

5.0 Urban Design Analysis and Outcomes

5.1 ROZELLE INTERCHANGE

The proposed underground connection linking the M4 and M5 motorways connects to the wider motorway network at Rozelle. The Rozelle interchange would allow for the connection of the proposed future Western Harbour Tunnel and Beaches Link as well as redesign and improve the current Victoria Road intersection with The Crescent and Anzac Bridge.

A tunnel connection from the Rozelle interchange to the eastern abutment of Iron Cove Bridge at Rozelle would also be provided [the Iron Cove Link].

Roads and Maritime is carrying out a suite of site management works on part of the Rozelle Rail Yards site. The works,

which include removal of rail and rail-related infrastructure, buildings, vegetation and stockpiles, are needed to manage the existing environmental and safety issues at the site and would also improve access to surface conditions, which would allow for further investigation into the location of utilities and the presence of contamination and waste.

The following section of the report outlines the existing conditions of the Rozelle Rail Yards and provides key findings. It also stipulates the strategic responses implemented in the urban design outcome, which correlate to the principles in section 3.



Example of redundant rail infrastructure to be removed under site management works

5.1.1 EXISTING CONDITIONS

Access and movement

The Rozelle Rail Yards site and surroundings are dominated by the major road connections between Anzac Bridge, City West Link and Victoria Road. Regional, local and neighbourhood traffic are intermingled, creating congestion and an unclear hierarchy of movement. Generous and pleasant neighbourhood movement networks and routes

include the foreshore walk and cycle path around Glebe Foreshore, and the local connector of Lilyfield Road and the Rozelle Bay light rail stop. The extended intersection of Lilyfield Road, Victoria Road, City West Link and Anzac Bridge occurs at an elevated level, disconnected from the Rozelle Rail Yards and Rozelle Bay foreshore.

There are existing inaccessible, short tunnels under Victoria Road, connecting the Rozelle Rail Yards with White Bay Power Station and Glebe Island. These local connections, whether vehicular, bicycle or pedestrian, are truncated by Victoria Road and City West Link, separating Rozelle and Balmain from Annandale and Glebe.

Pedestrian and cycling routes and the foreshore walk from Annandale, Glebe and Rozelle Bay are truncated at the intersection of The Crescent, City West Link and Victoria Road.



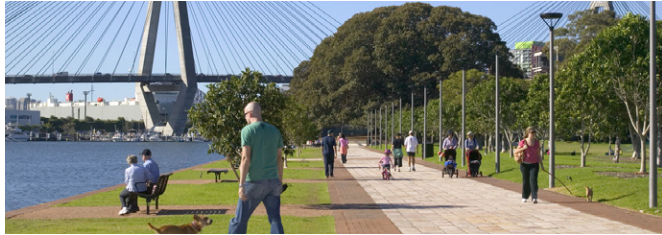
Traffic along City West Link.



Pedestrian and cycle infrastructure at intersection of Anzac Bridge and Victoria Road.



Poor pedestrian and cycle amenity at The Crescent and City West Link intersection.



Glebe foreshore walk in Jubilee Park.



Lilyfield light rail station under land bridge with poor pedestrian amenity.



Figure 5.1: Access and movement

Culture

The Rozelle Rail Yards has a rich industrial history linked with fabrication, transport [rail and maritime] and power generation. The immediate site still retains artefacts of its rail use, including a series of steel gantries that run perpendicular to the site boundary through the length of the site. The site and surrounding area is dominated by the structures, infrastructure, and traces of its industrial past.



The active Callan Park site campus during “Laneway Festival”.



White Bay and Glebe Island working docks.



White Bay Power Station - a future cultural anchor.



Rozelle collectors market on Darling Street.



Popular shops & cafés along Glebe Point Road.

Remnants of this legacy still exist in pockets of light industrial fabric and activities along Lilyfield Road and The Crescent. There are also remnants in a series of robust and significant structures of former and current industrial use, including White Bay Power Station, the Glebe Island silos, Harold Park Tram-shed and the railway viaduct [now used by the light rail route].

The northern foreshore of Rozelle Bay is a vibrant precinct of boat and maritime related activity, some of the last vestiges of the working harbour. Active retail and commercial streets are found well away from the site, the closest being Darling Street to the north and Johnston Street and Glebe Point Road to the south.

