



# Directions for Camellia–Rosehill Place Strategy

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NSW Department of Planning,  
Industry and Environment

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# Acknowledgment of Country

We acknowledge the Burramattagal people as the Traditional and continuing Custodians of Dharug Country on which Camellia-Rosehill sits. We pay respect to their Elders past, present and emerging and recognise their cultural and ancestral connections to the land, skies and waters of the site under investigation throughout this project.

Camellia-Rosehill, a place of creeks and rivers, would have been an important meeting place for Aboriginal peoples – a place of gathering for trade and cultural exchange between the east and west, salt water and freshwater peoples.

Through the Camellia-Rosehill Place Strategy, we commit to helping support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country, it will care for us.

We seek to genuinely recognise the needs and aspirations of the Burramattagal people and imagine this place through the eyes of Dharug Custodians. This is our chance to heal and restore the land, waters and cultural heritage of Camellia-Rosehill and make this precinct an exemplar of recovery and restoration – a place of not just economic prosperity but also for sharing stories, celebrating resilience and a better future.

## Directions for Camellia-Rosehill Place Strategy

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## Disclaimer

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Left: Artwork by Nikita Ridgeway

# About this directions paper

New investment and infrastructure in Camellia-Rosehill – one of Greater Sydney’s strategically important riverside precincts – provides a significant opportunity to create a clean, green and sustainable place for the community to live and work, now and into the future.

The Government is preparing a new place strategy for Camellia-Rosehill, an integrated 20-year vision to breathe new life into this precinct, which has long held potential to leverage its most vital asset – the Parramatta River.

The department is preparing the place strategy in partnership with the City of Parramatta Council, Cumberland City Council, state agencies, landowners and the community.

This directions paper builds on previous submissions and direct engagement already undertaken with stakeholders and landowners in the first phase of the place strategy. It gives interested parties an additional opportunity to provide their input on key considerations and directions that are emerging as the place strategy develops.

The overarching objective of the place strategy is to provide an integrated 20-year vision that:

- recognises the strategic attributes of the precinct
- guides future land use and infrastructure investment decisions
- can be delivered in an economically robust manner with the support of state and local agencies and in collaboration with key stakeholders including landowners and industry
- ensures growth is aligned with adequate infrastructure provision.

A master plan and several technical studies will underpin the place strategy. This will include an *Infrastructure Delivery Plan* that is intended to identify infrastructure required to support the master plan, any funding gaps, proposed funding mechanisms, and roles and responsibilities in infrastructure delivery.



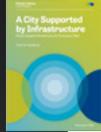
Parramatta River looking West to Camellia

## Strategic work to date

The place strategy will build on a significant body of strategic work completed to date and underway, including:



*A Metropolis of Three Cities* and the *Central City District Plan*



The *Place-based Infrastructure Compact and Recommendations Report* for the Greater Parramatta and Olympic Peninsula (GPOP) and the NSW Government response



City of Parramatta Council's local strategies including the *Parramatta Local Strategic Planning Statement (LSPS)*, *Local Housing Strategy* and *Employment Lands Study*



Studies of the Camellia–Rosehill precinct completed by the Department, including the *Draft Camellia Land Use and Infrastructure Strategy (2015)* and the *Draft Camellia Town Centre Master Plan (2018)*



Greater Sydney Commission's *Greater Sydney Industrial Lands Policy Review* and the Department's proposed Employment Zone Reforms as well as other relevant policy reforms

## The directions

These documents, as well as consultation with landowners in the area, reflect a diversity of views, priorities, and preferences for the future of the precinct.

As part of this, we've developed 5 initial directions that will shape the place strategy.



1. Recognising and celebrating Country



2. Boosting economic activity and employment opportunities



3. Improving connectivity with a focus on sustainable modes of transport



4. Making residential development key to delivering good placemaking outcomes



5. Delivering an integrated and holistic approach to environmental management and sustainability

We want to test these directions with the organisations and individuals who have an interest in the future of Camellia–Rosehill.

### Have your say



Visit [www.planning.nsw.gov.au/Camellia-Rosehill](http://www.planning.nsw.gov.au/Camellia-Rosehill)



Email your feedback to [camellia-rosehill@dpie.nsw.gov.au](mailto:camellia-rosehill@dpie.nsw.gov.au)

# The Vision

Camellia-Rosehill has an important strategic role as an industry and employment hub within the Greater Parramatta and Olympic Peninsula (GPOP) Economic Corridor. By 2041, the precinct will be enhanced, with service and circular economy industries, and new recreational and entertainment facilities, all enabled by better transport access via light rail, active transport and road connections.

A well-designed town centre next to the light rail stop will be the focus of community activity.

New homes will be close to public transport supported by walking and cycling paths and new public spaces including the Parramatta River foreshore.

Key environmental areas such as Parramatta River, Duck River and their wetlands will be protected and enhanced. Camellia's rich heritage will be interpreted, celebrated and promoted.

Camellia will be a showcase of recovery and restoration – a place of economic prosperity but also a place where people love to live, work and visit.



*Parramatta Light Rail bridge over James Ruse Drive*

# Immense opportunities

The Camellia–Rosehill precinct plays a significant strategic role in the Central River City<sup>1</sup>, given its economic contribution and the opportunities associated with its location at the heart of Greater Sydney, in proximity to Parramatta CBD.

The precinct contains a cluster of critical uses including:

- significant fuel storage and distribution
- the major location in Sydney for the manufacturing of building materials such as plasterboard and asphalt for roads
- the production of essential food products, including yeast supply for Sydney's largest bakery
- the majority of concrete recycling in Sydney, which is reused in the building of infrastructure.

The precinct will also house critical transport infrastructure, including the Parramatta Light Rail Stabling Yards and Sydney Metro Clyde stabling and maintenance facility.

Although generally low in employment generation, without these activities the city cannot function.

Existing water, waste and energy recycling uses such as EarthPower

and Rosehill Recycled Water Scheme have the potential to create a strong economic cluster that can drive innovation. They could expand to deliver circular economy outcomes, for the Central River City and Sydney more generally.

The delivery of Parramatta Light Rail will make the area more accessible. Stage 1 will bring the area within a short 10-minute commute to the jobs, services and additional public transport options in Parramatta CBD and Westmead, and proposed Stage 2 will improve connections to Sydney Olympic Park.

Over 7 kilometres of waterfront along the Parramatta and Duck Rivers, A'Becketts and Duck Creeks and Camellia wetlands is generally inaccessible and underused. This presents a major opportunity to create an integrated network of green infrastructure including new open spaces, foreshore access and active transport links.

Rosehill Racecourse already provides an important hub for recreation and entertainment in central Sydney. We could enhance this, creating a more diverse and inclusive entertainment precinct to serve the region's growing population.

Despite these opportunities, the area is affected by a range of physical and environmental challenges such as flooding, contamination, hazard risk, transport access challenges and odour and noise impacts, as shown in Figure 1. These need to be addressed holistically and with a strategic vision in mind.

