience the smallest growth, with a modest amount of development expected in Berowra.

Table 14 – Districts 5 and 7 Population

	2018	2028
Population	12,024	12,161
Play Space Provision Ratio	1:802	1:811
% Growth		1.1

This District currently has 14 play spaces, or 1:802 people, and will maintain a high provision based on minimal population growth.

Table 15 – Districts 5 and 7 Play Spaces

	2020	2035	
Pocket	4	3	
Local	8	8	Crossroads upgrade
District	0	1	Warrina St upgrade
Regional	0	0	
Special Use	2	2	
Total	14	14	

Key implications for this play plan:

- ▶ Upgrade Crossroads Reserve play space to a Local level;
- ▶ Currently no District level play spaces; upgrade Warrina St Oval Playground to District level, and include 'taps and runnels' waterplay element;
- ▶ Earmark one park in Berowra for sophisticated play experiences for young people such as group swings or hang out spaces;
- ▶ Nature play generally missing throughout District and should be included; and
- ▶ Shade provision in District 5 & 7 is low and natural shade should be incorporated to pocket and local play spaces.

Refer Section 8.9 for Districts 5 and 7 Action Plan

6.7 District 6

District 6 contains the suburbs of Arcadia, Berrilee, Berowra Creek, Berowra Waters, Canoelands, Dural, Fiddletown, Forest Glen, Galston, Glenhaven, Glenorie, Laughtondale, Maroota, Middle Dural, Singletons Mill and Wisemans Ferry. Large areas of the northern part of the district are protected as National Park.

Table 16 – District 6 Population

	2018	2028
Population	13,148	14,257
Play Space Provision Ratio	1:1,643	1:1,782
% Growth	-	8.4

District 6 currently has 8 play spaces, or 1:1,643 people. This District has the only Regional play space in the Hornsby Shire (Fagan Park). Fagan Park attracts residents and visitors from across Sydney.

Nancy Place play space is the only Pocket play space however it is poorly located with no direct surveillance, has compliance issues and the recreation value it provides is very limited.

Table 17 – District 6 Play Spaces

	2020	2035	
Pocket	1	0	Nancy Place removal
Local	4	5	Arcadia Park (new)
District	1	1	
Regional	1	1	
Special Use	1	1	
Total	8	8	

Key implications for this play plan:

- ▶ District 6 is the only District with a Regional play space which serves the entire LGA and surrounds;
- ▶ District 6 is the largest District in area, and travel times by car to the closest play space is by far the greatest;
- ▶ Nancy Place play space is non-compliant and has no passive surveillance. Recommend removal of play space;
- ▶ An Adventure play space is recommended in Fagan Park due to its Regional supportive items, open space and availability of raw material;
- ▶ A new Local play space is proposed for Arcadia.
- ▶ Water play is recommended at Fagan Park

Refer Section 8.10 for District 6 Action Plan

6.8 District 8

District 8 contains the suburb of Cherrybrook and part of Castle Hill. The recent opening of the Sydney Metro Northwest is expected to increase population growth within the neighbouring Hills Shire, and this may increase pressure on play spaces within the Hornsby Shire.

Table 18 – District 8 Population

	2018	2028
Population	24,865	25,667
Play Space Provision Ratio	1:921	1:951
% Growth	-	3.2

This District currently has 27 play spaces, or 1:921 people, including one Special Use play space at Cherrybrook skate park.

Table 19 – District 8 Play Spaces

	2020	2035	
Pocket	12	10	Myson Drive removal
Local	13	13	Morefield Reserve upgrade
District	1	2	Edward Bennet upgrade
Regional	0	0	
Special Use	1	1	
Total	27	26	

Key implications for this play plan:

- ▶ Play space provision is adequate in District 8 however play experiences for primary aged children are often repeated and require more diversification;
- ▶ Greenway Park Community Centre has 2 spaces which should be upgraded and amalgamated;
- ▶ The District requires play experiences for young people close to public transport and food options;
- ▶ A dedicated learn-to-ride bike track is recommended at Erlestoke Park.
- ▶ Suggest rehabilitation or a gentle exercise trail in a generous park setting;
- ▶ Currently there is one District level play space – a second District level play space should be provided by upgrading Edward Bennet play space; and
- ▶ Upgrade Morefield Hill Reserve to Local level.

Refer Section 8.11 for District 8 Action Plan



Part D

Plan for the future

7 Play Space Framework

The following section promotes a vision for public play provision in the Hornsby Shire area, provides overall play space design principles and establishes a play space hierarchy to guide future play space planning and investment.

7.1 Vision statement

Play spaces are vital to a liveable, productive, sustainable and collaborative Shire and they draw on the unique natural assets of the Bushland Shire.

Hornsby Shire Council commits to the equitable provision of diverse and engaging public play spaces for all residents in the Shire.

7.2 Guiding principles

The following principles have been informed by the research undertaken for this Plan, and in consultation with Council. The guiding principles align with the four key themes of the Hornsby Shire Community Strategic Plan.

Table 20 – Guiding Principles

THEME	PLAY IS:
Liveable	Fun – memorable, distinctive, diverse and imaginative
	Healthy – physical, intellectual, social and emotional
	Comfortable – amenities, seating and shelter
Productive	Managed – planned, managed and maintained
	Safe – compliant, age appropriate and well located
Sustainable	Sustainable – socially, financially and environmentally
Collaborative	Inclusive - all ages, cultures and capabilities
	Identifiable – promoted, valued, sign posted, identifiable and recognised

7.3 Play space design principles

Irrespective of a play space's nominated hierarchy, each play space should be designed in accordance with the following 8 universal principles:



7.4 Design considerations

The following design principles guide the design of play spaces at hierarchal levels.

Table 21 – Design principles

DESIGN PRINCIPLES	
Siting	Outdoor play spaces are typically provided in many diverse settings, including parks, community centres, and national parks. Refer to AS 4685.0 Section 6: Play Space Development for siting requirements.
Transport	Transport links are to be considered in District and Regional play spaces. Play spaces with transport links should be communicated through Council's website, library, social media etc. Note: 26% of Council's play spaces have nearby public transport, most of which are local play spaces.
Parking	Parking should be located as close as possible to the play space and include accessible parking. Note: topography can limit this outcome.
Amenities Block	Accessible amenities blocks are desirable and should be provided at District and Regional play spaces.
Surveillance	Play space design should encourage active supervision by carers through accessible seating in the centre of the play space. Low planting is valued for supervision. Tall opaque structures in the middle of the play space should be avoided. Passive surveillance of the play space from neighbouring residential properties and streets is highly valued.
Accessibility	The requirements of AS 1428 shall be applied to Regional and District play spaces. This includes access up to and through the play space, including up to and onto play equipment. Accessibility in Local play spaces shall be considered, where possible.
Wayfinding	Play space design should take into account all the ways in which people orient themselves in a play space and address how they navigate from area to area within the play space.
Universal Design	Wherever possible, the 7 principles of Universal Design shall be applied to play space design. Refer to The Centre of Universal Design Australia (CUDA). As a minimum, the principles should apply to District and Regional Play Spaces.
Fencing	Full perimeter fencing with self-closing gate hinges should be provided in all Regional and District play spaces. Where possible, fencing should be provided in Local play spaces as per current provision.
Variety	Play spaces should provide as many types of play as the space and budget allow.
Quality	Play space provision should value quality of play in terms of varied play types and longevity.

DESIGN PRINCIPLES

Shade	<p>Play spaces should be designed with areas of effective summer shade from either trees, built elements or both. The design should take into account the reflective index of various surfaces and materials to minimise UV exposure. Shade should be provided in accordance with the Cancer Council NSW's 'Guidelines to Shade: a Practical Guide for Shade Development in NSW'.</p> <p>The availability and desirability of winter sun is also important to consider and deciduous trees are invaluable in this regard. Where necessary, Regional and District play spaces should provide shade structures where trees cannot be achieved.</p>
Undersurfacing	<p>Playground undersurfacing material is required at all of Council's playgrounds in accordance with Australian Standards. At Regional, District and Local level playgrounds, rubber unitary undersurfacing should be used in areas that experience high usage levels such as under swings and at the end of slides. Unitary surfacing should also be applied in areas which are considered to be accessible. Play space mulch and sand are valued as sustainable choices which are cool underfoot and natural in appearance.</p> <p>Note: mulch and sand do not require 3-yearly testing in accordance with AS4422 and AS4685, whereas unitary surfaces do.</p>

7.5 Quality play provision

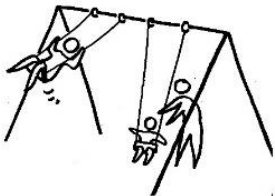



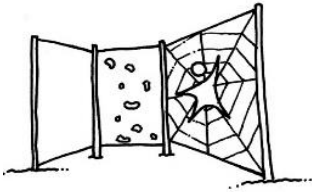
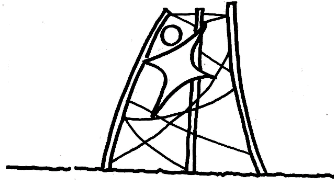
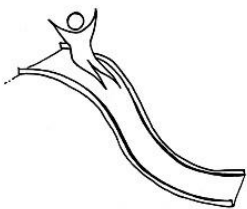


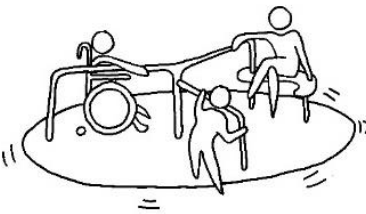
Hornsby Shire Council generally has an adequate number of play spaces across the Shire; this Plan recommends an improvement in the quality of play provision in the Shire. This shift is in direct response to public consultation. It also reflects the nationwide reframing of play provision over the last 15 years, which resulted in higher standards in public play. High quality play provision will also encourage greater levels of being active and healthy for all ages and capabilities.


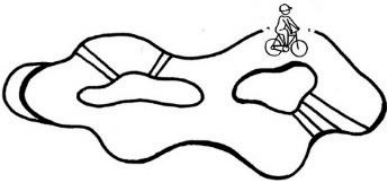
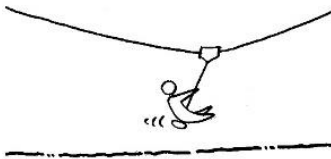
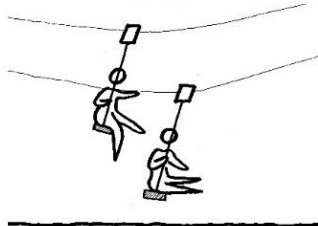

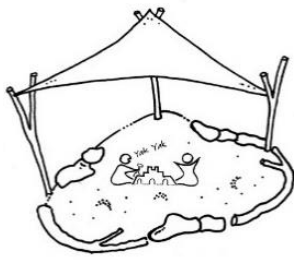
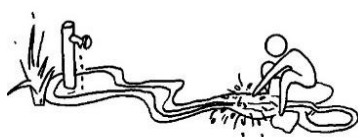

Improvement in quality public play provision can be achieved by:

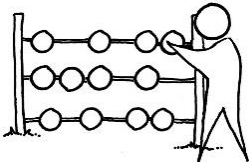
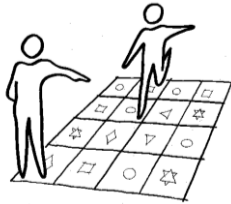
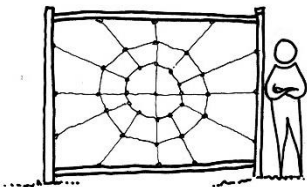

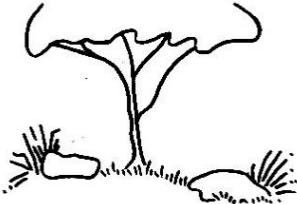

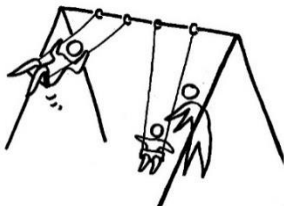
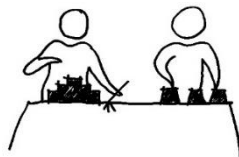
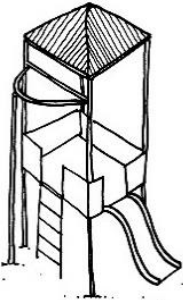
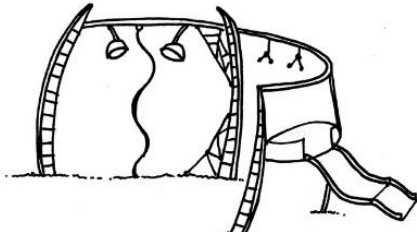
- ▶ Integrating play spaces with their settings, preferably in a natural environment;
- ▶ Using quality materials throughout each play space (robust, durable, attractive materials);
- ▶ Designing more diverse play types in play spaces (refer to Table 22);
- ▶ Providing more play spaces for 'missing age-groups' such as infants and toddlers, young people, and older people;
- ▶ Careful attention to diverse, balanced play provision across Districts, avoiding repetition of play types (Refer to Section 7.6: Mosaic of Play);
- ▶ Considered addition of non-traditional play space options to improve play diversity across the Shire e.g. shared spaces at schools, play streets, adventure play spaces, bush play programs, bike tracks, water play etc.;
- ▶ Consideration of designed play solutions (e.g. learn to ride bike tracks) in addition to standard equipment, games, mazes, hopscotch, sensory walkways, scavenger hunts, loose parts play with found objects (branches etc);
- ▶ More provision of nature-play elements and settings throughout the Shire e.g. use of boulders, plants and logs, turf etc.;
- ▶ Ongoing attention to maintenance (mowing, rubbish removal, raking of mulch, repair etc);
- ▶ Placing increased attention on creating convivial social spaces in the middle of play spaces (as opposed to the outer edges);
- ▶ Using coordinated colour schemes as a design tool in the selection of play space equipment, outdoor furniture, materials (e.g. rubber) and plants; and
- ▶ Creating habitats for wildlife adjacent to play spaces.

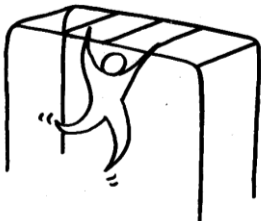
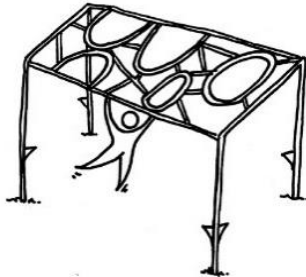

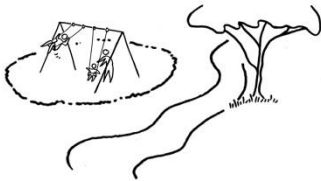
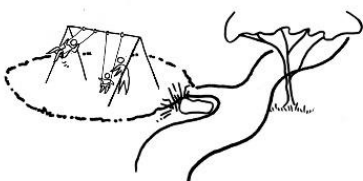
The following table provides a comparison of traditional play space provision versus current best practice quality provision.

