



# MACQUARIE PARK CORRIDOR INFRASTRUCTURE DELIVERY PLAN

Department of Planning and Environment

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Department of Planning and Environment

## Prepared for

Department of Planning and Environment

By



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## Executive Summary

The Department of Planning and Environment (the Department) is leading the development of a masterplan for the Macquarie Park Innovation Precinct (MPIP) to support the rezoning of the MPIP Stage 1 Neighbourhoods. The masterplan is part of the implementation of the Macquarie Park Innovation Precinct Place Strategy (the Place Strategy) in 2022.

Building on the comprehensive strategic analysis in the Macquarie Park Strategic Infrastructure and Services Assessment (SISA) prepared by the Greater Cities Commission in 2022, the Department engaged GLN Planning to prepare this Infrastructure Delivery Plan (IDP). The intention of this IDP is to provide details of the funding and delivery mechanisms that can be used to provide infrastructure met the needs of growth in the Macquarie Park Corridor (MPC), particularly the infrastructure needed Stage 1 Neighbourhoods Master Plan area.

The IDP also addresses the land requirements for infrastructure including acquisition or dedication strategies how a range of delivery mechanisms will be used to provide infrastructure, particularly local infrastructure.

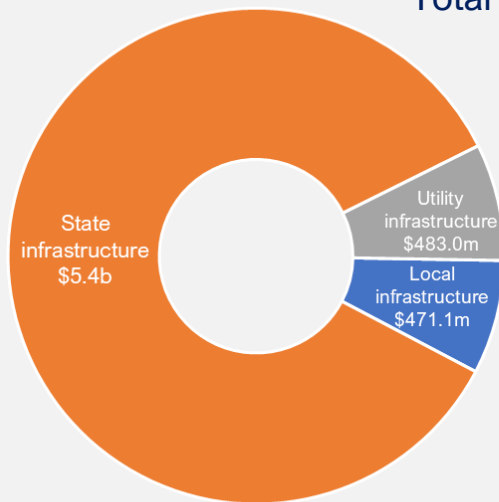
The IDP provides detail on how local infrastructure that is needed to serve Stage 1 Neighbourhoods can be provided. The plan presents a proposed integrated arrangement of mechanisms to fund various facilities.

The following table and charts provide a summary of the different infrastructure types, responsibilities, funding / delivery mechanisms to be used.

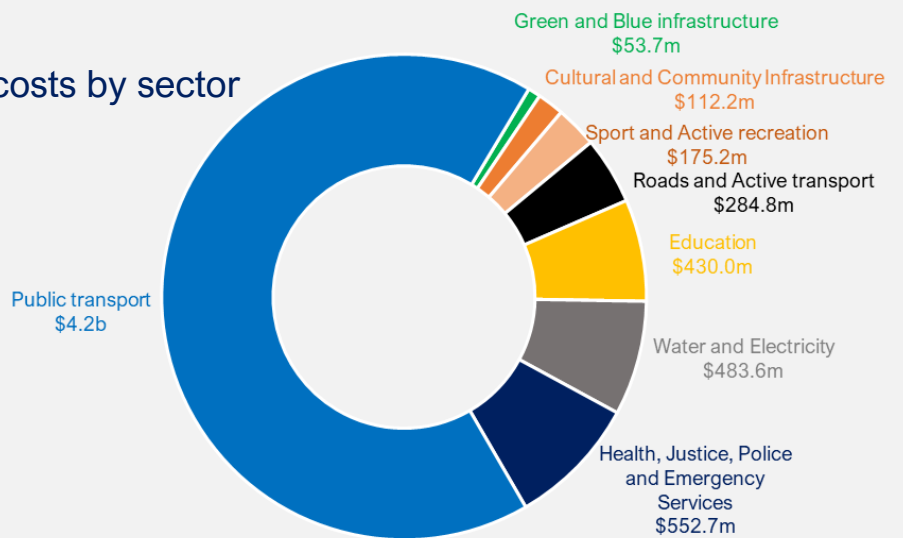
**Table 1 Macquarie Park Infrastructure Delivery Mechanisms**

Infrastructure category	Primary parties responsible for delivery	Mechanisms to be used
Local infrastructure	Ryde City Council Developers of land in the MPIP	<ul style="list-style-type: none"> <li>• Works conditions of development consent</li> <li>• Local infrastructure contributions</li> <li>• LEP provisions for floor space &amp; height incentives</li> <li>• LEP provisions linking development and provision of certain infrastructure on key sites</li> <li>• Macquarie Park special rate (commenced in 2006)</li> <li>• Stormwater levy</li> <li>• State budget allocations</li> </ul>
Utility infrastructure	Utility providers (e.g. Sydney Water)	<ul style="list-style-type: none"> <li>• User fees and charges Developer servicing plan (DSP)</li> </ul>
State infrastructure	Commonwealth and State governments	<ul style="list-style-type: none"> <li>• Budget allocations</li> <li>• Housing and Productivity Contributions</li> </ul>

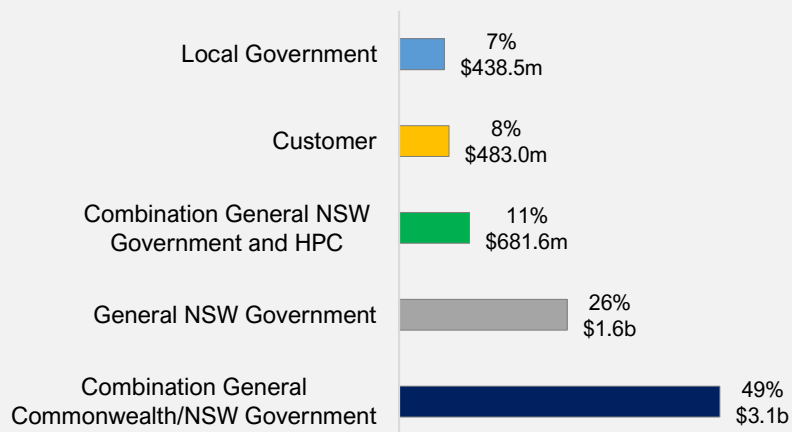
### Total infrastructure costs \$6.3 billion



### Infrastructure costs by sector



### Infrastructure primary funding source



The NSW government has committed funding in excess of \$1 billion toward State and regional infrastructure. These health, education, transport and recreation infrastructure initiatives – listed in **Table 18** - are in various stages of delivery, and some are considered to be critical to delivering the service capacity required by the projected growth. They are also to help ease existing backlogs arising from the rapid growth that occurred in the last decade.

### **Stage 1 Master Plan Area + 144 Wicks Road local infrastructure summary**

The infrastructure planned to be provided as part of future development of the Stage 1 Master Plan Area + 144 Wicks Road include the following:

- A total of 9.5 hectares of embellished open space, comprising 3.1 hectares of district active recreation space on a site to be acquired in Wicks Road, and 6.4 hectares of passive recreation space.
- The passive open space is to be provided in six separate recreation areas, the largest being 2.4 hectares and situated adjacent to Shrimptons Creek, existing open space, and existing and proposed high density residential developments. The passive recreation areas will be embellished and dedicated to Ryde City Council by developers of 'key sites' identified in the LEP.
- Approximately 9,000 square metres of plaza area surrounding the metro rail station entries on the western side of the Waterloo Road and Lane Cove Road intersection.
- A multipurpose indoor facility comprising 5,300 square metres of floor area. The facility will include community floor space and indoor courts.
- A fine grain road network that builds on the existing planned network in the area's development control plan. These roads and road widenings will be provided by the developers of the lands adjoining the proposed roads on approximately 8.2 hectares of land. About 0.9 ha of this land is to be acquired, and the remainder (7.2ha) is to be dedicated to the council.

Additional to the above, Stage 1 developments will contribute towards new and upgraded recreation and community facilities to be provided in the surrounding area by Ryde City Council under a new local infrastructure contributions plan.

### **Next steps**

Implementation of the infrastructure delivery framework as outlined in this IDP will support the efficient, timely and coordinated delivery of MPC infrastructure and help realise the Place Strategy vision.

The plan provides the detail on how the infrastructure to support development in the Place Strategy's Stage 1 Neighbourhoods can be provided and sets up a framework for Stage 2 Neighbourhoods' infrastructure delivery including out of sequence proposals.

Council, developers, and other stakeholders will be consulted on the proposed delivery arrangements presented in this plan. The IDP will be refined and adjusted following stakeholder consultation.



# 1 What is this plan about?

This plan sets out the various types of infrastructure proposed to support Macquarie Park's future development, and how that infrastructure is proposed to be delivered over time through various funding and delivery mechanisms.

This initial section of the plan elaborates on the role and purposes of this plan. It sets the scene for Macquarie Park infrastructure planning, including the events that have led to this plan being prepared, what is meant by infrastructure and why it is important to coordinate funding and delivery mechanisms at an early stage.

Later sections of the plan describe the infrastructure needed at Macquarie Park in more detail, the funding and delivery mechanisms that are available to implement the infrastructure, the way those mechanisms are to be used for Macquarie Park infrastructure.

## 1.1 Background

The Macquarie Park Corridor (MPC) comprises three distinct parts:

1. **North Ryde Station Urban Activation Precinct** (re-zoned in 2013): is a mixed-use and residential precinct centred around the North Ryde Metro Station, across the M2 Motorway, connected by the Christopher Cassaniti pedestrian and cycle bridge.
2. **Macquarie University (Herring Road) Urban Activation Precinct** (re-zoned in 2015): is a mixed used precinct surrounding the Macquarie University Metro station, comprising Macquarie University, Macquarie Shopping Centre, and the surrounds of Herring Road.
3. **Macquarie Park Innovation Precinct (MPIP)**: covers approximately 170 hectares of employment zoned land between the Macquarie Shopping Centre and Ivanhoe Estate through North Ryde Riverside Business Park. This area has not been rezoned and is the subject of a master planning process to facilitate potential future rezonings.

The Department of Planning and Environment (The Department) led the preparation of the Macquarie Park Innovation Precinct (MPIP) Place Strategy in 2022.<sup>1</sup>

The Place Strategy provides a strategic framework to guide future development in the MPIP to 2036. The strategy identifies opportunities to develop land and create attractive public spaces and connections within and around the area. This will boost its economic capacity and see it transition into a leading 21st century place to collaborate, innovate and do business.

The Macquarie Park Strategic Infrastructure and Services Assessment (Greater Cities Commission, 2022) was prepared as a companion document to the Place Strategy. The 'SISA' as it is commonly referred to, contains various infrastructure projects that are required to support the implementation of the Place Strategy. More information on the Strategic Infrastructure and Services Assessment is included in section 1.5 of this plan.

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<sup>1</sup> The MPIP and MPIA have the same boundary

The Department is adopting a staged approach to implementing the Place Strategy. Detailed master planning was undertaken for three of the seven neighbourhoods within the MPIP. The Stage 1 neighbourhoods shown in **Figure 1** are:

- Neighbourhood 2 - Waterloo Park – Butbut (Heart)
- Neighbourhood 3 - Shrimptons Quarter – Waragal Birrung (Evening Star); and
- Neighbourhood 4 - Macquarie Living Station – Gari Nawi (Saltwater Canoe)<sup>2</sup>

A Stage 1 Neighbourhood Master Plan has been prepared. This plan identifies preferred building envelopes, maximum building heights, and the location of existing and proposed infrastructure including roads, through-site links, open space areas and other infrastructure that is needed to support the Place Strategy's vision.

Funding and delivery of infrastructure in the Stage 2 neighbourhoods is being considered as part of this Plan. Whether, rezoning of Stage 2 occurs as a whole or all of the landowners in a particular neighbourhood agree to implement the Macquarie Part Innovation Precinct Place Strategy through an out of sequence industry-led detailed neighbourhood master plan, the infrastructure arrangements will either:

- be already established and apply to the neighbourhood (such as the new local contributions plan); or
- be provided along the same delivery principles as Stage 1 (such as fine grain roads will be provided by the developer via provisions in the LEP).

