PREPARED FOR:

CORONATION

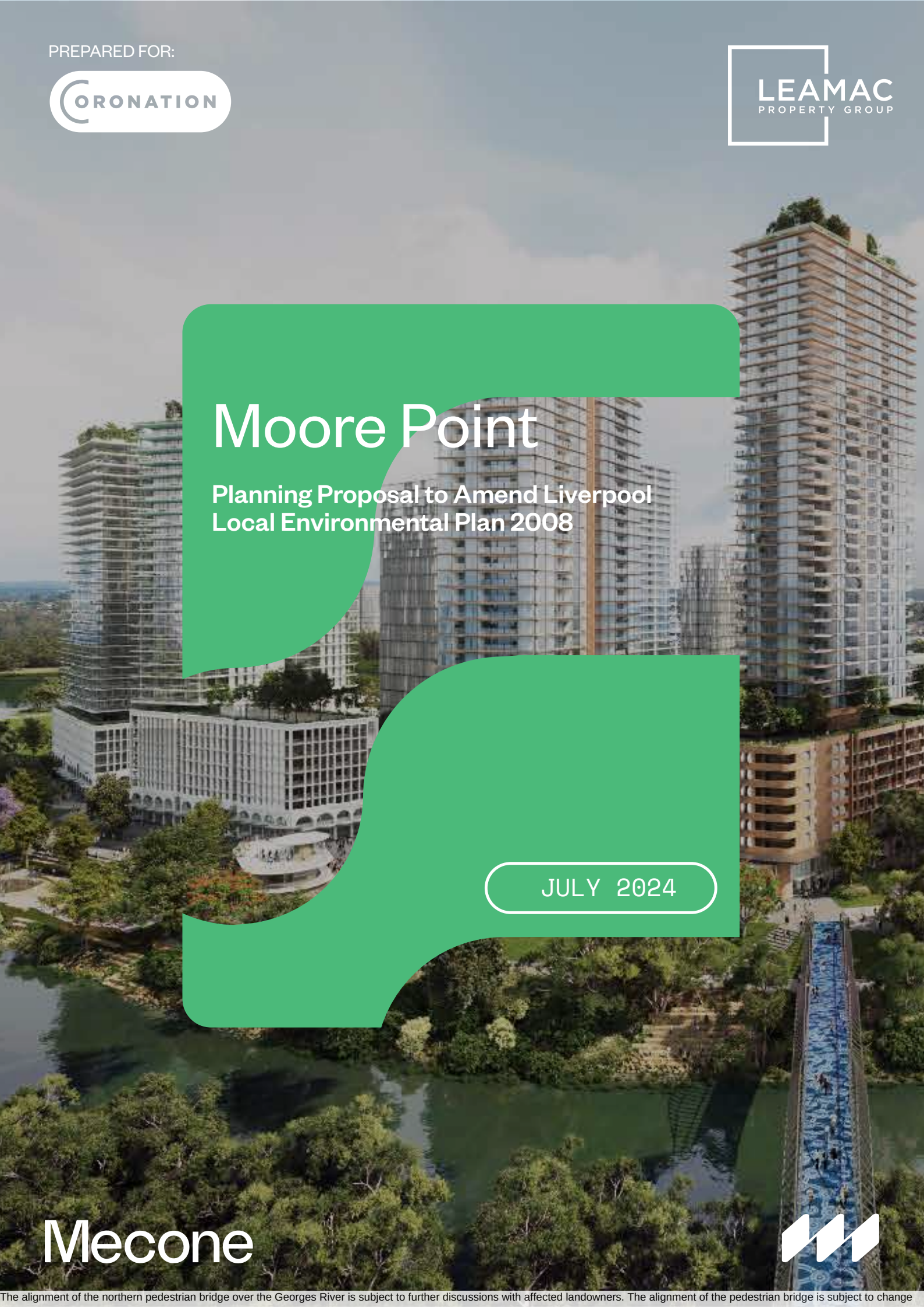
LEAMAC PROPERTY GROUP

Moore Point

Planning Proposal to Amend Liverpool Local Environmental Plan 2008

JULY 2024

Mecone



The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the pedestrian bridge is subject to change

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Revision	Revision date	Status	Authorised: Name & Signature	
A	15/05/2024	Draft	Jordan Faeghi	
B	20/05/2024	Draft	Jordan Faeghi	
C	20/05/2024	Final	Ben Hendriks	
D	12 July 2024	Final	Jordan Faeghi	

* This document is for discussion purposes only unless signed and dated by the persons identified. This document has been reviewed by the Project Director.

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Terminology

Abbreviation	Term
ACHA	Aboriginal Cultural Heritage Assessment
ADG	Apartment Design Guide
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
APAR	Airports (Protection of Airspace) Regulations 1996
BAM	Biodiversity Assessment Method
BAMC	Biodiversity Assessment Method Credit Calculator
BDAR	Biodiversity Development Assessment Report
BOS	Biodiversity Offset Scheme
BTR	Built to rent
CBD	Central Business District
City Centre CP	City Centre Contributions Plan
CM Act	Coastal Management Act 2016 NSW
Council	Liverpool City Council
DA	Development Application
DCP	Development Control Plan
DEP	Design Excellence Panel
District Plan	Western City District Plan
DITRDCA	Department of Infrastructure, Transport, Regional Development, Communications and the Arts
DPHI	Department of Planning, Housing and Infrastructure
EIA	Economic Impact Assessment
ELS	Employment Lands Study
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
FAP	Flood Advisory Panel
FERP	Flood Emergency Response Plan
FIA	Flood Impact Assessment
FM Act	Fisheries Management Act 1994 NSW
FSR	Floor Space Ratio
FTE	Full Time Equivalent
GFA	Gross Floor Area
GRP	Gross Regional Product
GRPP	Draft Georges River Precinct Plan
GRNP	Georges River North Precinct
Guidelines	Local Environmental Plan Making Guideline dated August 2023.

Abbreviation	Term
HPC	Housing and Productivity Contribution
JLG	Joint Landowner Group
LALC	Local Aboriginal Land Council
LCA	Liverpool Collaboration Area
LGA	Local Government Area
LHS	Local Housing Strategy
LIP	Liverpool Innovation Precinct
LLEP	Liverpool Local Environmental Plan 2008
LPP	Local Planning Panel
LSPS	Liverpool City Council Local Strategic Planning Statement – Connected Liverpool 2040
MHWH	Mean High Water Mark
OLS	Obstacle Limitation Surface
PANS-OPS	Procedures for Air Navigation Services Aircraft Operations
PCG	Project Collaboration Group
PCT	Plant Community Types
PDU	Department of Planning, Housing and Infrastructure - Planning and Delivery Unit
Place Strategy	Liverpool Collaboration Area Place Strategy
PP	Planning Proposal
PPR	Planning Proposal Report
PWG	Placemaking Working Group
PWG	Project Working Group
Region Plan	Greater Sydney Region Plan – A Metropolis of Three Cities
RTCC	Radar Terrain Clearance Chart
SEPP	State Environmental Planning Policy
SES	State Emergency Services
SHLS	Strategic Helicopter Landing Site
SoHI	Statement of Heritage Impact
SWSLHD	South Western Sydney Local Health District
TAG	Technical Advisory Group (Flooding)
TIWG	Transport Infrastructure Working Group
TEM	Timeline Evacuation Model
TMAP	Transport Management and Access Plan
ToR	Terms of Reference
UDR	Urban Design Report
VPA	Voluntary Planning Agreement
VRZ	Vegetated Riparian Zone
WIK	Works in Kind
WM Act	Water Management Act 2000 NSW

PART A – Introduction, Site Description, Background and Proposal

Executive Summary

Introduction

This Planning Proposal (**PP**) has been prepared by Mecone Group (**Mecone**) on behalf of Coronation Property and Leamac Property Group, known as the Joint Landowner Group (**JLG**) to support PP-2022-1602 for the 31.4 hectare (**ha**) landholding at Moore Point, Liverpool (herein referred to as the **site**).

This PP responds to the Gateway Determination conditions issued by the Department of Planning Housing and Infrastructure (**DPHI**) on 3 April 2023 and pertains to land owned and under the control of the JLG. It satisfies the requirements of Section 3.33 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and aligns with DPHI's *Local Environmental Plan Making Guideline* dated August 2023 (the **Guidelines**).

Moore Point is of strategic significance to Western Sydney. It represents the largest privately-led urban renewal project in Australia and is of regional importance to the growing role of Liverpool CBD. It will deliver much needed housing supply set within the nucleus of a Strategic Centre and facilitate the long-term strategic aspirations to support the creation of a true river city. The PP has been informed by Country and includes bringing river ecology up and over into the foreshore, including restoration of endemic/native species through naturalised revetment treatment that will support habitat.

Figure 1: Visualisation of Moore Point and Georges River foreshore
Source: SJB

At a glance, Moore Point will deliver:

- Approximately 11,000 dwellings set within walking distance of Liverpool CBD and LCA,
- Primary school (1,000 student capacity), community facilities and indoor recreation,

- 10 ha (34.5%) of publicly accessible open space supported by bridge crossings from Liverpool CBD to a fully accessible Georges River foreshore and Haigh Park,
- Approximately 23,500 jobs during operation, contributing to new employment opportunities as part of an expanding Liverpool CBD,
- Local shopping and entertainment, centred around an adaptively-reused heritage quarter that will be the focal point for the community,
- Multi-purpose indoor playing courts, riverbank stabilisation and restoration resulting in river foreshore improvements, and
- New local roads supporting active and public transport and intersection upgrades along Newbridge Road.

The primary aim of the PP is to realise the long-standing objective of Liverpool City Council (**Council**) to expand Liverpool CBD eastward by transitioning industrial land at Moorebank to mixed-use and recreational uses. This has been entirely consistent with the strategic planning framework set at both State and local levels. The proposal is not only considered consistent with key Government policy, but will specifically deliver a number of key priorities contained with:

- *Greater Sydney Region Plan – A Metropolis of Three Cities,*
- *Western City District Plan,*
- *Liverpool Collaboration Area Place Strategy, and*
- *Liverpool City Council's Local Strategic Planning Statement – Connected Liverpool 2040.*

The PP represents a once in a generation opportunity to renew the site for mixed-use and recreational purposes, befitting its strategic location and complementing the growth of Liverpool CBD.

The Site

The site, being a 31.4 ha, is one of the largest consolidated urban renewal sites in Western Sydney and located in the suburb of Moorebank. It forms part of Liverpool Collaboration Area (**LCA**) and is set along the eastern side of the Georges River directly opposite Liverpool Train Station and Liverpool Innovation Precinct (**LIP**).

The site comprises 31.4 ha of the 38 ha Georges River North Precinct (**GRNP**), as defined by strategic planning documents. The size and scale of Moore Point allows it to proceed independently of adjoining lots with the GRNP. The remainder of the Precinct relates to individual landholdings predominantly located on the eastern tail of the Precinct along Newbridge Road.

Moore Point has been regarded as a long-term future extension of Liverpool CBD since 2008, with *Liverpool Local Environmental Plan 2008* (**LLEP 2008**) identifying most of the site within the bounds of Liverpool City Centre.

It is defined by the Georges River to the west and north, which is lined with riparian vegetation and an eroding bank. The river wraps around the site to the east into the man-made Lake Moore, adjacent to Haigh Park. Haigh Park is a significant open space area, however, is currently underutilised by surrounding residents due to its limited access and poor connectivity from Liverpool CBD.

Figure 2: Moore Point and Liverpool CBD Context
Source: SJB

Planning Background

As described above, the site has been considered part of Liverpool's expansion since 2008 as a CBD expansion area. Since 2014, a series of individual and ad-hoc planning proposals have been submitted to Council relating to specific sites with the Georges River North Precinct. At the time, there was a lack of clarity in strategic planning documents regarding the vision of the LCA and the various character areas within it.

Following the release of the *Greater Sydney Region Plan – A Metropolis of Three Cities* (**Region Plan**, *Western City District Plan* **(District Plan**) and *Liverpool Collaboration Area Place Strategy* (**Place Strategy**), Council indicated that it was prepared to consider a rezoning of land.

The vision for Moore Point as a mixed-use precinct was also advanced with Council's *Local Strategic Planning Statement – Connected Liverpool 2040* (**LSPS**), which provided short-medium term timeframes to rezone the Georges River North Precinct as a mixed-use zone to support the Liverpool CBD and LIP.

Council indicated that a precinct-wide approach should be undertaken for a future rezoning. Due to their convenient land ownership patterns, Coronation Property Co and Leamac Property Group formed the JLG and submitted a consolidated proposal to Council on 15 April 2020 (**RZ-6-2015**).

On 25 November 2020, Council endorsed the PP, subject to providing a few refinements to the Structure Plan. The Council resolution also endorsed the Structure Plan prepared by SJB to guide assessment of future planning proposals in the area.

In December 2020, the PP was forwarded to DPHI for Gateway. DPHI wrote to Council in January 2021 and requested the proposal be submitted once the *Regional Flood Evacuation Analysis* was finalised.

On 2022 March, the *Regional Flood Evacuation Analysis* was completed and the PP was relodged by Council for Gateway on 4 May 2022.

During this period, the NSW Flood Inquiry was established in response to the flooding of the Northern Rivers region. An independent Flood Advisory Panel (**FAP**) was established by DPHI to examine planning proposals already lodged.

The FAP concluded that there was sufficient case-specific merit to allow the proposal to proceed to Gateway, subject to conditions.

On 3 April 2023, DPHI issued a Gateway Determination allowing the PP to proceed to the next stage of the planning process. Following extensive engagement with Council, DPHI and agencies via a Governance Framework, this PP is submitted to Council in response to the conditions set by the Gateway Determination to place the PP on public exhibition.

The Proposal

The PP was initially lodged in April 2020. Since then, the JLG has undertaken significant technical analysis to refine elements of the Structure Plan and PP. Key changes made since 2020 include:

- Refined site area based on new survey information,
- Primary school moved to a central location,
- Heritage administration building, landscape forecourt and entrance columns form part of the new public space entrance sequence,
- Larger portion of existing Factory 1 retained,
- Factory outbuilding structures to be adaptively reused,
- Two pedestrian bridges with refined alignments to accommodate civil engineering and flood parameters,
- Ground plane levels fully coordinated with specialist flooding, civil and landscape input,
- Increased open space from 76,995m^2 to 108,604m^2,
- New flood responsive open space and expansion of public space along Lake Moore to respond to levels,
- Blocks redrafted to optimise built form and public space,
- Increase north-south pedestrian spine width, and
- Reduced dwellings from 12,220 to 10,742 as a result of wider streets and addition/increased open space.

The JLG engaged Yerrabingin in 2021 to prepare an Indigenous Narrative Report. The report establishes Connecting with Country themes for the revised masterplan and public domain. This includes bringing river ecology up and over into the foreshore, including restoration of endemic/native species through naturalised revetment treatment that will support habitat.

Figure 3: Moore Point Structure Plan
Source: SJB

The above refinements have been undertaken in concert with Council's Design Excellence Panel (**DEP**) and advice from DPHI's urban designers.

Amendments to Planning Controls

The changes to the Structure Plan have necessitated several amendments to LLEP 2008, as outlined below.

Element	Planning Proposal (2020)	Planning Proposal (2024)	Justification
Planning Framework			
Land Use	B4 Mixed Use B6 Enterprise Corridor RE1 Public Recreation	MU1 Mixed Use RE1 Public Recreation	Correspond to latest Employment Zone Reforms. Simplified zoning to respond to strategic vision of the Georges River North Precinct as a 'mixed-use' precinct.
Height of Buildings	RL 108 and RL 136	9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136)	Refined building heights to protect heritage assets and land identified for future primary school. It is noted that the proposed height of buildings map has been provided as both a conventional height of building map (measured in m above existing ground level) and an RL height control format to demonstrate compliance with the

Element	Planning Proposal (2020)	Planning Proposal (2024)	Justification
			Obstacle Limitation Surface (**OLS**) height limits in relation to the Bankstown Airport. While DPHI indicated a preference for height in metres, the PP retains an RL as an optimal approach of retaining robustness and flexibility in the Structure Plan.
Floor Space Ratio	4.2:1 (B4 zone) 3.5:1 (B6 zone)	4:1 (entire site) with GFA control applying to identified blocks (see below).	Reflect zoning amendments and facilitate distribution of GFA across blocks to deliver Structure Plan outcomes and density distribution.
Minimum Lot Size	Previously not identified but has existing size of 2,000m^2	1,000m^2	Reflect minimum lot size requirements in Liverpool CBD and to allow subdivision and subsequent stages.
Additional Local Provisions	Division 1A Moore Point including objectives, design excellence, site area to include dedicated land, development authorising preparation of a development control plan, overshadowing of public spaces.	Division 1A Moore Point including objectives, design excellence, site area to include dedicated land, precinct development framework, development authorising preparation of a development control plan, overshadowing of public spaces.	Regulate the application of the GFA across blocks with nominated caps.
Schedule 5	Not proposed.	Amend Schedule 5 heritage listing wording and map for *Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors.*	Correspond to advice from GBA Heritage to reflect retention of the Administration Building and circular driveway, gate columns, Factory 1, part of Factory 2 and industrial outbuildings.
Additional Permitted Uses	Permit light industry, general industry and warehouse or distribution centres in MU1 zone.	Permit light industry, general industry and warehouse or distribution centres in MU1 zone.	To facilitate ongoing industrial use of the land as it transitions to mixed-use for Moore Point
Structure Plan			
Site Area	31.9 hectares	31.4 hectares	Refined based on updated survey information.
Open Space	76,995m^2 (24%)	108,604m^2 (34.5%)	Increased open space provision from 24% of site to 34.5% to satisfy requirements for open space in Council's November 2020 resolution and advice from Council's Design Excellence Panel (**DEP**) and DPHI.
Community Infrastructure	Identified conceptually across Structure Plan	2,400m^2 community and cultural hub. 3,000m^2 indoor recreation centre.	Allocation of community facilities based on additional open space and community needs analysis by ATX Consulting.

Element	Planning Proposal (2020)	Planning Proposal (2024)	Justification
		1,000 capacity primary school.	Inclusion of land for primary school based on discussions with School Infrastructure NSW (**SINSW**).
Bridges	Identified conceptually across Structure Plan	Two pedestrian bridges conceptually identified, connecting into Liverpool Train Station Concourse and adjacent to Liverpool Hospital and Hospital Precinct	While the precise location and design of bridges is ongoing, initial discussions with Transport for NSW (**TfNSW**) and South Western Sydney Local health District (**SWSLHD**) have indicated further investigation at these locations. The JLG will continue to engage with agencies on the bridges to finalisation of the PP.
Dwellings	12,220	10,742	Reduced dwellings based on refinements to density and increase provision of open space and wider streets.
People	24,440	21,484	As above to match revised dwelling yield.

A site-specific Development Control Plan (**DCP**) will be prepared following exhibition, consistent with the Gateway Determination. The site-specific DCP will be informed by the recommendations and findings of the technical reports submitted with the PP, including the Framework Plans submitted with the Urban Design Study (**UDR**).

The DCP will set a high quality vision for the site and lock in the Structure Plan elements of the PP.

Urban Design Methodology

In preparing the PP, a detailed and robust urban design methodology has been developed by SJB to ensure the flexibility of development to evolve in response to infrastructure and policy context, while providing a level of technical testing to confirm future DAs can achieve a high quality outcome.

The project team has developed the Structure Plan and a Test Scheme, described below.

Structure Plan

The Structure Plan sets out the spatial parameters for Moore Point that will remain constant throughout the delivery of the project. This includes the open space network, primary school, foreshore, roads and streets, heritage items to be re-used and development blocks. It has been informed by a range of Framework Plans that have informed its creation.

The Structure Plan (and the Framework Plans) will be the basis for a site-specific Development Control Plan (**DCP**) and represents the fixed spatial and land use outcomes across the site. Key elements on the Structure Plan include:

- Areas to be allocated as publicly accessible open space (with the Georges River Foreshore and part of Lake Moore foreshore to be dedicated to Council as RE1 Public Recreation),
- Heritage quarter including items to be retained and adaptively re-used,
- Location of the future primary school,

- Development blocks to enable future buildings and through-site-links,
- Road network including a collector road and supporting local roads, and
- Potential locations of future bridge landings and connections across the Georges River.

* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

Figure 4: Moore Point Structure Planning Envelope

Source: SJB

Test Scheme

The purpose of the Test Scheme is to demonstrate one of countless potential arrangements of the overall form and scale of Moore Point over its 30-40 year delivery. It is important to acknowledge a masterplan would infer one singular development outcome for the site and fail to recognise the evolution of land use and built form. On this basis, the project team has referred to any masterplan as a Test Scheme.

The purpose of the Test Option is to both allow for technical testing (such as urban design, traffic, economics, flooding, evacuation) and to set a high quality vision for the site. The Test Option is informed by:

- Design concept and intent,
- Site context and conditions,
- Land use and building program,
- Planning policy and technical compliance,
- Internal layout and access,
- Technical advice (engineering, flooding etc), and
- A range of design and planning assumptions.

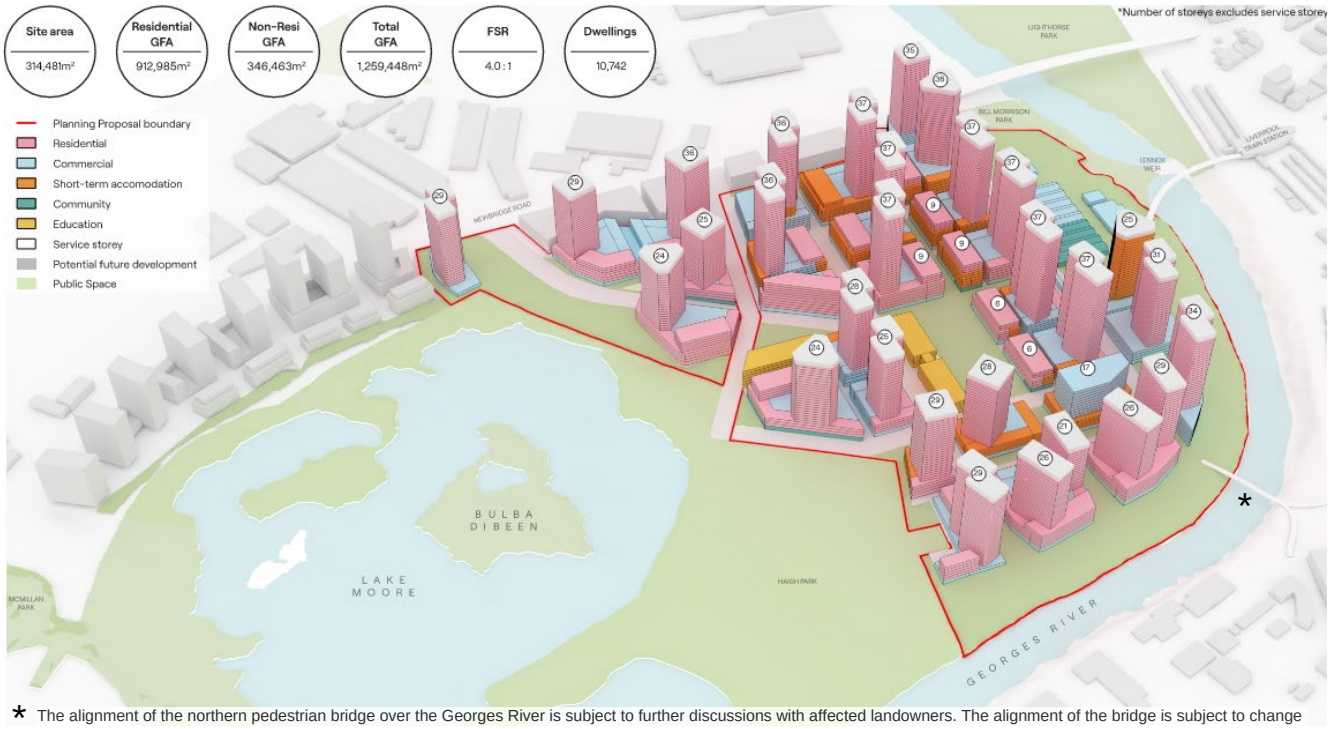


Figure 5: Moore Point Test Scheme

Source: SJB

All built form under the Test Scheme sits entirely within the proposed Structure Plan Envelope.

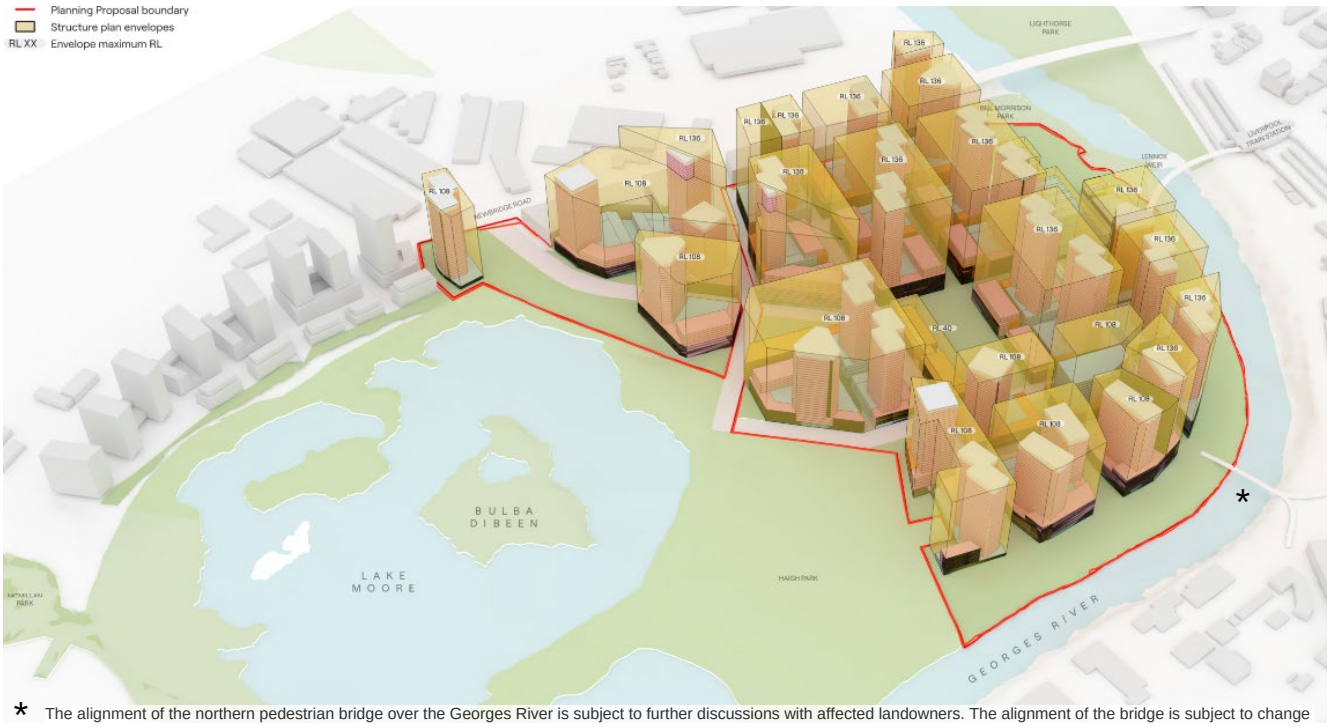


Figure 6: Moore Point Test Scheme with Structure Plan Envelope

Source: SJB

Strategic Merit

The site has a clear strategic line of sight since 2008 and exhibits robust strategic merit, having received endorsement from Council twice and subsequently receiving Gateway Determination.

Moore Point will provide additional housing and jobs and in proximity to the jobs, services, facilities and public transport available in the Liverpool CBD. It gives effect to the Western Parkland City District Plan priorities to deliver a liveable, productive and sustainable Western Parkland City, will assist to strengthen Liverpool CBD as a Strategic Centre and gives effect to the 30-minute city aspiration. Notwithstanding the sites consistency with a plethora of strategic planning policy, a summary of the PP's response key priorities of the District Plan is provided below.

W3 Providing services and social infrastructure to meet people's changing needs

Response: The PP is accompanied by a broad infrastructure package to meet the future resident needs including a Community and Cultural Hub (2,400m^2), Community Indoor Recreation Centre (3,000m^2), 34.5% of the site as publicly accessible open space, future primary school (1,000 capacity). Two pedestrian bridges are proposed to provide critical links to Liverpool CBD and the LIP, improving access to Haigh Park and expanding the infrastructure offering to residents in the wider area.

W5 Providing housing supply, choice and affordability with access to jobs, services and public transport

Response: The PP is capable of delivering approximately 11,000 dwellings within a highly accessible and convenient location. This supporting Test Scheme demonstrates potential for a range of mid-high rise housing options for future residents adjacent to new open space and within walking distance to Liverpool CBD via two bridge crossings.

W6 Creating and renewing great places and local centres, and respecting the District's heritage

Response: The PP will result in significant adaptive re-use and interpretation of the site's existing heritage assets including the Administration Building, Factory 1, part of Factory 2 and outbuildings along the Georges River. This will create a new heritage quarter and become a focal point for the community to interpret and interact with the site's former use.

Figure 7: Visualisation of heritage quarter
Source: SJB

W7 Establishing the land use and transport structure and deliver a liveable, productive and sustainable Western Parkland City

Response: The PP will support active and sustainable modes of transport within the site and its integration with the surrounding transport network. A range of different pedestrian and cyclist facilities are proposed to provide choices and encourage active transport for all ages and abilities. The PP will provide for a bus interchange, which will become the focal point of bus connectivity servicing high-capacity movements to Moore Point.

W12 Protecting and improvement the health and enjoyment of the District's waterways

Response: The PP will activate the Georges River and Lake Moore riverfront to create an interconnected network of open space including pedestrian and cycle paths, tree canopy, riverfront public spaces with potential for decks and pontoons to allow direct engagement with the riverfront by extending out to the Georges River. This has been informed by detailed riparian, aquatic and public domain planning to support the health and enjoyment of the existing foreshore.

Figure 8: Visualisation of Lake Moore
Source: SJB

W15 Increasing urban tree canopy cover and delivering Green Grid connections

Response: The proposal includes a precinct wide approach to deep soil and canopy cover, setting a 22% deep soil target and 30% canopy cover target. The location of deep soil provides convenient links to new open space on the Georges River foreshore and towards Haigh Park and supports Sydney's Green Grid objectives.

W18 Delivering high quality open space

Response: The PP includes provision of approximately 10.8 hectares or 34.5% of the site as publicly accessible open space. This includes a district scale riverfront park (to be dedicated as RE1 Public Recreation), a central park, local parks, pocket parks and linear parks.

Place Strategy

Under the Place Strategy, the site is situated within the Georges River North Precinct, which is identified as 'mixed use'. The mixed-use area is defined as:

> *a mixture of commercial, retail, residential and community uses that provide sustainable employment, that is complementary to and not in competition with, the commercial core.*

Response: The PP is directly responding to the vision of the Georges River North Precinct by providing a mix of land uses, heights and floor space amendments that will facilitate a combination of uses across the area.

LSPS

The LSPS recognises the Georges River North Precinct as future residential/mixed-use to support the CBD and Innovation Precinct as advanced through the Place Strategy.

Key actions emerging from the LSPS that directly relate to the preparation of a PP for the site include:

> *Investigate amendments to LEP to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages. (short to medium term).*

Response: The PP is entirely consistent with this action and is proposing to rezone majority of land in the Georges River North Precinct for mixed-use and recreational purposes, which is enshrined in the proposed LEP provisions, mapping and Structure Plan.

Overall, the site exhibits robust strategic merit at a strategic and local planning level.

Site Specific Merit

The PP is considered to achieve site-specific merit as it proposes a land use outcome, density and open space network that is compatible with the current and emerging context, achieves a high quality placemaking outcome and is responsive to environmental characteristics.

The site-specific merits of the proposal are:

Strategically prominent site in Strategic Centre

The project represents the largest privately-led urban renewal project in Australia, and is of strategic importance to the growing expansion and development of Liverpool as a river city. The scale of the PP and the Structure Plan demonstrate an outcome that is integrated across multiple technical disciplines to ensure key elements of the PP can be achieved including an accessible and revitalised foreshore, adaptive re-use of heritage assets, provision of community and school infrastructure, solar amenity to key spaces, and built form and public domain that can deliver a high standard of architectural design.

Complementary to Liverpool CBD

The PP provides an opportunity for the Liverpool CBD to grow and achieve critical mass. When including the commercial floorspace envisaged in the PP, along with others in the pipeline, the Liverpool CBD would effectively become akin to the St Leonards/Crows Nest office market at approximately 372,000m^2. It could play a similar role to the St Leonards/Crows Nest office market, which complements the St Leonards Health and Education Precinct. The proposal will provide 23,503 jobs during operation, providing significant employment and flow on impacts to the wider LCA.

Unsurpassed Infrastructure Investment

The total value of infrastructure to be delivered exceeds over $400 million and will serve the needs of not only future residents at Moore Point, but those in Liverpool CBD and the wider region. These include provision of a Community and Cultural Hub (2,400m^2), Community Indoor Recreation Centre (3,000m^2), 34.5% of the site as publicly accessible open space, future primary school (1,000 capacity), construction of new local roads supporting active and public transport movements, two pedestrian bridges to the western side of the Georges River and creation of a significant heritage quarter to support retail and cultural uses.

Figure 9: Visualisation of central park
Source: SJB

Significant Open Space Offering

The proposed public open space offering is significant and well-beyond the standards for major rezonings of State-led precincts, which typically provide open space provision in the order of 15-17%. The Structure plan demonstrates 34.5% of the site as public open space. When further analysed from a policy perspective, 51.64% of the site will be public space (31.2% parks and 19.84% urban places).

Robust Urban Design Analysis

The PP is supported by a highly detailed and rigorous urban design analysis, which provides an assessment of all built form within the Test Scheme against the *Apartment Design Guide* (**ADG**). The level of testing undertaken is akin to DA stages and demonstrates a high quality built form and amenity outcome can be achieved on individual development lots including compliance with solar access, natural ventilation, communal open space, deep soil, tree canopy and building separation. The analysis demonstrates acceptable levels of overshadowing, having regard to the strategic context of the site and surrounding land uses. Future DAs will be required to address design excellence considerations consistent with the provisions proposed in the LEP.

Improved Foreshore Accessibility and Revitalisation

The proposal will support the rehabilitation, revetment and activation of the Georges River foreshore and Lake Moore. The PP is supported by an interdisciplinary suite of technical reports that have informed the placemaking response to the foreshore including aquatic ecology, biodiversity, existing riverbank conditions (currently poor), flooding and public domain character. The PP will improve the quality and amenity of this critical area within the heart of Liverpool for residents and visitors to enjoy.

Figure 10: Visualisation of Georges River foreshore
Source: SJB

Revitalisation and Celebration of Heritage

The PP will support the adaptive re-use and revitalisation of existing heritage assets currently supporting industrial uses on the site. The Structure Plan outlines a number of design principles and strategies to support and celebrate local heritage and become a new focal point for the community. The PP is supported by a heritage assessment, which concludes that subject to the implementation of recommendations outlined, the proposal is supported from a heritage perspective.

Staging and Infrastructure

The PP has considered the gradual staging of development and the provision of infrastructure to support new homes over the 30-40 year lifespan of the proposal. The PP will provide substantial front-loading of infrastructure in the early stages of the project. Approximately 60% of the total infrastructure spend will be provided at the completion of Stage 1 with only 40% of dwellings delivered, and an additional 33% of total infrastructure spend at the completion of Stage 2 (70% of dwellings delivered for the project.

Environmental Considerations

The PP is supported by an extensive PP package that outlines various potential environmental matters however, there is no barrier that would preclude rezoning and the site's redevelopment (subject to the implementation of suitable mitigation measures and recommendations).

A summary of findings from the technical assessments are addressed below.

Biodiversity

The PP will require removal of approximately 0.21 ha of plant community types *Cumberland Bangalay x Blue Gum Riverflat Forest*, 0.46 ha of *Coastal Valleys Swamp Oak Riparian Forest* and 1.44 ha of *Cumberland Blue Box Riverflat Forest*.

The removal of 0.47ha of native planted vegetation was assessed using the *Biodiversity Assessment Method* (**BAM**) *2020 Appendix D: Streamlined assessment module-Planted native vegetation*. The removal of 6.52 ha of exotic and ornamental vegetation does not require assessment.

The PP outlines the measures taken to avoid, minimise and mitigate impacts on the vegetation and species habitat present within the development footprint and measures to minimise impacts during construction and operation of the development

Aquatic Ecology

Aquatic assessment of the site concludes that there are no threatened fish or turtle species identified under the *Environmental Protection Biodiversity Conservation Act 1999* (**EPBC Act**) Act that are likely to be within the study area or impacted by the proposal.

The area is identified as 'key fish habitat' and 'fair' fish community status under the *Fisheries Management Act 1994* (**FM Act**). There is no registered critical habitat. No threatened fish or seagrass population are considered likely to be in the study area or impacted by the proposal, no harm to marine vegetation is expected and no indirect or significant impacts are expected to downstream habitats and protected areas.

Overall, the proposal will result in significant change to the existing land use and landform along the foreshore of the Georges River, but with the intent to improve bank stability and riparian/aquatic habitat. The river and adjacent man-made Lake Moore have been heavily modified and disturbed by historic dredging, impoundment, bank slumping and weed invasion.

The quality of riparian and aquatic habitat along the riverbank is low-moderate, and higher in Lake Moore where mangroves, coaster wetlands and seagrass occur.

Flooding

During significant floods there is potential for floodwaters to 'spill' from the Georges River leading to inundation of low-lying areas of the site along the western and northern boundaries.

All developable areas and internal roads have been raised to be above the predicted peak 1 in 500 Annual Exceedance Probability (**AEP**) flood level. This increases the flood immunity of the development and allows evacuation to occur by vehicle to Newbridge Road and by foot over two footbridges during floods up to and including the 1 in 500 AEP event. It has also been designed to improve bank stabilisation and provide safe access to the foreshore of the river.

The PP is compatible with the flood risk at the site and is designed to ensure negligible adverse flood impacts in floods up to and including the 1% AEP event. It has also been shown to have minimal impact on flood characteristics in rarer events up to the 1 in 500 AEP flood.

Evacuation

There are four proposed vehicular access points, three of which connect to Newbridge Road and one to Haigh Avenue. Two pedestrian bridges are also proposed that cross the Georges River and provide pedestrian access to Liverpool Train Station and Liverpool CBD.

The flood modelling completed indicates that most areas of the site will not experience inundation due to flooding of the Georges River in events up to and including the 1 in 500 AEP flood. Evacuation from the development would also still be possible via vehicle or pedestrian evacuation routes.

Once flooding at the site exceeds a 1 in 500 AEP event, the bridges will no longer be accessible and shelter in place will be required for anyone remaining on site. For those remaining, residents will be able to shelter above the level of the Probable Maximum Flood (**PMF**) either within their apartments or at dedicated communal areas within the apartments and communal areas.

Riparian

From a riparian perspective, bank erosion was found to be ongoing and widespread on the steep western and northern riverbanks fronting the Georges River, including slumping at the weir spillway, slip failures and bank slumping resulting in localised sand deposition and collapsed trees, undercutting of the toe of the bank – exposing tree roots and predisposing them to collapse.

The PP seeks to improve and transform the Georges River and Lake Moore foreshore to create a destination public open space which will serve the residents of Moore Point and Liverpool LGA.

A riparian assessment has been undertaken that provides a review of the proposed development and comprehensive assessment against the requirements of the *Water Management Act 2000* (**WM Act**) and confirms that the proposal is aligned with and compliant with the provisions and objects of the WM Act.

This is supported by an additional foreshore strategy that will provide a control framework for future design and planning considerations at subsequent stages of development.

Heritage

Part of the site (3 Bridges Road) contains a local Heritage item under LLEP 2008 (**I76**), known as the *Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors*. The HIA considers the proposed Structure Plan, land uses and future built form and provides a detailed assessment of potential heritage impacts. Items considered include:

- Fabric and spatial arrangement of existing heritage structures,
- Setting, views and vistas, including views to, from and within the subject site,
- Landscaping response,
- Surrounding future land uses,
- Demolition, and
- Moveable heritage (retention and display of historic equipment).

The assessment confirms that the PP provides an appropriate response to the heritage values on site in terms of the retention and adaptive reuse of buildings and landscape elements.

Contamination

Historically the site has been cleared and the landscape has been raised with fill material (between 2m, 4m and up to 7.5m in thickness) and flattened as part of historical clearing and development. The site is currently zoned E4 General Industrial and is historically and currently associated with potentially contaminating industrial uses, such as, farming with potential chemical spraying of herbicides and pesticides, manufacturing of plastic, electrical cable and metal products, the production of polyurethane foam products and mechanical and smash repair businesses.

The contamination assessment supporting the PP includes a high level Conceptual Site Model (**CSM**) which seeks to assess plausible pollutant linkages between potential contamination sources and potential receptors. The CSM incorporates known impacted areas and contamination sources are outlined in the PP.

A detailed, site-specific RAP (**RAP**) is required for each site before the commencement of site remediation. The site-specific RAP must include an Unexpected Finds Protocol (**AFP**) to provide guidance on addressing unexpected contamination that may be identified during the course of site redevelopment.

Air Quality

The main sources of air pollutants in the area surrounding the site include emissions from local anthropogenic activities (such as motor vehicle exhaust) and industrial activities. A review of air quality data from the Liverpool monitoring station shows that the average annual particulate matter (PM10 and PM2.5), sulfur dioxide (**SO_2**) and nitrogen dioxide (**NO_2**) levels were below the relevant criterion. 24 hour exceedances were observed in some instances.

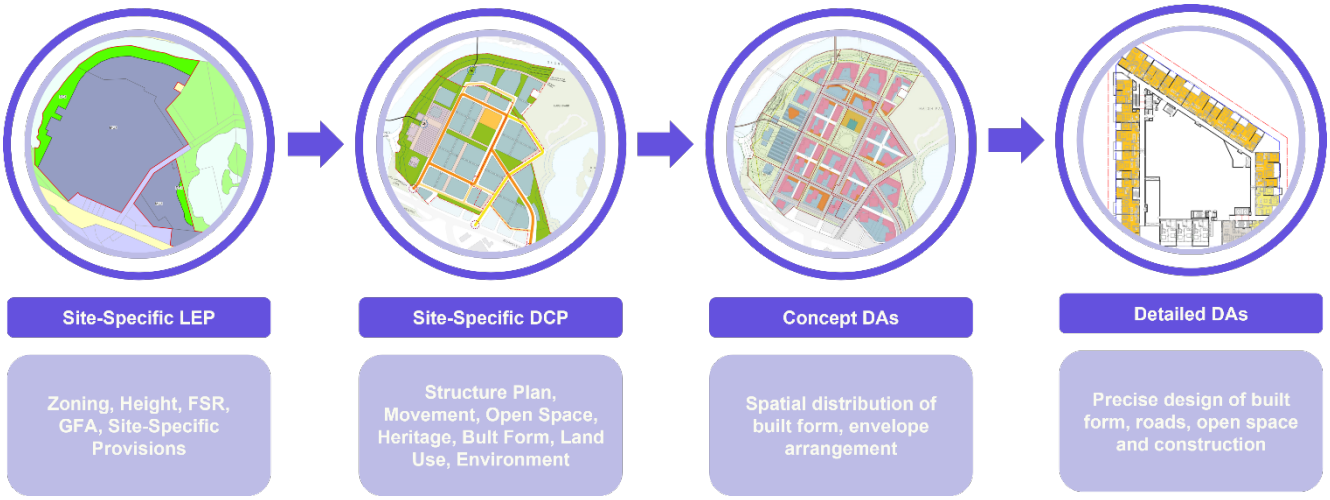
The proposal will remove industrial activities and to replace them with commercial and residential activities which are likely to have lower particulate emissions. Generally, it is expected that the redevelopment of the existing industrial land would lead to a net reduction in particulate levels in the vicinity of the site as industrial activities are removed from the area. The proposed residential dwellings have adequate setbacks from existing major roads.

The assessment concludes there is no reasonable indication of any likely air quality impacts as a result of the PP and the proposed development is supported on air quality grounds. A more detailed assessment of air emissions in the vicinity of the site is recommended at the DA stage as part of the assessment process.

Planning Process and Implementation

The proposed planning framework and implementation has been modelled on successful urban regeneration precincts of similar scale and significance including Western Gateway Precinct, Waterloo Estate (South) and Carter Street. The process includes:

1. **Site-Specific LEP** – Zoning, height, FSR, block GFA, site-specific provisions,
2. **Site-Specific DCP** – Structure Plan, movement, open space, heritage, built form, land use,
3. **Concept DAs** – Spatial distribution of built form and envelope arrangements, and
4. **Detailed DAs** – Precise design of built form, roads, open space and construction details.



Conclusion

The PP will realise a decade of strategic planning policy and studies to support the rezoning of land east of Liverpool CBD to mixed-use. It will result in the delivery of much needed community infrastructure, homes, jobs and open space amenity to support the evolution and natural expansion of Liverpool CBD over the next 30-40 years.

1 Introduction

This Planning Proposal Report (**PPR**) has been prepared by Mecone Group (**Mecone**) on behalf of Coronation Property and Leamac Property Group, known as the Joint Landowner Group (**JLG**) to support PP-2022-1602 for the 31.4 hectare (**ha**) landholding at Moore Point, Liverpool (the **site**).

This PPR responds to the Gateway Determination conditions issued by the Department of Planning Housing and Infrastructure (**DPHI**) on 3 April 2023 and pertains to land owned and under the control of the JLG.

It reflects over a decade of engagement with stakeholders to realise the long-standing objective of Liverpool City Council (**Council**) to expand Liverpool CBD eastward by transitioning industrial land at Moorebank to mixed-use and recreational uses. This has been entirely consistent with the strategic planning framework set at both State and local levels.

Figure 11: Aerial of Moore Point
Source: JLG

Strategically set on the eastern side of the Georges River, Moore Point will result in a complete transformation of Liverpool CBD. It will unlock additional capacity to expand Liverpool's footprint by providing the potential for 11,000 homes, 23,500 jobs (focused on office, tourism, community entertainment, leisure and retail) and 34.5% of publicly accessible open space.

The proposal will be supported by a significant infrastructure investment and public benefits package, comprising a mix local, State and privately delivered infrastructure to support the existing and new community. This includes two pedestrian bridges to the site and Georges River foreshore, a heritage precinct, a 1,000 capacity primary school, new community facilities, intersection upgrades on Newbridge Road and improved active transport links to Haigh Park and beyond.

To achieve the strategic objectives of Council, the PP seeks the following amendments to the *Liverpool Local Environmental Plan 2008* (**LLEP 2008**)

- Rezone the site from E4 General Industrial to MU1 Mixed Use and RE1 Public Recreation,
- Increase FSR from 0.5:1 to 4:1 and set maximum gross floor area for blocks,
- Introduce an RL height for the site and increase the maximum height of buildings to from 18m and 15m to 9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136),,
- Amend the minimum lot size from 2,000m^2 to 1,000m^2,
- Introduce Division 1A to manage site specific provisions including:
    - Objectives for development in Moore Point,
    - Land to which this division applies,
    - Precinct development framework,
    - Site area of proposed development includes dedicated land,
    - Development authorising the preparation of a development control plan,
    - Design excellence,
    - Overshadowing of certain public spaces,
- Amend Schedule 5 heritage listing wording and map based on advice from GBA Heritage, and
- Introduce new subclause in Schedule 1 to permit additional uses.

1.1 Report Structure

The PP has been prepared in accordance with:

- Section 3.33 of the *Environmental Planning and Assessment Act 1979* (the **EP&A Act**); and
- DPHI's *Local Environmental Plan Making Guideline* dated August 2023 (the **Guideline**).

Specifically, the Planning Proposal includes the following information:

- A description of the planning background and planning proposal history,
- A description of the site in its local and regional context,
- A statement of the objectives or intended outcomes of the proposed instrument,
- An explanation of the provisions that are to be included in the proposed instrument, and
- The justification for those provisions and the process for their implementation including:
    - Whether the proposed instrument will comply with relevant directions under Section 9.1,
    - The relationship to the strategic planning framework,
    - Environmental, social and economic impacts,
    - Any relevant State and Commonwealth interests, and
    - Details of the community consultation that is to be undertaken before consideration is given to the making of the proposed instrument.

1.2 Proponent and Project Team

This PP is supported by a comprehensive suite technical reports. **Table 1** identifies the Project Team

Table 1: Proponent and Project Team

Report	Consultant	Appendix
Planning Proposal Report	Mecone	
LEP Mapping	Mecone	Appendix 1
Connecting with Country Concept Report	Yerrabingin	Appendix 2
Urban Design Re**port**	SJB Architects	Appendix 3
Place Design Framework	Hatch Roberts Day	Appendix 4
Public Domain and Landscape Report	Turf	Appendix 5
Open Space and Community Needs Assessment	ATX Consulting	Appendix 6
Flood Impact Assessment	Advisian	Appendix 7
Flood Emergency Response Plan	Worley	Appendix 8
Economic Impact Assessment	Atlas Economics	Appendix 9
Statement of Heritage Impact	GBA Heritage	Appendix 10
Biodiversity Development Assessment Report	Eco Logical Australia	Appendix 11
Aquatic Ecology Assessment Report	Eco Logical Australia	Appendix 12
Riparian Assessment	Northrop	Appendix 13
Cut and Fill Strategy	Northrop	Appendix 14
River Foreshore Vision and Strategy	Mecone	Appendix 15
Part 1 Contamination Assessment	EI Australia	Appendix 16
Part 2 Contamination, Acid Sulfate Soil Management Plan	EI Australia	Appendix 17
Sustainability Statement	Mott McDonald	Appendix 18
Servicing Infrastructure Report	Mott McDonald	Appendix 19
Summary of Regional and Local Transport Impact	Ramboll	Appendix 20
Infrastructure Delivery Plan	Mecone	Appendix 21
Aeronautical Assessment	Strategic Airspace	Appendix 22
Air Quality Assessment	Todoroski Air Sciences	Appendix 23
Health Strategy	Lineaire	Appendix 24
Aboriginal Cultural Heritage Assessment Report (draft)	Austral	Appendix 25

2 Site Description

2.1 Country

Yerrabingin have prepared a Connecting with Country Concept Report (**Appendix 2**), which documents the Aboriginal history and use of the site. This has been used to inform Country narratives for the PP.

