Understanding Place Connection to Ngunnawal Country



Ginninginderry (Ginninderra) Plains, New South Wales Artist: Robert Hoddle

"The moderate climate of the Canberra region and its location within the wider Murrumbidgee River catchment has been shown to be conducive to First Nations peoples (Ngunawal) occupation in the past. East Lake lies within an extensive resource base associated with a multitude of water sources. These water sources are made up of the Molonglo River, Jerrabomberra creek and other, unnamed creeks. Habitats associated with these water systems would have supported a wide range of animals and plants.

Due to its environmental setting, the Canberra landscape would have been subject to a variety of human activities, primarily due to the presence of good resource availability followed by the presence of permanent water sources in the immediate area. Activities undertaken in this landscape would have included camping, hunting, gathering, cooking, ceremonies and other cultural activities associated with semi-permanent settlement sites in the region. East Lake has a deep time story and, whilst changed from its original form and natural systems to what it is today, through Ngunawal cultural guidance the landscape and water will be interwoven through future layers as an urban place, allowing the community to connect to this place.

Country is not just the physical land we see in front of us. It is a part of us and we are a part of it. When Country is sick we become sick, for First Nations people we feel a deep sense of responsibility to care for our mother and all her inhabitants.

This is an important opportunity to be a part of the process of how East Lake looks into the future, ensuring that Country is cared for and First Nations culture is celebrated."

Tyronne Bell, Traditional Custodian

Within the community there are different spellings of 'Ngunnawal'. The Traditional Custodians advising on the East Lake place planning project use the spelling 'Ngunawal'.

"Daramulan created Ngunnawal Country giving us our spirituality, culture, lore and law, customs and traditions. We walk as galambany (together) keeping strong our ancestral connections linked to the present towards a stronger community and environment today and for the future. Maliyan flew across Ngunnawal Country spreading her wings and laying her eggs creating the large rock formations across Country. As Maliyan flew she created the mountains, the waterways, the trees, the animals, the fish, the insects, the plants, the valleys, the pathways and songlines.

The land and waterways on Ngunnawal Country have sustained all life including our people, plants and animals since time immemorial. The waterways carried our songlines across the land. Songlines are the Ngunnawal memory code that gives us information from the landscape telling the stories of vital knowledges, cultural values and wisdom. The Songlines are a potent form of cultural memory and the passing on of stories to future generations. The waterways are all connected to each other through the Ngunnawal people informing ceremony, language, song, dance, art and the oral tradition of storylines weaving our history and present with each other and our environment."

Dhawura Ngunnawal Caring for Country Committee

Understanding Place First Nations Story of Place



Yankee Hat rock art, Namadgi National Park, Canberra

"Story of place for First Nations people will undeniably be different to how European or non-Indigenous history is viewed and documented. Often we view European stories and places within the historical buildings and architecture or the historical accounts of how people first arrived to a place.

First Nations stories are embedded in the land. It is in the shapes of our landscapes often depicting animals, providing a great understanding of the important songlines and dreaming tracks interwoven through Country.

It is defining landscape markers that separated a group's territory from another's, the lore and cultural protocols tied to these areas and how we interact with each other in trade and ceremony. It's our teaching stories taught to young children of how the natural world came to be and the greater meaning behind this, which more often than not hold a deeper understanding of how we should live as people in community. It's the knowledge of Country, songs and dances as they have been absorbed into the rocks, rivers and trees over thousands of generations and still hold the memories of our ancestors. Our stories don't come from the ancient ruins of former towns and empires, they are as old as the creation itself and hold important keys to unlock better understanding of who we really are."

Tyronne Bell, Traditional Custodian

Understanding Place Palaeo-Landscape

Palaeo-landscape

It has been supposed that the observable channels across the Jerrabomberra Wetlands Nature Reserve are palaeochannels.

Palaeochannels are commonly defined as deposits of unconsolidated sediments whose properties reflect the course and flow of former, sometimes ancient river and stream channel systems which are currently inactive.