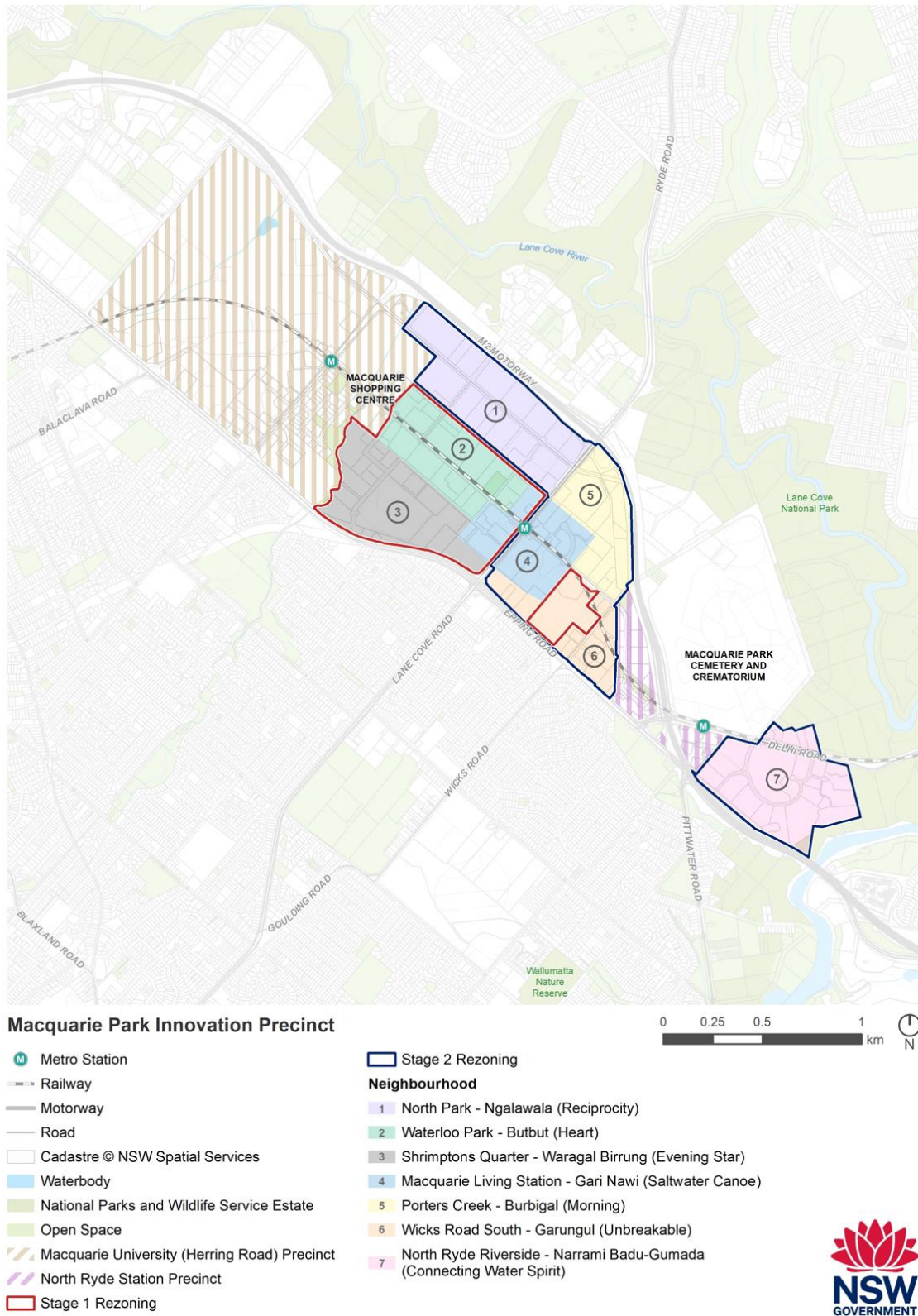
## 1.2 Purposes of this plan

The purposes of this Infrastructure Delivery Plan (IDP) are listed below:

1. Provide details of what infrastructure will be needed to support development of the Macquarie Park Corridor up to 2036, specifically the infrastructure required to support the Place Strategy's Stage 1 Neighbourhood Master Plan area.
2. Describe how and when the Stage 1 infrastructure and other Macquarie Park Corridor facilities will be provided.
3. Identify the infrastructure land needed to provide the Stage 1 infrastructure, and whether it is to be acquired or dedicated.
4. Using the latest available information, respond to the infrastructure implementation matters, and update the schedule and timing of infrastructure delivery included in the Macquarie Park Strategic Infrastructure and Services Assessment.
5. Outline the infrastructure funding and delivery arrangements that will apply to the remaining neighbourhoods (either individually or as a grouped 'Stage 2') noting that the final Place Strategy provides a planning pathway for landowner 'out of sequence' planning proposals outside of Stage 1.

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<sup>2</sup> The Master Plan addresses the built form and infrastructure for the whole of neighbourhood 4, though only the component that lies west of Lane Cove Road will be subject to adjustment of current planning controls.



**Figure 1 Macquarie Park Corridor and Stages 1 and 2 Neighbourhoods**

### 1.3 What is infrastructure?

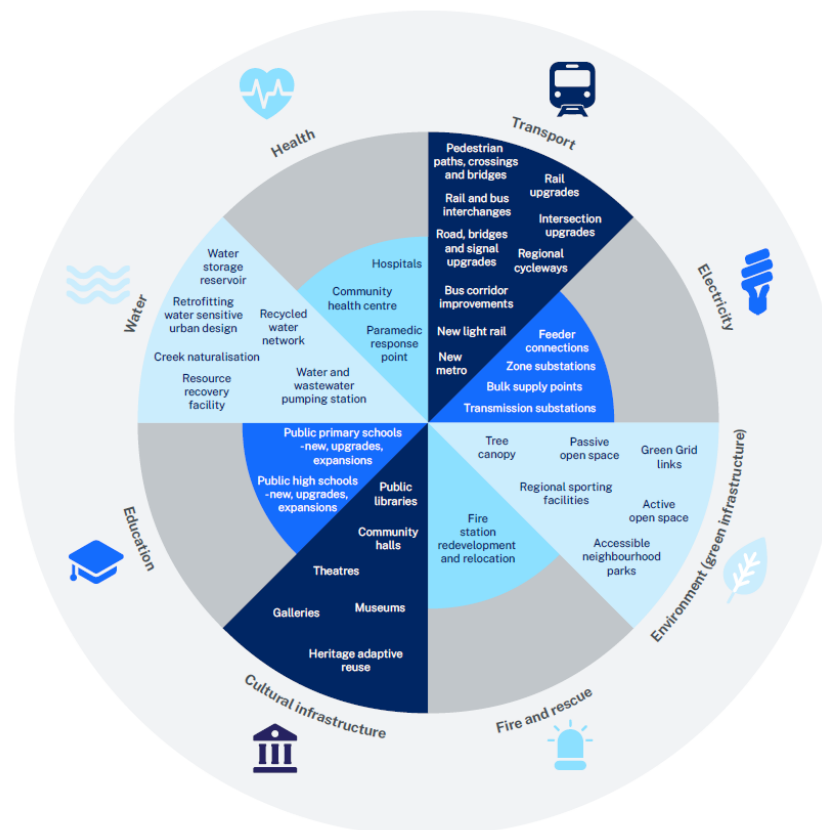
This plan is about ‘infrastructure’ – an often-used technocratic term that is not always easily understood.

Infrastructure means the ‘facilities’, ‘networks’ and ‘services’ people need to live their everyday lives. This includes both:

- the economic infrastructure that makes land able to be used for urban purposes such as transport, water, energy and telecommunications, and
- the social infrastructure that supports the wellbeing of the people that live in cities such as schools, hospitals, parks and other community facilities.<sup>3</sup>

The terms infrastructure, facilities, networks and services are used interchangeably throughout the report, but they all mean infrastructure.

The following diagram shows the infrastructure types that support well-functioning cities.



Source: Infrastructure NSW, State Infrastructure Strategy 2022-2042, p148, based on Greater Sydney Commission (2019)

<sup>3</sup> Infrastructure Australia (2018), Planning Liveable Cities A place-based approach to sequencing infrastructure and growth, p25

## 1.4 Why coordinate development and infrastructure?

Coordination of infrastructure, land use and service planning to meet future housing, employment, industry and community needs is one of the NSW Government's strategic directions for delivering value for money infrastructure (NSW's State Infrastructure Strategy 2022-2042).

Coordination of infrastructure and land use has become fundamental to justifying projects through place-based strategic business cases.

New housing supply and workplaces can only be delivered where infrastructure keeps pace with land use planning. Community acceptance of new development relies on good local amenity – transport connections, schools and health services, public civic and green spaces, protection of local character and access to services close to home. Achieving those outcomes requires timely planning, funding and delivery of local infrastructure in tandem with rezonings and subdivisions, based on well-developed master plans and a place-based planning approach.<sup>4</sup>

The Macquarie Park Innovation Precinct (or MPIP) is one of a number of areas where the NSW Government is refining and establishing place-based approaches to integrated planning. A common feature of the place-based planning approach is better coordinate prioritisation and sequencing of infrastructure and precincts delivery, in line with growth between and within identified new development areas and precincts.<sup>5</sup>

Stage 1 of the Place Strategy implementation focuses on the areas surrounding Macquarie Park and Macquarie University metro stations.

## 1.5 What is the SISA and how does this plan relate to it?

The Greater Cities Commission prepared the *Macquarie Park Strategic Infrastructure and Services Assessment* (SISA) as a companion document to the Place Strategy and the Master Plan.

Purposes and objectives of the SISA include:

1. To understand, at a strategic level, the infrastructure and services needed to support development in the Macquarie Park Corridor, including:
  - the already re-zoned precincts of North Ryde Station and Macquarie University (Herring Road) Urban Activation Precincts
  - potential additional mixed-use development in the MPIP.<sup>6</sup>
2. Guide detailed neighbourhood planning in, and strategic land use and infrastructure decision making affecting the Macquarie Park Corridor.<sup>7</sup>

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<sup>4</sup> Infrastructure NSW, State Infrastructure Strategy 2022-2042, p11

<sup>5</sup> Infrastructure NSW, State Infrastructure Strategy 2022-2042

<sup>6</sup> Macquarie Park Strategic Infrastructure and Services Assessment, p11

<sup>7</sup> Macquarie Park Strategic Infrastructure and Services Assessment, p9

This IDP provides more detail on how and when infrastructure identified in the SISA – particularly the infrastructure needed to align with Stage 1 implementation of the Place Strategy – will be provided.

### Delivery and implementation considerations

The SISA also identified a range of matters to be followed up at implementation stage. The following table lists those matters and indicates whether they are addressed in this report or in other exhibition material relating to Stage 1 implementation of the Place Strategy.

**Table 2 Specific implementation matters identified in the SISA**

SISA implementation matter	Addressed in IDP?
Meeting the needs of recent development that has already occurred in two mixed-use precincts, formerly referred to as Urban Activation Precincts (UAP): North Ryde Station to the south-east (re-zoned in 2013), and Macquarie University (Herring Road) in the north-west (re-zoned in 2015).	Table 16 of this IDP shows current infrastructure funding commitments, including new schools, intersection upgrades and public transport initiatives that will address backlog needs as well as future growth.
The land acquisition requirements, particularly for sports facilities, open space, roads and active transport, and schools are significant.  Land required projects to be delivered in the medium and the longer term (beyond 2036) should be reserved to reduce future acquisition costs and avoid further deficits in service provision.	Yes  Additional land for open space has been identified for acquisition or dedication. Refer to sections 2.3 and 4.4 of this plan.  Land for new roads, road widening and active transport has been identified for acquisition or dedication. Refer to section 4.4 of this plan.  Two of the three school projects identified in the infrastructure list have had funding committed to them. Refer to section 4.5 of this plan.
Further work is required to optimise government owned land. More detailed scoping work should be undertaken to minimise acquisition where possible.	The Department is working with Ryde City Council to identify opportunities where government owned land can be owned and/or managed by Council to provide additional opportunities to deliver infrastructure services and facilities to Council. In particular, land specific to delivering on open space and active recreation needs, which by virtue of their nature, require significant tracts of land.  Land at Tennis World North Ryde, which supports 10 full size courts and 4 mini courts is planned to be transferred to Council in 2024 to support growing needs of the community. This transfer also enables Council to better integrate the facility with adjoining public open space at Blenheim Park.  In addition, a further 1.388 hectares of government owned land near Christie Park is being explored for its potential opportunity to support the expansion of existing facilities, which currently include two full size football fields (subject to further ecological studies).  Further, a study is being prepared in conjunction with Ryde Council to consider how existing public

SISA implementation matter	Addressed in IDP?
	<p>open space can be best embellished and/or expanded to deliver additional facilities.</p> <p>This work, along with any further opportunities will be explored and completed, with land use and infrastructure needs able to support future identified growth incorporated into the Stage 2 State-led rezoning.</p>
<p>Further investigations to support re-zoning at the neighbourhood level and to determine the final quantum of gross floor area (GFA) for residential, retail, commercial and community uses, infrastructure prioritisation and funding sources in consultation with stakeholders.</p>	<p>No. These investigations included in other exhibition material.</p>
<p>More detailed work on development controls on a block by block basis to define the desired land use and built form outcomes for the area, as well as more accurate forecasts of the number of dwellings and building floorspace for employment.</p>	<p>A Stage 1 Detailed Master Plan was prepared to determine appropriate block by block land uses and built form outcomes for neighbourhoods 2, 3 and 4. It is proposed that an additional 3,060 dwellings be delivered and capacity for 1,610,000sqm of commercial floor space) including office and retail premises, with the potential for an additional 30,500 jobs.</p>
<p>More detailed investigation, including the use of transport modelling, to develop and validate the scope of individual transport proposals and their contribution towards creating a safe, efficient and reliable transport system that manages and balances access with the movement and place functions on the street network.</p>	<p>The preparation of a draft Detailed Transport Study (Transport Study), led by TfNSW (With WSP) in collaboration with the Department, validates the transport recommendations of the SISA, and proposes additional measures to support the place and transport vision.</p> <p>The Transport Study also found that the fine grain road network plays a key role in managing traffic operations and enables additional improvements for public and active transport customers.</p>

SISA p9

## 2 What facilities are needed to support development at Macquarie Park?

### 2.1 Development and population projections

The areas most relevant to the infrastructure planning and delivery framework described in this plan are shown in the table:

**Table 3 Macquarie Park Corridor and Neighbourhoods**

Area	Description	Relevance
Macquarie Park Corridor	All of the land south of the M2 Motorway and Delhi Road, east of Vimiera Road, north of Epping Road, and west of the Lane Cove National Park, as shown on Figure 1.	The amount and type of expected development in the entire MPC informs the calculation of reasonable local infrastructure contributions in the proposed contributions plan.
MPIP Stage 1 Master Plan Area	<ul style="list-style-type: none"> <li>Neighbourhood 2 – Butbut (Heart) - Waterloo Park</li> <li>Neighbourhood 3 - Waragal Birrung (Evening Star) - Shrimptons Quarter</li> <li>Neighbourhood 4 - Gari Nawi (Saltwater Canoe) - Macquarie Living Station</li> </ul> As shown on Figure 1.	The layout and scale of maximum development potential in the Stage 1 neighbourhoods both integrates with and informs the location and size of areas required for local infrastructure provided using local infrastructure contributions or ‘incentive clause’ provisions.
MPIP Stage 2 Master Plan Area	Neighbourhood 1 - Ngalawala (Reciprocity) - North Park  Neighbourhood 4. Gari Nawi (Saltwater Canoe) - Macquarie Living Station  Neighbourhood 5 – Burbigal (Morning) - Porter’s Creek  Neighbourhood 6 - Garungul (Unbreakable) - Wicks Road South  Neighbourhood 7 - Narrami Badu-Gumada (Connecting Water Spirit) - North Ryde Riverside	The local infrastructure included in the Macquarie Park Strategic Masterplan layouts for each neighbourhood will inform a future rezoning of any neighbourhood in Stage 2.  It is expected that the fine grain roads and local open space will be either: <ul style="list-style-type: none"> <li>provided by the developer using the ‘incentive clause’ provisions, or</li> <li>included in a future iteration of the local infrastructure contributions plan.</li> </ul>



The development projected in the Macquarie Park Corridor, on which the need for local and regional infrastructure is based – is shown in the table below.