The clan group around Liverpool was the Cabrogal. The Cabrogal were named after the cahbro, which they harvested and ate from the brackish parts of the Georges River.

The site's landscape was both rich with resources and cultural life, intersected by forest on the ridges and area of gathering and prospect over Country. Casuarina swamp forests, salt marsh and mangrove mudflat ecologies containing food and medicines essential to the health of Country and its kin.

Cabrogal Country was a known meeting place, with historic references noting the land in the Liverpool LGA was used by the Darug, Dharawal and Gandangara people.

During early colonisation, the Georges River was a place for Aboriginal people from all over Sydney to regroup. In the 1960's Cabrogal Country became a meeting place for Aboriginal people to meet and maintain social bonds under the Aborigines Protection Board. The Liverpool Weir was a popular place to socialise, swim, fish and learn about those who had come before them.

Figure 12: Panoramic of Lake Moore
Source: JLG

The PP is supported by a draft Aboriginal Cultural Heritage Assessment (**ACHA**) (**Appendix 25**), which assesses the potential for archaeological potential across the site, impacts and mitigation measures for future renewal.

2.2 The Site

Moore Point is located east of Liverpool CBD across the Georges River in the suburb of Moorebank. It is located within the Liverpool Local Government Area (**LGA**) and comprises 31.4 hectares of the 38 hectare Georges River North Precinct. An aerial of the site and its setting is provided in **Figure 3**.

Figure 13: Moore Point looking south west to Liverpool CBD
Source: SJB

The site is defined by the Georges River along the western and northern edge and Lake Moore along the eastern edge. It is located directly across the river from Liverpool CBD, Liverpool Train Station and Bus Interchange and the Liverpool Innovation Precinct (**LIP**). The site is adjacent to Haigh Park, which is a significant, yet poorly utilised open space area due it is isolated location and limited pedestrian access from the surrounding area.

The site has been historically utilised for agricultural and then industrial land uses and contains several industrial warehouses and associated facilities. Part of the site contains items of local heritage significance including the Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors.

2.2.1 Land Ownership

The PP pertains to land owned by the JLG. **Table 2** summarises the landholding and ownership arrangements of the site. Refer to **Figure 4**.

Importantly, the site comprises 31.4 ha of the 38 ha Georges River North Precinct (**GNRP**), as defined by strategic planning documents. The remainder of the landholdings that makeup the Precinct relates

to individual landholdings predominantly located on the eastern tail of the Precinct along Newbridge Road.

Table 2: Land Ownership Summary

Address	Legal Description	Site Area (approx.)	Owner
11 Bridges Road, Moorebank	Lot 201 DP 1009044	6.13 ha	Coronation Property Co
5 Bridges Road, Moorebank	Lot 100 DP 775780	4.17 ha	Coronation Property Co
16 Bridges Road, Moorebank	Lot 1 DP 329572	0.0646 ha	Coronation Property Co
8 Bridges Road, Moorebank	Lot 111 DP 1133744	3.17 ha	Coronation Property Co
6 Bridges Road, Moorebank	Lot 10 DP 875626	0.64 ha	Coronation Property Co
361 Newbridge Road, Moorebank	Lot 101 DP 82714	0.97 ha	Coronation Property Co
3 Bridges Road, Moorebank	Lot 200 DP 1009044	16.65 ha	Leamac Property Group

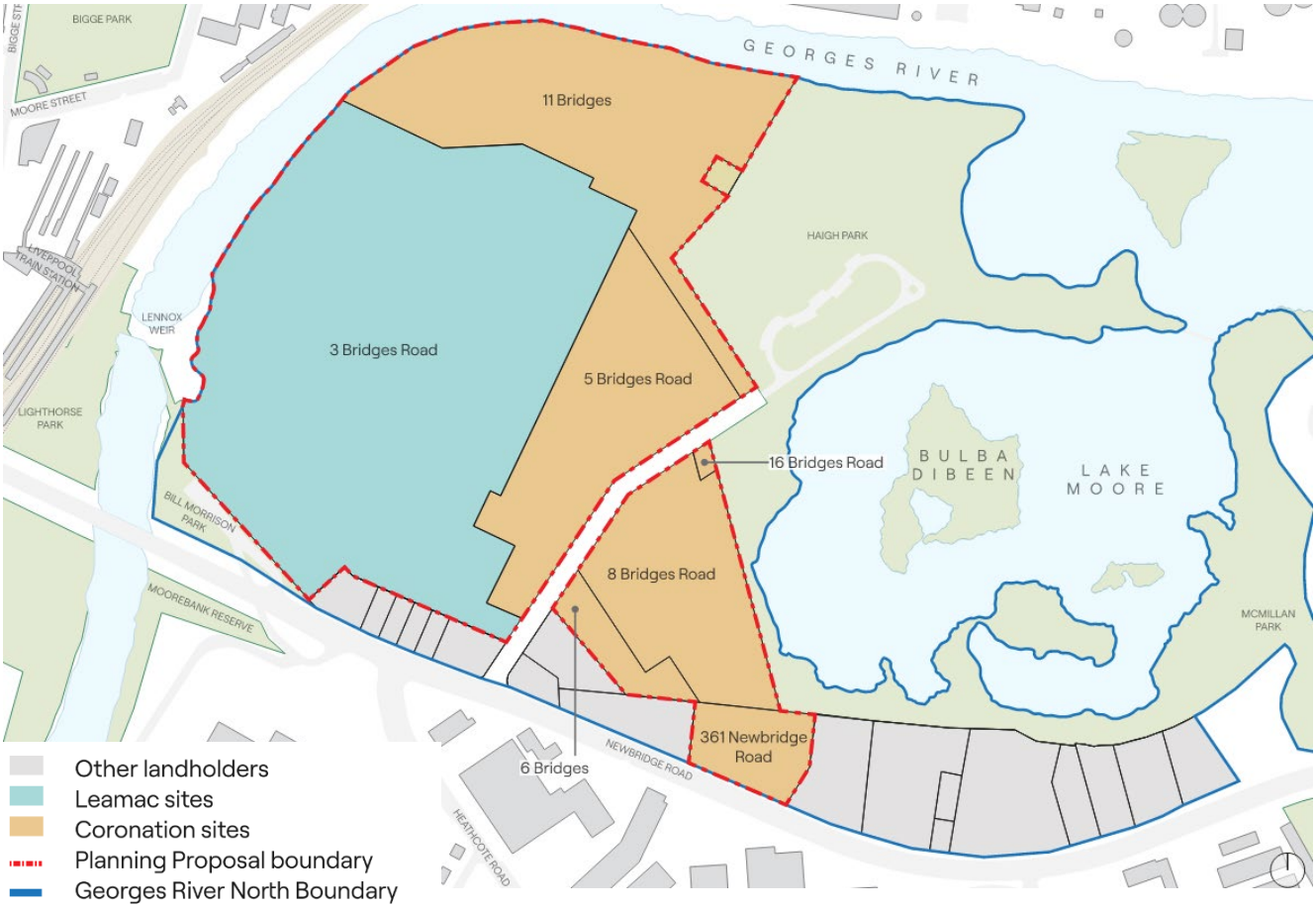


Figure 14: Moore Point and the Georges River North Precinct

Source: SJB

2.3 Environmental Features

2.3.1 Biodiversity

The site is bound by the Georges River to the north and west and Lake Moore to the east. The most distinctive landscape areas are situated along the outer perimeter of the site, namely the riparian edges along the Georges River and Lake Moore, which are distinguished by denser native tree canopies.

The vegetation state of the site is currently in poor condition. It contains planted native canopy and shrub species native to NSW however, not considered locally indigenous.

Large areas throughout the site has been previously cleared of native vegetation, or impacted through the dumping of soil and modification of terrain. The site supports grasslands dominated by exotic grasses, herbaceous and woody weeds. Refer to **Figure 5**.

Notable Plant Community Types (**PTCs**), which are predominantly situated along the rivers edge include *Cumberland Bangalay x Blue Gum Riverflat Forest, Cumberland Blue Box Riverflat Forest, Coastal Valleys Swamp Oak Riparian Forest*. Refer to **Figure 6**.

Figure 15: Native and exotic vegetation
Source: SJB

Figure 16: Vegetation types
Source: SJB

The PP is supported by Biodiversity Development Assessment Report (**BDAR**) prepared by Eco Logical Australia (**Appendix 11**), which provides information on existing fauna and flora at the site.

2.3.2 Georges River and Lake Moore

The quality and stability of the Georges River and Lake Moore has changed significantly since the 1800s. Once the area was settled, it was initially used for agricultural and horticultural uses. In the 1940s onwards, the land was industrialised, extensively cleared and used for a range of purposes including a cable manufacturing facility and sand mining.

The industrial uses resulted in significant alterations to the morphology of the site, including the formation of Lake Moore, which did not exist until the 1970s. Other industrial uses from the 1970s onwards have resulted in additional fill and clearing of vegetation.

The Georges River frontage is steep, unstable and eroding. Soil and contaminated material slumps into the river and the river is migrating landwards over time, creating ongoing instability. Relatively poor-quality vegetation exists on this frontage. Refer to **Figure 7**.

Figure 17: Erosion on the eastern side of the Georges River
Source: Georges Riverkeeper

The Lake Moore frontage has gentle banks and is stable and well-vegetated and is identified as containing coastal wetlands. The site is subject to flooding however, this only occurs in significant events with high energy forces along the Georges River frontage.

The PP is supported by Riparian Assessment prepared by Northrop (**Appendix 13**), which provides additional analysis on the existing condition of the river edge and how the PP seeks to stabilise the foreshore for recreational purposes.

2.3.3 Heritage

Part of the site (3 Bridges Road) contains a local Heritage item under LLEP 2008 (**I76**), known as the *Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors*. The buildings (**Figure 8**) include:

- A two storey Administration Building that fronts the main entrance to the site from Haigh Avenue,
- A two storey ‘gatehouse’ entrance building,

- Large industrial buildings that have clerestory windows, top lit either by ‘butterfly’ or saw-tooth trusses that provide natural top light,
- A series of smaller ancillary buildings along the riverside eastern boundary, including a Powerhouse, Engineering Workshop, a Boiler house and an Engineering Store, and
- Smaller industrial buildings along the north side of the site.

Figure 18: Existing heritage buildings at 3 Bridges Road
Source: GBA Heritage

The site is surrounded by several local and State heritage items and conservation areas. Notably, the Liverpool Weir adjoins the site to the west, which is one of the oldest structures in NSW and functioned as a source of fresh water for the town and hinterland.

Notable heritage items include:

- Liverpool Weir (State) (**01804**),
- Conservation Area – Bigge Park (local) (**C01**),
- Liverpool College (**TAFE**) site, including Blocks A-G, chimneystack, fences, gatehouse and archaeology (State) (**I80**), and
- Lighthorse Park (local) (**I70**).

The PP is supported by a Statement of Heritage Impact (**SoHI**) prepared by GBA Heritage (**Appendix 10**), which provides additional information on the site’s existing heritage context and proposed adaptive re-use approaches.

2.3.4 Flooding

The site sits within the Georges River floodplain upstream of Lake Moore and Anzac Creek. The site is located downstream of the Newbridge Road bridge crossing and to the east of the Liverpool CBD.

The site is elevated above the Georges River and Lake Moore with typical elevations across the site ranging between 8.6 and 9.3m Australian Height Datum (**AHD**). A maximum elevation of 12.5mAHD occurs along the southern boundary of the site adjacent to Newbridge Road. Areas of lower lying land are generally limited to the perimeter of the site along the Georges River banks. Refer to **Figure 9**.

During significant floods there is potential for floodwaters to 'spill' from the Georges River leading to inundation of low-lying areas of the site along the western and northern boundaries. During major events such as a 1% Annual Exceedance Probability (**AEP**) flood, there is potential for floodwaters to flow through the site towards Lake Moore to the east.

A detailed Flood Impact Assessment (**FIA**) and Flood Emergency Response Plan (**FERP**) have been prepared by Worley Consulting (Advisian) and were submitted to DPHI prior to submission in accordance with Gateway Determination Condition 2.

The flood analysis for the site has been the subject of detailed modelling consistent with the scope of requirements set by the 2022 NSW Flood Inquiry and the Flood Planning Advice Panel.

These reports are included in **Appendix 7** and **Appendix 8**.

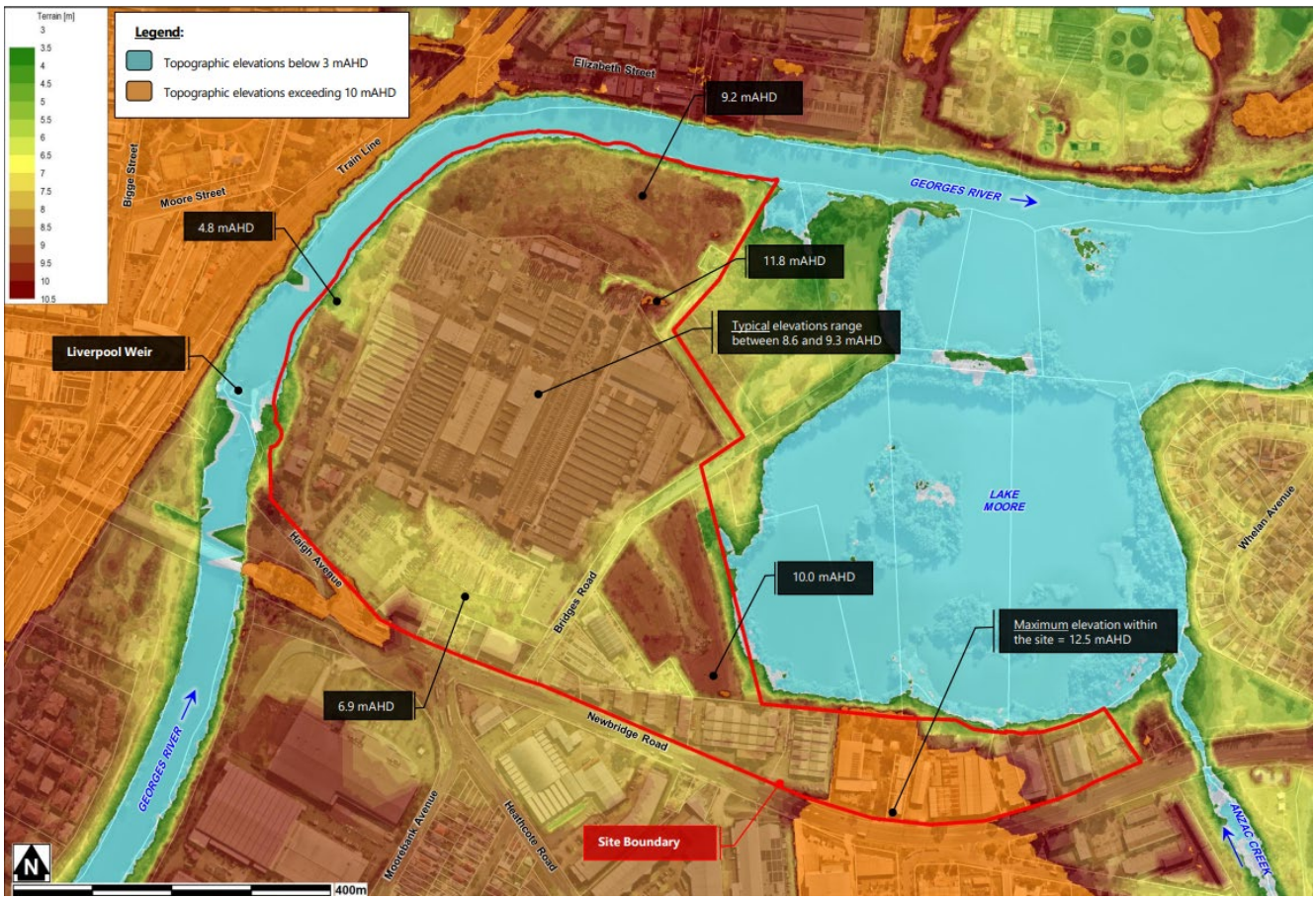


Figure 19: Existing topography across the site and surrounds
Source: Advisian

2.4 Summary of Site Features

Table 3 overview of the existing site features and key attributes which have been considered as part of the PP.

Table 3: Site Features Summary

Item	Description
Site Area	Approximately 31.4 hectares.
Topography	The site is primarily flat, with topography falling steeply along the Georges River bank areas (along western and northern boundaries), and falling gradually towards Haigh Park and Lake Moore the east.
Existing Uses	The site has been historically utilised for industrial land uses and contains several industrial warehouses, ancillary structures and hard stand. Part of the site contains heritage items including the Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors.
Vegetation	The site has been significantly altered for industrial uses. Vegetation is observed towards the perimeter of the site (to the west, north and east) nearest to the Georges River, Haigh Park and Lake Moore. The Georges River foreshore bank is currently in poor condition and has seen evidence of erosion.
Street Frontages and Access	The site benefits from existing street frontages to Newbridge Road and Bridges Road. 3 Bridges Road is currently accessed from Newbridge Road which includes a left in, left out arrangement (from the easterly travel lanes) and an underpass which provides access if travelling west. 361 Newbridge Road has direct driveway access Newbridge Road. Bridges Road provides access to 5, 6, 8, 11 and 16 Bridges Road.
Surrounding Context	The site is uniquely positioned in Liverpool Collaboration Area and provides excellent proximity to a range of infrastructure, jobs and services. Development to the south on the opposite side of Newbridge Road is developed with a mix of low-rise industrial developments and detached residential dwellings. Development to the west on the opposite side of the Georges River is Liverpool CBD, Train Station and Bus Interchange and Shepherd Street Precinct, which contains a mix of high-density mixed use, residential and commercial developments. Development to the north on the opposite side of the Georges River is Liverpool Hospital and a range of educational institutions including Liverpool Boys/Girls High School and TAFE NSW Liverpool.
Public Transport Access	The site is located within 200m radius of Liverpool Train Station and Bus Interchange. Liverpool Train Station is served by the T2 Inner West and Leppington Line, T3 Bankstown Line and the T5 Cumberland Line. The station connects Liverpool to a range of centres including Parramatta, Bankstown, Strathfield, Blacktown and Sydney CBD. Liverpool Bus Interchange provides over 45 bus services connecting Liverpool CBD across Metropolitan Sydney. During the AM and PM peak periods, the interchange services approximately 110 bus movements during peak hour across all the stands.

2.5 Strategic Setting

Moore Point is located directly east of Liverpool Central Business District (**CBD**) on the opposite side of the Georges River. The CBD is defined by existing commercial, mixed use and retail developments with heights up to and over 100m. Liverpool CBD has steadily grown over the past decade, with 13,000 jobs, it is a sizeable commercial centre.

Much of the new employment in the vicinity has been generated by the role of the LIP, with over 96% of jobs recorded over 2011-2021 being in health and education. The growth in health and education industries indicates synergies between Liverpool CBD and the surrounding employment precincts.

There have been several notable development projects in Liverpool CBD (completed or under construction) including:

- **Liverpool Civic Place** – $195 million development including new Council offices and Council Chambers, new city library (5,000m^2) and community hub, childcare facility, new civic plaza.
- **Liverpool Hospital Redevelopment** - $790 million redevelopment of Liverpool Hospital and a new education and research hub. It will provide expanded clinical services, public spaces, car parking, integrated research and teaching.
- **Paper Mill Precinct** - $500 million redevelopment along the Georges River including new residential buildings, adaptive re-use of the existing Paper Mill building into 'The Paper Mill Food'.

While Liverpool CBD has expanded as a primary employment core it has also shifted towards additional mixed-use outcomes. The vision for Moore Point is to be a mixed-use precinct with recreational amenity provided along the Georges River foreshore. This is seen to complement the expansion of Liverpool CBD (as recognised in LLEP 2008).

The Western Sydney International Airport is due to open in 2026 and the site will support over 200,000 new jobs in the Western Parkland City and become a high-skilled hub across aerospace, defence, manufacturing, healthcare, freight, logistics and research industries.

Liverpool CBD and Moore Point are uniquely positioned to capitalise on the Western Sydney International (Nancy-Bird Walton) Airport, Western Sydney Aerotropolis and the LIP. Refer to **Figure 10**.

Figure 20: Moore Point strategic setting
Source: SJB

2.6 Planning Context

2.6.1 Statutory Planning Context

LLEP 2008 is the principal Environmental Planning Instrument (**EPI**) that applies to development in the LGA. **Table 4** provides an overview of the key provisions which currently apply to the site**.**

Table 4: LLEP 2008 Summary

Provision	Description
Land Use Zone	The site is zoned E4 General Industrial.
Cl 4.1Minimum Lot Size	The site has a minimum lot size control of 2000m^2.
Cl 4.3 Height of Buildings	The site has maximum building heights of 15m and 18m.
Cl 4.4 Floor Space Ratio	The site has a maximum floor space ratio of 0.75:1.
Cl 5.1 Relevant Acquisition Authority	The site is not subject to land acquisition for a public purpose.
Cl 5.10 Heritage	A portion of the site is identified as a local heritage item being “Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors”.

Provision	Description
Cl 5.21 Flood Planning	The site is subject to flood planning related development controls outlined in Cl 5.21.
Cl 7.6 Environmentally Significant Land	The site is partially identified as “Environmentally Significant Land” within the LEP Mapping. This is largely aligned to the foreshore building line map. Cl 7.6 therefore applies.
Cl 7.7 Acid Sulfate Soils	The site is subject to class 5 and 3 Acid Sulfate Soils.
Cl 7.9 Foreshore Building Line	Pursuant to clause 7.9, the part of the site contains land identified as foreshore building line, representing the Georges River foreshore.

2.6.2 Strategic Planning Context

Moore Point has been the subject of extensive strategic planning investigations over the past decade. These investigations have envisaged Moore Point as the future extension of Liverpool CBD. It has both State and Local level endorsement that has commenced since 2008.

The evolution of the Strategic Planning framework, as it relates to Moore Point is briefly summarised below.

- **Liverpool Local Environmental Plan 2008 (2008)** – Moore Point was first acknowledged as a natural extension to the CBD via the LEP, which identifies the site as part of the Liverpool City Centre pursuant to Division 1 and as shown the Key Sites Map.
- **Draft Georges River Precinct Plan (2016)** – The *draft Georges River Precinct Plan* (draft **GRPP**) established the design principles and vision to transform land uses around Moorebank, including a vision for an activated mixed use precinct.
- **Community Strategic Plan (2022-2023)** – *Community Strategic Plan 2022-2023* (**Community Strategic Plan**) provides directions for the LGA to be healthy, sustainable, innovative and visionary over a 10 year period.
- **Greater Sydney Region Plan (2017-18)** – The *Greater Sydney Region Plan* (**Region Plan**) introduced Collaboration areas across Sydney, which included Liverpool and environs.
- **Western City District Plan (2017-18)** – The *Western City District Plan* (**District Plan**) established the physical extent of the LCA, which incorporated land pertaining to the draft GRPP.
- **Liverpool Collaboration Area Place Strategy (2018)** – *Liverpool Collaboration Area Place Strategy* (**Place Strategy**) identifies the site as ‘mixed use’, which is to comprise a mixture of commercial, retail, residential and community uses that provide sustainable employment and is complementary to the commercial core. See **Figure 11**.
- **Liverpool City Centre Contributions Plan (2018) –** Over half of the Moore Point site is identified in Council’s *Liverpool City Centre Contributions Plan 2018* (**City Centre CP**), reinforcing its role as a future expansion area of the CBD.
- **Liverpool Local Strategic Planning Statement (2020)** – Liverpool Local Strategic Planning Statement *Connected Liverpool 2040* (**LSPS**) formally refers to the site extent as ‘Moore Point’, which provides short-medium term actions to be rezoned into residential/mixed-se to support the CBD and Liverpool Innovation Precinct.

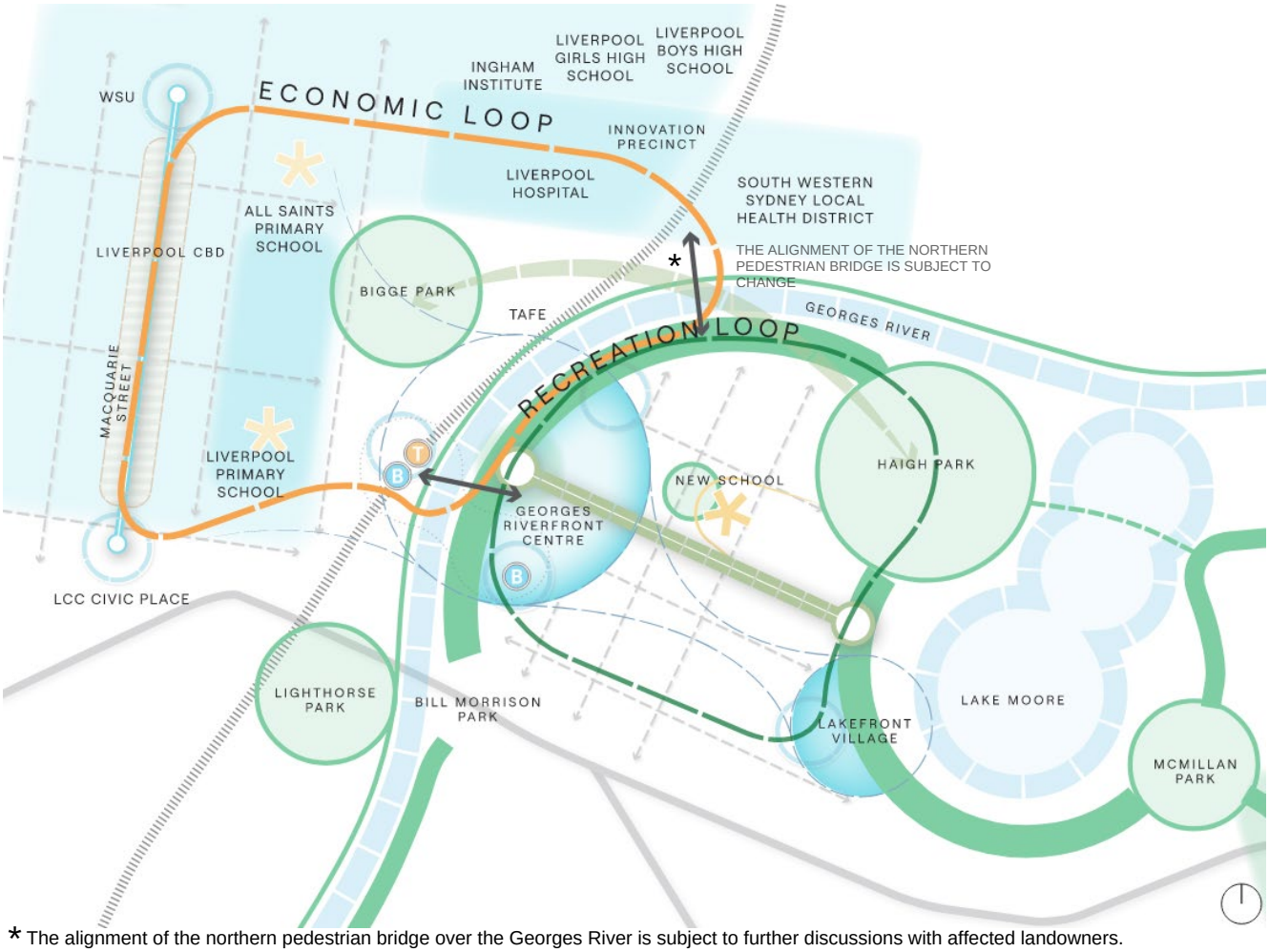
Figure 21: Liverpool Collaboration Area Place Strategy Extract

Source: Greater Sydney Commission

The site plays a critical role in fulfilling the connectivity, liveability, productivity and sustainability priorities of the LCA and support the vision to make Liverpool Australia's next great river city. These include:

- New housing and jobs within a highly accessible location (five minutes' walk to Liverpool CBD and transport interchange) via new bridge crossings over the Georges River. This will support active and sustainable modes of travel within the LCA,
- Critical links from the CBD and LCA to the Georges River, Haigh Park and Lake Moore. This will support the creation of a new green and blue infrastructure network to which will support healthy urban growth,
- A genuine riverside precinct with high levels of activation, amenity and accessibility, facilitating Council's vision of celebrating the river and prioritising great places for people, and
- A diverse range of new and enhanced social and civic infrastructure outcomes to benefit both current and future generations.

Refer to **Figure 12**.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 22: Moore Point and Liverpool CBD Concept

Source: SJB

3 Planning Background

3.1 Pre-Lodgement Phase

Moore Point has been the subject of extensive strategic planning investigations over the past decade. These investigations have consistently advocated for Moore Point as a future expansion of the CBD. It has both State and local level endorsement that has commenced since 2008.

Following adoption of the Place Strategy in September 2018, Council indicated to landowners in Moore Point that it was prepared to consider a rezoning of land in the precinct that would meet the intention expressed in the Liverpool Collaboration Area Place Strategy.

Council's LSPS also established support for the rezoning of the area, stating that Council would:

> *'Investigate amendments to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages'* – short-to-medium term.

Council indicated to landowners that had previously submitted planning proposals that a precinct-wide approach to development of Moore Point should be undertaken, including a structure plan for the entire precinct.

On this basis, a PP was lodged with Council on 15 April 2020 for the consolidated Moore Point site. The PP replaced RZ-6-2015 and withdrew all other previous site-specific planning proposals that were submitted.

3.2 Transport Infrastructure Working Group

A Transport Infrastructure Working Group (**TIWG**) was established prior to lodgement of PP to facilitate an integrated and connected transport vision for Moore Point. The TIWG was formed in January 2020 under an adopted Terms of Reference (**ToR**) and met regularly to oversee all transport assessment and modelling.

The TIWG involves Transport for NSW (**TfNSW**), Council, DPHI, Greater Sydney Commission (**GSC**) and the JLG to ensure the PP aligns with the overarching Place Strategy and ensuring the successful integration of Moore Point into the current and future planned transport network.

3.3 Place Making Workshop and Collaboration Group

The JLG commenced discussions with Council regarding the vision and principles of Moore Point in 2014, culminating in lodgement on 15 April 2020. The masterplan has been subject to an extensive process of engagement, developed in a consultative manner with Council through a Placemaking Working Group (**PWG**) established in 2020.

The PWG, which included a Terms of Reference, had a mandate to ensure Moore Point is delivered based on world's best practice. Key members of the PWG included:

- Liverpool City Council (Chair),
- Greater Sydney Commission, and

- Representatives from the JLG.

The PWG was pursued until Council endorsement of the PP at its meeting on 25 November 2020.

Overall, there has been a significant level of consultation and collaboration with Council at all stages of the PP process.

While it is anticipated elements of the masterplan would be refined over the course of the rezoning process, up-front consultation with Council established the form and fundamental drivers of the Structure Plan and were spatially established and agreed in-principle. These included the street network, heritage, open space and land use.

3.4 Council Assessment and Endorsement

The lodged (2020) PP proposed the following amendments to the LEP:

- Rezone the site from IN2 Light Industrial to B4 Mixed Use and B6 Enterprise Corridor,
- Increase the maximum FSR to part 4.2:1 and 3.5:1,
- Introduce an RL height for the site and increase the maximum height of buildings from 18m and 15m to RL 136 and RL 108, and
- Introduce Division 1A to manage site-specific provisions.

The supporting masterplan (**Figure 13**) indicated the following outcomes:

- Approximately 12,200 dwellings and 23,000 jobs,
- 24% of the site dedicated to public open space,
- Adaptive re-use of existing heritage items and education facilities,
- Rehabilitation, access and activation of the Georges River foreshore,
- Contribution to an 8km network of foreshore pedestrian and cycle paths, and
- Bridge crossings into Liverpool CBD, train station and LIP.

Figure 23: Illustrative Masterplan 2020
Source: SJB

Following lodgement, several matters were raised by Council through the course of the assessment including:

- Ensure scale of development is complementary and not in competition with Liverpool CBD,
- Justification to support appropriateness of the proposed building heights and FSR and particularly yield,
- Include a 40m wide RE1 zone along the Georges River and Lake Moore,
- Ensure all residential development is within 200m to open space,
- Clarity around pedestrian bridge connections across the Georges River,
- Location of various uses including residential buildings, community centre and small parks,
- Confirmation of residential and commercial population figures between Moore Point and the broader Georges River North Precinct, and
- Overshadowing to foreshore open space and block massing.

Following resolution of these issues to the satisfaction of Council, the PP was endorsed by Council at its meeting on 25 November 2020, subject to the following:

1) *Notes the advice of the Liverpool Local Planning Panel;*
2) *Endorses in principle the planning proposal request with the following amendments:*

a) *An additional 1.5 hectares of open space marked as 'Open Space Investigation' adjacent to Haigh Park;*

b) *A minimum 40m RE1 – Public Recreation zone is provided along Lake Moore;*

3) *Endorses an Urban Design Study and Structure Plan for the Georges River North precinct, with the above amendments, to guide the assessment of future planning proposals in this area.*

Following endorsement, an addendum to the Urban Design Report was prepared by SJB that resolved the items of the Council resolution, noting that:

- Location and configuration of the 40m RE1 zone around the riverfront and Lake Moore would be finalised following masterplan review and additional engagement with stakeholders, and
- Additional studies including open space needs will inform the quantum, type and distribution of open space required for the site and wider area.

The Structure Plan that was endorsed by Council is provided in **Figure 14**.

* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 24: Endorsed Structure Plan November 2020
Source: SJB

3.5 Department Assessment and NSW Flood Enquiry

The PP was then forwarded to DPHI for Gateway in December 2020. At the same time, Council was finalising a Regional Flood Evacuation Analysis.

Council wrote to DPHI requesting the proposal be submitted once the analysis was completed and its findings could inform the proposal. The advice was to relodge the PP once the findings of Council's Regional Flood Study were understood.

The Georges River Flood Evacuation Analysis was finalised in March 2022 and the PP was relodged by Council for Gateway on 4 May 2022.

In March 2022, in response to the flooding of the Northern Rivers region, the NSW Government commissioned an independent expert inquiry into flooding. The inquiry recommended a review of planning rules for developing on flood-prone land.

DPHI reviewed current planning proposals in relation to the flood risk each proposal presented, to determine if proposals can proceed or whether further flood risk and mitigation measures and evacuation capacity was required.

Considering the recommendation of the NSW Flood Inquiry, DPHI sought advice from a Flood Advisory Panel (**FAP**) regarding the flood risk associated with Moore Point. The Panel found that there was sufficient case-specific merit to pursue the flood risk mitigation measures and allow the proposal to proceed to Gateway, subject to conditions that have been informed by the Technical Advisory Group (**TAG**) and other material before the Panel.

On 3 April 2023, DPHI concluded the PP could proceed subject to conditions. These conditions were included in the Gateway Determination issued on 3 April 2023.

3.6 Post Gateway Governance Framework and Terms of Reference

Following issue of the Gateway Determination, DPHI's Planning and Delivery Unit (**PDU**) established a governance arrangements and Terms of Reference (**ToR**) for the PP.

The purpose of the governance arrangements was to establish the project governance including structure, forums, roles, responsibilities and mechanisms for collaboration including the Project Working Group (**PWG**) and Project Collaboration Group (**PCG**). The objectives of the governance arrangements were to:

- Ensure that DPHI, Council and other relevant government agencies work collaboratively for the timely completion of the Moore Point PP,
- Provide a forum to share information that may impact other agencies and stakeholders,
- Provide a forum for DPHI and Council to engage with the JLG,
- Facilitate the delivery of the PP in alignment with Gateway Determination conditions and timeframes, and
- Have a proactive, collaborative and outcome-based approach to resolve issues and problem solve.

The outcomes of this governance arrangement resulted in standing meetings occurring since May 2023 including fortnightly PCG meetings, as well as additional meetings and workshops held at the request of either DPHI, Council or the JLG.

A summary of the project governance structure is provided in **Figure 15**.

Figure 25: Governance Arrangement Structure
Source: SJB

3.7 Post Gateway Flood Engagement

To guide assessment of the Panel recommendations and in alignment with the Gateway Determination Conditions, DPHI appointed an independent Peer Reviewer in October 2023 (WMA Water) to ensure the recommendations have been fulfilled as part of the assessment process. Council also engaged a technical flood advisor (Rhelm) in November 2023 to support Council's review of the revised PP. These processes were funded by the JLG to support the progression of the proposal.

Following the submission of the FIA and FERP in January – February 2024 by the JLG, WMA Water prepared a Scope of Work dated April 2024. This Scope of Work outlined additional parameters and analysis to be considered as part of the PP.

Following receipt of the Scope of Work, the JLG engaged with DPHI, Council and their flood advisors. DPHI wrote to Council on 8 April 2024 outlining their views on what analysis was required prior to exhibition and what could be undertaken in parallel with exhibition, when determining if the PP has adequately met the conditions of the Gateway Determination.

On 1 May 2024, DPHI facilitated a workshop with WMA Water, Rhelm, the JLG and Worley to provide additional guidance on what components of the Scope of Work could be delivered pre and post public exhibition in line with the expectations of WMA Water. The intent of categorising scope according to stages of the PP process reflects a shared commitment to progressing the PP in an expedited manner.

Communications have been ongoing between the JLG, DPHI, Council and the appointed technical flood advisors to ensure that the Gateway Determination conditions relating to flooding have been comprehensively addressed to a jointly agreed standard. This PP provides a comprehensive overview of how these conditions and other components of the Scope of Work that have been addressed.

3.8 Design Excellence Panel

On 30 January 2024, the PP was presented to a Design Excellence Panel (**DEP**). The panel was facilitated by Liverpool City Council, to assist Council in its consideration of the PP. It is noted that consultation with the DEP was not a requirement of the Gateway Determination.

The panel was comprised of the following members:

- Sean Carter (Chair), Carter Williamson Architects,

- Kim Crestani, Order Architects, and
- Matthew Taylor, Taylor Brammer Landscape Architects.

Meeting minutes, which included a series of recommendations were issued on 5 March 2024. The DEP were generally supportive of the PP and supporting design framework, subject to the recommendations issued.

Notable amendments have been made to the PP Structure Plan to accommodate the following:

- Widening of north south pedestrian spine from 14m to 20m,
- Redesign of the primary school site and configuration of the central open space,
- Increase size of central open space >8,000m^2, and
- Minor amendments to the structure plan layout to ensure solar access to key streets and central open space.

A comprehensive response to the DEP recommendations and detailed changes to the Structure Plan is provided within the UDR at **Appendix 3**.

3.9 Request to alter Gateway

On 26 February 2024, a request was submitted by Mecone on behalf of the JLG to DPHI to alter the Gateway Determination. Primarily, the request included minor wording alterations to ensure that the PP would adequately address all conditions required prior to exhibition.

The requested changes reflect ongoing discussions between the JLG, Council and DPHI as part of developing the masterplan and demonstrating an evidence-based response to dealing with the unique challenges of the site.

Notably, the original Gateway Determination required the LEP to be completed on or before 31 March 2024. Due to the scale and complexity of the proposal, and the extent of Gateway Determination conditions, completion of the LEP amendment during this timeframe was not feasible.

4 Planning Proposal Overview

4.1 Vision

In preparing the Planning Proposal, the JLG have developed the following vision for Moore Point:

> *"Liverpool has the ambition to be the next Great River City of the world. A city where the Georges River is its beating heart, unifying both sides of the river into a pulsating riverfront experience.*
>
> *Moore Point will shape Liverpool's eastern bank into an internationally renowned destination loved by locals and visitors alike. Connected by bridges and green streets, the riverfront parklands, creative heritage marketplace, cultural and educational opportunities will inspire our people and residents to be the most productive, most happy, and most healthy people on the planet"*

The proposal will create the first truly integrated riverfront development at scale. At the heart of this attraction will be a revitalised riverbank which will undergo an ecological transformation and create a natural, healthy and vibrant river ecosystem.

Figure 26: Visualisation of Moore Point development
Source: SJB

4.2 Structure Plan

As a result of the size and scale of the PP, it was determined that preparation of a masterplan for the site would not accurately capture the long-term vision for site's renewal and its ability to respond and evolve to changing infrastructure investment and policy context.

The project team have developed a Structure Plan for Moore Point. The Structure Plan provides the layout of future development blocks, open space, road network and key infrastructure. It sets the key spatial parameters for future development for the site that will be embedded into renewal of the site.

As depicted in **Figure 17**, the Moore Point Structure Plan expresses the key outcomes for the site including:

- Redevelopment of the 31.4 ha development site, directly adjacent to Liverpool CBD for mixed-use and recreational purposes,
- Approximately 10.8 ha of open space, equivalent to 34.5% site area (this includes areas functioning as publicly accessible open space, not including streets),
- Spatial allocation of land for a future 1,000 capacity primary school and identification of an additional future potential educational use subject to investigation and demand,
- A revitalised and adaptively re-used heritage quarter for future commercial, cultural and community use,
- Approximately 50% of the site as public space (this includes streets, squares and plazas),
- A new movement and access network that prioritises pedestrians and cyclists to enhance active transport within the site to surrounding areas,
- A diverse range of pocket parks, passive open space areas and pedestrian laneways between future development blocks to enhance views and access to the water, and
- Two bridge crossings from the site into Liverpool CBD and LIP (conceptual only).

The Structure Plan is the cultivation of extensive site analysis, which has enabled a deep understanding of the site, its immediate context and relationship to the city centre through ongoing analysis of the site's history and character.

Figure 27: Structure Plan
Source: SJB

As shown in The Structure Plan will be capable of delivering the following outcomes:

Table 5: Structure Plan Summary

Element	Description
Land Use	MU1 Mixed Use RE1 Public Recreation
Floor Space Ratio	4:1
Height	Various to a maximum 126m (RL 136)
Public Open Space	34.5%
Gross Floor Area	Non-residential - 346,463m^2
	Residential - 912,985m^2
	Total – 1,259,448m^2
Dwellings	10,742
Population	21,484
Jobs	23,503

4.3 Framework Plans

The Structure Plan has been informed by seven proposed Framework Plans, which build upon the intent of the Moore Point Structure plan and provide more detailed guidance around Country, Heritage, Land Use, Open Space, Movement, Built Form and Character.

The seven plans will inform the future development control framework, being a site specific Development Control Plan (**DCP**) or equivalent.

Together, each framework plan has been used to inform the proposed Structure Plan Envelope (Planning Envelope). The Planning Envelope is proposed to guide future DAs in the site. The relationship between the Structure Plan, Framework Plans and the Structure Plan Envelopes is depicted in **Figure 18** below.

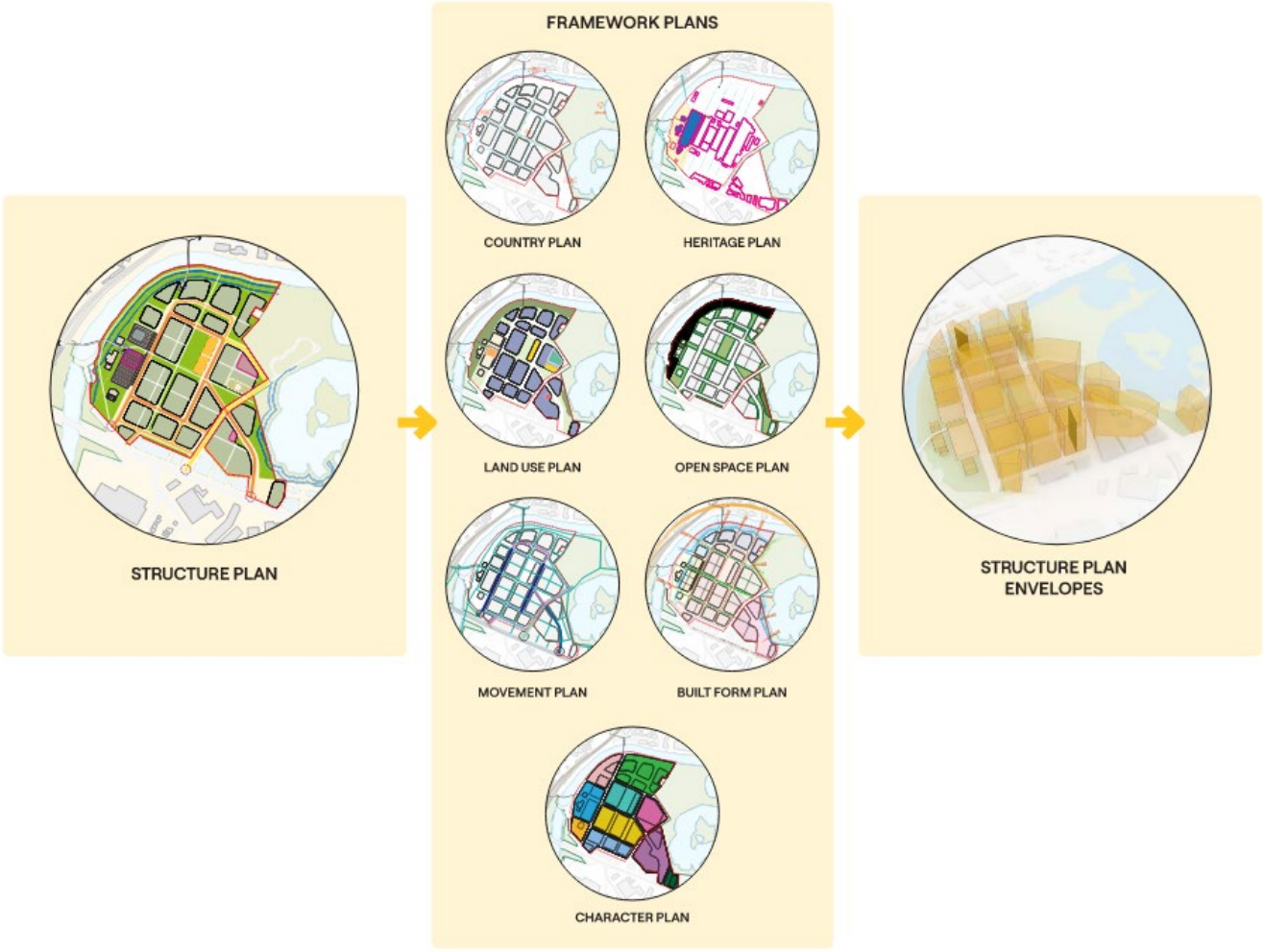


Figure 28: Framework Plans
Source: SJB

4.4 Structure Plan Envelope

The Structure Plan Envelope for Moore Point is the volumetric expression of the Structure Plan, analysis of the Framework Plans and planning controls proposed for the PP. The role of the Structure Plan is to set the envelope of which future DAs will need to be considered within.

The Structure Plan sets out the general extent of future development, which will still be required to comply with design controls in the site-specific DCP. This will allow a non-shrink-wrapped and flexible approach that allows for design excellence. Refer to **Figure 19**.