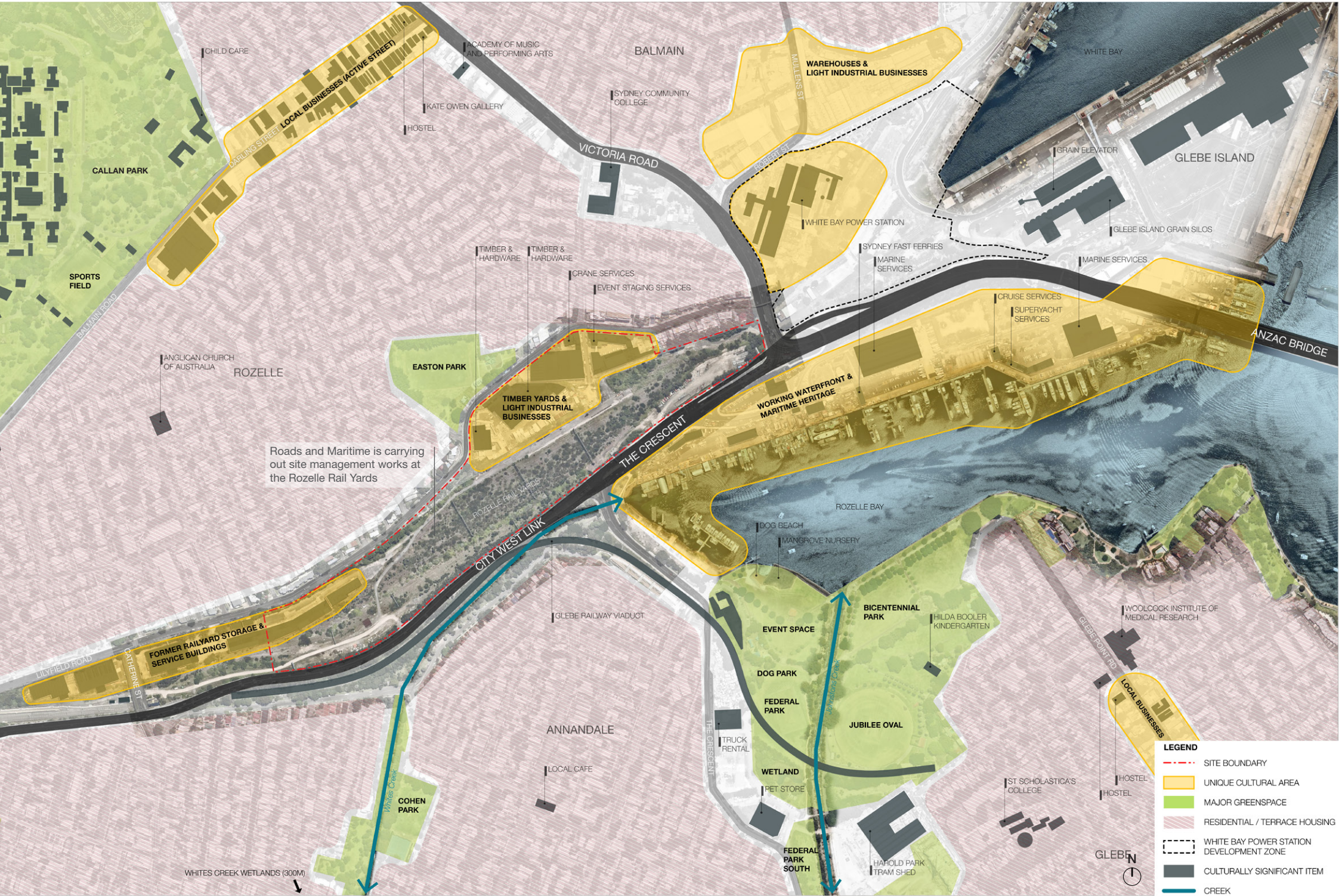


Figure 5.2: Culture

Natural environment

The Rozelle Rail Yards was part of Rozelle Bay and formerly an extended wetland and watercourse in the valley between what are now the suburbs of Rozelle and Annandale, draining to Sydney Harbour at Rozelle Bay. Though filled in to form the Rozelle Rail Yards, there are remnants of green enclaves and watercourses along the edges of the site, still



Stormwater drains adjacent to the Rozelle Rail Yards.



Grasslands, native and exotic vegetation reclaim the Rozelle Rail Yards.*



Sydney rock oysters native to the Blackwattle Bay area.



Sydney Water educational talks about local species at the Whites Creek wetland.



Water pollution from stormwater outlets in Rozelle Bay.

*Roads and Maritime is carrying out site management works at the Rozelle Rail Yards

connecting to the bay. The site is surrounded by significant green spaces - Whites Creek and Bicentennial Park to the south and Callan Park and Easton Park to the north. Most of the parks have extensive stands of mature figs and other native tree species, which create both habitat and feeding zones for a variety of local and regional bird and flying fox

species. While many of the local watercourses have been covered, several small sections of Whites Creek in Annandale have been restored and remediated. The harbour at Rozelle Bay has poor water quality, but the decline in industrial run-off and growing oyster beds and restored sections of mangrove habitats along the foreshore may help contribute to its remediation. Whites Creek and Johnstons Creeks are

systems that discharge stormwater into the harbour. Inner West Council, however, set an example through Whites Creek further upstream by creating habitat wetlands showing the potential to re-establish natural drainage and limit pollutants. This work is being continued by Sydney Water under a program to naturalise a large extent of Whites Creek.



Figure 5.3: Natural environment

Built form and landscape

Resulting from its geological history, the Rozelle Rail Yards is essentially a deep trench separating the residential suburbs of Rozelle and Annandale. Beyond the topographical depression that defines much of the length of the Rozelle Rail Yards, the site is further separated from its surroundings by built fabric, a series of low warehouses and factories on

the north side, and City West Link on the south side. Beyond the valley of the Rozelle Rail Yards, the two neighbouring suburbs of Rozelle and Lilyfield to the north rise upwards. These neighbourhoods are characterised by a fine grain fabric of predominantly one and two storey houses in a dense street pattern of small local streets and interlinked

back laneways. Towards the east and the harbour, the topography is flat, having been levelled for industrial use. Major physical elements include the industrial and maritime buildings, and the dominant elevated roadway linking Anzac Bridge with City West Link and Victoria Road.

Opportunities exist to improve visual connections across the site as well as views of local landmarks, including White Bay Power Station and Anzac Bridge. Views in Figure 5.4 have been taken from preliminary site analysis. Detailed landscape and view analysis is contained in EIS Appendix O [Technical working paper: Landscape and visual impact].



Corner of The Crescent and City West Link looking east over Rozelle Bay to Sydney CBD.



Green view from the Catherine Street crossing to Sydney CBD.



View from Victoria Road pedestrian bridge to the White Bay Power Station.



Glimpses of green across the Rozelle Rail Yards.



View from Victoria Road to the Harbour Bridge.