**Table 4 Macquarie Park population and dwelling projections 2021-2036**

	2021	2023*	2036	Growth 2023-36
Dwellings	5,450	6,000	17,750	11,750
Residents	12,800	14,000	38,050	24,050
Workers	72,850	73,500	83,500	10,000

\* GLN Planning estimate

Source: Macquarie Park Strategic Infrastructure and Services Assessment, p26 and GLN Planning

The Stage 1 neighbourhoods are proposed to have the following development characteristics:

- Residential development: 3,060 dwellings (compared to zero currently)
- Employment GFA capacity: 1,610,000m<sup>2</sup> (no change from existing potential)
- Additional workers capacity: 30,500 workers (no change from existing potential)

The anticipated location and maximum height (in storeys) of the buildings and the locations of roads and open space areas in the ultimate development of the Stage 1 neighbourhoods are shown in **Figure 2**.



Source: AJC Tract

**Figure 2 Stage 1 Neighbourhoods anticipated development (excluding 144 Wicks Road and 18 Waterloo Road)**

## 2.2 Infrastructure required to meet development

Essential to realising the vision for the MPIP and Stage 1 is the provision of high-quality infrastructure in a timely and coordinated manner. This section of the plan discusses the particular infrastructure required to meet the projected development in the MPIP and wider Macquarie Park Corridor area.

### Infrastructure identified in the SISA

The SISA infrastructure schedule was the result of a collaborative effort between state agencies, utility providers and local councils to examine the relationship between growth and infrastructure.

The methodology for developing the schedule comprised the following steps:


**Table 5** Infrastructure schedule methodology

Step No.	Details	Notes
1	Scenario development and land use forecasting	
2	Preliminary infrastructure and services identification for initial scenarios and forecasts	
3	Targeted stakeholder engagement on future scenarios	
4	Multi-criteria analysis to select a preferred scenario	
5	Preferred scenario sector infrastructure and service needs, land requirements and cost evaluation	} SISA is the output of these steps
6	Consolidation of infrastructure and service needs, spatially and temporally	
7	Inputs to Place Strategy and Master Plan.	IDP provides SISA implementation details

Source; SISA p13

The SISA identified 190 individual infrastructure items that would be needed to serve the future Macquarie Park Corridor developments. **Table 6** is an excerpt from the SISA showing a summary of infrastructure categories, examples of works, and responsibilities.

**Table 6 SISA infrastructure overview**

Category	Type	Responsible
 Cultural and community infrastructure	<ul style="list-style-type: none"> <li>• Gallery</li> <li>• Performance space</li> <li>• Museum</li> <li>• Library</li> <li>• Community centre</li> </ul>	State government Local government
 Education	<ul style="list-style-type: none"> <li>• Primary school</li> <li>• Secondary school</li> <li>• Support facilities</li> </ul>	State government
 Green and blue infrastructure	<ul style="list-style-type: none"> <li>• Public open space (local and regional)</li> <li>• Passive open space</li> <li>• Tree planting</li> <li>• Blue infrastructure (stormwater, riparian areas, riparian corridor planting)</li> </ul>	State government Local government
 Health, justice, police and emergency services	<ul style="list-style-type: none"> <li>• Hospital</li> <li>• Ambulance station</li> <li>• Community health facility</li> <li>• Courthouse / tribunal</li> <li>• Fire station</li> <li>• Police station</li> </ul>	State government
 Public transport	<ul style="list-style-type: none"> <li>• Rail/metro</li> <li>• Interchange and stations (including bus stops, layovers)</li> <li>• Fleet (e.g. buses, trains)</li> </ul>	State government Local government
 Roads and active transport	<ul style="list-style-type: none"> <li>• State road (e.g. Lane Cove Road)</li> <li>• Local road (e.g. Cottonwood Crescent)</li> <li>• Cycleways</li> <li>• Footpaths</li> <li>• Electric vehicle charging stations</li> </ul>	State government Local government
 Sport and active recreation	<ul style="list-style-type: none"> <li>• Active open space / recreation facility</li> <li>• Sporting field</li> <li>• Indoor / outdoor court</li> </ul>	State government Local government
 Water and electricity	<ul style="list-style-type: none"> <li>• Wastewater treatment plant / recycling plant</li> <li>• Water pumping station</li> <li>• Reservoir</li> <li>• Stormwater infrastructure</li> <li>• Electrical zone substation</li> </ul>	State government Local government Utilities

Source; SISA p12

## State and local infrastructure needs

The SISA identified infrastructure types according to whether they were the State (or regional) infrastructure, or local infrastructure, as shown in **Table 7** below.

**Table 7 State, regional, and local infrastructure needs**

Public transport	State or regional	Local
Bus Priority Infrastructure Program (BPIP Stage 1A, 1B and 2)	●	
New strategic bus corridor and bus priority facilities	●	
Macquarie University Bus Interchange (MUBI)	●	
Macquarie Park northern and southern bus layovers	●	
New and upgraded bus stops		●
Upgrade Ryde bus depot	●	
Investigate mass transit links	●	
Increase Sydney Metro services through MP Corridor	●	
Roads and active transport	State or regional	Local
Fine grain road network		●
Land acquisition for road widening		●
Pedestrian bridge crossings of Lane Cove Road	●	
New or upgraded pedestrian crossings and signals		●
Intersection improvements on State road network	●	
Intersection improvements on local road network		●
New and upgraded footpaths on existing roads	●	●
Traffic management facilities on local road network		●
Lower speed limits		●
Electric vehicle charging stations		●
New and upgraded cycle links (within Stage 1)		●
New and upgraded cycle links (outside Stage 1 and regional works)	●	●
Comprehensive network of dedicated cycle & micro-mobility connections		●
Publicly accessible bicycle parking		●
Active transport link through Browns Waterhole		●
Sports and active recreation	State or regional	Local
Active open space within MPIP (144 Wicks Rd) - land	TBD	TBD
Active open space within MPIP (144 Wicks Rd) - works	TBD	TBD
Outdoor sports courts		●
Indoor Multi-use courts		●
Upgrades to existing active open space outside MPIP		●

Green and blue infrastructure	State or regional	Local
Waterloo Road Forest Zone (linear park)		●
Embellishment of existing parks outside MPIP		●
Open space within Stage 1 neighbourhood plan - land and works		●
Open space within Stage 2 neighbourhood plan - land and works		●
Shared path upgrades		●
Street tree planting		●
Improving waterways / water quality devices		●
Park and open space tree planting		●
Health, education, police and emergency services	State or regional	Local
New primary schools	●	
New secondary school	●	
New North Ryde fire station	●	
Ryde Hospital Redevelopment	●	
New ambulance station (8 bays)	●	
Community health facility	●	
New Ryde PAC Multipurpose Policing Centre	●	
Cultural and community infrastructure	State or regional	Local
Multipurpose Indoor Recreation, Community and Youth Hub Centre		●
Macquarie Centre Library and Creative Hub Fitout		●
Ryde Central - Regional Community Facilities		●
Creative Gallery, Production and Event Space		●
Water and electricity	State or regional	Local
Wastewater - wet weather storage tank	Utility	
Wastewater main duplication-DN225, 200m long	Utility	
Reinstate existing disused Ryde to Pymble ('RP03') trunk drinking water main	Utility	
Marsfield Reservoir - new 10 mega litre reservoir	Utility	
Local water network duplication	Utility	
Waterloo Road Stormwater Works	Utility	

'TBD' – to be determined

### Infrastructure identified in the Stage 1 Neighbourhoods Plan

The SISA identified that an additional 25 hectares of land would be needed to meet the MPIP's additional demands for sportsfields and other active recreation, including 18 hectares for 'four ovals'.

The following additional facilities have been identified as part of the development of the Stage 1 neighbourhood plan.

Active recreation land – 144 Wicks Road

Acquisition and embellishment of approximately 3.1 hectares of a site at 144 Wicks Road. The site has been identified within the Stage 1 rezoning (whilst included within the Stage 2 area), to provide certainty around the future provision of active open space within the MPIP.

The land is generally undeveloped aside from a small child care building and is of a size and shape that would allow its development for at least two sports fields. The land also:

- adjoins land containing a hockey field owned by the Office of Sports adding co-location / cluster benefits
- has proximity to transport and a proposed activity hub
- has a single land owner.

The extent of acquisition, cost and embellishment are yet to be determined.

It is proposed that the Planning Ministerial Authority (OSL) would be the acquisition authority (subject to funding support).

Embellishment of existing open space land

Ryde City Council has identified projects listed in **Table 8** that are proposed to absorb extra demand for outdoor sports by making existing parks ‘work harder’ – i.e., embellishment of existing open space land to increase carrying capacity.

**Table 8 Additional open space projects identified by Ryde City Council**

Facility type	Location and description
Sports field	Marsfield Park - Conversion of two fields to synthetic turf
	Pidding Park - optimisation to create 1 new natural full-size field and 2 new natural junior fields
	Magdala Park masterplan delivery - optimisation to create 1 new natural full size field
	Waterloo Park - optimisation to create 1 new natural full-size field
Outdoor courts	Meadowbank Park masterplan delivery - stage 6 - 2 new modified multipurpose courts
	Waterloo Park - 1 new modified multipurpose court
	Porters Park - 1 new modified multipurpose court

Multi-purpose indoor facility

The following facility has been identified for provision in the Stage 1 Master Plan Area :

- Multi-purpose indoor facility– 5,300 sqm GFA, facility to include 4 x court indoor hall, multipurpose rooms – makerspaces, community tech lounge.

## 2.3 Land required for infrastructure

The SISA identified that approximately 60ha of land would need to be acquired to provide new and expanded infrastructure to meet the demand generated by the anticipated development within the Macquarie Park Corridor. The majority of this land is required for the following infrastructure types:

- Sporting facilities 25ha
- Roads and active transport 11ha
- Green & blue infrastructure 10ha
- Public transport 6ha
- Education 5.5ha

The land requirements do not include land already owned by the NSW government or the Council.

Section 4.4 of the IDP discusses the extent of land for infrastructure that will be acquired or dedicated, and the mechanisms to be used to obtain the land.

## 2.4 Land ownership

The relatively few land owners and the moderate to large sites that are a feature of Macquarie Park provide the opportunity for developers to directly provide infrastructure land and works that are integral to the Place Strategy outcomes while reducing the infrastructure obligations of State and local government.

For example, the ownership and lot pattern at Macquarie Park makes it possible for segments of the fine grain roads network and areas of local open space to be provided *in conjunction with* development on land held in one or few owners. In this way the infrastructure delivery is part of the developer's project and the cost and financial risk rests with the land owner.

A land owner will only do this if he is paid for the value of the works provided and the land forgone for infrastructure. This 'payment' need not involve cash but can be in terms of additional development potential (such as extra floor space) or rezoning the land to allow a change of land use that increases the residual value of the land.

This approach to providing urban infrastructure is the basis of the 'incentive clause' mechanism that is available to owners and developers of certain land in the MPIP and that is discussed later in the report.

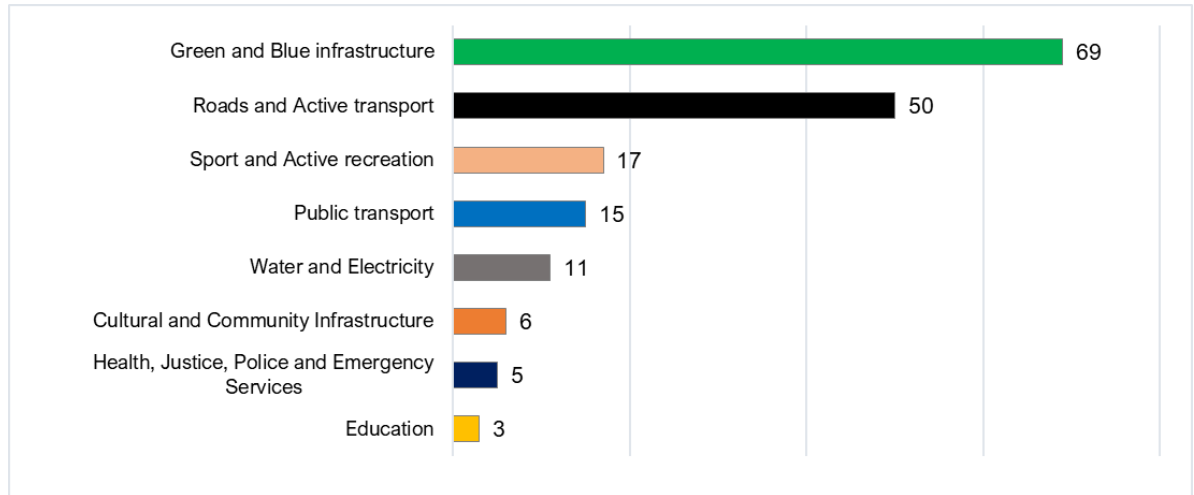
## 2.5 Consolidated infrastructure schedule and infrastructure costs

Development of the Stage 1 Neighbourhoods Master Plan has resulted in rationalisation of the infrastructure list and minor adjustments to the total costs of infrastructure.