Soils and Geology

Most of the study area sits on elevated ground. This ground forms low gradient basal slopes that define the edge of the Jerrabomberra Creek and Molonglo River floodplains.

In most areas this elevated ground has formed from Early Silurian aged shale, limestones and siltstones belonging to the Canberra Formation that was laid down in the warm shallow seas that once covered the now Canberra region.

The limestone across Canberra is widely dispersed and deep in nature,

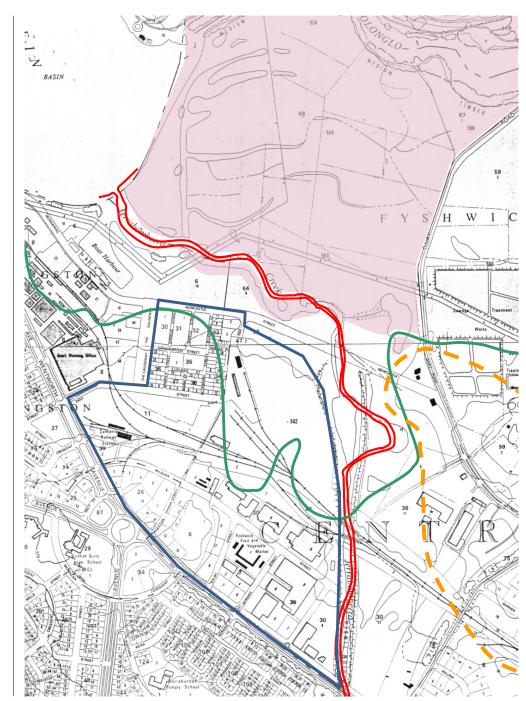
like an iceberg. Within the study area, in the north eastern fence line adjacent to Eyre St, in the boundary of the former Weights and Measures building (Newcastle House) is one such limestone outcrop. It is one of two remaining outcrops within the area.

Vegetation

Prior to European land use, the vegetation of the study area is thought to have been dominated by woodland (savanna) and grasslands. Natural grasslands are thought to have been present across most of the Molonglo Valley floor and basal slopes between Acton Peninsula and Fyshwick, and the lower Jerrabomberra Valley.

Key

- Course of Jerrabomberra Creek circa 1912
- Approximate shoreline of Postulated Pleistocene Lake
- Approximate boundary of Tertiary Gravels
- Area of identified palaeo channels
- East Lake study area boundary



Understanding Place European History

The area in which the East Lake study area is located is identified on several historical maps, including one produced in 1832 as part of Campbell's Duntroon Estate. The property was used for the grazing of sheep and cattle.

Acquired by the Commonwealth Government in 1912, and with the establishment of the Australian Federal Territory, much of the local pastoral land was resumed to make way for residential and industry development.

Blocks between Canberra Avenue and the Molonglo River were identified as the Mill Flat Soldier Settlement Area, established in 1920. East Lake partially sits in this area. The area continued to be part of land dedicated to farming and was heavily associated with the development of the local Canberra dairy industry.

David Cargill was an employer who contributed greatly to the development of the dairy industry. His family were employers of many families from the Causeway and he was also known for his success in farming practices and establishment of other industries.

The basic layout of The Causeway was established in 1925/26. This settlement was established during the construction of Canberra, erected as one of the major camps to house the builders of Canberra. Over time, the settlement grew, adapted and was modified based on the needs of the local community. After the initial camps were developed, more permanent dwellings were constructed and recreational facilities were provided including the Causeway Hall.

The Canberra Rail network was first established in November 1913 when the line between Canberra and Queanbeyan began construction. The area south of the railway has been a hub of urbanisation since the establishment of the builders' camps. From this point, even prior to the construction of the Causeway houses, the area began to form as an industrial precinct. Access to transportation at Canberra Railway Station was essential to this area.