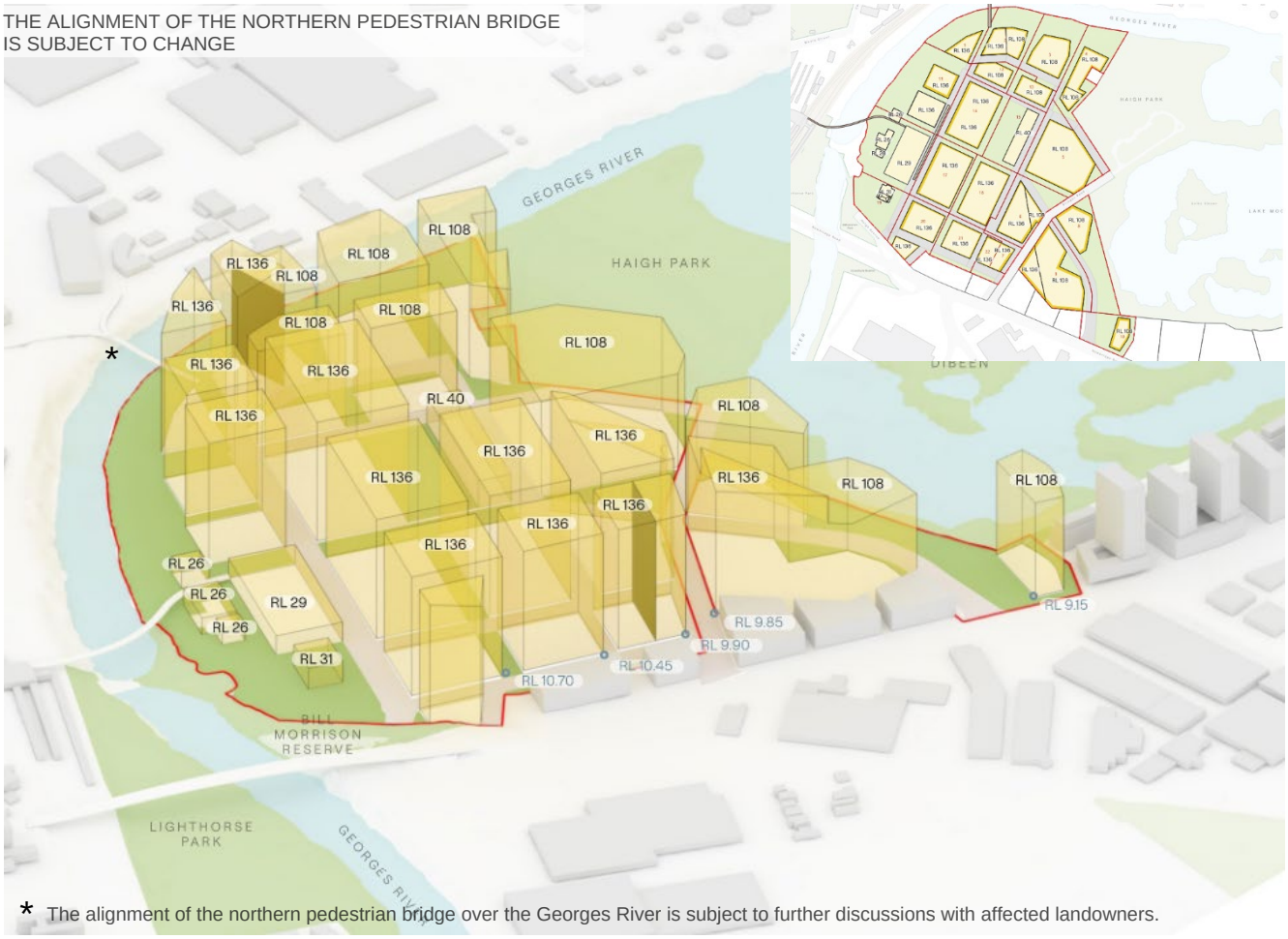


Figure 29: Structure Plan Envelope
Source: SJB

4.5 Test Scheme

In response to the Gateway Determination, the project team was asked to prepare a masterplan (referred to as Test Scheme) (**Figure 20**) to satisfy a range of specific urban design issues including ability to satisfy the *Apartment Design Guide* (**ADG**).

The purpose of the Test Scheme is to ensure the intended outcomes of the Structure Plan, and other key planning controls could be practically realised within the proposed Structure Plan Envelopes. The Test Scheme can be considered as a more detailed design proposal which will be the basis for future technical design and construction.

It is important to acknowledge a masterplan would infer one singular development outcome for the site. The project will be developed over 30-40 years and be impacted by changes in planning policy, design frameworks and its urban context.

The Test Scheme should therefore not be construed as a pre-determined design outcome that is fixed over 30-40 years, simply one example of how built form may eventuate at Moore Point under the proposed planning framework. The purpose of the Test Scheme is to both allow for technical testing (such as urban design, traffic, economics, flooding, evacuation) and to set a high quality vision for the site. It is informed by:

- Design concept and intent,

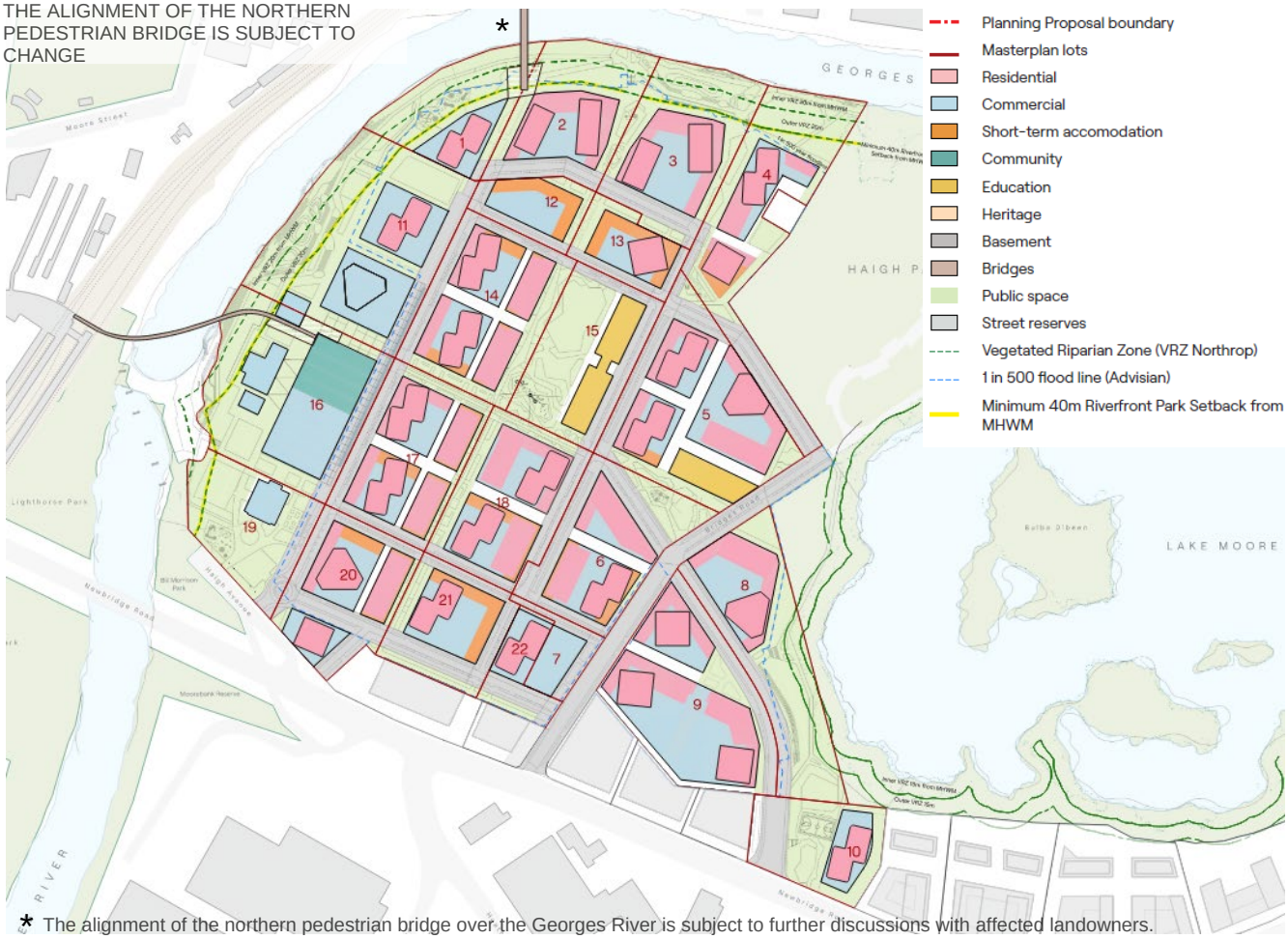
- Site context and conditions,
- Land use and building program,
- Planning policy and technical compliance,
- Internal layout and access,
- Technical advice (engineering, flooding etc), and
- A range of design and planning assumptions.

The Test Scheme provides a detailed breakdown and placement of land uses, proposed building heights (in response to both aviation and heritage requirements), tower and apartment layouts, specific treatment of open space areas and their function. It brings to life how the future built form could eventuate in Moore Point.

- 1,259,448m^2 total GFA comprising,
    - 912,985m^2 residential GFA,
    - 328,516m^2 commercial GFA,
- Mix of land uses including residential, short-term accommodation, retail, education and commercial,
- 10,742 new dwellings,
- 22% overall deep soil,
- Communal open space provision on development blocks,
- 30% potential tree canopy cover in the public domain, and
- Over 34.5% of proposed open space, including public open space to be dedicated and additional privately owner, publicly accessible open space.

Figure 21 below depicts how potential future built form may be accommodated within the proposed Structure Plan Envelopes.

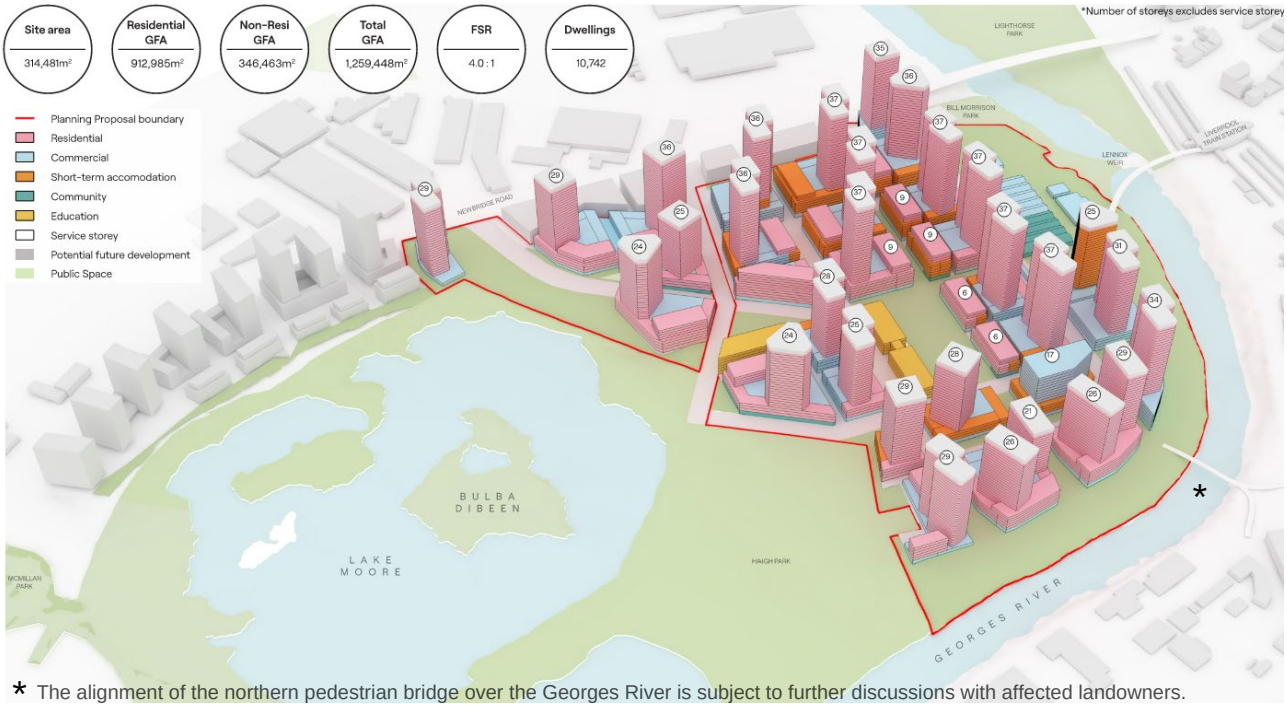
THE ALIGNMENT OF THE NORTHERN PEDESTRIAN BRIDGE IS SUBJECT TO CHANGE



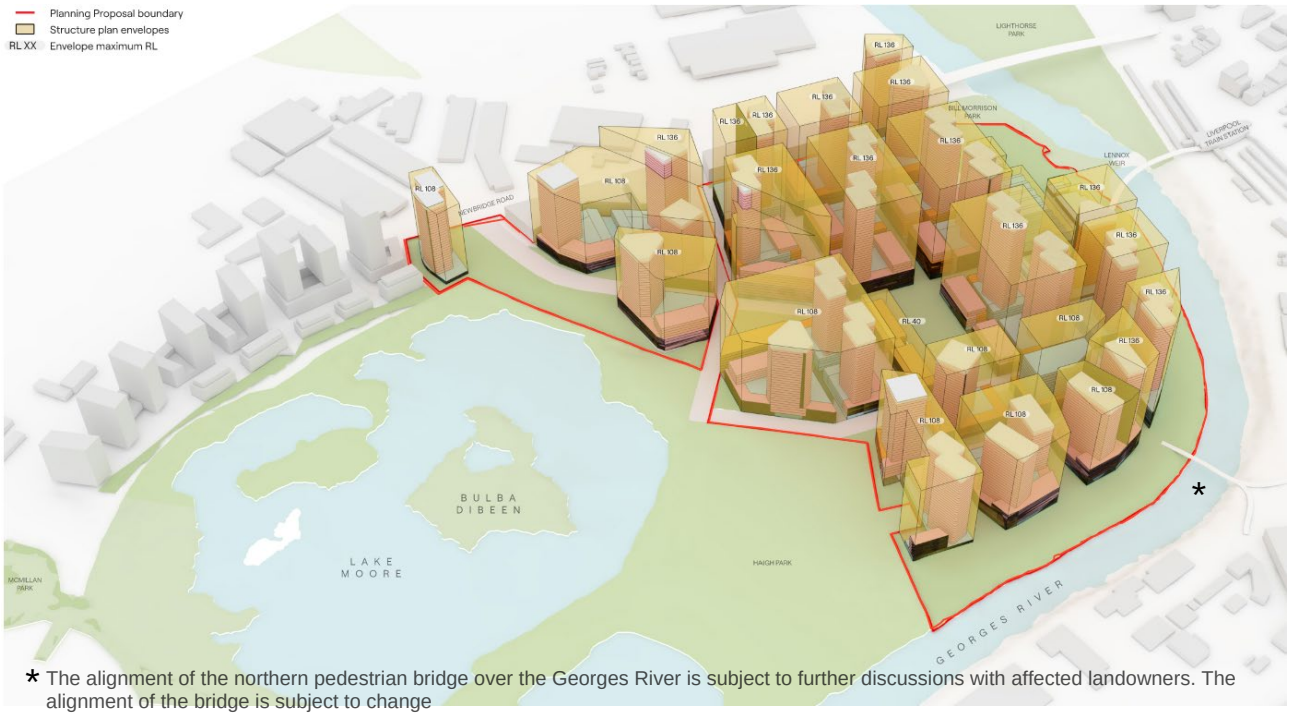
* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 30: Test Scheme

Source: SJB



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

Figure 31: Test Scheme (top) with Test Scheme in Structure Plan Envelope (bottom)
Source: SJB

4.6 Public Domain Framework

To support the Structure Plan and outcomes of the Test Scheme, a detailed Public Domain and Landscape Plan has been developed by Turf (**Appendix 5**). The purpose of this strategy is to respond to requirements of the Gateway Determination that require a public domain strategy and additional analysis pertaining to open space requirements.

The Public Domain and Landscape Plan has been developed in concert with the complementary technical analysis including the Connecting with Country Concept Report, Open Space and Community Needs Assessment, FIA, BDAR, Riparian Assessment and Cut and Fill Strategy.

The proposed Public Domain and Landscape Plan delivers a well connected network of open space and meeting the needs of the future community. It also unlocks benefits for existing residents of Liverpool CBD by establishing an interconnected riverfront that provides for passive and active recreation opportunities.

Figure 32: Public Domain Framework Strategy Plan
Source: Turf

As defined in the UDR, the Moore Point Structure Plan delivers 10.86 ha (34.5% total site area) of total open space (from a planning perspective).

The Public Domain and Landscape Plan rationalises the open space figure in alignment with NSW policy. The Structure Plan is discussed in two main categories:

- Public Open Space (parks): 10.1ha (32.10% site area), and
- Streets (including urban places, plazas and squares): 6.2ha (19.84% site area).

As a result, Moore Point achieves 16.3ha of public space (public open space and streets) equating to 51.94% of the total site area.

4.7 Staging

The PP is supported by a staging strategy, which outlines the indicative delivery of the project over the next 30-40 years alongside the necessary infrastructure to support development. See **Figure 23**.

Figure 33: Staging Plan
Source: SJB

A summary of the proposed infrastructure against each stage and associated dwellings is provided in **Table 6** below.

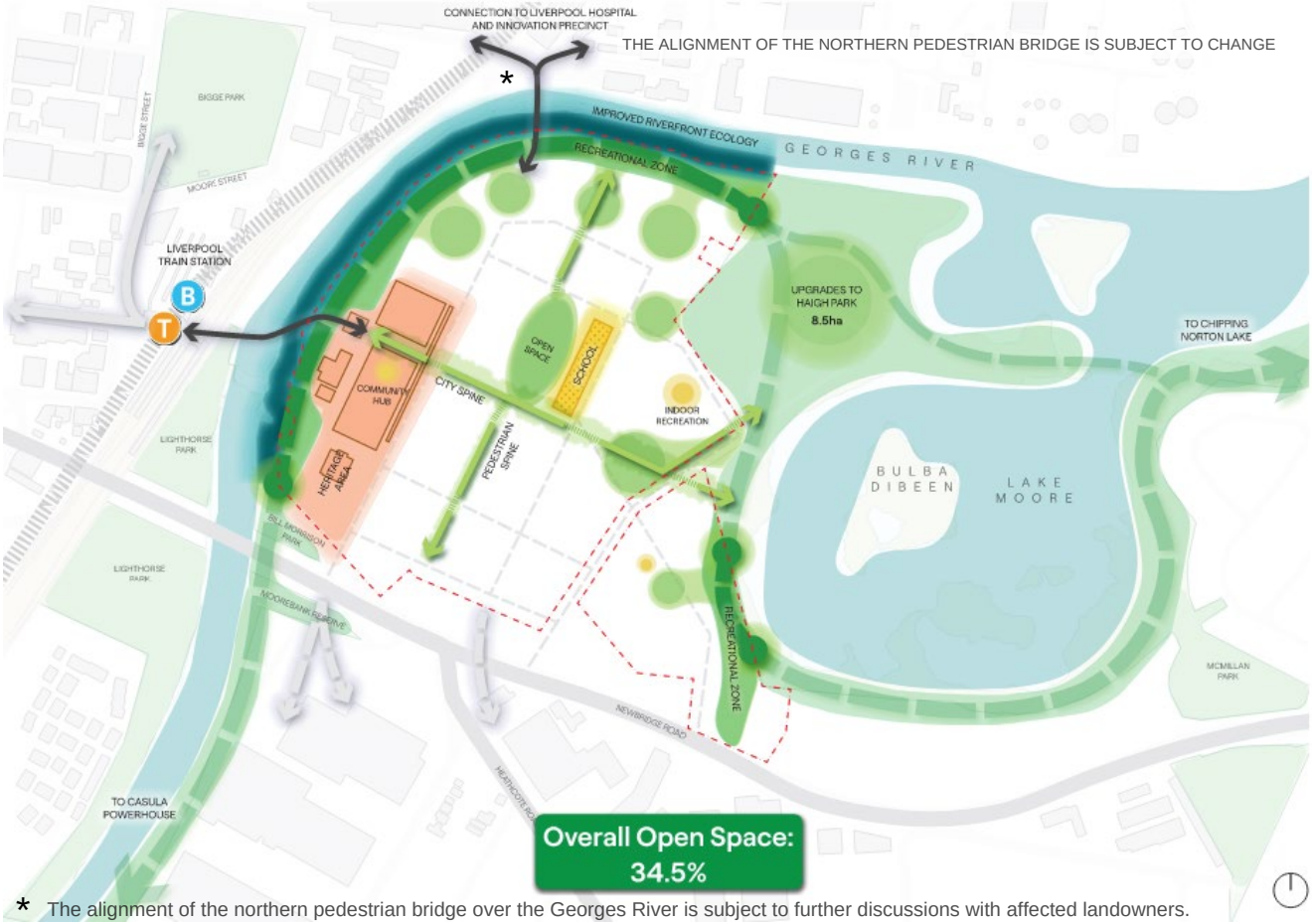
Table 6: Staging Summary

Stage	Dwellings	Pop	Infrastructure items	% of infrastructure	% of dwellings
1	4,372	8,474	• Remediation and establishment of northern foreshore • Partial site establishment/utility, stormwater and road works • Publicly accessible privately managed open space and through-site links • Anchor Place intersection works • Central park embellishment and dedication • Construction of northern bridge • School site dedication	60%	39%
2	3,111	6,622	• Remediation and embellishment of western foreshore • Partial site establishment, utility, stormwater and road works • Multi-purpose community and cultural hub • Partial delivery of privately owned public space/civic areas • Newbridge Road intersection works	33%	31%

Stage	Dwellings	Pop	Infrastructure items	% of infrastructure	% of dwellings
			• Construction of southern bridge		
3	3,194	6,388	• Partial site establishment, utility, stormwater and road works • Partial delivery of privately owned public space/civic areas • Indoor recreation centre	7%	30%

4.8 Public Benefits and Infrastructure

The outcomes of the PP are supported by a package of comprehensive public benefits aimed at meeting the needs of the existing residents of Liverpool CBD but also future residents. See **Figure 24**.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 34: Public Benefits
Source: SJB

The package of infrastructure associated with the PP is outlined in **Table 7**.

Table 7: Project Benefits Overview

Project Benefits	Description
Connecting the Green Grid	34.5% of the site area will be publicly accessible open space (land that is publicly dedicated space and privately managed publicly accessible space)

Project Benefits	Description
	51% of the site area will be public space (including roads, footpaths, publicly dedicated space and publicly accessible open space) Opportunity for embellishment of Haigh Park to support active recreation opportunities
Enhancing the Blue Grid	Rehabilitation and revitalisation of the Georges River foreshore into a Riverfront District Park (17.4% of the site area) to allow for water play and river interaction
Expanding Tree Canopy	30% of the site will be tree canopy
Celebrating Liverpool's Heritage	Creation of a heritage quarter and adaptive re-use of buildings to anchor the site, functioning as a new civic heart and destination for the community
Arts, Education and Culture	1,000 student capacity primary school (including potential for second school subject to future investigation and demand) 2,400m^2 community and cultural facility 3,000m^2 indoor recreation facility Smart City Initiatives, public art and cultural installations, signage and Water Sensitive Urban Design
Bridge Connectivity	Provision of two pedestrian bridges into Liverpool CBD improving access to the site, the Georges River, Lake Moore and Haigh Park
Traffic and Transport	Construction of new collector and local roads and upgrades to Newbridge Road
Jobs and Employment	Ability to provide up to 23,503 jobs in a highly accessible location, strengthening Liverpool as a job-rich city promoting its existing education, health and innovation assets – allowing the CBD to grow and achieve critical mass (to a similar office market to St Leonards/Crows Nest).
Economic Activity	Approx. $6.8 billion in additional output Approx. $3.9 billion in contribution to GRP Approx. $2.4 billion additional incomes and salaries paid to households
Environment and Sustainability	Riverbank and site rehabilitation including bank stabilisation, stormwater infrastructure, recycling infrastructure and foreshore water quality improvements
Affordable Housing	Up to 2% of appropriate residential floor space will be investigated as affordable housing, subject to viability assessment and resolution of the infrastructure delivery plan post exhibition.

PART B – Planning Proposal

5 Part 1 – Objectives and Intended Outcomes

5.1 Objective

The objective of the PP is to amend LLEP 2008 to facilitate the urban renewal of the subject site at Moore Point to accommodate mixed-use development. The PP seeks to introduce specific additional 'Local Provisions' in Part 7 of LLEP 2008 to set the objectives for Moore Point and guide quality place making and built form outcomes.

5.2 Intended Outcomes

The intended outcomes of this Planning Proposal are to:

- Realise Government objectives for the GRNP expressed both through the Place Strategy and LSPS, to provide a mixture of uses that complement the Liverpool CBD,
- Deliver on the objective for Liverpool Collaboration Area as a "rejuvenated river city",
- Assist the collaboration area in achieving its 2036 job and housing targets, which include 18,800 new dwellings and 16,200 new jobs,
- Ensure infrastructure is delivered in line with development,
- Celebrate local character and heritage through the adaptive re-use of existing heritage items,
- Provide future housing and jobs within close proximity to existing transport infrastructure including the FAST Corridor to the Western Sydney Airport,
- Achieve Council's vision of the Georges River Precinct as a "true River City that has a vibrant mix of uses and activities",
- Enhance access to the Georges River Foreshore and improve opportunities along the waterfront,
- Provide active and passive recreation opportunities for residents and workers in the area,
- Act as a statement of intent to set a benchmark for new development in Moorebank that prioritises a high quality public realm,
- Provide new public domain infrastructure and uses conducive to the foreshore nature of the site,
- Deliver new pedestrian and cycleway improvements along the foreshore, and additional connections from the site to Liverpool CBD and Train Station,
- Provide a mix of uses with excellent access to existing public transport, community infrastructure, health and education services and Liverpool CBD,
- Enable new services and accommodation in proximity to the LIP,
- Deliver a local street network and pedestrian connections to the foreshore, and

- Provide high quality mixed use development, which will facilitate opportunities for new employment, housing choice and public amenity.

6 Part 2 – Explanation of Provisions

6.1 Summary

The PP seeks to achieve the intended outcomes outlined in **Section 5** (**Part 1**) of this report through proposed amendments to the maps and introduction of new provisions to the LLEP 2008.

The PP seeks the following amendments to the LEP:

- Rezone the site from E4 General Industrial to MU1 Mixed Use and RE1 Public Recreation,
- Increase FSR from 0.5:1 to 4:1 and set maximum gross floor area for blocks,
- Introduce an RL height for the site and increase the maximum height of buildings to from 18m and 15m to 9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136),
- Amend the minimum lot size from 2,000m^2 to 1,000m^2,
- Introduce Division 1A in Part 7 Additional Local Provisions to manage site specific provisions including:
    - Objectives for development in Moore Point,
    - Land to which this division applies,
    - Precinct development framework,
    - Site area of proposed development includes dedicated land,
    - Development authorising the preparation of a development control plan,
    - Design excellence,
    - Overshadowing of certain public spaces,
- Amend Schedule 5 heritage listing wording and map based on advice from GBA Heritage, and
- Introduce new subclause in Schedule 1 to permit additional uses.

The LEP Maps are provided in **Section 8** (**Part 4)** of this report. The proposed mapping is for public exhibition purposes and will be subject to refinement prior to finalisation.

6.2 Amendments to LLEP 2008

As a result of the size and scale of the proposal and its relationship to Liverpool CBD, it is proposed to introduce *Division 1A Moore Point* provisions within Part 7. The structure and contents of the proposed provisions are outlined below.

6.2.1 Division 1A Amendments

Following Division 1 Liverpool city centre provisions:

Division 1A Liverpool city centre eastern expansion – Moore point provisions

7.5AB Objectives for development in Moore Point

1) *Before granting consent for development on land in the Moore Point, the consent authority must be satisfied that the proposed development is consistent with such of the following objectives for the redevelopment of Moore Point as are relevant to that development –*
    a) *to provide building forms and land uses that are complementary to Liverpool city centre,*
    b) *to enhance the Georges River foreshore for passive and active recreational purposes,*
    c) *to enhance places of heritage significance including the Former Cable Makers Australia site and Administration Building,*
    d) *Provide a mix of uses that exhibit a high level of design excellence,*
    e) *to provide direct, convenient and safe pedestrian links to Liverpool train station and Liverpool city centre,*
    f) *to ensure land uses respond appropriately to Newbridge Road including traffic and residential amenity.*

7.5AC Land to which this Division applies

This division applies to Moore Point marked "AREA A" on the Key Sites Map.

7.5AD Precinct development framework

1) *Despite clause 4.4, development consent may be granted to development on land to which this clause applies if the total gross floor area of the development does not exceed the following:*
    a) *Block A – 211,811 square metres.*
    b) *Block B – 179,656 square metres.*
    c) *Block C – 58,587 square metres.*
    d) *Block D – 11,508 square metres.*
    e) *Block E – 221,714 square metres.*
    f) *Block F – 184,337 square metres.*
    g) *Block G – 206,852 square metres.*
    h) *Block H – 184,985 square metres.*
2) *Development consent must not be granted in Moore Point unless the consent authority has taken into consideration a development control plan,*

7.5AE Site area of proposed development includes dedicated land

1) *The site area of proposed development on land within Moore Point is, for the purpose of applying a floor space ratio under clause 4.5, taken to include land that—*
    a) *is dedicated to the Council or a public authority for a public purpose (including roads, drainage or open space), and*
    b) *would have been part of the site area if it had not been so dedicated.*

7.5AF Development requiring or authorising the preparation of a development control plan

1) *The objective of this clause is to ensure development occurs with a site-specific development control plan*
2) *This clause applies to land that is shown on the Key Sites Map as Moore Point precinct*
3) *This clause applies to any of the following development –*
    a) *Development within land identified as a block in the Key Sites Map, or*
    b) *Development on land that has a minimum site area of 3,500 square metres*
4) *A development control plan is not required to be prepared if the consent authority is satisfied that such a plan would be unreasonable or unnecessary in the circumstances or that the development*
    a) *Involves only alterations and additions to an existing building, or*

b) *Does not significantly increase the height or gross floor area of the building, or*
c) *Does not have significant adverse impacts on adjoining buildings or the public domain, or*
d) *Does not significantly alter any aspect of the building when viewed from public places.*

5) *The development control plan must provide for all of the following –*
   a) *requirements as to the form and scale of proposed development so as to provide a high quality public domain and design outcome,*
   b) *how proposed development addresses the following matters—*
      i. *the suitability of the land for development,*
      ii. *the existing and proposed uses and use mix,*
      iii. *any heritage issues and streetscape constraints,*
      iv. *the location of any towers proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
      v. *the bulk, massing and modulation of buildings,*
      vi. *street frontage heights,*
      vii. *sustainable design, overshadowing and residential amenity and requirements for environmental assessment,*
      viii. *the achievement of the principles of ecologically sustainable development,*
      ix. *pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,*
      x. *the impact on, and any proposed improvements to, the public domain,*
      xi. *the impact on any character area,*
      xii. *achieving appropriate interface at ground level between the building and the public domain,*
      xiii. *the excellence and integration of landscape design,*
      xiv. *manage the interface with industrial uses and associated amenity impacts from their ongoing operation,*
      xv. *the incorporation of high quality public art into the fabric of buildings in the public domain or in other areas to which the public has access.*

7.5AG Design excellence

1) *The objective of this clause is to deliver the highest standard of architectural and urban design.*
2) *Development consent must not be granted to development involving the construction of a new building or external alterations to an existing building in Moore Point unless the consent authority considers that the development exhibits design excellence.*
3) *In considering whether development exhibits design excellence, the consent authority must have regard to the following matters—*
   a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
   b) *whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*
   c) *whether the proposed development detrimentally overshadows the Georges River foreshore,*
   d) *any relevant requirements of applicable development control plans,*
   e) *how the proposed development addresses the following matters—*
   f) *the suitability of the site for development,*

g) *existing and proposed uses and use mix,*
h) *heritage issues and streetscape constraints,*
i) *the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
j) *bulk, massing and modulation of buildings,*
k) *street frontage heights,*
l) *environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
m) *the achievement of the principles of ecologically sustainable development,*
n) *manage the interface with industrial uses and associated amenity impacts from their ongoing operation,*
o) *pedestrian, cycle, vehicular and service access, circulation and requirements,*
p) *the impact on, and any proposed improvements to, the public domain.*

4) *This clause does not apply to industries, warehouse or distribution centre and local distribution centre*

7.5AH Overshadowing of certain public spaces

1) *The objective of this clause is to protect specific public space from excessive overshadowing along the Georges River foreshore.*
2) *The consent authority must not grant consent to development on any land unless it is satisfied that the development will maintain a minimum 3 hours of direct sunlight to the Georges River foreshore between 9am-3pm mid-winter, shown in blue hatching on the Key Sites Map.*

6.2.2 Other Amendments

7.16 Ground floor development in Zones E1 and MU4

Amend subclause (3) to exclude Moore Point from the clause, as follows:

> *This clause does not apply to land at Edmondson Park* ***and Moore Point****.*

Additional Permitted Use

In recognition of the precincts long-term staging, it is proposed to enable the continuation of industrial related uses as the precinct develops. This will conserve existing consents over the lifecycle without creating issues regarding existing use rights. As such, a new subclause is proposed to Schedule 1 with the following wording suggested.

Use of certain land at Moore Point in zone MU1

1) *This clause applies to MU1 land in Moore Point*
2) *The objective of this clause is to permit industrial uses as Moore Point transitions from industrial to mixed use and residential land uses.*
3) *Development for the purposes of 'light industry', 'general industry' and 'warehouse or distribution centres are permitted with consent.*
4) *Clauses 7.5 AF and 7.5AG do not apply to development subject to this clause.*

Schedule 5 Environmental Heritage

Amend Schedule 5 Environmental Heritage Item 76 to read as follows:

> *Item - General (Local) -* ~~*Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors*~~ ***Former Cable Makers***

Australia site, including the c.1941 Administration Building with landscaping and turning circle, front gates and piers, factory No. 1, western wall to factory No. 2, powerhouse, engineering workshop, boiler house and engineering store, including interiors to all the above listed buildings.

6.3 Amendments to LEP Maps

Table 8 sets out the administrative amendments to the LEP mapping to facilitate the proposed planning controls.

Table 8: LEP Map Amendments

Map Sheet	Amendment	Explanation
Land Zoning LZN_11 LZN_12 LZN_14	Rezoning the subject site from E4 General Industrial (previously IN1 General Industrial to MU1 Mixed Use and RE1 Public Recreation	The MU1 Mixed Use zone will allow for a range of residential, commercial and community uses which aligns with the objectives of the proposal. The RE1 Public Recreation zone will protect proposed regional and local open spaces for public use in perpetuity.
Minimum Lot Size LSZ_11 LSZ_12 LSZ_14	Amend minimum lot size from 2000m^2 to 1,000m^2.	Required to facilitate future subdivision of development lots, commensurate to a mixed-use zone.
Height of Buildings HOB_11 HOB_12 HOB_14	Increase the maximum height of buildings for the subject site from 18m and 15m to 9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136).	Required to facilitate the proposed density, commensurate with approximately 10,742 dwellings and 23,503 jobs. Height limits have been tailored in key locations to respond to heritage values and protect solar access to public open space. It is noted that the proposed height of buildings map has been provided as both a conventional height of building map (measured in m above existing ground level) and an RL height control format to demonstrate compliance with the Obstacle Limitation Surface (**OLS**) height limits in relation to the Bankstown Airport. While DPHI indicated a preference for height in metres, the PP retains an RL as an optimal approach of retaining robustness and flexibility in the Structure Plan. It is anticipated only one of the height maps proposed would be adopted, which is to be resolved following exhibition of the planning proposal.
Floor Space Ratio FSR_11 FSR_12 FSR_14	Increase the maximum floor space ratio from 0.5:1 to 4:1.	Required to facilitate the proposed density, commensurate with approximately 10,742 dwellings and 23,503 jobs. The distribution of floor space will be managed through the identification of blocks on the Key Site Map and a correlating GFA schedule within the proposed Division 1A of Part 7.

Map Sheet	Amendment	Explanation
Heritage HER_11 HER_12 HER_14	Reduce the extent of Lot 200 DP 1009044 (3 Bridges Road) identified as Local Heritage Item 76.	Reduce the extent of heritage mapping to reflect retained heritage buildings in accordance with specialist heritage advice from GBA Heritage.
Key Site KYS_11 KYS_12 KYS_13	Identify Moore Point (the subject site) on the Key Sites Map.	Identification of the subject site as a key site to apply Additional Local Provisions (described below), including allocation of various development blocks with nominated GFA caps, and identification of *potential* future school sites (subject to further investigation post-exhibition).

6.4 Site-Specific Development Control Plan

As required by the Gateway Determination, a site-specific DCP is to be prepared prior to finalisation of the PP. The UDR supporting the PP contains a suite of Framework Plans, which articulate the essential built form, access, open space framework to inform a future site-specific DCP post-exhibition. This will be prepared in conjunction with Council, DPHI and based on the suite of technical reports submitted with the PP.

6.5 Explanation of Planning Implementation

The proposed planning framework and implementation has been modelled on successful urban regeneration precincts of similar scale and significance including Western Gateway Precinct, Waterloo Estate (South) and Carter Street. (**Figure 25**)

The process includes:

1. **Site-Specific LEP** – Zoning, height, FSR, block GFA, site-specific provisions,
2. **Site-Specific DCP** – Structure Plan, movement, open space, heritage, built form, land use,
3. **Concept DAs** – Spatial distribution of built form and envelope arrangements, and
4. **Detailed DAs** – Precise design of built form, roads, open space and construction details.

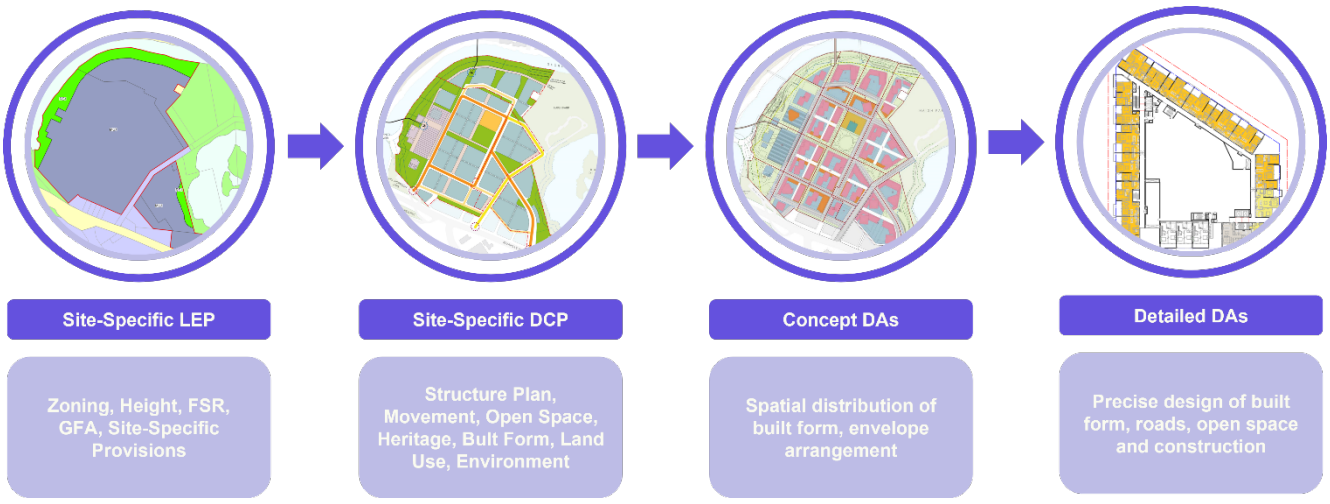


Figure 35: Planning Process and Implementation

Source: SJB

As described earlier, the Structure Plan and Structure Plan Envelope will establish the 'fixed' parameters of the Moore Point proposal and will be carried forward as part of a future approvals across the site. The planning controls, set out in LLEP 2008 and supported by the DCP, will frame the design and built form outcomes to be achieved in Concept DAs across the site.

The Concept DAs will ensure the GFAs provided at the block level are then allocated to superlots. Future DAs would need to be consistent with the allocation of GFA at the superlot level. This avoids situations where individual development sites may seek to drawdown against one another, resulting in an inconsistent distribution of built form.

The proposed provisions provide the maximum GFA for each block, which is then distributed across the superlots within each block.

7 Part 3 – Justification of Strategic and Site-Specific Merit

7.1 Section A Need for the Planning Proposal

Q1. Is the planning proposal a result of an endorsed LSPS, strategic study or report?

The PP is the direct result of a range of strategic planning studies including:

- *Liverpool Collaboration Area Place Strategy 2018,*
- *Liverpool Local Strategic Planning Statement 2020, and*
- *Liverpool Housing Strategy 2019*.

These studies provide a clear strategic line of sight aimed at the successful transformation of Liverpool CBD eastwards and the regeneration of Moorebank. Overall, it reflects strong strategic and site-specific merit to facilitate land use change.

We note the recognition of Moore Point as an extension of Liverpool CBD was realised in 2008 through the creation of LLEP 2008 and the inclusion of land north of Newbridge Road and west of Bridge Road under *Division 1 – Liverpool city centre*.

Liverpool Collaboration Area Place Strategy

The Place Strategy acknowledges Liverpool's complex challenges including the provision of new local amenity along the Georges River, constrained road networks, lack of sequencing and coordination associated with PPs and market interests in new residential development.

The site is situated within the Georges River North Precinct, which is identified as 'mixed use'. The mixed-use area is defined as:

> *a mixture of commercial, retail, residential and community uses that provide sustainable employment, that is complementary to and not in competition with, the commercial core.*

The PP is directly responding to the vision of the Georges River North Precinct by providing a mix of land uses, heights and floor space amendments that will facilitate a combination of uses across the area.

Liverpool Local Strategic Planning Statement

The LSPS establishes a 30-year strategic vision for land use planning in Liverpool and the necessary actions required to align with broader regional and district planning objectives.

Key to the LSPS is the recognition of the Georges River North Precinct as future residential/mixed-use to support the CBD and Innovation Precinct as advanced through the Place Strategy.

Key actions emerging from the LSPS that directly relate to the preparation of a PP for the site include:

> *Investigate amendments to LEP to rezone River precinct north of Newbridge Road (Moore Point) as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages. (short to medium term).*

We note short to medium term in the LSPS refers to the following periods:

- Short term – 2019/2020 - 2020/2021, and
- Medium term – 2021/2022 - 2024/2025.

Following the clear alignment between the Place Strategy and LSPS, the PP has been prepared to realise the priorities for Liverpool.

Georges River Precinct Plan

Whilst not formally endorsed or finalised, the draft GRPP established the design principles and vision to transform land uses around Moorebank.

The masterplan provided the following vision for the River City:

> *By 2035 Liverpool and the Georges River Moorebank Precinct will become a true River City that has a vibrant mix of uses and activities. To support this new 21st century vision, employment opportunities will be created by leveraging the existing health-related industries in Liverpool and capitalising on the Precinct's strategic location within the south-west of Sydney.*
>
> *The unique natural environment that surrounds the Precinct will be taken advantage of with mixed use development overlooking the river. New and upgraded open space along the river will encourage greater interaction and enjoyment of the area.*

Whilst now superseded by other strategic documents, the PP has been developed in consideration of the vision, design strategies and opportunities detailed within the masterplan. This includes the creation of an activated mixed use precinct, adopting highest and best uses to capitalise on proximity to Liverpool CBD, creation of a contiguous and accessible foreshore and responding to the waterfront character of the Georges River.

Liverpool Local Housing Strategy

The *Liverpool Local Housing Strategy* (**LHS**) sets out the priorities and actions to deliver suitable housing in the right locations to meet the needs of the Liverpool community over the next 20 years that aligns with the Western City District Plan and Council's LSPS.

The Liverpool LGA population is forecast to grow to 358,871 people by 2036, which is estimated to actualise to demand for 43,452 additional dwellings in the period 2016-2036.

While under current controls there is a demonstrated capacity to meet demand for housing over the next 20 years, the Housing Strategy also identifies investigation opportunity area including the Georges River North precinct, also known as Moore Point.

Moore Point is identified as a short-term investigation area and suitable to accommodate a new mixed-use precinct which is complementary to, the Liverpool CBD.

Key items noted within the Strategy relevant to the site include:

- Suitable location for Council to provide additional housing within the Liverpool city centre and in proximity to train stations,
- Opportunity for additional housing will depend on improved transport infrastructure like the FAST Corridor,
- Provides an opportunity to leverage off excellent connections to the Liverpool Hospital and proposed Health, Innovation and Research Precinct, and
- Opportunity to realise the LSPS priority of improving connections to Georges River.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The PP is the best means of achieving the objectives and outcomes mandated in the Place Strategy, LSPS and LHS.

The site is zoned for E4 General Industrial purposes. Land uses within this zone are unable to achieve the mix of uses that are envisaged for the Georges River North Precinct. Therefore, a change of land use is required to facilitate a combination of residential and non-residential uses on the site.

The permitted uses contained under the E4 zone would also fail to facilitate the job and dwelling targets stipulated in the Place Strategy, LSPS and Housing Strategy.

The existing land use and development standards would not be able to deliver the public domain improvements envisaged for the Georges River North Precinct including embellishment of the foreshore, adaptive re-use of existing heritage and creation of integrated and connected pedestrian and cycle links.

A change of land use in conjunction with amendments to key development standards and the introduction of a new division to the LEP is necessary to transform Moorebank into the natural extension of Liverpool CBD. This will provide land uses conducive to satisfying the objectives of the Place Strategy, LSPS and Housing Strategy as well as ensuring significant public benefits associated with the proposal are safeguarded.

The PP will facilitate the following public benefits that are entirely consistent with the objectives and outcomes of the LSPS. The public benefits will be a combination of local and State infrastructure items, and outcomes that will be associated with private development. These include:

- Riverbank rehabilitation and revegetation, including associated flooding and foreshore water quality treatments,
- Bridge connections to Liverpool CBD including extensive shared cycle/pedestrian paths to foster healthy and socially connected communities across Liverpool and optimising access to underutilised open space at Haigh Park,

- Approximately 34.5% of the site as publicly accessible public open space and upgraded parkland, enhancing the green grid and delivering bespoke and high quality open space;
- Adaptive re-use of existing heritage buildings (Administration Building, Factory 1 and industrial outbuildings) and retention of heritage grid adjacent to foreshore open space, creating a destination for the community,
- Upgrades to Newbridge Road and creation of new streets, improving infrastructure and enhancing connectivity to Haigh Park and Liverpool CBD,
- Provision of cultural uses and opportunities including land for 1,000 capacity primary school, establishing new experiences for a diversifying Liverpool and contributing to local character,
- Contribution to the 8km 'Georges River Walk' from Chipping Norton to Casula Powerhouse to activate but also protect and improve the health and activation of the Georges River, and
- Capacity to provide approximately 23,503 additional jobs in excellent proximity to Liverpool CBD and the LIP, strengthening the areas productivity.

The PP is a direct result of Liverpool's LSPS, which provides actions to rezone Moore point for residential and mixed-use purposes.

A proponent driven PP is the best means of achieving this outcome through an integrated masterplan response in tandem with bespoke planning provisions to optimise built form and amenity outcomes for Moore Point.

7.2 Section B Relationship to the Strategic Planning Framework

Q3. Will the planning proposal give effect to the objectives and actions of the applicable regional or district plan or strategy (including any exhibited draft plan or strategies)?

The PP will give effect to the objectives and outcomes of the applicable strategic plans, being the Region Plan and the relevant District Plan.

Greater Sydney Regional Plan

The Region Plan was published in March 2018 and sets out a vision, objectives, strategies and actions for a metropolis of three cities across Greater Sydney. The Plan outlines 10 overarching directions supported by 40 objectives which aim to provide interconnected infrastructure, productivity, liveability and sustainability benefits to all residents. The PP's consistency with the relevant objectives is discussed in **Table 9**:

Table 9: Consistency with Region Plan

Objective	Topic / Theme	Consistency with Objective
1	Infrastructure supports the three cities	**Consistent** The proposal seeks to align new infrastructure to support the growth of Liverpool as Sydney's third CBD including extensive foreshore open space embellishments, creation of new roads and upgrades of existing intersections.

Objective	Topic / Theme	Consistency with Objective
2	Infrastructure aligns with forecast growth –growth infrastructure compact	**Consistent** The proposal aligns with population, employment and housing demand for Liverpool LGA and will be addressed through commercial and residential floor space.
3	Infrastructure adapts to meet future needs	**Consistent** The proposal will provide new infrastructure along the Georges River foreshore and responds to the vision of the area articulated in the LSPS and Place Strategy. This will be achieved through further consideration of planned and future transport required to support Moore Point.
4	Infrastructure use is optimised	**Consistent** The proposal will locate future residents within immediate proximity to Liverpool CBD, Innovation Precinct and Liverpool Train Station, whilst also establishing new open space, social and road infrastructure to support the additional population.
5	Benefits of growth realised by collaboration of governments, community and business	**Consistent** The proposal provides a complete alignment with the land uses articulated in the Place Strategy and Liverpool Collaboration Area including residential, recreational, retail and commercial uses. The proposal has established a series of working groups to drive a number of strategic objectives and principles for Moore Point.
6	Services and infrastructure meet communities' changing needs	**Consistent** The proposal will provide new open spaces, soft infrastructure such as cycle links, civic spaces, educational facilities and service that will cater for the future population growth of Liverpool.
7	Communities are healthy, resilient and socially connected	**Consistent** The proposal will provide new pedestrian and cycleway connections to form part of a broader integrated network, promoting walkability and pedestrian movement along the Georges River foreshore, Lake Moore and Casula. The proposal will establish a fine grain urban character in an area which is largely defined by large industrial lots as outlined in the sub-precinct character statements.
8	Greater Sydney's communities are culturally rich with diverse neighbourhoods	**Consistent** The proposal will celebrate the identity and sense of place of the River City. In particular, the proposal seeks to utilise the existing local heritage item on the site (Administration Building, Factory 1 and industrial outbuildings) as a focal point and destination for Liverpool CBD. The use of this area will be for commercial, cultural and community purposes will provide opportunities to create new diverse neighbourhoods that are founded on an identity unique to the Georges River.
9	Greater Sydney celebrates the arts and supports creative industries and innovation	**Consistent** The proposal will provide new public spaces and street corners that will facilitate public art and opportunities for civic gathering. This includes opportunity for cultural and event spaces in the heritage quarter. The proposed land use zone will enable a variety of creative and innovative industries.