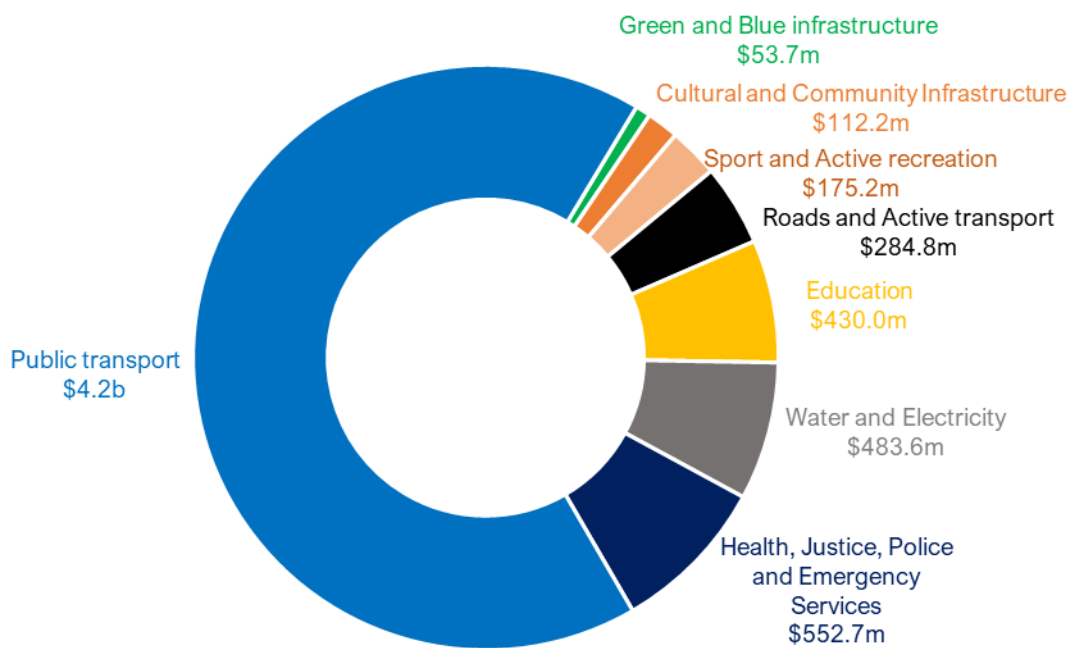
The total estimated cost of infrastructure in this IDP is \$6.3 billion, slightly below the \$6.4 billion total apportioned cost in the SISA. However, the costs of several items are yet to be determined, and the total costs are likely to increase.

Most of the total infrastructure cost (\$4.2 billion) is for investment in strategic public transport projects that are not anticipated to be incurred until after 2036.

**Figure 3** and **Figure 4** show a breakdown of the number of infrastructure items and the infrastructure cost by sector. **Figure 5** shows the breakdown of costs by jurisdictional responsibility (i.e., the costs of State (ore regional) infrastructure, utility infrastructure, and local infrastructure).

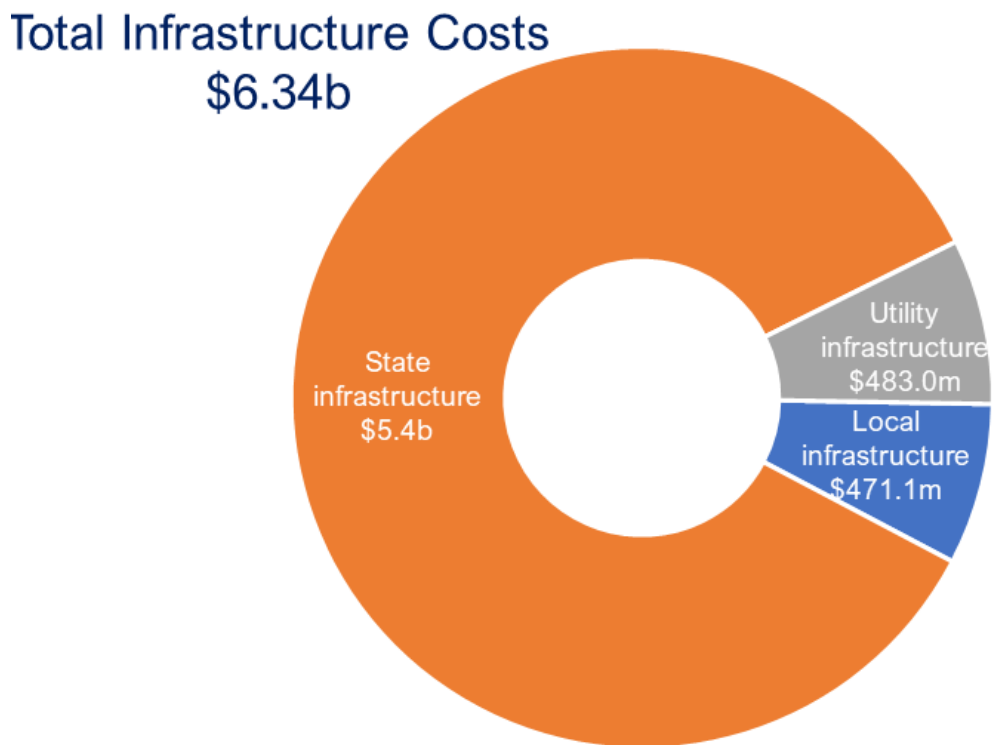


**Figure 3** Macquarie Park Corridor number of infrastructure items by sector



**Figure 4** Macquarie Park Corridor infrastructure costs by sector





**Figure 5** Macquarie Park Corridor infrastructure costs by jurisdictional responsibility

## 3 Funding and delivery mechanisms

### 3.1 Summary of mechanisms

New or augmented infrastructure that is needed to support the growth of urban redevelopment areas in a built-up urban context can be provided through several mechanisms.

Potential planning system and other mechanisms that are available to deliver infrastructure that is linked to development growth, and that could be used to deliver MPIP infrastructure are shown in the table below. Mechanisms in bold text are more fully discussed in section 3.2.

**Table 9 Potential infrastructure funding and delivery mechanisms**

Mechanism	Brief description of mechanism
Planning system mechanisms	
S7.11 contributions	A contribution of money or land imposed as a condition on a development consent or complying development certificate. The contribution cannot be more than an amount that reflects the relationship (or nexus) between the particular development and the infrastructure the subject of the contribution.
S7.12 levies	Fixed rate levy imposed as a condition on a development consent or complying development certificate. Maximum levy rate is set by regulation and is generally 1% of development cost, however there are numerous areas where this maximum has been increased through EP&A Regulation amendments.
S7.28 Housing and Productivity Contributions (or HPC contributions)	Contribution of money or land imposed as a condition on a development consent or complying development certificate to be applied toward the provision of state and regional infrastructure determined by the Minister for Planning.
S7.4 Planning agreements (State and Local)	An agreement voluntarily negotiated between a developer and the one or more planning authorities in which the developer commits to providing contributions of land, works or money for public purposes.  In the MPIP there is potential for planning agreements to be used to formalise LEP incentive clause arrangements in Stage 1 (refer to section 4.1), and in out of sequence neighbourhood planning proposals in Stage 2.
LEP 'incentive clause' provisions	An arrangement where a developer provides infrastructure on or adjacent the development site that has a broader public benefit, in exchange for the right to develop the site for alternative and/or more intense land use. The developer commitments are usually formalised through a planning agreement.  Land in the MPIP is already subject to an incentive clause (refer to section 3.2).
Direct developer provision through planning controls	The developer is required to provide, replace or upgrade infrastructure as a condition on a development consent. The works are usually required directly as a result of the development works.

Mechanism	Brief description of mechanism
	For example: in-street drainage and upgrades of street adjoining their development.
Other mechanisms	
Council General fund	Ordinary rates revenue that is collected by the council on an annual basis to fund the operations of the council. The use of general funds to fund infrastructure needs to be agreed and endorsed by Council.
Special rate variation (LGA)	Additional council rates pursuant to section 495 of the Local Government Act 1993 for works or services that will service the LGA. An application is required to be made and approved by Independent Pricing and Regulatory Tribunal (IPART). The use of special rate variations need to be agreed and endorsed by Council.
Local area special rate	Additional council rates pursuant to section 495 of the Local Government Act 1993 for works or services limited to a specific area (e.g. land release or suburb) that will benefit from the proposed infrastructure. An application is required to be made and approved by IPART.  A local area special rate has operated in Macquarie Park for 15 years. More information on its potential use in Macquarie Park to fund future infrastructure is included in section 3.2 of this plan.
State or Commonwealth Budget allocations	Amounts allocated from NSW or Commonwealth government consolidated revenue.
User fees and charges	One-off and recurrent payments made by users of a facility or service, such as connection and usage fees charged by utility authorities for utility services. For example, NSW water supply authorities in issuing a certificate of compliance for a development consent, can first require the developer to pay headworks contributions under a Developer Servicing Plan (DSP).
State and Commonwealth Government grants	Funds that are available for the provision of infrastructure via an application process. Most schemes require co-funding/cash contribution for projects. Projects without co-funding tend to score lower against the merit criteria.
Non council providers of similar service	Facilities and services that have been traditionally provided by councils but are also provided by other organisations. Examples include childcare centres (increasingly provided by for-profit companies), indoor recreation centres (increasingly provided by registered clubs and Non-Government Organisations (NGOs) such as Police and Community Youth Clubs (PCYC)).

## 3.2 Local infrastructure

### S7.11 and s7.12 contributions

Much of the infrastructure identified as being needed to support the Place Strategy's implementation is local infrastructure that Ryde City Council is responsible for delivering and/or owning and managing.

The primary funding and delivery mechanism available to councils to fund local infrastructure is local infrastructure contributions, comprising section 7.11 or section 7.12 contributions.

The main difference between the two contribution types is that a s7.11 contribution must be reasonable, meaning that it must meet the tests of nexus and apportionment:

- Nexus is the connection between proposed development and the demand created for infrastructure included in a contributions plan.
- Apportionment is the share of the total demand that the developer must pay.

That is, the s7.11 contribution amount levied on a development must reflect its share (or portion) of the total demand it generates for infrastructure items in the plan it has some nexus (or connection) with.

A s7.12 contribution is a fixed rate levy on the cost of development. A s7.12 amount need not have any connection with the facilities the contribution is proposed to fund.

Section 212 of the EP&A Regulation requires a contributions plan to specify the relationship between the expected types of development and the demand for additional public amenities and public services. As such, while there may not need to be a connection between an individual development and the infrastructure provided using the contribution from that development, there still should be a connection between the types of development on which the levy is imposed and the infrastructure being funded by the levy.

S7.11 and s7.12 contributions can fund 'public amenities and public services'. Public amenities and public services can be any infrastructure or facilities apart from water supply and sewerage services.<sup>8</sup> Convention, case law and practice notes however has led to these contributions being limited to meet the capital costs of infrastructure that is the responsibility of local government. Has meant Typical infrastructure items that may be part or fully funded, depending on the population growth, includes:

- local road improvements, pedestrian crossings, and cycleways
- local and district park upgrades
- local and district community facilities upgrades and expansions
- public domain works including footpath widening and street tree planting (where these facilities are not proposed to be required as developer works in conditions of consent)

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<sup>8</sup> S7.1 Environmental Planning and Assessment Act 1979

- recreation and sport facilities including courts, swim centres, sports fields
- trunk stormwater drainage facilities.

Under the current planning framework, councils and local planning panels as consent authorities are restricted on the amount of contributions can be imposed on residential development. For section 7.11 contributions, the current State government policy is that unless a contributions plan has been reviewed by the Independent Pricing and Regulatory Tribunal (IPART), the maximum amount applying to residential development in infill areas is \$20,000 per dwelling or lot. Presently no corresponding limit applies to contributions imposed on non-residential development.

The IPART review process is extensive and the infrastructure in a plan must be on the 'essential works' list to be funded by developer contributions. Essential works do not include community buildings, indoor sports centres, and streetscape works not linked to traffic improvements.

Alternatively, a section 7.12 plan may be applied to development - that is, a single development can be subject to either a section 7.11 contribution or a section 7.12 levy, but not both.

The section 7.12 levy is generally restricted to a maximum of 1 per cent of the cost of development, although higher levies are permitted in certain areas.<sup>9</sup>

The Secretary has published a practice note setting out the criteria that the Minister for Planning will apply when considering any request from a council seeking to impose higher levy rates on development.<sup>10</sup>

### **LEP 'incentive clause'**

Ryde Local Environmental Plan 2014 includes provisions that links additional height and floor space on certain land within the Macquarie Park Innovation Precinct with the provision of roads, pedestrian linkages, and open space.

For example, standard FSRs applying to employment zoned land in Macquarie Park range between 1:1 and 3:1; and the LEP allows further FSR of between 0.5:1 and 2:1 depending on location.

Approval for increased FSR and / or height can only be granted where the consent authority is satisfied that:

- (a) there will be adequate provision for recreation areas and an access network, and
- (b) the configuration and location of the recreation areas will be appropriate for the recreational purposes of the precinct, and

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<sup>9</sup> Areas where section 7.12 levies above 1 per cent of the development cost are currently permitted include Land in Burwood LGA (Burwood town centre), Land in Willoughby LGA (Chatswood town centre), Land in Liverpool LGA (Liverpool city centre), Land in Newcastle LGA (Newcastle city centre), Land in Parramatta LGA (Parramatta CBD), Land in Wollongong LGA (Wollongong City Council), Land in Randwick LGA (Kensington and Kingsford town centres), Land in City of Sydney LGA (Central Sydney), Land in The Hills LGA (Norwest innovation area)

<sup>10</sup> Section 7.12 fixed development consent levies - Practice note – February 2021

- (c) the configuration and location of the access network will allow a suitable level of connectivity within the precinct.<sup>11</sup>

The scheme is predicated on developers being able to choose between developing in accordance with the base floor space ratio and height of buildings requirements; or in accordance with the incentive requirements if they can meet requirements (a) to (c) above.