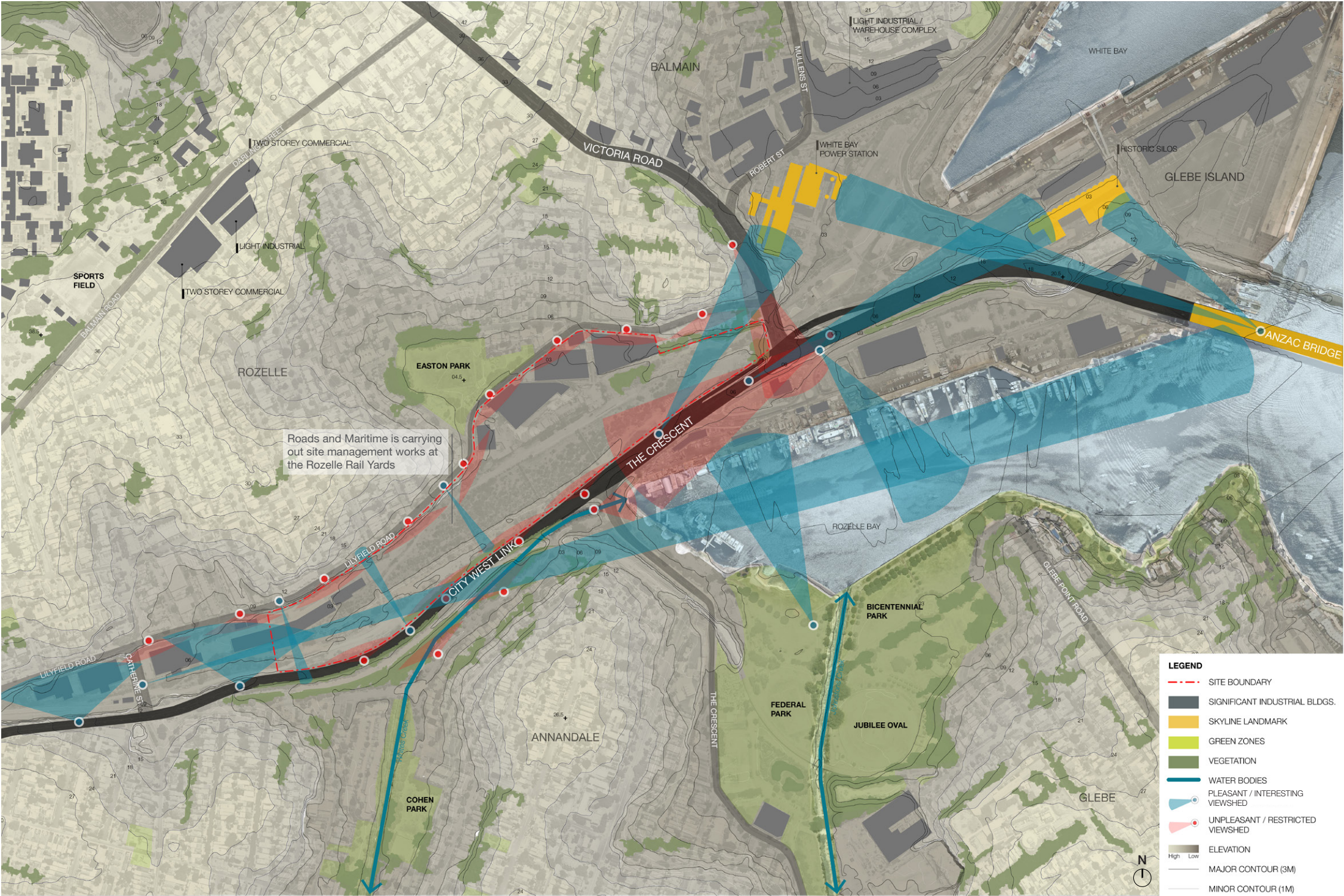


Figure 5.4: Built form and landscape

History and heritage

The Rozelle Rail Yards were part of Rozelle Bay and evolved from a low lying wetland draining to the harbour into an isolated zone of rail switching and holding yards. Changing shorelines, in-filled bays, reclaimed land, suspended piers and docks, elevated platforms and bridges – the site is not continuous solid ground, but rather a man-made structure.



Tunnel access from Rozelle Rail Yards to White Bay.



The Rozelle Rail Yards in use, 1965.



1885 Historical Map.



Old Rozelle Town Centre at the tram sheds.



Rail gantries within the Rozelle Rail Yards.

These large scale landscape changes are also endemic to the surrounding area: Glebe Island, once a rocky isolated outcrop in the harbour, is now a flat expanse of tarmac – vacant, but with the latent potential of many post-industrial sites. The legacy of the site's industrial past is inescapably present in the large scale artefacts, structures, and traces of former operations and institutions.

A number of the items being removed during the site management works, including the rail gantries, lighting tower, and some sections of rail tracks are being preserved [if possible] for interpretation in the final design. The site has a number of heritage conservation areas close to its boundary.

These areas will not be physically impacted by the work, however, visual impacts will be considered by means of the visual impact assessments [refer to Appendix O [Technical working paper: Landscape and visual impact]]. Impacts on listed heritage items at the site have been assessed in Appendix U [Technical working paper: Non-Aboriginal heritage].



Figure 5.5: History and heritage

5.1.2 KEY FINDINGS

Access and movement

Pedestrian, cycling routes and the foreshore walk from Annandale, Glebe and Rozelle Bay are truncated at the intersection of The Crescent, City West Link, Victoria Road and Anzac Bridge. There is an opportunity to facilitate the connectivity of the site to the surrounding area.