Table 22 – Traditional versus Best Practice Play Types

PLAY TYPE	TRADITIONAL	BEST PRACTICE
Swings	 <p>1 bay swing with strap and toddler seat</p>	 <p>2 bay swing with social and/or inclusive seat, toddler and strap seats</p>
Rockers	 <p>Single rocker for one user</p>	 <p>Multi-user rocker, with inclusive supports on one side, or multiple single rockers, or 2-person see-saw</p>
Climbing	 <p>2D climbing panel</p>	 <p>3D climbing frame</p>
Sliding	 <p>1200mm high slide</p>	 <p>Varied slide choices</p>
Spinners	 <p>Single spinner</p>	 <p>Group spinner (carousel) preferably accessible, or 2-person spinner bowl</p>

PLAY TYPE	TRADITIONAL	BEST PRACTICE
Bike Tracks	 <p>Looped bike track</p>	 <p>Complex figure-8 bike track with fun challenges</p>
Flying Fox	 <p>Single pomma</p>	 <p>Double pomma, or complex track rides, or inclusive options e.g. cruise line (NO 5-way harnesses)</p>
Sandpit	 <p>Rectangular with concrete edge</p>	 <p>Free-form, natural materials and shade structure</p>
Water Play	<p>Not usually provided</p>	 <p>Pump and runnel, splash-pad, misters, creek play</p>
Dedicated Sensory play	<p>Not usually provided</p>	 <p>Planted areas, musical equipment, visual interest, texture and colour</p>

PLAY TYPE	TRADITIONAL	BEST PRACTICE
Cognitive Challenges	 <p>Tic tac toe, abacus</p>	 <p>Scavenger hunts, complex hopscotch, puzzles for all ages</p>
Imaginative Settings	 <p>2D spider web</p>	 <p>Themed play spaces, more sculptured animals, more 'open-minded' settings, evocative planting and materials</p>
Nature Play	 <p>Trees, grass, and mulch</p>	 <p>Logs, rocks, mulch, shipping ropes, boulders, quarry blocks, sand, water, trees, shrubs and ground covers and mulch</p>
Side-by-side	 <p>Swings the most common provision</p>	 <p>More options e.g. rockers, 2 spinners, 3D climbing, sandpits, shopfronts</p>
Social play	 <p>Combination unit: Step and deck</p>	 <p>Vary the mix</p>

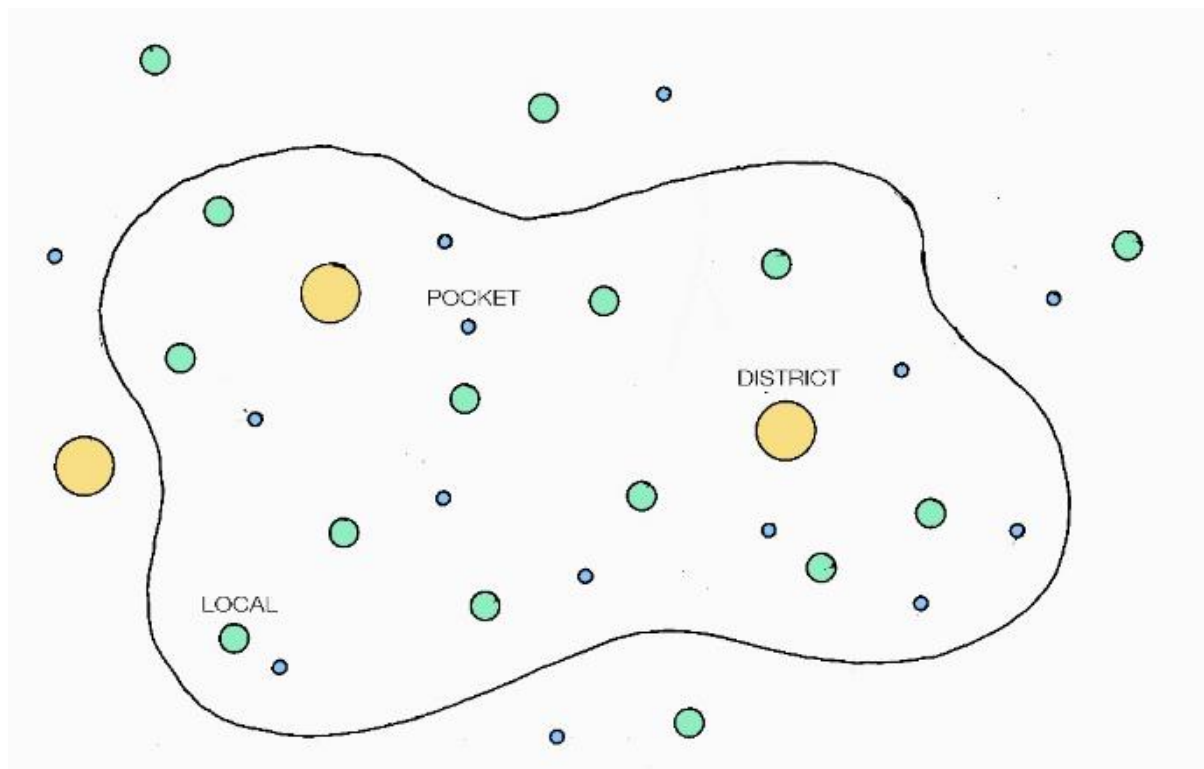
PLAY TYPE	TRADITIONAL	BEST PRACTICE
Monkey Bars	 <p>Traditional, but seldom-used</p>	 <p>Varied configurations – no platforms</p>
Trampolines (bouncing facilities)	<p>Not usually provided</p>	 <p>Group of single-use trampolines. Consider wheelchair access option</p>
Nature Trails	 <p>Not consciously linked to play spaces</p>	 <p>Obviously linked to play space</p>

7.6 'Mosaic of play' concept

Each District in the Hornsby LGA has its complement of play spaces, equitably distributed within the District. Typically, a District has one District play space and several Local and Pocket play spaces, with an average ratio of 1:10:7 (1 District to 10 Locals to 7 Pockets). Numbers depend on population density and housing styles.

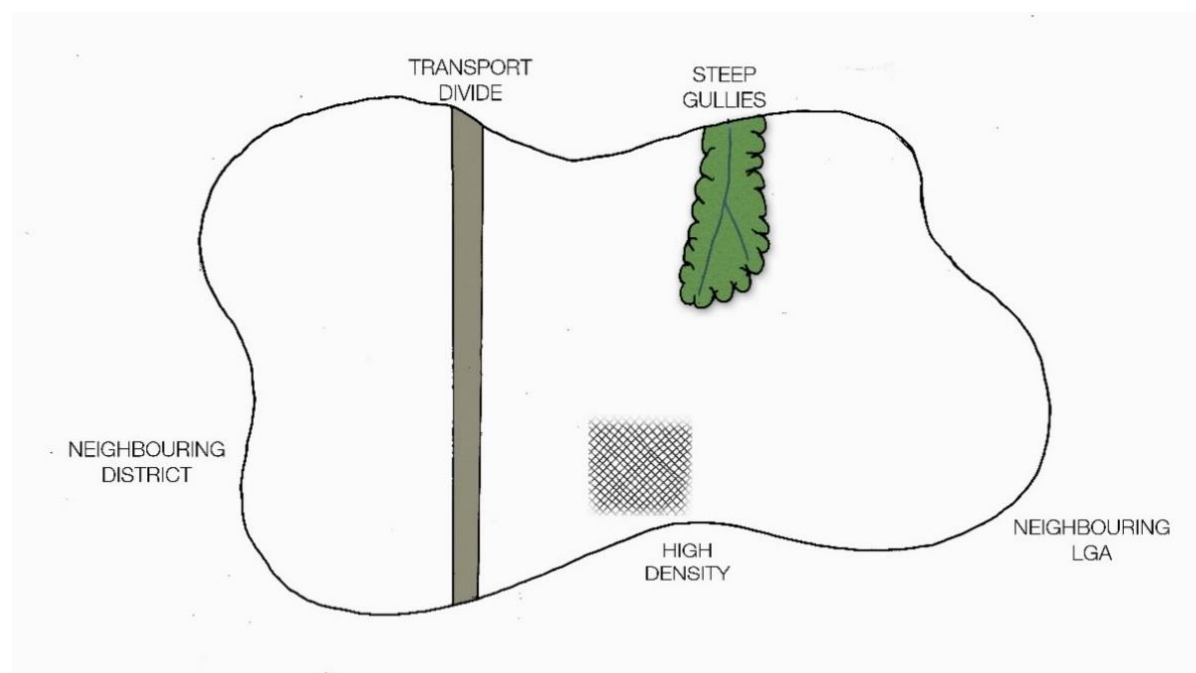
An important premise of this Play Plan is that the mix of play types (see Section 5.5) across the District should be well planned to offer varied play choices, avoiding formulaic repetition of play provision in each park. This process directly addresses the current shortfall in varied play types. It also addresses the fact that many play space users drive to play spaces in their District, as well as walk, and hence diverse play types are valued.

Figure 4 – Diagrammatic Distribution of Play Spaces in a District



Each district has its own unique features – e.g. arterial roads, dense bushland, steep gullies, high density buildings etc.

Figure 5 – District Unique Features



These features naturally divide each District into zones of play. The 'Mosaic of Play' concept of play distribution suggests an equitable mix of local and pocket play spaces in each zone. The process needs to consider play spaces in nearby districts, as the boundaries are theoretical only.

The most important consideration in the 'Mosaic of Play' approach is that a balance of play types is offered across the district within the zones. This study identifies 10 different play types, acknowledging that many play types are embedded in each other.

Figure 6 – Distribution of Play Spaces with Unique District Features

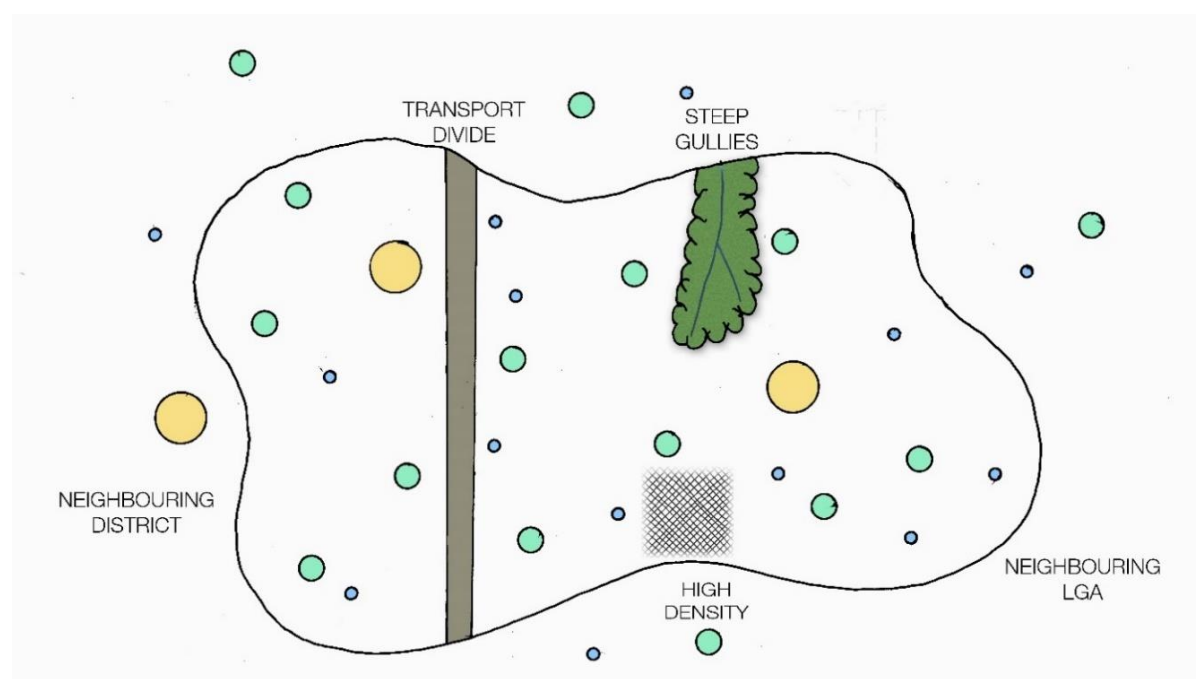
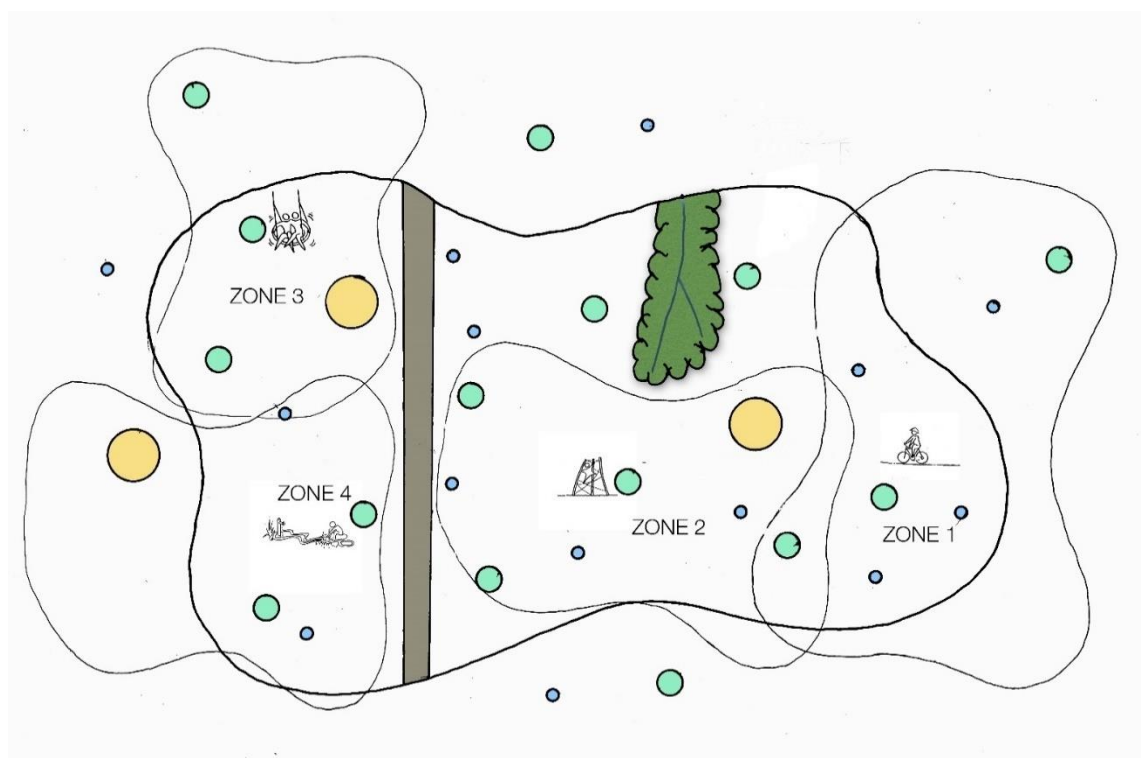


Figure 7 – Zones of Play Within Districts



The concept is that each play space in a zone provides one selected play type particularly well – at Best Practice level, which usually means a more complex level, or in a Local play space could mean offers of more side-by-side play. For example: rocking (a low-cost option) could be offered as two single-user rockers side-by-side, rather than one rocker. If budget permits, the rocking would be offered as a multi-rocker as well as a single rocker. Rocking may be replicated in the other nearby play spaces, but not as whole-heartedly.

The principle is that together, about 7 play spaces offer a diverse play experience, making it worthwhile to travel to different play spaces locally.

This Mosaic of Play is not required to be formulaic. When upgrading or providing a new play space, the team responsible travels to the play spaces around the selected play space, noting the play types on offer. This includes the neighbouring Local Government Area play spaces. The 'missing' types of play provision can then be considered in the play space design brief.

Mosaic of Play Principles

- ▶ No replication of a standard manufacturer combination unit in the Local Government Area, no matter how efficient this is;
- ▶ Inclusive features should always be considered where a play type (e.g. rocking) is the selected focus of a play space i.e. is the item unique to that play space;
- ▶ Provision for differing ages should be considered where a play type (e.g. rocking) is the selected focus of a play space (e.g. rocking that accommodates smaller and larger people);
- ▶ No favouring of one manufacturer for all new play space upgrades/new play spaces; and
- ▶ Some play types are so popular that they should be replicated in almost every play space, (e.g. climbing, swinging, imaginative settings etc). The Mosaic of Play approach means that if swinging is the focus item, then it should be offered at a whole-hearted level in one park (e.g. 4 different swing seats in one park), and at a basic level in other parks.

7.7 Recommended hierarchy

A hierarchy is a useful planning tool to guide the scale and investment in play spaces. A hierarchy approach creates a network of complimentary play spaces that provide a variety of experiences across the Hornsby Shire.

The following hierarchy has been developed in consultation with Hornsby Shire Council and is intended to guide future planning and design of play spaces.

Figure 8 – Hierarchy of Play Spaces

</

The following sections provide diagrammatic layouts which can guide play space provision at the various hierarchy levels.

7.8 Regional play space

Description A generous play space that caters for all ages, cultures and abilities. This play space serves the whole LGA and surrounding suburbs.