Addressing these challenges and maximising opportunities is complex and costly and will demand significant planning interventions and investment.

It will require innovative thinking and striking the right balance that will enable productivity, liveability and environmental outcomes to be optimised. To achieve this, various public and private sector stakeholders will need to work in partnership.

Through this partnership and informed by various technical studies, the future Camellia–Rosehill Place Strategy will identify the scope and staging of required essential infrastructure, as well as associated delivery and funding mechanisms.

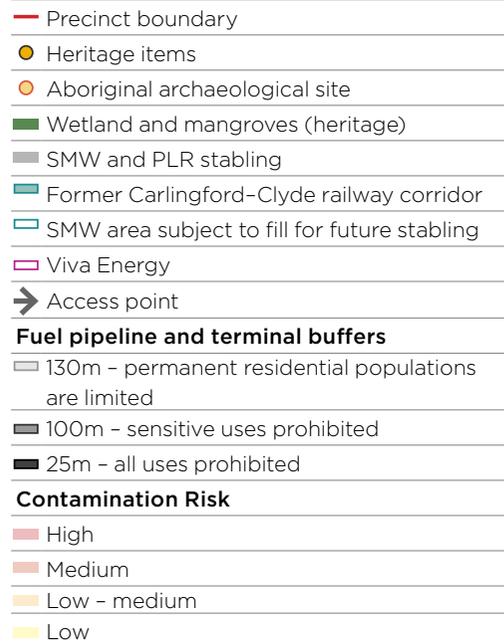


*Rosehill Recycled Water Scheme Reservoir*

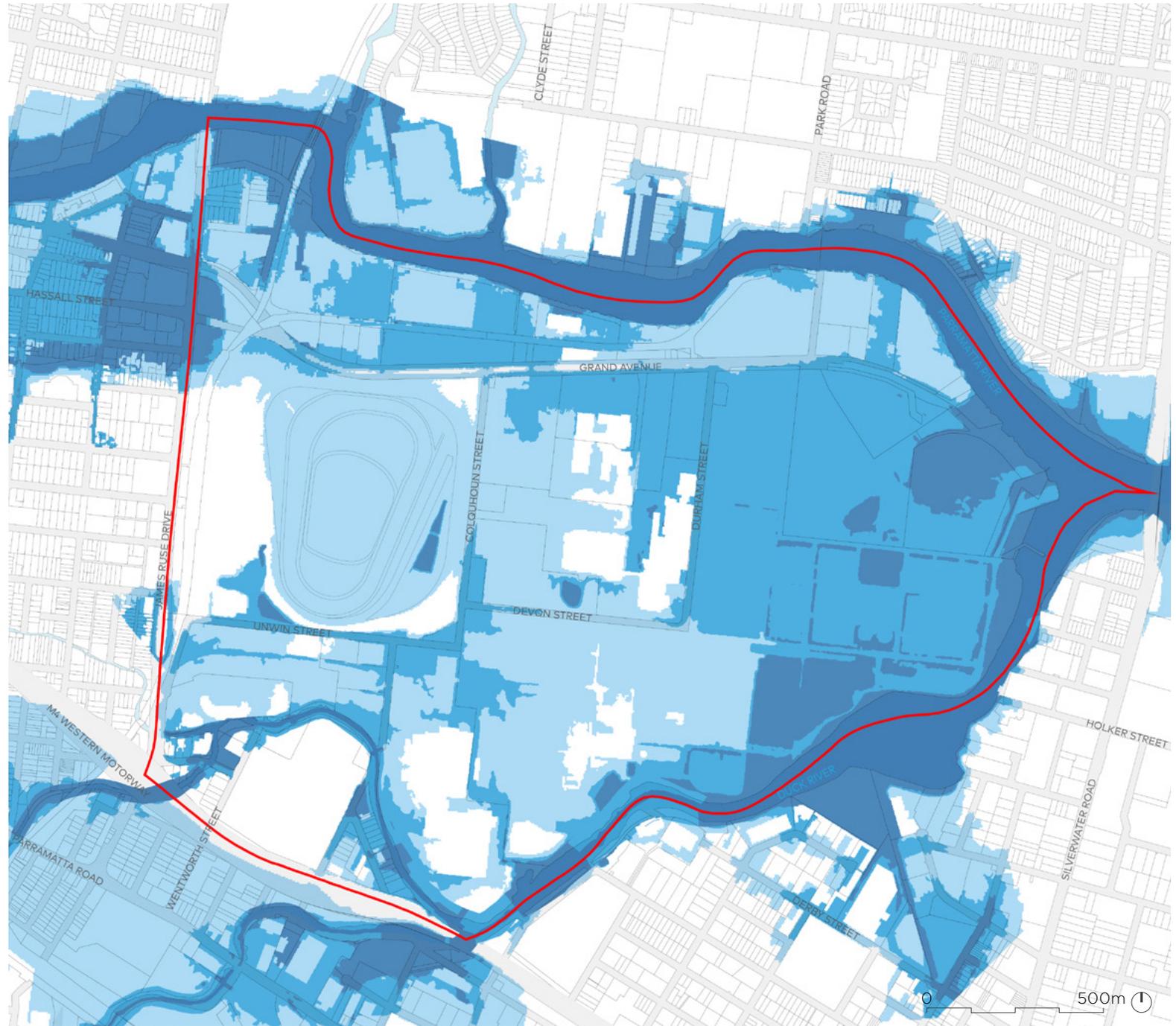
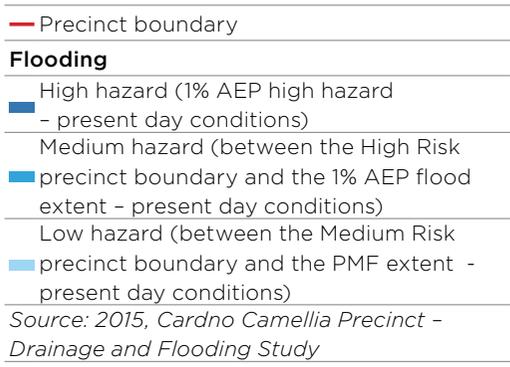


*EarthPower food-waste-to energy facility*

- ① Significant volume of heavy vehicle traffic with only two access roads and limited pedestrian access across the precinct
- ② Significant soil and water contamination
- ③ Potential odour, air quality, noise and visual impacts due to existing heavy industrial operations and surrounding road network
- ④ Existing sewerage pumping station with heritage significance and potential odour impacts
- ⑤ Interface with PLR and Sydney Metro West alignments
- ⑥ PLR Stabling facility
- ⑦ Planned Sydney Metro West stabling facility
- ⑧ Hazard risks due to Viva Energy's operation and a number of petroleum and gas pipelines, which will require buffers and limit certain development
- ⑨ Existing wetlands and mangroves along foreshore areas



**Figure 1.** Physical and environmental challenges within Camellia-Rosehill



Note: This map depicts current flood risk and does not include future climate change impacts. Increased rainfall intensity and sea level rise will worsen flooding. The extents of each risk category would be greater under future climate conditions. The 1% AEP flood event will occur more frequently under future climate conditions. The PMF will change over time, including due to changes in catchment conditions and sea level rise.