Culture

The remnants of robust and significant structures of former and current industrial use, including White Bay Power Station, the Glebe Island silos, Harold Park Tram Shed and the railway viaduct [now used by the light rail route] should be celebrated in the future use of the Rozelle Rail Yards as features of the landscape design.

Natural environment

The major green spaces in the locality are separated by the Rozelle Rail Yards and City West Link, though there are multiple fragments of green spaces and tree lined streets through Rozelle offering the potential for continuous links.

Built form and landscape

The central portion of the site, while closer to surrounding levels, is separated from its surroundings, both spatially and visually, by City West Link and industrial warehouses along Lilyfield Road. This creates an opportunity to use existing physical conditions to increase connectivity through the site, integrating it with its surrounds.

History and heritage

Until recently, the site has been a pivotal location for movement and transport, as expressed in the legacy of the site’s industrial landscape and remnant rail infrastructure. This history presents as an opportunity to interpret connection and movement within the future use of the site.

5.1.3 ROZELLE RAIL YARDS STRATEGIES

The following diagrams represent the key strategies that have been developed for the Rozelle Rail Yards. The Rozelle Rail Yards concept [Figure 5.6] outlines how the key strategies could be delivered on the site. The concept exemplifies the key strategies through links between Rozelle, White Bay and the light rail, active transport links along the spine of the

site, a large volume of new open space and connection of communities adjacent to City West Link.

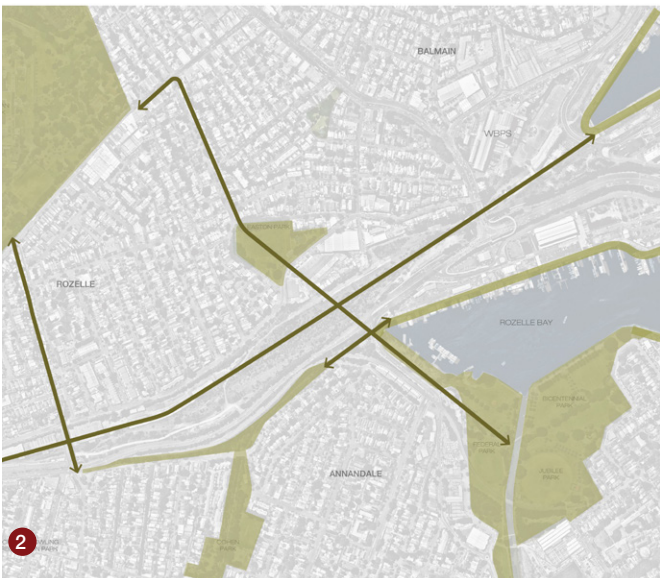
The project would deliver up to 10 hectares of open space and landscaping, including the land at the Rozelle Rail Yards. While the final urban design form will be refined

during detailed design, the concept has been prepared to demonstrate how the principles established for the final end state could be implemented in the development and refinement the project.



Connect and provide for communities

The concept offers a parkland destination that works to stitch together previously separated communities by providing a range of social infrastructure at a central, easily accessible location.



Enhance green links

The concept reactivates closed-off land through new green spaces and links. These links strategically establish a new green “interaction” connecting a series of significant yet fragmented [future and existing] green spaces in and around White Bay, Rozelle Bay, Rozelle, Balmain, Glebe and Annandale.



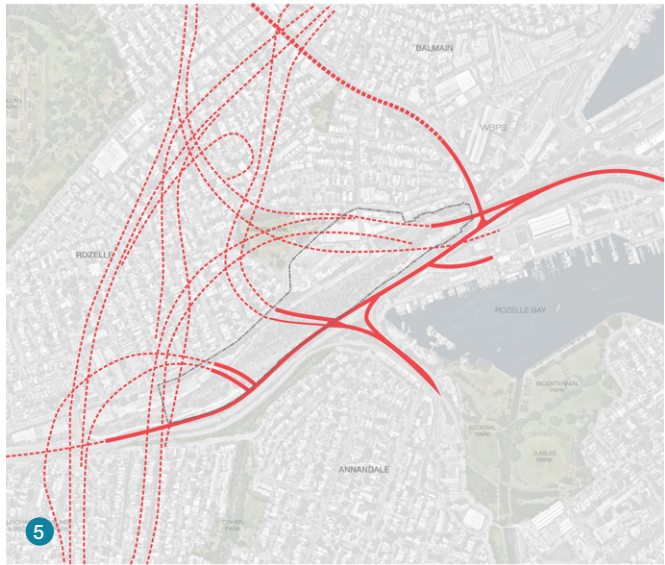
Integrate WSUD

Located in an old creek and swamp bed, the concept strategically uses this to its advantage, employing WSUD to ecologically filter run off before it enters the harbour.



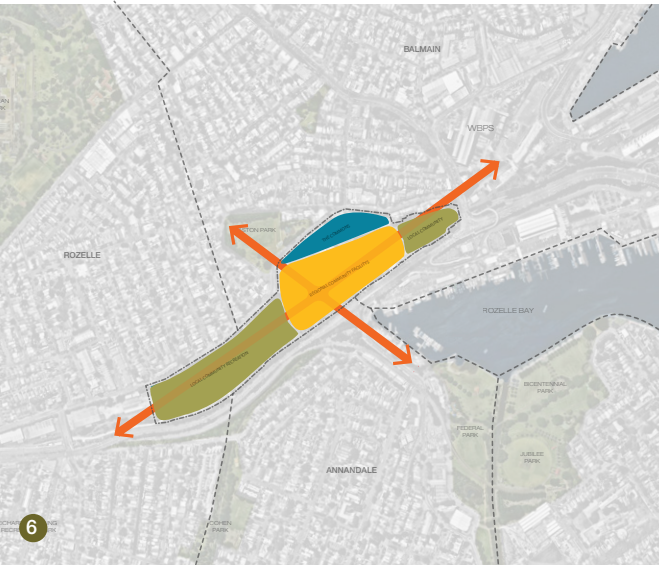
Integrate active transport links

A new active transport spine that works directly with existing and future connections providing a much needed funnel between previously-disconnected communities, the foreshore and the city.