The Causeway Aerial view of the The Causeway circa 1941–42



Dairy Industry

The heritage listed Milk Treatment Depot at 2 Mildura Street, Fyshwick



Old Canberra Railway Station

In 1924, the first public station was opened adjacent to Uriarra Road, now Wentworth Avenue



Causeway Hall The Construction of the Causeway Hall by volunteer workmen in 1927

Understanding Place The Past - The Griffin Plans

The winning entry for the 1911 Australian Federal Capital City Design Competition, prepared by architects Walter Burley Griffin (1876–1937) and Marion Mahony Griffin (1871–1961) comprised many iterations. They were based on ideas of a garden city, the recognition of water, topographical landmarks, the shape of the land, of natural systems, and the solemnity of significance being the nation's capital of colonial Australia.

The the Griffins' plan for the national capital presented a different spatial ordering to the place, with defined axes of land and water that would be constructed. Avenues, monuments and street geometries would radiate from Capital Hill as a cultural, ceremonial and physical axial reference linking to Mount Ainslie. The formation of Lake Burley Griffin reconfigured the Molonglo River and confluence with Jerrabomberra Creek.

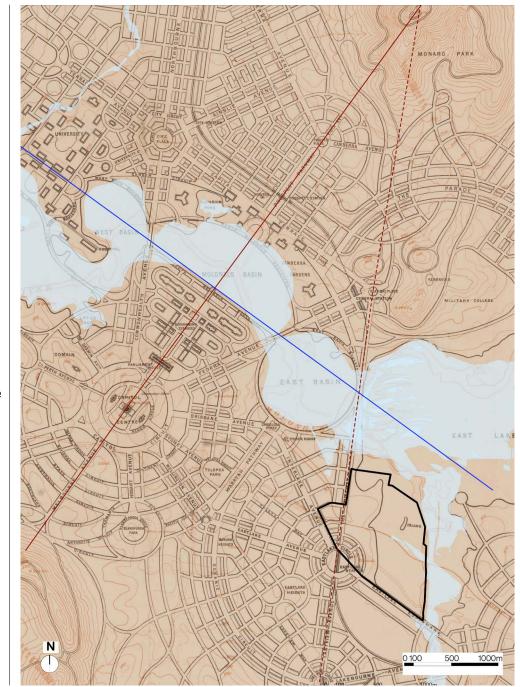
The image of the Griffins' Plan of 1918 has been overlaid with The Causeway axis from Hume Circle north that extended across the proposed lake to Russell, and the envisioned Central Rail Station. The rail line met at the East Lake Circle that became the partly constructed Hume Circle. Four lake crossings were proposed.

Within East Lake, the constructed fabric of Canberra's history includes The Causeway Hall, Cargill's Cottage, the Dairy Farmers Co-op, and remnant railway lines (plus additional imprints of former lines) and the adjacent Jerrabomberra Wetlands. The deep time past remains visible with an outcrop of limestone fossils at the north-eastern corner of East Lake representing the continuum of historical layering. This is one of the last two remaining locations within the constructed Canberra.

Key

Overlays on Griffins' Plan of 1918 - image source: National Archives

- East Lake study area
- Water + 1-in-100 year flood overlay
- Axis overlays
- Water axis
 I and axis
- ---- Mt Ainslie Mugga Mugga axis
- Note: Contours at 25 feet intervals



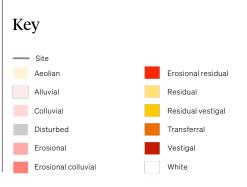
Understanding Place Geology Soils Vegetation

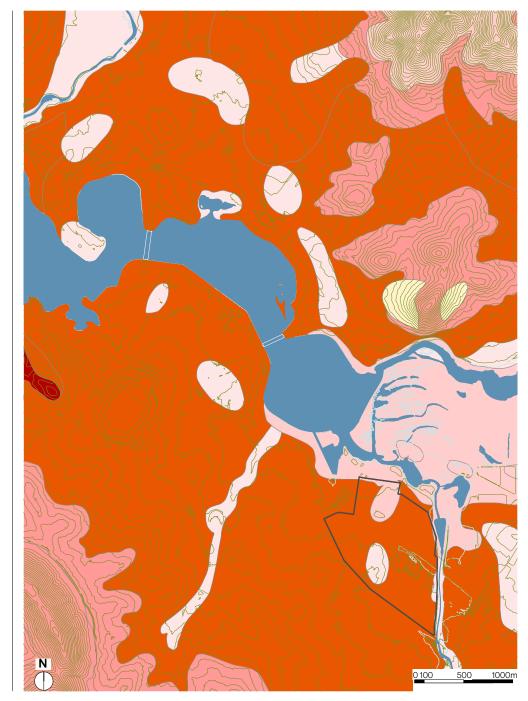
The geology tells the deep time story of the place.