Example Fagan Park, Galston

Figure 9 – Regional Play Space Layout



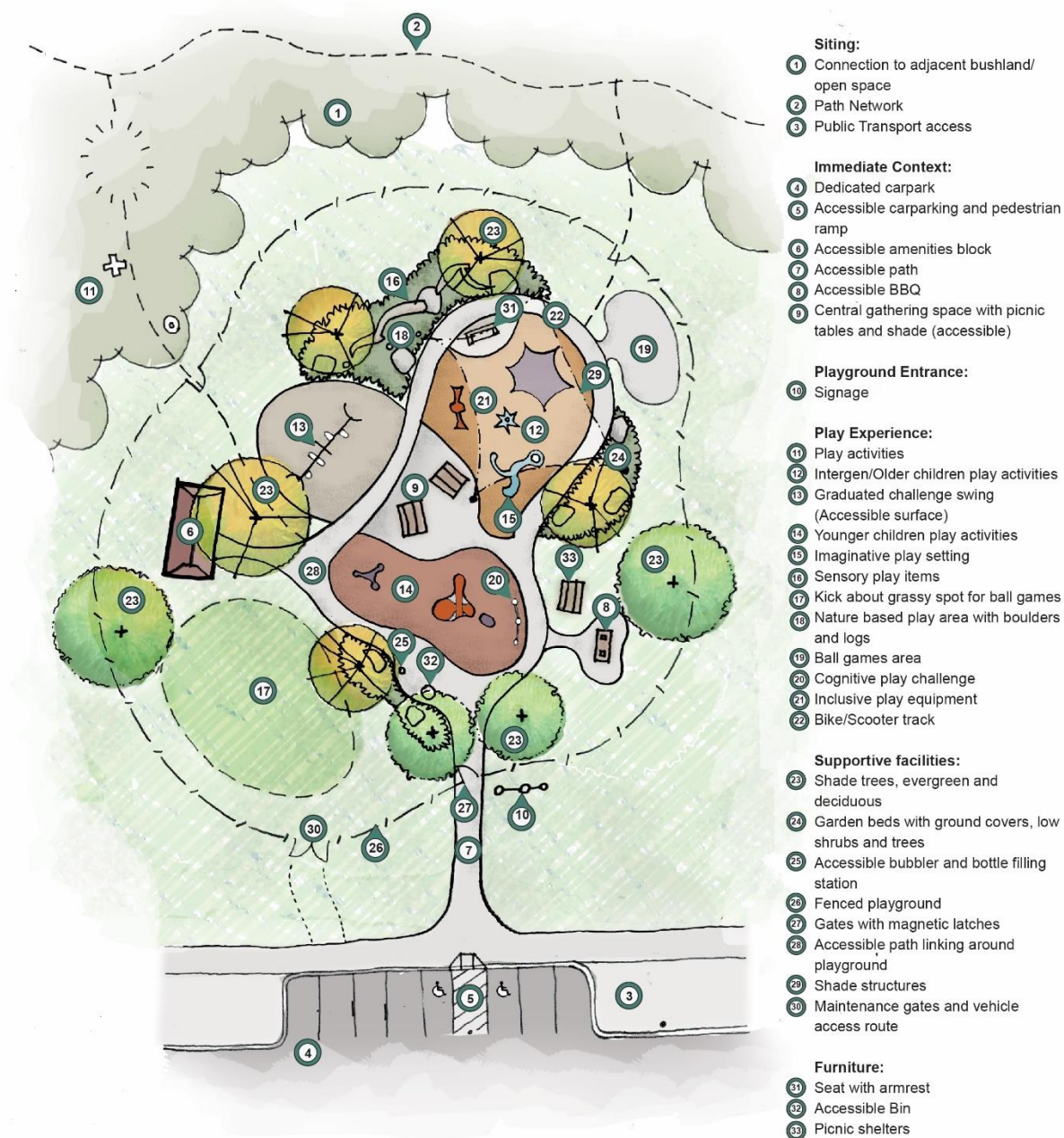
- | | | | |
|--|--|--|--|
| <p>Siting:</p> <ul style="list-style-type: none"> 1 Connection to adjacent bushland/ open space 2 Path Network 3 Bus parking <p>Immediate Context:</p> <ul style="list-style-type: none"> 4 Dedicated carpark with accessible parking 5 Drop off bay (no kerb) 6 Accessible amenities block including changing places cubicle 7 Accessible path 8 Accessible BBQ 9 Central gathering space with picnic tables and shade (accessible) 10 Bike Track | <p>Playground Entrance:</p> <ul style="list-style-type: none"> 11 Entry marker 12 Arrival apron 13 Bin enclosure 14 Bike rack 15 Double gates 'airlock' entry <p>Play Experience:</p> <ul style="list-style-type: none"> 16 Play activities 17 Intergen equipment 18 Older children play activities 19 Graduated challenge swing 20 Flying fox 21 Younger children play activities 22 Imaginative play setting 23 Sensory play area 24 Kick about grassy spot for ball games | <ul style="list-style-type: none"> 25 Nature based play area with boulders and logs 26 Ball games area 27 Waterplay and sandpit 28 Cognitive play challenges 29 Indigenous culture references 30 Inclusive play equipment 31 Bike/Scooter track 32 Respite space 33 Play pod: strongly defined, play types separate <p>Supportive facilities:</p> <ul style="list-style-type: none"> 34 Fenced playground (entire) 35 Gates with magnetic latches 36 Shade trees, evergreen and deciduous | <ul style="list-style-type: none"> 37 Garden beds with ground covers, low shrubs and trees 38 Mobile coffee cart 39 Exercise stations 40 Unencumbered grassy area 41 Shade structures 42 Maintenance gates and vehicle access route 43 Party gathering spaces <p>Furniture:</p> <ul style="list-style-type: none"> 44 Seating (various options) 45 Accessible bubbler and bottle filling station |
|--|--|--|--|

7.9 District play space

Description A large play space that caters for all ages and abilities within a District catchment.

Example Ruddock Park, Westleigh
Waitara Park, Waitara

Figure 10 – District Play Space Layout

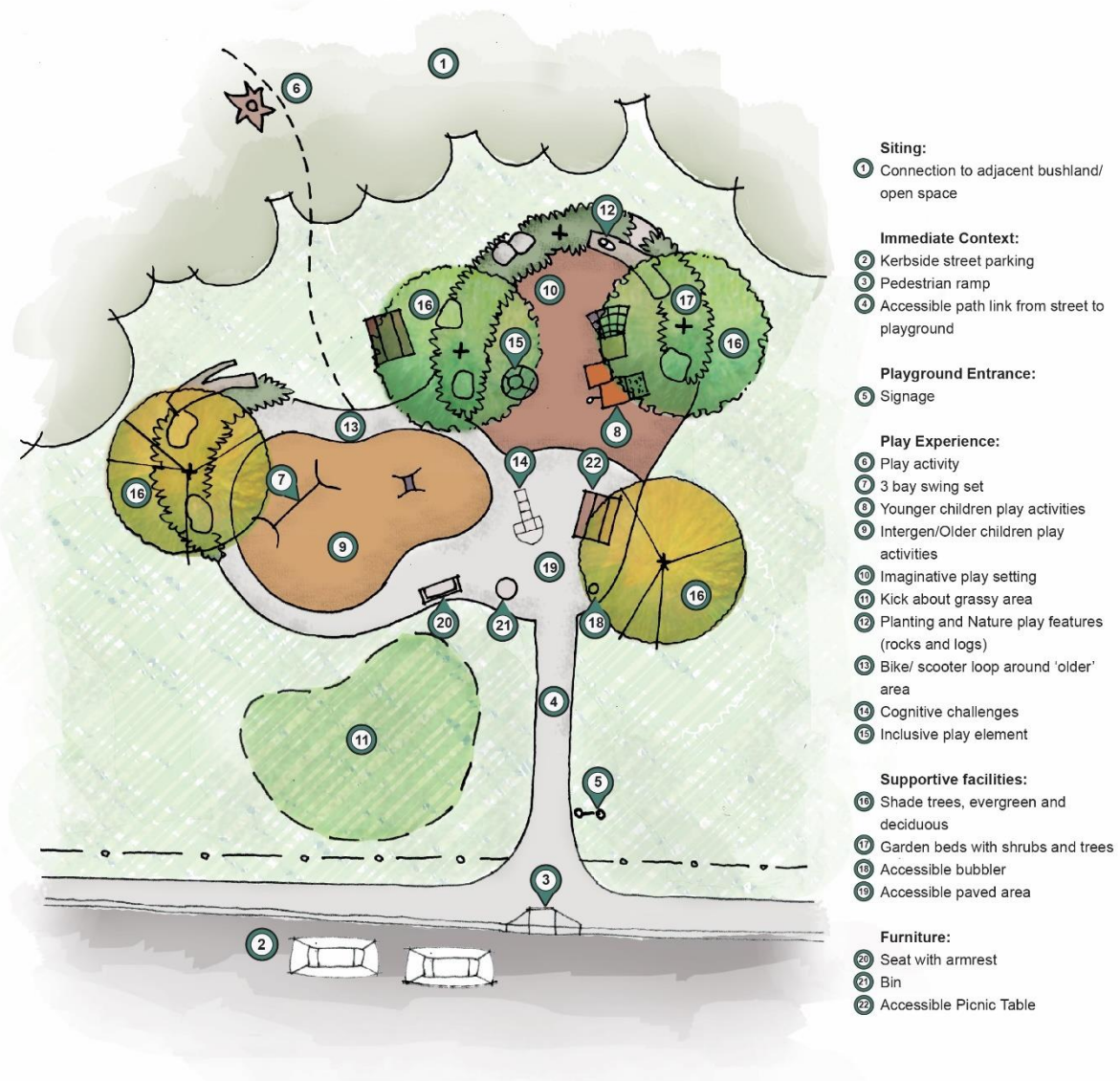


7.10 Local play space

Description A medium size accessible play space that caters for local residents within a District, with several varied options within a District catchment.

Example Lessing St Park, Hornsby
Britannia St Park, Pennant Hills

Figure 11 – Local Play Space Layout

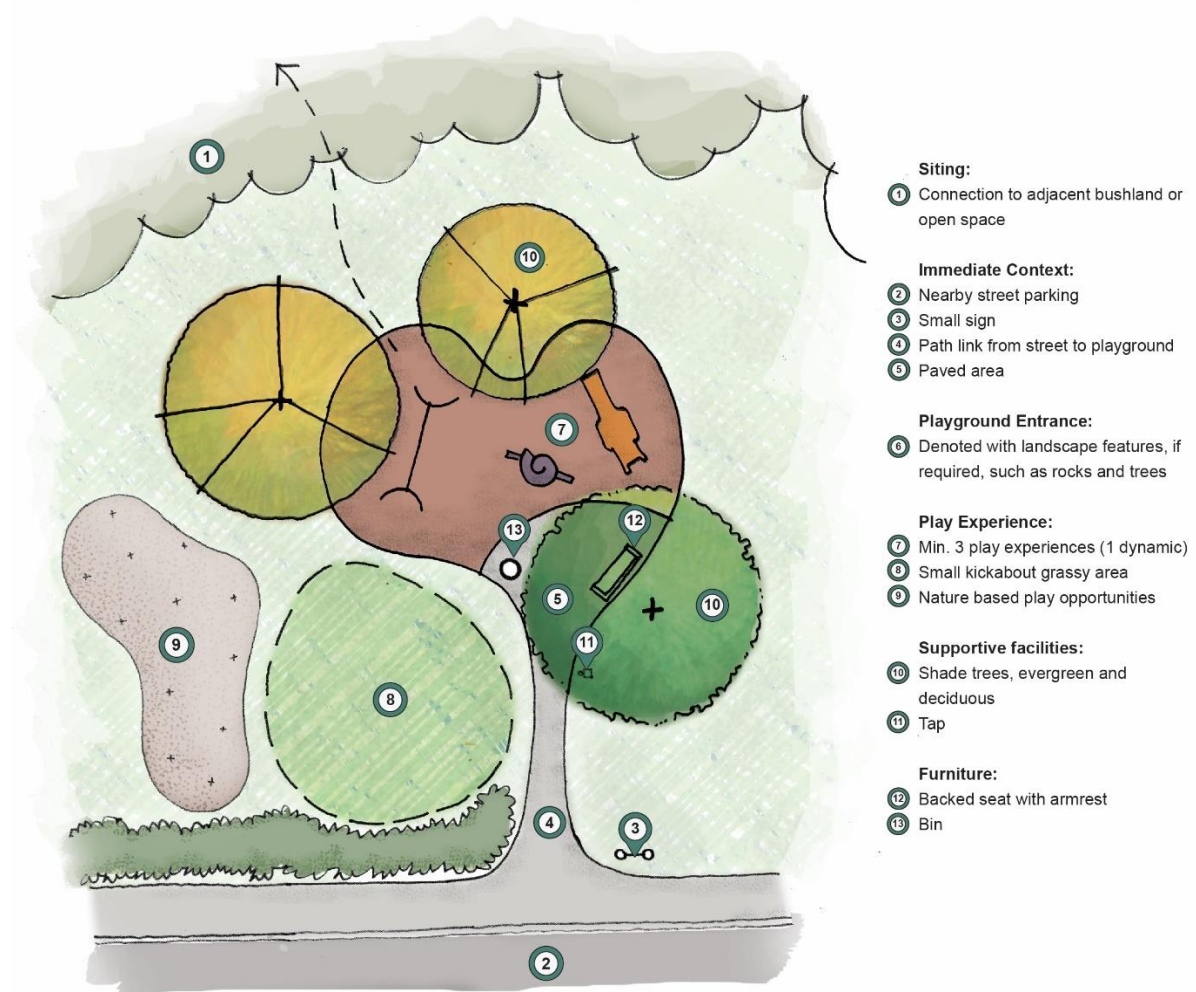


7.11 Pocket play space

Description A small short-stay play space that caters for immediate local residents, with several varied options within a District catchment.

Example Wanawong Drive Park, Thornleigh
Patrick Kelly Park, West Pennant Hills

Figure 12 – Pocket Play Space Layout



7.12 Special purpose

Description A medium size accessible play space that caters for local residents within a District, offering specific unique play experiences.

Example Berowra Skate Park, Berowra

This study identifies 14 special purpose types of play spaces, some of which Hornsby Shire Council currently has spread throughout the LGA.

The special purpose play spaces can be split into 3 groups.

Permanent	<ul style="list-style-type: none">▶ Adventure Play▶ Play Yard▶ Parkour/ Youth Space▶ Learn to ride bike track▶ Skate parks▶ POPS (privately owned, public space)▶ Splashpad Water Play space▶ Natural Water Play (open water bodies + creeks)*
Play programs (not offered 7 days a week)	<ul style="list-style-type: none">▶ Art play▶ Shared schools*▶ Play streets▶ Play programs and pop-up events
Other	<ul style="list-style-type: none">▶ Play passport▶ Bush trail play*

**Hornsby Shire Council provides these special purpose play types.*

The following sections provide details and examples for various special purpose play space types.

Adventure play

Definition: A supervised outdoor area that has both fixed movable structures on which children can climb and play, and that also has equipment and loose materials for building projects and modifying pre-existing structures.

Components: Fenced area, with trees, equipment storage shed, loose tools, paint, loose play parts (e.g. timber, tyres, nets), water, sand, mulch storage bins and rubbish bins essential.

References and precedents: St Kilda Adventure Play Space, St Kilda, Victoria.

For more information visit:

http://www.portphillip.vic.gov.au/adventure_playgrounds.htm



Play yard

Definition: A place for free, daily and often messy play: a back yard for families who do not have their own.

Components: Secure fenced area, storage sheds, social area (maybe part of a building), bike track, sandpit, natural items (e.g. boulders), seating area for portable equipment to be arranged.

References and precedents: The Venny Play Yard, Melbourne.

For more information visit:

<https://thevenny.org.au/>



Parkour/ youth space

Definition: A space specifically designed for young people to test their skills and be social.

Components: The space typically features parkour equipment, obstacle course (ninja warrior style), climbing walls and hang out areas.

References and precedents: Meadowbank Park Youth Space Sydney, & Fremantle Youth Space.



POPS – Privately owned publicly-accessible space

Definition: A privately funded (typically Developer) pocket or local sized play space on private land. Used by residents and neighbours.

Components: As per a Local or Pocket play space, usually fenced.

Distribution: One POPS per additional 700 people in any new development of medium or high-density housing or whenever current distribution of play spaces in planning district is exceeded by planned development.

References and precedents:

Vancouver/Toronto (Planning for children in new vertical communities, draft urban design guidelines 2017).

For more information visit:

<https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/private-owned-publicly-accessible-spaces-pops/>



Learn-to-ride bike track

Definition: A dedicated track including interesting challenges where children can learn to ride their bikes, gain confidence, and practice skills. Learn to ride tracks do not include road rules, but rather enhances a child's riding skills and capabilities.

Components: Diverse riding tracks, one large paved area, wall turns, bumpy textures to ride over, tunnels, whoop-de-dos, slalom poles, imaginative features (e.g. petrol station, shopfronts), puddles, generous seating, picnic areas, integrated planting.

References and precedents: Sydney CARES bike track, Sydney Park, St Peters.