The requirements can be met by directly providing recreation or access infrastructure in accordance with the DCP or making a cash contribution in lieu of provision. All developer commitments in relation to development approved under the incentive clause of the LEP are formalised in a planning agreement between the developer and the council.

The LEP provisions enable the following to be provided at no cost to Council;

- the construction of and/or the dedication of land to enable construction of a 'fine grain' road network set out in the DCP
- the embellishment of and/or the dedication of land to enable embellishment of new open space areas identified in the DCP
- the embellishment of through-site links identified in the DCP

The current LEP provisions aim to deliver the following local infrastructure:

- 4.1 km of 20m wide roads
- 3.6 km of 14m wide roads
- 3.4 km of 8m wide pedestrian links
- 111 m of road widening; and
- 3.5 hectares of open space.

### **Macquarie Park Special Rate**

A special rate administered by City of Ryde currently applies to all properties within the Macquarie Park Corridor. The funds have in the past been used by the council to provide public domain works, road improvements and cycleways.

The levy has raised approximately \$20 million since it commenced in 2006-07. In the financial year ending June 2022 the special rate fund collected about \$1.8 million in revenue, and had a closing balance of \$2.3 million.

This source can continue to fund new and upgraded Macquarie Park infrastructure, particularly:

- facilities that are not able to be fully funded by the other funding sources available to Ryde City Council, or
- where co-funding with other funding sources is needed because of the scale or high cost of the of the project (land or works), or
- meeting unforeseen or unfunded infrastructure delivery costs, such as service relocations.

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<sup>11</sup> Clause 6.9, Ryde LEP 2014

### 3.3 State and regional infrastructure

#### Housing and Productivity Contributions

The *Environmental Planning and Assessment Amendment (Housing and Productivity Contributions) Act 2023* was passed by the NSW Parliament. This Act introduces a new State infrastructure contribution known as the Housing and Productivity Contribution (**HPC**). It will replace the previous Special Infrastructure Contribution (SIC) in the NSW planning legislation in October 2023.

The purpose of the HPC is to facilitate the provision of regional infrastructure that supports and promotes housing and economic activity in a region by enabling a contribution (a housing and productivity contribution) to be required (s7.24(1) EP&A Act).

Contributions will go towards the provision of state and regional infrastructure, such as roads, parks, hospitals and schools.

The HPC can contribute towards the following growth-enabling types of infrastructure:

- Active transport
- Transport
- Education
- Health
- Emergency
- Justice
- Open Space and conservation

Funds will also be provided to support councils in delivering infrastructure that supports housing and productivity.

Funds collected through the HPC are set to apply in October 2023 to Greater Sydney, the Illawarra-Shoalhaven, Lower Hunter and the Central Coast to the following development:

- residential development that intensifies land-use where new dwellings are created, such as houses, apartments, terraces and dual occupancies.
- commercial and retail development such as shops, neighbourhood shops, supermarkets, and commercial office buildings where new floorspace is created.
- industrial development such as warehouses and industrial buildings, where new floorspace is created.

The 'base' HPC rates applicable to the following development types within the Greater Sydney region, after they are fully phased in by 2025 are as follows:

- Houses (detached, semi-detached and townhouses): \$12,000 per dwelling
- Other residential accommodation (residential flat buildings and units): \$10,000 per dwelling
- Industrial: \$15 per square metre of new gross floor area
- Commercial: \$30 per square metre of new gross floor area

- Retail: \$30 per square metre of new gross floor area

The following discounts will apply in the period prior to 1 July 2026:

- HPC paid before July 2024 - 50% of the full rate
- HPC paid before July 2025 - 25% of the full rate
- HPC paid from July 2025 - full rate will apply

These rates are proposed to be indexed quarterly using ABS PPI index. Moneys collected will be held in a Housing and Productivity Fund administered by NSW Treasury. Payments of the HPC will be held by Treasury in a Special Deposits Account.

The disbursement of Fund monies will be through a process that includes:

- Preparation of an Infrastructure Opportunities Plan that will contain 20 year growth projections and projects eligible for funding throughout the 4 regions.
- Construction data, dwelling forecasts and inputs from stakeholders will inform a set of infrastructure priorities will be recommended for each region.
- Further refinement of the infrastructure priority list by a Government Coordination Group will inform government funding allocation decisions.

The Act provides that contributions collected in a region must be spent in the same region. Therefore it is likely that the HPC funds directed towards regional infrastructure in Macquarie Park will be a different amount to the contributions collected in Macquarie Park.

### 3.4 Matching infrastructure to delivery mechanisms

GLN Planning then compared the types of infrastructure required to meet future development against the array of possible funding and delivery mechanisms described in Table 8.

**Table 10** on the following pages is a matrix analysis showing the potential for different mechanisms to provide the infrastructure that is required in the development area. Potential mechanisms and a suggested primary mechanism are shown for each infrastructure type.





**Table 10 Macquarie Park Corridor infrastructure and potential delivery mechanisms**

INFRASTRUCTURE TYPE	Developer works conditions /DCP	Local infrastructure contributions s7.11 or s7.12	LEP incentive clause	Planning agreement submitted with Planning proposal in Stage 2	Council general revenue or reserves	Macquarie Park Special Rate	Stormwater levy	Housing & Productivity Contribution	State or Commonwealth budget allocation	State or Commonwealth grants to local council	Utility user fees and charges	Non-govt providers
<b>Public transport</b>												
Bus Priority Infrastructure Program (BPIP) Stage 1A, 1B and 2 (funding committed)									+			
New strategic bus corridor and bus priority facilities							•	+				
Macquarie University Bus Interchange (MUBI)							•	+				
Macquarie Park northern and southern bus layovers							•	+				
New and upgraded bus stops		•		•	+			•	•			
Upgrade Ryde bus depot								+				
Investigate mass transit links							•	+				
Increase Sydney Metro services through MP Corridor								+				
<b>Roads and active transport</b>												
Fine grain road network	•	•	+	+		•						
Land acquisition for road widening		+	•			•						
Pedestrian bridge crossings of Lane Cove Road							•	+				
New or upgraded pedestrian crossings and signals		•	•	•		+		•				
Intersection improvements on State road network												
Intersection improvements on local road network		•	•	•		+		•				
New and upgraded footpaths on existing roads	•	•	•	•	•	+			•			
Traffic management facilities on local road network		•	•	•	•	+				•		
Lower speed limits				•	•	+		•	•			
Electric vehicle charging stations			•	•		•		•	+	•		•
New and upgraded cycle links (within Stage 1)	•	•				•	•	+	•			
New and upgraded cycle links (outside Stage 1 and regional works)	•	•				•	•	+	•			
Comprehensive network of dedicated cycle & micro-mobility connections	•	•				•	•	+	•			
Publicly accessible bicycle parking	•	+				•			•			
Active transport link through Browns Waterhole		•				•	•	+	•			
<b>Sports and active recreation</b>												
Active open space within MPIP (144 Wicks Rd) - land		•					•	+				
Active open space within MPIP (144 Wicks Rd) - works		•		•		•	•	+	•			
Outdoor sports courts	•	+		•					•			•
Indoor Multi-use courts	•	•	•	•		•			•			•
Upgrades to existing active open space outside MPIP		+	•	•	•		•		•			
Aquatic facility					•			+	•			•



**INFRASTRUCTURE TYPE**

	Developer works conditions DCp	Local infrastructure contributions s7.11 or s7.12	LEP incentive clause	Planning agreement submitted with planning proposal in Stage 2	Council general revenue or reserves	Macquarie Park Special Rate	Stormwater levy	Housing & Productivity Contribution	State or Commonwealth allocation	State or Commonwealth budget local council	Utility user fees and charges	Non-govt providers
<b>Green and blue infrastructure</b>												
Waterloo Road Forest Zone (linear park)	●	★	●	●		●				●		
Embellishment of existing parks outside MPIP		★	●	●	●		●			●		
Open space within Stage 1 neighbourhood plan - land and works		●	★	●	●					●		
Open space within Stage 2 neighbourhood plan - land and works		●	★	●						●		
Shared path upgrades		★			●					●		
Street tree planting	●	●		●	★					●		
Improving waterways / water quality devices	●	●				●	★			●		
Park and open space tree planting		★				●				●		
<b>Health, education, policy and emergency services</b>												
New primary schools							●	★				●
New secondary school							●	★				●
New North Ryde fire station							●	★				
Ryde Hospital Redevelopment							●	★				
New ambulance station (8 bays)							●	★				
Community health facility							●	★				
New Ryde PAC Multipurpose Policing Centre							●	★				
<b>Cultural and community infrastructure</b>												
Multipurpose Indoor Recreation, Community and Youth Hub Centre		★	●	●	●	●		●	●			●
Macquarie Centre Library and Creative Hub Fitout		★			●	●						
Ryde Central - Regional Community Facilities		●			●				●			
Top Ryde Community Services Hub		●			●				●			
Creative Gallery, Production and Event Space								★	●			●
<b>Water and electricity</b>												
Wastewater - wet weather storage tank											★	
Wastewater main duplication-DN225, 200m long											★	
Reinstate existing disused Ryde to Pymble ('RP03') trunk drinking water main											★	
Marsfield Reservoir - new 10 mega litre reservoir											★	
Local water network duplication											★	
Waterloo Road Stormwater Works	●					★	●					

Potential mechanism ●  
Suggested primary mechanisms (s) ★

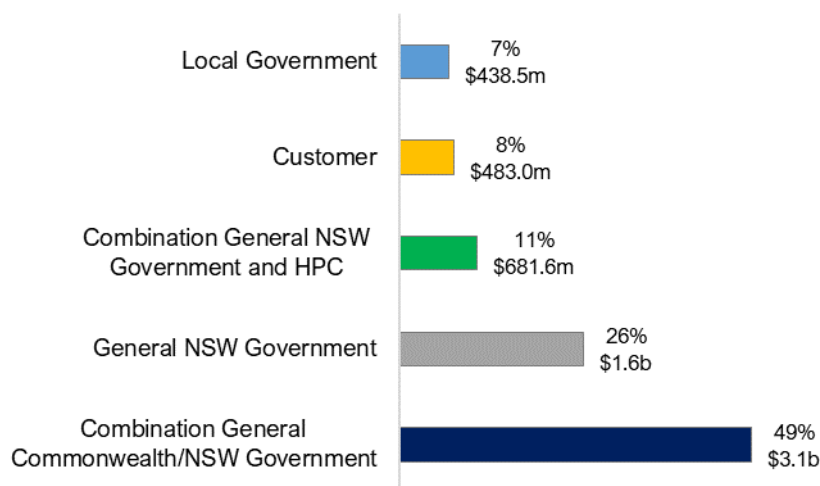
## 4 Infrastructure funding and delivery plan

### 4.1 Overview of funding sources

Section 3.4 of the SISA identified indicative primary funding sources for all the infrastructure required for the MPC. The categories have been adjusted slightly for this IDP to simplify the funding picture and to recognise the introduction of the HPC in October 2023. Water utility DSP funding source has not been specifically identified but is a source that can meet some of the costs in the 'Customer' category. Despite the adjustment, there has been no change to the reality that the NSW Government will inevitably be responsible (with the Commonwealth) for the overwhelming majority of the costs.

The broad funding source categories are listed below, and estimated funding responsibility shares are included in **Figure 6**:

- General NSW Government
- Combination General Commonwealth/NSW Government
- Combination General NSW Government and HPC
- Customer
- Local Government



**Figure 6** Macquarie Park Corridor infrastructure primary funding sources

### 4.2 Local infrastructure

#### A range of mechanisms to be used

An assessment of the suitability of different funding / delivery mechanisms was undertaken for the items categorised in the infrastructure list as local infrastructure.

The Department and Council reviewed each local infrastructure item, and decided whether they could be reasonably delivered using the following mechanisms:

- (a) provided by the developer as a condition of consent
- (b) provided through the provisions included in the Ryde LEP requiring the developer to provide infrastructure
- (c) provided by contributions made by developers under a contributions plan prepared under s7.11 or s7.12 of the EP&A Act
- (d) provided by Council using funds received under the Macquarie Park corridor special rate or the stormwater levy authorised by the Local Government Act 1993.

The following table shows a summary of the mechanisms and the type and total cost of local infrastructure included in that mechanism.

**Table 11 How local infrastructure is to be provided**

Mechanism	Examples of local infrastructure types to be delivered using this mechanism	No. of items	Total value of works using this mechanism <sup>a</sup>
Contributions plan	Open space and recreation Streetscape and other embellishments Open space embellishment Traffic and transport facilities – land acquisition and works Access points to open space Active transport facilities Community facilities	77	\$293.6 million <sup>b</sup>
Planning agreement (including use of incentive provisions in LEP)	Community facility Civic squares near metro station Street planting Passive open space Fine grain roads network	13	\$77.1 million <sup>b</sup>
Macquarie Park Special Rate	Improving waterways Lowering speed limits Electric vehicle charging stations Stormwater facilities	28	\$29.6 million
General NSW Government funding / State grants	Creative Production Space Creative Gallery and Event Space Aquatic facility 1x50m pool Acquisition and embellishment of open space land - 144 Wicks Road Herring Road: Intersection improvements Active transport link through Browns Waterhole	9	\$70.3 million

Mechanism	Examples of local infrastructure types to be delivered using this mechanism	No. of items	Total value of works using this mechanism <sup>a</sup>
Stormwater levy	Herring Road stormwater works Waterloo Road stormwater works	3	\$450,000
Conditions of consent	Riparian corridor works	1	\$100,000

Notes:

a Infrastructure list and costs not yet finalised – for example the proposed aquatic centre and acquisition and embellishment of new open space at Wicks Rd

b This is the total cost of the items. The reasonable, apportioned cost of the list of contributions plan items is estimated at \$249.6m.

c Costs of open space embellishment and civic squares to be delivered by developer through LEP provisions are yet to be determined

## Contributions plan

Development on land in the Macquarie Park Corridor is currently subject to the City of Ryde Section 7.11 Development Contributions Plan 2020.