Objective	Topic / Theme	Consistency with Objective
10	Greater housing supply	**Consistent** The proposal seeks to provide approximately 10,742 dwellings when ultimately developed. This will contribute to the housing targets as mandated by the GSC in the medium and long term.
11	Housing is more diverse and affordable	**Consistent** The proposal will provide additional housing supply to Liverpool LGA and CBD, ensuring enough supply is provided to lower the cost of housing.
12	Great places that bring people together	**Consistent** The proposal seeks to unify Liverpool CBD with the Georges River. Under the current planning provisions, the site fails to respond and complement the changing aspirations and vision of Liverpool CBD. The proposal will rebalance Liverpool CBD and focus of a vibrant mix of uses oriented around the Georges River foreshore including passive and active recreational opportunities and bridge connections.
13	Environmental heritage is identified, conserved and enhanced	**Consistent** The proposal will adaptively reuse selected heritage buildings on the site. This will ensure that the unique environmental assets of the site are utilised and celebrated.
14	A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities	**Consistent** The site is located within excellent proximity of Liverpool CBD, which connects residents and employers across Sydney and to the future Badgery's Creek Aerotropolis. The proposal will provide new cycle and pedestrian links coordinated across the Moorebank area to improve connections to Liverpool CBD.
15	The Eastern, GPOP and Western Economic Corridors are better connected and more competitive	**Consistent** The proposal will reinforce the role of the Western Economic Corridor by contributing to employment and residential growth in Liverpool CBD and the LIP. This will leverage off the strategic location of the site in relation to the Badgery's Creek Aerotropolis.
16	Freight and logistics network is competitive and efficient	**Not applicable** The proposal will not undermine the existing freight and logistical projects being undertaken at Moorebank Intermodal Terminal.
17	Regional connectivity is enhanced	**Not applicable** The proposal will not undermine the ability to improve north-south transport connections between Greater Sydney, Greater Newcastle and Wollongong.
18	Harbour CBD is stronger and more competitive	**Not applicable** The proposal is not located within the Harbour CBD and will not undermine the strength of the Harbour CBD. Sydney Metro City & Southwest will improve accessibility between the site and the Harbour CBD.
19	Greater Parramatta is stronger and better connected	**Not applicable** The proposal is not located within the Greater Parramatta and will not undermine the growth of Greater Parramatta.

Objective	Topic / Theme	Consistency with Objective
20	Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City	**Consistent** The proposal will ensure residents are living within a closer proximity to the potential economic benefits of Badgery's Creek and the western city, which will be accessible via the FAST Corridor.
21	Internationally competitive health, education, research and innovation precincts	**Consistent** The proposal will contribute to the regeneration of Moorebank, facilitating new residents into the area who will benefit from close proximity to Liverpool's existing key education and health assets and transport infrastructure including the LIP. The proposal will facilitate high-quality residential and services in close proximity to the major Liverpool institutions including Western Sydney University and Liverpool Hospital, as well as providing capacity for educational and cultural institutions on the site.
22	Investment and business activity in centres	**Consistent** The proposal will facilitate increased business activity additional high standards of amenity in Moorebank and Liverpool CBD by providing critical mass of new residents. This in turn will facilitate the demand for additional services and business in the CBD and the site itself. Importantly, the uses and floorspace proposed would act as complementary, and not in competition with the CBD. The proposal has capacity to deliver approximately 23,503 additional jobs.
23	Industrial and urban services land is planned, retained and managed	**Consistent / See below** The proposal seeks to rezone land from industrial to mixed use and recreational purposes. The District Plan states that where appropriate, conversion of industrial lands into other uses may be appropriate. Moore Point is identified in the District Plan as 'Review and Manage'. We further note Council's Employment Lands Study (**ELS**) seeks to only retain land industrial land outside of the Collaboration Area. Land within Collaboration Areas are subject to future alternative uses. As identified in the Place Strategy, the site is located in the Georges River North Precinct, which is envisaged to accommodate a mix of land uses. Furthermore, the LSPS advances a mixed-use vision for the Precinct via a rezoning in the short to medium term. Given the strategic line of sight and consistency amongst strategic planning to see a mix of uses on the site, the site provides a circumstance where conversion would be appropriate to satisfy the overall strategic vision for Liverpool's diversifying and expanding CBD.
24	Economic sectors are targeted for success	**Consistent** The proposal will increase employment opportunities in the precinct by proposing non-residential floor space that can be allocated to a mix of entertainment, retail, commercial and business uses. The proposal is capable of delivering up approximately 23,503 additional job and strengthen the role of health and education sectors in Liverpool.
25	The coast and waterways are protected and healthier	**Consistent** The proposal will contribute to the remediation and revitalisation of the Georges River foreshore by improving foreshore vegetation and

Objective	Topic / Theme	Consistency with Objective
		bank stabilisation. This includes consideration of key fish habitat, revitalisation of the riverbank and connecting with Country.
26	A cool and green parkland city in the South Creek corridor	**Consistent** The proposal will revitalise parts of the Georges River foreshore, facilitating new landscaping, vegetation and tree planting across the site. This aligns to the strategic vision to manage the South Creek catchment area and create cool, green and attractive urban communities.
27	Biodiversity is protected, urban bushland and remnant vegetation is enhanced	**Consistent** The proposal will revitalise parts of the Georges River foreshore, facilitating new landscaping, vegetation and tree planting across the site. The site in its current state and capacity under existing planning controls fails to incentivise or facilitate additional tree canopy or landscaping.
28	Scenic and cultural landscapes are protected	**Consistent** The proposal will ensure future residents and visitors will benefit from new views and vistas towards the Georges River foreshore.
29	Environmental, social and economic values in rural areas are protected and enhanced	**Consistent** The proposal will strengthen the environmental, social and economic values of the area by celebrating cultural heritage items on the site and surrounding environmental assets including Haigh Park, Lake Moore and the Georges River foreshore.
30	Urban tree canopy cover is increased	**Consistent.** The proposal will provide opportunities for additional landscaping and street trees along new local streets, pocket parks and the Georges River foreshore. Owing to the scale and significance of the site, both deep soil and tree canopy cover are addressed at the masterplan scale. This precinct wide approach to deep soil sets a 22% deep soil target and exceed a 30% canopy cover target, which will be delivered on tower and podium roofs as well as the streets and open spaces.
31	Public open space is accessible, protected and enhanced	**Consistent** The proposal seeks to create and embellish open space across the site and thereby improving Sydney's green grid connections to Liverpool CBD and the Georges River. The proposal provides approximately 10.8 hectares, equivalent to 34.5% of publicly accessible open space.
32	The Green Grid links parks, open spaces, bushland and walking and cycling paths	**Consistent** The proposal will deliver a green and blue grid, integrating the site with a series of bespoke landscape and open space areas supporting by pedestrian and cycling infrastructure. The proposal importantly, facilitates public access to the riverfront and previously underutilised open space with new pedestrian and cycling paths.
33	A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change	**Consistent** The proposal will contribute to a more sustainable and resilient city through remediation of the Georges River and the utilisation of ESD principles in future development.

Objective	Topic / Theme	Consistency with Objective
34	Energy and water flows are captured, used and re-used	**Consistent** The proposal will provide uses that will enable WSUD and ensure water is appropriately drained across the site.
35	More waste is re-used and recycled to support the development of a circular economy	**Consistent** The proposal will facilitate a mix of land uses that can utilise recycled water for landscaping and WSUD.
36	People and places adapt to climate change and future shocks and stresses	**Consistent** The proposal will deliver a resilient waterfront that is able to respond to the varying shocks and stresses of the Georges River. The proposed pad levels have been designed with climate changed factored as part of the flood assessment. The proposal aligns with the foreshore building line in accordance with the LEP.
37	Exposure to natural and urban hazards is reduced	**Consistent** The proposal will improve the landscape quality of the site.
38	Heatwaves and extreme heat are managed	**Consistent** The proposal will deliver additional landscaping and tree plantings on the site and along the riparian waterfront, improving the overall urban cooling and summertime shade. The proposed tree canopy within the Structure Plan will contribute to reducing urban heat island effect.
39	A collaborative approach to city planning	**Consistent** The proposal is responding to a precinct wide approach for Moorebank as outlined in the Place Strategy and LSPS. The working groups previously established that includes Council, relevant State agencies and the JLG, builds on the collaborative approach established by the GSC Collaboration Area. The proposal aims to provide an integrated and whole of government approach to the future of the area including new land uses, foreshore spaces, cycle and pedestrian links.
40	Plans refined by monitoring and research	**Consistent** The proposal responds to the Pulse of Greater Sydney and the 2019 Annual Report for the Liverpool Collaboration Area.

The section below discusses the Objective 23 relating to industrial land protection.

Industrial Land Protection

Objective 23 of the Plan provides directives to plan, manage and retain industrial and urban services land.

The Plan acknowledges that Liverpool and its surrounding areas will undergo a review of all industrial and urban services land to confirm its retention or to manage uses to allow sites to transition to higher-order employment activities.

As discussed in the table above, there has been a clear mandate from a suite of strategic planning documents to reconsider land uses east of the Georges River and north of Newbridge Road for mixed use purposes. This has most recently been reflected in the LSPS, which provides actions to rezone

land east of the Georges River and north of Newbridge Road for mixed use purposes as a short term priority.

In light of this, the site provides a circumstance where conversion from industrial uses would be appropriate to satisfy the overall strategic vision for Liverpool's diversifying and expanding CBD. The PP proposes a MU1 zone that is capable of providing a genuine mix of uses including hotels and serviced apartments that will contribute to additional employment generation and job density.

A single purpose industrial use of the site does not present the most intensive and efficient use of the land. The site is suitable to accommodate higher order jobs via the MU1 zone and to co-locate these uses with high levels of visibility and exposure to Newbridge Road or in mixed use buildings.

The previous consideration of loss of industrial lands was comprehensively addressed in the originally submitted Economic Impact Assessment (**EIA**). An updated EIA has been prepared by Atlas Economics under separate cover (**Appendix 9**), which builds on the originally submitted EIA and notes the following outcomes for the PP.

- Compared to the base case of retaining the existing industrial land use, the proposal will deliver significant and positive economic impacts to the Liverpool economy,
- When operational, the proposal is estimated to result in an annual net increase in economic activity with $6,843.5 million additional in output and 23,503 additional jobs (in comparison to the base case), and
- Beyond these economic impacts, the proposal will importantly strengthen the existing role and offering of the Liverpool CBD and cater for the flow-on growth of the Liverpool Innovation Precinct.

Overall, the PP is consistent with the Region Plan by building upon liveability, productivity and sustainability objectives including increasing housing supply and diversity, co-locating new jobs and homes in close proximity to existing infrastructure in Liverpool CBD, building upon the Green Grid through the Georges River foreshore and Lake Moore remediation and adaptive re-use of heritage items that celebrate Liverpool's local character.

The Region Plan nominates industrial land in Liverpool to be reviewed. The Place Strategy, LSPS and ELS support the transformation of Moore Point into a mixed use precinct and implies that loss of industrial zoned land is required to facilitate the future outcomes for the site.

Nonetheless, the proposed MU1 zone will accommodate the transition to high order employment activates, with significant intensification of jobs and a genuine mix of employment opportunities as well as low impact industrial uses.

Western Sydney District Plan

Table 10 below provides a summary of the PP's consistency with the relevant District Plan Planning Priorities.

Table 10: Consistency with District Plan

Priority	Topic / Theme	Consistency with Priority
W1	Planning for a city supported by infrastructure	**Consistent** The proposal seeks to align new infrastructure to support the growth of Liverpool as Sydney's third CBD including extensive foreshore

Priority	Topic / Theme	Consistency with Priority
		open space embellishments, creation of new roads and upgrades of existing intersections. The proposal is supported by an IDP (**Appendix 21**), which identifies that range of infrastructure elements proposed to be delivered as part of the proposal.
W2	Working through collaboration	**Consistent** The JLG has sought to collaborate and incorporate feedback from a range of stakeholders including DPHI, Council, TfNSW, SINSW, LIP, HNSW and DPI Water to prepare this proposal. This includes working groups with State and local government stakeholders, which have facilitated collaboration in all stages of planning for Moore Point.
W3	Providing services and social infrastructure to meet people's changing needs	**Consistent** The proposal seeks to provide a variety of infrastructure and services to meet the future resident needs including community facilities, open space, parks, future primary school, indoor sport courts. It is noted that the needs of the residents of Moore Point may change over time and the proposal seeks flexibility to provide for needs as required over time. The proposal is supported by an Open Space and Community Needs Assessment (**Appendix 6**), which identifies the types of infrastructure required to support the future population.
W4	Fostering healthy, creative, culturally rich and socially connected communities	**Consistent** The proposal seeks to provide housing, jobs, services and recreational facilities, open space, walkable streets, safe pedestrian and cycling routes that connect to the adjoining CBD to assist in promoting physical activity and to provide a place of social connectivity for people of all ages. The proposal is supported by an Open Space and Community Needs Assessment (**Appendix 6**), which outlines how the proposed infrastructure offering will support socially connected communities.
W5	Providing housing supply, choice and affordability with access to jobs, services and public transport	**Consistent** The proposal seeks to provide housing, jobs, services, recreational facilities, open space and pedestrian and cycling routes within the precinct or connects with existing public transport and the jobs and services in the Liverpool CBD.
W6	Creating and renewing great places and local centres, and respecting the District's heritage	**Consistent** The proposal is seeking to renew the site by creating new dwellings, jobs, education facilities and services. The proposal also seeks to renew the site by enhancing the river foreshore to create a publicly accessible riverfront interconnected by a network of parks, pedestrian and cycle ways and open space. The proposal aims to maintain heritage attributes by conservation and adaptively reusing aspects of the site's heritage.
W7	Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City	**Consistent** The site's location adjacent to the Liverpool CBD, and the delivery of the two proposed pedestrian bridges, will facilitate joint access between the site and residents within the CBD to Haigh Park, the foreshore, Liverpool CBD, the LIP and supporting health services. Moore Point's strategic location has the potential to minimise the

Priority	Topic / Theme	Consistency with Priority
		need to fund additional infrastructure, assists in delivering the 30-minute city goal and gives effect to this priority.
W8	Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis	**Consistent** The delivery of future transport links like the FAST Corridor and the North South Rail Line / South West Rail Link Extension will provide greater access between Liverpool and the future WSA. Liverpool offers the largest commercial hub of the edge cities proximal to WSA with a defined CBD, with great potential to support this by the development of Moore Point. Liverpool is well-situated roughly midway between WSA and the Sydney CBD, offering an obvious hub from which businesses and people can access the city and the airport. The flexibility of the residential use of Moore Point would allow a place to stay for incoming tourists and business people from WSA in the future.
W9	Growing and strengthening the metropolitan cluster	**Consistent** The proposal will provide further housing and jobs to support the development of Liverpool as a metropolitan cluster. Moore Point is anticipated to complement the Liverpool city centre and will not compete with the existing commercial core, as demonstrated in the submitted EIA (**Appendix 9**).
W10	Maximising freight and logistics opportunities and planning and managing industrial and urban services land	**Consistent** The proposal will not undermine the existing freight and logistical projects being undertaken at Moorebank Intermodal Terminal. The Western Sydney Freight Line will be a proposed dedicated freight rail line connection between the Western Parkland City and Port Botany. The freight line is not located near the site. The proposal seeks to rezone land from industrial to mixed use and recreational purposes. Moore Point is identified in the District Plan as 'Review and Manage'. We further note Council's ELS seeks to only retain land industrial land outside of the Collaboration Area. Land within Collaboration Areas are subject to future alternative uses. As identified in the Place Strategy, the site is located in the Georges River North Precinct, which is envisaged to accommodate a mix of land uses. Furthermore, the LSPS advances a mixed-use vision for the Precinct via a rezoning in the short to medium term. Given the strategic line of sight and consistency amongst strategic planning to see a mix of uses on the site, the site provides a circumstance where conversion would be appropriate to satisfy the overall strategic vision for Liverpool's diversifying and expanding CBD.
W11	Growing investment, business opportunities and jobs in strategic centres	**Consistent** An increase in residential and commercial development will support investment, business opportunities and jobs in the CBD. An improvement in amenity and additional open space around the Georges River will also increase the attractiveness of the area as an investment destination. The proposal is supported by an EIA (**Appendix 9**), which demonstrates the economic benefits of the proposal including 23,503 operational jobs.

Priority	Topic / Theme	Consistency with Priority
W12	Protecting and improving the health and enjoyment of the District's waterways	**Consistent** The proposal seeks activate the riverfront to create an interconnected network of open space including pedestrian and cycle paths, tree canopy, riverfront public leisure space with decks and pontoons to allow direct engagement with the riverfront by extending out to the Georges River. The proposal is supported by a Riparian Assessment (**Appendix 13**), which demonstrates proposed landscape solutions along the Georges River and revetment strategies.
W13	Creating a Parkland City urban structure and identity, with South Creek as a defining spatial element	**Consistent** The proposal will contribute to the green corridor within the Western Parkland City and support the vision for the South Creek corridor. The proposal seeks to create linear parks and deliver a one of its kind continuous open space along the riverfront that will link to the Liverpool city centre. The proposal is supported by a Public Domain and Landscape Plan (**Appendix 5**), which sets out the interconnected open space network to be delivered by the proposal.
W14	Protecting and enhancing bushland and biodiversity	**Consistent** The planning proposal includes a considered biodiversity response which seeks to avoid, minimise and mitigate impacts on the vegetation and species habitat present within the site during construction and operation phases of the development. Rehabilitation, replanting and improving foreshore environments is a key aspect of the proposal. Where vegetation removal is required, ecosystem credits will be obtained. A detailed response regarding the proposed biodiversity approach is provided within the BDAR (**Appendix 11**).
W15	Increasing urban tree canopy cover and delivering Green Grid connections	**Consistent** The planning proposal seeks to utilise the Georges River and Lake Moore foreshore, and a diverse offering of other local open space options to create an integrated and high quality open space network. The proposed open spaces will connect with Haigh Park, an existing district open space asset adjacent to the subject site. The proposal includes a precinct wide approach to deep soil and canopy cover, setting a 22% deep soil target and 30% canopy cover target. Refer to the UDR at **Appendix 3**.
W16	Protecting and enhancing scenic and cultural landscapes	**Consistent** The site is not formally identified as having scenic landscape values. However, has been intentionally designed to maximise views to natural areas including the Georges River foreshore and Lake Moore. Improvement to the foreshore will maximise scenic landscape values from a variety of vantage points. The proposal is supported by an Aquatic Ecology Assessment (**Appendix 12**), BDAR (**Appendix 11**) and Riparian Assessment (**Appendix 13**), which considers the sites existing landscape values. The proposal also includes an integrated heritage response, outlined in detailed within the SoHI (**Appendix 10**). Views to and from existing heritage items, and integration of heritage structures into the built form through adaptive re-use are key aspects of the proposal.

Priority	Topic / Theme	Consistency with Priority
W17	Better managing rural areas	**N/A** The site is not located within a rural area.
W18	Delivering high quality open space	**Consistent** The planning proposal includes provision of approximately 10.8 hectares or 34.5% of the site as publicly accessible open space. This includes a district scale riverfront park (to be dedicated as RE1 Public Recreation), local parks, pocket parks and linear parks. Furthermore, the site is directly adjacent Haigh Park, providing further opportunity to utilise this existing asset. The diverse offering of open spaces and the distribution across the site will support the proposed urban land use and proposed populations variety of recreational needs. Refer to the Open Space and Community Needs Assessment (**Appendix 6**).
W19	Reducing carbon emissions and managing energy, water and waste efficiently	**Consistent** The planning proposal includes a considered Sustainability response, outlined in detail within the Sustainability Statement (**Appendix 18**). The strategy sets long term sustainability targets, while remaining flexible to adapt to new targets and technologies over time as the precinct is delivered.
W20	Adapting to the impacts of urban and natural hazards and climate change	**Consistent** Adapting to the existing flood conditions of the site and ensuring safe evacuation is possible during a flood emergency have been key drivers behind the proposal. This is outlined in detail within the FIA (**Appendix 7**) and FERP (**Appendix 8**).

The following table provides a summary of the PP's consistency with the District Plan with specific reference to the aims for the LCA.

Table 11: Additional Consistency with District Plan

Area		Consistency with Priority
1	Increase housing diversity and provide affordable housing	**Consistent** The proposal will provide approximately 10,742 dwellings on the site in the long term to 2056. The additional housing proposed will provide housing choice and diversity and reducing pressure on affordability for the area. The Test Scheme option indicates potential for a range of alternative forms of accommodation including co-living, student housing and BTR. The JLG will undertake further investigations into affordable housing subject to feedback on the Structure Plan and viability.
2	Improve and coordinate transport and other infrastructure to support job growth	**Consistent** The proposal prioritises active modes of transport with public transport infrastructure including new cycle links and a new pedestrian bridge crossing to Liverpool Train Station. The proposal will provide much needed upgrades to Newbridge Road, including Bridges Road and Anchor Place, to support the proposal but also improve the surrounding transport network.

Area		Consistency with Priority
3	Develop smart jobs around the health and education precinct, particularly in the areas of advanced manufacturing and logistics, automation and translational research	**Consistent** The proposal will facilitate a higher order job density due to the proposed MU1 mixed use zoning. The proposed commercial floor space can accommodate a variety of uses which are complementary to surrounding precinct functions including commercial, retail, entertainment and leisure.
4	Improve the night-time economy, mixed use and transport connections	**Consistent** The proposal will facilitate the creation of a night-time economy through the proposed MU1 mixed use zoning, which can facilitate a variety of active uses. The heritage quarter will be a focal point for visitors and residents, conveniently situated east of Liverpool CBD.
5	Improve urban liveability and Liverpool's sense of place	**Consistent** The site's current zoning and planning controls do not improve urban liveability or allow residents to celebrate the Liverpool's sense of place. The proposal will transform Liverpool CBD into Sydney's third CBD with significant investment in open space and public domain, high-quality mixed-use buildings and celebration of local heritage and orientation towards natural assets. The proposed heritage quarter will become a focal point for the community.
6	Improve environmental outcomes around the Georges River	**Consistent** The current industrial use on the site is considered to have a higher impact in regard to the health and remediation of the surrounding river and waterways. The current use of the site provides no incentive to respond to its foreshore setting via built form, landscaping and design of buildings. The proposal will result in uses that have lower impact on the Georges River in tandem with bank rehabilitation for passive recreational uses. The proposal is supported by a Riparian Assessment (**Appendix 13**), BDAR (**Appendix 11**) and Aquatic Ecology Assessment (**Appendix 12**), which assess the existing environment of the Georges River and Lake Moore and how the proposal responds to this via new revetment strategies and waterfront management objectives.
7	Develop Greater Sydney Green Grid projects	**Consistent** The proposal will deliver a suite of open spaces and form part of a more integrated open space network for Liverpool and the Moorebank area. The proposal will provide approximately 34.5% of the site as publicly accessible open space. This includes connection of the missing link from Casula Powerhouse to Chipping Norton.
8	Capitalise on Western Sydney Airport and the Western Sydney City Deal	**Consistent** The proposal capitalises on the opportunities presented by the Western Sydney City Deal and Western City Airport by providing a catalyst for urban regeneration east of Liverpool CBD and strengthening its prominence as Sydney's third CBD.
9	Revitalise Liverpool CBD	**Consistent** The proposal will rebalance Liverpool CBD towards the Georges River, which has been a clear objective of Council and Government for land east of the Georges River.

Area		Consistency with Priority
		The proposal will complement the revitalisation of Liverpool CBD by increasing residential and non-residential uses in tandem with new open space and infrastructure improvements. The EIA submitted with the proposal asserts the additional non-residential floorspace will put Liverpool CBD on a similar level to St Leonards and Crows Nest without compromising the role of the existing commercial core. See **Appendix 9**.
10	Examine flooding issues and water management	**Consistent** The proposal has considered flooding on the site consistent with the 2022 Flood Inquiry and Flood Advisory Panel. The findings of this analysis are presented in the FIA (**Appendix 7**). The proposal is supported by a Riparian Assessment (**Appendix 13**), which considers water quality and treatment across the site.
11	Consider the opportunities presented by the Liverpool Water Recycling Facility	**Consistent** The proposal does not interfere with the Liverpool Water Recycling Facility. If there is capacity the JLG may investigate utilising this facility, subject to further investigation.
Actions for Liverpool CBD		
a	Protect and develop the commercial core	**Consistent** The proposal will strengthen the critical mass available to Liverpool's commercial core, by providing for new residential communities that require access to goods and services in Liverpool CBD. It will aim to provide uses that are complementary to the CBD. Refer to the EIA at **Appendix 9**.
b	Improve and coordinate transport and other infrastructure to support jobs growth	**Consistent** The proposal will provide new active transport options across the site, acting as a catalyst for wider regional active transport links to the CBD. The proposal will provide new bridge crossings over the Georges River to Liverpool Train Station and the LIP, ensuring new residents have access to services, employment and amenity along the river.
c	Develop smart jobs around the health and education precinct	**Consistent** The proposal will provide for new higher order commercial uses on the site through the MU1 Mixed Use zone that complement the LIP.
d	Build on the centre's administrative and civic role	**Consistent** The proposal does not undermine Liverpool's administrative and civic role.
e	Improve public domain including tree-lined, comfortable open spaces and outdoor dining	**Consistent** The site has traditionally operated for uses that does not require consideration of the public domain, street trees, open spaces and outdoor dining. The proposal will facilitate transformation of the site for mixed use purposes, ensuring open space, tree plantings and active frontages are introduced to promote the public domain. The urban design and public domain strategies for the site are articulated in the UDR (**Appendix 3**).
f	Improve connectivity and links to the Georges River and prioritise	**Consistent** The proposal will provide cycle links along the Georges River foreshore and pedestrian links to Liverpool Train Station and LIP.

Area		Consistency with Priority
	pedestrian, cycle and public transport facilities	
g	Encourage vibrant mix of uses, new lifestyle and entertainment uses to activate streets and grow the night-time economy	**Consistent** The current planning controls only allow for more intensive employment related uses and do not encourage a vibrant mix of lifestyle and entertainment uses. The proposal will facilitate a high amenity mixed-use precinct consistent with the vision of the GRNP.

The proposal is consistent with the specific actions and priorities of the LCA by proposing land uses that will achieve the mix of residential, commercial and recreational uses east of the Georges River and north of Newbridge Road.

Q4. Is the planning proposal consistent with a council LSPS that has been endorsed by the Planning Secretary or another endorsed local strategy or strategic plan?

The PP is consistent with both the Place Strategy and the Liverpool LSPS. The consistency with these strategies is outlined below.

Liverpool Collaboration Area Place Strategy

The Place Strategy was released in December 2018 and establishes the priorities, opportunities and delivery actions for the area.

Under the Place Strategy, the site is identified as 'mixed use' and within the Georges River North Precinct, which aims to provide a mixture of retail, residential and community uses that provide sustainable employment that is not in competition with the commercial core. Consistency against the Place Strategy is demonstrated in **Table 12**.

Table 12: Consistency with Place Strategy

Priority		Consistency with Priority
1	Plan for movement and place functions in Liverpool City Centre, improve accessibility and walkability, and reduce congestion in and around the centre.	**Consistent** The proposal will improve accessibility and walkability in Liverpool CBD by proposing pedestrian and cycle links along the Georges River foreshore and bridge crossings into Liverpool CBD. This will reduce car dependence and encourage active modes of transport in the wider area.
2	Improve public transport to and from Liverpool	**Consistent** The proposal includes provision for bus services to connect residents to Liverpool and surrounds, as well as pedestrian connection directly into Liverpool CBD.
4	Create and renew great places for people	**Consistent** The proposal and accompanying framework plans provide a holistic precinct wide outcome involving the celebration of existing heritage, embellishment of open space and capacity for new educational and

Priority		Consistency with Priority
		cultural institutions to reinforce the areas local character and place making assets.
5	Provide social and civic infrastructure for current and future generations	**Consistent** The proposal will introduce new civic and social infrastructure around the Georges River foreshore and within the site.
6	Support the growth of critical employment hubs in the Collaboration Area	**Consistent** The proposal supports non-residential floorspace that can support employment growth adjacent to Liverpool CBD and Innovation Precinct that is complementary to the existing city centre.
7	Support the role and function of employment and urban services land	**Consistent** The proposal is located in a designated 'mixed use' area under the Place Strategy. The proposal has capacity to deliver a mix of employment opportunities without competing with the CBD. The proposal aims to transition the site to higher-order employment uses via the proposed MU1 mixed use zone.
8	Develop a network of high-quality open space linked by the Greater Sydney Green Grid and invest in improvements to the Georges River and its foreshores	**Consistent** The proposal implements green and blue grid aspirations by remediating the Georges River foreshore and introducing a network of new open spaces to connect to Liverpool CBD and the wider area.
9	Create a resilient place	**Consistent** The proposal has been designed with consideration of flooding on the site. This is outlined in detail within the FIA (**Appendix 7**) and FERP (**Appendix 8**).

The proposal is consistent with the Place Strategy by proposing land uses that will achieve the mix of residential, commercial and recreational uses east of the Georges River and north of Newbridge Road.

Liverpool Local Strategic Planning Statement: Connected Liverpool 2040

Connected Liverpool 2040 is Council's LSPS and sets out a 20 year strategic vision for land use planning in Liverpool and the necessary actions required to align with broader regional and district planning objectives. Consistency against the LSPS is set out in **Table 13**.

The LSPS specifically identifies Moore Point as an area to *"Investigate residential/mixed use at Moore Point to support CBD and Innovation precinct (River Precinct)"* within the Liverpool City Centre Structure Plan, depicted in **Figure 26** below.

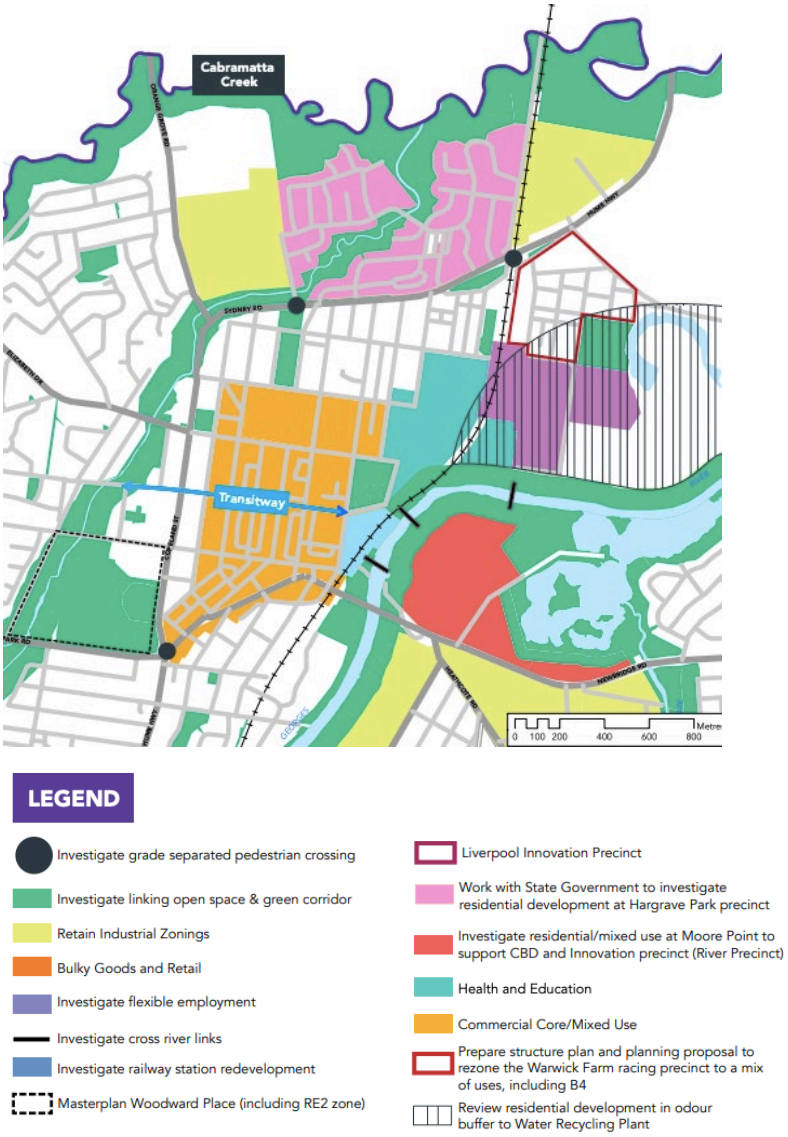


Figure 36: Liverpool City Centre Structure Plan

Source: Liverpool City Council

Table 13: Consistency with LSPS

Priority		Consistency with Priority
P1	Active and public transport reflecting Liverpool's strategic significance	**Consistent** The planning proposal locates proposed urban density adjacent to established public transport infrastructure. Pedestrian connections and cycleways will be provided to encourage a mode shift from private vehicle travel to active and public transport modes.
P2	A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis	**Consistent** The planning proposal strengthens the case for a rapid transit link between Liverpool and the new airport. The site will benefit from proximity to the FAST Corridor and maximise value from this infrastructure investment.
P3	Accessible and connected suburbs	**Consistent** The masterplan includes provision for public transport services, as well as private vehicle connections, pedestrian walkways and

Priority		Consistency with Priority
		cycleways which connect with the broader transport network to connect residents to other suburbs within the Liverpool LGA.
P4	Liverpool is a leader in innovation and collaboration	**Consistent** The proposal is a direct response to the recommendations of the Place Strategy. The provision of employment floor space will complement the function of the adjacent CBD and LIP.
P5	A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart	**Consistent** The planning proposal will facilitate a vibrant, mixed use development which will support a 24 hour economy. The masterplan positions the Georges River as the focal point for activation and will offer improved amenity and access to this important asset at a regional scale.
P6	High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth	**Consistent** The planning proposal includes provision of approximately 10.8 hectares or 34.5% of the site as publicly accessible open space. This includes a district scale riverfront park (to be dedicated as RE1 Public Recreation), local parks, pocket parks and linear parks. The masterplan includes an identified location for a new school, and has capacity to deliver community infrastructure in line with the anticipated population growth. The Open Space and Community Needs Assessment (**Appendix 6**) outlines this in further detail.
P7	Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport	**Consistent** The proposed development will contribute significantly to the supply of residential apartments within the Liverpool LGA in an area which has excellent access to services and public transport. The proposal has opportunity to contribute to the supply of affordable housing and other housing types such as student accommodation and build to rent.
P8	Community-focused low-scale suburbs where our unique local character and heritage are respected	**N/A** The proposed development is located within an established residential suburb.
P9	Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community	**Consistent** The design of Moore Point has been undertaken seeking to maximise opportunities for healthy lifestyles through the provision of open space, active transport options and physical connections to health services. A comprehensive Health Strategy (**Appendix 24**) has been provided which outlines this in further detail. The Test Scheme incorporates the principles of Crime Prevention through Environmental Design (**CPTED**) which will be further employed as the development progresses.
P10	A world-class health, education, research and innovation precinct	**Consistent** The proposal supports non-residential floorspace that can support employment growth adjacent to Liverpool CBD and Innovation Precinct that is complementary to the existing City Centre. Non-residential floorspace provides opportunity for a range of land uses and employment compatible with research and innovation. The Test Scheme includes provision for a new school and has the opportunity to support student housing for nearby educational institutions and workers of the LIP with a high amenity location.

Priority		Consistency with Priority
P11	An attractive environment for local jobs, business, tourism and investment	**Consistent** The planning proposal will be a catalyst for investment and employment within Western Sydney, providing opportunity for approximately 23,503 new jobs at completion. The masterplan can accommodate retail and tourism uses, including accommodation, event spaces, retail destinations and dining. There will be a particular focus on activating the foreshore areas and existing heritage precinct.
P12	Industrial and employment lands meet Liverpool's future needs	**Consistent** While the planning proposal seeks to rezone industrial land to mixed use, it is not inconsistent with the Liverpool Industrial and Employment Lands Strategy which seeks to retain industrial land outside of the Collaboration Area. The proposed mix use zoning will support a variety of services and provide a net employment benefit of 23,503 new jobs at completion (against the base case of retaining the existing industrial land use).
P13	A viable 24-hour Western Sydney International Airport growing to reach its potential	**Consistent** The planning proposal is not located within the Aerotropolis, however will benefit from the proximity to this new infrastructure. This will create convenience for residents and maximise the value of the infrastructure investment.
P14	Bushland and waterways are celebrated, connected, protected and enhanced	**Consistent** The proposal will result in improved environmental and place outcomes for the Georges River. The Georges River and Lake Moore Foreshore areas will be rehabilitated and stabilised to encourage connection with the waterway and enable public recreation uses. Redevelopment of the site will enable new landscaping, vegetation and tree planting across the site. The site in its current state and capacity under existing planning controls fails to incentivise or facilitate additional tree canopy or landscaping.
P15	A green, sustainable, resilient and water-sensitive city	**Consistent** The proposed masterplan targets a proposed 22% deep soil provision and 30% tree canopy cover. Allowance has been made for potential Water Sensitive Urban Design (**WSUD**) initiatives to be considered along key streets and spaces. The PP is supported by a Sustainability Statement (**Appendix 18**), which sets out objectives and mechanisms for delivering sustainable outcomes across the site. Adapting to the existing flood conditions of the site and ensuring safe evacuation is possible during a flood emergency have been key drivers behind the proposal. This is outlined in detail within the FIA (**Appendix 7**) and FERP (**Appendix 8**). The public domain has been designed to be flood resilient and prevent unnecessary maintenance costs.
P16	Rural lands are protected and enhanced	**N/A** The proposal does not include rural lands.

The proposal is consistent with the LSPS and seeks to rezone land east of Georges River and north of Newbridge Road for mixed-use purposes as a short to medium term priority to support the Innovation

precinct. The masterplan accompanied by the PP reinforces the creation of an integrated and interconnected open space network that will be accessible from Liverpool CBD and surrounding areas.

Q5. Is the planning proposal consistent with any other applicable State or regional studies or strategies.

Future Transport Strategy

The Future Transport Strategy is a 40-year strategy supported by plans for regional NSW and Greater Sydney that seeks to align transport with land use.

The Strategy describes a number of new Greater Sydney initiatives for investigation (0-10 years) including infrastructure to support rapid bus connections and improved bus connections between Western Sydney Airport and Liverpool. As previously described, this has been actioned through Council's collective vision and flagship project of a FAST Corridor to provide express and frequent services from Liverpool CBD to Badgery's Creek Aerotropolis.

A more critical initiative for investigation (20+ years) is the future Sydney Metro City and Southwest Extension to Liverpool CBD and the M5 motorway extension from Liverpool to Outer Sydney Orbital.

While these investigations are long-term, they demonstrate that there is potential for significant transport investment in Liverpool and its surrounding areas. The site is well placed to capitalise on a future metro station and provide additional jobs and homes near public transport. The TIWG will further implement the Movement and Place Framework as set out in Future Transport Strategy.

The proposal is consistent with Future Transport Strategy and ensures new residents are able to utilise prospective transport infrastructure including the FAST corridor and a future potential Southwest Metro extension.

The TIWG and sequenced transport investigations will ensure existing and planned infrastructure can meet forecast land use and population growth resulting from the PP and wider Collaboration Area.

Q6. Is the planning proposal consistent with applicable SEPPs?

Table 14 outlines the intent of the relevant State Environmental Planning Policies (**SEPP**) and consistency of the PP.

Table 14: Consistency with SEPPs

SEPP	Consistency?	Assessment
SEPP (Biodiversity and Conservation) 2021	**Consistent**	The proposal does not seek to contradict or hinder the application of the SEPP.
Chapter 2 – Clearing vegetation in non-rural areas	**Consistent**	The proposal requires clearing of both exotic and native vegetation to facilitate the proposed development outcome. This is outlined in detail within the provided BDAR (**Appendix 11**). The BDAR has been updated in response to the Gateway Determination and includes consideration of the appropriateness of the proposed RE1 zone on the riverfront land. Mitigation measures have been recommended which extend to the management of light and rubbish and fencing of protected areas.
Chapter 4 – Koala habitat protection 2021	**Consistent**	The BDAR **(Appendix 11**) considers the requirements of this chapter as well as the Koala Habitat Protection Guidelines. The

SEPP	Consistency?	Assessment
		assessment confirms vegetation within the subject land is not considered to be highly suitable koala habitat for the purpose of this SEPP. The nearest remnant population in the area is approximately two and a half kilometres away to the south and is cut off from the site by the M5 South-West Motorway and Newbridge Road, a dual carriage way arterial road. The vegetation has a long history of disturbance and dense ground and midstorey weed cover.
Chapter 6 Water Catchments	**Consistent**	This chapter of the SEPP provides general controls for regulated catchments (including Georges River) focussed around water quality and quantity, aquatic ecology, flooding, recreation and public access and total catchment management. As the proposal and management of foreshore areas requires an integrated response, the following documents have been provided which address various aspects of this chapter. These include: • Riparian Assessment (**Appendix 13**) • Acid Sulfate Soils Management Plan (**Appendix 17**) • BDAR (**Appendix 11**) • Aquatic Ecology Assessment (**Appendix 12**) • Flood Impact Assessment (**Appendix 7**) • River Foreshore Vision and Strategy (**Appendix 15**) Notably, the proposal provides substantial public benefit in the improvement of public access to and around foreshores, while carefully managing impacts to the existing waterways, wetlands and vegetation.
SEPP (Exempt and Complying Development Codes) 2008	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
SEPP (Housing) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
Chapter 4 – Design of Residential Apartment Development	**Consistent**	The UDR (**Appendix 3**) provides a comprehensive response to the Chapter 4 requirements. Consideration for the Schedule 9 *design principles for residential apartment development* and the ability to achieve future compliance with the Chapter 4 requirements have been integral to the design development process. The design development process has been iterative and several improvements have been made following consultation with the DEP. The Test Scheme analysis within the UDR demonstrates that compliance is readily achievable with Chapter 4 requirements and the ADG within the proposed planning envelopes.
SEPP (Industry and Employment) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
SEPP (Planning Systems) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
SEPP (Precincts – Western Parkland City) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.

SEPP	Consistency?	Assessment
SEPP (Resilience and Hazards) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
Chapter 2 – Coastal Management	**Able to demonstrate consistency**	The site is partially subject to the following Coastal Protections: • Coastal Wetland, • Coastal Wetland Proximity Area, • Coastal Use Area, and • Coastal Environmental Area. The BDAR (**Appendix 11**) has been updated in response to the Gateway Determination to confirm that the proposal has avoided impact to coastal wetlands along the eastern and north-eastern boundary of the subject land. Appropriate public domain objectives are explored for these areas, which relate to avoidance and minimal intervention. In addition, an Aquatic Ecology Assessment (**Appendix 12**) provides an assessment of the proposal against the *NSW Coastal Management Act 2016* (**CM Act 2016**), confirming also that development is sited outside of coastal wetland boundaries. As identified above against the requirements of the *Biodiversity and Conservation SEPP Chapter 6 – Water Catchments*, development and management of foreshore areas (including those subject to coastal protections) requires an integrated response. Implementing the recommendations and mitigation measures identified within the various supporting studies provides a multi layered approach in line with the aims of the Coastal Management chapter.
Chapter 4 – Remediation of Land	**Able to demonstrate consistency**	The site is currently zoned E4 General Industrial, associated with potentially contaminating industrial uses. This PP is supported by an updated Contamination Assessment (**Appendix 16**) and Acid Sulfate Soils and Remedial Strategy (**Appendix 17**) which has been updated in response to the Gateway Determination. The assessment confirms that based on the available environmental data, there are no levels of contamination which would not be able to be remediated based on current available technologies. The report sets out remediation and management options for known areas of environmental concern, however, acknowledges the remedial strategy will be refined as the project progresses. The findings of the assessment would therefore not preclude the rezoning for mixed-use. Additional assessment of contamination and subsequent remedial strategies will be required at the DA stage.
SEPP (Resources and Energy) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
SEPP (Sustainable Buildings) 2022	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.
SEPP (Transport and Infrastructure) 2021	**Consistent**	The proposal does not contradict or hinder the application of the SEPP.

Q7. Is the planning proposal consistent with applicable Ministerial Directions (section 9.1 Directions) or key government priority?

Yes. The PP is consistent with, or able to demonstrate consistency with all applicable Ministerial Directions as outlined in **Table 15** below.

Table 15: Consistency with Section 9.1 Directions

Direction	Consistency?	Comments
Focus Area 1: Planning Systems		
1.1 Implementation of Regional Plans	**Consistent**	The PP gives effect to the relevant Regional Plan: The Greater Sydney Region Plan: A Metropolis of Three Cities.
1.3 Approval and Referral Requirements	**Consistent**	The PP does not require provisions that require the concurrence, consultation or referral of development applications to a Minister of public authority.
1.4 Site Specific Provisions	**Consistent**	The PP seeks to implement site-specific provisions, which is warranted and justified given the size and scale of the proposal. Refer to **Section 6.2.1**.
Focus Area 3: Biodiversity and Conservation		
3.1 Conservation Zones	**Consistent**	The PP does not seek to rezone conservation zoned land, however, seeks to develop land which is partially identified as environmentally significant. To facilitate the proposed Structure Plan and future built form, removal of some exotic and native vegetation is necessary, as well revetment and stabilisation works along the Georges River. The PP is supported by a BDAR (**Appendix 11**) as well as an Aquatic Ecology Assessment Report **(Appendix 12**). These reports have been updated directly in response to the Gateway Determination conditions and provide additional information to satisfy this Direction. The BDAR outlines the measures taken to avoid, minimise and mitigate impacts on the vegetation and species habitat present within the development footprint and measures to minimise impacts during construction and operation of the development. It is to be noted there were no Serious and Irreversible Impact (**SAII**) entities identified during the assessment. Refer to **Section 7.3.1**.
3.2 Heritage Conservation	**Consistent**	The subject site is partially identified as containing a local heritage item identified on Schedule 5 of LLEP 2008 and is also in the vicinity of several other local heritage items. This PP is supported by a SoHI (**Appendix 10**). This report has been updated directly in response to the gateway conditions to provide additional information to satisfy this Direction and relevant legislative requirements. The PP is also supported by a draft ACHAR (**Appendix 25**), which has been undertaken to assess the archaeological potential for Aboriginal material as part of the PP. The SoHI provides an assessment of significance and confirms buildings which are to be retain and adaptively re-used.
Focus Area 4: Resilience and Hazards		

Direction	Consistency?	Comments
4.1 Flooding	**Consistent**	Following Gateway Determination, this PP has been updated to incorporate the findings and recommendations of an updated FIA (**Appendix 7**) and FERP (**Appendix 8**). The flood analysis for the site has been the subject of detailed modelling consistent with the scope of requirements set by the 2022 NSW Flood Inquiry and the Flood Planning Advice Panel. These reports provided have been prepared in response to the Gateway Determination conditions and have been undertaken in direct consultation with DPHI, Council and their technical advisors.
4.2 Coastal Management	**Consistent**	The subject site is partially identified as containing environmentally sensitive land under the LLEP 2008. The subject site is also identified as being subject to the *State Environmental Planning Policies Biodiversity and Conservation 2021 - Chapter 6 Water Catchments and Resilience and Hazards 2021 - Chapter 2 Coastal.* The site is partially subject to the following Coastal Protections: • Coastal Wetland, • Coastal Wetland Proximity Area, • Coastal Use Area, and • Coastal Environmental Area. This PP is supported by an Aquatic Ecology Assessment (**Appendix 12**), a Riparian Assessment (**Appendix 13**). Together these documents provide a comprehensive assessment of the proposal against the legislative and policy guidelines which apply to coastal areas, riparian corridors, water run-off quality and the use and management of foreshore land.
4.3 Planning for Bushfire Protection	**Able to demonstrate consistency**	The site is partially identified as bushfire prone land. Consultation will occur with the Rural Fire Service (**RFS**) as the PP progresses as part of the public exhibition process.
4.4 Remediation of Contaminated Land	**Consistent**	The site is currently zoned E4 General Industrial, associated with potentially contaminating industrial uses. This PP is supported by an updated Contamination, Acid Sulfate Soils and Remedial Strategy (**Appendix 17**) which has been updated in response to the Gateway Determination. The assessment confirms that based on the available environmental data, there are no levels of contamination which would not be able to be remediated based on current available technologies. The report sets out remediation and management options for known areas of environmental concern, however, acknowledges the remedial strategy will be refined as the project progresses. The findings of the assessment would therefore not preclude the rezoning for a mixed-use purposes.
4.5 Acid Sulfate Soils	**Consistent**	The site is identified as having Class 5 and Class 3 acid sulfate soil classes under the LLEP 2008. The proposal does not seek to contravene or alter the relevant LEP controls. This PP is supported by a Preliminary Acid Sulfate Soil Management Plan (**Appendix 17**). The plan provides a description of the sites soil attributes, a description of potential impacts, management options and procedures,

Direction	Consistency?	Comments
		details of a focussed monitoring program, procedures for reporting and consultation with co-ordination authorities and contingency measures.
Focus area 5: Transport and Infrastructure		
5.1 Integrating Land Use and Transport	**Consistent**	This proposal seeks to create a pedestrian and active transport oriented precinct which leverages its proximity to the existing Liverpool Train Station and bus interchange. Two pedestrian bridges are proposed across the Georges River to connect the proposed development to Liverpool CBD and health precinct, as well as upgrades to existing road infrastructure to support bus access and network demands. As part of the wider public benefits package, the PP will facilitate upgrades to Newbridge Road (Bridges Road and Anchor Place), as well as provide a local road network with cycle paths and through-site-links. These are detailed with the Summary of Regional and Local Transport Impact (**Appendix 20**) and the IDP (**Appendix 21**).
5.2 Reserving Land for Public Purposes	**Consistent**	The proposal includes land intended to be dedicated for a public purpose, being RE1 Public Recreation. This has been requested by Council as part of the endorsement of the PP in November 2020. The proposed LEP maps (**Appendix 1**) include provision for 40m of RE1 zoned land along the Georges River foreshore, consistent with the Gateway Determination requirements.
5.3 Development Near Regulated Airports and Defence Airfields	**Consistent**	The PP has been designed in consideration of its proximity to Bankstown Airport, including the known PANS-OPS and OLS requirements. The proposal seeks to amend LLEP 2008 by introducing new maximum heights of (primarily) 126m (136 RL) and 99m (108 RL) across the site in line with the recommended PANS-OPS measures. The suitability of this is confirmed in the Aeronautical Impact Assessment **(Appendix 22**). The planning authority may consult with lessee/operator of the Bankstown to confirm the above findings. It is anticipated this will occur during public exhibition.
Focus Area 6: Housing		
6.1 Residential zones	**Consistent**	This PP is considered consistent with this Direction as the proposal seeks to deliver an infill, mixed use precinct delivering housing with access to infrastructure and services. The Test Scheme indicates potential for a range of housing types including co-living, BTR and student accommodation.
Focus Area 7: Industry and Employment		
7.1 Employment Zones	**Consistent**	The District Plan identifies the LCA as an area for residential and employment opportunities. The LCA identifies the Liverpool CBD and surrounding areas including Moore Point as suitable to be developed into a metropolitan centre with jobs, dwellings situated along the Georges River supported by the health, education and retail precincts in the centre. The proposal is entirely consistent with this direction as it gives effect to the relevant District Plan.