Integrate the motorway

Working with the road design leverages the potential of co-locating road infrastructure to offer more functional space to the community.



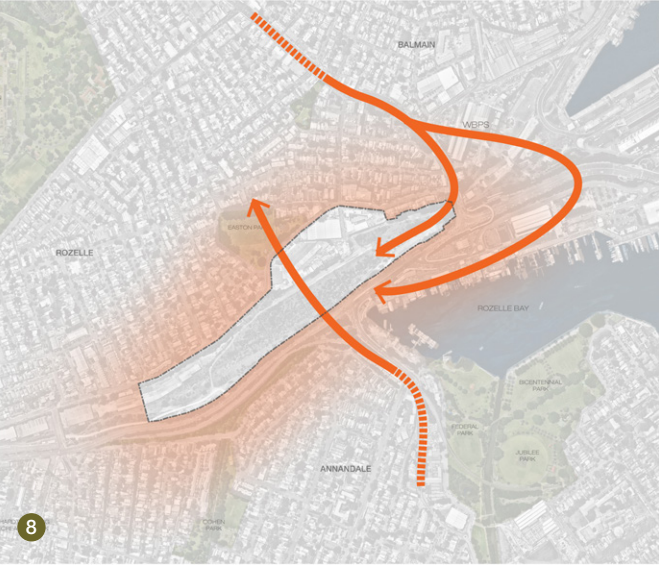
Respond to the local character

Respecting and maintaining the unique heritage, industrial character and topography of the Rozelle Rail Yards through interpretation.



Revitalise streets for equality of mobility

New public spaces and much-needed universally accessible links establish entirely new “public streets” and enhance the surrounding neighbourhood.



Sensitive economic revitalisation

With the intended future growth of the area, the design delivers much needed and quality open space and social infrastructure [through active recreation facilities] for both existing and future communities.



Figure 5.6: Rozelle Rail Yards concept plan

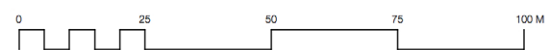
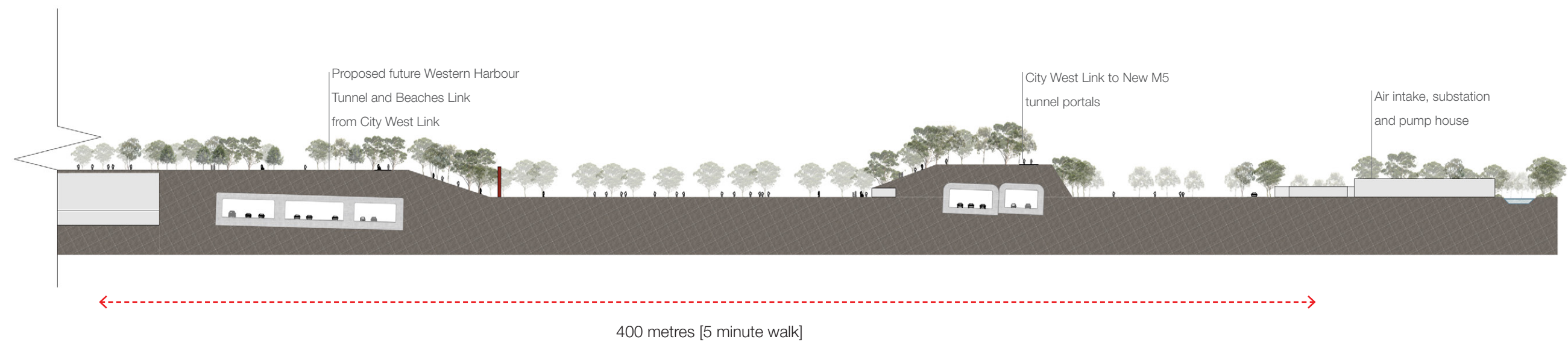
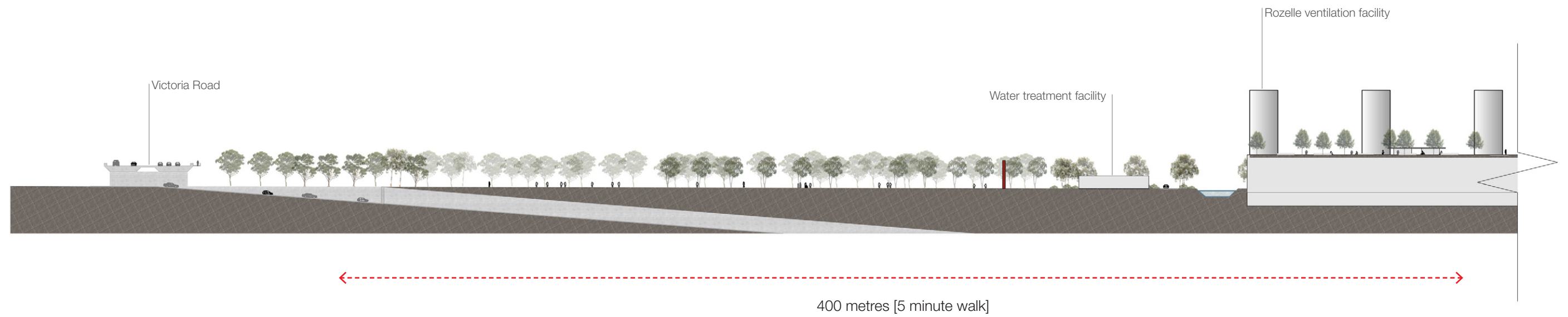