Skate parks

Definition: A skate park is a purpose-built recreational environment made for skateboarding, BMX, scooter, wheelchair, and inline skating.

Components: Deep bowl, half & quarter pipes, vert wall etc, seating, lighting, and shade.

References & Precedents: Galston Skate Park, Berowra Skate Park, Thornleigh Skate Park, Brooklyn Skate Park, Cherrybrook Skate Park



Dedicated 'splashpad' water play space

Definition: A specialised water play space, typically a zero-depth splash pad with water treatment facilities

Components: Large concrete slab with water jets, and water equipment that sprays water out at various heights, angles, and combinations. Seating essential, storage shed required.

References & Precedents: Pirrama Park Play space, Pyrmont; Nurragingy "Wren" Play space, Blacktown.

For more information visit: Appendix C: Water Splash Parks Fact Sheet



Bush trail play

Definition: A bush path where children can learn about and discover different facets of nature through guided stopping points. Each stopping point provides a sign with a challenge and some facts. Can be provided in any bushland adjacent to play spaces that is not undergoing rehabilitation.

References and precedents: Galston Nature Trail, Galston Recreation Reserve, Galston; Lowie's Loop Nature Play Trail, Adelaide City.

For more information visit:

<https://www.walkingsa.org.au/walk/find-a-place-to-walk/lowies-loop-nature-play-trail>



Natural water play space

Definition: A natural occurring body of water used for carer- supervised canoeing, fishing and splashing and fossicking. Sand play a secondary offer. Creeks and the Hawkesbury River may be considered.

Components: A dedicated and obvious point of entry which transitions to shallow water, stepping stones, small contained shallow areas of water, water which is not stagnant.

References & Precedents: Crosslands Reserve, McKell Park – Brooklyn (Brooklyn Baths).

For more information visit:

<https://www.mhlfit.net/users/HornsbyShireCouncil-SwimmingConditions>



Art play

Definition: A supervised, pre-booked art program where children make/ build and paint art works in an outdoor setting. This includes free play time to enjoy the items children have made. The program runs after school, on weekends or during school holidays.

Components: Shelter, with running water and storage, concrete floor and bins.

References and precedents: Art Play, Melbourne

For more information visit:

<https://www.melbourne.vic.gov.au/arts-and-culture/artplay/Pages/artplay.aspx>



Play streets

Definition: A program where a quiet street becomes closed to through traffic and is made available to children for playing. Timing is predetermined on agreed weekends or during school holidays according to a program.

Components: Bitumen area, kerbs and gutters, street trees and footpaths are all useful for bike riding, chalk drawing, playing games (eg. Cricket), doing art, having a picnic, having races, walking pets, flying kites, etc.

References and precedents: South Street, Drummoyne, Sydney.

For more information visit:

<https://www.playstreetsaustralia.com/>



Shared schools (share our space)

Definition: A program where school grounds open space and play spaces are opened for public access after school, on weekends or during school holidays for all to use.

Components: Constructed school play spaces and play areas.

References and precedents: Asquith Boys High School, Berowra Public School.

For more information visit:

<https://www.schoolinfrastructure.nsw.gov.au/programs/share-our-space.html>



Intergenerational play program

Definition: active healthy events suitable for children and older people to enjoy together. These events take place on set days of the week for toddlers, or school holidays. Events are varied and take place in a number of venues. Examples include canoeing, model-making, outdoor art, building things, bushwalking, birdwatching, scavenger hunts, torchlight walks, fishing, etc.

Components: varied locations and an easy-to-follow accessible website with information and booking forms.

References and precedents: Brisbane City Council Gold N Kids program.

For more information visit:

<https://www.agelessplay.com.au/about/>



Nature play program

Definition: A play program where outdoor fun activities in natural areas for children are located on a map throughout the LGA. Activity instructions and how-to's are provided on Councils website and a passport is provided for children to mark off activities once completed.

Components: selected sites for dependable activities in easy-to-find locations. Also well-arranged and accessible website information and forms.

References and precedents: Aldinga / Sellicks Our Big Backyard Program

For more information visit:

<https://www.lga.sa.gov.au/webdata/resources/files/Case%20Study%20Our%20Big%20Backyard%20City%20of%20Onkaparinga.pdf>

60 things to do before you're 12 in Aldinga and Sellicks.

Each activity sits next to a dot that tells you whether its location is at the beach, wetlands, creek, scrub, or parkland. We have included some coordinates for the map (overleaf) as suggested locations but don't let that stifle your imagination! Tick off the coloured circles as you go!

1. Go for a beach walk at your nearest beach.
2. Go for a walk on the beach at your nearest beach.
3. Go for a walk on the beach at your nearest beach.
4. Go for a walk on the beach at your nearest beach.
5. Go for a walk on the beach at your nearest beach.
6. Go for a walk on the beach at your nearest beach.
7. Go for a walk on the beach at your nearest beach.
8. Go for a walk on the beach at your nearest beach.
9. Go for a walk on the beach at your nearest beach.
10. Go for a walk on the beach at your nearest beach.
11. Go for a walk on the beach at your nearest beach.
12. Go for a walk on the beach at your nearest beach.
13. Go for a walk on the beach at your nearest beach.
14. Go for a walk on the beach at your nearest beach.
15. Go for a walk on the beach at your nearest beach.
16. Go for a walk on the beach at your nearest beach.
17. Go for a walk on the beach at your nearest beach.
18. Go for a walk on the beach at your nearest beach.
19. Go for a walk on the beach at your nearest beach.
20. Go for a walk on the beach at your nearest beach.
21. Go for a walk on the beach at your nearest beach.
22. Go for a walk on the beach at your nearest beach.
23. Go for a walk on the beach at your nearest beach.
24. Go for a walk on the beach at your nearest beach.
25. Go for a walk on the beach at your nearest beach.
26. Go for a walk on the beach at your nearest beach.
27. Go for a walk on the beach at your nearest beach.
28. Go for a walk on the beach at your nearest beach.
29. Go for a walk on the beach at your nearest beach.
30. Go for a walk on the beach at your nearest beach.
31. Go for a walk on the beach at your nearest beach.
32. Go for a walk on the beach at your nearest beach.
33. Go for a walk on the beach at your nearest beach.
34. Go for a walk on the beach at your nearest beach.
35. Go for a walk on the beach at your nearest beach.
36. Go for a walk on the beach at your nearest beach.
37. Go for a walk on the beach at your nearest beach.
38. Go for a walk on the beach at your nearest beach.
39. Go for a walk on the beach at your nearest beach.
40. Go for a walk on the beach at your nearest beach.
41. Go for a walk on the beach at your nearest beach.
42. Go for a walk on the beach at your nearest beach.
43. Go for a walk on the beach at your nearest beach.
44. Go for a walk on the beach at your nearest beach.
45. Go for a walk on the beach at your nearest beach.
46. Go for a walk on the beach at your nearest beach.
47. Go for a walk on the beach at your nearest beach.
48. Go for a walk on the beach at your nearest beach.
49. Go for a walk on the beach at your nearest beach.
50. Go for a walk on the beach at your nearest beach.
51. Go for a walk on the beach at your nearest beach.
52. Go for a walk on the beach at your nearest beach.
53. Go for a walk on the beach at your nearest beach.
54. Go for a walk on the beach at your nearest beach.
55. Go for a walk on the beach at your nearest beach.
56. Go for a walk on the beach at your nearest beach.
57. Go for a walk on the beach at your nearest beach.
58. Go for a walk on the beach at your nearest beach.
59. Go for a walk on the beach at your nearest beach.
60. Go for a walk on the beach at your nearest beach.

15 things to do before you're 12

1. Climb a tree
2. Build a cubby
3. Camp out under the stars (even in your backyard)
4. Invent a game that lasts three days
5. Learn to swim
6. Catch a wave (start with a small one)
7. Play in a creek
8. Play in the bush
9. Visit a national park
10. Play in the rain
11. Catch a tadpole (and release it)
12. Make a mud pie
13. Build a sandcastle city
14. Plant something and watch it grow
15. Learn to ride a bike

Make a boat out of sticks and see if it floats

Aldinga Bay has a long history of ships and shipwrecks. You can create your own boat out of found materials. Will it float ... or become a shipwreck? Building a stick boat is a great way for kids to problem solve and gain a sense of ownership – as well as elation when their boat floats!

How to do it

1. Boats can be made from a single stick or a piece of bark to become a miniature raft depending on your skills and who can help. You can even make a sail from a leaf, or anything else that will catch the wind. Your boat can be as big or as small as you like. Try a few designs and see which works best!
2. Try to use only what you can find nearby and make sure it is natural, as litter can get lost and harm wildlife.
3. The best place to start your maiden voyage is at the edge of the water with your back to the wind.
4. Once you've mastered boat building you can hold boat races with your friends and family. No one is ever too old to make a stick boat!
5. Up for a challenge? Have a race to build and sail your boats from one side of the water to the other!

Did you know?

The most famous shipwreck in the area is the Star of Greece, wrecked in 1888. Check the plaque in the Port Willunga carpark and Aldinga Library for more information.

Play safe

Keep safe near the water and observe any warning signs. Not all water is safe to drink or swim in! Keep an eye out for wildlife and reptiles that might be coming to the water for a drink.

Look after nature

Don't make your boat out of anything that can't turn to compost. String and plastic can be dangerous to many wetland and sea animals. Don't take any live branches as trees need them to survive. Pick one up off the ground instead.

Special purpose play

Table 23 – Special Purpose Play Locations

SPECIAL PURPOSE TYPE	SUGGESTED LOCATION	SUBURB	P.O.M. DISTRICT
Adventure Play	Fagan Park	Galston	6
Parkour / Youth Space	Brickpit Park	Thornleigh	2 & 2a
Parkour / Youth Space	Hornsby Town Centre	Hornsby	3 & 9
Learn-to-Ride Bike Track	Erlestoke Park	Castle Hill	8
Learn-to-Ride Bike Track	Ruddock Park	Westleigh	2 & 2a
Skate Park	Good provision	-	-
Privately Owned Publicly-Accessible Space (POPS)	Hornsby Town Centre / New high-density developments	Hornsby	3 & 9
Splashpad Water Play Space	Hornsby Park (Quarry) Old Mans Valley	Hornsby	3 & 9
Splashpad Water Play Space	Fagan Park	Galston	6
Shared Schools	Entire L.G.A, focusing on Maroota Public, Waitara Public + Arcadia Public	Maroota Waitara Arcadia	6 3 & 9

Special purposes play spaces that should be considered within Hornsby Shire but have no suggested locations include play yards, play streets, nature based programs, bush trail play, art play and intergenerational play.



8 Recommendations & Action Plan

8.1 High level recommendations

Table 24 – High level recommendations

RECOMMENDATION	PRIORITY LEVEL
Incorporate the value of play and a child's right to play into the Hornsby Town Centre Revitalisation.	High
Incorporate the provision of new play spaces and upgrades as identified in this Play Plan into the Hornsby Town Centre Revitalisation masterplan.	High
Incorporate the play principles and child's right to play into the Hornsby Development Control and other statutory and strategic documents to maximise uptake of best practice play.	Medium
Develop a communications strategy for the promotion of play spaces, including upgrades to the Hornsby Shire website to include imagery of all play spaces, play space features and inclusiveness of play spaces. Consider non-digital communications for residents who are not computer literate.	Medium
Develop a POM to guide the management of Regional level play spaces – this will include the future Hornsby Quarry Regional play space.	Medium

8.2 Action plan

The following section provides detailed recommendations for each play space in the Hornsby LGA. The recommendations are presented in the play space action plan under the following headings:

Table 25 – Action Heading Descriptions

ACTION	DESCRIPTION
Upgrade Hierarchy	An existing play space which will be upgraded to have more play experiences and supportive items.
Renovate	Minor additions and/or improvements to a play space including equipment, undersurfacing, shade, natural setting and supportive items.
New Play Space	New play space positioned in a location where no play space currently exists. A new play space is to be sited within the park based on a detailed site assessment and community consultation to be undertaken at the time of the upgrade.
Removal	Closure of the play space. Removal of play equipment once it has reached the end of its useful life, and is no longer meeting safe use requirements.
No Change	No changes to existing play space.

8.3 Play space priority

Each play space has been given a rating relating to its need for change;

High – A play space that requires attention in the next few years, due to equipment lifespan coming to an end, poor undersurfacing quality or demographic demands. High priority has a short timeframe – implement within 5 years.

Medium – A play space design that is somewhat outdated, with no noticeable condition issues. Medium priority has a timeframe of 5-10 years.

Low – A play space that has been recently upgraded and in exceptional condition that may be at the end of its expected lifespan in 10+ years.

8.4 Play space major changes

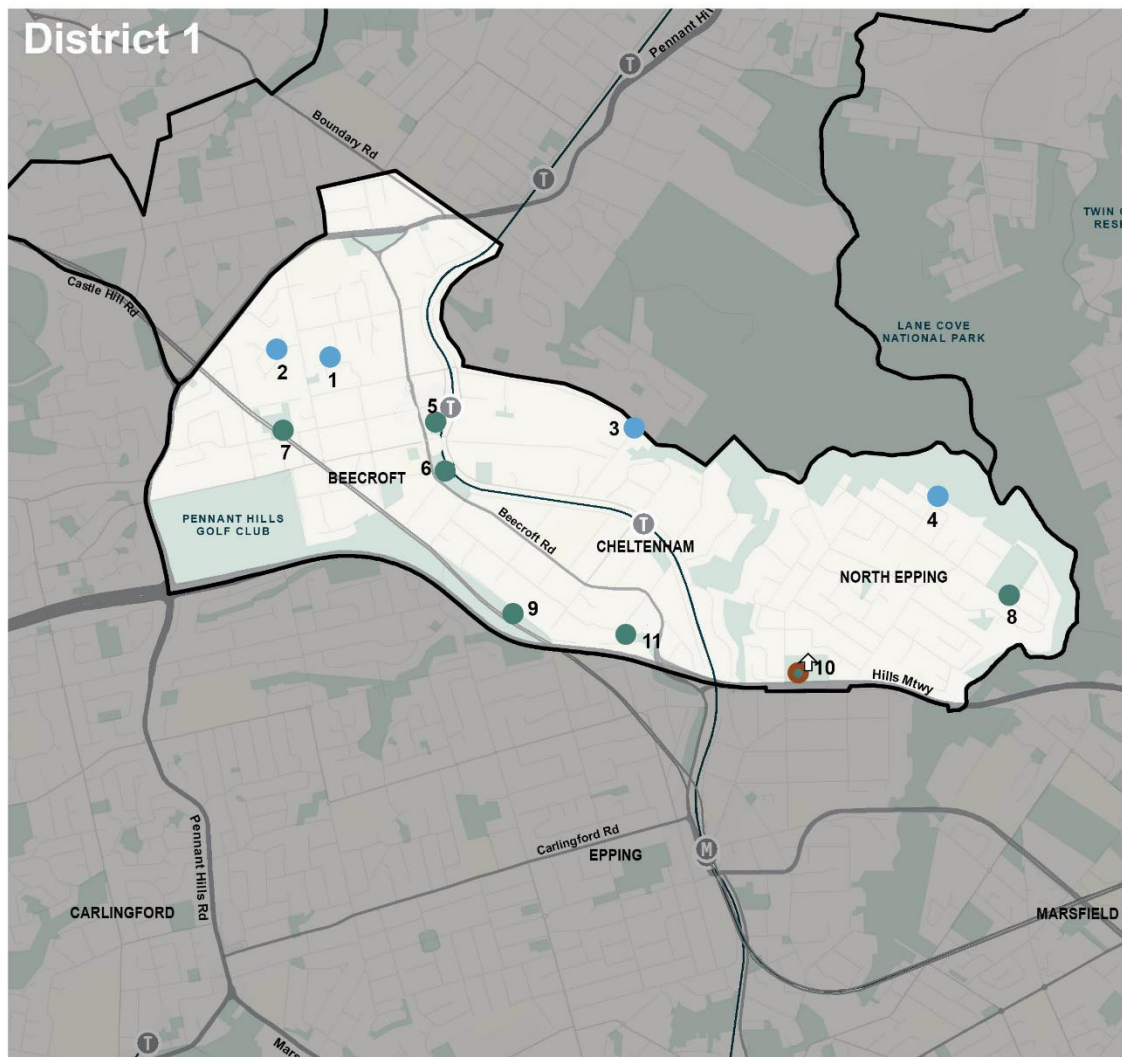
The following table shows the major changes in play spaces throughout the LGA. Major changes include new play spaces, upgraded hierarchies, or play space removal.