AEP - The Annual Exceedance Probability is the probability of an event occurring in any one year period. The 1% AEP flood has a 1 in 100 chance of occurring each year and has an average recurrence interval (ARI) of 100 years.

PMF - The probable maximum flood is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation coupled with the worst flood-producing catchment conditions. The probable maximum flood defines the extent of flood prone land (i.e. the floodplain).

**Figure 2.** Flooding from Parramatta River, Duck River, Duck Creek and A'Becketts Creek

# Guiding directions



Creating places for people to live, work and visit involves many inputs and decisions by many parties across key considerations. The following 5 directions are our starting point for a robust, workable Camellia-Rosehill Place Strategy.

We expect that these directions will evolve as our work progresses. We welcome feedback so that our work addresses the things that really matter to those interested in the future of Camellia-Rosehill.

Existing artwork along Grand Avenue

## 1. Recognising and celebrating Country

Camellia-Rosehill rests on Dharug Country of the Burramattagal people. The story of the place and the Aboriginal people who have occupied and continue to occupy the area is a rich one that began long before European arrival in 1788 and will continue long after the present day.

Before European contact, Camellia-Rosehill was an important place of trade and cultural exchange between Aboriginal peoples travelling between the Blue Mountains and the Coast. The surrounding Cumberland Plain was once a dense woodland habitat of stringybark, blackbutt, box and ironbark trees and a food source of snapper fish, crabs and ducks.

The more recent history of Camellia-Rosehill has been one of heavy industry, contamination, poor environmental management and neglect.

The place strategy presents an important opportunity to shape the place through the lens of the NSW Government Architect's *Connecting with Country draft framework*. One of the key objectives is ensuring engagement throughout the project lifecycle. As the project progresses, a series of meetings with Aboriginal community stakeholders and Custodians are occurring in parallel. These conversations are important

to ensure that cultural/community priorities are embedded in the place strategy. These will help further establish the key directions for Camellia-Rosehill as it continues to develop in the years to come.

The place strategy will emphasise the history of the precinct and its constant evolution. Landscape and ecological elements (such as accessible foreshore and wetland rehabilitation) contribute to protecting, enhancing and recognising these river landforms for their Aboriginal cultural heritage values. These will also provide opportunities for cultural education along the river and public space for enjoyment by the whole community.

Opportunities to conserve and add to public art along Grand Avenue will enable the evolution of the corridor as a place for people and centrepiece of the locality.

A series of creative and cultural activities will be enabled through a diversity of mixed-use and employment opportunities.

Looking ahead, there are opportunities to:

- ensure Connecting with Country principles are embedded within the integrated master plan so that the design and delivery teams act upon them

- use Dharug language in naming of entries, streets, public spaces, buildings, wayfinding and interpretive signage and art
- ensure access to the foreshore, wetlands and other remnant ecologies (where possible) and enhance these to promote Caring for Country
- ensure social infrastructure and public places include opportunities for supporting Aboriginal culture, such as meeting and performance spaces
- promote the exploration of economic opportunities for Aboriginal people, such as partnerships between local businesses and Aboriginal enterprises
- reduce impacts of drought and flooding by way of more sustainable land and water strategies
- integrate public art commissioned through local Aboriginal arts practitioners into public spaces.

### Give us your thoughts

- What are your thoughts on the proposed initiatives to Care for Country?
- What other initiatives could we implement to respect, heal and care for Camellia-Rosehill?



## 2. Boosting economic activity and employment opportunities

Delivering a more competitive and connected economic corridor across the GPOP is critical to achieving the vision for a stronger and more productive Central River City. Camellia–Rosehill has a significant role to play in this.

The precinct makes up more than half of the Parramatta local government area’s industrial lands and has several regionally significant existing businesses that contribute to the NSW economy. These include the Viva Energy fuel storage and distribution terminals that are a significant supplier of Sydney’s petroleum and jet fuel requirements, as well as a cluster of activities that recycle and supply building material, supporting development and infrastructure delivery across Greater Sydney. These uses are not easy to relocate. In some instances, they have been built on decades of infrastructure investment. They also rely on access to the arterial road network and the availability of large, unfragmented land parcels that are isolated from nearby residential uses. However, large tracts of industrial land in Camellia remain underused for a variety of reasons, including poor transport access, a lack of services and the cost of remediation.

Protecting these employment lands does not necessarily mean maintaining the status quo. As industries evolve with advances in technology and new business models emerge, we need to unlock opportunities for more innovative, creative and knowledge-intensive jobs within the precinct. Improved access to the precinct will help realise this outcome.

Camellia’s central location also makes it ideal for a diversity of businesses such as freight and logistics and urban services that rely on proximity to population catchments. As Parramatta continues to grow as Sydney’s second CBD, business will increasingly need access to land that can provide urban services, freight and logistics services. Despite having lower employment densities, these uses are critical to the function of the city.

In 2016, the Camellia–Rosehill precinct accommodated approximately 4,000 jobs and contributed approximately \$500 million to the state’s economy. Without planning intervention and improved infrastructure, employment lands in Camellia are likely to remain underused and will

experience only a modest growth in jobs.

Our vision is to strengthen Camellia–Rosehill as an employment hub that supports city building and the growth of the Parramatta CBD. Camellia–Rosehill will focus on co-existing energy recycling and water infrastructure to enable a circular economy precinct connected into the wider Sydney network.

An active town centre will provide local retail and service uses to support local employers, workers and the local resident population (refer to Figure 3).

A transition zone could act as a buffer between heavy industrial and residential uses. It could accommodate mixed employment typologies and a diversity of industries – ranging from urban services to population serving jobs, freight and logistics, retail and recreation and an emerging innovation cluster.

Our preliminary investigations demonstrate there is opportunity to more than double the number of jobs in the precinct to approximately 10,000, while retaining the existing heavy industrial economic activities across the precinct. Better



Existing businesses in the Rosehill Industrial Estate on Unwin Street

transport access and connectivity and improved place amenity is essential to achieving this outcome.

The industrial land within Camellia-Rosehill is within the 'review and manage' category of industrial and urban services lands, as defined by the *Greater Sydney Region Plan*. The Greater Sydney Commission is reviewing the *Greater Sydney Industrial Lands Policy*<sup>2</sup> in consultation with the department and other stakeholders. Phase 1 of the review currently underway relates to precincts identified as 'retain and manage'.