It sets the character and colour of the land, the vegetation types and mixes, the creatures that inhabit it.

Despite the disturbance of the original soil and geology, understanding the soil structures now will facilitate the selection of plant species that can help to repair and heal the place to become a more healthy and biodiversity connected place.

East Lake is comprised mostly of Transferral soils with an area to the north of Colluvial and a small area to the south west of Alluvial soils.





Understanding Place Vegetation and Canopy

Vegetation and Tree Canopy

The ACT has many varied ecosystems. The vegetation consists of native and introduced species. The main vegetation types across the ACT are shrub-lands, grasslands, forests and wetlands.

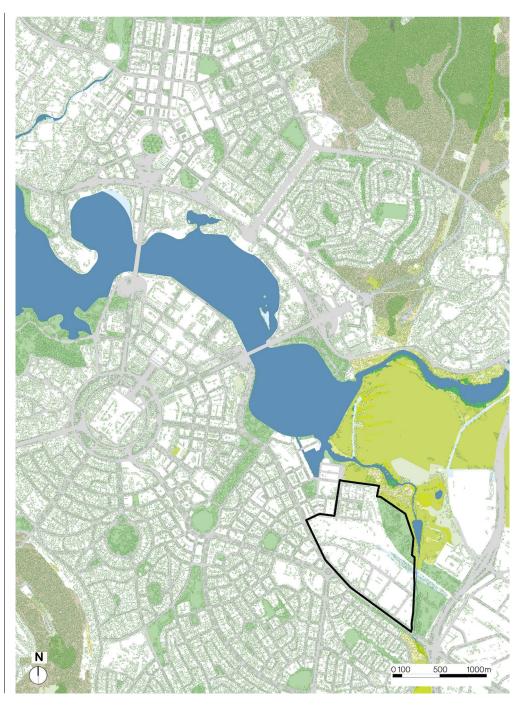
Most of these vegetation types come together and weave within and around Canberra where urban canopy becomes an important component in creating liveable cities and places.

Focusing on vegetation types and canopy cover around East Lake, it is evident that existing canopy is lacking. However, this needs to be considered with the wetlands stretching from Jerrabomberra to Narrabundah, which has a rich cultural heritage along with being a diverse ecological environment of naturally treeless grasslands that are key values to protect.

The Former Landfill area currently creates an important buffer to the wetlands. Access around these areas needs to protect the delicate wetlands habitat while allowing public access in a way that educates people and helps the community enjoy it.

New development and changes to the area should celebrate and preserve East Lake's wetlands corridor and locate new canopy appropriately, maintaining the natural values.





Understanding Place Green - Blue Networks

Topography and Water

East Lake meets at the confluence of two large water catchments – Jerrabomberra Creek and the Molonglo River – at the East Basin of the lake. The land is low-lying, with parts prone to flooding and slow-receding ponding in storm events. Understanding the water courses and land levels will be essential to facilitate the natural system flow of water making its way through the wetlands to the lake. Mt Ainslie and Mt Mugga Mugga are way-finding markers visible from the Causeway and at various other locations.

Green Network Open Space

Understanding the continuum of the canopy within and beyond East Lake provides a basis for understanding where breaks of that continuity occur. This facilitates the repair and promotion of healthy biodiversity corridors and the Territory's objectives of urban forestation and mitigating urban heat.