Table 26 – Major changes in play spaces

P.O.M DISTRICT	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
1	Epping Oval Play Space	Epping	Local	District	Upgrade Hierarchy	High
2 & 2a	Kenley Park	Normanhurst	Pocket	-	Remove	High
2 & 2a	Westleigh Park Play Space	Westleigh	-	Local	New Play Space	High
2 & 2a	Brickpit Park	Thornleigh	Local	District	Upgrade Hierarchy	High
2 & 2a	Wollundry Park	Pennant Hills	Local	District	Upgrade Hierarchy	High
3 & 9	Hornsby Park (Crusher Plant)	Hornsby	-	District	New Play Space	High
3 & 9	Hornsby Park (Old Mans Valley) Hornsby Quarry Water Play Space	Hornsby	-	Regional/ Special Use	New Play Space	High
3 & 9	Hornsby Town Centre Play Space	Hornsby	-	Special Use	New Play Space	High
4	Ulolo Community Park	Hornsby Heights	Pocket	Local	Upgrade Hierarchy	High
4	Hunt Reserve	Mount Colah	Local	District	Upgrade Hierarchy	High
4	Berry Park	Mt Colah	-	Local	New Play Space	High
5 & 7	Warrina St Oval Play Space	Berowra	Local	District	Upgrade Hierarchy	High
6	Nancy Place	Galston	Pocket	-	Remove	High
6	Arcadia Play Space	Arcadia	-	Local	New Play Space	Medium
8	Moorfield Hill Reserve	Dural	Pocket	Local	Upgrade Hierarchy	High
8	Myson Drive Park	Cherrybrook	Pocket	-	Remove	High
8	Edward Bennett Oval Play Space	Cherrybrook	Local	District	Upgrade Hierarchy	High

8.5 District 1: Action plan

Figure 13 – District 1 Play Spaces



01 Gunbalanya Park Pocket	04 Ron Payne Reserve Pocket	07 Fearnley Park Local Park	10 Epping Oval Playground District Park (upgraded from Local Park)
02 Lyndon Way Reserve Pocket	05 Beecroft Railway Station Gardens Local Park	08 North Epping Oval Local Park	11 Lyne Rd Playground Local Park
03 Malton Road Park Pocket	06 Beecroft Village Green Local Park	09 Cheltenham Oval Playground Local Park	

Upgraded
 Removed
 New
 Pocket park
 Local park
 District park
 Regional park
 Special use park

© 2020, PSMA Australia Ltd, HERE Pty Ltd. ABS. Produced by Urbis Pty Ltd ABN 50 105 256 228, Feb 2020

1 Kilometre

Table 27 – District 1 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
1	Gunbalanya Park	Beecroft	Pocket	Pocket	Renovate	Medium
2	Lyndon Way Reserve	Beecroft	Pocket	Pocket	Renovate	High
3	Malton Road Park	Cheltenham	Pocket	Pocket	Renovate	Medium
4	Ron Payne Reserve	North Epping	Pocket	Pocket	No Change	-
5	Beecroft Railway Station Gardens	Beecroft	Local	Local	Renovate	Low
6	Beecroft Village Green	Beecroft	Local	Local	Renovate	High
7	Fearnley Park	Beecroft	Local	Local	Renovate	High
8	North Epping Oval	North Epping	Local	Local	Renovate	High
9	Cheltenham Oval Play Space	Cheltenham	Local	Local	No Change	-
10	Epping Oval Play Space	Epping	Local	District	Upgrade Hierarchy	High
11	Lyne Rd Play Space	Cheltenham	Local	Local	No Change	-

8.6 Districts 2 and 2a: Action plan

Figure 14 – Districts 2 and 2A Play Spaces

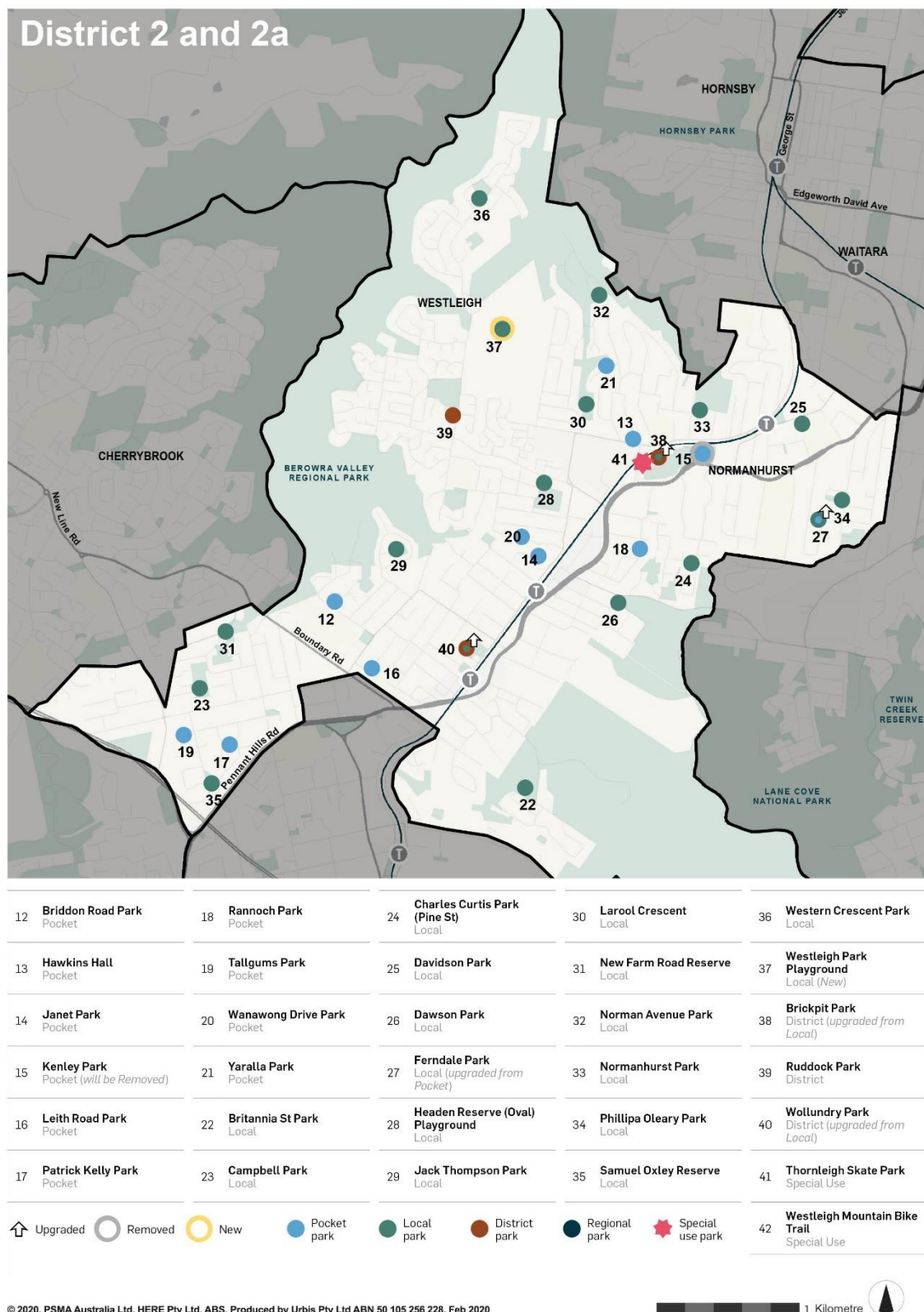


Table 28 – Districts 2 and 2a Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
12	Briddon Road Park	Pennant Hills	Pocket	Pocket	Renovate	High
13	Hawkins Hall	Thornleigh	Pocket	Pocket	Renovate	Low
14	Janet Park	Thornleigh	Pocket	Pocket	Renovate	Low
15	Kenley Park	Normanhurst	Pocket	-	Remove	High
16	Leith Road Park	Pennant Hills	Pocket	Pocket	Renovate	High
17	Patrick Kelly Park	West Pennant Hills	Pocket	Pocket	Renovate	High
18	Rannoch Park	Thornleigh	Pocket	Pocket	Renovate	Medium
19	Tallgums Park	West Pennant Hills	Pocket	Pocket	Renovate	High
20	Wanawong Drive Park	Thornleigh	Pocket	Pocket	Renovate	High
21	Yaralla Park	Thornleigh	Pocket	Pocket	Renovate	High
22	Britannia St Park	Pennant Hills	Local	Local	No Change	-
23	Campbell Park	West Pennant Hills	Local	Local	Renovate	Medium
24	Charles Curtis Park (Pine St)	Normanhurst	Local	Local	Renovate	Low
25	Davidson Park	Thornleigh	Local	Local	No Change	-
26	Dawson Park	Thornleigh	Local	Local	No Change	Low
27	Ferndale Park	Normanhurst	Local	Local	Renovate	Medium
28	Headen Reserve (Oval) Play Space	Thornleigh	Local	Local	Renovate	High
29	Jack Thompson Park	Pennant Hills	Local	Local	No Change	-
30	Larool Crescent	Thornleigh	Local	Local	No Change	-
31	New Farm Road Reserve	West Pennant Hills	Local	Local	Renovate	Low
32	Norman Avenue Park	Thornleigh	Local	Local	Renovate	Low
33	Normanhurst Park	Normanhurst	Local	Local	Renovate	Low
34	Phillipa Oleary Park	Normanhurst	Local	Local	Renovate	Medium
35	Samuel Oxley Reserve	West Pennant Hills	Local	Local	No Change	-
36	Western Crescent Park	Westleigh	Local	Local	Renovate	High
37	Westleigh Park Play Space	Westleigh	Local	Local	New Play Space	High
38	Brickpit Park	Thornleigh	Local	District	Upgrade Hierarchy	High
39	Ruddock Park	Westleigh	District	District	Renovate	High
40	Wollundry Park	Pennant Hills	Local	District	Upgrade Hierarchy	High
41	Thornleigh Skate Park	Thornleigh	Special Use	Special Use	No Change	-

8.7 Districts 3 and 9: Action plan

Figure 15 – Districts 3 and 9 Play Spaces

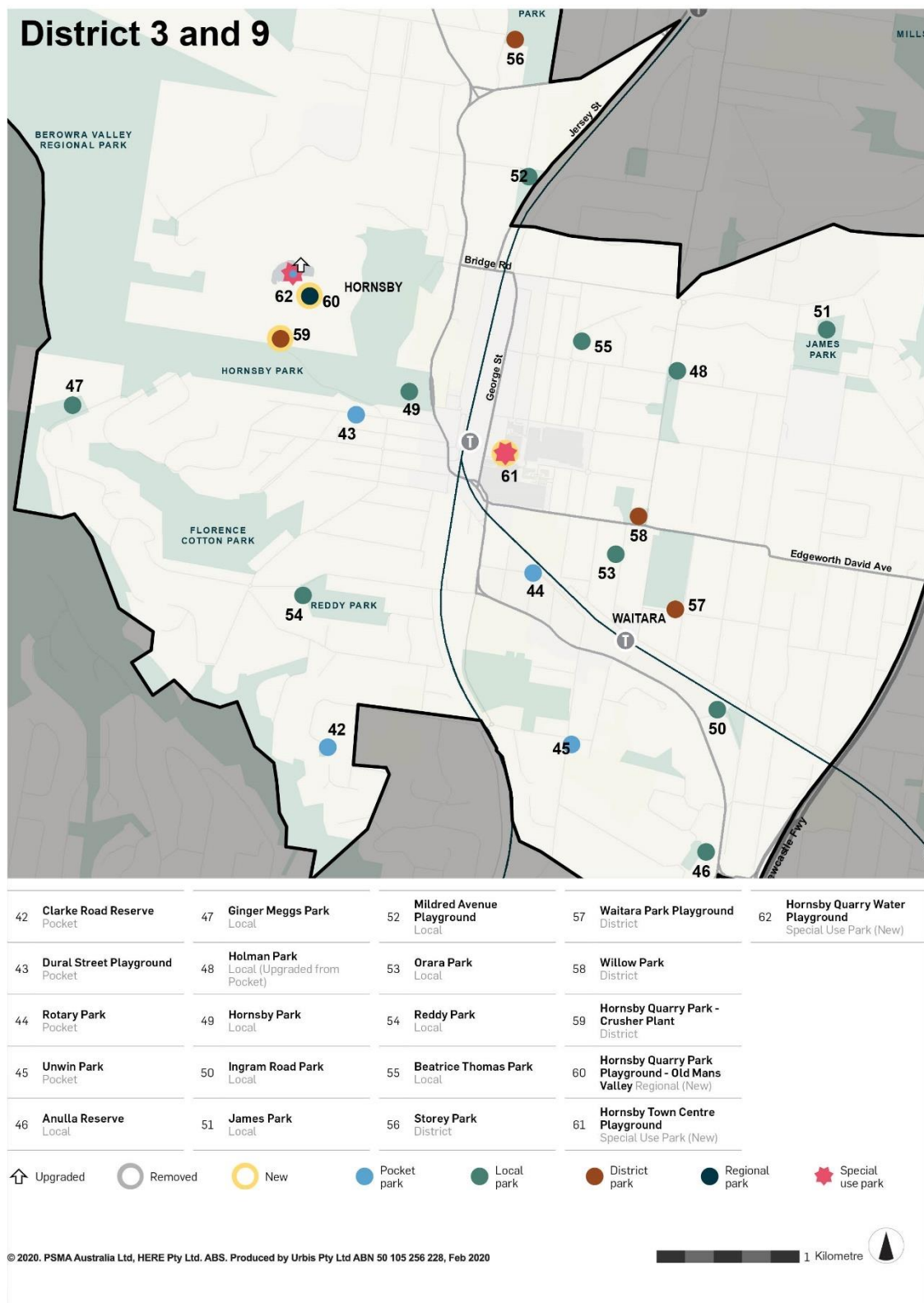


Table 29 – Districts 3 and 9 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
42	Clarke Road Reserve	Hornsby	Pocket	Pocket	Renovate	High
43	Dural Street Play Space	Hornsby	Pocket	Pocket	Renovate	Low
44	Rotary Park	Waitara	Pocket	Pocket	No Change	Low
45	Unwin Park	Waitara	Pocket	Pocket	Renovate	Medium
46	Anulla Reserve	Wahroonga	Local	Local	No Change	-
47	Ginger Meggs Park	Hornsby	Local	Local	Renovate	High
48	Holman Park	Hornsby	Local	Local	Renovate	Medium
49	Hornsby Park (Upper)	Hornsby	Local	Local	No Change	-
50	Ingram Road Park	Wahroonga	Local	Local	Renovate	Medium
51	James Park	Hornsby	Local	Local	Renovate	Low
52	Mildred Avenue Play Space	Hornsby	Local	Local	Renovate	Medium
53	Orara Park	Waitara	Local	Local	No Change	-
54	Reddy Park	Hornsby	Local	Local	Renovate	Medium
55	Beatrice Thomas Park	Hornsby	Local	Local	Renovate	Low
56	Storey Park	Hornsby	District	District	No Change	-
57	Waitara Park Play Space	Waitara	District	District	No Change	-
58	Willow Park	Hornsby	District	District	Renovate	High
59	Hornsby Quarry Park (Crusher Plant)	Hornsby	-	District	New Play Space	High
60	Hornsby Quarry Park Playground (Old Man's Valley)	Hornsby	-	Regional	New Play Space	High
61	Hornsby Town Centre Play Space	Hornsby	-	Special Use	New Play Space	High
62	Hornsby Quarry Water Play Space	Hornsby	-	Special Use	New Play Space	High