In parallel with the review by the Commission, the Department are also reviewing the existing employment zones (Industrial and Business Zones) to ensure the zones suits the future of work, is fit for purpose, supports productivity and jobs growth while facilitating delivery of strategic plans and planning priorities<sup>3</sup>.

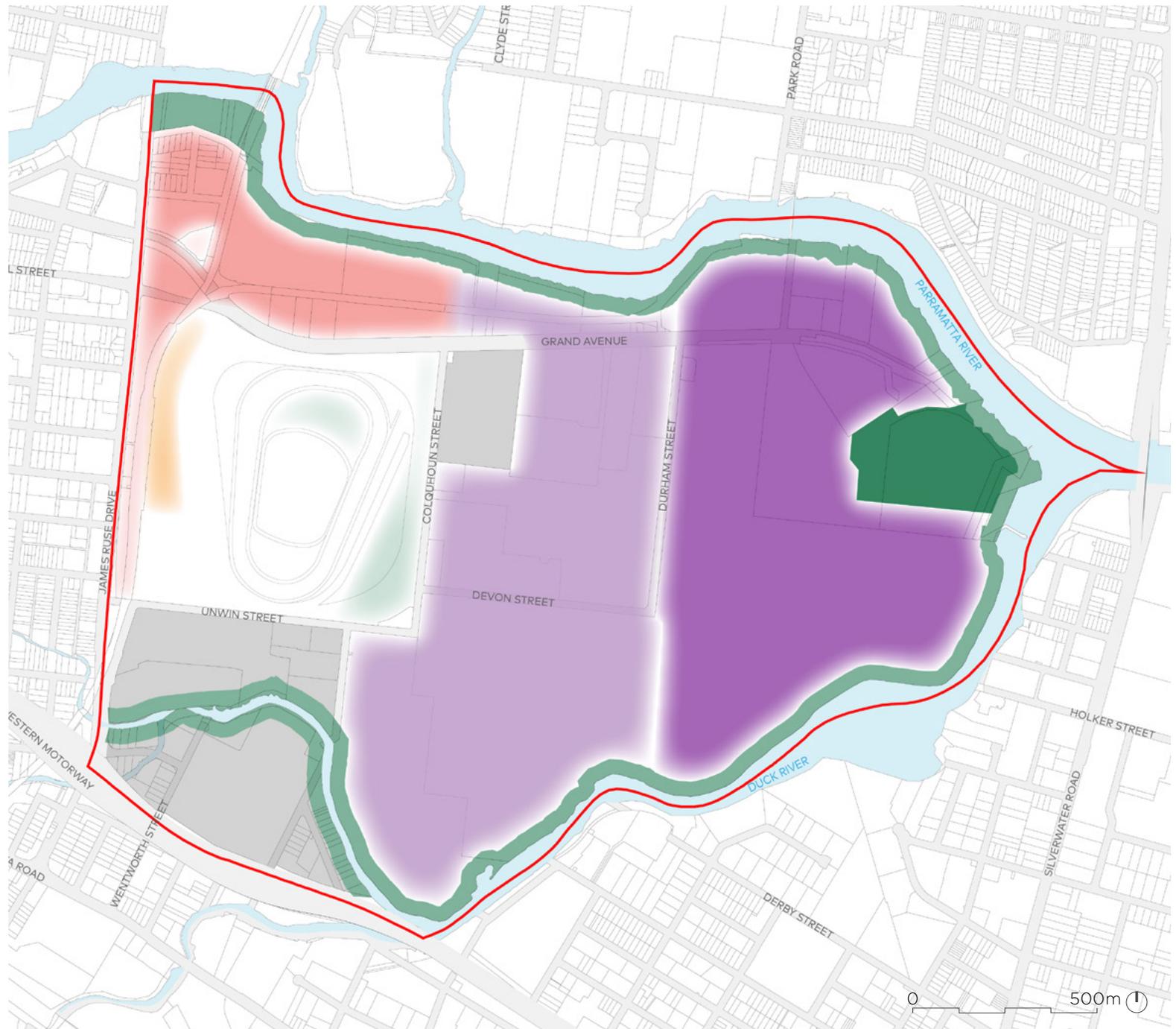
The place strategy will consider the use of the new employment zones and the policy review.

### Give us your thoughts

- What infrastructure or place-making initiatives do we need to catalyse employment growth and better productivity outcomes across the precinct?
- What measures does the place strategy need to adopt to manage land-use conflict within the precinct?
- What are the synergies between existing businesses, and what additional interventions are needed to allow the area to become an innovative, circular economy precinct? What are the barriers to achieving this outcome?
- What land use zoning is required to facilitate optimal economic outcomes?



- Precinct boundary
- Town centre including residential, mixed use, open space, schools and community facilities
- Employment - heavy industry
- Employment - light industry
- Entertainment precinct
- Wetland
- Open space & foreshore areas
- Transport facilities



**Figure 3.** Indicative land uses



### 3. Improved connectivity with a focus on sustainable modes of transport

While the precinct is strategically located and in close proximity to the motorway and regional road network, road access to the 321ha precinct is limited to only two points:

- Grand Avenue onto James Ruse Drive/Hassall Street
- Wentworth Street onto Parramatta Road (height restricted at 4.6 m).

Parramatta Light Rail will transform access to the precinct. Leveraging this investment, the Camellia-Rosehill Place Strategy aims to:

- improve traffic and transport accessibility to, from and within the precinct
- diversify land uses and activity, including a mix of residential uses that will lead to increased walking and cycling trips.

The key principles include:

- Prioritising public transport as the primary mode of access for residential uses – this can be achieved through place-making and road access configurations, as well as through appropriate approaches to parking
- Innovative approaches to parking that encourage public transport use, as well as a diversity of other

outcomes (such as place-making, sustainability and affordable housing)

- Managing mobility and place conflicts between different modes, and in particular between heavy vehicle movements and other road users (including pedestrians). New transport infrastructure aimed at improving economic productivity will support some separation between heavy vehicles and other road users
- Provision of and improved walking/cycling links within the precinct, along and across the foreshore to enable more sustainable travel modes and provide important green grid connections.

The potential transport initiatives that we have identified so far are shown in Figure 4 and include:

- delivery of Parramatta Light Rail Stage 1 and potential delivery of Stage 2 as well as new bus connections to the west towards the CBD in areas not serviced by the light rail, north to Rydalmere and south to Silverwater to capitalise on connections with existing services

- precinct parking hubs to reduce the need for on-site parking (decoupled parking)
- a bridge connection across the Parramatta River, extending access to Rydalmere and Victoria Road to the north. We expect this access would be used predominantly by light vehicles and buses
- improved access to James Ruse Drive to the west via the existing Grand Avenue intersection and potentially Prospect Street further south. These connections would predominantly serve the town centre, as well as the entertainment precinct
- potential connections to the M4 Motorway via Unwin Street, to be used primarily by heavy vehicles
- a new bridge connecting Devon Street to Carnarvon Road in Silverwater. In addition to light vehicles and buses, this access could function as a secondary route for heavy vehicles
- increased road networks within the precinct to provide a finer grain street grid and improved connectivity

Camellia

- new and improved walking and cycling links are proposed throughout the precinct taking advantage of foreshore links and other access corridors.