The plan applies to all land in the City of Ryde, and authorises the following contributions to be imposed on development in the 'Macquarie Park' area that increases demand for public amenities and public services:

- \$15,812 per 0-1 bedroom dwelling
- \$20,000 per 2 bedroom dwelling
- \$20,000 per 3 or more bedroom dwelling
- \$1,759 per additional worker

Details of the contributions plan are currently being discussed between the Department and Council.


## LEP provisions

Current provisions in Ryde Local Environmental Plan 2014 that allow additional (i.e., 'incentive') floor space in exchange for the developer providing components of the fine grain road network situated on the development site would be expanded upon to implement certain infrastructure outcomes in Stage 1 of the master plan.

The provisions will enable mixed use development (including dwellings) to be approved on certain land only if the development includes specific infrastructure. The affected lands (i.e. 'key sites') and the specific infrastructure to be provided by the developer of each site are shown in

**Table 12.**

**Table 12 Proposed LEP 'key sites' and infrastructure requirements to be met as part of the site development**

Key site #	Infrastructure to be provided to council's satisfaction as part of the development
	
Area 1	<ol style="list-style-type: none"> <li>At least 23,975 square metres will be used for the purposes of a recreation area, including approximately 2,800 square metres to be used for the purposes of state water infrastructure.</li> <li>A 30m pedestrian bridge over Shrimptons Creek connecting to Wilga Park</li> </ol>
Area 2	At least 7,310 square metres of embellished open space to be used for the purposes of a recreation area.
Area 3	<ol style="list-style-type: none"> <li>At least 3,470 square metres will be used for the purposes of a recreation area, and</li> <li>At least 5,300 square metres will be used for the purposes of a community facility, and</li> <li>The recreation area will be adjacent to the community facility.</li> </ol>
Area 4	1. At least 3,435 square metres will be used for the purposes of a recreation area, and

Key site #	Infrastructure to be provided to council's satisfaction as part of the development
	2. The recreation area will be above the metro reserve.
Area 5	At least 5,805 square metres will be used for the purposes of a recreation area.
Area 6	1. At least 2,685 square metres will be used for the purposes of a recreation area, and 2. At least 1,000 square metres will be used for the purpose of an active transport bridge landing ramp

The provision of infrastructure in exchange for residential uses and / or additional incentive floor space is in addition to any requirement for land developers to make local infrastructure contributions to the Council under section 7.11 or s7.12 of the EP&A Act. These contributions go towards other infrastructure in the Ryde LGA which have a nexus with the Macquarie Park development. As is the case currently, the value of any infrastructure provided by developers under the incentive clause cannot be used to offset s7.11 or s7.12 contribution requirements.

### Macquarie Park special rate

The scale of investment needed to provide all the local infrastructure required in the Macquarie Park corridor is expected to be beyond the sum of all the other funding sources, and so the special rate will be an integral part of the suite of delivery mechanisms.

A business-as-usual approach to the rate would generate approximately \$30 million in revenue for Macquarie Park infrastructure.

Ryde City Council should investigate the merit of increasing the rate at some point in the future to reduce potential local infrastructure funding shortfalls. Matters for council consideration include:

- The level of the rate having regard to the amount of infrastructure investment needed.
- The expected shortfall in funds available to deliver all the local infrastructure requirements in Macquarie Park.
- The Macquarie Park special rate income has not increased at the same pace as general business rates in the City of Ryde. Whereas rates for all business classed land have increased 7.3% pa over the 15 years to 2022, the Macquarie Park Special Rate increased 5.2% pa over the same period. If the rate was brought into line, the rate would have generated \$2.2m in the 2021-22 financial year (instead of \$1.8m).

### 4.3 State and regional infrastructure

New development in the Macquarie Park corridor will be required to make contributions toward State and regional infrastructure through the HPC.

In regard to HPCs, **Table 13** below shows the estimated HPC payable by the expected development in the Macquarie Park Corridor from the time of its full implementation from July 2025 (excluding indexation).

**Table 13 Greater Sydney Region HPC amount**

Development type	HPC base rate	Development projection	HPC Contribution
Residential	\$10,000 per dwelling	11,750 dwellings	\$117,500,000
Commercial	\$30 per sqm of GFA	300,000 sqm GFA	\$9,000,000
		<b>TOTAL</b>	<b>\$126,500,000</b>

Notes:

- a. Calculation based on full HPC rates that will apply from July 2025
- b. HPC amounts are paid into a Housing and Productivity Fund containing contributions from developments across the Sydney region. The amounts shown are an estimate of payments into the Fund and they do not represent the funds available to deliver Macquarie Park Corridor regional infrastructure

#### 4.4 Utility infrastructure

The costs of utility infrastructure are met by user fees and charges and potentially, in the case of water supply authorities, through headworks charges imposed on developers under Development Servicing Plans (DSPs).

The NSW Government set the developer charge to zero in 2008 for the water utilities Sydney Water and Hunter Water in response to low development activity during and immediately following the Global Financial Crisis.

Following a review of infrastructure contributions and recommendations made by the NSW Productivity Commissioner that were adopted by the NSW Government in 2021, Sydney Water and Hunter Water are currently exhibiting draft DSPs that propose to reintroduce charges on new development towards the provision of drinking and wastewater infrastructure works.

The site is located within the Greater Sydney Drinking Water DSP and Sydney Coastal Wastewater DSP which proposes the base charges proposed per Equivalent Tenement (ET) as outlined in **Table 14**.

**Table 14 Water and wastewater DSP charges per ET**

DSP	Rate per ET
Water infrastructure	\$5,311
Wastewater infrastructure	\$2,060
Total	\$7,371

ET = Equivalent tenement

1 ET is equal to the annual total demand of an average detached, single residential dwelling.



To calculate an infrastructure contribution price, the total number of ETs each year is the sum of:

1. The number of new single residential dwellings, where one dwelling is one ET (by definition); and
2. The number of new dwellings in multi-unit residential lots (e.g., apartments), converted to ETs based on the difference in annual volume compared to a single residential dwelling; and
3. The total annual volume of new non-residential lots, converted to ETs based on the difference in annual volume compared to a single residential dwelling.

The proposal includes a mix of multi-unit residential and non-residential development. The DSP charges for these development types are calculated as a proportion of the single ET rate included in the DSP. The proportional rates and likely DSP charges are show in **Table 15** below.

**Table 15 Anticipated water and wastewater charges**

Category	Rate Per 1 ET	Rate Per Multi-unit residential (0.58 ET)	Rate per Multi: Single (0.004 ET)
Water infrastructure	\$5,311	\$3,080	TBC
Wastewater infrastructure	\$2,060	\$1,195	TBC
<b>Total charge</b>	<b>\$7,371</b>	<b>\$4,275</b>	<b>TBC</b>
Number of anticipated dwellings / Employees	0	11,750	TBC
<b>Total charges</b>	<b>\$0</b>	<b>\$50,231,250</b>	<b>TBC</b>

Subject to final adoption by Sydney Water and IPART, the DSP contributions will be gradually reintroduced from 1 July 2024 when they will be capped at 25 per cent of the full charge in 2024-25; then capped at 50 per cent in 2025-26, with full contributions applying from 1 July 2026.

#### 4.5 Land acquisition and dedication

**Table 16** shows the breakdown of the land requirements, and how they could be delivered.

**Table 16 Infrastructure land requirements**

Additional land required for	Land area identified in SISA	Potential provision strategies
Sporting facilities	25ha	<ul style="list-style-type: none"> <li>• Approximately 3.1ha of a site within the MPIP at 144 Wicks Road to be acquired.</li> <li>• Potential for Crown land east of Christie Park to be formed and embellished for sports uses to be investigated.</li> </ul>

Additional land required for	Land area identified in SISA	Potential provision strategies
		<ul style="list-style-type: none"> <li>Local infrastructure contributions for embellishment of existing parks outside the MPIP to increase their capacity for active recreation</li> <li>Expand current shared use agreement with Macquarie University for public use of university sports facilities.</li> </ul>
Roads and active transport	10ha	<ul style="list-style-type: none"> <li>Incentive clause (for fine grain roads land in MPIP)</li> <li>HPC</li> <li>State government budget allocation</li> </ul>
Green and blue infrastructure (including local and district open space)	6ha	<ul style="list-style-type: none"> <li>Incentive clause (for open space in MPIP)</li> <li>State government budget allocation</li> </ul>
Public transport	5ha	<ul style="list-style-type: none"> <li>HPC</li> <li>State government budget allocation</li> </ul>
Primary schools (2) and a high school	5.5ha	<ul style="list-style-type: none"> <li>Macquarie Park Education Campus comprising 1 primary school and 1 high school has funding committed</li> </ul>

Source: SISA

The infrastructure land areas will be either:

- (a) identified in a DCP that addresses Stage 1 development and is dedicated free of cost by the developer to the council as part of an overall development of the residue of the lot or lots that is approved under the incentive clause provisions of the Ryde Local Environmental Plan 2014, or
- (b) identified in the Land Acquisition Reservation map in an LEP or other environmental planning instrument to be acquired by either the NSW government or Ryde City Council. Acquisitions would be subject to the *NSW Land Acquisition (Just Terms Compensation Act) 1991*.

**Table 17** provides a summary of the neighbourhood infrastructure land requirements for implementing Stage 1 of the Place Strategy, and whether the lands are to be obtained by acquisition or dedication.

**Table 17 Stage 1 Master Plan infrastructure land requirements**

Infrastructure purpose for the land	Land area to be dedicated by developer as part of development (m <sup>2</sup> )	Land area to be acquired from the land owner by State or local government (m <sup>2</sup> )	Other areas
Waterloo Road widening for pedestrian amenity and active transport		4,160	
Fine grain road network - New road reserves (including widenings)	51,290	4,150	
Fine grain road network in current DCP - Existing privately owned road reserves	21,245		
Public open space (new within Stage 1 neighbourhoods)*	64,020		
Active recreation open space at 144 Wicks Road		31,135	
Multi-purpose Indoor facility (in sqm GFA, potentially to be provided in stratum)			5,300
<b>Total</b>	<b>136,555</b>	<b>39,445</b>	<b>5,300</b>

\* includes Catherine Hamlin Park where work is not yet completed

**Figure 7** shows the location of proposed 4 hectares of land acquisitions to be included in the Stage 1 planning instrument's Land Reservation Acquisition Map.



**Figure 7** Infrastructure land to be acquired as part of Stage 1 Rezoning

**Figure 8** shows the location of proposed 11 hectares of land to be dedicated by developers as part of development.



**Figure 8 Infrastructure land to be dedicated by developers as part of Stage 1 Rezoning**

#### 4.6 Timing of infrastructure delivery

Section 5 contains indicative delivery timeframes of infrastructure items and updates the timing that appears for infrastructure in the SISA. Delivery timeframes are shown as being either:

- Short term (0-5 years from the date that the updated Stage 1 planning controls take effect)
- Medium term (6-12 years from the date that the updated Stage 1 planning controls take effect)
- Long term (after 2036)
- More than one of the above

The SISA identified current deficiencies in the infrastructure networks and recommended that implementation plans address existing backlogs as well as future needs.

**Table 18** shows ‘committed and funded’ initiatives. These are projects which have been publicly announced and to which public funding has been committed.

These initiatives – comprising at least \$1.07 billion of the total \$6.3 billion infrastructure costs in Macquarie Park - are in various stages of delivery, and some are considered to be critical to delivering the service capacity required by the projected growth. They are also to help ease existing backlogs arising from the rapid growth that occurred in the last decade.

**Table 18 Committed funding initiatives - State and regional infrastructure**

Project	Description
State and regional infrastructure	

Project	Description
Lane Cove Rd & Waterloo Rd intersection	Improvement of bus travel by reducing congestion and travel times. It is expected to be completed in late 2024. It is part of a \$240 million investment to support economic growth and create jobs.
Macquarie Park Precinct & Bus Interchange Upgrade	The upgrade of the Macquarie University Station Bus interchange to optimise bus operation and pedestrian access. It will connect people to Macquarie University, Macquarie Centre, Macquarie Business Park and residential and commercial areas. Governments are investing \$200 million and construction is expected to commence early 2024.
Macquarie Park Bus Priority and Capacity Stage 2	The State Government is improving the road network in Macquarie Park as part of the Bus Priority Infrastructure Program to increase reliability and efficiency of services.
Macquarie Park Education Campus	Two new public schools will be built within the Macquarie Park Education Campus. The new primary school and high school are proposed to be delivered as part of an integrated mixed-use development in partnership with the private sector.
Herring Road improvements	Improvement of public transport in Macquarie Park to ease congestion and improve travel times.
Ryde Hospital Redevelopment	The existing Ryde Hospital Campus is to become a major health facility with an investment of \$479 million. It will include a new road and expanded medical imaging department, new expanded intensive care unit, operating theatres, overnight inpatient beds, an ambulatory care centre, paediatric short stay unit.
Talavera Road Bus Layover	A new layover near the intersection with Culloden Road to increase the efficiency of the bus network.
New Ryde Fire Station	A new \$8.3 million fire station to replace the existing station at Blaxland Road.
Lachlan's Line and Midtown schools	<p>SINSW has secured sites for the delivery of the new primary school within the Midtown development area and for a new primary school and high school in the Lachlan's Line development area. The final business case for these schools has been approved.</p> <p>The Macquarie Park Education Campus around Lachlan's Line will provide a new 1,000 student primary school and 2,000 student high school to be completed during 2028.</p> <p>A project is underway for a new primary school in Midtown Macquarie Park to meet anticipated enrolment growth in the area. The school will accommodate around at least 1,000 students from Kindergarten to Year 6 and is anticipated to be completed during 2026.</p>

Many local infrastructure items are likely to be delivered in the short term but haven't necessarily had funding committed by Ryde City Council.