Figure 5.7: Rozelle Rail Yards longitudinal section



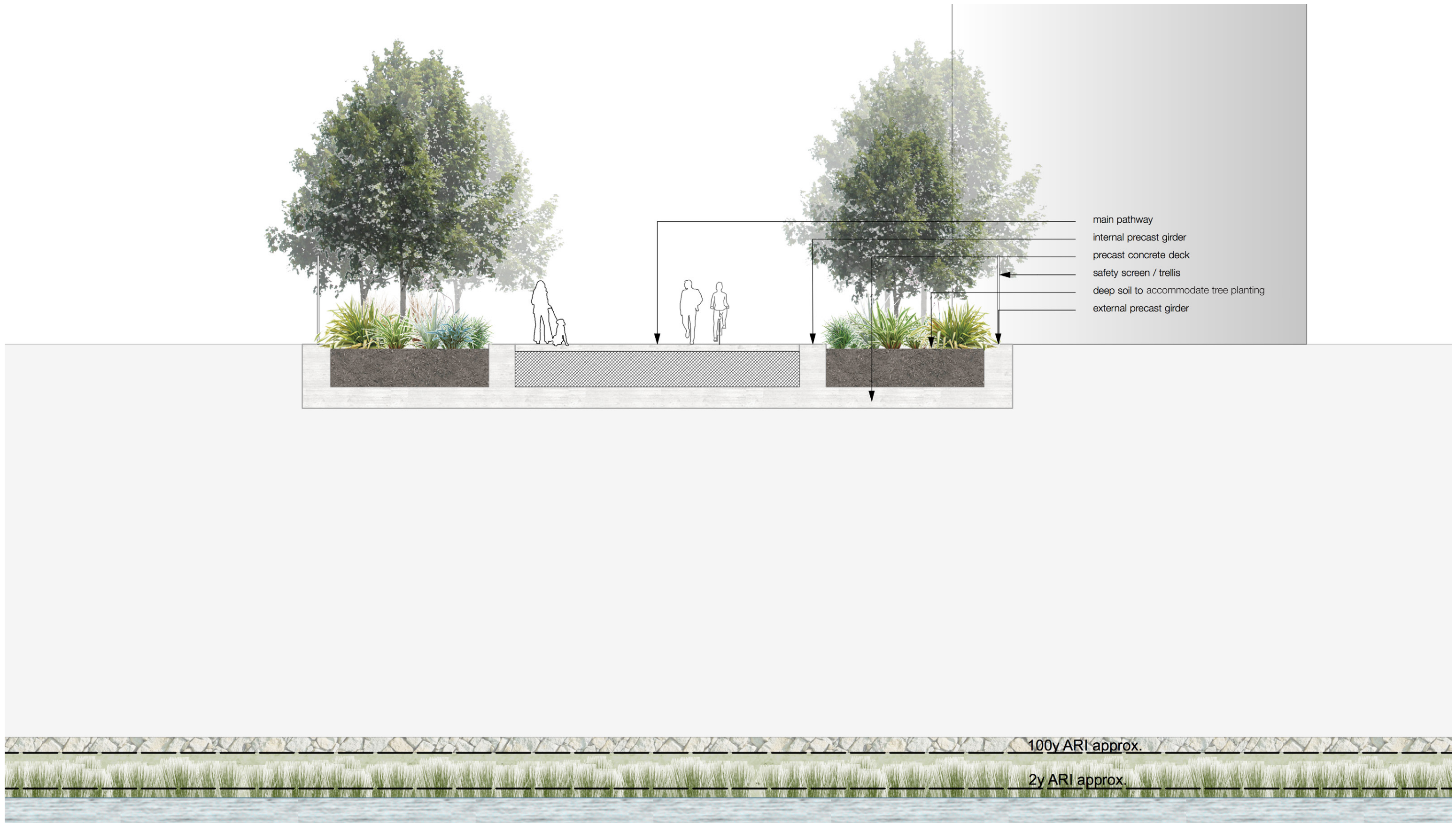


Figure 5.8: Rozelle Rail Yards land bridge section

5.1.4 BUILT FORM

The Rozelle Rail Yards concept integrates motorway infrastructure within a parkland setting. The built form components that would be constructed within the Rozelle Rail Yards are shown in Figure 5.9, and would therefore be present in any refinement of the urban design solution, include:

- Ventilation facility [1]
- Ventilation outlets [2]
- Water treatment plant [3]
- Ventilation supply facility and substation [4]
- New M5 tunnel portals [5]
- Land bridge [6]
- Proposed future Western Harbour Tunnel and Beaches Link tunnel portals [7]
- M4 East / Anzac Bridge tunnel portals [8]

The ventilation outlets would be sited at the confluence of City West Link, The Crescent and proposed future Western Harbour Tunnel and Beaches Link entry and exit ramps. As around 35 metre structures above existing ground level, the three outlets would be significant vertical elements within the landscape. Along with the White Bay Power Station outlets and Anzac Bridge pylons, the M4-M5 Link ventilation outlets have the ability to become markers within the surrounding landscape.