Planning controls are being investigated to support transport initiatives and include:

- the requirement for parking to be de-coupled from housing parking
- restrictions on basement parking due to contamination
- limiting car spaces
- the provision of electric vehicle charging infrastructure.

*All transport initiatives are indicative only and subject to detailed design, feasibility review and funding commitments. No investment decisions have been made.*

### Give us your thoughts

- Are there other road or transport improvements that we could investigate as part of this work?
- Are there better connectivity options that we have not identified?
- How can we improve access arrangements for the existing businesses and potential future industrial uses, while encouraging public transport use in the town centre?
- How can we manage potential conflicts in transport types, given the high number of heavy vehicle movements and the vision to prioritise active transport (walking and cycling) and public transport for non-industrial uses?



*Intersection of James Ruse Drive and Grand Avenue*

- ① PLR stage 2 interchange stop
- ② PLR stage 2 connection to South Street (alignments under consideration)
- ③ Connection to M4 Motorway
- ④ Connection to Carnarvon Street and Derby Street to Silverwater Road
- ⑤ Connection to Clyde Street (for northbound and eastbound traffic at Victoria Road)
- ⑥ Realignment of Hassall Street to connect to PLR signals and Grand Avenue alignment

- Precinct boundary
- Existing Road Network
- Proposed Road Network to be finalised
- Active Transport
- Parramatta Light Rail + Stops
- Parramatta Light Rail Stage 2 Options A & B alignments under consideration
- Parramatta Light Rail Stage 2 Option C alignment identified through the place strategy process to be investigated
- Bus Network + Stops
- Sydney Metro corridor
- Ferry
- P Potential Precinct Parking Locations
- Transport facilities
- Wetland
- Open space
- Racecourse

Note: All transport initiatives are indicative only and subject to detailed design, feasibility review and funding commitments. No investment decisions have been made.

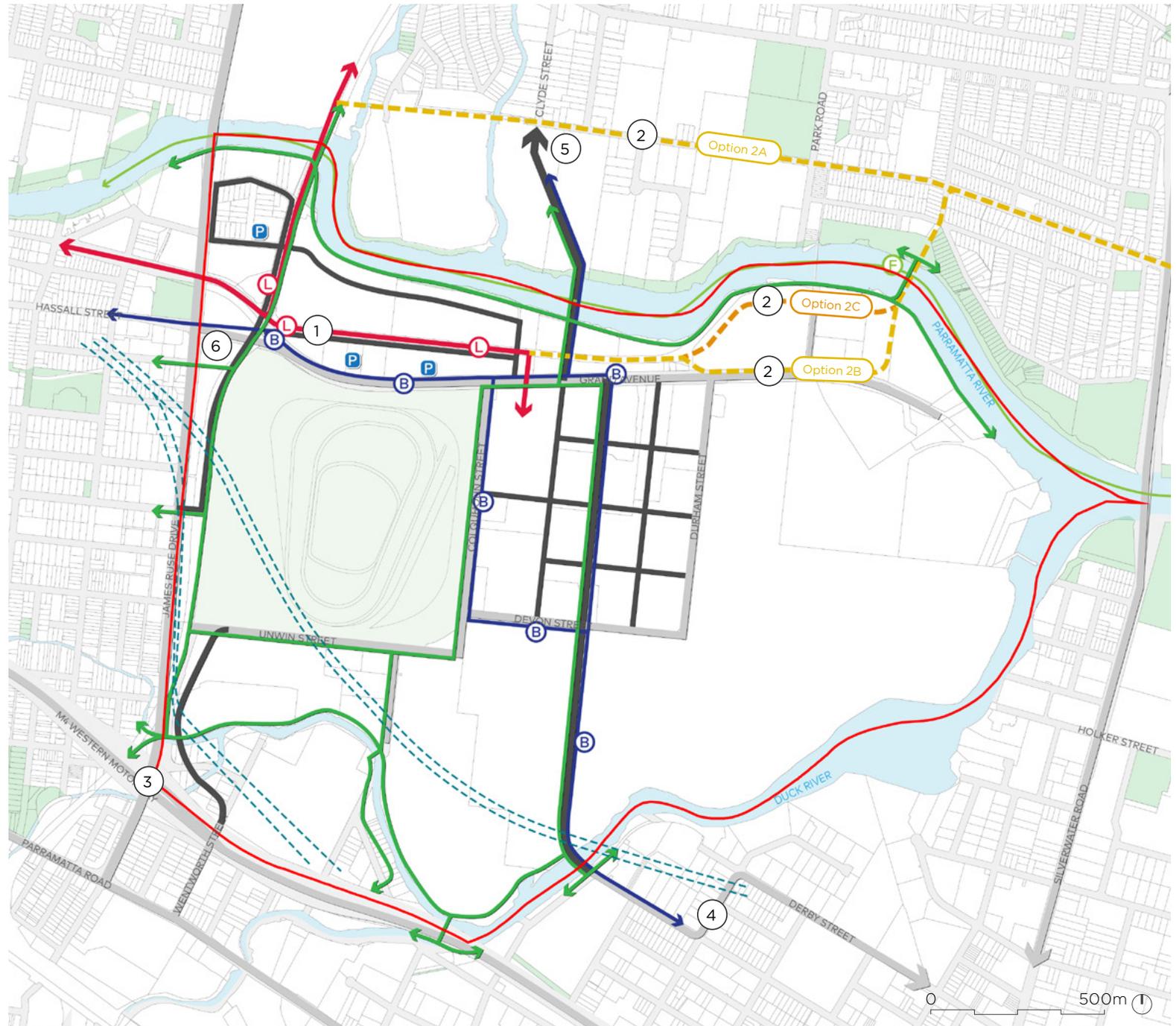


Figure 4. Potential transport improvements



## 4. Residential development key to delivering good placemaking outcomes

Sydney must continue to find new housing supply to accommodate a growing population and to provide affordable housing choices in middle-ring local government areas, such as the City of Parramatta.

The north-western portion of the Camellia-Rosehill precinct has the potential to support a diversity of housing opportunities that would complement the Parramatta CBD and Central River City and help meet local housing demand. The area is only 1.5 km east of the Parramatta CBD and is adjacent to Western Sydney University. It also has planned public and active transport and foreshore access.

While the main goal of the place strategy is to boost jobs and economic activity, residential development is key to enabling the expensive remediation work and transport improvements needed to boost productivity and jobs growth. Residential development brings important opportunities to connect with Country, as well as active transport and environmental improvements through opening up the foreshore for public access and delivering place-making outcomes.