Liveable Green Connections Active Travel

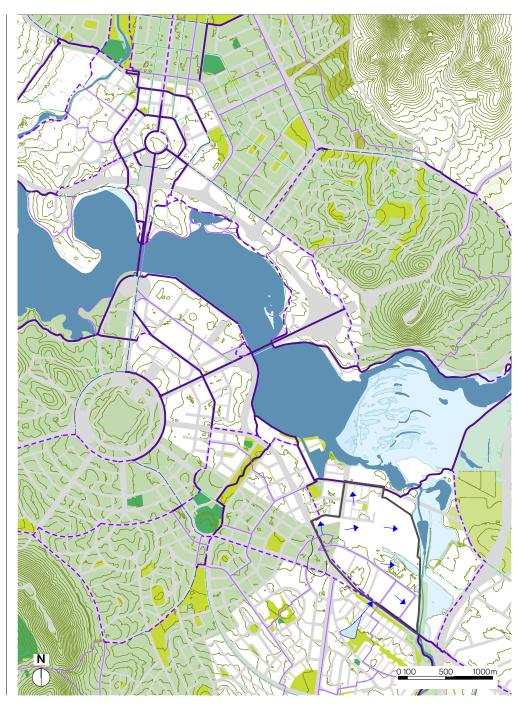
Cycle and pedestrian networks connect people and environment, and support a better quality of life.

The ACT Active Travel Plan comprises walking, cycling, scooting, skateboarding and other types of micromobility and include On Road Cycling and Community Routes.

- Liveable green network can complete the Causeway re-imagining and repairing Griffin's Causeway axis to Hume Circle
- Long-term vision for potential north south connection across the Lake
- East-West connections to Dairy Road reconsiders Eyre Street and East Lake connections beyond.

Key





Understanding Place Sustainable Neighbourhood

Streets - A Spatial Structure

The spatial layout of streets needs to consider mass movement of people and goods to meet demands generated as a city grows. Streets are the spatial structure of the city. They are its greatest public domain element, organsing its form, the movement of people, water, landscape and creatures. They become a layer on Country.

The strength of the layout of Griffins' Plan for the national capital (realised in part, while diverted in others) provides a structure of strong axes and connectivity. It envisaged a garden city comprising smaller districts linked and served by public transport. The ideal of smaller garden city districts separated by bushland over time has evolved and resulted in the dominance of districts linked by freeways for private cars. Experiencing street networks differs from driver to pedestrian, cyclist and users of other active transport. East Lake can create a positive street hierarchy, focused on pedestrian and active travel experience, that also serves the movement of vehicles and transport.

Transport and Strategic Movement

The mass movement of people and goods is a layer on the spatial structure of streets that must meet future demand generated by proposed development.

As Canberra has grown, the increasing connectivity of light rail, rapid bus, and active transport is providing a richer urban experience. East Lake can expand upon this connectivity to link around the Lake to the north, and to Dairy Road and Fyshwick to the east.

Diverse Centres

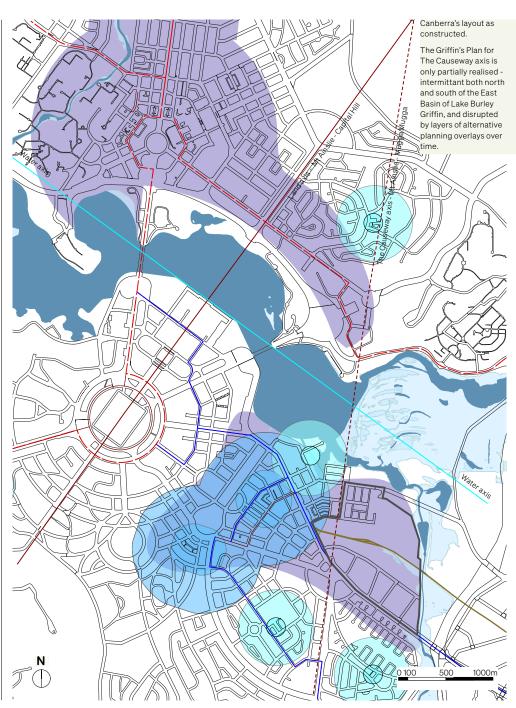
Thriving centres are close to transport and in areas with high amenity. East Lake has the potential to become a lively, diverse centre. East Lake's combination of precincts have very different attributes and characters within a walkable distance of each other.