8.8 District 4: Action plan

Figure 16 – District 4 Play Spaces

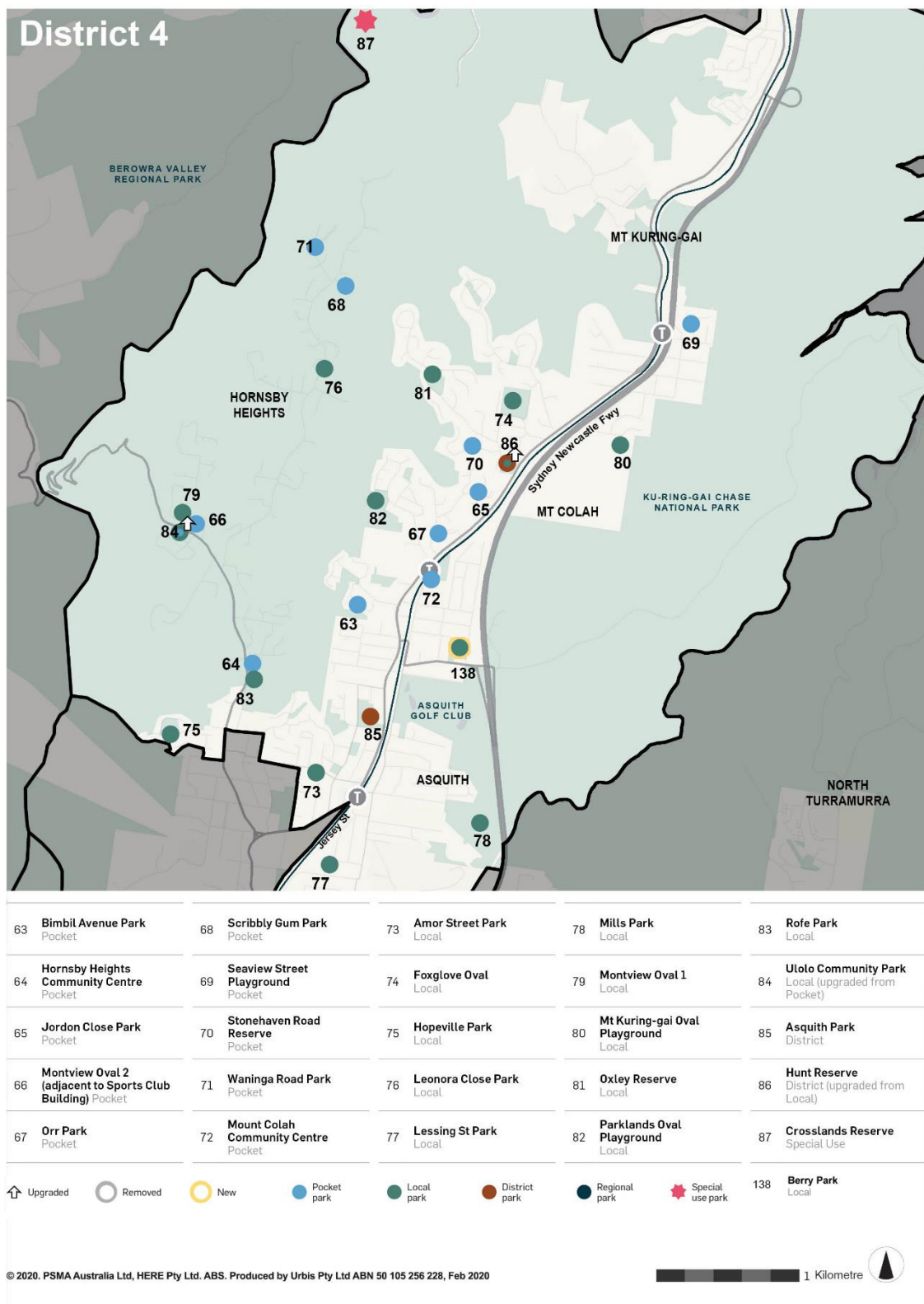


Table 30 – District 4 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
63	Bimbil Avenue Park	Mount Colah	Pocket	Pocket	No Change	-
64	Hornsby Heights Community Centre	Hornsby Heights	Pocket	Pocket	No Change	-
65	Jordon Close Park	Mount Colah	Pocket	Pocket	Renovate	Medium
66	Montview Oval 2 (adjacent to Sports Club Building)	Hornsby Heights	Pocket	Pocket	Renovate	Low
67	Orr Park	Mount Colah	Pocket	Pocket	Renovate	High
68	Scribbly Gum Park	Hornsby Heights	Pocket	Pocket	Renovate	Medium
69	Seaview Street Play Space	Mount Kuring-gai	Pocket	Pocket	Renovate	Medium
70	Stonehaven Road Reserve	Mount Colah	Pocket	Pocket	Renovate	High
71	Wananga Road Park	Hornsby Heights	Local	Local	No Change	-
72	Mount Colah Community Centre	Mount Colah	Pocket	Pocket	No Change	-
73	Amor Street Park	Asquith	Local	Local	Renovate	High
74	Foxglove Oval	Mount Colah	Local	Local	Renovate	Low
75	Hopeville Park	Hornsby Heights	Local	Local	Renovate	High
76	Leonora Close Park	Hornsby Heights	Local	Local	No Change	-
77	Lessing St Park	Hornsby	Local	Local	No Change	-
78	Mills Park	Asquith	Local	Local	Renovate	High
79	Montview Oval 1	Hornsby Heights	Local	Local	Renovate	Medium
80	Mt Kuring-gai Oval Play Space	Mount Kuring-gai	Local	Local	No Change	-
81	Oxley Reserve	Mount Colah	Local	Local	No Change	-
82	Parklands Oval Play space	Mount Colah	Local	Local	No Change	-
83	Rofe Park	Hornsby Heights	Local	Local	No Change	-
84	Ulolo Community Park	Hornsby Heights	Pocket	Local	Hierarchy Upgrade	High
85	Asquith Park	Asquith	District	District	No change	-
86	Hunt Reserve	Mount Colah	Local	District	Hierarchy Upgrade	High
87	Crosslands Reserve	Hornsby Heights	Special Use	Special Use	Renovate	Medium
138	Berry Park	Mount Colah	-	Local	New Play Space	High

8.9 Districts 5 and 7: Action plan

Figure 17 – Districts 5 and 7 Play Spaces

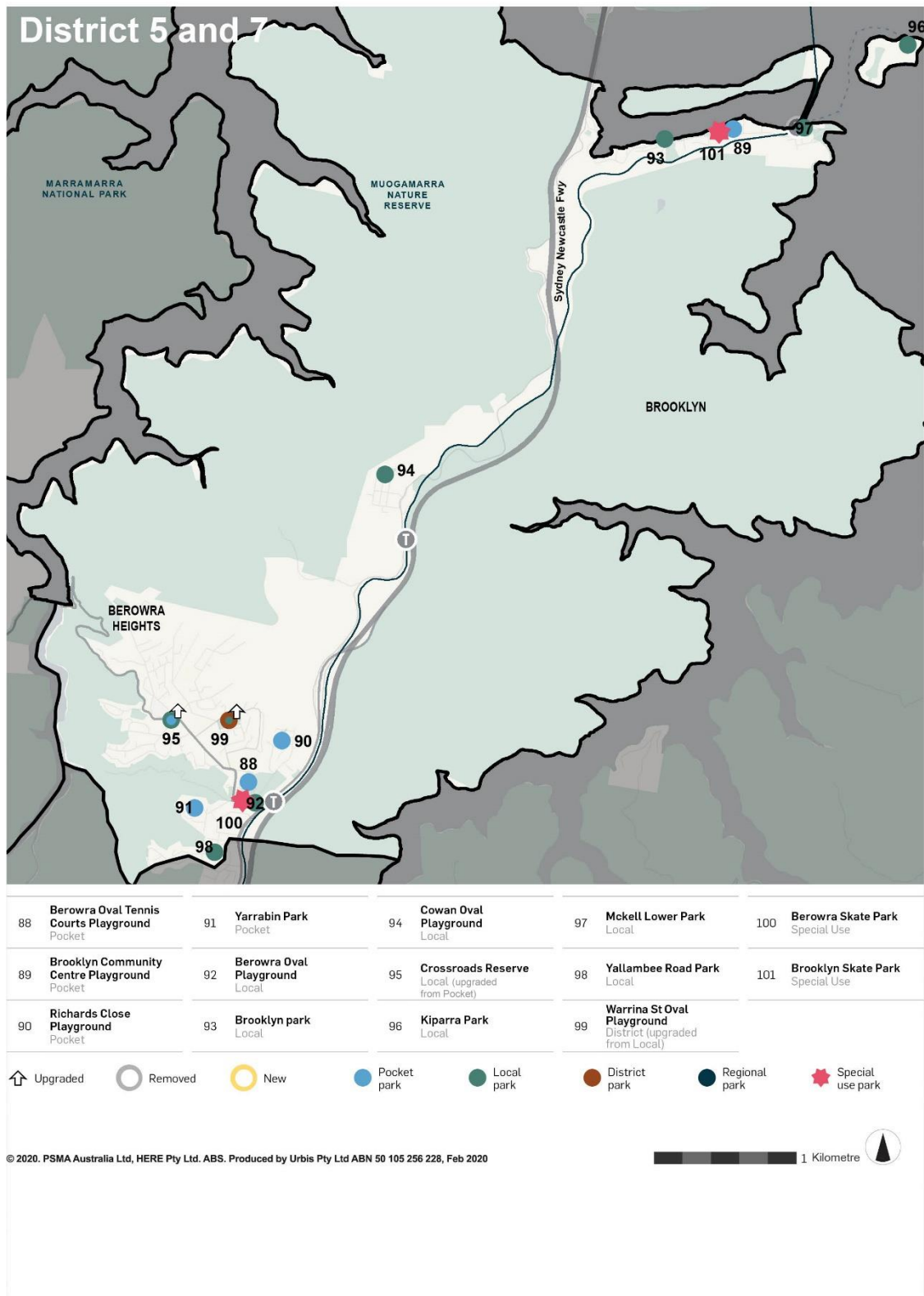


Table 31 – Districts 5 and 7 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
88	Berowra Oval Tennis Courts Play Space	Berowra	Pocket	Pocket	Renovate	Low
89	Brooklyn Community Centre Play Space	Brooklyn	Pocket	Pocket	Renovate	Low
90	Richards Close Play Space	Berowra	Pocket	Pocket	Renovate	High
91	Yarrabin Park	Berowra	Pocket	Pocket	No Change	-
92	Berowra Oval Play Space	Berowra	Local	Local	Renovate	Medium
93	Brooklyn Park	Brooklyn	Local	Local	No Change	-
94	Cowan Oval Play Space	Cowan	Local	Local	No Change	-
95	Crossroads Reserve	Berowra Heights	Pocket	Local	Renovate	High
96	Kiparra Park	Dangar Island	Local	Local	No Change	-
97	Mckell Lower Park	Brooklyn	Local	Local	No Change	Low
98	Yallambee Road Park	Berowra	Local	Local	No Change	-
99	Warrina St Oval Play Space	Berowra	Local	District	Hierarchy Upgrade	High
100	Berowra Skate Park	Berowra	Special Use	Special Use	No Change	-
101	Brooklyn Skate Park	Brooklyn	Special Use	Special Use	No Change	-

8.10 District 6: Action plan

Figure 18 – District 6 Play Spaces

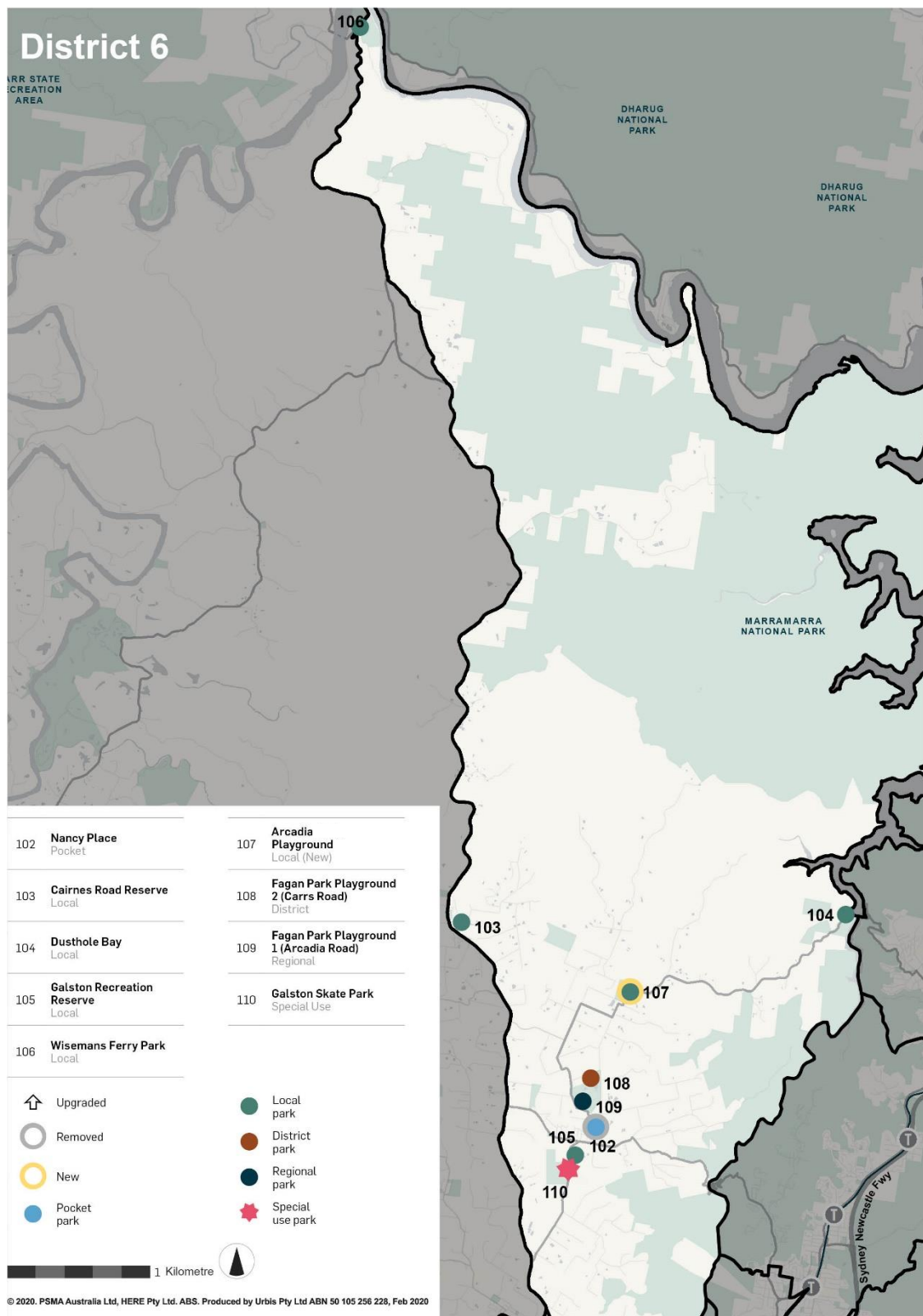


Table 32 – District 6 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
102	Nancy Place	Galston	Pocket	-	Remove	High
103	Cairnes Road Reserve	Glenorie	Local	Local	Renovate	High
104	Dusthole Bay	Berowra Waters	Local	Local	Renovate	High
105	Galston Recreation Reserve	Galston	Local	Local	Renovate	High
106	Wisemans Ferry Recreation Reserve	Wisemans Ferry	Local	Local	Renovate	High
107	Arcadia Play Space	Arcadia	-	Local	New Play Space	Medium
108	Fagan Park Play Space 2 (Carrs Road)	Galston	District	District	No Change	-
109	Fagan Park Play Space 1 (Arcadia Road)	Galston	Regional	Regional	Renovate	High
110	Galston Skate Park	Galston	Special Use	Special Use	No Change	-