The area that we are investigating for new housing (shown on Figure 3) has the potential for high-quality amenity,

good access to public transport and appropriate buffers and treatment from industrial activity, pipelines, busy roads and sewerage pumping station O67. This area also includes large, strategic, and heavily contaminated sites that have remained vacant and dormant for many years because they needed development improvements to viably remediate the land.

*Early investigations indicate that the precinct can potentially accommodate up to 10,000 dwellings, but only upon resolution of the funding and locational requirements of key infrastructure to serve the residents and workers. This yield could be substantially less if essential infrastructure is not able to be suitably located or funded.*

### Infrastructure opportunities

When planning for residential growth, we must ensure that suitable social infrastructure, such as schools, open space, recreation and community facilities, are available locally and provided early to support future populations as well as to deliver quality placemaking outcomes. Improved transport access and connectivity (infrastructure and services) will also be needed to enable residential development and ensure access to industrial lands is not impeded.

Social infrastructure such as schools and sporting fields need to be planned in highly accessible locations and away from hazard risks. For example, Department of Education guidelines to create a safe environment for students include the requirement for school sites to have 3 to 4 street frontages, in close proximity to sport fields and away from potential risk sources such as the fuel terminal and gas and fuel pipelines. There are not many sites in the precinct that can meet these locational requirements.

As part of the preparation of the place strategy we must identify appropriate areas to accommodate the necessary social infrastructure and ensure there is a funding mechanism to deliver this in a timely manner.

Table 1 identifies the minimum social infrastructure needed to service additional dwellings.

### Avoiding land-uses conflicts and ensuring amenity

The design of future residential areas or sensitive uses will need to consider conflict with, as well as protection of, other land uses and the creation of appropriate buffer zones. We are currently considering the following measures to minimise noise, air,

vibration, odour, hazard risk and visual impacts:

- the proposed urban services precinct can act as a transition zone and create a buffer between certain conflicting land uses
- a proposed 120 m buffer between the existing sewerage pumping station O67 and future surrounding residential uses
- regulatory buffers and setbacks from existing fuel pipelines to minimise hazard risks:
  - A 25 m buffer, where all uses are prohibited
  - A 100 m buffer, where sensitive uses (such as day-cares, schools and aged care facilities) are prohibited
  - A 130 m buffer, where permanent residential populations are limited
- appropriate buffers to any gas pipelines or other utility infrastructure
- avoid locating sensitive land uses in certain areas, such as positioning vibration sensitive land uses above the Sydney Metro West or adjacent to the Parramatta Light Rail
- use of vegetation and landscaping, and design measures such as building placement, use of pleasant noise sources (soundscape design), and noise treatments for facades of buildings.

### Give us your thoughts

- How do we set the right amount of residential use in the precinct, while allowing for potential future uses, the existing development challenges and growing demand for infrastructure?
- Are there other areas of the precinct that may be suited to residential or mixed use, taking into account the role and function of employment lands, the need to create a buffer to industrial land and the need to provide social infrastructure to support the future population?
- What innovative types of housing can be feasibly delivered in Camellia-Rosehill?
- Given the benchmarks and locational requirements, as well as the existing challenges within the precinct, where can we best accommodate the social infrastructure needs? Where are the best locations for new schools and sports fields?
- What are landowners' views on potential development yields, considering the challenges?



181 James Ruse Drive



**Table 1.** Social infrastructure benchmarks

Infrastructure type	Benchmark
<b>Public facilities</b>	
Library number and floorspace	1 per 20,000 to 35,000 people   State library calculator
Community floorspace	80 sqm per 1,000 people
Cultural floorspace	20 sqm per 1,000 people
Subsidised spaces	80 sqm per 1,000 people
Early childhood education - long day care	1 per 2.48 children aged 0 to 4 years
Early childhood education - outside school hours care	1 per 2.70 children aged 5-11 years
Primary school	1 per 4,000 - 5,000 dwellings 1 per 8,000 - 10,000 dwellings   2ha per school*
High school	1 per 8,000 - 10,000 dwellings   4ha per school*
Tertiary	No benchmarks
Affordable rental housing	5 - 10% of total yield
Hospital beds	2 per 1,000 people
Youth centre	1 per 3,000 young people aged 12 to 17 years
Senior citizen centre	1 per 15,000 to 20,000 people
<b>Public open space</b>	
Parks (hectare approach)	<ul style="list-style-type: none"> <li>• 1ha/1,000 people for park</li> <li>• 1ha/1,000 people for sporting open space</li> <li>• 1ha/1,000 people or more for natural areas and other open spaces</li> </ul>
Regional Aquatic facilities	1 per 100,000 to 150,000 people
Play spaces	1 per 2,000 people
Indoor recreation courts	1 per 20,000 people   Workers - 10% of the population participates in sporting activities
Indoor sports centre	1ha per 50,000 to 100,000 people   Workers - 10% of the population participates in sporting activities
Outdoor recreation	Hard courts 1: 10,000 people Fitness station 1:12,000 people Skate facilities 1: 50,000 people Off-leash animal areas 1: 50,000 people

*\*Based on very high-level preliminary advice from Department of Education. Further detailed analysis will be required. Refer draft School Site Selection and Development Guidelines for further information on requirements.*



## 5. An integrated and holistic approach to environmental management and sustainability

### Precinct-wide remediation strategy

Contamination is a key issue for the Camellia–Rosehill precinct, given its industrial legacy. Apart from Rosehill Gardens Racecourse, most sites within the precinct are affected by contamination.

No residential development should occur until there is an integrated strategy to ensure any new development addresses contamination and remediation in a way that contributes to and is consistent with strategic remediation principles for the precinct. This must be to a standard that protects human health and the environment for permitted land use zonings. The strategy will also support the improvement of water quality in Parramatta River, Duck River and Duck Creek and provide opportunities to develop the green infrastructure network, including canopy cover.

We are considering a range of matters in the development of the precinct-wide remediation strategy building on previous work. The principles include:

- Minimising disturbance of certain contaminants and generation of surplus contamination (waste) that requires offsite management
- Preference for on-site remediation over off-site treatment options and on-site destruction and treatment of contaminants preferred over containment, where practical to do so

- Mitigating potential flooding impacts (for example, created by filling/containment)
- Staging to reduce land use conflicts
- Making provision for the integrated governance of remediation across the precinct and the oversight and funding of ongoing management and maintenance
- Excavating and/or capping of foreshore areas to facilitate public access while mitigating potential impacts on mangrove communities and other sensitive ecological receptors
- The creation of ‘clean infrastructure and vegetation corridors’ through the precinct
- Specific remediation technologies to deal with precinct-wide groundwater contamination such as:
  - installation of an inground permeable reactive barrier along the Parramatta River foreshore
  - ongoing monitored natural attenuation<sup>4</sup>, with the adoption of remediation corridors (easements) to facilitate future groundwater remediation programs as new technologies become available.