Direction	Consistency?	Comments
		The PP is supported by an EIA (**Appendix 9**), which demonstrates the proposal will complement the status of Liverpool CBD (similar to Sydney CBD to Pyrmont), and provide 23,503 jobs during operation. This is significantly above what could be realised under the current planning framework for the site.

7.3 Section C Environmental, Social and Economic Impact

7.3.1 Environmental Effects

Q8. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

Biodiversity

A BDAR has been prepared (**Appendix 11**) to assess the PP's potential impacts on critical habitat, threatened species, populations or ecological communities or their habitats. It further responds to the requirements set by DPHI's Gateway Determination conditions issued on 3 April 2023.

The PP will require removal of approximately 0.21 ha of plant community types (***PCT***) 3145 *Cumberland Bangalay x Blue Gum Riverflat Forest*, 0.46 ha of *PCT 4023 Coastal Valleys Swamp Oak Riparian Forest* and 1.44 ha of *PCT 4024 Cumberland Blue Box Riverflat Forest*.

The removal of 0.47ha of native planted vegetation was assessed using the Biodiversity Assessment Method (**BAM**) 2020 Appendix D: Streamlined assessment module-Planted native vegetation. The removal of 6.52 ha of exotic and ornamental vegetation does not require assessment.

Two threatened ecological communities in low condition were identified within the subject land:

- *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregion* – PCT 4024 and PCT 3145, and
- *Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner bioregions* – PCT 4023.

The vegetation within the site was in poor condition and did not satisfy the criteria for listing as part of the critically endangered ecological community *River-flat Eucalypt Forest on Coastal Floodplains of the southern NSW and eastern VIC* (PCT 4024 or PCT 3145) or the endangered ecological community *Coastal Swamp Oak (Casuarina glauca) Fres of South-east Queensland and New South Wales* (PCT 4023), both listed under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**). Refer to **Figure 27**.

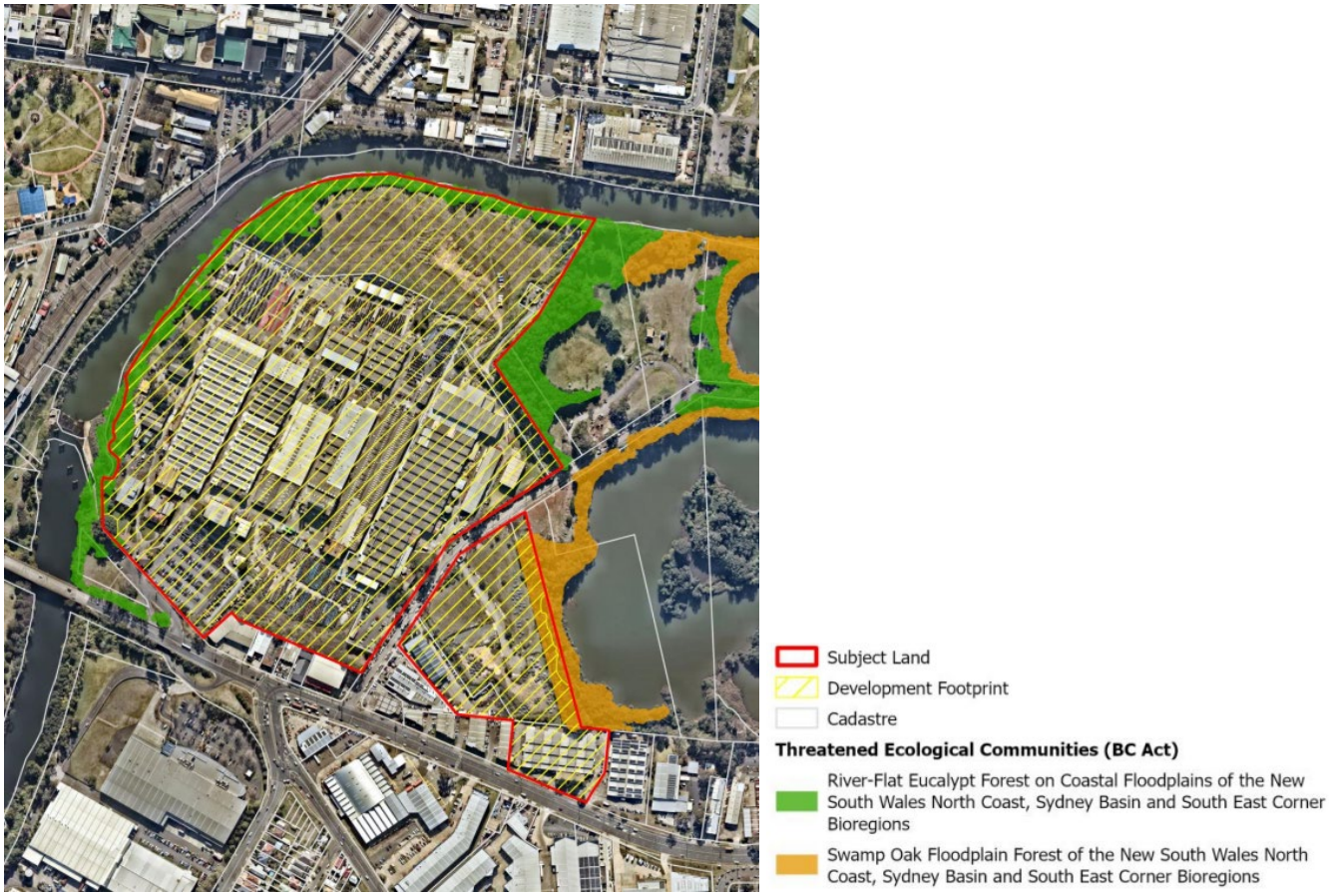


Figure 37: Threatened Ecological Communities
Source: Eco Logical Australia

Impacts to these PCTs will require the retirement of 37 'ecosystem credits' to address the residual impacts of the planning proposal according to the offsetting rules of the Biodiversity Offset Scheme (**BOS**). Refer to **Table 16** and **Figure 28**.

Table 16: Ecosystem Credits Summary

Zone	PCT ID	PCT Name	Condition	Integrity Score	Direct Impact (ha)	Credits Required
1	3145	Cumberland Bangalay x Blue Gum Riverflat Forest	Weedy	25.9	0.21	3
2	4023	Coastal Vcalleys Swamp Oak Riparian Forest	Low	27.8	0.46	6
3	4024	Cumberland Blue Box Riverflat Forest	Weedy	38.6	1.44	28
					2.11	**37**

Figure 38: Impacts Requiring Offset
Source: Eco Logical Australia

Targeted surveys were conducted for candidate species credit microchiropteran bat (microbat) species that had potential to utilise the site. The total number of calls during the targeted surveys were very low with only one call from possible *Myotis macropus* / non-threatened species. The results from the targeted surveys indicate that microbats only utilise the subject land on rare occasions and are not roosting/breeding or regularly foraging within the subject land. No species credits were generated for the proposed works. Additionally, no ecosystem credit species microbats were detected during targeted surveys.

No other species credit species were detected during targeted surveys. Therefore, no species credits are required to offset the impacts of the planning proposal.

At the detailed design stage, the subject land should be re-assessed for presence or absence of ecosystem and species credit species (particularly microbats). This may be deemed necessary due to presence of human-made structures which may provide habitat for species credit species and requires further assessment prior to removal.

The BDAR outlines the measures taken to avoid, minimise and mitigate impacts on the vegetation and species habitat present within the development footprint and measures to minimise impacts during construction and operation of the development. Following consideration of the below aspects, the residual unavoidable impacts of the project were calculated consistent with BAM by utilising the Biodiversity Assessment Method Credit Calculator (**BAMC**).

There were no SAII entities identified during this assessment.

One Matter of National Environmental Significance was identified as having potential to be adversely affected by the proposed works. *Pteropus poliocephalus* (Grey-headed Flying-fox) is listed as Vulnerable under the EPBC Act and it is considered that this species is likely to use some of the vegetation within the subject land for seasonal foraging. An assessment of the Commonwealth Significant Impact Criteria was undertaken for the Grey-headed Flying-fox and concluded that the PP would not result in a significant impact to this species.

Aquatic Ecology

Due to the proximity of the proposed development to existing waterways, consideration of impacts to the health of the waterways and the associated aquatic ecology has been provided within an Aquatic Ecology Assessment at **Appendix 12.**

Assessment

The Aquatic Ecology Assessment reviews the legislative context so far as it relates to the protection of aquatic ecosystems. Legislation of relevance includes:

- *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (**EPBC Act**)
- *Fisheries Management Act 1994 NSW (***FM Act**),
- *Water Management Act 2000 NSW (***WM Act**),
- *Coastal Management Act 2016 NSW* (**CM Act**),
- *Liverpool Local Environmental Plan 2008* (**LLEP**), and
- *State Environmental Planning Policy (Biodiversity and Conservation)* 2021 (**SEPP** Biodiversity and Conservation).

Based on a study of available datasets and a review of site conditions, the report finds the following:

- No threatened fish or turtle species identified under the EPBC Act are likely to be within the study area or impacted by the proposal.
- The area is identified as 'key fish habitat' and 'fair' fish community status under the FM Act. There is no registered critical habitat. No threatened fish or seagrass population are considered likely to be in the study area or impacted by the proposal, no harm to marine vegetation is expected and no indirect or significant impacts are expected to downstream habitats and protected areas.
- The development area is impacted by the following management zones under the Resilience and Hazards SEPP: Proximity to coastal wetlands or littoral rainforest, coastal environment area and coastal use area.
- The site is impacted by acid sulfate soils and the relevant provisions of LLEP 2008.
- Previous fish surveys within the Georges River nearby have observed no threatened species.

The Assessment provides a detailed list of potential direct and indirect impacts of the planning proposal, with consideration for the key legislation, and how the proposal may demonstrate compliance. Refer to Tables 4 – 11 within the Assessment Report for detailed discussion on these items.

Overall, the proposal will result in significant change to the existing land use and landform along the foreshore of the Georges River, but with the intent to improve bank stability and riparian/aquatic habitat. The river and adjacent Lake Moore have been heavily modified and disturbed by historic dredging, impoundment, bank slumping and weed invasion. The quality of riparian and aquatic habitat along the

riverbank is low-moderate, and higher in Lake Moore where mangroves, coaster wetlands and seagrass occur.

No threatened aquatic species, populations or communities are predicted to occur on or near the site and further assessment is unlikely to be triggered under the FM Act or EPBC Act (aquatic).

Proposed bank reprofiling has potential long term positive impacts on the intertidal and shallow subtidal habitat along the reach. Through the incorporation of targeted habitat features in the bank design, future development could ensure no net loss of key fish habitat.

Recommendations

As the project progresses, consideration of the below recommendations is required:

- If bank reprofiling intends to create a tiered or stepped profile to accommodate intertidal saltmarsh species, then species selection needs to consider the salinity of the estuary below the weir. The reed lands around the coastal wetlands and Lake Moore would provide a guide to what species are tolerant to the local conditions (noting they are in a protected bay and may not tolerate faster flows when the weir spills).
- The proposed toe of the bank (rock or piled) would create a hard substrate for some estuarine species (molluscs and macroalgae) if the salinity and turbidity is suitable. This area should be left for self-colonisation rather than attempting to plant macroalgae or macrophytes in the subtidal zone.
- Designing habitat variety and complexity would increase the value of the riverbank for aquatic species. For example, depressions and cavities that retain water when the tide drops helps create refuges for small organisms; and using complex rock of various sizes and positioning, rather than smooth homogenous walls would increases the surface area and habitat options for small marine species.
- Establishing marine or brackish vegetation on the new bank may be challenging due to high freshwater influence, tidal rebound off the weir, low flushing potential. Lessons may be taken from existing bank stabilisation works on the opposite bank near the rail corridor (e.g. to monitor what species have naturally colonised those intertidal areas, then replicating suitable conditions on the new bank).

Q9. Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

Country

Indigenous Site History

Yerrabingin were engaged to prepare A Connecting with Country Concept Report (**Appendix 2**) to provide an analysis of the pre-colonial use of the site, and to inform urban design and placemaking principles to deliver themes of Country into the PP.

The clan group around Liverpool was the Cabrogal. The Cabrogal were named after the cahbro, which they harvested and ate from the brackish parts of the Georges River.

The site's landscape was both rich with resources and cultural life, intersected by forest on the ridges and area of gathering and prospect over Country. Casuarina swamp forests, salt marsh and mangrove mudflat ecologies containing food and medicines essential to the health of Country and its kin.

Cabrogal Country was a known meeting place, with historic references noting the land in the Liverpool LGA was used by the Darug, Dharawal and Gandangara people.

During early colonisation, the Georges River was a place for Aboriginal people from all over Sydney to regroup. In the 1960's Cabrogal Country became a meeting place for Aboriginal people to meet and maintain social bonds under the Aborigines Protection Board. The Liverpool Weir was a popular place to socialise, swim, fish and learn about those who had come before them.

Site Opportunities

The Structure Plan will deliver cross-river linkages from the site to Liverpool CBD, which relates well with the pre-colonial use of the Georges River as a transport route and a means of connecting with one another. The riverbank become a community space for Aboriginal people from all over NSW and continued well into the 1960s, where Aboriginal people would gather at the weir to socialise and swim.

Yerrabingin outline several opportunities to embed Country into the Structure Plan and future development across the site, including:

- Potential places along the rivers edge to explore the form, habitats and interrelationship of the Cahbro in design – this includes plant species and patternation.
- Potential places within the site and along the rivers edge inspired by flow, movement and history of water – this includes meandering pathways and providing nodes for sense of discovery.
- Potential places to create sharing spaces to learn, respect and reciprocate – this includes education of fauna and flora to connect and share on Country.

The key narratives and concepts from Yerrabingin have informed a Connecting with Country Plan, which identifies key areas to be guided by indigenous perspectives. This includes the bridge locations, along the Georges River adjacent to the heritage quarter, the primary school site, Haigh Park and along Lake Moore. See **Figure 29**.

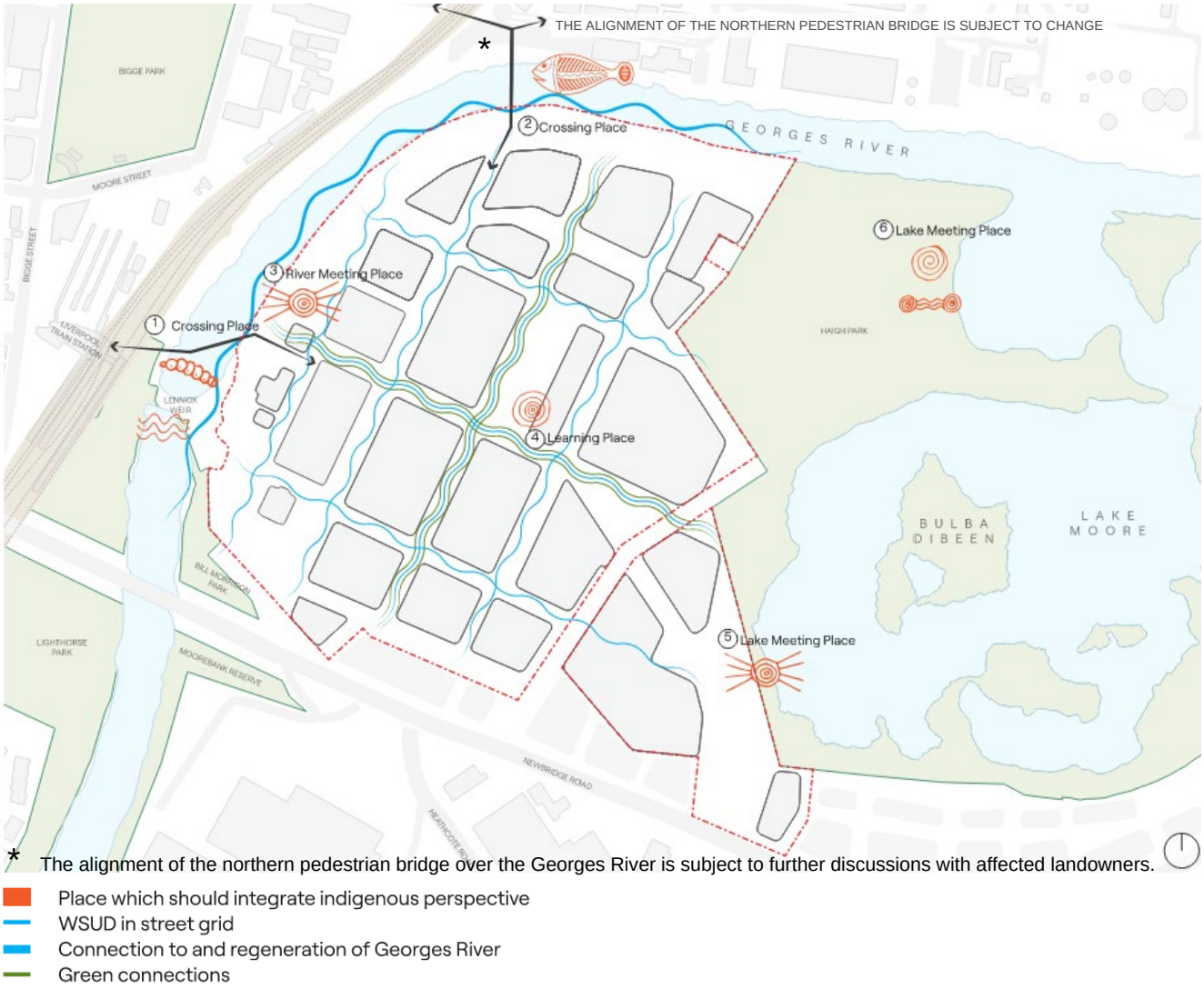


Figure 39: Connecting with Country Plan

Source: SJB

As part of preparing site-specific DCP for the site, the project team will build on the work established by Yerrabingin and SJB to explore additional opportunities to engage with traditional custodians at detailed DA stage for buildings and the public realm.

Aboriginal Cultural Heritage

A draft ACHA has been prepared by Austral in by Austral Ecology (**Appendix 25**) in support of the PP. While not a requirement of the Gateway Determination conditions, a final ACHA will be issued to Council prior to public exhibition.

The ACHA was undertaken to assess the archaeological potential for Aboriginal material as part of the PP before the it site is developed. It has been undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* by the Department of Environment Climate Change and Water NSW (**DECCW**).

Desktop Review

A search of the NSW Heritage Aboriginal Heritage Information Management System (**AHIMS**) was undertaken on 5 April 2024. The results identified 53 previously recorded sites within a 5km radius of

the site. Artefacts and modified trees were the most predominate site type (34%) followed by artefacts and Potential Archaeological Deposits (**PADs**).

An archaeological survey was undertaken on 2 November 2023 and 4 December 2023 with Gandangara Local Aboriginal Land Council (**LALC**) in attendance.

The most significant disturbance in the study area is the current Prysmian cable factory and Joyce factory that encompasses about 80% of the study area. This part of the site has been cut and filled, with underground utilities installed to cater for the industrial practices under taken within the factory.

Additionally, the study area exhibits no evidence of the natural landform that would have existed prior to its use for industrial purposes. The green space to the north of the factory was expected to have the highest archaeological potential, however, upon inspection, the area was severely disturbed, and all visible ground surface presented evidence of imported fill.

As a result of the broad disturbance throughout the study area, it was decided that no archaeological test excavations was necessary.

Community Consultation

Consultation with Aboriginal stakeholders has been completed, which included letters to agencies, registration of stakeholders, project information, review of project methodology and final review of ACHA by Aboriginal stakeholders.

Note: at the time of writing this PP the ACHA review by stakeholders is to be completed. An updated final ACHA will be issued to Council upon completion.

Assessment

The proposed works have no foreseeable impact on known archaeological values. There is limited potential for partial use of the study area by Aboriginal groups linked to the proximity of the site to the adjacent 7th Georges River however, no Aboriginal cultural materials or sites have been recorded as of yet. An area identified as potentially preserving ‘pockets’ of natural soil profiles and Aboriginal cultural objects underneath historical fills lies within the riparian zone in the north-western section of the study area along the Georges River.

Furthermore, the extensive and ongoing industrial development of the study area has led to heavy disturbance and modification of the site, limiting the potential for in situ cultural materials to be present.

Due to the lack of identified tangible heritage within the study area, the impacts of the proposed works on Aboriginal heritage values are considered acceptable.

Recommendations

Austral provide a series of recommendations to be considered at detailed DA stages. These include:

- No further assessment or works are required for the study area unless subsurface works are proposed in the north-wester riparian zone along the southern bank of the Georges River.
- In the event subsurface works are proposed as above, test excavation may be required.
- In the event unexpected finds occur during any activity within the study area, all works must cease immediately and processes undertaken in accordance with the relevant legislation under NPW Act.

- The JLG is to inform Aboriginal stakeholders about the management of Aboriginal cultural heritage within the study area throughout the completion of the project. The consultation outlined in the draft ACHA is valid for six months and must be maintained by the JLG for it to remain continuous.
- A copy of the final ACHA should be forwarded to all Aboriginal stakeholder groups who have registered an interest in the project.

Urban Design

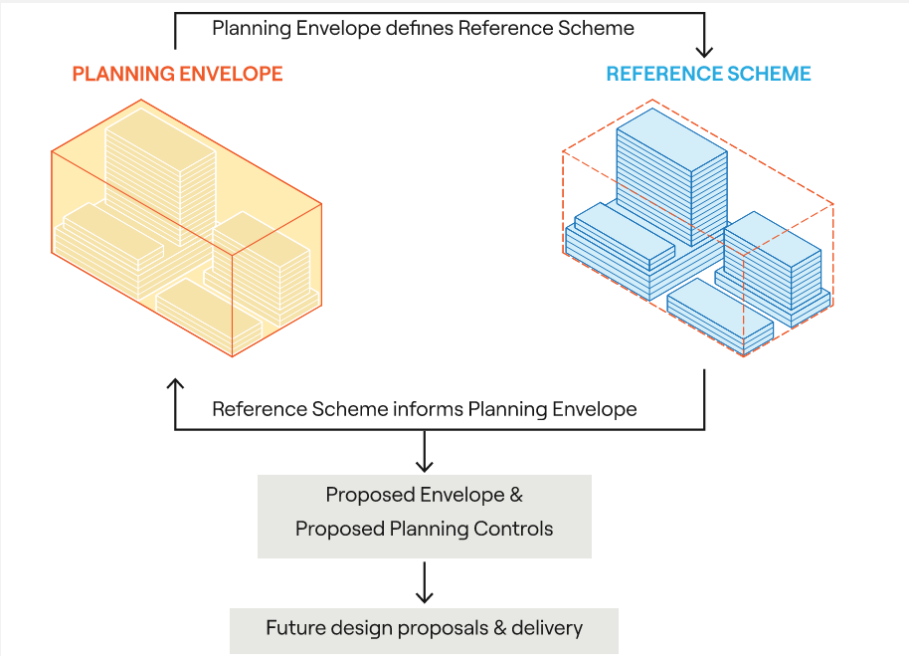
The section below details the key urban design themes of the Structure Plan and supporting Test Scheme. Given the expansive level of detail contained in this PP, this section should be read in conjunction with the Urban Design Report (**UDR**) submitted in **Appendix 3**.

Urban Design Envelope Methodology

It acknowledged that the size, scale and strategic influence of the PP necessitates a planning framework and design process that enables flexibility to evolve in response to changing policy context, infrastructure investment and market fluctuations. It is also expected that any development on the site is able to meet a high standard of architecture design and built form amenity.

To address this need, the project team has developed the Structure Plan Envelope (the volumetric expression of the spatial elements of the Structure Plan), and a Test Scheme. These are described in **Section 12** of the UDR and are summarised in **Table 17**.

Table 17: Envelope Methodology and Approach

Structure Plan	Test Scheme
	
Structure Plan Envelope • Lot (cadastre) pattern, • Desired future character, • Street reserves and open space, • Setbacks (within lot and above streetwall),	**Test Scheme** • Design concept and intent, • Site context and conditions, • Land use and building requirements, • Internal layout and access,

Structure Plan	Test Scheme
• Views and topography, • Solar access to key spaces, • Easements and operational needs, • Existing context, and • Surrounding planning controls.	• Technical advice (structure) • Building codes and standards, • Planning legislation and policy, • Specialist advice (riparian, heritage etc.)

It is not realistic to put forward a fixed masterplan that locks in finite tower forms and detailed building layouts at this stage. The purpose of the Test Scheme is to demonstrate one of countless potential arrangements of the overall form and scale of Moore Point over its 30-40 year delivery.

As articulated in the UDR, different urban renewal projects have necessitated different levels of envelopes relative to a reference design or similar. The long-term flexibility required by PP, in tandem with the requirement to achieve the extensive Gateway Determination conditions, has resulted in a generous envelope, but with a level of technical detail akin to DAs.

The Test Scheme sits within the Structure Plan Envelope, which is intended to be the fixed spatial layer to Moore Point and will be enforced via the future site-specific DCP as the benchmark for the site's renewal. The testing approach for the PP is summarised in **Figure 30**.

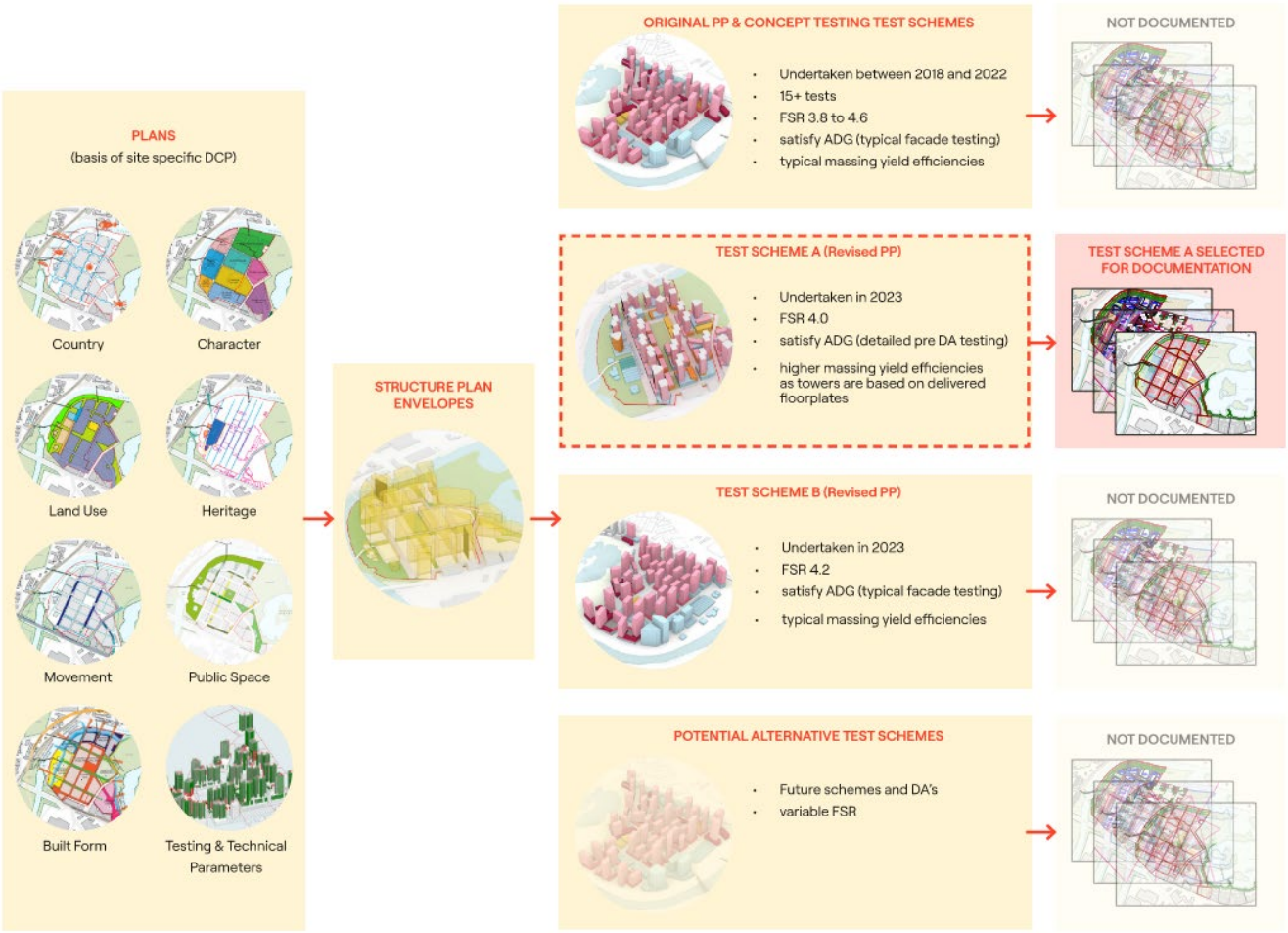


Figure 40: Testing Approach
Source: SJB

Test Scheme Assumptions

For the purpose of technical testing, the Test Scheme has been used as the basis for environmental assessment and considerations. The Test Scheme demonstrates future renewal of the site has the capacity to deliver:

- 1,259,448m^2 of GFA
    - 912,985m^2 of residential GFA, and
    - 345,463m^2 of non-residential GFA.
- Land uses including residential, short-term accommodation (hotels, BTR, student accommodation), commercial, education and community.
- 10,742 dwellings across tower forms ranging from 6 to 37 storeys,
- Foreshore open space compliant with the inner and outer VRZ,
- 34.5% of the site as publicly accessible open space,
- Heritage quarter, and
- Community infrastructure including a primary school.

Extracts of the Test Scheme are provided in **Figure 31**.

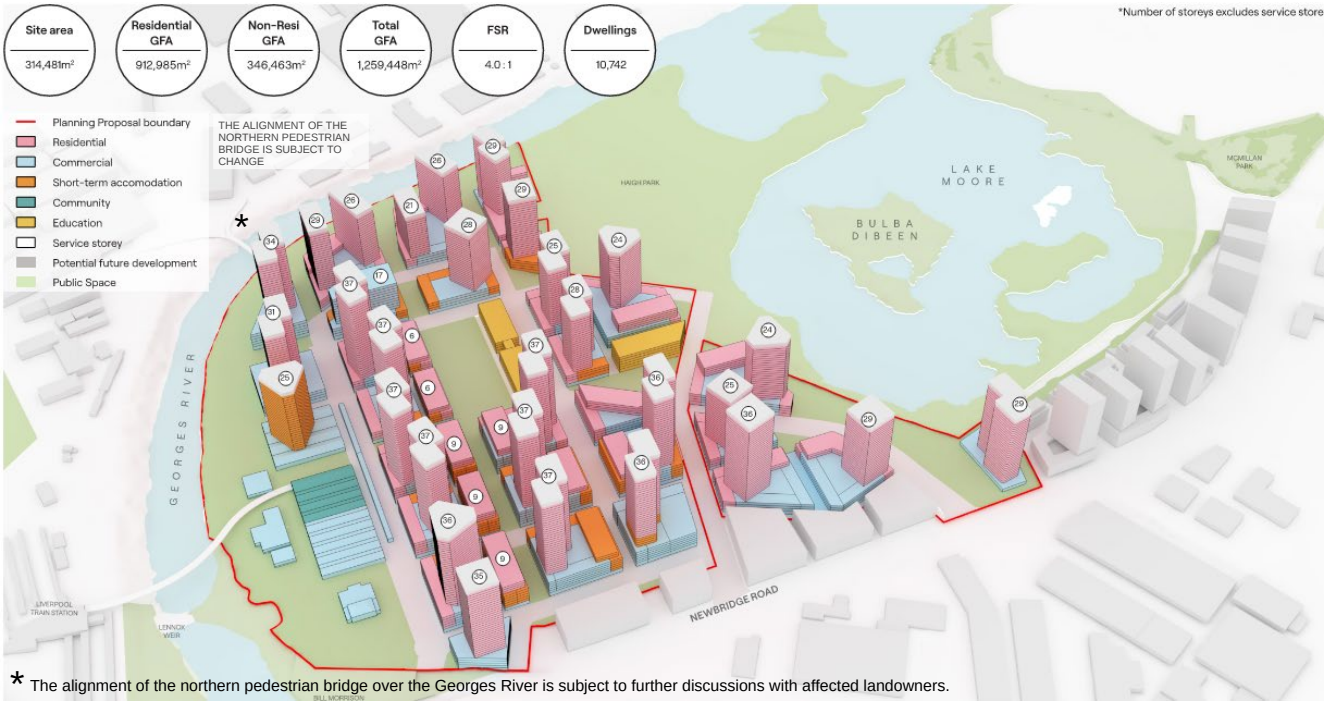


Figure 41: Test Scheme and Section
Source: SJB

Relationship to Liverpool CBD

At a strategic level, the proposed heights and density pursued in the PP will complement the transforming skyline of Liverpool CBD and LCA.

Most of Moore Point has been considered part of Liverpool CBD since 2008 and previous investigations have consistently mandated the site as the future extension endorsed at a State and local level. As such, the site has always been regarded as a complementary component of the CBD and through the amendments of the PP, it will realise Council's strategic vision as a river city with unparalleled amenity on the Georges River.

The heights within the CBD under bonus FSR provisions are capable of producing taller buildings than what is envisaged at Moore Point, ensuring the CBD retains its primacy as the centre of the CBD. Heights decrease eastward to Moore Point and taper towards Newbridge Road, conveying a clear hierarchy between the two areas. See **Figure 32**.

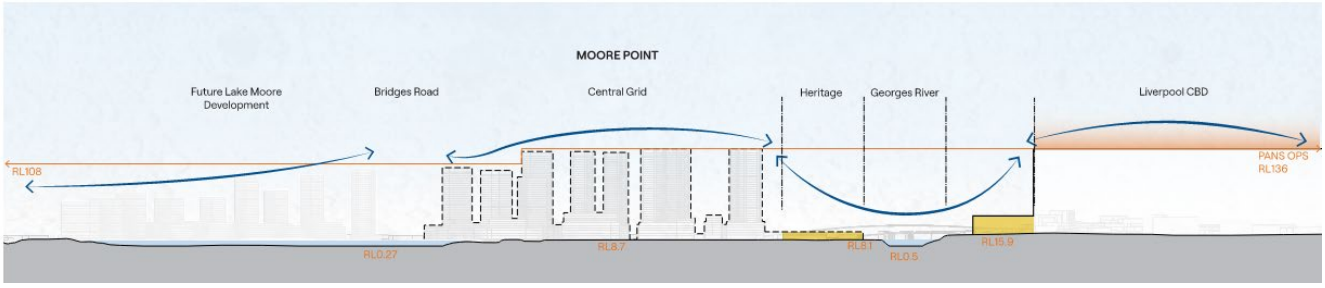


Figure 42: Height Transition
Source: SJB

Furthermore, the PP is developing planning capacity for development over the next 30-40 years. It will be delivered in a staged manner in line with the delivery of essential infrastructure required to support the future population. While Moore Point gradually develops, it is anticipated Liverpool CBD and its surrounds will undergo ongoing development and review of its planning framework to cater for additional jobs and homes.

The PP will have a complementary effect on expanding Liverpool CBD and will not compete with its commercial status. This is reinforced by the submitted EIA (**Appendix 9**), which states the current footprint of the Liverpool CBD does not have sufficient critical mass to support the various ingredient uses that are necessary for CBDs to thrive (e.g. hospitality, leisure, short term accommodation, etc.).

The PP offers the opportunity to expand the footprint of the CBD (playing a similar role to Pyrmont in the Sydney CBD) that supports the vibrancy of the Liverpool CBD, rather than compete with it.

Density Distribution

The Test Scheme depicts multiple tower forms supported by podium elements with heights ranging from 8 to 37 storeys.

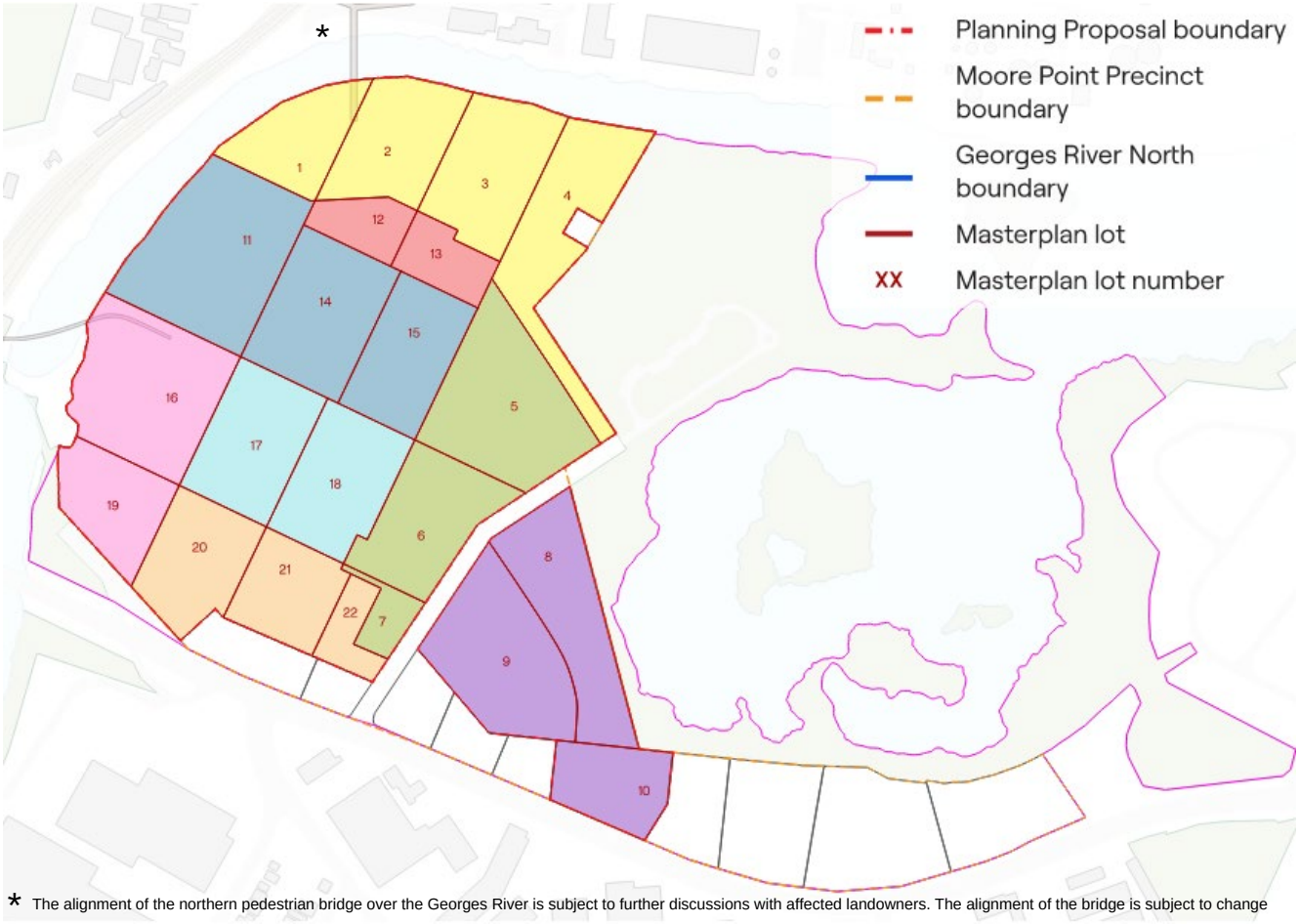
Moore Point will be set at an aggregate FSR 4:1 across the entire site. This reflects the cumulative density of all potential built form spread across the entire site area. However, it is acknowledged that this approach alone does not reflect the nuanced built form distribution required to facilitate orderly development and the outcomes of the Structure Plan.

The FSR control will be read in conjunction with a new clause in LLEP 2008 that sets GFA caps at a block level. These blocks are defined by land ownership patterns and character areas within the site to ensure a certain level of density can be achieved at a block level.

As shown in **Figure 33** the Structure Plan outlines nine blocks (coloured). This corresponds to the proposed LEP provision and applies a maximum GFA to each block. Each block contains a series of superlots, that provide potential GFA that equal the maximum GFA of the respective block. The

distribution of GFA within each block will be determined through Concept DAs, similar to what is proposed within the Test Scheme.

This will also ensure key areas such as heritage items, key public spaces and the primary school land will be safeguarded from extensive development.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

Figure 43: Block and Superlot Breakdown
Source: SJB

The GFAs for each block are outlined in **Section 12** of the UDR and the process for implementation at the various stages of planning in **Figure 33**.

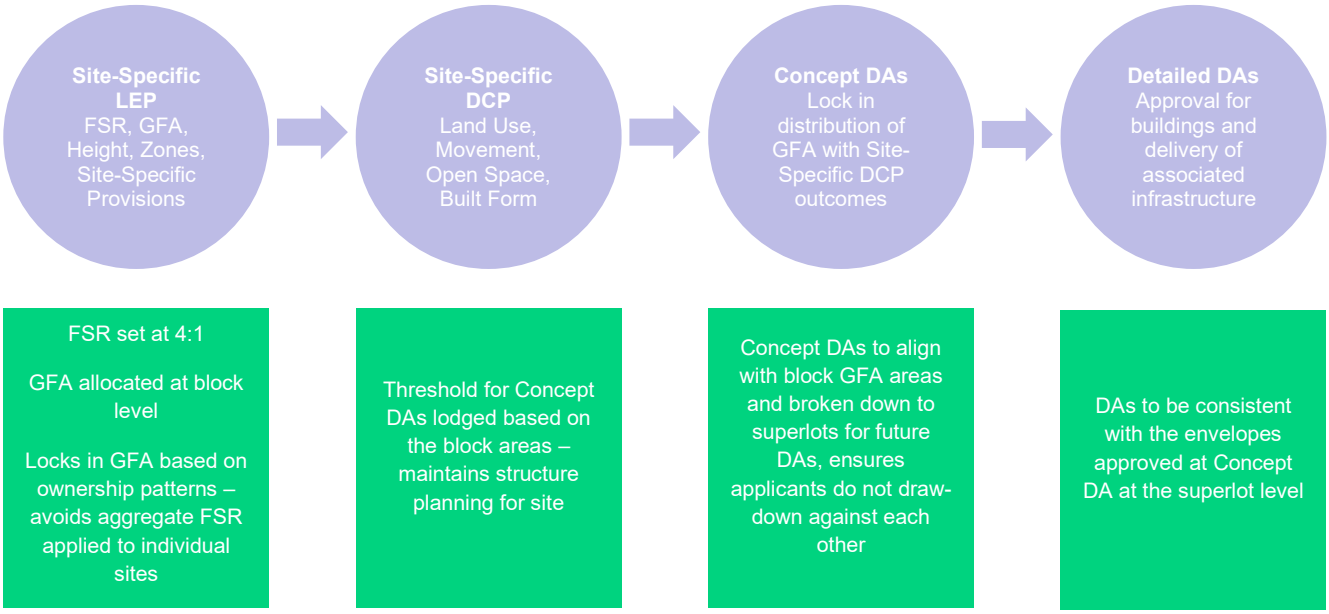


Figure 44: GFA Mechanism
Source: Mecone

It is important to note that when considering the FSR at the block level, the PP would produce FSRs ranging from 3.5 to 7.17:1 (not including the 0.33:1 heritage quarter). This FSR is commensurate with Liverpool CBD (with FSRs up to 10:1).

Supporting the proposed GFA distribution will be a site-specific DCP that will be prepared pre-finalisation. The site-specific DCP will be accompanied by a detailed suite of built form controls and public domain objectives to ensure the future quality and character of various sub-precincts and their vision will be delivered. Future proposals will be required to demonstrate consistency against the future character outcomes of each area. An example of the Civic Village character area is provided in **Figure 34**.

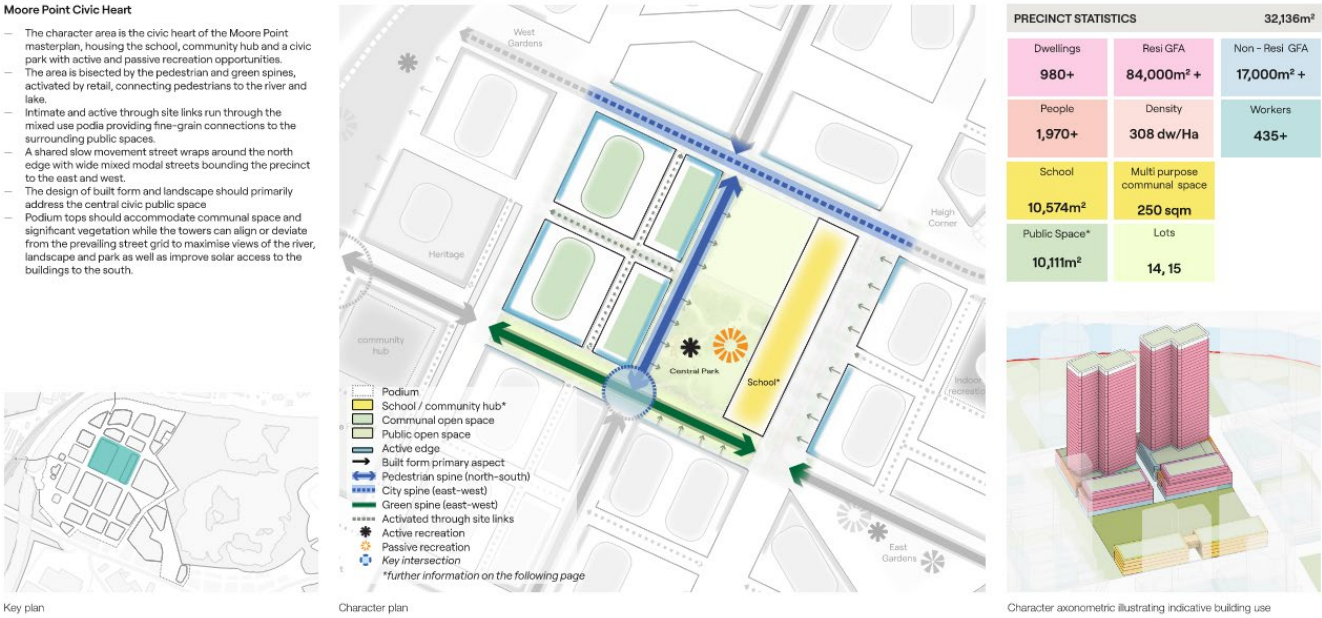


Figure 45: Civic Village Character Area
Source: Mecone

ADG Testing Methodology

The project team has developed a multi-level design testing approach to demonstrate future applications are capable of complying with the ADG at both a site level and individual building level. This testing relates to the Test Scheme and the subsequent land uses proposed in that test.

In some instances, ADG testing has been undertaken at all scales, such as solar access and amenity. This methodology is summarised in **Figure 35**.