Key



Note: Future RAPID network is outside map area

Group centre 200m Group centre 600m Urban intensification localities (2018)



Understanding Place Character Places

East Lake is a distinctive place with an eclectic, diverse and interesting character not found elsewhere in Canberra.

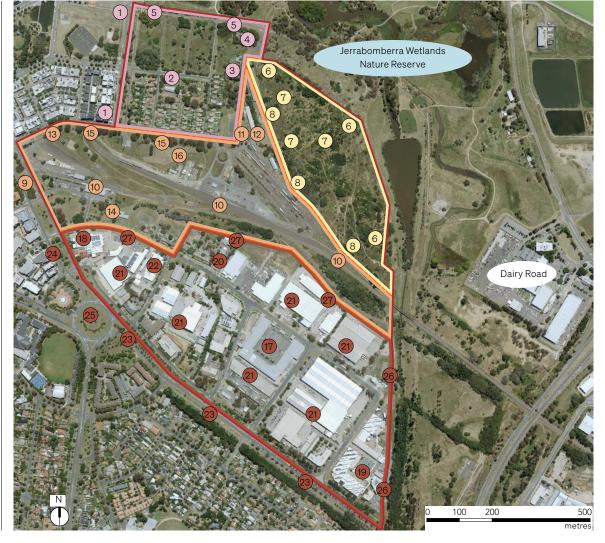
The key existing features of each of the character places are shown on the map. Understanding this existing condition is fundamental to shaping the future of East Lake.

Key

- THE CAUSEWAY
- 1 The Causeway
- 2 Causeway Hall
- 3 Cargill's Cottage
- 4 Limestone outcrop
- 5 Wetland edge street
- FORMER LANDFILL
- 6 Sensitive wetland edge
- 7 Low lying places prone to ponding
- 8 Long edge with the rail and sheds
- RAILWAY
- 9 Wentworth Avenue edge
- 10 Canberra Station and operational rail
- 11 Railway Museum
- 12 Steam Loco 1210
- 13 Remnant rail lines
- 14 Aerial traces of former rail tracks to the Dairy Farmer's Co-op
- 15 Established grove of street trees
- 16 Low lying places prone to ponding

MILDURA STREET

- 17 Fyshwick Fresh Food Markets
- 18 Dairy Farmers Co-op
- 19 CIT Fyshwick
 - 20 Salvation Army store
 - 21 Industrial employment area
 - 22 Adaptive re-use such as Thor's Hammer
 - 23 Canberra Avenue edge
 - 24 Wentworth Avenue edge
 - 25 Hume Circle
 - 26 Jerrabomberra Creek edge
 - 27 Railway edge
 - JERRABOMBERRA WETLANDS Protected under the Heritage Act



Emerging Themes Narrative Approach to Place

Sun - Wiinyu



Developing an experience that's greater than the sum of its parts forms the nucleus of East Lake. This nucleus is akin to the Sun, radiating cultural, social, physical and environmental connections.

It is important to maintain and strengthen existing connections between different diverse communities within and around East Lake.

New cultural and social connections between new and future developments, like Dairy Road and Kingston Arts Precinct, will be crucial to East Lake's success.

Dedicated nature corridors, cycling trails, public spaces and transport connections to the wider city will fortify the Ngunnawal story, existing walking, cycling and natural connections within the region. Three themes have emerged from the study of people and place in East Lake. The continuous relationship to Ngunnawal Country and its cultural importance has a powerful presence.

Land - Dhawura

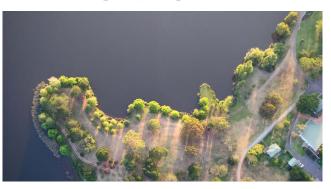


The integration and celebration of the natural environment into the built realm will define the future of East Lake. With a focus on a socially, civic minded and ecologically sustainable future, the development will emphasise and enhance its connection to Ngunnawal Country.