The White Bay Power Station chimneys are composed of brick and metal banding and the Anzac Bridge pylons are simple precast concrete composed in an elegant design. Both structures are reflective of their use and the design language of their time. Such a philosophy would be reflected in the M4-M5 Link ventilation outlets at Rozelle in the material and colour choice. Furthermore, the final design of the open space within the Rozelle Rail Yards would be used to determine a final material palette, and would be detailed in the UDLP.

The ventilation supply facility, water treatment facility and electricity substation would be designed to allow them to become recessive elements within the overall park design. Under the concept, elements such as the water treatment facility and ventilation facilities are co-located within the landscape.

A pedestrian and cycle ‘land bridge’ would be provided to create a north-south connection between Bicentennial Park, the Rozelle Rail Yards and beyond to Easton Park. It would span City West Link and provide connections either side of The Crescent for pedestrian and cyclist access north-south between Annandale/Glebe and Rozelle. The bridge would feature planting across its span to provide an amenable space for pedestrians and cyclists.

As a largely concrete structure, the detailing of the spans would require consideration to ensure it presents the thinnest profile possible.

The New M5 tunnel portals would be located at the western end of the Rozelle Rail Yards and be partially concealed by vegetation. The portals themselves would be simple structures and largely unadorned to ensure the landscape forms the most dominant feature.

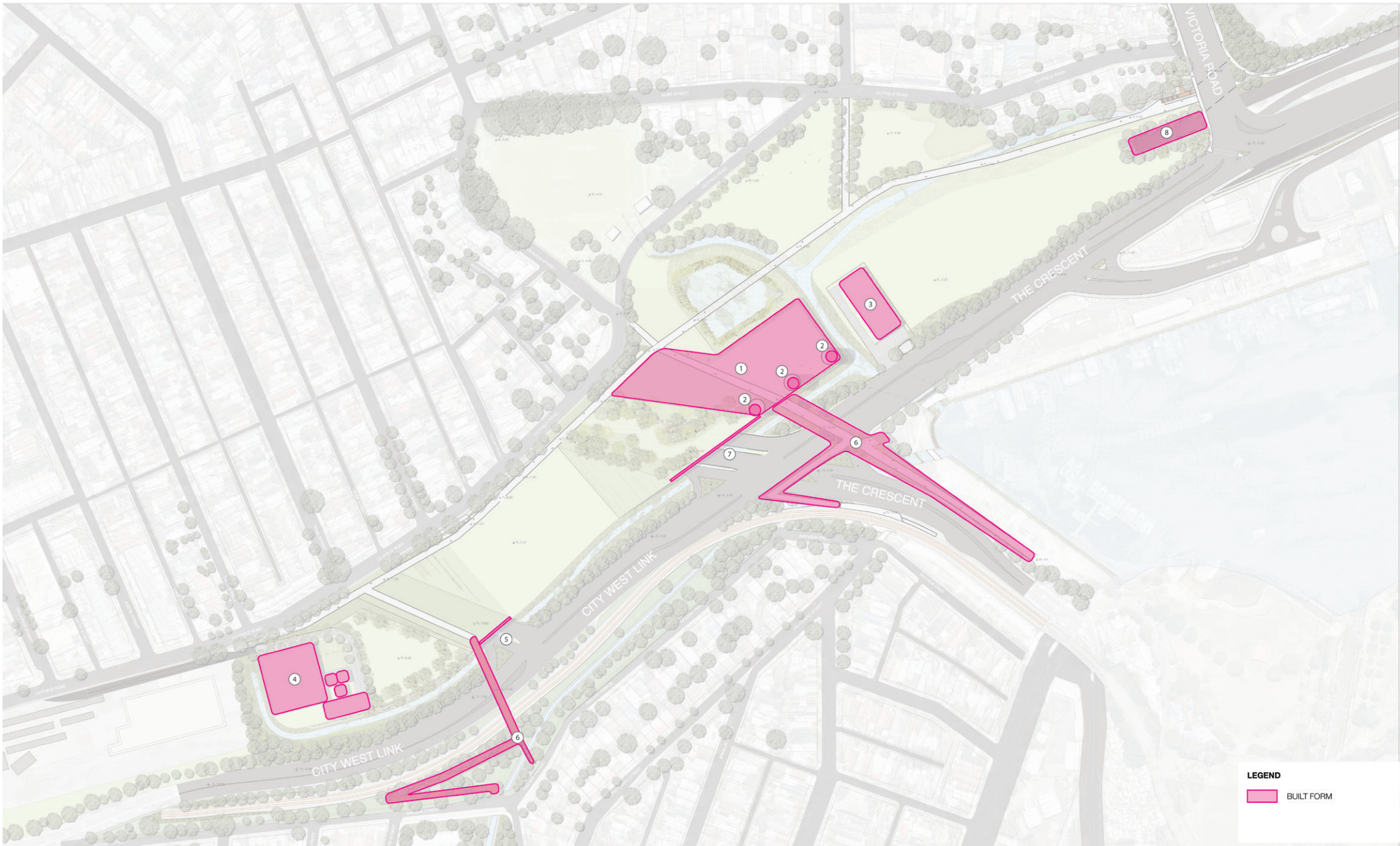


Figure 5.9: Rozelle Rail Yards built form

5.1.5 OPEN SPACE AND CONNECTIVITY

The concept for the Rozelle Rail Yards improves pedestrian and cyclist connectivity. Key routes are created north-south via the land bridge and a pedestrian and cyclist bridge between Whites Creek and Lilyfield Road. These links would greatly improve accessibility between Glebe/Annandale and Rozelle/Lilyfield. They would also provide connectivity between the waters of Rozelle Bay north to the waters of Iron Cove, picking up key green spaces of Bicentennial Park, Rozelle Rail Yards, Easton Park and Callan Park.