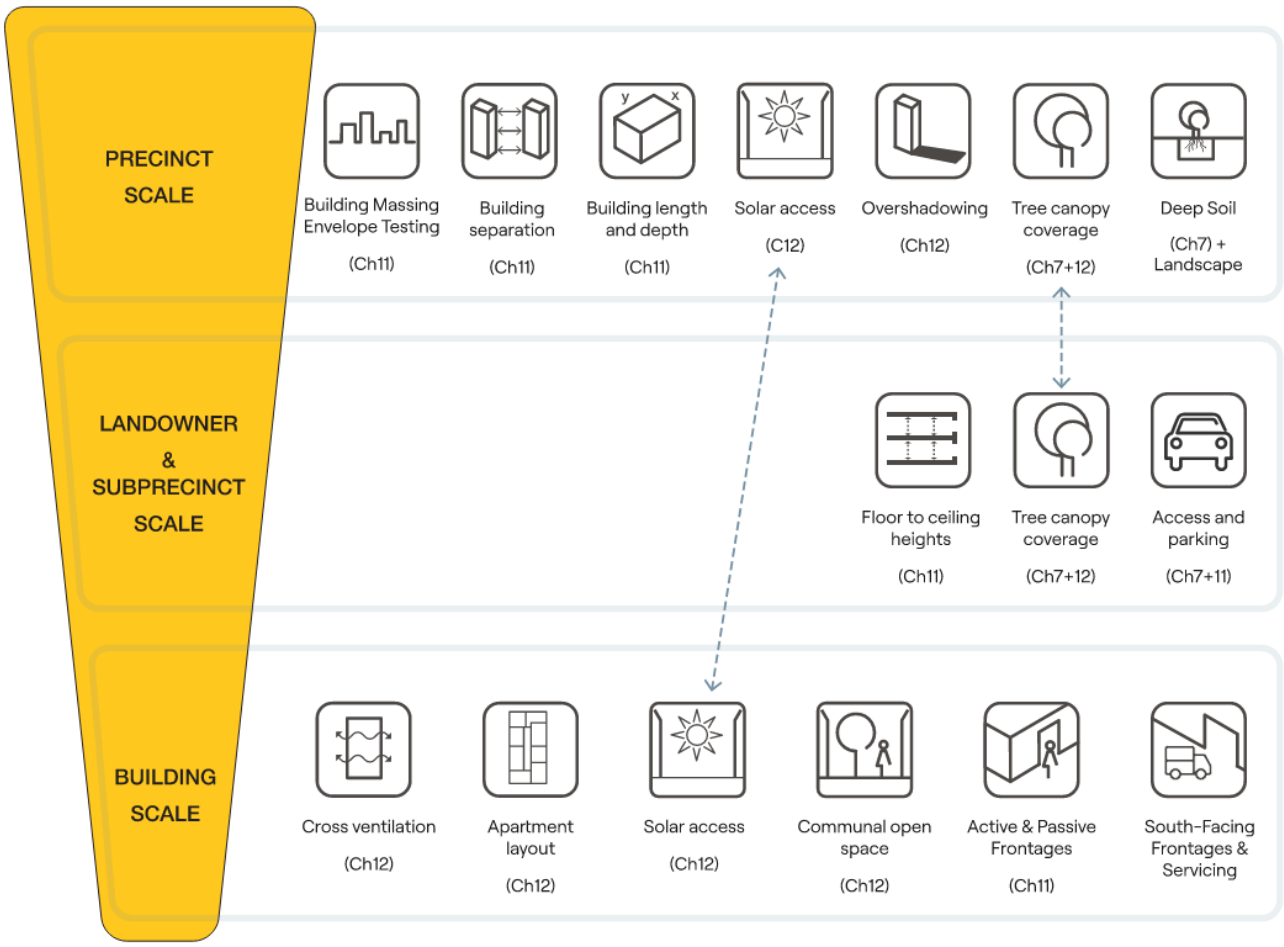


Figure 46: ADG Testing Methodology
Source: SJB

Solar Analysis

The Test Scheme has been subject to a detailed solar analysis test at the site and individual building scale. The methodology has been developed to test solar access at a site scale taking into consideration of the follow:

- The grid orientation of the Structure Plan (25 degrees north east) is a place based response to the heritage character of the site.
- The adopted site grid creates challenges for achieving solar amenity on an individual building basis, as only two tower faces per tower will receive two hours of direct sunlight in mid-winter, compared to a north-south oriented tower, where three facades would receive the required solar.

The evolution of the Test Scheme has included extensive solar testing to provide certainty of solar compliance by applying a number of principles.

- Orient towers as close to north as possible (11 degree tolerance), whilst maintaining podiums on the alignment of streets (25 degrees).
- Maximise the number of apartments along elevations receiving 2 hours of direct sunlight.
- Reducing the number of dwellings on lower levels of towers that receive less solar access but with good internal amenity from additional living space and greater opportunities for natural ventilation.

The testing approach is outlined below

A solar insolation analysis was undertaken of the Test Scheme to determine the number of hours of direct sunlight received by the Test Scheme between 9am and 3pm mid-winter taking into consideration the cumulative impact of surrounding developments.

The test established the basis for refining floor plates that sit inside the Test Scheme to demonstrate consistency with the design guidance. Refer to **Figure 36**.

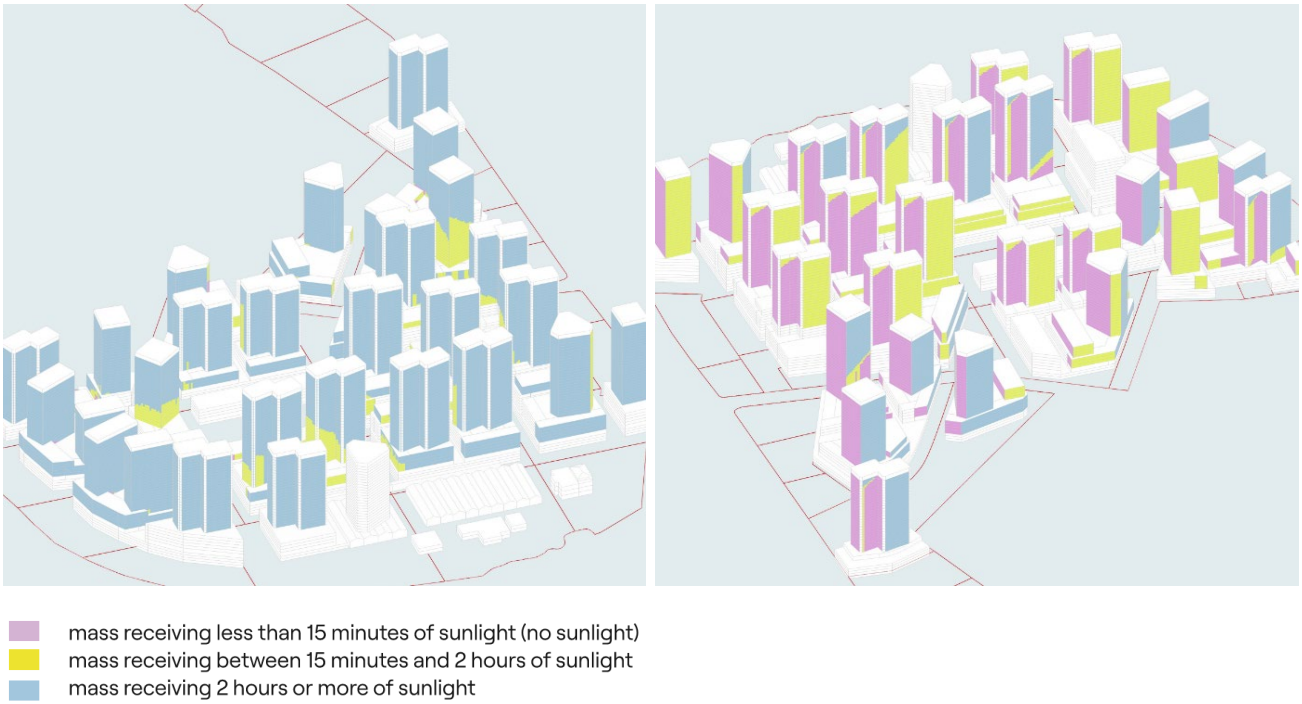


Figure 47: Axonometric Solar Testing
Source: SJB

Following the façade testing, additional analysis of the Test Scheme was undertaken to determine the number of apartments within each tower that achieve the ADG threshold of 1m^2 of direct sunlight to private open spaces and bedrooms measured at 1m above floor level between 9am and 3pm mid-winter. This test is used to calculate the ratio of apartments per building which meet the ADG requirements, as outlined in the following test. Refer to **Figure 37**.

Figure 48: Axonometric Solar Testing 2

Source: SJB

The test numerically illustrates the number of hours of direct sunlight received by Test Scheme apartments. The number in green specifies the percentage of apartments per building which receive solar access. To satisfy the ADG this number should be above 70%.

The number in grey specifies the percentage of apartments per building which receive no sunlight. To satisfy the ADG this number should be below 15%.

Overall the analysis demonstrates the Test Scheme, and individual buildings tested at a lot level, satisfies the solar requirements of the ADG. This analysis is reconfirmed in the individual building testing undertaken for the site as shown in the UDR (**Appendix 3**).

Communal Open Space

The Test Scheme tests the provision of communal open space at an individual lot level, demonstrating all future developments are capable of providing the required 25% communal open space, either on podiums or on the roofs of individual towers.

Natural Ventilation

Natural ventilation testing has been undertaken across 22 individual lots and associated built form. The analysis of typical floorplates concludes that all towers within the Test Scheme are capable of achieving 60% of apartments as naturally cross ventilated within the first nine floors.

Overshadowing

A detailed overshadowing assessment has been undertaken between 9am and 3pm mid-winter (**Figure 38**), summer solstice and the equinox. The analysis of mid-winter overshadowing concludes:

- Throughout all hours of the day, the proposal will overshadow Newbridge Road and land to the south along Moorebank Avenue and Heathcote Road. Development at this location is non-residential in nature.
- Throughout all hours of the day, the proposal will overshadow buildings within the site and to the south. However, the analysis has confirmed future built forms that propose residential accommodation will be able to demonstrate compliance with the ADG with respect to solar access.
- Solar access to existing low density residential dwellings between Moorebank Avenue and Heathcote Road will be largely retained.
- From 9am to 10am, the proposal will overshadow the Georges River foreshore along the south western edge, adjacent to the heritage quarter. A majority of open space along the Georges River and Lake Moore will be retained. Additional areas south of Newbridge Road will be overshadowed however, are largely non-residential in nature.
- From 11am to 12pm, the Test Scheme will continue to overshadow parts of Newbridge Road. Most open space areas, including the central open space, north-south link and the foreshore will not be impacted.
- From 1pm onwards, the proposal will overshadow parts of Haigh Park and Lake Moore. Open space along the Georges River and the heritage quarter will receive sufficient levels of solar access and offset the shadows cast to Haigh Park.

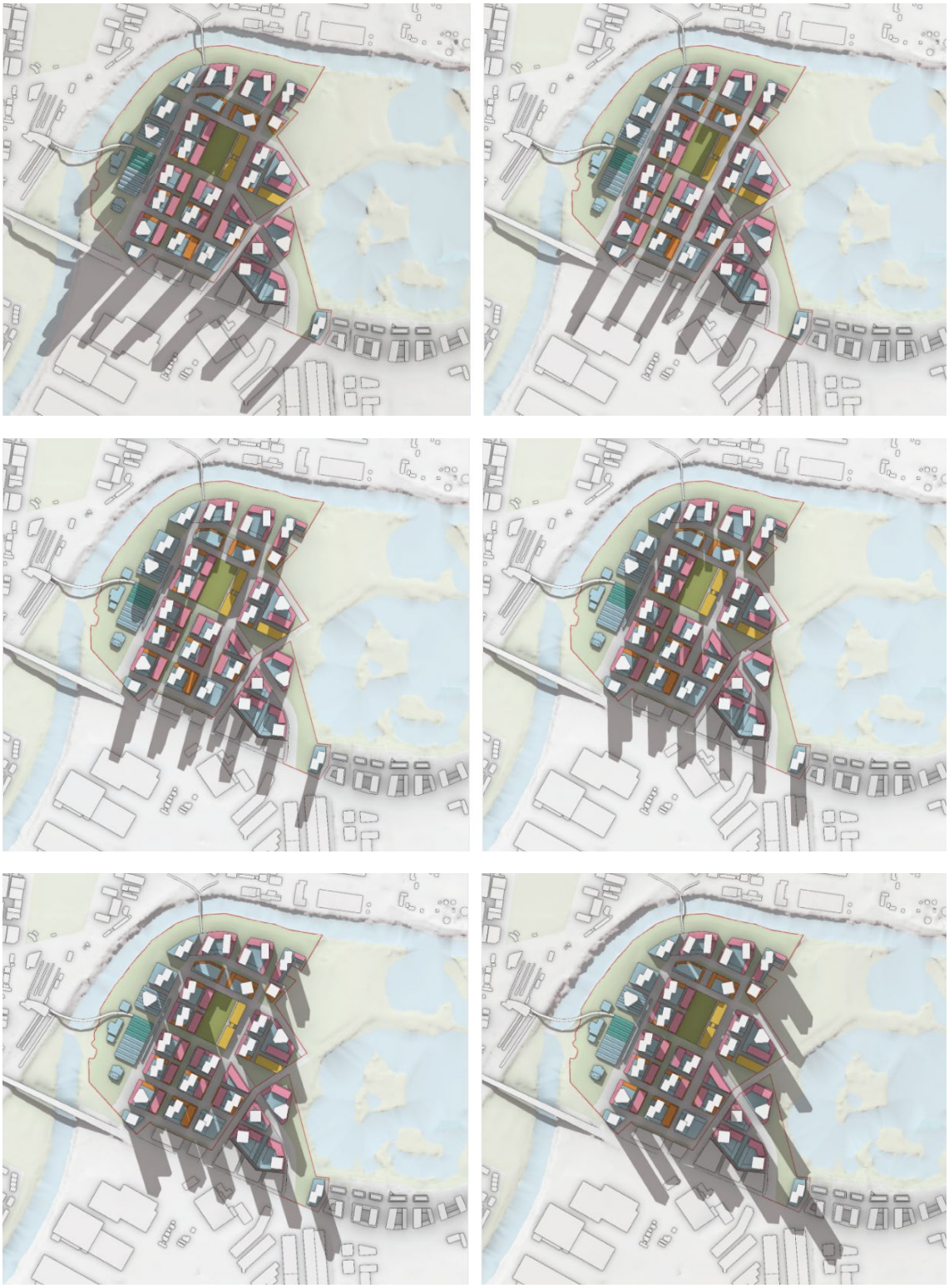


Figure 49: Overshadowing Analysis
Source: SJB

Deep Soil

The Test Scheme indicates the entire site is capable of delivering 22% (69,836m^2) as deep soil. Refer to **Figure 39**.

Most individual lots are capable of meeting the minimum 7%, with some minor instances being Lot 9, Lot 17 and Lot 18. These lots sit either within the southern portion of the site, where the emphasis of

deep soil has been placed towards Georges River, Lake Moore and the central open space, which receive the greatest areas of solar access and necessitate appropriate levels of canopy for shade.

Furthermore, the provision of deep soil at a precinct-level is entirely consistent with the ADG, which states under 1C alternative solutions to some of the design criteria may be appropriate. Some design criteria may be best applied to the entire precinct area or to stages within the site, for example deep soil and communal open space may be consolidated and accessed by a number of buildings.

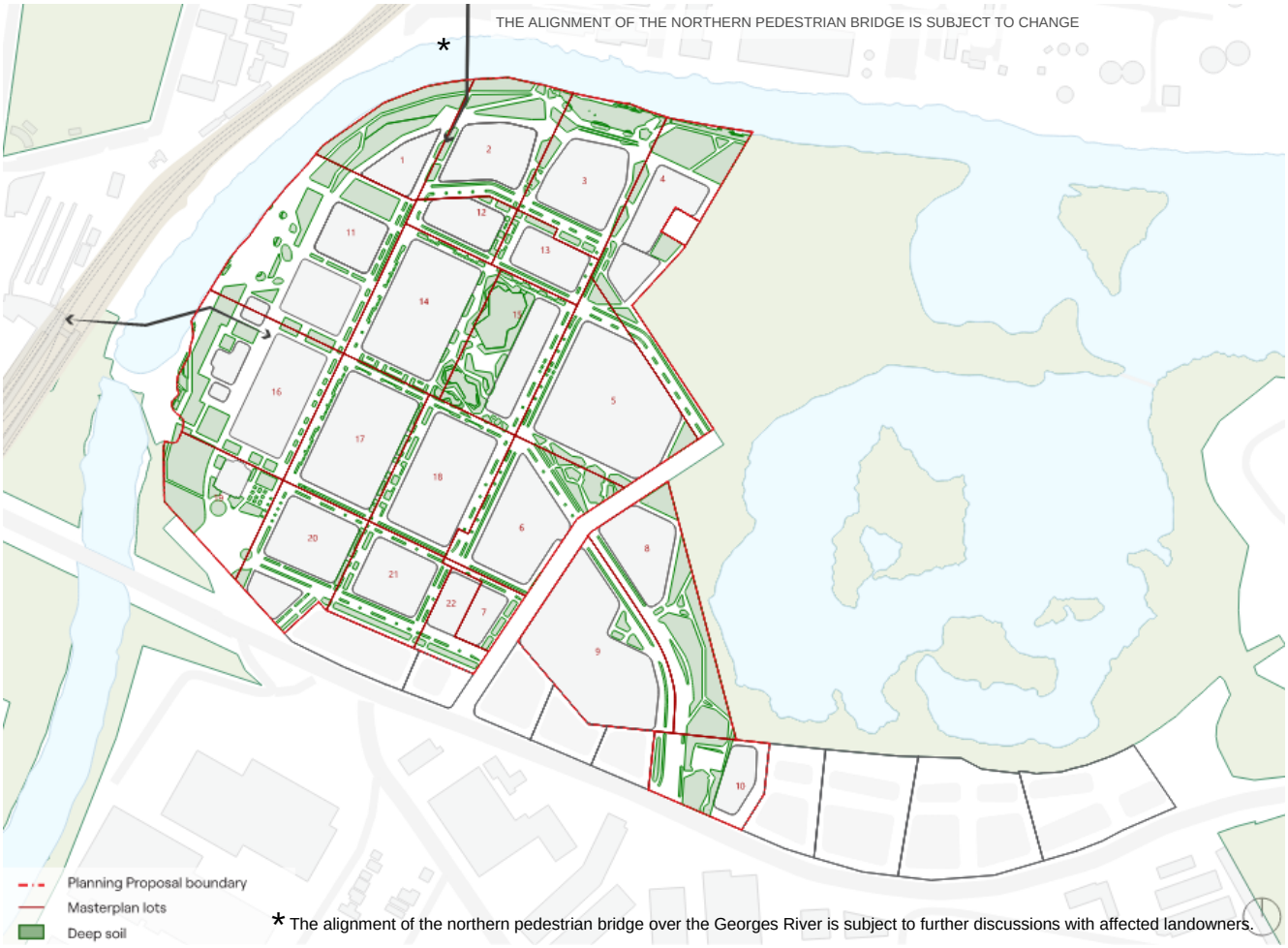


Figure 50: Deep Soil Plan
Source: SJB

Solar Access to Key Parks and Spaces

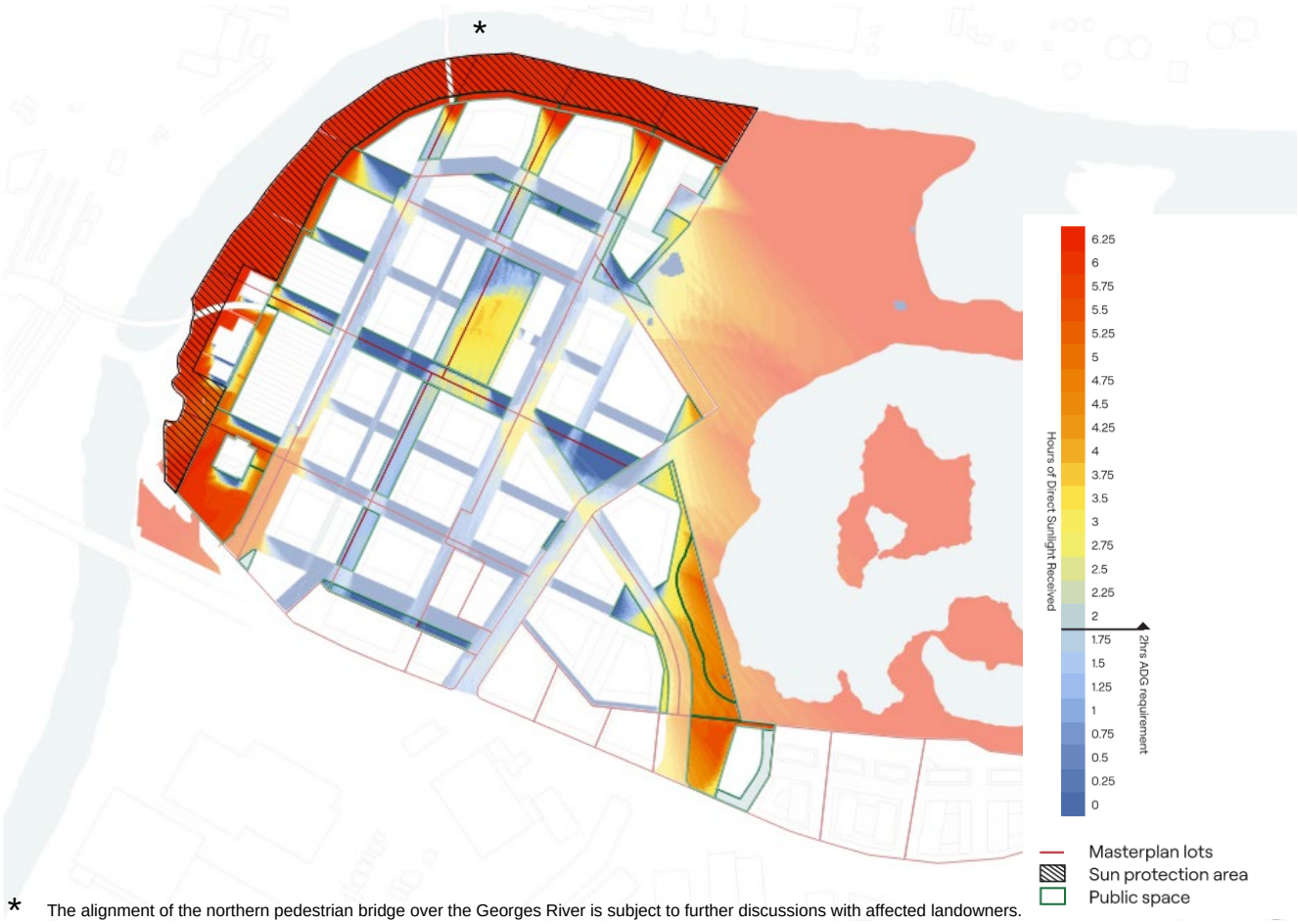
The usability and quality of each key open space areas has formed a central driver of spatially defining the Structure Plan. This includes provision of an expansive riverfront park (5 ha) and a central open space area within the heart of the site.

Solar insolation testing has been undertaken to these key areas, which confirms that the Georges River and Lake Moore foreshore will receive generous amounts of solar access throughout the day. Furthermore, 70% of the central park receives more than two hours of solar access between 9am and 3pm mid-winter.

To ensure a high standard of solar amenity is maintained through the lifecycle of the projects development, it is proposed to include a provision in LLEP 2008 that identifies a sun protection area, which must receive a minimum of 3 hours direct sunlight between 9am and 3pm mid-winter. This will apply to the Georges River foreshore hatched and depicted in **Figure 40**.

A number of north-south streets will afford some levels of solar access, however, will be predominantly support urban canopy and be designed to reduce urban heat. It is important to acknowledge that the site will deliver spaces that receive high levels of solar amenity, but also spaces for shade and respite from the heat. This is a key consideration in Western Sydney, which is experience a greater increase in temperature and the number of hot days compared to the east.

The *Western Sydney Regional Organisation of Councils* (**WSROC**) *Urban Heat Planning Toolkit* sets out a range of principles and design strategies for urban heat resilience including cool outdoor spaces, sustainable water supplies, cool buildings and robust energy systems. It is proposed in a future site-specific DCP provisions will be developed to manage urban heat.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 51: Solar Amenity to Public Domain
Source: SJB

Landscape and Public Domain

A detailed Public Domain and Landscape Plan has been developed by Turf (**Appendix 5**). The plan responds to the UDR Structure Plan outcomes, the supporting Test Scheme and outlines the Moore Point's contribution to the green infrastructure of Liverpool against policy frameworks.

Existing Open Space Context

The site benefits from a range of passive and active open space areas that service both local and district needs within a 2km radius.

These include Lighthorse Park (4 ha), Chipping Norton (49 ha), Casula Parklands (14 ha), Haigh Park (8.7 ha), Bill Morrison Park (1.4 ha), Mcmilan Park (1.2 ha), Bigge Park (3.6 ha) and Woodward Park (28 ha). The PP plays a critical component in enhancing and improving access to open space around Liverpool CBD and the LCA, including completion of the missing link between Casula Parklands and Chipping Norton. Refer to **Figure 41**.

Figure 52: Existing Open Space Context
Source: Turf

Open Space Calculations

A key component of the Planning Proposal is the consideration of a wide variety of open space areas and typologies based on government policy and benchmarking. The Open Space Framework Plan prepared by SJB identifies open space areas within the Structure Plan capable of being used for public use.

The Moore Point Structure Plan delivers 34.5% of the site as publicly accessible open space.

When considering the nuances of numerical criteria and open space function set out in policy (draft Greener Places and Movement and Place Framework), the Moore Point Public Domain and Landscape Plan prepared by Turf rationalises the 34.5% open space area and shows 32.1% of the site are as open space (parks) in accordance with policy frameworks.

The 2.4% difference is attributed to characterisation of these spaces more accurately defined as urban places and squares, which still function as a form of open space. Based on the analysis from Turf, streets, urban places and plazas account for 19.84% of the site area.

This results in 51.64% of the site area as public space (32.1% as parks and 19.84% as streets and urban places).

It is evident the total open space provision of Moore Point is a significant offering well above the benchmarks for urban renewal precincts. Refer to **Figure 42**.

* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 53: Public Open Space Plan Policy Alignment

Source: Turf

Category Breakdown

Public Open Space (Parks)

The proposed open space provision aligns with NSW Public Spaces Charter, which defines public open spaces as parks, gardens, playgrounds, public beaches, riverbanks and waterfronts, outdoor playing fields and courts, and bushland that is open for public access.

The proposed public open space provision quantifies space in alignment with NSW draft Greener Place Design Guide and results in 10.1 ha of public open space (parks) (32.1% of the site area). Other spaces not included in this figure are still considered public space however, within the context of streets, urban plazas and squares. Refer to **Figure 43**.

	Area (m2)	% of Public Open Space (Parks)	% of Site
Total	100,950.27	-	32.10%
Riverfront District park	54,766.06	54.27%	17.41%
Local parks	25,027.88	24.79%	7.96%
Pocket Parks	4,075.99	4.04%	1.30%
Linear Parks	17,080.35	16.92%	5.43%

Figure 54: Public Open Space (Parks)
Source: Turf

Public Open Space (Streets, Urban Places, Plazas and Squares)

The NSW Public Spaces Charter defines streets as part of public spaces. The Structure Plan adopts the NSW Movement and Place transport matrix to define streets, roads and civic spaces.

When considering the quantum of areas within the Structure Plan defined as streets, urban places, plazas and squares, this equates to 6.2 ha (19.84% of the site area). The breakdown of spaces according to streets, urban places, plazas and squares is provided in **Figure 44**.

	Area (m^2)	% Streets	% of Site
Total	62,383.29		19.84%
Urban Places, Plazas and Squares (incl. shared streets)	14,280.02	22.89%	4.54%
Streets (footpath)	26,294.99	42.15%	8.36%
Streets (carriageway + parking bays)	21,808.28	34.96%	6.93%

Figure 55: Streets (Urban Places, Plazas and Squares)
Source: Turf

Active and Passive Recreation

The provision of active and passive recreation has been a key issue following issue of the Gateway Determination. Extensive analysis has been undertaken to spatially define and quantify the types of recreation to be delivered. Five main types of recreation were considered and spatially defined across the Structure Plan. See **Figure 45**.

Environmental areas: Natural spaces that have some environmental value and include river revetment, habitat and bank restoration areas. There is opportunity for low-impact recreational activities with opportunities to connect with Country.

Passive recreation: Occurring in all parks (district, local, linear and pocket parks) used for both informal or spontaneous activities as well as organised or more formal events and activities.

Activity nodes: Distributed throughout an area to provide community focal points within a broader open space network. They can be spaces that experience high levels of visitation by resident, worker and visitor populations. This includes civic spaces like squares and plazas, outdoor gyms, playgrounds and water play areas.

Active recreation: Activities engaged in for the purpose of relaxation, health and wellbeing or enjoyment with the primary activity requiring physical exertion, and the primary focus on human activity.

Indoor sports spaces that are facilities for organised, structured sport activities such as team competitions, physical skill development and training. Designed to accommodate the playing surface and infrastructure requirements of specific sports, with greater spatial requirements.

***10.10ha (32.10% total site area)** is the total area of public open space (parks) aligning with policy (NSW Public Spaces Charter and NSW Greener Places and NSW Movement and Place Guides).

			Area (m²) (Total Public Open Space - parks)*	% of Public Open Space (parks)	% of Site
		Total	100,950.27	-	32.10%
	Activity node	Local play (LPY, LPC,OCA)	3,436.65	3.40%	1.09%
	Activity node	Water play (LPY, LPC,OCA)	2,064.35	2.04%	0.66%
	Activity node	Gathering ground , Public plaza	7,432.81	7.36%	2.36%
	Active recreation	Fitness and exercise space (FES)	1,257.91	1.25%	0.40%
	Active recreation	Active recreation (ASR, YRS)	655.88	0.65%	0.21%
	Environmental area	Environment	6,170.10	6.11%	1.96%
	Passive recreation	Passive recreation (LRS)	59,774.73	59.21%	19.01%
	Passive recreation	Outdoor amphitheatre	8,415.48	8.34%	2.68%
	Passive recreation	City walk (TPR)	1,392.59	1.38%	0.44%
	Passive recreation	Foreshore promenade (TPR)	6,820.03	6.76%	2.17%
	Passive recreation	Cultural walk (TPR)	3,529.75	3.50%	1.12%
	Community Facilities (Indoor Sports)	Opportunity for community facilities such as indoor sport and recreation, aligning with recommendations for 'Organised sport and recreation (OSR)' within Draft Greener Places Design Guide.			

Figure 56: Recreation Types
Source: Turf

The proposed open space network is supported by an Open Space and Community Needs Assessment by ATX Consulting (**Appendix 6**), which confirms the proposed open space provision, including the breakdown of open space between passive and active uses, will meet the needs of the future community, and also meet the needs of existing residents in Liverpool CBD.

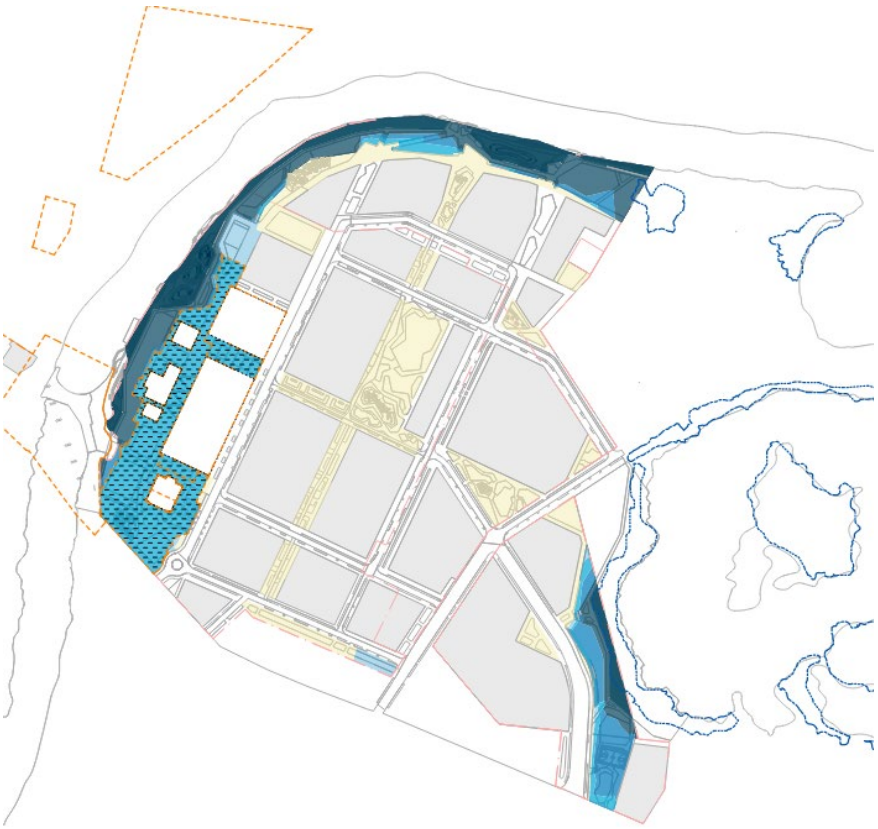
The evidence-based analysis within the Open Space and Community Needs Assessment has directly informed the spatial distribution of open space within the site. ATX conclude:

- Approximately a third of the site (32.1%) will be provided as public open space, which is significantly higher than other comparative urban renewal areas (with standard provision being approximately 15-17%).
- A diversity of open space types are provided to ensure population needs are addressed, including children's play, water play, bike paths, half courts, outdoor multipurpose courts, outdoor gym equipment, linear parks, running paths, pocket and local parks, trail-based recreation, promenade-style walking paths, places for picnics, spaces for civic and cultural events, water access for kayaks.
- A diversity of active open space recreational needs will be met.
- Additional options to embellish Haigh Park to bring it up to a standard that is consistent with best practice and include a wide variety of recreational amenity.

The approach to open space planning at Moore Point directly addresses, and in many cases exceeds, the key policy directions established by NSW Government for public open space

Flood Management

As part of the Gateway Determination conditions, Turf has undertaken analysis of various levels of flooding and the availability of open space within the site. The analysis, which has been informed by the flood modelling work prepared by Advisian, concludes approximately 6.6 ha (66.14% of open space) would be above the 5% AEP. Refer to **Figure 46**.



	Area (m²)	% of Public Open Space (parks)	% of Site Area
Total	100,950.27 (Total Public Open Space - Parks)**	-	32.10%
Open space above 1 in 500 AEP	40,655.31	40.27%	12.93%
Between 1% AEP and 1 in 500 AEP	3,142.27	3.11%	1.00%
Between 5% AEP and 1% AEP	2,949.72	2.92%	0.94%
Heritage Area between 5% AEP and 1% AEP	19,008.29	18.83%	6.04%
Between 10% AEP and 5% AEP	7,459.21	7.39%	2.37%
Between 20% AEP and 10% AEP	15,448.54	15.30%	4.91%
Between MHW and 20% AEP	12,637.02	12.52%	4.02%

Figure 57: Open Space Flood Inundation
Source: Turf

Public Domain Design

The PP has considered the potential quality and outcome various public domain zones, which has been defined by the 10 Character Areas identified by the Place Framework Plan prepared by Hatch (**Appendix 4**).

It is anticipated that these 10 Character Areas, and the subsequent objectives of these areas discussed in the UDR and Public Domain and Landscape Plan would be incorporated into a site-specific DCP to embed a high quality placemaking outcome for the site. This includes consideration of:

- Role and function of various public domain areas and their outcomes,
- Street and verge designs,
- Planting strategy and palette, and
- WSUD opportunities.

An example of the individual public domain studies is provided in **Figure 47**. This will set the standard for the future activation and amenity of spaces along the Georges River, Lake Moore and within the site.

All public domain sections along the waterfront, including identification of inner and outer VRZs and revetment strategies have been informed by the Riparian Assessment by Northrop (**Appendix 13**).

Figure 58: Public Domain Design Example
Source: Turf

Haigh Park Study

While not forming part of the PP, the project team has considered the site's adjacency to Haigh Park. While Haigh Park is a prominent form of open space for the LCA, it is poorly utilised as a result of its limited access (via Bridges Road). It also provides limited quality provisions for the community.

As part of PP's contextual response, indicative plans have been presented depicting an opportunity to upgrade Haigh Park as a district-level multi-purpose space that contributes to the Green Grid and the LGA's parklands.

The indicative plans indicate Haigh Park can accommodate 8.7 ha of additional public open space that can be upgraded to provide additional multipurpose courts, passive recreation, informal sport, play and amenities.

As part of the public benefit offer, the PP may contribute to initial embellishment of Haigh Park in Stage 1 to provide additional active open space for the community. The implementation and delivery of a complete embellishment and upgrade of the Haigh Park would need to be investigated by Council. See **Figure 48**.

Figure 59: Indicative Haigh Park Upgrade
Source: Turf

Flooding

Background

The PP has been the subject of an extensive and rigorous flood review from the 2022 NSW Flood Inquiry and Flood Advisory Panel regarding the flood risk associated with Moore Point.

The Panel found that there was sufficient case-specific merit to pursue the flood risk mitigation measures and allow the proposal to proceed to Gateway, subject to conditions that have been informed by the TAG and other material before the Panel.

The requirements of the Flood Advisory Panel were implemented via conditions into the Gateway Determination and have been addressed in the FIA (**Appendix 7**) prepared by Advisian and FERP (**Appendix 8**) prepared by Worley.

The Gateway Determination under condition (2)(g) requires the FIA and FERP to be submitted to DPHI to enable an independent peer review. Following issue of the FIA and FERP in January – February 2024, WMA Water prepared a Scope of Work dated April 2024. This Scope of Work outlined additional parameters and analysis to be considered as part of the PP.

Following receipt of the Scope of Work, the JLG engaged with DPHI, Council and their flood advisors. DPHI wrote to Council on 8 April 2024 outlining their views on what analysis was required prior to exhibition and what could be undertaken in parallel with exhibition, when determining if the PP has adequately met the conditions of the Gateway Determination.

On 1 May 2024, DPHI facilitated a workshop with WMA Water, Rhelm, the JLG and Advisian to provide additional guidance on what components of the Scope of Work could be delivered pre and post public exhibition in line with the expectations of WMA Water. The intent of categorising scope according to stages of the PP process reflects a shared commitment to progressing the PP in an expedited manner.

Existing Flood Conditions

As outlined in the FIA, the site surrounds are located on the Georges River floodplain upstream of Lake Moore and Anzac Creek. The site is located downstream of the Newbridge Road bridge crossing and to the east of the Liverpool CBD.

The site is elevated above the Georges River and Lake Moore with typical elevations across the site ranging between 8.6 and 9.3m AHD. A maximum elevation of 12.5m AHD occurs along the southern boundary of the site adjacent to Newbridge Road. Areas of lower lying land are generally limited to the perimeter of the site along the Georges River banks. Refer to **Figure 49**.

During significant floods there is potential for floodwaters to 'spill' from the Georges River leading to inundation of low-lying areas of the site along the western and northern boundaries. During major events such as a 1% AEP flood, there is potential for floodwaters to flow through the site towards Lake Moore to the east.

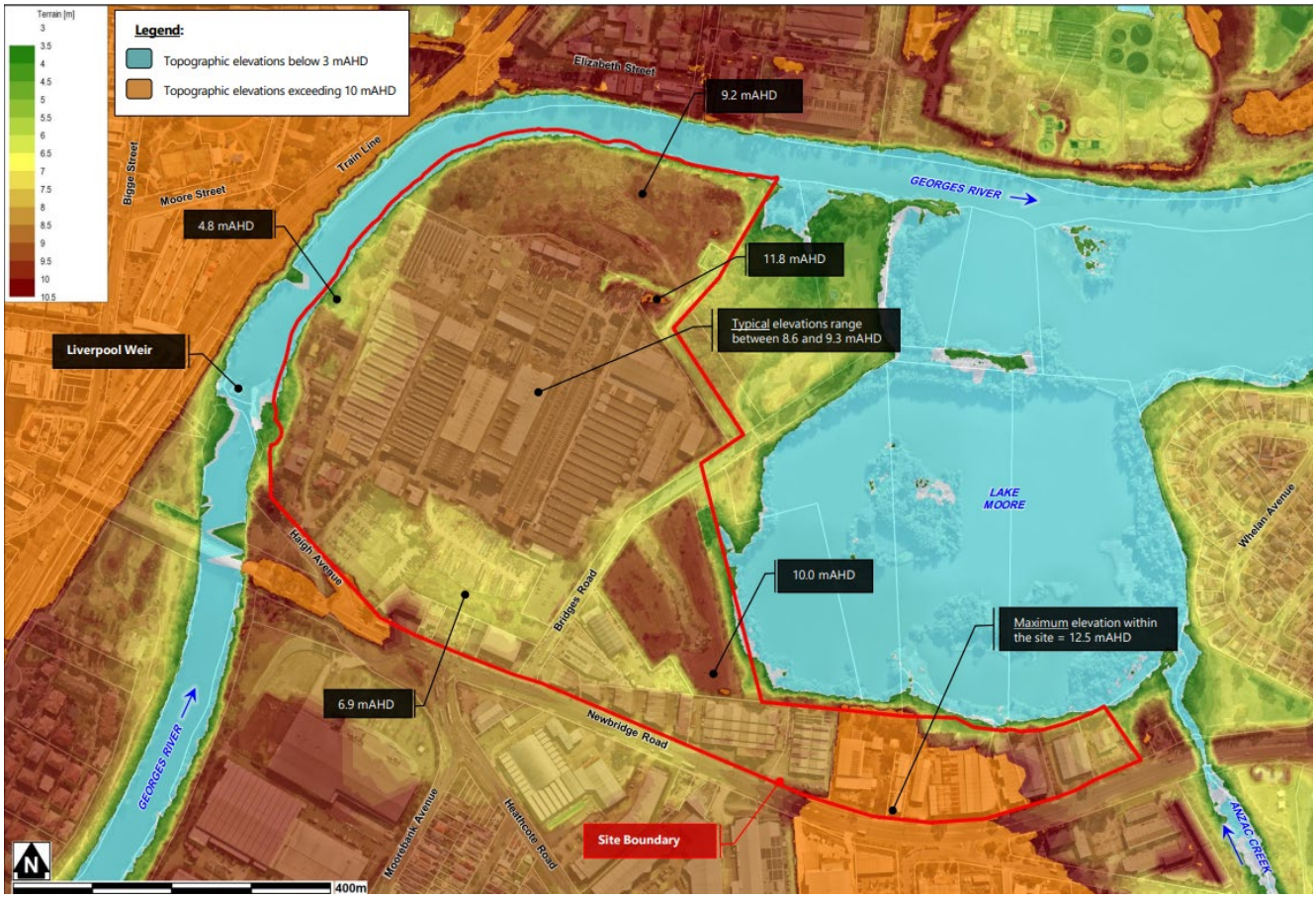


Figure 60: Existing topography across the site and surrounds
Source: Advisian

Previous Flood Assessment

Investigations for the PP have been ongoing since 2018 and have included assessment of the impact of the proposed development on flooding along the Georges River. These assessments are document in the following reports, which accompanied the originally lodged PP:

- *Liverpool Waterfront Water Cycle and Flood Management Strategy (2016)*, prepared by Wyndham Prince, and
- *Moore Point Precinct Flood Impact Assessment (2021)*, prepared by Wyndham Prince.

The PP was relodged in May 2022 with the following reports

- *Moore Point Precinct, Liverpool–Flood Impact and Risk Assessment (July 2022)* prepared by Advisian, and
- *Moore Point Precinct Flood Emergency Response Strategy (November 2022)*, prepared by Advisian.

Flood Modelling Methodology

Before investigating the potential impacts associated with the PP, it is critical to reliably define flood characteristics (i.e., peak flood levels and flow velocities) for existing conditions.

Although the TUFLOW model developed for the *Georges River Flood Study (2020)* provides a good basis for these investigations, the model was developed with a regional focus with inputs that are now superseded.

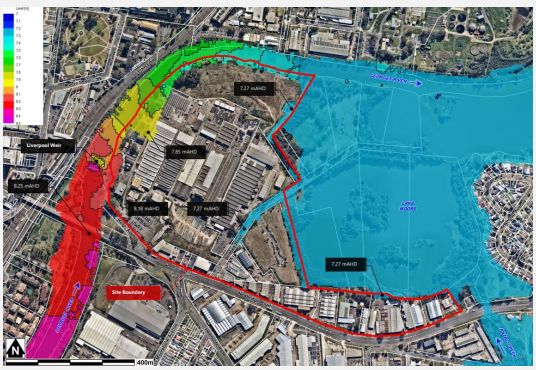
Accordingly, the TUFLOW model was truncated and updated to provide a tool more suitable for defining flow characteristics in the vicinity of the Precinct. These updates and the resulting outputs for the 5% and 1% AEP events, the 1 in 500 AEP event, and the PMF adopted by Council.

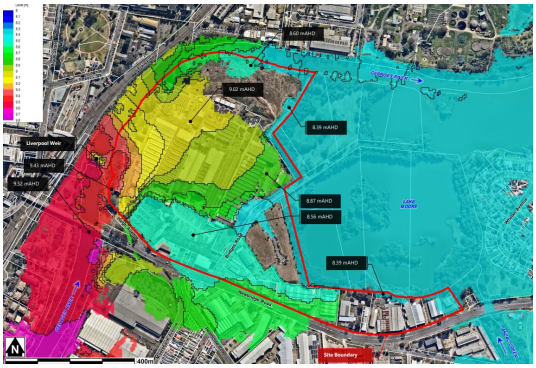
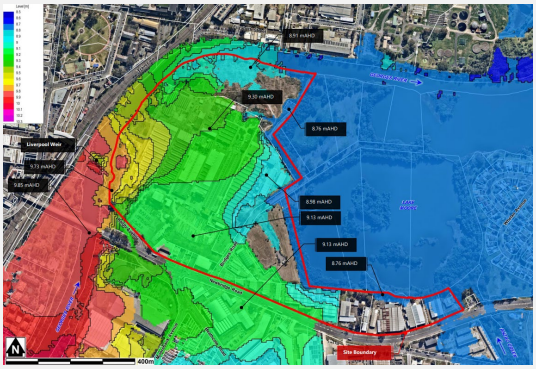
Outputs are also provided for a 1 in 5,000 AEP event and for climate change assessment in accordance with the recommendations of the Gateway Determination.

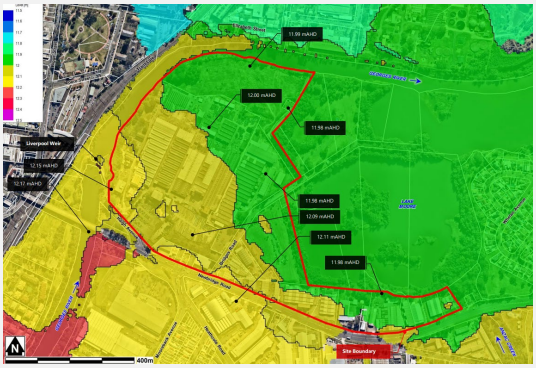
Flood Modelling – Existing Condition

A summary of the peak flood levels for summarised in **Table 18** below:

Table 18: Flood Modelling – Existing Condition

Flood Event	Summary	
5% AEP	Inundation of the Precinct will be minimal during a 5% AEP event with floodwaters typically encroaching into the Precinct by less than 20m. The largest encroachment is predicted to occur to the east of the Liverpool Weir where floodwaters extend into the site by up to 100m. The peak flood level at this location during the 5% AEP event is predicted to be 7.85m AHD. Floodwaters are also predicted to “back-up” into the Precinct along Bridges Road. A peak 5% AEP flood level of 7.27m AHD is predicted along Bridges Road and across Lake Moore.	

Flood Event	Summary	
1% AEP	Inundation across the Precinct is predicted to become more widespread during a 1% AEP event with floodwaters entering the Precinct from upstream of Newbridge Road and near Liverpool Weir. Floodwaters are predicted to break the banks of the Georges River upstream of Newbridge Road before flowing east and over Moorebank Avenue and Heathcote Road. Once east of Heathcote Road, floodwaters build-up upstream of Newbridge Road before overtopping it and entering the Precinct. The majority of inundation across the Precinct is caused by floodwaters overtopping the riverbanks downstream of Newbridge Road and near Liverpool Weir. Floodwaters enter the Precinct over a length of approximately 400m extending from Haigh Avenue to near the bend in the river downstream of the weir. Peak 1% AEP flood levels across the Precinct are predicted to vary between 9.37 and 8.38m AHD.	
1 in 500 AEP Event	Approximately 80% of the Precinct is predicted to be inundated at the peak of the 1 in 500 AEP flood. Floodwaters are predicted to enter the Precinct via the same flow paths as outlined above for the 1% AEP event. That is, both upstream and downstream of the Newbridge Road bridge crossing. Peak flood levels within the Precinct for the 1 in 500 AEP event are typically between 0.3 to 0.4m higher than those predicted for the 1% AEP event. Peak flood levels within Lake Moore also vary by a similar magnitude with a maximum difference of 0.37m ; i.e., 8.39m AHD compared to 8.76m AHD for the 1% and 1 in 500 AEP events, respectively. The modelling predicts a change to flow patterns through the site for the 1 in 500 AEP event with floodwaters escaping to Lake Moore and towards the south over Newbridge Road. Flows from the site combine at Newbridge Road with those arriving from the west and upstream of the Newbridge Road bridge crossing. From there, floodwaters reach a flood level that is sufficient for flow to travel to the south-east.	

Flood Event	Summary	
PMF	Floodwaters are predicted to inundate the entire Precinct during the adopted PMF with peak flood levels varying between 12.15m AHD and 11.98 mAHD.	

Flood Risk Precincts

Flood risk mapping for the LGA is based on the categorisation of flooding into three different grades – Low, Medium and High. Flood Risk Precinct mapping is presented in **Figure 50** for the Precinct. The mapping is provisional only as it does not include a detailed review of evacuation constraints based on consideration of available warning times and any Flood Emergency Response Planning Classifications determined for the area by State Emergency Services (**SES**).

It indicates that the majority of the Precinct is categorised as having a 'Medium Flood Risk'. Although there are some areas of 'High Flood Risk', these are typically limited to the edges of the site or to areas of higher localised flood depths such as the area north of Newbridge Road.