8.11 District 8: Action plan

Figure 19 – District 8 Play Spaces

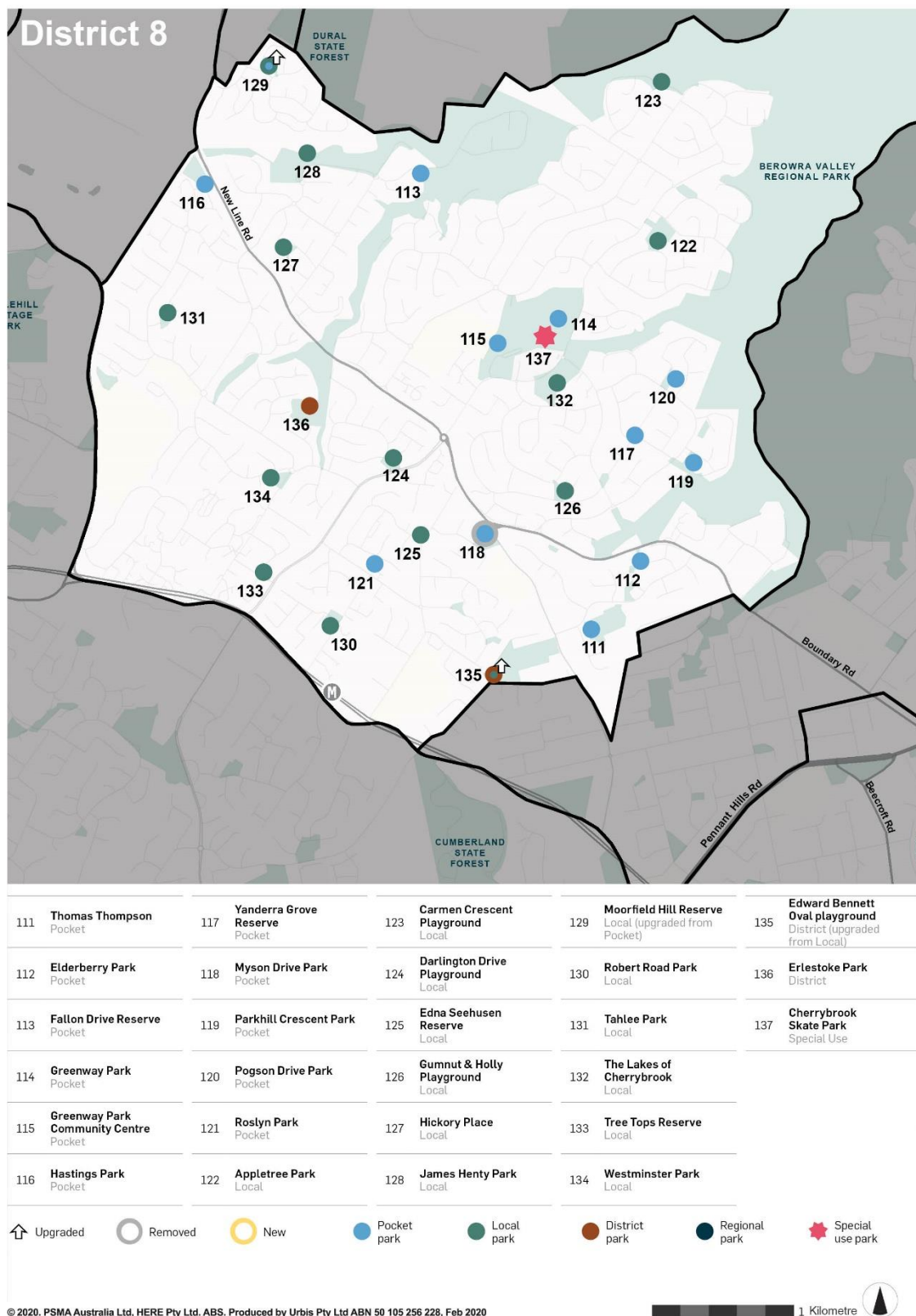


Table 33 – District 8 Action Plan

NO.	PLAY SPACE NAME	SUBURB	CURRENT HIERARCHY LEVEL	PROPOSED HIERARCHY LEVEL	ACTION	PRIORITY
111	Thomas Thompson	Cherrybrook	Pocket	Pocket	Renovate	Medium
112	Elderberry Park	Cherrybrook	Pocket	Pocket	Renovate	Medium
113	Fallon Drive Reserve	Dural	Pocket	Pocket	Renovate	Medium
114	Greenway Park	Cherrybrook	Pocket	Pocket	Renovate	High
115	Greenway Park Community Centre	Cherrybrook	Pocket	Pocket	Renovate	Medium
116	Hastings Park	Castle Hill	Pocket	Pocket	No Change	-
117	Yanderra Grove Reserve	Cherrybrook	Pocket	Pocket	Renovate	High
118	Myson Drive Park	Cherrybrook	Pocket	-	Remove	High
119	Parkhill Crescent Park	Cherrybrook	Pocket	Pocket	Renovate	High
120	Pogson Drive Park	Cherrybrook	Pocket	Pocket	Renovate	High
121	Roslyn Park	Cherrybrook	Pocket	Pocket	Renovate	Medium
122	Appletree Park	Cherrybrook	Local	Local	No Change	-
123	Carmen Crescent Play Space	Cherrybrook	Local	Local	No Change	-
124	Darlington Drive Play Space	Cherrybrook	Local	Local	No Change	-
125	Edna Seehusen Reserve	Cherrybrook	Local	Local	Renovate	Low
126	Gumnut & Holly Play Space	Cherrybrook	Local	Local	Renovate	Low
127	Hickory Place	Cherrybrook	Local	Local	No Change	-
128	James Henty Park	Dural	Local	Local	No Change	-
129	Moorfield Hill Reserve	Dural	Pocket	Local	Hierarchy Upgrade	High
130	Robert Road Park	Cherrybrook	Local	Local	Renovate	Low
131	Tahlee Park	Castle Hill	Local	Local	No Change	-
132	The Lakes of Cherrybrook	Cherrybrook	Local	Local	Renovate	High
133	Tree Tops Reserve	Cherrybrook	Local	Local	No Change	-
134	Westminster Park	Cherrybrook	Local	Local	Renovate	Low
135	Edward Bennett Oval play Space	Cherrybrook	Local	District	Hierarchy Upgrade	High
136	Erlestoke Park	Castle Hill	District	District	Renovate	High
137	Cherrybrook Skate Park	Cherrybrook	Special Use	Special Use	No Change	-

9 Conclusion

The purpose of this Play Plan has been to provide an assessment on the current provision of play spaces in Hornsby Shire Council, to engage the community to ensure the plan reflects the current needs and interests of the community, and to provide recommendations and an Action Plan to meet these requirements.

The Play Plan has provided a rationale for the classification of play spaces according to their size and distribution, referred to as the play space hierarchy

9.1 Current supply

There are currently 131 Council-managed publicly accessible play spaces within the Hornsby Shire LGA. Based on the current population of 150,000 people this equates to a provision of 1 play space per 1,145 people. Below is a breakdown of Hornsby Shire Council's play spaces, according to the play space hierarchy.

HIERARCHY	NO. OF CURRENT PLAY SPACES IN THE HORNSBY LGA (2020)
Regional	1
District	7
Local	71
Pocket	46
Special Use	6
Total	131

Hornsby Shire has an adequate number of play spaces per capita, with reasonable distribution across the LGA.

Notable qualities of Hornsby Shire Council's Play spaces are;

- ▶ Many are beneficially located adjacent to bushland and creek settings;
- ▶ They are well maintained in terms of their settings and comfort levels;

Improvement is required:

- ▶ In the quality of play provision especially play types;
- ▶ To cater for more varied age groups and capabilities; and
- ▶ To cater for more varied play provision – to provide a greater range of play experiences and types of play spaces.

9.2 Current demand

- ▶ There is a desire for more diversity of play types and experiences that are challenging and go beyond traditional play spaces;
- ▶ There are currently no water play spaces in the Hornsby Shire area and this needs to be addressed;
- ▶ Play spaces should provide opportunities for people of all ages, including babies, toddlers, children, young people and older people, with age appropriate settings, spaces and equipment;
- ▶ Play spaces should provide inclusive play settings for people with varying disabilities and additional needs;
- ▶ Improved communications about play spaces across the Hornsby area are required in particular website information, and play space signage
- ▶ Consider equity of provision and access to play spaces across the Hornsby Shire, in terms of population density, future planning and design.

9.3 Recommendations

Hornsby Shire Council's population is projected to grow by 15% to around 170,000 people by 2028. To maintain current provision, an additional 7 play spaces are proposed in high growth areas, or areas of inadequate supply. Eight play spaces are proposed to be upgraded in areas without adequate land for a new play space. Upgraded play spaces cater to a greater number of people. A typical upgrade is from local level to district level. Three play spaces are proposed for removal where surveillance is inadequate. This then equates to 1 play space per 1,214 people.

A breakdown is provided below of the proposed future playgrounds, and the number provided per hierarchy. This table includes proposed special use play spaces adjoining to existing sites.

HIERARCHY	NO. OF CURRENT PLAY SPACES (2020)	PLAY SPACES TO BE REMOVED	PLAY SPACES TO BE UPGRADED	NEW PLAY SPACES	SPECIAL USE PLAY SPACES ADJOINING TO EXISTING SITES
Regional	1		1	1	
District	7		6	2	
Local	71		2	2	
Pocket	46	3			
Special Use	6			2	5
Total	131	3	8	7	5

The following table shows a breakdown of Hornsby Shire Council's future play spaces, according to the play space hierarchy.

HIERARCHY	NO. OF FUTURE PLAY SPACES (2035)
Regional	3
District	14
Local	69
Pocket	41
Special Use	13
Total	140

Providing Hornsby Shire Council follow the proposed new and special purpose play spaces, and undertake play space hierarchy upgrades, an adequate number of play spaces will be maintained across the Shire.

This Plan also recommends an improvement in the quality of play provision in the Shire. This shift is in direct response to public consultation. It also reflects the nationwide reframing of play provision over the last 15 years, which has resulted in higher standards in public play. High quality play provision will also encourage greater participation levels in being active and healthy for all ages and capabilities.

Improvement in quality public play provision can be achieved by:

- ▶ Integrating play spaces with their settings, preferably in a natural environment;
- ▶ Using quality materials throughout each play space (robust, durable, attractive materials);
- ▶ Designing more diverse play types in play spaces
- ▶ Providing more play spaces for 'missing age-groups' such as infants and toddlers, young people, and older people;
- ▶ Careful attention to diverse, balanced play provision across Districts, avoiding repetition of play types (Refer to Section 7.6: Mosaic of Play);
- ▶ Considered addition of non-traditional play space options to improve play diversity across the Shire (special purpose) e.g. shared spaces at schools, play streets, adventure play spaces, bush play programs, bike tracks, water play etc.;
- ▶ Consideration of designed play solutions (e.g. bike tracks) in addition to standard equipment. Introduce more games, mazes, hopscotch, sensory walkways, scavenger hunts, loose parts play with found objects (branches etc), nature-based play;
- ▶ More provision of nature-play elements and settings throughout the Shire e.g. use of boulders, plants, logs, sand, turf etc.;
- ▶ Ongoing attention to maintenance (mowing, rubbish removal, raking of mulch, repair etc);
- ▶ Placing increased attention on creating convivial social spaces in the middle of play spaces (as opposed to the outer edges);
- ▶ Using coordinated colour schemes as a design tool in the selection of play space equipment, outdoor furniture, materials (e.g. rubber) and plants;
- ▶ Creating habitats for wildlife adjacent to play spaces; and
- ▶ Ongoing consideration of the effects of climate change in play spaces, particularly in terms of shade and thermal comfort.

Based on the key findings, this Play Plan sets out a plan for the future of play spaces in the Hornsby LGA, including a vision, guiding principles and detailed action plan. The Action Plan is a guide only and regular reviews will assist in effective implementation.



Part E

Appendix

Appendix A

Design considerations

Regional play space design considerations

SITING	ESSENTIAL	DESIRABLE
Located in a regional park setting, co-located with other recreational facilities (both active and passive) e.g. bike tracks and community gardens	✓	
Located near to public transport e.g. bus stop	✓	
A setting with a high level of landscape amenity and naturalness	✓	
Sited in a park which is visible, well-known, easy to locate, and well signposted	✓	
Sited in a quiet, protected area	✓	
Sited near bushland		✓
IMMEDIATE CONTEXT		
Within 50m of a large dedicated carpark, which includes accessible parking, mini-bus parking, large bus-bay drop off points and standard car parking bays	✓	
Within 50m of an amenities block, which includes accessible toilets, family toilets, and a variety of toilet options to be considered e.g. small pans for very young children, squat pans, 'Changing Place' facilities with hoists and different size tables to be considered.	✓	
Siting in a flat or near flat landscape to enable continuous path of travel up to and into the play space		✓
Sited close to generous barbeque areas and picnic shelters		
Good signage and wayfinding systems	✓	
Sited adjacent to walking tracks and cycle tracks		✓
PLAY SPACE ENTRANCE		
Sense of arrival	✓	
Visible from carpark and entry paths	✓	
Colour and luminance contrasted to surrounding landscape or play space features	✓	
Bin enclosure	✓	
Bike rack		✓

Signage, including inclusive options e.g. tactile signs		✓
Consider double gated 'airlock' entry with a seat		
PLAY EXPERIENCE		
11 to 15+ play experiences	✓	
Intergenerational play equipment catering for all age groups	✓	
Graduated challenges within one play type e.g. swings	✓	
Imaginative play settings provided e.g. shop fronts, themed equipment, overall setting	✓	
Separate areas and equipment for younger and older users e.g. toddlers vs. teens, but still connected into one play space area	✓	
Minimum 6 kinds of 'moving' play equipment – swings, slides, rockers/see-saws, carousels, spinners, trampolines (bouncing facilities), flying foxes, track-rides	✓	
As many physical challenges as possible e.g. climbing, balancing, monkey bars, somersault bars etc.	✓	
Dedicated sensory play area	✓	
Kick-about grassy spot for informal games	✓	
Nature-based play opportunities: e.g. creeks, boulders, logs, plants etc.	✓	
Ball games area (non-competitive) e.g. ping-pong tables, ball toss tower		✓
Sandpit with interactive features e.g. pulleys		✓
Waterplay		✓
Cognitive play challenges e.g. scavenger hunts		✓
Indigenous culture references		✓
Play types separated into 'pods' or individual rooms, sequentially arranged	✓	
Inclusive play equipment options selected – both for individuals and multi-users	✓	
Universally designed equipment options selected	✓	
Bike/scooter track within play space curtilage	✓	

SUPPORTIVE FEATURES		
Fenced play space (entire)	✓	
Gates with magnetic latches	✓	
Accessible paths linking all play pods	✓	
Clear path hierarchy into and around play space	✓	
Shade structures and shade trees	✓	
Garden beds with groundcovers, low shrubs and trees	✓	
Deciduous and evergreen trees	✓	
Nearby café or coffee cart		✓
Nearby accessible amenities	✓	
Nearby informal ball game areas		✓
Nearby exercise stations		✓
Nearby large grassy spaces	✓	
Signage	✓	
Maintenance gates, and maintenance vehicle access route	✓	
Party gathering spaces	✓	
FURNITURE		
Bin enclosures	✓	
Seating – varied options	✓	
Bike racks		✓
Picnic shelters – clustered and individual	✓	
Accessible barbecues	✓	
Accessible bubblers and water bottle filling stations	✓	

District play space design considerations

SITING	<i>ESSENTIAL</i>	<i>DESIRABLE</i>
Located in a regional or district park adjacent to open space and other recreational facilities e.g. exercise stations and off-leash dog area	✓	
Located near to public transport	✓	
A setting with high level of landscape amenity and naturalness	✓	
Sited in a park which is visible, known, easy to locate, and well signposted	✓	
Sited in a quiet, protected area	✓	
Sited near a bushland setting		✓
IMMEDIATE CONTEXT		
Close to a dedicated carpark, or ample street parking, including accessible parking and kerb ramps	✓	
Within 70m (or nearer) of amenities block, with at least one accessible toilet option	✓	
Siting in a flat or gently sloping landscape to enable continuous path of travel up to and into the play space		✓
Sited near to a barbecue and picnic shelters		
Good signage and wayfinding systems	✓	
Sited adjacent to walking tracks		✓
Sited adjacent to bushland areas		✓
PLAY SPACE ENTRANCE		
Visible from carparking and entry paths	✓	
Signage	✓	
PLAY EXPERIENCE		
8 to 10 play experiences	✓	
Intergenerational play equipment	✓	
Graduated challenges within one play type e.g. swings	✓	
Separate areas and equipment for younger and older users		

Minimum 3 kinds of 'moving' play equipment		
Minimum 2 physical challenges		
Imaginative play settings provided		✓
Some sensory play items	✓	
Kick about grassy spot for informal games	✓	
Nature-based play opportunities	✓	
Ball games area if possible		✓
Cognitive play challenges if possible		✓
Inclusive play equipment options	✓	
Bike/scooter track within play space curtilage	✓	
SUPPORTIVE ELEMENTS		
Fenced play space (entire)		✓
Gates with magnetic latches		✓
Accessible path linking around play space	✓	
Clear path hierarchy into and around play space	✓	
Shade structures and shade trees	✓	
Garden beds with ground covers, low shrubs and trees	✓	
Deciduous and evergreen trees	✓	
Accessible amenities block within 75m	✓	
Nearby large grassy spaces	✓	
Signage	✓	
Maintenance gates, and vehicle access route		✓
Gathering spaces for family groups	✓	
FURNITURE		
Bins	✓	
Seats with backs and armrests	✓	
Picnic shelters		✓
Accessible bubblers with bottle filling addition	✓	