Considered urban responses – including restoring the visual connection to Mount Ainslie – will ground people in place while bringing nature as far into the urban realm as possible. This will further break down the border between the natural and built environments.

Lower density built forms alongside urban rewilding, native low-maintenance planting and tree-lined streets will ensure the scale of architecture and landscape reflects Ngunnawal and the character, proportions and people of East Lake.

Water - Ngadjung



The Ngunnawal connection to water will be maintained and celebrated in the East Lake development. Ngunnawal storytelling and education will bring this to life, while pivotal ecological practices will be co-created with First Nation communities to enhance the strength of connection and improve the overall result.

Water will be meaningfully integrated throughout the area, brought into the precincts and acting not just as an amenity but a fundamental component of everyday life.

Sensitive urban design responses will blur the boundary between water and land, bringing people closer to the junction between the natural and man-made. 04 Global Benchmarks

Global Benchmarks Introduction

East Lake creates a place with an eclectic, diverse and interesting character not found elsewhere in Canberra.

The following projects have been selected as they resonate with the key themes and design principles attributable to East Lake. They aren't representative of the typologies being constructed but inspire what could be developed in the future.

These projects were selected based on criteria that includes site constraints, design, context, scale and potential development strategies.

They include urban renewal strategies with medium density character and water sensitive urban designs like the built form outcomes anticpated for East Lake.

Campbell Section 5 is an example of the Griffins' Legacy where public realm spaces and streets have been celebrated. The building forms have created a clear definition and character for those spaces and street axes interwoven with water and andscape.

Consideration of The Causeway and the Hume Circle with the surrounding street structure are important considerations for the Griffins' Legacy.



Campbell Section 5, Canberra

Global Benchmarks Urban Renewal Precincts

Hafen City, Hamburg, Germany



Waterfront development of former inner city port and industrial area

Hafen City has transformed the former industrial shipping port of Hamburg into an extension of the city centre as a mixed-use waterfront destination with high quality public domain network, urban streets, a range of park types and continuous public waterfront. Built form ranges predominantly from 4-10 storeys commensurate with Hamburg's historic centre, with point towers and taller public elements mainly in the east.

Key Takeaways

- Waterfront urban regeneration
- New residences and employment opportunities
- Interlinkages between the old and the new city

Victoria Park, Sydney, Australia



Streets are major components of the water sensitive urban design

Victoria Park is a former industrial site transformed into a new urban community east of Green Square Town Centre with high quality new streets, diverse open spaces and a range of robust medium-high density mixed-use buildings. This low lying area of the former Lachlan Swamp features a number of successful water-sensitive urban design strategies to assist flood mitigation and improve urban water quality.

Key Takeaways

- Industrial space redesigned as a mixed-use typology
- Water sensitive urban design strategy
- Improved high quality public realm

Global Benchmarks Urban Renewal Precincts

Hammarby Sjöstad, Stockholm, Sweden



Apartment balconies overlooking parks or playgrounds in Hammarby Sjöstad

Hammarby Sjöstad was created on former port and industrial lands with the aim of limiting urban sprawl by reusing urban land whilst at the same time reducing energy use and waste. The precinct has a high percentage of well proportioned open spaces which cleanse and manage urban water in a celebratory manner. Built form is predominantly 4-6 storeys.

Key Takeaways

- Industrial area developed into an ecological sports arena and residential village
- Integration of infrastructure in planning from the start
- Large-scale water harvesting and filtration

Campbell Section 5, Canberra, Australia



More than 50% of the site is public domain, including the major new Hassett $\ensuremath{\mathsf{Park}}$

Campbell Section 5 makes a contemporary urban project attuned to the Griffin Legacy works, including 5 new streets, 5 urban blocks, landscaped squares and a major new park with significant water sensitive urban design strategies. The precinct has major urban frontage and mixed use to Constitution Avenue, as well as 550 dwellings plus serviced apartments in 4-8 storey perimeter block forms.

Key Takeaways

- Masterplan attuned to the Griffin Legacy
- Social elements that join new community to the existing suburb of Campbell
- Blue green networks designed to improve inflows to Lake Burley Griffin