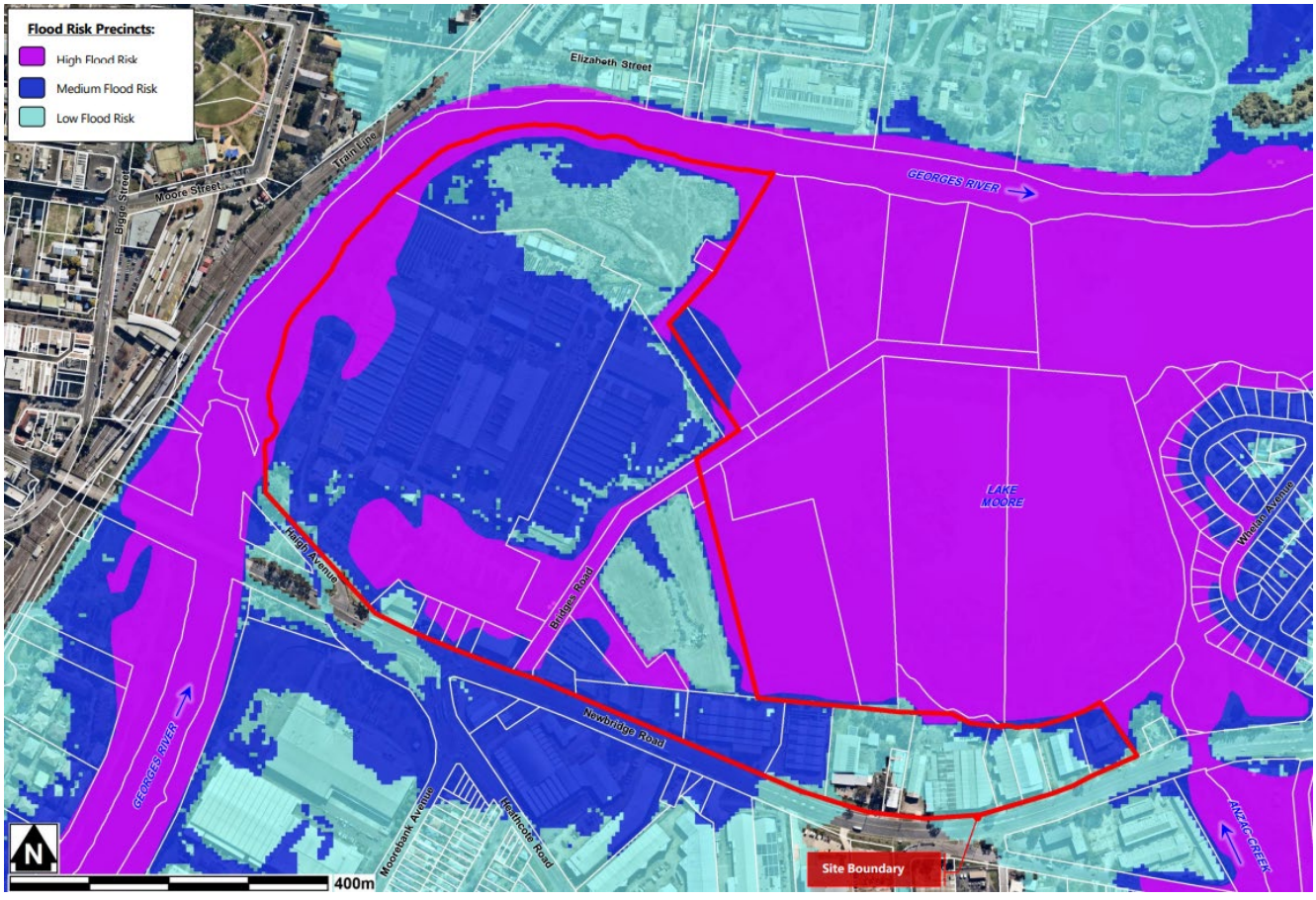


Figure 61: Flood Risk Precincts – Existing Conditions
Source: Advisian

Climate Change

Based on policy and previous flood studies undertaken for the Precinct, Advisian adopted the 1 in 500 AEP event as being representative of the year 2080 1% AEP event, and for it to be used to characterise the potential impact of climate change on flooding along the Georges River and across the Precinct.

The differences in flood levels between this climate change scenario and the present day 1% AEP flood are presented in **Figure 51**.

The flood level difference mapping shows that climate change could lead to flood level increases that range between 0.28 and 0.57m across the Precinct. The differences are highest across the southern parts of the site where the increase in flood flows reaching Newbridge Road leads to some backing up of floodwaters.

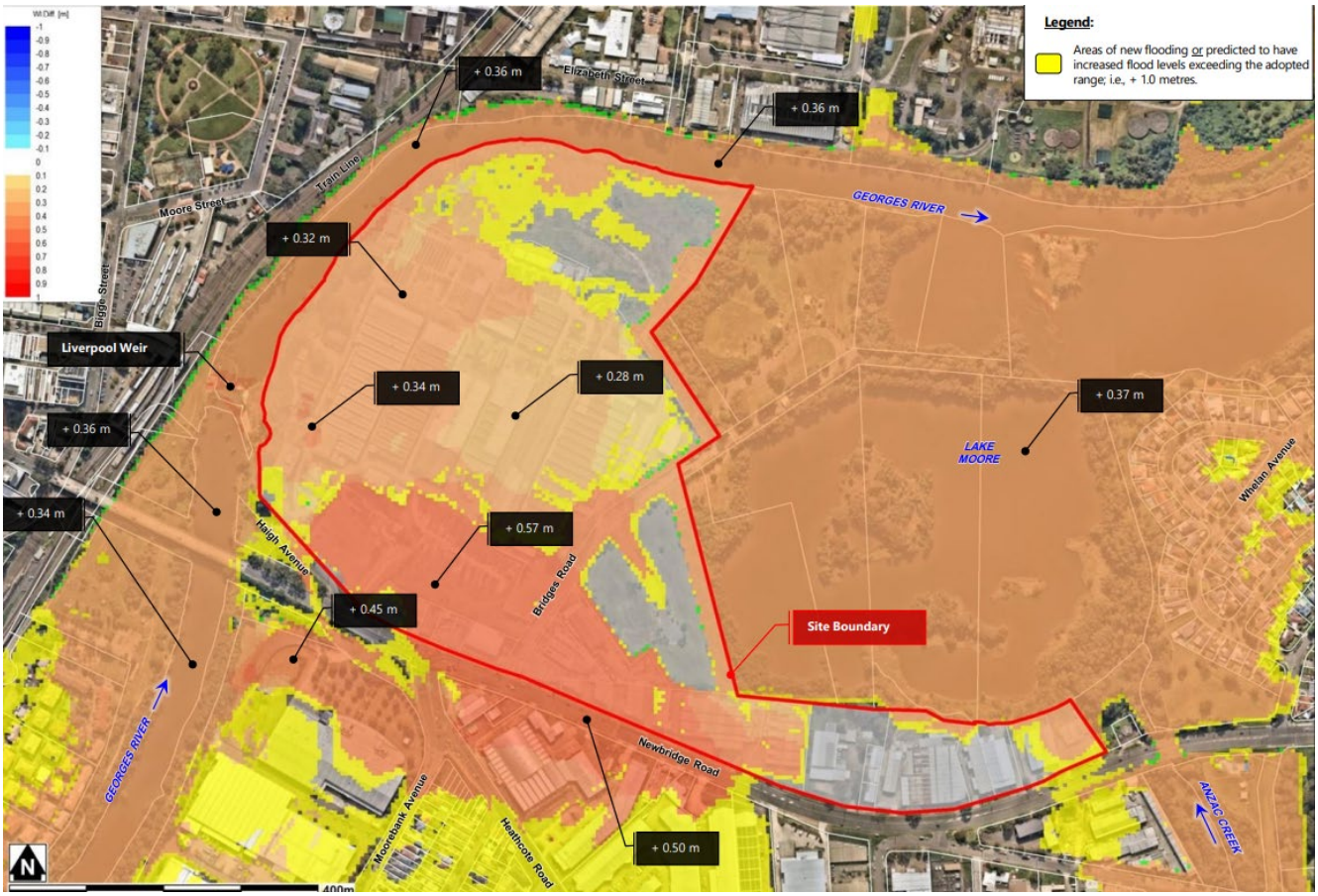


Figure 62: Climate Change Flood Levels
Source: Advisian

1 in 5000 AEP Flood Assessment

Predicted peak flood levels and extents for the 1 in 5000 AEP flood have been extracted from the modelling results and are depicted in **Figure 52**. The mapping shows that floodwaters are predicted to inundate most of the site. Only a small area of the elevated section of Newbridge Road near the Georges River crossing is predicted to remain dry.

The results indicate that 1 in 5000 AEP flood levels are generally between 1.0 and 1.3m higher than for the 1% AEP flood.

A maximum flood level of 10.60m AHD is predicted across the Precinct. Predicted flood depths and flow velocities have also been extracted from the modelling results and are presented in **Figure 52**. The mapping shows that flow velocities are highest around the peripheries of the Precinct and along Bridges Road.

This is similar to the 1 in 500 AEP event and is influenced by the presence of the industrial building located in the centre of the Precinct which act as a significant barrier to overland flows which might otherwise short-circuit the meander bend downstream of Liverpool Weir and flow through the site.

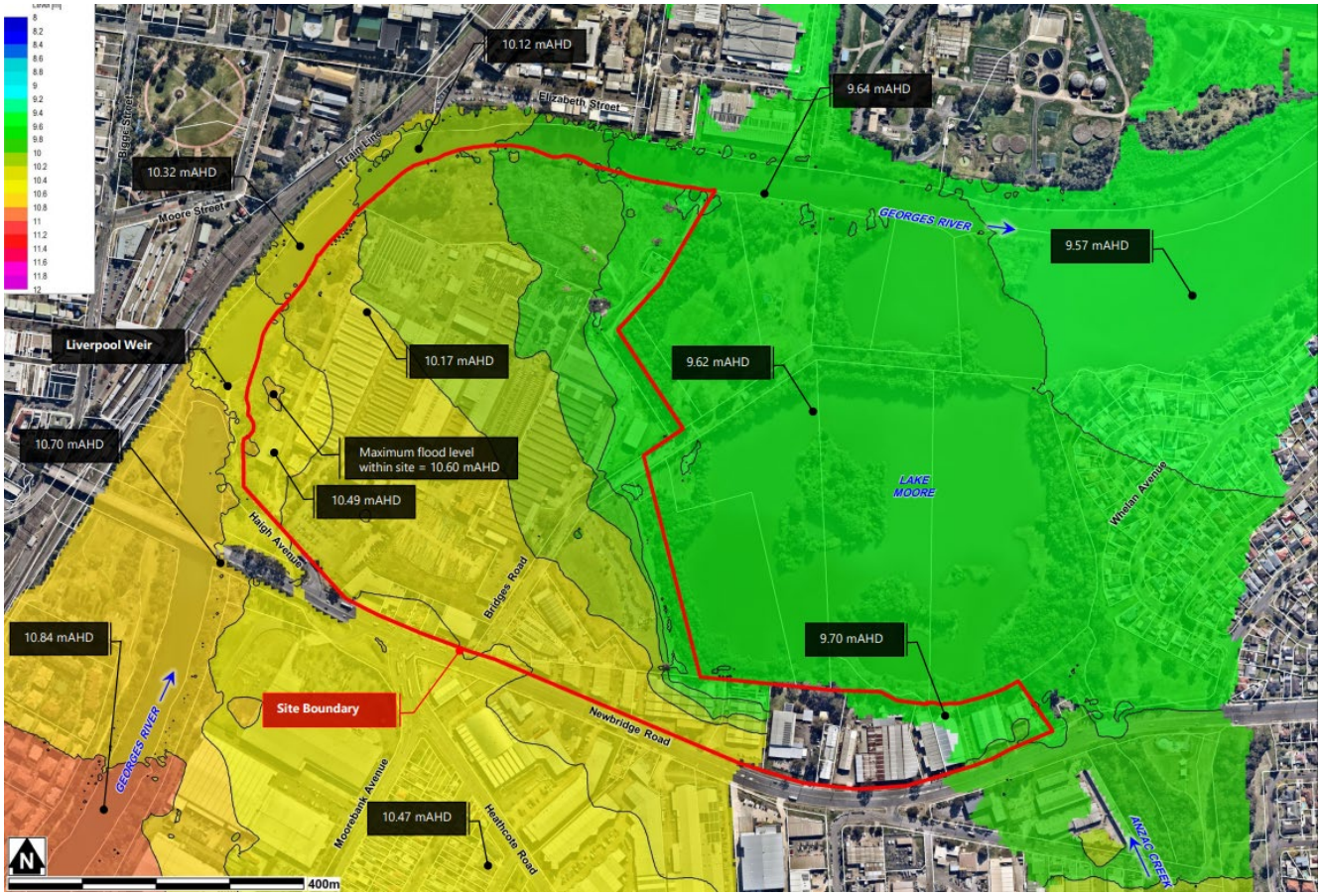


Figure 63: 1 in 5000 Flood Event Existing Conditions
Source: Advisian

Proposed Flood Response

Development is proposed across a large proportion of the Precinct with about 30% of the land area to be retained at its current elevation and used for open space. The Structure Plan layout shows the internal road network, locations of landscaping, parks and paved areas as well as areas set aside for rehabilitation of the Georges River foreshore.

Under post-development conditions the Precinct will primarily be accessed via Newbridge Road with connections at Bridges Road and Anchor Place. A further connection is proposed to Haigh Avenue to the west of the Precinct.

The post-development landform proposed across the Precinct is shown in **Figure 53**. The extent of filling and excavation required to achieve this landform is shown. The fill proposal has been designed to create a landform that is raised above the flood planning level where habitable structures are proposed. However, it has also been designed to improve bank stabilisation and provide safe access to the foreshore of the river.

As shown in **Figure 54** excavation is proposed along the Georges River foreshore with depths of cut typically ranging between 2 and 3m. A maximum excavation depth of 4.6m is proposed along the foreshore near the north-eastern corner of the Precinct.

Filling is proposed across much of the remainder of the Precinct with typical depths of fill ranging between 0.5 and 1.5m. The greatest depths of fill are generally proposed to the north of Haigh Avenue and along Bridges Street. Depths of fill of up to 2.6m are proposed at both locations. A maximum depth of fill of 5m is proposed along the eastern Precinct boundary adjacent to the foreshore of Lake Moore.

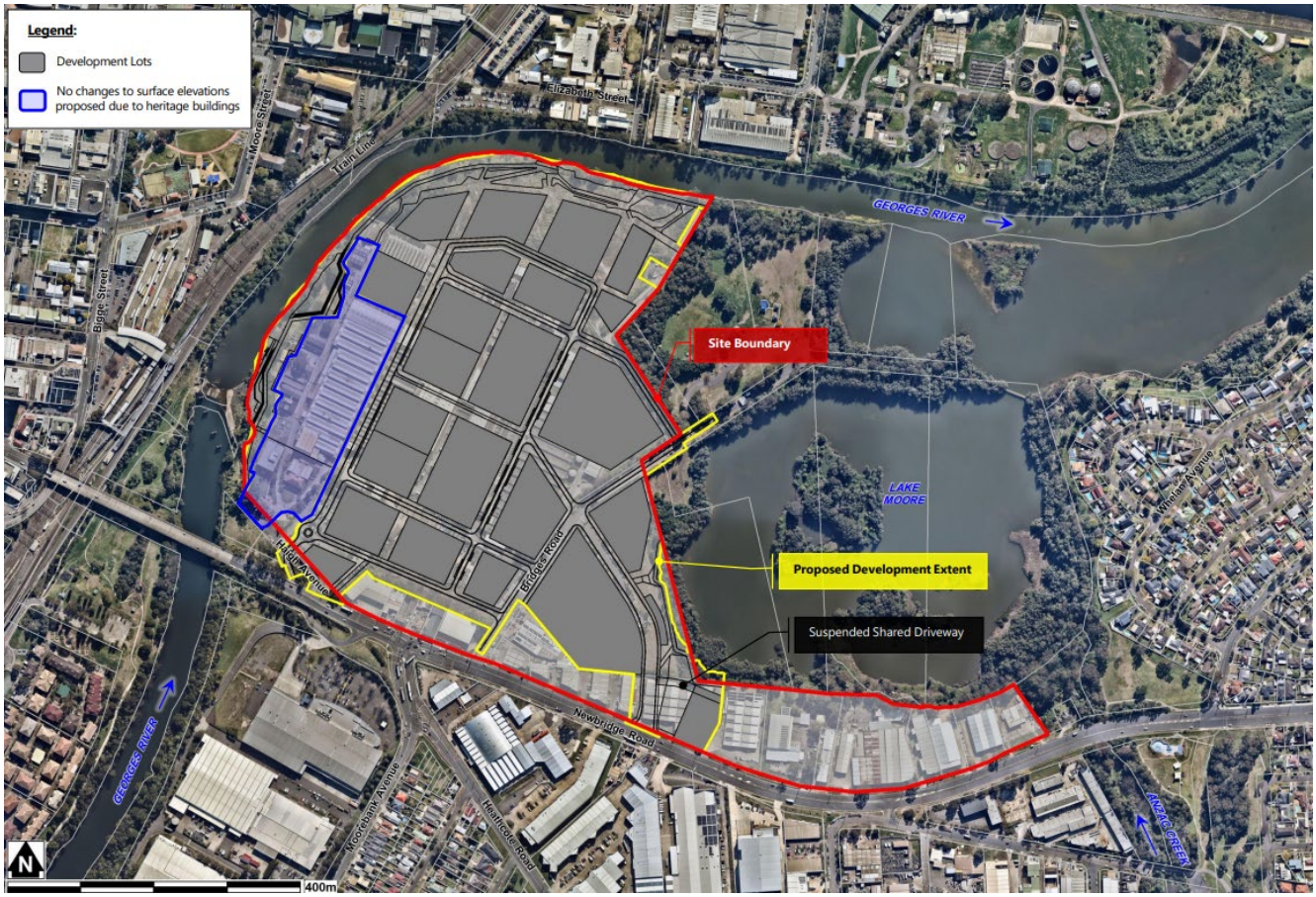


Figure 64: Structure Plan Layout
Source: Advisian

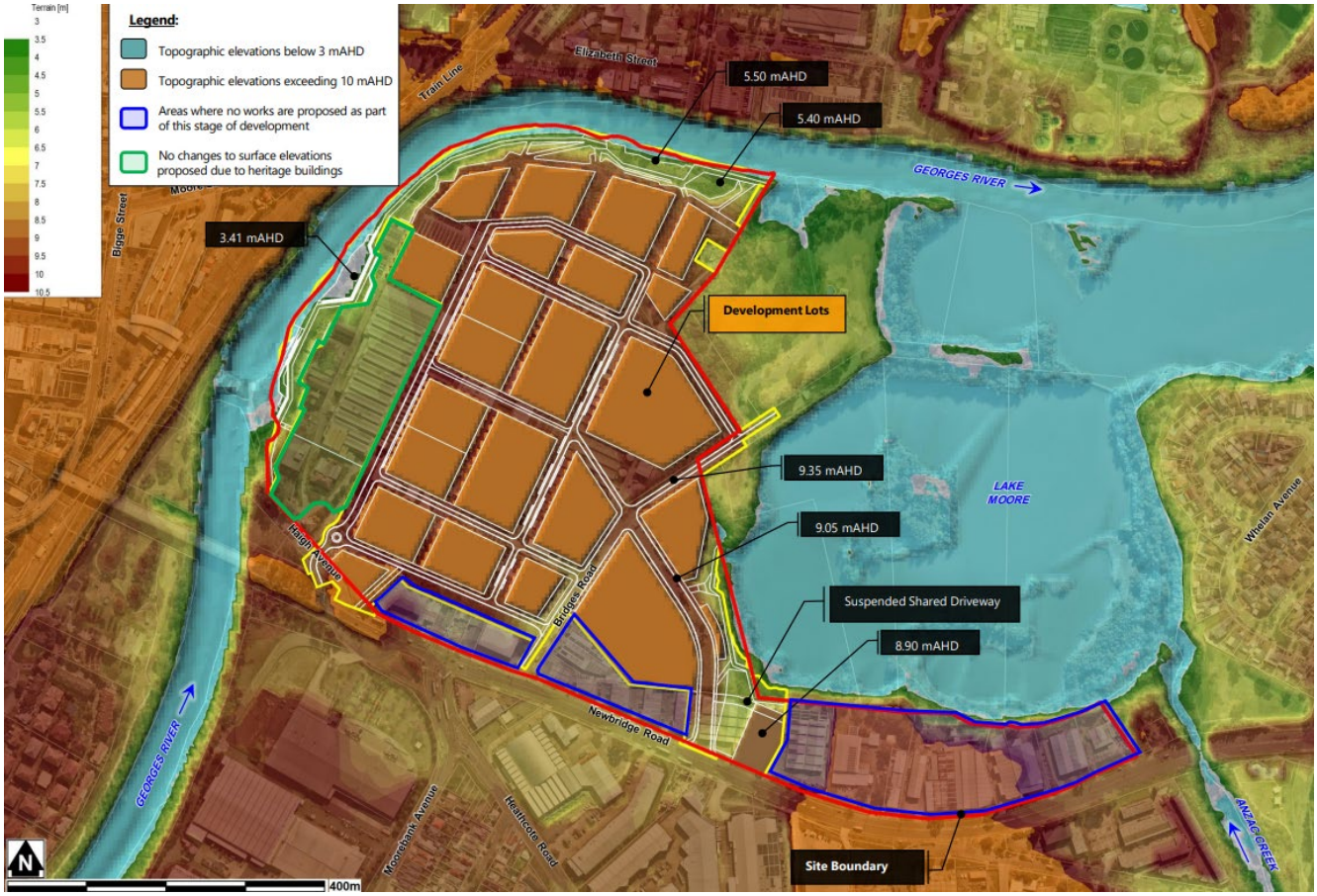


Figure 65: Post Development Topography
Source: Advisian

Post Development Flood Assessment

The development is predicted to remain largely flood free during a 1 in 500 AEP event, with only the foreshore, existing heritage buildings and proposed overland flow route predicted to be inundated. Two internal roads to the south of the site are also predicted to be inundated near their respective intersection with Newbridge Road. This occurs as the raised internal roads grade back to existing elevations along Newbridge Road See **Figure 55**.

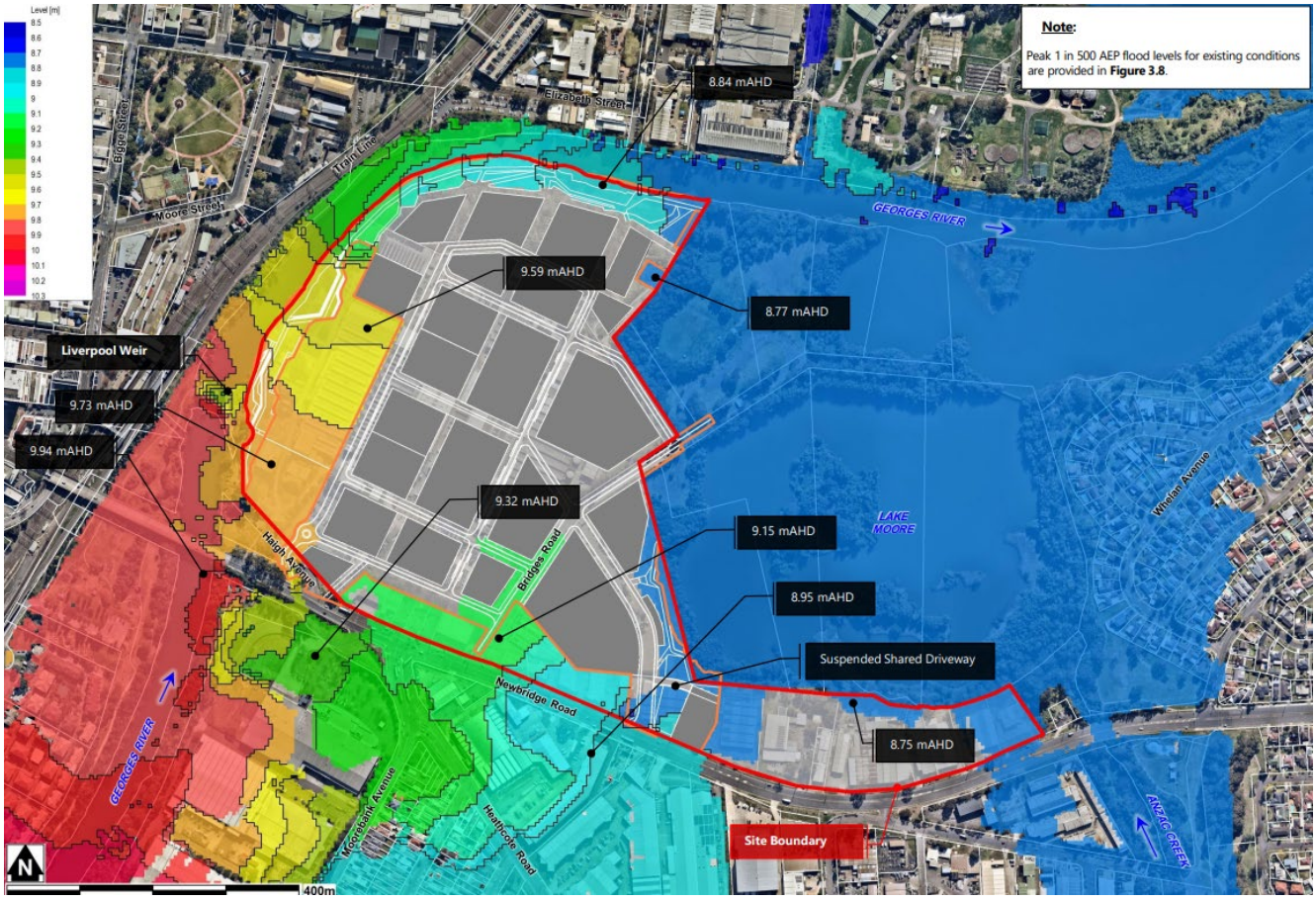
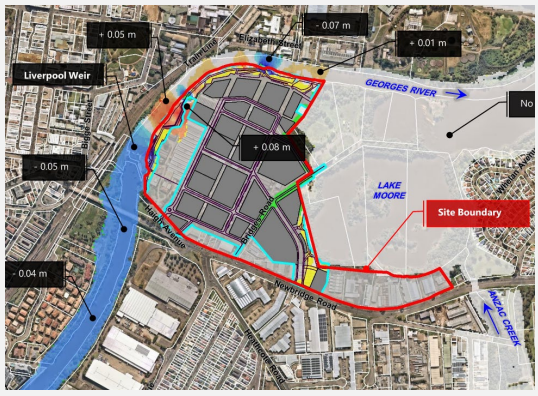


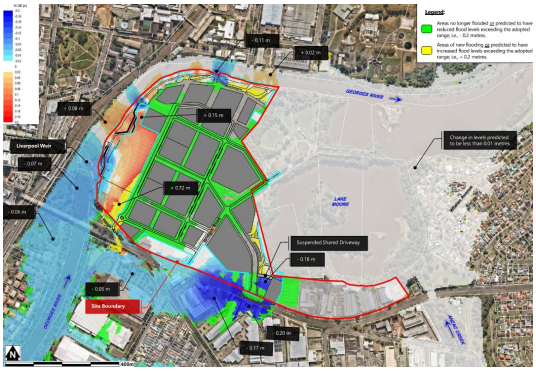
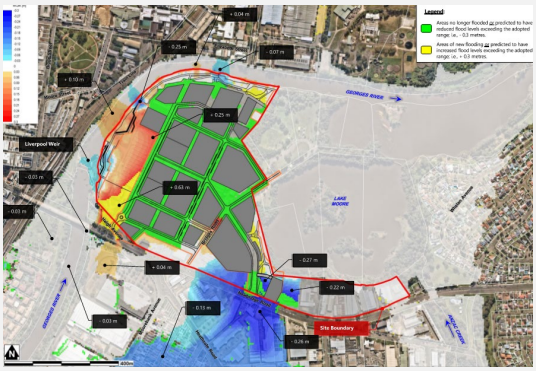
Figure 66: Predicted Flood Levels in 1:500 Flood Event
Source: Advisian

Impact on Peak Flood Levels

A summary of the peak flood levels for summarised in **Table 19** below:

Table 19: Flood Modelling – Proposed Condition

Flood Event	Summary	
5% AEP	The mapping indicates that the proposed development would result in flood level decreases upstream of Liverpool Weir by up to 0.05m. Reductions of up to 0.04m are predicted to extend 900m upstream of the weir and reduce to 0.03m at the South Western Motorway (M5) bridge crossing. These reductions to peak 5% AEP flood levels are predicted to occur as a result of the proposed foreshore works which create additional flow conveyance capacity along the western and northern edges of the Precinct.	

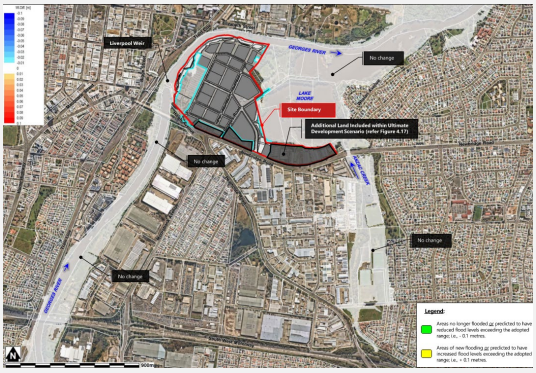
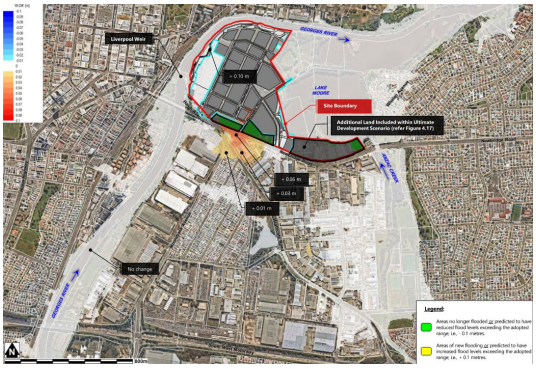
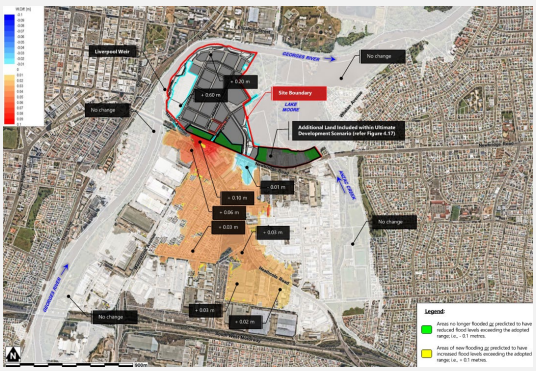
Flood Event	Summary	
1% AEP	The proposed development is predicted to result in decreases in peak 1% AEP flood levels upstream of Liverpool Weir. The decreases are predicted to be largest in the vicinity of the weir where reductions of up to 0.06m are predicted to occur. Decreases of up to 0.07m are predicted upstream of Newbridge Road and up to 0.03m in areas upstream of the South West Motorway (M5) crossing. Decreases in flood levels of up to 0.20m are also predicted across the commercial and residential properties located to the east of the Georges River. The decreases of up to 0.20m are predicted to occur upstream of Newbridge Road and the proposed overland flow route.	
1 in 500 AEP Event	Flood level difference mapping for the 1 in 500 AEP event shows that the development would lead to decreases in predicted peak 1 in 500 AEP flood levels upstream of Newbridge Road, both along the Georges River and across the Industrial, commercial and residential areas to the east. This pattern of flood level changes indicates that during a 1 in 500 AEP event the development would result in a minor increase in conveyance capacity for areas downstream of Newbridge Road. This occurs as a function of the proposed foreshore regrading and the overland flow route that is proposed between Newbridge Road and Lake Moore. The foreshore regrading is the primary reason for the decreased flood levels west of Moorebank Avenue.	

Ultimate Development Scenario

The Gateway Determination includes a recommendation that an assessment of the 'whole Moore Point Precinct' be undertaken prior to public exhibition. This refers to what could be considered an ultimate development scenario for the Precinct, that includes those remaining parts of the Precinct located outside the current development extent and which are not heritage listed (i.e. the tail of development along Newbridge Road and other lots south of the site).

A summary of the peak flood levels for the ultimate condition is summarised in **Table 20** below:

Table 20: Flood Modelling – Ultimate Condition

Flood Event	Summary	
5% AEP	Additional development incorporated as part of the ultimate development scenario will not lead to any additional changes to flood levels beyond those predicted for the development proposal. This indicates that the remaining parts of the Precinct could be developed without causing any impacts to peak 5% AEP flood levels.	
1% AEP	Additional development incorporated as part of the ultimate development scenario will lead to impacts to the south of the Precinct and Newbridge Road of up to 0.06m. These impacts are predicted to occur due to the removal of the temporary flood storage available across the new development areas located to the east and west of Bridges Road. The flood level difference mapping indicates that the additional development areas would not result in any further changes to flood levels along the Georges River or across Lake Moore that exceed 0.01m.	
1 in 500 AEP Event	Additional development incorporated as part of the ultimate development scenario will lead to impacts to the south of the Precinct and Newbridge Road of up to 0.10m, but typically less than 0.03m. These additional impacts are predicted to occur due to the following two factors: • Removal of the temporary flood storage available across the new development areas located to the east and west of Bridges Road, and • Filling of areas that previously conveyed floodwaters to the proposed overland flow path thus leading to a reduction in its efficiency and conveyance capacity.	

Flood Levee and Alternative Strategy

The flood mitigation strategy for the development has been changed to no longer require the flood mitigation levee. Modelling documented in the FIA report confirms that a similar, if not better flooding outcome, can be achieved by incorporating an overland flow path within the development for the carriage of flows that overtop the eastern bank of the Georges River upstream of the Newbridge Road crossing. Refer to **Figure 56**.

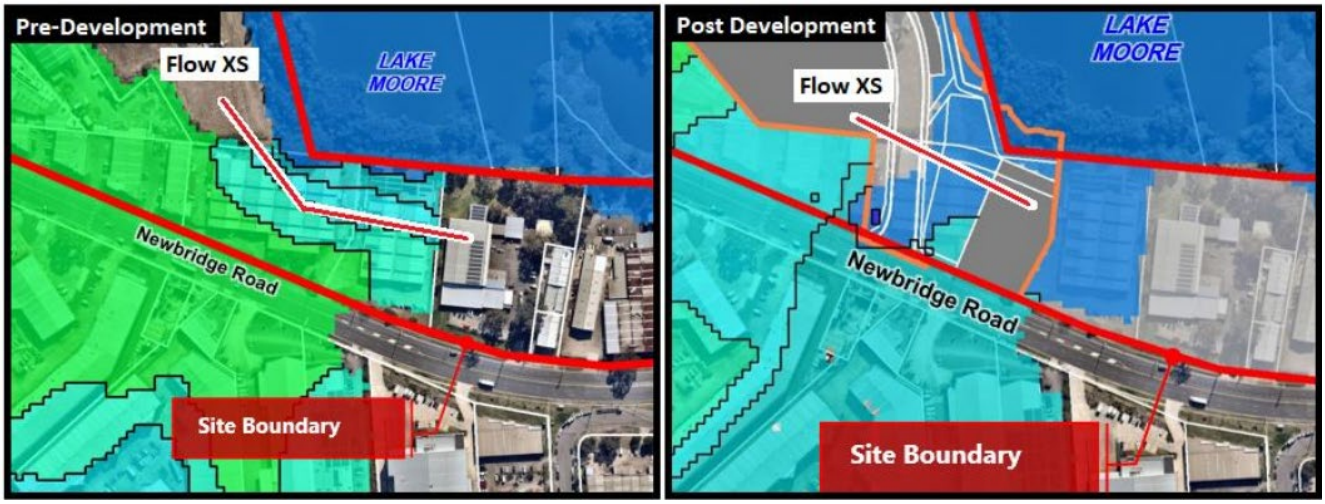


Figure 67: Overland Flow Route
Source: Advisian

As discussed in the FIA, the overland flow route is proposed to be located between Newbridge Road and Lake Moore to allow floodwaters approaching from the south-west to escape to Lake Moore and not impact on the development.

Conclusion

The investigations undertaken by Advisian conclude that the development as proposed conforms with all relevant flood criteria and for some off-site areas, will provide a better flood affectation outcome than is the case for existing conditions.

The development proposal detailed in the PP is compatible with the flood risk at the site and is designed to ensure negligible adverse flood impacts in floods up to and including the 1% AEP event. It has also been shown to have minimal impact on flood characteristics in rarer events up to the 1 in 500 AEP flood.

The modelling indicates that the post-development landform combined with the proposed overland flow path will reduce 1 in 500 AEP flood levels at more than two hundred properties located upstream of the Precinct.

Evacuation Strategy

The PP is supported by a Flood Emergency Response Plan (**FERP**) by Worley (**Appendix 8**). It has been prepared based on the *Flood Emergency Response Strategy* (**FERS**) (2022) and the findings from the additional work completed following the Gateway Determination, including the finding from the 2024 FIA.

Analysis completed for the FERP indicates that the strategies previously determined as part of the FER can be implemented to ensure the flood risks to future occupants of the Moore Point development will be minimal.

Note: All references to figures and tables in this section refer to the FERP.

Precinct Access

The FERP relies on a phased approach involving vehicular evacuation, evacuation by foot and shelter-in-place. Key elements of the FERP are as follows:

- There are four (4) potential vehicular routes which provide opportunity for access from the development to Newbridge Road during the onset of major flooding of the Georges River (refer Vehicular Connections V1 to V4 as shown in Figure 4-1). The flood immunity of each route is as follows:
    - Vehicular Connections V1 to V3 all offer the same level of flood immunity which corresponds to a flood that reaches a gauge height of 6.44m (9.2m AHD) at the Liverpool Weir Gauge (refer Table 4-2). This corresponds to a flood immunity that is between a 2% and 1% AEP flood.
    - Access to Vehicular Connection V4 is not predicted to be 'cut' until river water levels reach a gauge height of 7.44m (10.2m AHD). This corresponds to a level of flood immunity that exceeds the 1 in 500 AEP event (refer Table 4-2).
- (Two pedestrian footbridges are proposed as part of the development. These will connect the Moore Point Precinct to the Liverpool CBD and to Liverpool Train Station (refer Figure 4-1). As indicated in Table 4-2, access to Pedestrian Footbridges P1 and P2 is not predicted to be 'cut' until river water levels reach a gauge height of 7.44m (10.2m AHD) indicating that both pedestrian footbridges will not begin to experience any form of inundation until flooding of the Georges River approaches the magnitude of the 1 in 500 AEP event (refer Table 4-2).

  Both pedestrian footbridges will be designed to be upwardly grading from the development site.
- Emergency vehicle access is proposed to be provided via Newbridge Road and Vehicular Connection V4. As discussed above, this will allow ambulances and other emergency vehicles to access the site during floods up to and including a 1 in 500 AEP event. Emergency vehicle access via the footbridges will not be required.

Flood Warning Assessment

The 2022 Molino Stewart Report states that there is 7.25 hours of available evacuation time for the Moore Point Precinct. This is based on the forecast 12 hours of 'target warning lead time' less the required time for mobilisation and decision making in accordance with the NSW SES Timeline Evacuation Model (**TEM**).

The 7.25 hours of evacuation time is considered to be conservative as it appears to only include the time available before a height of 4m is reached on the Georges River at the Liverpool Weir gauge. As Newbridge Road is not predicted to be cut by floodwaters until river water levels reach a gauge height of 6.44m, there could be up to 2 hours of additional evacuation time available (refer Table 4-2).

In addition, the available warning time for the Precinct does not take into consideration Vehicular Evacuation Route V4 which will allow evacuation to continue west along Newbridge Road during flooding up until river water levels reach a gauge height of 7.44m. This could allow evacuation to occur for a further 1.5 hours from initial inundation of Newbridge Road (refer Figure 4-17) or 3.5 hours from the time when flood levels are predicted to reach a height of 4m on the gauge.

Notwithstanding, the 7.25 hours of available evacuation time documented in the 2022 Molino Stewart Report is considered more than adequate for the Precinct to be evacuated safely via the available vehicular routes and footbridges.

An analysis of available warning times for potential evacuation triggers was undertaken based on an assessment of the rate-of-rise of flood levels at the Liverpool Weir gauge for the PMF and for the 1 in 500 AEP flood. Flood level (or stage) hydrographs for the 5%, 1% and 1 in 500 AEP floods and the PMF are plotted in Figure 4-17 for the Liverpool Weir Gauge. Markers indicating the point in time along

the 1 in 500 AEP and PMF flood level hydrographs when inundation of the various evacuation routes first occurs is superimposed on the figure.

All flood warning times include twelve (12) hours of minimum 'target warning lead time' before a gauge height of 4m is reached as per the 'Provisions of and Requirements for Flood Warning' (NSW SES, 2019). The analysis found that the following flood warning and evacuation times would be available for the Moore Point Precinct.

- There would be between 13.5 and 15.5 hours of combined warning and evacuation time available during a PMF event (refer Table 4-6).
- Warning and evacuation times would range between 14 and 19 hours during a 1 in 500 AEP event (refer Table 4-7).
- The length of available time varies depending on the method of evacuation and the specific route chosen.

It is expected that once Volume 3 of the 'Georges River and Woronora River Valley Flood Emergency Sub Plan' is completed there will be clearer guidance on emergency response planning and SES adopted triggers for evacuation management.

Evacuation Assessment – 2056 Final Development

The capacity for the Moore Point Precinct to be evacuated via the proposed vehicular and pedestrian routes has been assessed and documented in Table 4.7. The assessment was based on applying the 5,500 maximum vehicle capacity determined by Molino Stewart (2022). The following was determined for the final development scenario in 2056.

- It is estimated that 10,500 vehicles could be "in the precinct" prior to the onset of major flooding. However, many vehicle owners may choose to heed advice associated with a Flood Watch which in all likelihood would be issued by BOM up to three (3) days prior to an event of this magnitude and may relocate their vehicles in advance.
- 12,100 people would evacuate the site via the 5,500 vehicles determined to be the capacity of the transport network allocated to the Moore Point Precinct.
- The remaining 17,300 people would evacuate from the site via pedestrian Footbridges P1 or P2.
- 17,300 people could be evacuated via the two footbridges within less than 2 hours.
- Evacuation over the footbridges could be staggered based on their being 3.5 hours of additional time for evacuation, when based on use of the Minor flood warning being used as a trigger for evacuation.

As there is capacity to safely evacuate all of the population from the Precinct within the available time, it follows that shelter-in-place will only serve as a back-up strategy should it be required. As a risk mitigation measure, all habitable floors and back-up infrastructure will be positioned at or above an elevation of 12.2m AHD which corresponds to the predicted peak level of the PMF

Evacuation Assessment – Intermediate Stages of Development

Construction of the Moore Point Precinct is proposed to occur over three stages between 2026 and 2056. Evacuation during intermediate stages 1 and 2 was also assessed as part of this FERP. The key findings are documented below.

- Stage 1 of the development is to be completed between 2026 and 2036. As shown in Figure 5-1, Stage 1 would include Vehicular Connection V1 (Bridges Road) and V2 (Anchor Place) which are both predicted to be 'cut' once floodwaters reach a height of 6.44m (9.2m AHD) at the Liverpool Weir Gauge. Pedestrian Footbridge P2 will be constructed as part of Stage 1 and will provide a pedestrian evacuation route during floods up to and including the 1 in 500 AEP event; or up to a gauge height of 7.44m (10.2m AHD).

  As shown in Table 5-3, it is expected that all 5,500 vehicles predicted by the 2022 Molino Stewart Report could evacuate Stage 1 of the development. This exceeds the number of vehicle spaces that will be provided as part of Stage 1 by 925 spaces (refer Table 5.3). Accordingly, all vehicles predicted to be on-site once Stage 1 is completed will be able to evacuate during the onset of major flooding of the Georges River.

  The 2,420 people that will not be able to leave the precinct via vehicle (because they won't own one or had arrived via public transport) will be able to walk to flood free land in the Liverpool CBD via Pedestrian Bridge P2 (refer Table 5.3). Based on the evacuation timeframes determined by BG&E (refer Appendix B) it is estimated this number of people could evacuate in less than 30 minutes. As the available evacuation time is 5.5 hours, there is potential for pedestrian evacuation of these people to be staggered to allow a more gradual influx of people into the Liverpool CBD.

- Evacuation Routes V1 (Bridges Road), V2 (Anchor Place) and V3 (Haigh Avenue) and Pedestrian Footbridge P1 and P2 are all proposed to be available during Stage 2 of the development (2036 to 2046) (refer Figure 5-1). There would be no constraints preventing all 5,500 vehicles determined to be the capacity of the transport network allocated to the Moore Point Precinct by the 2022 Molino Stewart Report to evacuate once Stage 2 of the development is completed (2046).

  The analysis indicates that 8,189 total vehicle parking spaces will be provided by the end of development of Stage 2 (refer Table 5-3). Therefore, it follows that in 2046 there could be up to 2,689 vehicles that remain in the precinct over the duration of a 1 in 500 AEP event. As one of the proposed footbridges will be completed prior to the commencement of Stage 2 it follows that the remaining population (after vehicular evacuation) will be able to evacuate by foot. As shown in Table 5-3, the remaining 8,606 people could evacuate by foot within a 2 hour period. As above, there is approximately 3.5 hours excess time for evacuation by foot into the Liverpool CBD. Evacuation by foot could therefore be staggered.

- Anyone remaining onsite during Stage 1 and Stage 2 will be required to shelter in place within their apartments and/or nominated communal gathering areas.

Evacuation Assessment – Intermediate Stages of Development

Flood emergency response management procedures have also been determined for the proposed development to show how flood risks and evacuation would be managed. The procedures contained in Appendix A have been determined with the objective of:

- Utilising technology and other means for information dissemination,
- Utilising early warning triggers such as severe weather warnings to commence systems maintenance and preparation of the site and people,
- Maximising the capacity for future residents and workers to safely evacuate the precinct either by vehicle (up to a maximum of 5,500) or by foot, during the onset of major flooding that would cause the precinct to be isolated for more than 6 hours, and,

- Addressing the recommendations made by the flood advisory panel and the 2022 NSW Flood Inquiry.

Heritage

The PP is supported by a SoHI prepared by GBA Heritage (**Appendix 10**), which provides additional information on the site's existing heritage context and proposed adaptive re-use approaches.

Existing Heritage Context

Part of the site (3 Bridges Road) contains a local Heritage item under LLEP 2008 (**I76**), known as the *Former MM Cables Factory and Cable Makers Australia Factory Pty Ltd Group, including inter-war administration building, factory and interiors*. The buildings (pictured previously at **Figure 8**) include:

- A two storey Administration Building that fronts the main entrance to the site from Haigh Avenue,
- A two storey 'gatehouse' entrance building,
- Large industrial buildings that have clerestory windows, top lit either by 'butterfly' or saw-tooth trusses that provide natural top light, and
- A series of smaller ancillary buildings along the riverside eastern boundary, including a Powerhouse, Engineering Workshop, a Boiler house and an Engineering Store, and Smaller industrial buildings along the north side of the site.

The subject site is also located in the vicinity of the following items of heritage significance

- Item 70 – Light Horse Park (Local),
- Item 72 – Liverpool Railway Station Group (State),
- Item 80 - Liverpool College (TAFE) site (State),
- Item 86 - Pylons (former Liverpool Railway Bridge) (Local),
- Item 87 – Liverpool Weir (State), and
- C01 – Bigge Park Conservation Area.

A Heritage Context Plan is provided below which highlights the above items of significance (**Figure 60**).

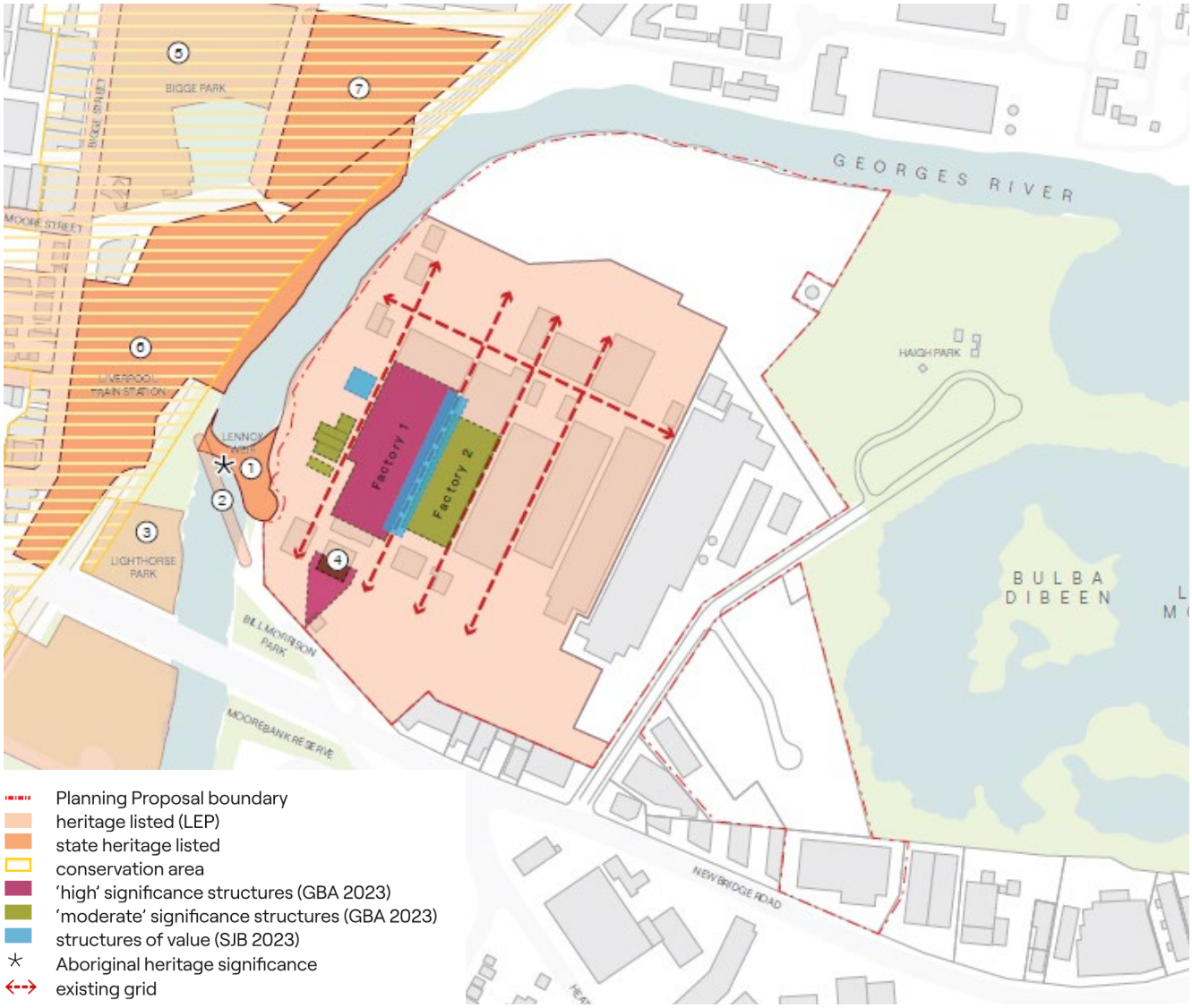


Figure 68: Heritage Context
Source: SJB

Assessment of Significance

GBA Heritage have undertaken a detailed assessed the heritage structures on the subject site to determine their level of significance. Significance is graded into five levels, being Exceptional, High, Moderate, Little or Intrusive. The process of grading is a valuable tool to assist in developing the appropriate conservation measures moving forward.