East-west connectivity would be provided through the site, connecting to the Lilyfield Road cycleway adjacent the CBD South East Light Rail Rozelle maintenance depot. A path would connect to the existing Anzac Bridge shared path by travelling underneath the Victoria Road/City West Link intersection. This connection would provide future possibilities for connections into The Bays Precinct.

Access along City West Link is provided on the southern side of the road way. This would provide a connection between the upgraded cycleway on the western side of Victoria Road via a signalised crossing and the shores of Rozelle Bay.

The Rozelle Rail Yards concept provides a significant addition of open space to the inner west area. This open space would benefit current and future communities. The Bays Precinct program being led by UrbanGrowth NSW would generate an increase in the worker and resident population around Rozelle Rail Yards and the open space provided would assist in supporting the recreation needs of this future population.

Significant tree planting along the perimeter of the site will continue the canopy of surrounding areas. Within the site large grassed areas would be complemented by tree planting and garden beds to create a series of spaces. These spaces could accommodate a range of future uses according to the needs of the community.

Heritage interpretation would be included within the final urban design of the site. A number of elements that are being removed by the site management works at Rozelle would be reinstated in the final design. These elements include the former rail gantries, lighting tower and some rail tracks [if possible].

Water would be treated through the site within vegetated swales and water treatment ponds that would be designed to integrate with the landscape.

The scope of open space development to be provided by M4-M5 Link includes all pedestrian and cycle connections, hard and soft landscaping, WSUD elements and heritage interpretation.

Details on the connectivity provided by the project is contained in Appendix N [Technical working paper: Active transport strategy].

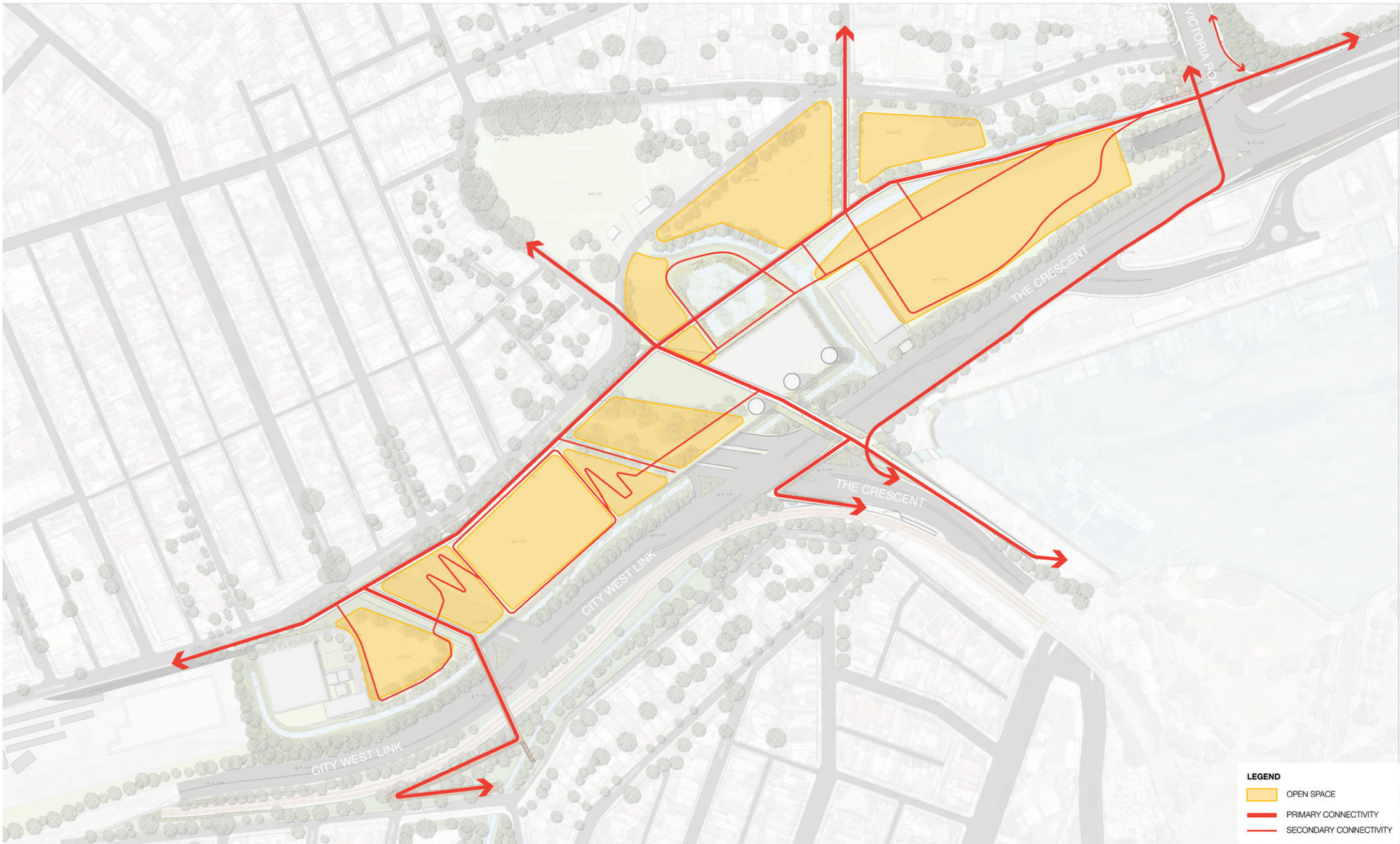


Figure 5.10: Rozelle Rail Yards open space and connectivity