In most instances, landowners will need to work together to stage remediation appropriately. Generally, individual landowners will be responsible for remediation of their properties, including adjacent foreshore areas, as part of their redevelopment. Sites that are to be used

for higher order/more sensitive land uses (such as open space and school sites) will typically require remediation to a higher standard than areas that may be retained for employment or industrial uses.

### Sustainability

Camellia–Rosehill will develop with the goal of being a net-zero precinct by 2050, supported by circular economy industries. This may include the development of utility scale solar power generation, potentially providing a ‘behind-the-meter’ energy solution for local energy-intensive industries, through an embedded energy network. Delivery of such a scheme would require a proposal from a utility or other private sector provider.

The precinct will become water positive. That is, it will return more water to the system than it takes by using existing water treatment and recycling facilities and optimising the use of recycled water in all industrial, recreational and residential development. Sydney Water is considering a major waste-water treatment facility for the precinct that could provide a large additional supply of recycled water. Abundant availability of recycled water would enable large-scale planting through the precinct to mitigate heat-island impacts, reduce dust and air pollution, and improve local amenity generally. Any planting strategy would also

need to consider contamination and remediation as key issues.

Environmental assets will be protected and enhanced through remediation, additional planting and provision of new open space. This includes Parramatta and Duck River as well as the creeks, and associated heritage listed wetlands which has high ecological value (and potentially cultural value) providing habitat for endangered species and ecological communities such as saltmarsh and the Green and Golden Bell Frog.

Open space, active transport, public domain planning will also need to be integrated with the development and delivery of precinct wide environmental strategies. To this extent, it is expected that public foreshore access and improvement will be a condition of any relevant redevelopment proposal.

Planning controls such as tree canopy targets, future-proofing buildings with recycled water and electric vehicle charging and digital/smart infrastructure are being investigated to deliver on sustainability objectives.

Consideration is being given to potentially making the wetland located on the Viva Energy site (shown on Figure 3) publicly accessible which would not only provide an additional recreation area but could also be an important educational resource.

## Integrated water management

An integrated water cycle management strategy is focused on:

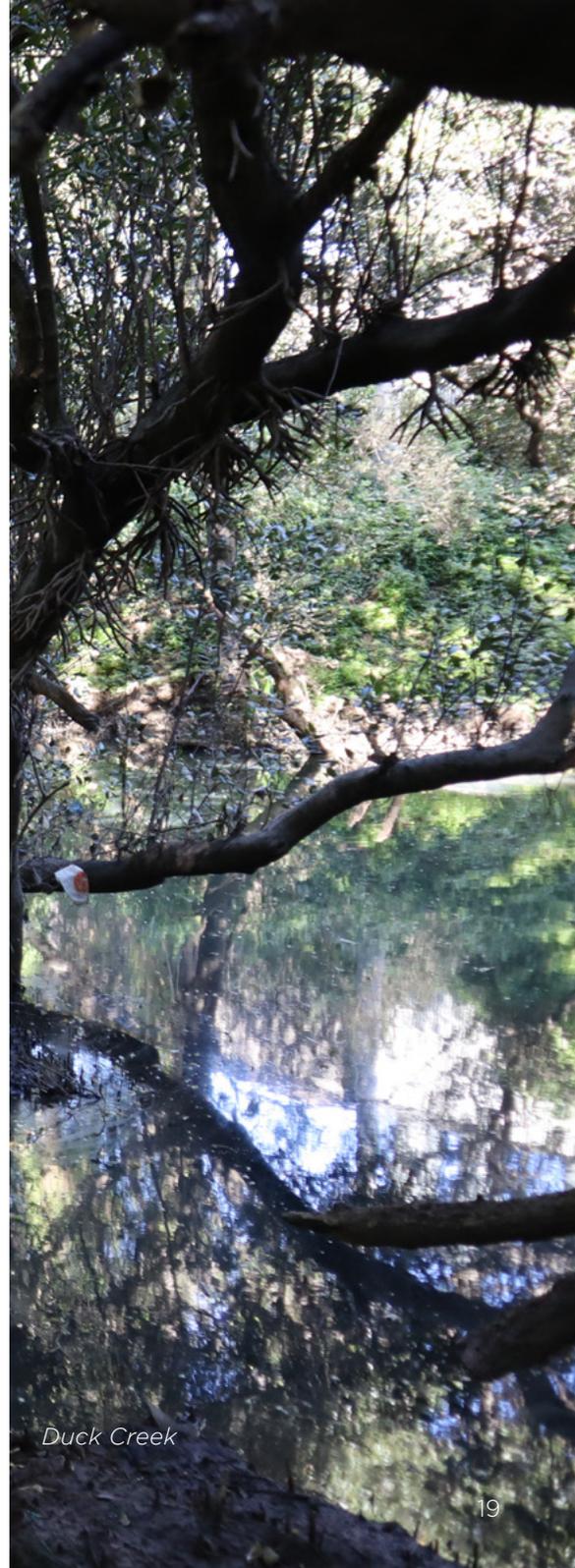
- A coordinated approach to address flooding challenges
  - Ensure that development is compatible with the flood behaviour, hazard and risk, including consideration of flood emergency management (evacuation routes and safe refuge), climate change projections for increased rainfall and sea level rise for an appropriate planning horizon, and location of sensitive and critical land uses (e.g. residential, childcare) out of flood-affected areas
  - Maintenance/enhancement of riparian habitats, with a minimum of 40 m setback from mean high water level where required and possible
  - Identify suitable strategies for topography changes such as setbacks from main waterways/ rivers required to avoid adverse impacts offsite and identify overland flow routes across the precinct to allow the controlled passage of floodwaters across the precinct
  - Maintain existing levels of flood storage to avoid adverse offsite flood impacts
  - Provide storage (detention) for local stormwater runoff
- Water-sensitive urban design, water reuse and management
  - Identify requirements for stormwater infrastructure.
  - Implement water quality and quantity management onsite and cooling of the precinct
  - Identify precinct-scale and site-specific water treatment and management opportunities and challenges
  - Identify drainage network upgrades required, opportunities, and challenges such as on-site detention.

to help return flow regimes in watercourses to natural conditions

- Identify requirements for stormwater infrastructure.
- Water-sensitive urban design, water reuse and management
  - Implement water quality and quantity management onsite and cooling of the precinct
  - Identify precinct-scale and site-specific water treatment and management opportunities and challenges
  - Identify drainage network upgrades required, opportunities, and challenges such as on-site detention.

### Give us your thoughts

- What governance structures could help the private sector ensure remediation systems are well managed in perpetuity?
- What specific measures are developers and the business community considering to achieve net-zero outcomes within the precinct?
- What strategies could be applied to the planning and design of new development to exceed water quality objectives?