## 4.7 Funding and delivery of infrastructure in Stage 2

Whilst it is anticipated that remaining neighbourhoods outside of the Stage 1 Neighbourhood Plan will be master planned and rezoned through a 'Stage 2' master planning and rezoning process (pending government commitment), there is the opportunity for rezoning and development of individual neighbourhoods being brought forward should full landowner agreement be achieved.

In the event of a single neighbourhood rezoning within the MPIP but outside of the Stage 1 Master Plan area, the following arrangements will apply:

- The planning proposal will identify the local infrastructure to be provided using the incentive clause mechanism in the LEP. That is, the fine grain roads and local open space identified for the particular neighbourhood in the Place Strategy's strategic master plan.<sup>12</sup> Maps of these neighbourhoods showing local infrastructure are included in Appendix B of this plan.
- Developments in the neighbourhood will be subject to the prevailing local infrastructure contributions plan adopted by Ryde City Council.
- Developments in the neighbourhood will be subject to any HPC for regional infrastructure and any water and or sewer infrastructure DSP charges that may apply.
- Out-of-sequence planning proposals brought forth by landowners would be implemented by a self-repealing SEPP.

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<sup>12</sup> Macquarie Park Strategic Master Plan - Final Report, prepared by Arup, 3 August 2022

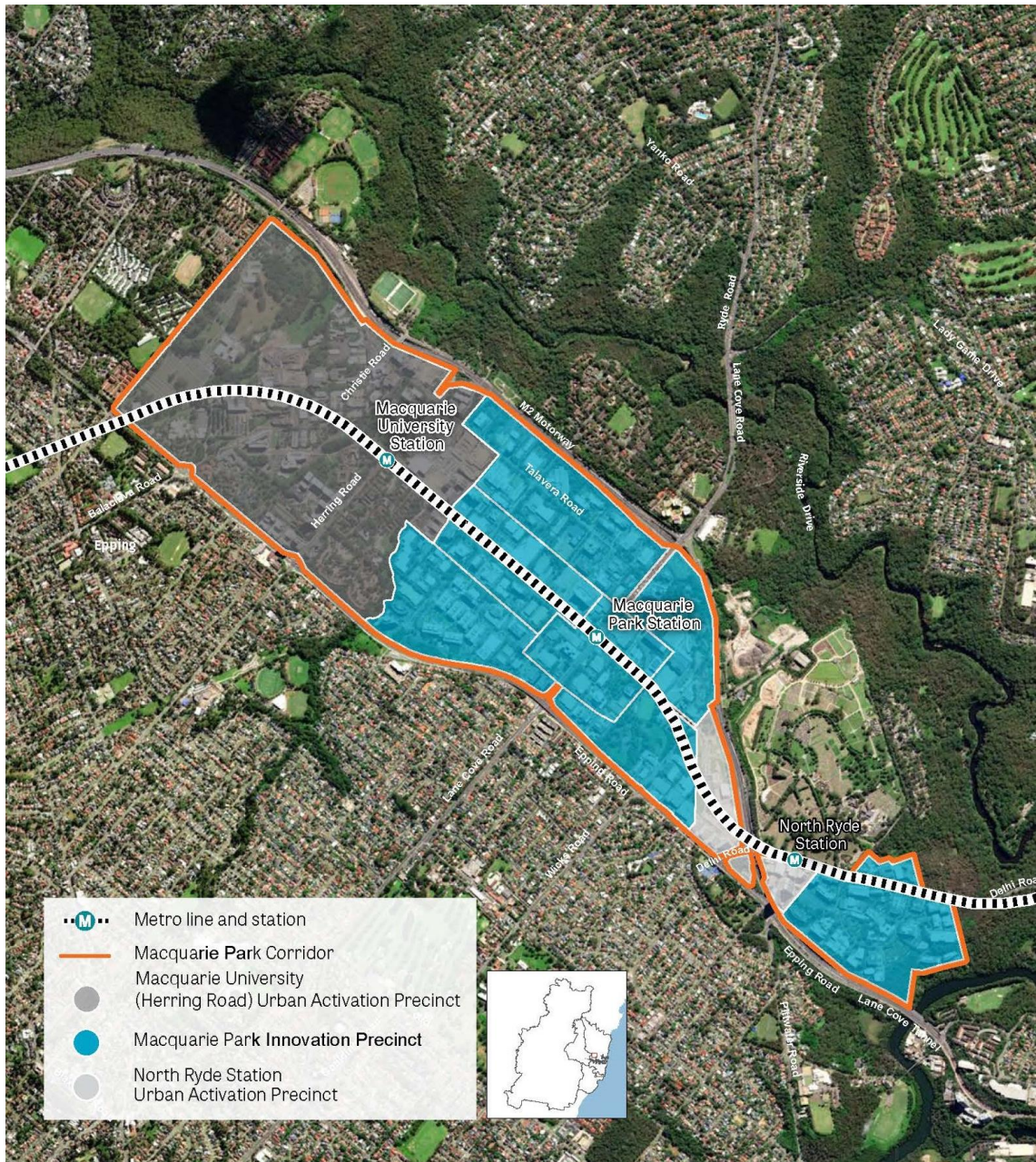
## 5 Infrastructure lists

This section contains updated information on the SISA infrastructure list.

The list is arranged in the same way as the items appear in the SISA – that is, on the following geographic areas shown in **Figure 9**:

- (a) Herring Road UAP and Macquarie University
- (b) North Ryde Station UAP
- (c) Within the Macquarie Park Innovation Precinct
- (d) Multiple Precincts (meaning infrastructure located in one or more precincts described in (a) to (c) above)
- (e) Outside Macquarie Park Corridor





**Figure 9**      **SISA infrastructure areas**



### Infrastructure and service proposals located in Macquarie University (Herring Road) UAP

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Public transport</b>					
Bus Priority Infrastructure Program (BPIP) Stage 1B: Upgrades to Herring Road and the intersections with Waterloo Road, Epping Road and Ivanhoe Place.	Public Transport	Combination General Commonwealth/NSW Government	●		
Macquarie University Bus Interchange (MUBI)	Public Transport	Combination General Commonwealth/NSW Government	●		
Northern bus layover	Public Transport	General NSW Government	●		
<b>Roads and Active transport</b>					
Introduce electric vehicle charging stations: Herring Road UAP	Roads and cycleways	Local Government	●		
Talavera Road/Christie Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC	●		
Talavera Road/Macquarie Park Shopping Centre: Ensure pedestrian crossings on all legs of intersection for Alma Road / Talavera Road / Shopping Centre Access	Roads and cycleways	Combination General NSW Government and HPC	●		
Herring Road: Intersection improvements	Roads and cycleways	Combination General NSW Government and HPC	●		



Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Lower speed limits (Regional Road) - Herring Road	Roads and cycleways	Local Government	●		
<b>Cultural and community infrastructure</b>					
Macquarie Centre Library and Creative Hub Fitout	Cultural and Community Infrastructure	Local Government		●	
<b>Green and blue infrastructure</b>					
Improving waterways and water dependent ecosystems in Herring Rd UAP	Blue	Local Government	●	●	●
Street planting along new road layout (Herring Rd UAP - 131 trees)	Green	Local Government	●	●	
Open space canopy - plant existing local parks in Herring Rd UAP to 60% canopy (541 trees)	Green	Local Government	●	●	
Open space canopy - plant proposed local parks in Herring Rd UAP to 60% canopy (96 trees)	Green	Local Government	●	●	
Waterloo Road Forest Zone - passive open space - Herring Rd UAP (1,020sqm)	Green	Local Government	●	●	
Street planting along existing roads - Herring Rd UAP (2164 trees)	Green	Local Government	●	●	
Additional access points to existing parks - Herring Rd UAP (51 access points)	Green	Local Government	●		
New passive open space area in Herring Rd UAP (15,0033sqm)	Green	Local Government	●	●	
Quandong Reserve, Cottonwood Reserve and Wilga Park shared user path upgrade	Roads and cycleways	Local Government	●		



Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Water and electricity</b>					
Herring Road Stormwater Improvements	Water and Electricity	Local Government	●		
Lachlan Avenue Stormwater	Water and Electricity	Local Government	●		
Macquarie Shopping Centre Culvert GPT	Water and Electricity	Local Government	●		

**Infrastructure and service proposals located in North Ryde Station UAP**

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Roads and active transport</b>					
Introduce electric vehicle charging stations: North Ryde UAP	Roads and cycleways	Local Government	•		
Epping Road/Delhi Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC	•		
<b>Green and blue infrastructure</b>					
Improving waterways and water dependent ecosystems in North Ryde UAP	Blue	Local Government		•	•
Street planting along new road layout (North Ryde UAP - 263 trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in North Ryde UAP to 60% canopy (198 trees)	Green	Local Government	•	•	
Open space canopy - plant proposed local parks in North Ryde UAP to 60% canopy (93 trees)	Green	Local Government	•	•	
Additional access points to existing parks - North Ryde UAP (4 access points)	Green	Local Government	•		
New passive open space area in North Ryde UAP (3,298sqm)	Green	Local Government	•		

**Infrastructure and service proposals located in Macquarie Park Innovation Precinct**

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Public transport</b>					
Southern bus layover	Public Transport	General NSW Government	•		
Bus Priority Infrastructure Program (BPIP) Stage 1A: Waterloo Road & Lane Cove Road Intersection upgrade	Public Transport	General NSW Government	•		
Bus Priority Infrastructure Program (BPIP) Stage 2: Waterloo Road (Lane Cove Road and Herring Road)	Public Transport	General NSW Government	•		
Investigate Macquarie Park to South-East Sydney Transit / Train Link (incl Transport Hub)	Public Transport	Combination General Commonwealth/NSW Government			•
<b>Roads and active transport</b>					
Deliver Finer Grain Street Network - North Park, Shrimptons Quarter, Porters Creek, Macquarie Park Living Station, Wicks Road South, Waterloo Park, North Ryde Riverside	Roads and cycleways	Local Government	•	•	•
Waterloo Road: Intersection improvements Byfield Rd, Khartoum Rd, Thomas Holt Dr.	Roads and cycleways	Local Government	•		
Waterloo Road: New and upgraded paths	Roads and cycleways	HPC	•		
Waterloo Road: Additional traffic management measures	Roads and cycleways	HPC	•		
Talavera Road: Reallocation of road space	Roads and cycleways	HPC		•	
Lower speed limits (Local Road) - Waterloo Road, Khartoum Road, Wicks Road	Roads and cycleways	Local Government	•		
Introduce electric vehicle charging stations: Shrimptons Quarter, Waterloo Park, Macquarie Park Living Station, North Park, Porter's Creek, Wicks Road, North Ryde Riverside	Roads and cycleways	Local Government	•		
Provide more signalised pedestrian / cyclist crossings across Waterloo Road, Talavera Road	Roads and cycleways	Combination General NSW Government and HPC	•	•	



Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Khartoum Road/Banfield Road intersection improvements	Roads and cycleways	Combination General NSW Government and HPC		●	
Waterloo Road / Eden Park Drive, Macquarie Park - Intersection improvements	Roads and cycleways	Local Government		●	
Lower speed limits (State Road) - Lane Cove Road	Roads and cycleways	General NSW Government		●	
Lane Cove Road: Intersection improvement at Talavera Rd (at grade)	Roads and cycleways	HPC	●		
Epping Road: Intersection improvement at Wicks Rd (at grade)	Roads and cycleways	HPC	●		
Pedestrian bridge crossing of Lane Cove Road in vicinity of Hyundai Drive, Dirrabari Road, Waterloo Road	Roads and cycleways	Combination General NSW Government and HPC		●	
Lane Cove Road/Waterloo Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		●	
Lane Cove Road/Talavera Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		●	
Epping Road/Lane Cove Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		●	
<b>Health, justice, police and emergency services</b>					
New Ryde PAC Multipurpose Policing Centre	Police	General NSW Government	●	●	
<b>Sports and recreation</b>					
Indoor court/Youth Rec facility (e.g., 4 indoor courts and associated youth recreation facilities)	Sports	Local Government	●	●	
Sports fields	Sports	Local Government		●	

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Cultural and community infrastructure</b>					
Multi-purpose Indoor Facility – 5,300 sqm GFA, facility to include 4 x court indoor hall, multipurpose rooms – makerspaces, community tech lounge.	Cultural and Community Infrastructure	Local Government	•	•	
<b>Green and blue infrastructure</b>					
Improving waterways and water dependent ecosystems in ARUP Neighbourhood's 2,3,6,7	Blue	Local Government	•	•	
Waterloo Rd street canopy - North Park – Ngawala ('Reciprocity') (198 trees)	Green	Local Government	•		
Waterloo Rd street canopy - <b>Shrimptons Quarter – Waragal Birrung ('Evening Star')</b> (34 trees)	Green	Local Government	•		
Waterloo Rd street canopy - <b>Macquarie Living Station – Gari Nawi ('Saltwater Canoe')</b> (34 trees)	Green	Local Government	•		
Waterloo Rd street canopy - <b>North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit')</b> (114 trees)	Green	Local Government	•		
Street planting along new road layout (North Park – Ngawala ('Reciprocity') - 164 trees)	Green	Local Government	•	•	
Street planting along new road layout ( <b>Waterloo Park – Butbut ('Heart')</b> - 408 trees)	Green	Local Government	•	•	
Street planting along new road layout (Shrimptons Quarter – Waragal Birrung ('Evening Star')- 51 trees)	Green	Local Government	•	•	
Street planting along new road layout (Macquarie Living Station – Gari Nawi ('Saltwater Canoe') - 88 trees)	Green	Local Government	•	•	
Street planting along new road layout ( <b>Porters Creek – Burbigal ('Morning')</b> - 182 trees)	Green	Local Government	•	•	
Street planting along new road layout ( <b>Wicks Road South – Garungul ('Unbreakable')</b> - 201 trees)	Green	Local Government	•	•	



Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Street planting along new road layout ( <b>North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit')</b> - 183 trees)	Green	Local Government	●	●	
Open space canopy - plant existing local parks in <b>North Park – Ngalawala ('Reciprocity')</b> to 45% canopy (66 trees)	Green	Local Government	●		
Open space canopy - plant proposed local parks in North Park – Ngalawala ('Reciprocity') to 45% canopy (41 trees)	Green	Local Government	●		
Open space canopy - plant proposed local parks in - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') to 45% canopy (209 trees)	Green	Local Government	●		
Waterloo Road Forest Zone - passive open space - in North Park – Ngalawala ('Reciprocity') (15,236sqm)	Green	Local Government	●		
Waterloo Road Forest Zone - passive open space - Shrimptons Quarter – Waragal Birrung ('Evening Star') (1,584 sqm)	Green	Local Government	●		
Waterloo Road Forest Zone - passive open space - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (1,465 sqm)	Green	Local Government	●		
Waterloo Road Forest Zone - passive open space - North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit') (1,696sqm)	Green	Local Government	●		
Street planting along existing roads - <b>Wicks Road South – Garungul ('Unbreakable')</b> (49 trees)	Green	Local Government	●	●	
Additional access points to existing parks - <b>Waterloo Park – Butbut ('Heart')</b> (24 access points)	Green	Local Government	●		
Additional access points to existing parks - <b>Shrimptons Quarter – Waragal Birrung ('Evening Star')</b> (2 access points)	Green	Local Government	●		
Additional access points to existing parks - <b>Macquarie Living Station – Gari Nawi ('Saltwater Canoe')</b> (2 access points)	Green	Local Government	●		
Additional access points to existing parks - <b>Porters Creek – Burbigal ('Morning')</b> (6 access points)	Green	Local Government	●		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Additional access points to existing parks - <b>Wicks Road South – Garungul ('Unbreakable')</b> (7 access points)	Green	Local Government	•		
Additional access points to existing parks - <b>North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit')</b> (5 access points)	Green	Local Government	•		
New passive open space area in <b>North Park – Ngalawala ('Reciprocity')</b> (8,721sqm)	Green	Local Government	•		
New passive open space area in <b>Waterloo Park – Butbut ('Heart')</b> (5,694sqm)	Green	Local Government	•		
New passive open space area in <b>Macquarie Living Station – Gari Nawi ('Saltwater Canoe')</b> (32,537 sqm)	Green	Local Government	•		
New passive open space area in <b>Shrimptons Quarter – Waragal BIRRUNG ('Evening Star')</b> (3,340sqm)	Green	Local Government	•		
Open space canopy - plant proposed local parks in <b>Shrimptons Quarter – Waragal BIRRUNG ('Evening Star')</b> to 45% canopy (30 trees)	Green	Local Government	•	•	
Street planting along existing roads - <b>Porters Creek – Burbigal ('Morning')</b> (130 Trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in <b>Shrimptons Quarter – Waragal BIRRUNG ('Evening Star')</b> to 45% canopy (65 trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in <b>Macquarie Living Station – Gari Nawi ('Saltwater Canoe')</b> to 45% canopy (4 trees)	Green	Local Government	•	•	
Open space canopy - plant proposed local parks in <b>Waterloo Park – Butbut ('Heart')</b> to 45% canopy (51 trees)	Green	Local Government	•	•	

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Street planting along existing roads - <b>North Park – Ngalawala ('Reciprocity')</b> (170 trees)	Green	Local Government	●	●	
Street planting along existing roads - <b>Waterloo Park – Butbut ('Heart')</b> (158 trees)	Green	Local Government	●	●	
Street planting along existing roads - <b>Shrimptons Quarter – Waragal Birrung ('Evening Star')</b> (47 trees)	Green	Local Government	●	●	
Street planting along existing roads - <b>Macquarie Living Station – Gari Nawi ('Saltwater Canoe')</b> (52 trees)	Green	Local Government	●	●	
Street planting along existing roads - <b>North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit')</b> (193 trees)	Green	Local Government	●	●	
Acquisition of open space land - Wicks Road	Green	General NSW Government	●		
Embellishment of acquired open space land - Wicks Road	Green	General NSW Government	●		
Catherine Hamlin Park Embellishment - Macquarie Park of approx 1.5ha	Green	Local Government	●		
<b>Water and Electricity</b>					
Waterloo Road Stormwater Works	Water and Electricity	Local Government	●		
Wastewater main duplication-DN225, 200m long	Water and Electricity	Customer	●		



### Infrastructure and service proposals – Multi-Precinct

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Public transport</b>					
New and upgraded bus stops	Public Transport	Combination General NSW Government and HPC	●	●	
Increase Sydney Metro services through Corridor	Public Transport	General NSW Government		●	
<b>Roads and active transport</b>					
Deliver comprehensive network of dedicated cycle & micro-mobility connections	Roads and cycleways	Combination General NSW Government and HPC	●	●	
Deliver increased publicly accessible bicycle parking	Roads and cycleways	Local Government	●	●	
Complete missing links in Macquarie Park's centre-serving local / regional cycling network	Roads and cycleways	Combination General NSW Government and HPC	●	●	
<b>Education</b>					
Ryde Primary SCG: new primary school + 44 TS	Education	General NSW Government	●	●	
Ryde Secondary SCG: new high school +100 TS	Education	General NSW Government	●		
<b>Health, justice, police and emergency services</b>					
Community Health	Health	General NSW Government		●	
Ambulance	Health	General NSW Government	●		
<b>Sports and active recreation</b>					



Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Aquatic facility 1x50m pool	Sports	Combination General NSW Government and HPC	●		
Seven Outdoor Netball Courts	Sports	Local Government	●		
Community and Youth Hub Centre	Sports	Local Government		●	
<b>Cultural and community infrastructure</b>					
Creative Production Space	Cultural and Community Infrastructure	Local Government	●		
Creative Gallery and Event Space	Cultural and Community Infrastructure	Local Government	●		
<b>Green and blue infrastructure</b>					
Provision of senior's leisure needs - Embellishment of City Wide parks with additional seating, pathways and exercise equipment	Green	Local Government	●		
<b>Water and Electricity</b>					
New Zone Substation and Downstream Network Augmentations	Water and Electricity	Customer		●	
Recycled Water scheme - Macquarie Park	Water and Electricity	Customer	●		



### Infrastructure and service proposals located outside the Macquarie Park Corridor

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
<b>Public Transport</b>					
Investigate Parramatta to Epping Mass Transit / Train Link	Public Transport	Combination General Commonwealth/NSW Government			•
Deliver Mona Vale to Macquarie Park public transport improvements (Mona Vale - Macquarie University Rapid route by 2036).	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Parramatta via Eastwood (Rapid route by 2036)	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Hurstville (Rapid route by 2036)	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Blacktown via M2 (Rapid route by 2030)	Public Transport	General NSW Government		•	
Upgrade Ryde bus depot	Public Transport	Combination General NSW Government and HPC	•		
<b>Roads and Active Transport</b>					
Deliver active transport link through Browns Waterhole	Roads and cycleways	Local Government	•		
Provide footpath adjacent to Lane Cove Road from Talavera Road to Fontenoy Road	Roads and cycleways	Local Government	•		
Cycle link to Northern Beaches via A3	Roads and cycleways	Combination General NSW Government and HPC	•	•	
<b>Education</b>					
Ryde Primary SCG: new primary school +32 TS	Education	General NSW Government	•		
<b>Health, justice, police and emergency services</b>					

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
New North Ryde fire station	Emergency Services	General NSW Government	●		
<b>Sports and active recreation</b>					
Indoor Outdoor Sports Facility - 4 indoor and 32 outdoor netball courts	Sports	General NSW Government	●		
Christie Park - Synthetic Sports Surfaces - Stage 2 six futsal/5-aside pitches with a car park extension	Sports	Local Government	●	●	
Christie Park - Synthetic Sports Surfaces - Stage 3 includes suspended slab with 3rd synthetic football field on top of car parking and a fitness facility/gym	Sports	Local Government	●	●	
North Ryde Park - Upgrade to playing surface, fencing and irrigation	Sports	Local Government	●		
Marsfield Park, Fields 1 & 2 Surface Renewal	Sports	Local Government	●		
Waterloo Park - Surface Renewal	Sports	Local Government	●		
ELS Hall Park - Master planned upgrades, youth space, and car park	Sports	Local Government	●		
ELS Hall Park - Indoor Facility	Sports	Local Government		●	
Marsfield Park - Conversion of two fields to synthetic turf	Sports	Local Government	●		
Pidding Park - optimisation to create 1 new natural full size field and 2 new natural junior fields	Sports	Local Government	●		
Magdala Park masterplan delivery - optimisation to create 1 new natural full size field	Sports	Local Government	●		
Waterloo Park - optimisation to create 1 new natural full size field	Sports	Local Government	●		
Meadowbank Park masterplan delivery - stage 6 - 2 new modified multipurpose courts	Sports	Local Government	●		
Waterloo Park - 1 new modified multipurpose court	Sports	Local Government	●		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Porters Park - 1 new modified multipurpose court	Sports	Local Government	•		
<b>Cultural and community infrastructure</b>					
Library Public Multimedia Lab	Cultural and Community Infrastructure	Local Government	•		
Ryde Central - Regional Community Facilities (Apportioned cost to MP Corridor)	Cultural and Community Infrastructure	Local Government	•		
<b>Green and blue infrastructure</b>					
Improving waterways and water dependent ecosystems at Lane Cove River	Blue	Local Government		•	•
Fontenoy Park - Construction of Irrigation and drainage systems	Green	Local Government	•		
Tuckwell Park - Amenities Upgrade	Green	Local Government	•		
Blenheim Park - Design and Construction of Master planned works	Green	Local Government	•		
ELS Hall - Master planned Upgrades	Green	Local Government	•		
Marsfield Park, Darvall Park and Waterloo Master planned upgrades	Green	Local Government	•		
Pioneer Park Master planned upgrades	Green	Local Government	•		
Waterloo Park - Amenities updates	Green	Local Government	•		
Dunbar Park - Master planned upgrades	Green	Local Government	•		
<b>Health, justice, police and emergency services</b>					
Ryde Hospital Redevelopment	Health	General NSW Government	•		
<b>Water and electricity</b>					
Marsfield Reservoir	Water and Electricity	Customer	•		
RP03 re-instatement	Water and Electricity	Customer	•		





Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Local water network duplication	Water and Electricity	Customer		●	
Wastewater - wet weather storage tank	Water and Electricity	Customer		●	

## References

*Environmental Planning and Assessment Act 1979*, New South Wales State Government

*Housing and Productivity Contribution* (May 2023), NSW Department of Planning and Environment

*Macquarie Park Innovation Precinct Place Strategy* (August 2022), NSW Department of Planning and Environment

*Macquarie Park Strategic Infrastructure and Services Assessment – Final report* (September 2022), Greater Cities Commission

*Macquarie Park Strategic Master Plan – Final Report* (August 2022), Arup

*Planning Liveable Cities: A place-based approach to sequencing infrastructure and growth* (11 December 2018), Infrastructure Australia

*Ryde Local Environmental Plan 2014*, New South Wales State Government

*Section 7.12 fixed development levies – Practice note* (February 2021), NSW Department of Planning and Environment

*Staying Ahead: State Infrastructure Strategy 2022-2042* (May 2022), Infrastructure NSW

*Working Draft Rolling Issue Revision E - Macquarie Park Innovation Precinct – Stage 1 Neighbourhoods Detailed Master Plan* (22 June 2023), AJC Architects and Tract Consulting

## Glossary

Abbreviation	
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
GFA	Gross floor area
HPC	Housing and Productivity Contribution
IDP	Infrastructure delivery plan
LEP	Local environmental plan
LGA	Local government area
SISA	<i>Macquarie Park Strategic Infrastructure and Services Assessment</i> , prepared by Greater Cities Commission, September 2022
MPC	is the Macquarie Park Corridor – an area generally bounded by the M2 Motorway, Delhi Road, the eastern boundary of Riverside Corporate Park, Epping Road and Vimiera Road, and shown in Figure 3
MPIP	Macquarie Park Innovation Precinct, which comprises the Stage 1 Neighbourhoods and the Stage 2 Neighbourhoods, as shown in Figure 1
Place Strategy	<i>Macquarie Park Innovation Precinct Place Strategy</i> (August 2022), NSW Department of Planning and Environment

# APPENDIX A: STAGE 2 NEIGHBOURHOODS LOCAL INFRASTRUCTURE

Stage 2 Neighbourhoods local infrastructure identified in Macquarie Park Strategic Master Plan - Final Report (Arup 2022)

Neighbourhood 1 - Ngalawala (Reciprocity) - North Park



Stage 2 Neighbourhoods local infrastructure identified in Macquarie Park Strategic Master Plan - Final Report (Arup 2022)

Neighbourhood 5 – Burbigal (Morning) - Porter's Creek



Stage 2 Neighbourhoods local infrastructure identified in Macquarie Park Strategic Master Plan - Final Report (Arup 2022)

Neighbourhood 6 - Garungul (Unbreakable) - Wicks Road South



Stage 2 Neighbourhoods local infrastructure identified in Macquarie Park Strategic Master Plan - Final Report (Arup 2022)

Neighbourhood 7 - Narrami Badu-Gumada (Connecting Water Spirit) - North Ryde Riverside





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