Local play space design considerations

SITING	ESSENTIAL	DESIRABLE
Located in a district or local park, adjacent to open space and some recreational facilities e.g. half-basketball hoop	✓	
A setting with good landscape amenity and naturalness	✓	
Sited near bushland if possible, or natural pockets of vegetation		✓
IMMEDIATE CONTEXT		
Nearby street parking with kerb ramp	✓	
Path link from street up to and into play space	✓	
Signage	✓	
PLAY SPACE ENTRANCE		
Visible from street carparking	✓	
Signage	✓	
PLAY EXPERIENCE		
4-7 play experiences	✓	
3-seater swing-set (toddler, strap and inclusive play option)		✓
Separated younger – older user areas	✓	
Minimum of 2 kinds of ‘moving’ play equipment	✓	
Imaginative play element (x1)		✓
Minimum of one physical challenge	✓	
Kick about grassy area	✓	
Nature-based play opportunities (constructed or natural)	✓	
Simple bike/scooter loop	✓	
Consideration of at least one additional element of sensory play, or water play, or sand play, or a cognitive challenge		✓
At least one play element selected for its contribution to inclusive play	✓	
Supportive elements		

Path linking from street up to and into play space, preferably accessible if slope allows		
Shade trees – deciduous and evergreen		
Garden beds with shrubs and trees		✓
Nearby grassy spaces	✓	
Bubbler, preferably accessible	✓	
Signage (small sign)	✓	
FURNITURE		
Minimum 1, preferably 2 backed seats with arm rests	✓	
Bin	✓	

Pocket play space design considerations

SITING	<i>ESSENTIAL</i>	<i>DESIRABLE</i>
Located in a local park, sometimes adjacent to open space	✓	
A natural setting with some trees and grass	✓	
Sited near bushland if possible, or natural pockets of vegetation		✓
IMMEDIATE CONTEXT		
Nearby street parking	✓	
Small sign		✓
Path link from street to play space if possible		✓
PLAY SPACE ENTRANCE		
Denoted with landscape features, if required, such as rocks or trees		✓
PLAY EXPERIENCE		
Minimum 3 play experiences (?)	✓	
Minimum one 'moving' type of play equipment	✓	
Small kickabout grassy area	✓	
Nature-based play opportunities (constructed or natural)	✓	
SUPPORTIVE ELEMENTS		
Path linking from street to play space, preferable but optional		✓
Shade trees – evergreen and deciduous	✓	
Nearby small grassy spaces	✓	
Tap	✓	
Small sign		✓
FURNITURE		
1 backed seat, with armrest if possible	✓	

Gap analysis

‘Zone’ Play space Evaluation + Gap Analysis Sheet

PLAY SPACE BEING UPGRADED: _____ HIERARCHY: P/L/D/R/SU			
Surrounding Play space Name	Play type + experience	Hierarchy	Age group
PG1: _____	<input type="checkbox"/> Physical: _____ <input type="checkbox"/> Cognitive: _____ <input type="checkbox"/> Social: _____ <input type="checkbox"/> Sensory: _____ <input type="checkbox"/> Nature: _____ <input type="checkbox"/> Intergenerational: _____ <input type="checkbox"/> Imaginative: _____ <input type="checkbox"/> Solo: _____ <input type="checkbox"/> Constructive: _____	<input type="checkbox"/> Pocket <input type="checkbox"/> Local <input type="checkbox"/> District <input type="checkbox"/> Regional <input type="checkbox"/> Special Use	<input type="checkbox"/> Babies <input type="checkbox"/> Toddlers <input type="checkbox"/> Early Primary <input type="checkbox"/> Late Primary <input type="checkbox"/> Young People <input type="checkbox"/> Adults <input type="checkbox"/> Older People
PG2: _____	<input type="checkbox"/> Physical: _____ <input type="checkbox"/> Cognitive: _____ <input type="checkbox"/> Social: _____ <input type="checkbox"/> Sensory: _____ <input type="checkbox"/> Nature: _____ <input type="checkbox"/> Intergenerational: _____ <input type="checkbox"/> Imaginative: _____ <input type="checkbox"/> Solo: _____ <input type="checkbox"/> Constructive: _____	<input type="checkbox"/> Pocket <input type="checkbox"/> Local <input type="checkbox"/> District <input type="checkbox"/> Regional <input type="checkbox"/> Special Use	<input type="checkbox"/> Babies <input type="checkbox"/> Toddlers <input type="checkbox"/> Early Primary <input type="checkbox"/> Late Primary <input type="checkbox"/> Young People <input type="checkbox"/> Adults <input type="checkbox"/> Older People
PG3: _____	<input type="checkbox"/> Physical: _____ <input type="checkbox"/> Cognitive: _____ <input type="checkbox"/> Social: _____ <input type="checkbox"/> Sensory: _____ <input type="checkbox"/> Nature: _____ <input type="checkbox"/> Intergenerational: _____ <input type="checkbox"/> Imaginative: _____ <input type="checkbox"/> Solo: _____ <input type="checkbox"/> Constructive: _____	<input type="checkbox"/> Pocket <input type="checkbox"/> Local <input type="checkbox"/> District <input type="checkbox"/> Regional <input type="checkbox"/> Special Use	<input type="checkbox"/> Babies <input type="checkbox"/> Toddlers <input type="checkbox"/> Early Primary <input type="checkbox"/> Late Primary <input type="checkbox"/> Young People <input type="checkbox"/> Adults <input type="checkbox"/> Older People
PG4: _____	<input type="checkbox"/> Physical: _____ <input type="checkbox"/> Cognitive: _____ <input type="checkbox"/> Social: _____ <input type="checkbox"/> Sensory: _____ <input type="checkbox"/> Nature: _____ <input type="checkbox"/> Intergenerational: _____ <input type="checkbox"/> Imaginative: _____ <input type="checkbox"/> Solo: _____ <input type="checkbox"/> Constructive: _____	<input type="checkbox"/> Pocket <input type="checkbox"/> Local <input type="checkbox"/> District <input type="checkbox"/> Regional <input type="checkbox"/> Special Use	<input type="checkbox"/> Babies <input type="checkbox"/> Toddlers <input type="checkbox"/> Early Primary <input type="checkbox"/> Late Primary <input type="checkbox"/> Young People <input type="checkbox"/> Adults <input type="checkbox"/> Older People
PG5: _____	<input type="checkbox"/> Physical: _____ <input type="checkbox"/> Cognitive: _____ <input type="checkbox"/> Social: _____ <input type="checkbox"/> Sensory: _____ <input type="checkbox"/> Nature: _____ <input type="checkbox"/> Intergenerational: _____ <input type="checkbox"/> Imaginative: _____ <input type="checkbox"/> Solo: _____ <input type="checkbox"/> Constructive: _____	<input type="checkbox"/> Pocket <input type="checkbox"/> Local <input type="checkbox"/> District <input type="checkbox"/> Regional <input type="checkbox"/> Special Use	<input type="checkbox"/> Babies <input type="checkbox"/> Toddlers <input type="checkbox"/> Early Primary <input type="checkbox"/> Late Primary <input type="checkbox"/> Young People <input type="checkbox"/> Adults <input type="checkbox"/> Older People
Gap Analysis			
Notes/Design Opportunities			

Appendix B

Water splash parks

Water splash parks

Water splash parks are zero or shallow depth swimming pools combined with play equipment or aquatic structures. They often include a range of areas which may include splash pads, slides, water dumps and shallow pools.

Water Splash Parks (including splash pads, water play areas, water slides and other similar recreational water structures) are defined as public swimming pools according to the Public Health Act 2010. Schedule 1 of the Public Health Regulation 2012 prescribes the requirements for water treatment and disinfection of water splash parks.

Water splash parks - the public health risk

Water splash parks present a risk to public health if they are not designed and managed properly. They are considered a high risk public swimming pool because of (i) potentially very high bather loads; (ii) they are frequently used by toddlers (who are not toilet trained); and the (iii) fine aerosols of water can be easily inhaled or swallowed.

Water splash parks have been closed at times by NSW Health and local councils because of the presence of pathogenic microorganisms and/or because of insufficient disinfection.

Water splash parks should be designed by a suitably qualified and experienced professional engineer and the installation of good quality treatment systems will help to ensure compliance with the Public Health Regulation 2012.

To prevent the spread of disease water splash parks need to be designed and managed according to best practice standards.



Water splash parks - design and management

1. Management, operation and control

- i) **Council requirements:** Land use planning, construction and operational requirements may apply. It is recommended that you discuss these with your local authority prior to commencement of works.
- ii) **Supervision:** Water splash parks should be supervised at all times.
- iii) **Automatic control systems:** Where 24 hour access or control/supervision to the water splash park is not possible, automatic control systems (with remote warnings to alert an off-site manager) and automatic shutdown (in the event of a system failure) should be installed. A contact number for site staff should be easily accessible at the site.
- iv) **Policies:** Policies and operational procedures should be developed by management that encourage patrons to: (i) shower before entering the water splash park; (ii) ensure that toddlers wear tight fitting swim nappies; (iii) ensure nappies are changed in the change room, not beside the splash pad; (IV) encourage patrons not to swallow pool water; (iii) advise patrons not to sit on the water jets; and (iv) to advise patrons not to swim within two weeks of having had diarrhoea.
- v) **The NSW Health Faecal Accident Response Plans** should be enforced by management to ensure that faecal accidents are immediately cleaned up and the surrounding area disinfected (or the water splash park closed and shock dosed with chlorine) to prevent the spread of disease. The response plans are located on the NSW Health webpage at: <http://www.health.nsw.gov.au/environment/publicpools/Pages/default.aspx>
- vi) **Cleaning:** A strict cleaning regime needs to be implemented to keep the water splash park, especially the splash pad, clean.
- vii) **Water testing frequency:** The pH and disinfection level of a water splash park fitted with a continuous metered disinfectant dosing system must be tested manually once each day before the splash park opens. Water splash parks fitted with

an automated disinfectant dosing system must record the pH and disinfection level once before opening to the public and once during the time the water splash park is in use by the public. The disinfectant level and the pH must be tested more frequently if park management considers it necessary, taking into account the number of people using the splash park, the hours of operation of the splash park, and the effect of sunlight on disinfectant levels. The Fact Sheet titled 'Swimming Pool Chemistry Testing Frequency' and 'Swimming Pool Microbiological Testing Frequency' should be used as a guide (See website below)

<http://www.health.nsw.gov.au/environment/publicpools/Pages/default.aspx>

- viii) **Closure of water splash parks:** The water splash park (or individual splash pad and/or pool, if a separate filtration system is in place) should be closed if the water in the splash pad or pool fails to meet the minimum water quality criteria and it should remain closed until the water quality is brought into compliance with the legislated criteria.

2. Location and Design

- i) **Drinking water bubblers, nappy change facilities, toilets and hand wash basins (with soap)** should be provided.
- ii) **Fencing** should be provided to keep out dogs and other animals during and outside operating hours.
- iii) **Prevent water pooling in the splash pad:** Where splash pads are used, water should not be allowed to pool, because stagnant warm water encourages the growth of microorganisms.
- iv) **Surrounding drainage:** Good surrounding drainage must be provided to prevent entry of pollutants, such as food scraps, animal droppings, grass clippings and grime from dirty feet.
- v) **Control of wastewater and stormwater:** Wastewaters from cleaning water splash parks must be diverted to the sewer. Stormwater should be prevented from entering the balance tank when the water splash park is not being used.
- vi) **Eating and picnic areas:** Dedicated areas away from the water splash park

should be provided for eating or other recreational activities. This will assist in preventing contamination of circulating water with food scraps, packaging materials and other potential contaminants likely to reduce water quality.

3. Disinfection and Control

- i) **Water treatment systems:** Water splash parks must be fitted with an automated or continuously metered disinfectant (chlorine or bromine) dosing system. It is recommended that the treatment system also include secondary treatment capabilities (e.g. medium pressure UV light treatment and/or ozone treatment). Secondary treatment is beneficial for treating high combined chlorine that typically form in water splash parks due to reduced solar radiation on the water.
- ii) **Balance tanks:** It is recommended that water splash park treatment systems incorporate large balance tanks as the extra volume capacity is beneficial in providing: i) chemical stability; ii) Total Dissolved Solids (TDS) dilution; and iii) Water for filter cleaning. The balance tank should be sized as indicated in Example 1.
- iii) **Oxidation Reduction Potential (ORP) systems:** ORP is a good measure of disinfection effectiveness, however problems will arise if poor quality equipment is installed and/or if they are not regularly serviced. The ORP probes should be regularly cleaned and calibrated in accordance with the manufacturer's instructions. *Free chlorine sensors (with pH control) are also effective at maintaining good disinfection.
- iv) **pH control:** Whilst a maximum pH of 7.8 is permitted under the Public Health Regulation 2012, NSW Health recommends that pH should be maintained at or below a pH of 7.6. This will help to achieve high oxidation (high ORP) which is necessary for good disinfection.
- v) **Cyanuric acid:** It is recommended that cyanuric acid is not used in water splash parks as it lowers the disinfection power of the free chlorine. The benefit of cyanuric acid in this situation is minimal or of no benefit because most of the splash park water is contained in the balance tank and not exposed to solar radiation.

- vi) **Combined chlorine:** Combined chlorine must be maintained below 1mg/L. High combined chlorine reduces the disinfection power of free chlorine and can cause skin irritations and/or trigger an asthma attack. To reduce combined chlorine, secondary disinfection, e.g. Medium Pressure UV and/or Ozone treatment, should be installed. The addition of sufficient replacement water (e.g. 30L water x daily numbers of users) may also assist to reduce combined chlorine and Total Dissolved Solids (TDS) as a result of high evaporation.
- vii) **Super-chlorination:** Super-chlorination assists in reducing micro-organisms including Cryptosporidium and may be necessary to remove any biofilms that protect microorganisms from disinfection. Super-chlorination may not be necessary if a secondary disinfection system is installed.
- viii) **Hand dosing of chemicals for disinfection of water splash parks is not permitted.**
- ix) **Record Keeping:** Records from the testing of chlorine (or bromine), pH, alkalinity, ozone, and cyanuric acid must be kept for a period of 6 months.

4. Circulation and Filtration

- i) **Ultra-fine filtration (UFF):** UFF is used to efficiently remove pool pollutants, including Cryptosporidium. UFF systems are capable of filtering water down to 2 microns. This allows for greater filtration efficiency and may be combined with other pools (if present and available). The plant capacity for a water splash park is indicated in Example 1 below.
- ii) **Filtration Systems:** Where Ultra-fine filtration (UFF) is not installed, separate filtration systems should be installed for high risk pools such as those in water splash parks. This assists in reducing the potential spread of Cryptosporidium.
- iii) **The circulation system within the balance tank should be operated 24 hours per day**

5. Ventilation

- i) **Good ventilation:** Good ventilation is essential in indoor public swimming pools where a build-up of chemicals, such as trichloramine may be dangerous to health (Refer AS 1668).

EXAMPLE 1: DESIGN FOR A WATER SPLASH PARK

Feature water	Drawn from the balance tank adjacent to the 'Filtered Water Inlet' into the tank.
Pad drains	Discharge next to 'Return to Plant' suction point.
Chloramines	Medium Pressure UV or Ozone treatment should be installed.
Contamination	Shut-off Drain Valves' must be installed to divert the splash pad wastewater to the sewer when the splash pad is being washed. This will prevent contamination of the splash park balance tank water. Stormwater from surrounding areas should also be diverted away from the splash pad when the splash park is not being used.
Outdoor Plant (Size)	0.36 cum/hr/sqm wetted area, e.g. 300sqm = 108cum/hr.
Indoor Plant*(Size)	0.44 cum/hr/sqm wetted area, e.g.300sqm Capacity = 132cum/hr.
Balance tank (Total Volume)	0.2 cum/sqm wetted area, e.g. 300sqm Capacity = 60cum.
<p>'Wetted area' =- area of the splash pad that gets wet on a windless day with all features turned on.</p> <p>* In accordance with the 'NSW Health Public Swimming Pool Advisory Document' the plant capacity should be increased for an indoor water facility.</p> <p>cum = cubic metre</p> <p>sqm = square metre</p>	

This fact sheet has been developed to assist managers and operators of Water Splash Parks meet the requirements of the Public Health Regulation, 2012 and protect public health.

Water Splash Parks (including zero depth splash pads, water play areas, water slides and other similar recreational water structures) are defined as public swimming pools according to the Public Health Act 2010.

For further information contact your local council or PHU (1300 066 055) or visit the NSW Health website at:

<http://www.health.nsw.gov.au/environment/publicpools/Pages/default.aspx>