Duck Creek



*Parramatta Light Rail Bridge*



*Parramatta Light Rail under construction*

# Delivering the place strategy

The successful delivery of a place strategy for Camellia–Rosehill will require substantial investment over many years, including the remediation of contaminated lands, new transport infrastructure, opening up the foreshore, social infrastructure and open space. Infrastructure delivery will need to be staged appropriately to ensure it aligns to growth. A mix of mechanisms will be required to fund and deliver essential infrastructure, and it will be important for state agencies, local councils, landowners and industry to work collaboratively. The private sector will need to contribute substantially to funding this investment.

Early consultation with the landowners within the precinct reflects a willingness by the private sector to collaborate with government and contribute towards the infrastructure funding required to support the renewal of the precinct.

A funding and delivery strategy is key to the implementation of the precinct vision. We will need to test the feasibility of various development scenarios to ensure a high standard of residential

amenity and supporting social infrastructure, while promoting employment and productivity outcomes. We are investigating how to implement reforms to development contributions recommended by the Productivity Commissioner.

Residential development will need to deliver social infrastructure to support the needs of the future population. The place strategy will identify potential options where this social infrastructure could be incorporated into sites within the proposed town centre and broader precinct.

There is also an option for existing landowners to contribute to the cost of new transport infrastructure, through a broad-based funding mechanism such as a special rate levy. Given the productivity improvements that may arise from better infrastructure, there may be support for such an initiative.

Mechanisms currently being considered include (but are not limited to) direct developer provision through planning controls, section 7.11 or section 7.12 contributions, regional and

transport contributions, voluntary planning agreements, key sites provisions, and a local special rate variation. We will investigate this further as the place strategy progresses.

## Give us your thoughts

- What mix of funding mechanisms do you think will be the most effective to fund and deliver infrastructure required?
- As a landowner would you be willing to contribute to the cost of new transport infrastructure through a special rate levy?

# Staging strategy

A staging strategy will accompany the place strategy, aiming to strike the right balance to optimise place outcomes including housing delivery, employment growth, infrastructure provision, and delivery of environmental outcomes. It will be critical that staging of development is aligned with infrastructure provision to ensure the needs of the new resident and worker population in the precinct can be met. This could include the identification of thresholds for certain infrastructure or land use outcomes for different stages of development in the precinct. Based on preliminary investigations, we anticipate the sequence of growth and infrastructure delivery (shown in Table 2) will optimise precinct wide placemaking outcomes.

**Table 2.** Indicative staging – All initiatives are indicative only and subject to design, detailed feasibility review and funding commitments.

Timeframe	Infrastructure	Employment uses	Town centre, residential and entertainment precincts
Short term (0 to 5 years)	<ul style="list-style-type: none"> <li>Parramatta Light Rail stabling yard</li> <li>Parramatta Light Rail (Stage 1)</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing industrial activity, with growth associated with development applications currently in the pipeline</li> </ul>	<ul style="list-style-type: none"> <li>Start of planning and remediation works</li> <li>Potential early delivery of housing on low risk/de-contaminated sites</li> </ul>
Medium term (5 to 10 years)	<ul style="list-style-type: none"> <li>Sydney Metro West stabling yards</li> <li>Deliver the initial road network enhancements:               <ul style="list-style-type: none"> <li>Grand Ave/James Ruse Drive intersection</li> <li>M4 connection</li> <li>Road connections across Parramatta River and Duck Creek</li> </ul> </li> <li>First stage of active transport links</li> <li>Town Centre enabling works</li> <li>Primary school facilities</li> <li>Foreshore access</li> <li>Bus services established</li> </ul>	<ul style="list-style-type: none"> <li>Continued growth of industrial and urban services</li> <li>Start of finer grain development through the Urban services precinct</li> <li>Consolidation of city building uses with access to enhanced wastewater and renewable energy supply (including battery storage facilities, subject to private sector investment)</li> </ul>	<ul style="list-style-type: none"> <li>Initial development on remediated sites</li> <li>Early stage Town Centre enabling work, including District Park and early community facilities</li> <li>Entertainment precinct establishment including night-time venues and indoor courts</li> </ul>
Long term (10 to 20+ years)	<ul style="list-style-type: none"> <li>Parramatta Light Rail Stage 2</li> <li>Active transport links completed</li> <li>Additional Primary and Secondary school facilities</li> </ul>	<ul style="list-style-type: none"> <li>More employment growth within and adjacent to the town centre</li> <li>Establishment of a new road network through the urban services precinct</li> <li>Consolidation of a circular economy built around businesses supporting city building, including water treatment, energy generation and materials recycling</li> </ul>	<ul style="list-style-type: none"> <li>Gradual development of the town centre supported by social infrastructure, Parramatta Light Rail and road upgrades</li> <li>Build out of remediated sites</li> </ul>

# Next steps

Our directions build on an extensive body of investigations over the recent years. We have tested multiple future scenarios through a highly collaborative enquiry-by-design process, with cross-government inputs. We invited landowners within the Camellia-Rosehill precinct to participate in this process through presentations and drop-in sessions.

Our directions are not set in stone. We expect to refine and adapt these as we talk to more people and complete our technical investigations. That's why we want to hear from you on these directions and how they can inform the development of the Camellia-Rosehill Place Strategy.

## Have your say



Visit  
[www.planning.nsw.gov.au/  
Camellia-Rosehill](http://www.planning.nsw.gov.au/Camellia-Rosehill)



Email your feedback to  
[camellia-rosehill@dpie.nsw.gov.au](mailto:camellia-rosehill@dpie.nsw.gov.au)

## OUR TIMELINE FOR PREPARING THE PLACE STRATEGY

### Investigations & evidence base

*April to July 2021*

### Directions paper exhibition

*September 2021*

### Draft place strategy exhibition

*October 2021*

### Refinement

*November to December 2021*

### Adoption & ongoing management

<sup>1</sup>An area including Greater Parramatta, as defined by the Greater Sydney Commission at [www.greater.sydney/metropolis-of-three-cities/vision-of-metropolis-of-three-cities/central-river-city-vision](http://www.greater.sydney/metropolis-of-three-cities/vision-of-metropolis-of-three-cities/central-river-city-vision)

<sup>2</sup>The Greater Sydney Commission is undertaking a review of the Industrial and Urban Services Lands Retain and Manage policy under the *Greater Sydney Region Plan*. The policy applies to industrial areas in Greater Sydney that should be safeguarded from competing land use pressures. For further information visit: <https://www.greater.sydney/strategic-planning/monitoring-the-plans/industrial-lands-policy-review>

<sup>3</sup>The Department of Planning, Industry and Environment is currently undertaking a suite of reforms which includes the delivery of a simplified employment zones framework that suits the future of work, is fit for purpose, supports productivity and jobs growth while facilitating delivery of strategic plans and planning priorities. For further information visit: <https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Employment-Zones-Reform>

<sup>4</sup>Monitored natural attenuation (MNA) refers to the reliance on natural attenuation processes (such as degradation of organic contaminants, binding of inorganic compounds to soil) to remediate a site.