A summary of the grading process is provided in **Table 24**.

Table 21: Heritage Significance Summary

Grading of Significance	Site Elements
Exceptional	There are no elements of the subject site considered to be of Exceptional significance
High	Administration Building Original Factory Building No.1, including front landscaping and circular drive Front gate and piers
Moderate	Factory No. 2

Grading of Significance	Site Elements
	Guard House Powerhouse Engineering Workshop Boilerhouse
Little	Rear addition to the Administration Building North bays to Factories No. 1 and 2 Factory Building No. 3 Factory Building No. 4 Factory Building No. 5 The Engineering Store All other remaining structures
Intrusive	West lean-to and south additions to Factory No.1 elevations

Figure 61 below illustrates the grading of structures across the site. The proposed Structure Plan has been designed with consideration of the heritage values and seeks to retain all items graded as high significance (Administration Building, Factory 1 including front landscaping and circular drive, front gate and piers).

Other items identified for retention include the Powerhouse (moderate), Engineering Workshop (moderate), Boilerhouse (moderate) and Engineering Store (little significance). Notably, the Structure Plan also incorporates the western façade of Factory 2 (graded as moderate) to retain the laneway between factories, offering opportunity for interpretation and adaptive reuse.

Figure 69: Grading of Heritage Significance
Source: GBA Heritage

Given the site elements of Moderate and High heritage significance are located toward the west side of 3 Bridges Road and that the remainder of the site features structures of little heritage significance, GBA propose that the site has a reduced a Reduced Heritage Curtilage, as depicted in **Figure 62**. The reduced heritage curtilage has been reflected in a proposed update to the LEP Heritage Map – refer to Part 4 Maps.

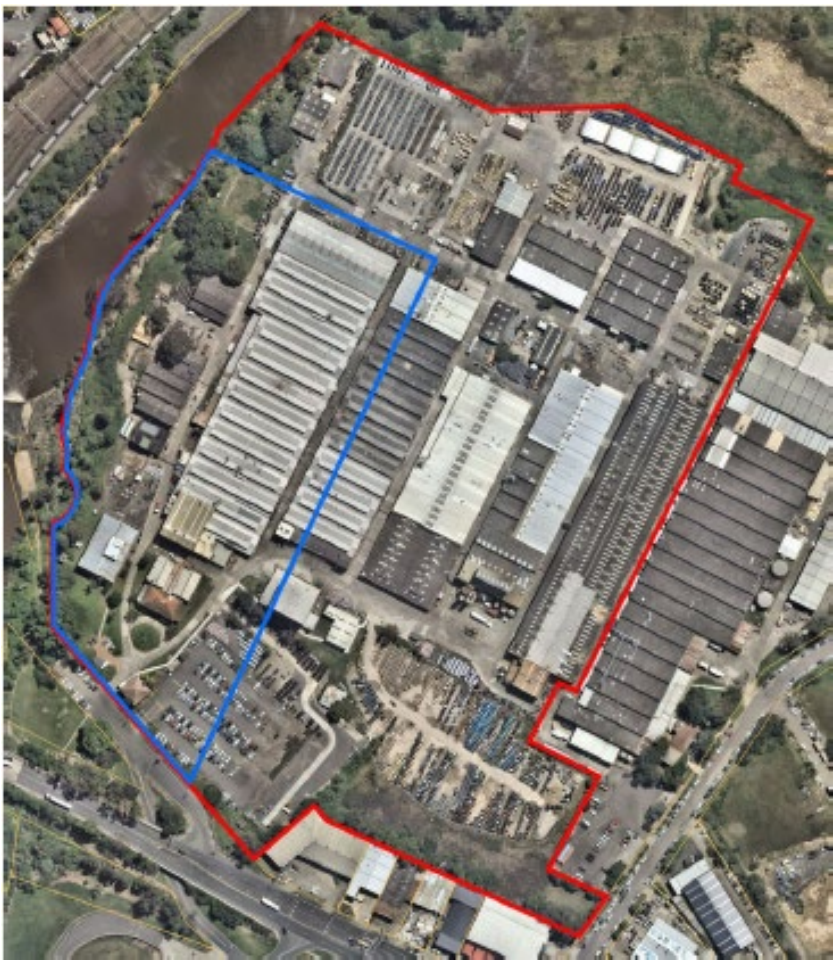


Figure 70: Existing (red) and Proposed (blue) Heritage Curtilage
Source: GBA Heritage

The SoHI considers the proposed Structure Plan, land uses and future built form and provides a detailed assessment of potential heritage impacts. Items considered include:

- Fabric and spatial arrangement of existing heritage structures,
- Setting, views and vistas, including views to, from and within the subject site,
- Landscaping response,
- Surrounding future land uses,
- Demolition, and
- Moveable heritage (retention and display of historic equipment).

The assessment confirms that the PP provides an appropriate response to the heritage values on site in terms of the retention and adaptive reuse of buildings and landscape elements.

The proposal would bring suitable uses to the retained buildings and would likely require acceptable physical alterations. Cumulatively, the proposal will have an acceptable heritage impact, subject to further view analysis and response.

The assessment confirms that the proposal is consistent with relevant Local Plan Making directions. Furthermore, subject to the implementation of mitigation measures (outlined below) the proposal is consistent with LLEP 2008 and the LDCP 2008.

Structure Plan Response

The UDR includes a Heritage Structure Plan (pictured below), which primarily draws upon the physical modern industrial layers of the sites history by establishing a heritage precinct, reinforcing the historical site grid and retaining and adapting a number of key buildings and elements.

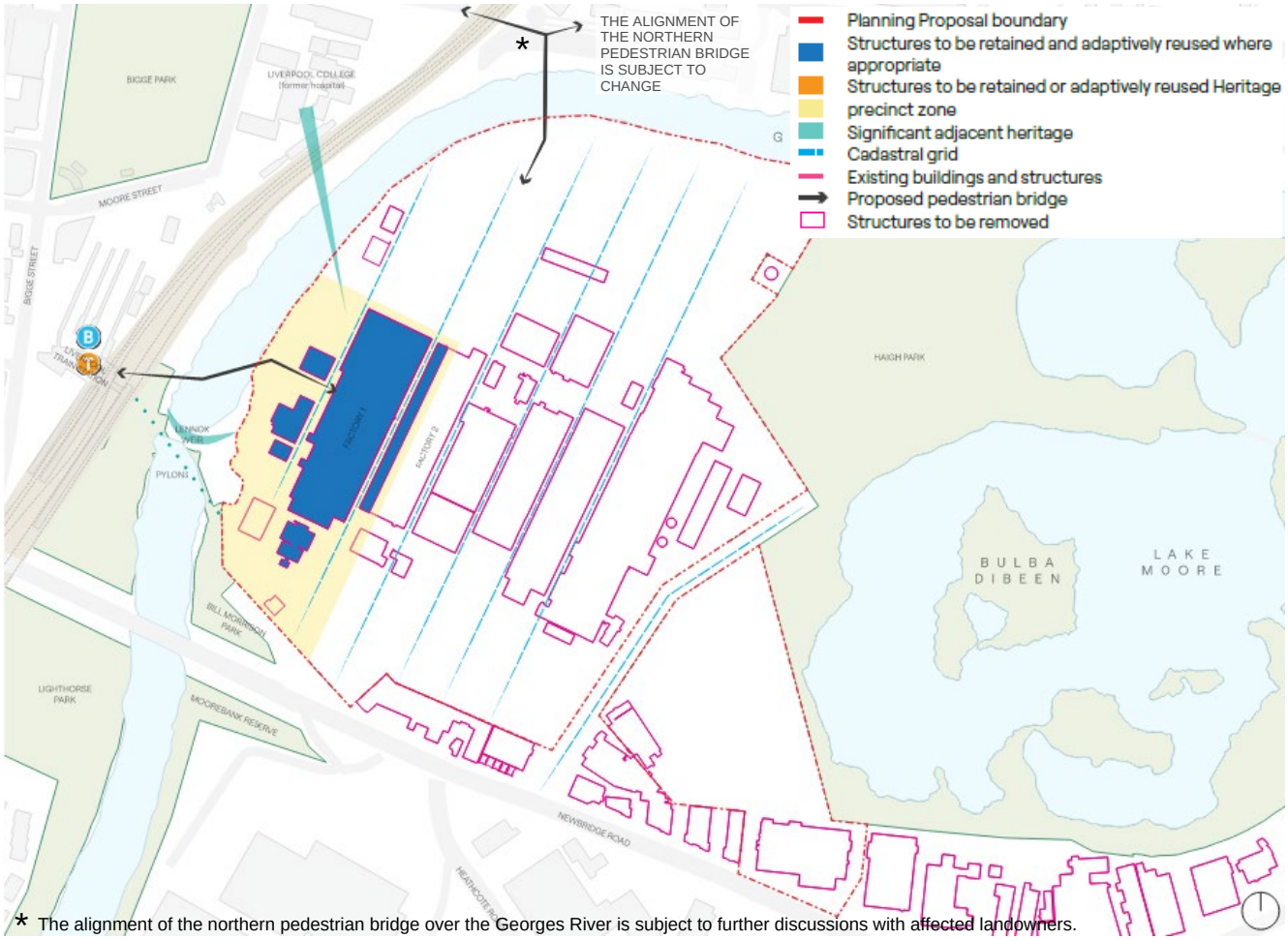


Figure 71: Proposed Heritage Structure Plan
Source: SJB

Specifically, the Heritage Structure Plan seeks to:

- Establish a heritage precinct within the western portion of the site which celebrates heritage character and draws on connections to surrounding heritage. New structures in this area will be designed to sensitively respond to the heritage context This precinct will include all of the retained heritage structures as outlined above,
- Reinstate the historic heritage grid, honouring the 25 degree off north orientation, originating from originates from farming and factory uses that date back to the early 19th Century,
- Retaining and adapting heritage buildings and fabric where appropriate to reduce unnecessary materials and waste,
- Continuing and re-imagining land uses in a modern context,
- Recycle and re-use of building materials. Repurpose materials in a visible way which strengthens the identity of the precinct, such as in public buildings, public domain and artwork, and

- Explore opportunities for interpretation, including incorporating colour palettes and materiality original the site and implementing consistent wayfinding to unite the character of the precinct.

The proposed heritage precinct and broader Heritage Structure Plan will contribute positively towards the place identity of Moore Point. It will provide an entry point to the site from the Liverpool Station pedestrian bridge, creating a strong sense of arrival. The heritage precinct will be a highly activated area, with opportunities for retail, dining and other uses which encourage activities amongst the heritage backdrop, as depicted below.

Figure 72: Visualisation of Heritage Precinct
Source: SJB

Mitigation Measures

The SoHI includes the following proposed mitigation measures, which can be implemented as the PP progresses and be further addressed at DA stage. Proposed mitigation measures include:

- The proposed pedestrian bridge from the subject site to the Liverpool Railway Station should:
    - Be positioned as far away from the footprint of the Liverpool Weir as practical and reasonable,
    - Consideration is given to the reuse of the historic pylons for the proposed bridge, which may have heritage, structural and environmental advantages. The pylons are built of concrete and appear to be of 'robust' construction,
    - Have a sympathetic design with the Liverpool Weir,
    - Have a creative design that contributes to the aesthetic qualities of this part of the Georges River, and
    - Include a position to view the Liverpool Weir, which includes interpretation signage that explains the history and significance of the weir.
- Have minimal bulk and have visual permeability at its eastern end, by the retained historic buildings, to have minimal impacts on views across the area,
- Building blocks 1, 11 and the northern end of Factory No.1, may be reconsidered following a visual impact assessment from the HCA and Bigge Park,
- The guard house should be photographically archivally recorded prior to its demolition, and
- A visual impact assessment and analysis should be prepared from the area of Bigge Park to the subject site, including for the Liverpool TAFE. This would allow for a more informed heritage assessment of the heritage items in the vicinity, as well as for the project as a whole.

Recommendations

Subject to the implementation of the mitigation measures outlined within the SoHI, the proposal provides an appropriate heritage response and may be supported on heritage grounds.

Riparian Assessment, Water Management and River Foreshore Strategy

Overview of Technical Considerations

The PP seeks to improve and transform the Georges River and Lake Moore foreshore to create a destination public open space which will serve the residents of Moore Point and Liverpool LGA. Upgrades to foreshore areas requires a multi-disciplinary response which considers flooding conditions, biodiversity values, water quality and management, engineering and landscaping and place outcomes.

Flooding, biodiversity and landscaping are addressed elsewhere within this PPR. This section provides an overview of the following technical reports which specifically consider proposed foreshore works, legislative requirements and ongoing management of place and environmental outcomes within foreshore areas. Relevant reports include.

- Riparian Assessment Report, Northrop (**Appendix 13**),
    - Water Cycle Management Statement, Northrop (Appendix 3 of Riparian Assessment Report), and

- Foreshore Vision and Strategy, Mecone (**Appendix 15**).

The Riparian Assessment Report provides a review of the proposed development and comprehensive assessment against the requirements of the WM Act 2000 and is a direct response to the Gateway Determination.

The Riparian Assessment is accompanied by a preliminary Water Cycle Management Statement. This outlines how water may be managed within the precinct, including the provision of potable water and sewer, the provision of effective drainage and ensuring water quality targets are met.

A Foreshore Vision and Strategy has been prepared, which outlines the objectives and intended outcomes for the river foreshore, as well as development controls required to facilitate the intended foreshore outcomes at DA stages.

The Strategy is intended to form part of a future control framework for future DAs across the site. It is proposed that the Strategy is reviewed and endorsed by the Department of Planning Industry and Environment – Water (**DPIE Water**) in response to the Gateway Determination. Future DAs would be required to consider and demonstrate consistency with the proposed Strategy.

The following sections provide a discussion around existing conditions of the waterway, an assessment of the proposed works within foreshore areas, discussion around future water cycle management and an overview of the intended Foreshore Vision and Strategy.

Existing Condition

An investigation of existing river bank conditions was undertaken by Royal Haskoning in 2021. Bank erosion was found to be ongoing and widespread on the steep western and northern riverbanks fronting the Georges River, including:

- Slumping at the weir spillway,
- Slip failures and bank slumping resulting in localized sand deposition and collapsed trees, and
- Undercutting of the toe of the bank – exposing tree roots and predisposing them to collapse.

The existing embankment was found to be unstable, with ongoing regression and failure of the embankment observed. Bank conditions are depicted in **Figure 65** below.

Figure 73: Bank Erosion at Moore Point February 2020
Source: Georges Riverkeeper

Intervention is required to stabilise and improve foreshore areas to facilitate the Structure Plan outcomes. Proposed interventions include:

- Remediation of the site and management of acid sulfate soils,
- Filling of the site to protect future development footprints from flood events,
- Reshaping of the riverbanks and adoption of a variety of revetment typologies to stabilise the foreshore, provide improved flooding outcomes and enable public recreation uses,
- Removal of vegetation associated with proposed works,
- Establishment and management of a 40m wide VRZ to Georges River and 30m wide VRZ to Lake Moore,

- Providing appropriate stormwater infrastructure to manage the quantity and quality of stormwater, and
- Implementing a landscape design response which provides for the protection, embellishment and safe use of foreshore areas.

Establishment of Riparian Zones

Georges River is a 7th order waterway and as a result a 40m wide riparian zone is proposed from the toe of the bank (**MHWM**). This results in 20m wide Inner and Outer VRZs.

Prior to sand mining, the current Lake Moore frontage previously fronted Anzac Creek. It is therefore valid to adopt Anzac Creek as the reference waterway for assigning riparian zone. Anzac Creek is a 3rd order watercourse in this location, and so a 30m wide riparian zone is proposed from the toe of the bank. This results in 15m wide Inner and Outer VRZs.

The proposed VRZ locations are depicted in **Figure 66** below.

Figure 74: Proposed VRZ Locations
Source: SJB

Works within riparian zones adopt an interdisciplinary approach which considers:

- Engineering informed revetment typologies which will withstand flooding conditions and potential flood events,
- Design with Country Principles, which highlight the importance of the waterway as a meeting place for connection,

- Landscape design which provides for a variety of activities and activation of the waterfront, and supports adjoining commercial uses, and
- Adoption of estuarine, foreshore and parkland species planting which will provide habitat diversity and lead to improved biodiversity outcomes.

Legislative and Policy Compliance

The Riparian Assessment includes a comprehensive assessment of the proposal against the objectives of the WM Act. This is a key requirement of the Gateway Determination and confirms that the proposal is aligned with and compliant with the provisions and objects of the Act.

In support of this, a Water Cycle Management Statement has been prepared as an appendix to the Riparian Assessment, which outlines how water will be managed within the site and how water quality standards can be met to *enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their* water quality in accordance with the requirements of the WM Act 2000.

As depicted in **Figure 66**, there are no existing or proposed buildings located within the VRZ. However, a highly activated foreshore outcome is sought which reflects the urban context and strategic setting.

For this reason, the Foreshore Vision and Strategy (**Appendix 15**) has been prepared to establish intended objectives and outcomes for the ongoing use and management of foreshore areas. It does not seek to strictly align with the full intent of the *Guidelines for controlled activities on waterfront land: Riparian Corridors 2018* (**DPI Guidelines**) as a result of not proposing a fully structure native revegetation outcome.

As such as merit-based assessment of the Strategy is proposed, consistent with the DPI Guidelines.

Water Cycle Management and Water Quality

The Water Cycle Management Statement outlines how water may be managed within the site, including the provision of potable water and sewer, the provision of effective drainage and ensuring water quality targets are met. The Statement has considered the requirements of LDCP 2008 with the intent of future compliance. It also considers the Water Quality and River Flow Objectives set by the NSW Government.

The approach to water cycle management is summarised in **Table 25**.

Table 22: Water Cycle Management Approach

Water Cycle Element	Discussion
Catchment Areas	Up to six sub-catchments will be defined based on proposed site grading.
Drainage	New pit and pipe drainage will be provided across the development to drain the various sub catchments to the Georges River, or to Lake Moore. The drainage system will accommodate all runoff up to and including the 5% AEP.
Rainwater and stormwater harvesting and re-use of recycled water	All new buildings (excluding heritage) will include rainwater tank provisions, plumbed internally and externally for non-potable uses. Treated stormwater may be harvested in underground tanks. Any treated stormwater may be used to irrigate landscape plantings which will contribute to urban cooling. Top-up of tanks with recycled water can be provided, if it becomes available and if this proves to be feasible.

Water Cycle Element	Discussion
Water Sensitive Urban Design	WSUD treatment measures will be selected from the following: • Each lot may have water quality treatment in a chamber using Ocean Protect filter cartridges sized for each site, • Ocean Protect CDS gross pollutant traps on sub-catchments as end-of-pipe treatment measure to trap gross pollutants and sediment, • Bioretention basins may be proposed in the public domain (i.e. foreshore and overbanks) to provide further water quality treatment, integrated with landscaping, and providing some urban cooling, • Street tree pit WSUD elements can be employed for sub-catchments which cannot drain to a bioretention basin, and • Bioswales can be co-located within streets, e.g. the green spine (east-west street access) in the western portion of the site. An indicative WSUD options layout is depicted below. 
Stormwater Outlets	Stormwater will be directed to outlets that either enter the Georges River or Lake Moore directly. The stormwater from each outlet will be treated before discharge. Outlets will be designed to comply with Council's DCP and the DPI riparian guidelines using soft engineering comprising rock, geofabrics and plants. The design will take into account flood flow forces to ensure their stability and longevity.
Water and Sewer Servicing	**Sewer** To allow for construction and servicing of the development, new wastewater gravity connections are required from the development site to adjacent wastewater mains and Sydney Water Sewer Pump Station. Existing sewer mains within the subject site are proposed to be removed. Further investigations are to be undertaken regarding the potential upgrade or relocation of the existing Sydney Water Sewer Pump Station (SP0287). **Water** With regard to potable water, new connections to the existing Sydney Water potable mains on Newbridge Road and Bridges Road are required along with any required amplification works. A new internal potable water line with a connection to the proposed development lots will be proposed. Opportunities for a recycled water treatment system is being explored with Sydney Water.

The design represents a contemporary response to water cycle management that provides many ancillary benefits. It is appropriate and fitting for the vibrant mixed-use vision of the PP.

Foreshore Vision and Strategy

As described above, the Strategy is intended to form part of a future control framework for the renewal of the site. It is proposed that the Strategy is reviewed and endorsed by DPIE-Water. Future DAs would be required to consider and demonstrate consistency with the proposed Strategy.

The Strategy seeks to balance a range of environmental and place objectives for foreshore areas with a merit-based approach which is tailored to the future urban context. The Strategy defines the foreshore into 5 key areas (**Figure 67**).

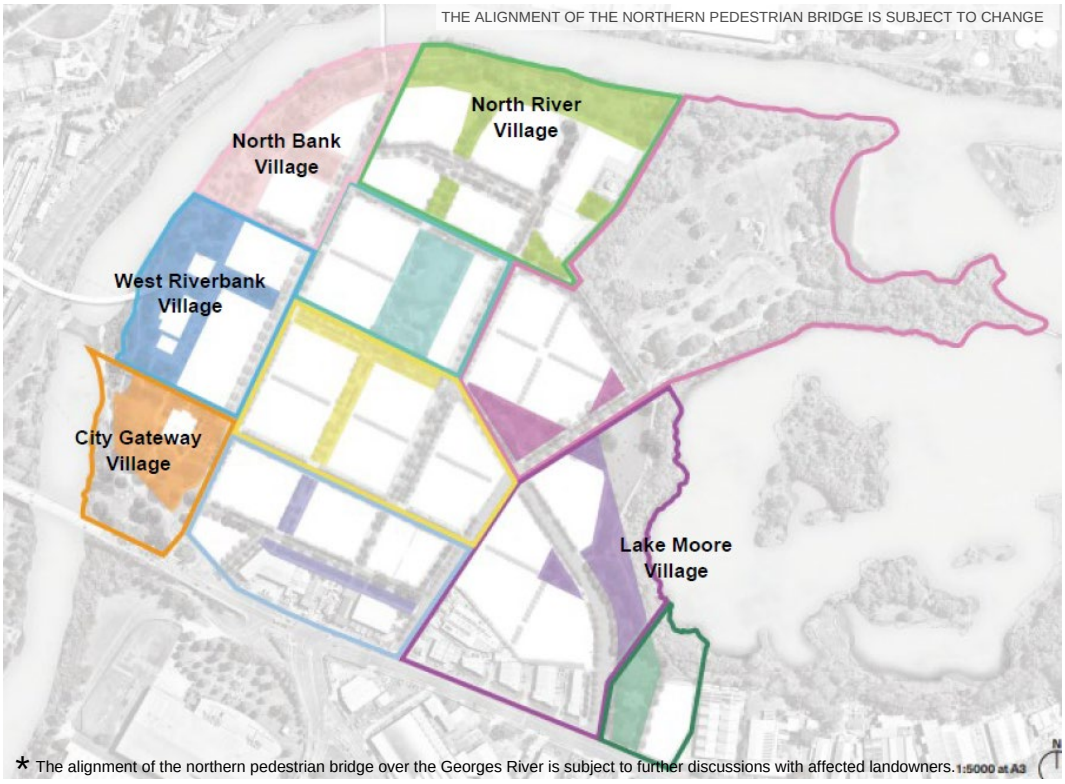


Figure 75: Foreshore Areas
Source: Turf

Each foreshore area includes specific objectives and design requirements, which respond to existing flood conditions and proposed foreshore uses and activation. Detailed sections are included for each foreshore area, setting guidance for future development. An example of this is provided in **Figure 68**.

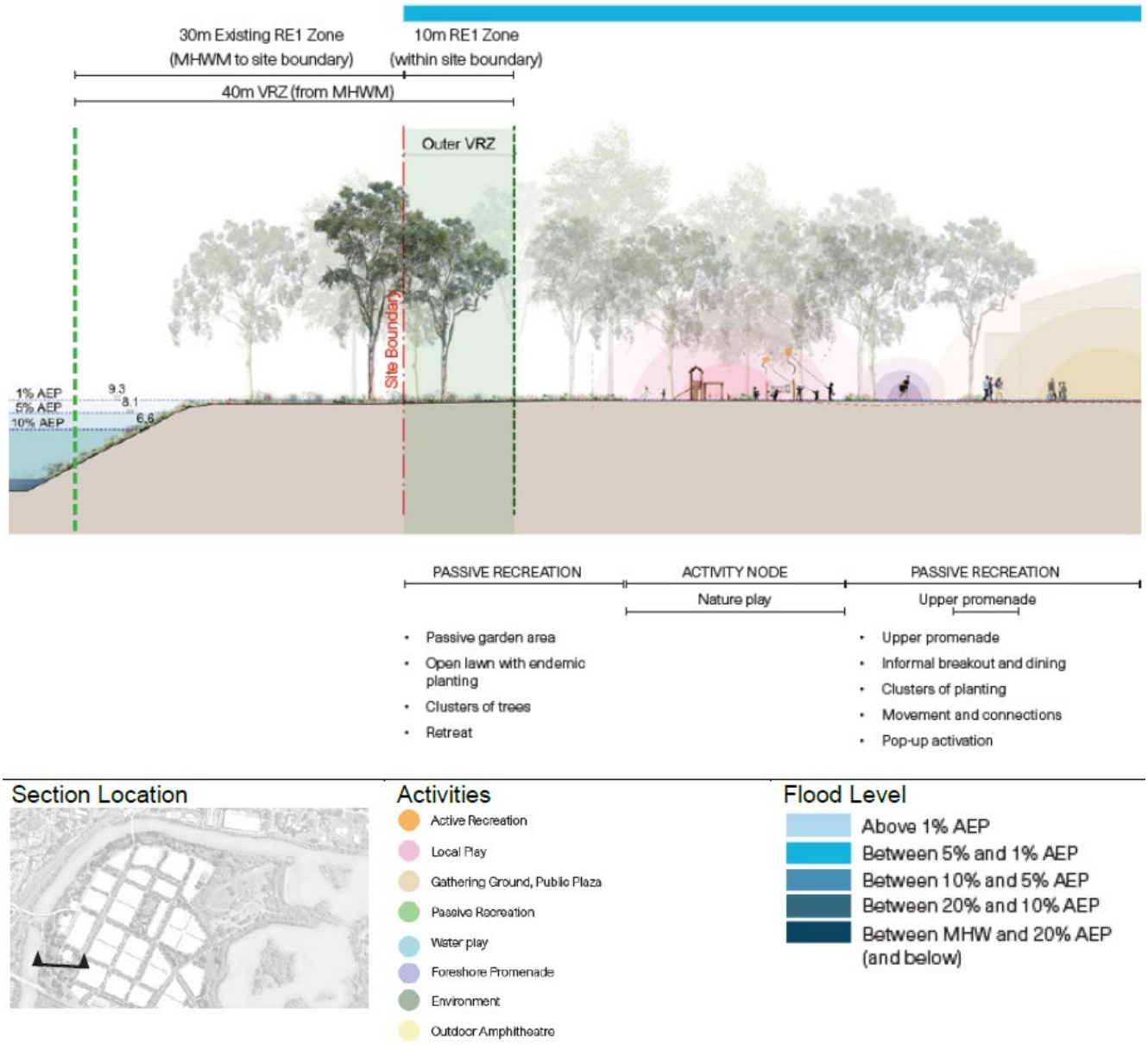


Figure 76: Example of Foreshore Section - City Gateway Village Section 1
Source: Turf

The Strategy also includes detailed guidance on revetment typologies, planting palette, location of infrastructure within the foreshore and permitted structures within the VRZs. Importantly, no new buildings are proposed within the inner or outer VRZs. Some structures will be located within the VRZs as outlined in the table below. These structures relate directly to the function and safety of the Riparian Area and its role as a recreational asset, and have been assessed to be consistent with the DPI Guidelines as a merit-based approach. Refer to **Table 26**.

Table 23: Structures in Riparian Zones

Location	Buildings/Structures in Riparian Zone	
	Existing Retained	**Proposed**
Inner VRZ	Nil	No habitable buildings proposed. Structures may include: • Revetment works,

Location	Buildings/Structures in Riparian Zone
	• Structures which facilitate access to the water (boat ramps, jetties, pontoons etc), • Cultural path, • Passive water play, • Bridge infrastructure, • Stormwater infrastructure; and • Essential services.
Outer VRZ	Nil	No habitable buildings proposed. Structures may include: • Structures as listed above, • Shared paths, boardwalks, viewing platforms, seating, shade structures, • Recreation infrastructure such as play equipment, water play, fitness equipment, courts, skateparks ect, and • Structures relating to temporary events, markets, outdoor dining.

Recommendations

As outlined above, the proposal provides a multi-disciplinary response and approach to development within foreshore areas and the ongoing water management. The proposal has been assessed to be consistent with the WM Act 2000 and capable of providing a merit-based approach which is consistent with DPI Guidelines.

It is recommended that the findings and recommendations of the Riparian Assessment and supporting Water Cycle Management Statement are implemented as the PP progresses.

As part of implementing the ultimate vision of the site as an expansion of the Liverpool CBD, it is intended that the Foreshore Vision and Strategy will form part of a future control framework to guide works within foreshore areas.

Traffic and Transport

A Summary of Regional and Local Transport Impact (**Appendix 20**) has been provided with this proposal. This report summarises the previous analysis undertaken and outlines the active transport measures being introduced via the PP, for exhibition purposes.

In a parallel process, further transport management and access planning is currently being progressed in consultation with TfNSW and Liverpool City Council as part of the Stage 2 TMAP study.

Background to Strategic Transport Assessment

In November 2019, the Transport Infrastructure Working Group (**TIWG**) was established, which included representatives of the following stakeholders:

- Liverpool City Council (Chair),
- Transport for NSW,
- NSW Department of Planning,

- Greater Sydney Commission, and
- JLG.

The TIWG was established to ensure a collaborative approach would be adopted to managing the traffic and transport impacts within the Liverpool Collaboration Area. In January 2020, the TIWG adopted the 'Terms of Reference', which included a proposed two-staged assessment approach to Transport Impact Assessment and set the scope, methodology and deliverables for Stage 1.

A *Strategic Transport Infrastructure Assessment* was prepared by Aurecon in April 2020 to assess strategic transport alignment in relation to the Moore Point planning. This report was high level, and included general recommendations, including the need to prepare a Transport Management Accessibility Management Plan. Following this, the *Liverpool Collaboration Area – Strategic Transport Infrastructure Assessment* was prepared by Aurecon in July 2021 to detail transport infrastructure required to support growth in the Liverpool Collaboration Area.

Under this Stage the TIWG agreed on inputs and assumptions, timelines for testing, development staging and agreed on a preferred scenario and staging plan, and a high-level cost estimation for key infrastructure was also undertaken.

Given the evolution of the proposed Structure Plan, and revised GFA estimates, the proposal is supported by an updated summary of Regional and Local Transport Impacts, prepared by Ramboll (**Appendix 20**).

In a parallel process, further transport management and access planning is currently being progressed in consultation with TfNSW and Council as part of the Stage 2 Transport Management and Access Plan (**TMAP**) study. A summary of the Regional and Local Transport Impacts report is provided below.

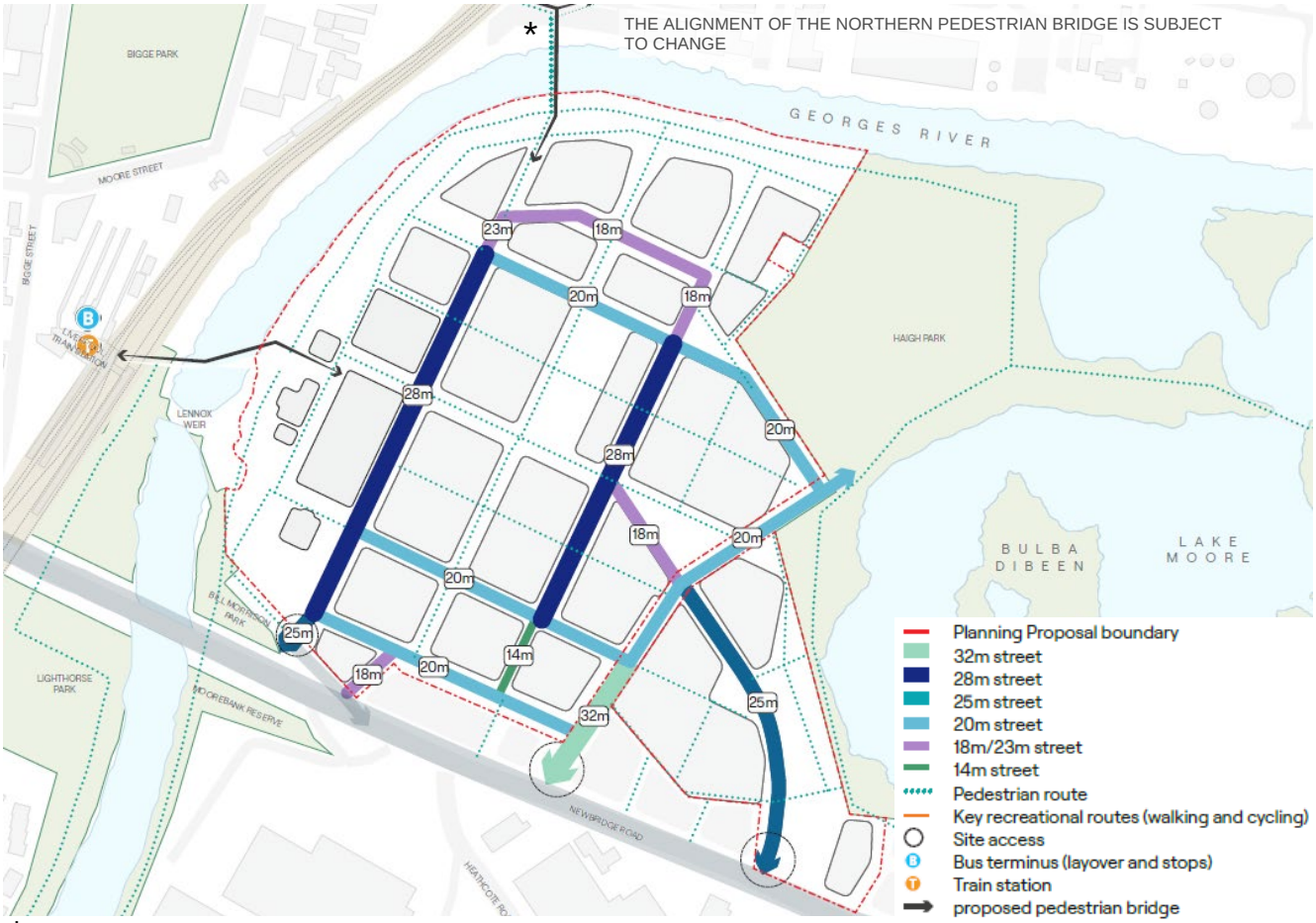
Street Network

The Precinct has been designed with people, accessibility and safety in mind. The Precinct has been defined as a grid, with streets running east-west and north-south throughout the Precinct.

Vehicular access is gained from a series of intersections on Newbridge Road, which come online throughout the lifecycle of the Precinct. Pedestrians and cyclists can access the Precinct from multiple points along Newbridge Road in addition to two new proposed active transport bridge crossings over the Georges River.

Six street typologies have been proposed throughout the Precinct (**Figure 69**). These streets have been designed to cater for efficient and sustainable movement alongside great places for people. Proposed speed limits for vehicles vary across typologies but it is anticipated that the Precinct would have a maximum speed limit of 30km/h to support the prioritisation of active modes. These include:

- Main Street (28m, 30km/h),
- Primary Street (20m, 30km/h),
- Secondary Street (18m, 30km/h),
- Entry and Exit Streets (25m - 32m, 30km/h),
- Green Spine (24m, 10km/h), and
- Serviceways (variable, 10km/h).



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 77: Street Hierarchy

Source: SJB

Note the 18m street that provides access to Newbridge Road is for emergency vehicle access only and would not be used in normal day-to-day travel.

Four proposed access points are proposed for vehicular access to the Precinct in the ultimate scenario. These access points will become available and evolve throughout the development and delivery of the Precinct. All vehicular access to and from the precinct is proposed via Newbridge Road or Haigh Avenue. Vehicular access is proposed via:

1. Haigh Avenue (accessed via intersection with Newbridge Road and utilising existing underpass arrangement),
2. Newbridge Road | Bridges Road (Future signalisation as part of the proposed long-term realignment of Moorebank Avenue to create a four-way junction with Newbridge Road),
3. Newbridge Road | Anchor Place (New signalised access to be developed at 361 Newbridge Road), and
4. Newbridge Road | New Access Road (Priority controlled access point / emergency vehicle access only).

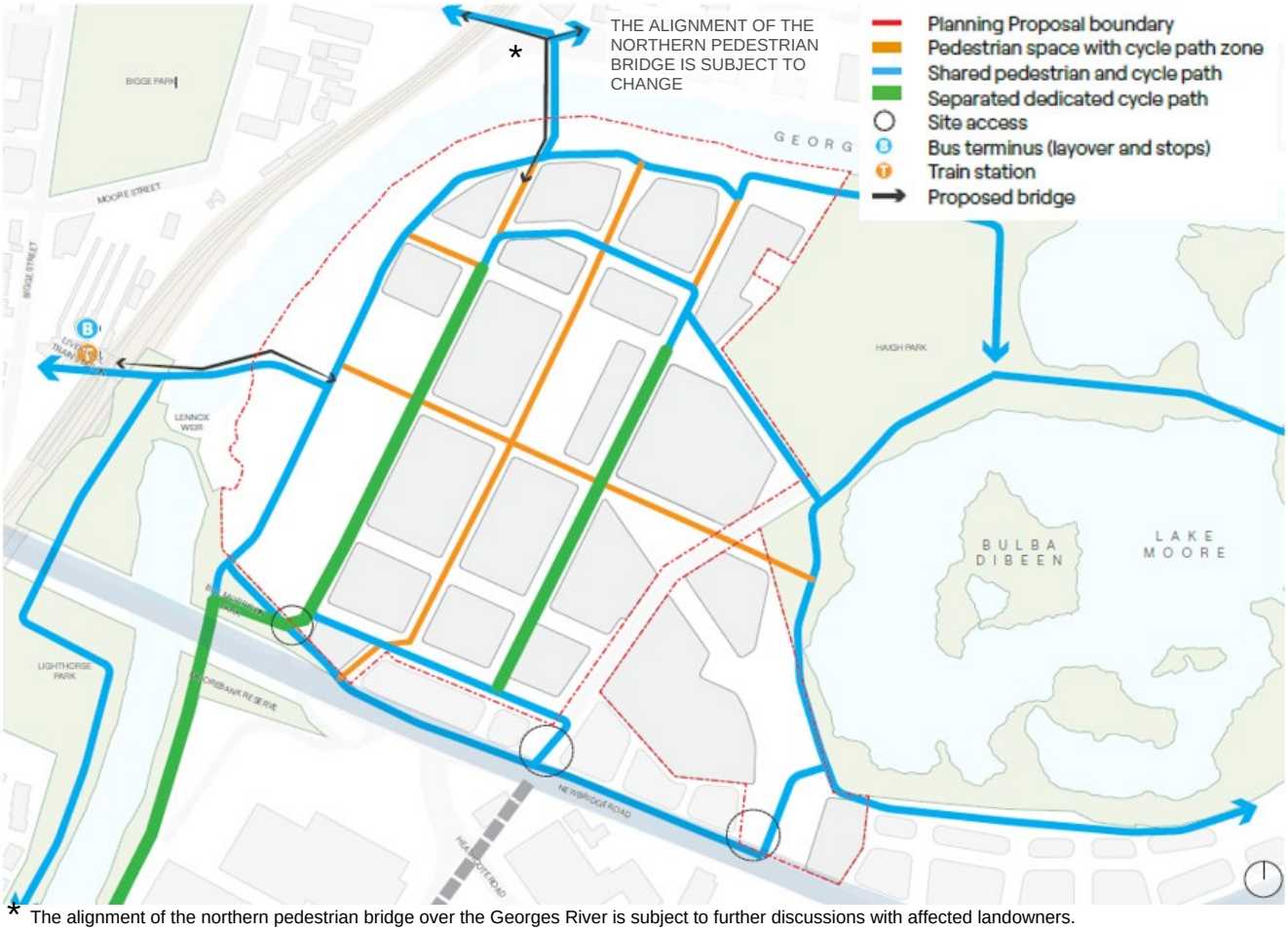
The proposed staging and funding of these key infrastructure upgrades is outlined within the IDP, provided at **Appendix 21**.

Active Transport Measures

The proposed future transport network seeks to create a connected and accessible place for people. Key aspects of this include:

- Designing streets for people, seeking to encourage an active, walkable 15 minute neighbourhood,
- Connecting the precinct as part of the 30 minute city, by streamlining access to Liverpool Station and the inclusion of a bus interchange within the Precinct,
- Investigating opportunities for the provision of freight microhubs as part of the built form, located on the periphery of the Precinct and reducing the need for larger delivery vehicles to enter the urban core, and
- The provision of flexible parking infrastructure and mobility hubs which will support changing travel behaviours as the precinct develops over time.

All streets within the Precinct have been designed to enable safe and accessible active movement throughout. A range of different pedestrian and cyclist facilities have been provided to provide choices and encourage active transport for all ages and abilities. This includes two indicative pedestrian bridges which will connect the precinct to the north and west, providing direct access to the Liverpool Health Precinct. The proposed active transport network is depicted in **Figure 70** below.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 78: Active Transport Provision

Source: SJB

Public Transport Networks

The proposal has been developed to leverage existing public transport infrastructure and include provision for future public transport services.

As the Precinct develops a modern transport interchange will be provided within easy walking distance of the Liverpool CBD, and with convenient access to Newbridge Road. The interchange would initially cater for bus, on-demand, active and pedestrian interchanges with an option for further expansion if other public transport modes come online. The capacity, timing and design of the interchange will be developed in consultation with Council and TfNSW.

As noted above, the proposal will provide for a bus interchange, which will become the focal point of bus connectivity servicing high-capacity movements to Moore Point. Additional stops may be located within the Precinct for local routes however it is anticipated that Express or Rapid Transit routes would terminate at the interchange and not travel through the wider precinct due to the expected travel times, low speed limits and pedestrian and cyclist priority. On-demand bus services may be further explored and could provide a viable and desirable alternative to traditional buses. The Liverpool Station's bus interchange will also be highly accessible to residents, workers and visitors via a new proposed link over the Georges River.

Enhanced connectivity will be provided with Liverpool Train Station with a new proposed link across the Georges River. This link will provide pedestrians and active transport users with direct access to the station, connecting them with Parramatta and Sydney's CBD's. Express between Liverpool and these cities will bring Moore Point residents within 30 minutes of employment, education and amenity throughout Greater Sydney by public transport, reducing reliance on private vehicles for transport.

Conversely, this proximity will also support the various land-uses proposed within Moore Point, enabling easy access by public transport for visitors and employees, minimising the need for private vehicles and commercial parking and increasing the available space for active movement and place.

Parking

The proposal provides for a staged approach to parking provision. This approach seeks to accommodate the short term expectations of residents, visitors and workers, while future proofing the precinct for an expected reduction in parking demand in the long term as travel behaviours change over time.

The Structure Plan proposes that three distinct parking rates are employed within the precinct, aligning with the three stages of development and reducing over time.

- **Stage 1** it is proposed to provide parking consistent with the rates outlined in the Liverpool City Centre LEP / DCP,
- **Stage 2** it is proposed to reduce rates to be consistent with the City of Sydney LEP / DCP Category C, and
- **Stage 3** the proposal adopts a further reduction in rates, aligning with the rates proposed in the Parramatta CBD.

Next Steps

The JLG will continue to engage and work with TfNSW, Council and the TIWG in the further development of the Stage 2 – TMAP as set out in August 2021. Key next steps in Stage 2 include:

- Discussions and alignment with TfNSW in relation to the Draft TMAP outcomes,

- Updating of the Stage 2 TMAP modelling following the revised Moore Point Structure Plan subject to the Gateway Determination Conditions, and
- Finalise the updated Stage 2 TMAP for approval and endorsement by the TIWG.

Contamination and Acid Sulfate Soils

The proposal is supported by the following documents in relation to site contamination and acid sulfate soils:

- Part 1 Contamination and Acid Sulfate Soils and Remedial Strategy **(Appendix 16**), and
- Part 2 Preliminary Acid Sulfate Soils Management Plan (**Appendix 17**).

The findings and recommendation of these reports is outlined below.

Existing Contamination Condition

Historically the subject site has been cleared and the landscape has been raised with fill material (between 2m, 4m and up to 7.5m in thickness) and flattened as part of historical clearing and development. The site is currently zoned E4 General Industrial and is historically and currently associated with potentially contaminating industrial uses, such as, farming with potential chemical spraying of herbicides and pesticides, manufacturing of plastic, electrical cable and metal products, the production of polyurethane foam products and mechanical and smash repair businesses.

Contamination Analysis

The Part 1 Contamination and Acid Sulfate Soils and Remedial Strategy includes a high level conceptual site model (**CSM**) which seeks to assess plausible pollutant linkages between potential contamination sources and potential receptors. The CSM incorporates known impacted areas and contamination sources as outlined in **Table 27**.

Table 24: Conceptual Site Model Summary

Area	Discussion
Subsurface Conditions	The typical soil profile consists of an upper layer of sandy fill that is between 2m and 4m in thickness, becoming thicker close to the Georges River foreshore. Underlying soils contain sands, silts and clays associated with Gerorges River alluvium. The alluvium in turn underlain by shale, carbonaceous claystone, laminate and lithic sandstone, which form the regional bedrock materials.
Potential Contamination Sources	Imported fill of largely unknown origins, containing various contaminants Previous farming, market garden and cultivation activities involving chemicals, fertilisers and petroleum hydrocarbon used for farming equipment The use of paints and other chemicals, including volatile organic compounds (**VOCs**) used during industrial activities TCFM, leaked from concrete liquid waste tank located within the south western portion of Area B west Above and underground storage of petroleum fuels Deeper natural soils or groundwater containing residual impacts from leaked hydrocarbons and other chemicals Hazardous building materials from past and present structures (including ACM and lead-based paint) Asbestos impacted site soils

Area	Discussion
Chemicals of Potential Concern (COPCs)	**In Soil** – metals, petroleum hydrocarbons (TRH) polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), including the monocyclic aromatic hydrocarbons benzene, toluene, ethylbenzene and xylenes (BTEX), chlorinated VOCs (CVOCs, including trichloromethane – TCFM), organochlorine pesticides (OCPs), organophosphate pesticides (OPPs) herbicides, polychlorinated biphenyls (PCBs), phenols, per and poly fluoroalkyl substances (PFAS) and asbestos). **In Soil Vapour** – VOCs including light-chain TRHs, BTEX, CVOCs and the semi-volatile PAH compound naphthalene, particularly in areas where VOCs are present in soil and/or groundwater. **In Groundwater** – metals, TRHs, PAHs, VOCs, CVOCs and PFAS.
Potential Sources, Exposure Pathways and Receptors	Potential contamination sources, exposure pathways and potential human and environmental receptors that are considered relevant for the precinct are summarised within Table 5-1 of the Contamination and Acid Sulfate Soils and Remedial Strategy.

Contamination Recommendations

The Contamination and Acid Sulfate Soils and Remedial Strategy identifies several data gaps of additional information which will come to light as the project progresses and further testing is possible.

EI Australia conclude a combination of the following remedial options may be implemented to remediate the site for its intended purpose:

Excavation and On-site Encapsulation – Involving excavation of impacted soils from bulk excavations that are intended for the construction of basement car parking facilities followed by onsite reuse to the extent possible. On-site containment of contaminated soils by way of capping and/or encapsulation within low permeability cells or other appropriately designed barrier system, where subsurface or above-ground storage areas are available.

Contaminated materials that are retained on-site will need to be managed under a site-specific LTEMP, which will include periodic groundwater monitoring to confirm that off-site containment migration is not occurring. Should off-site mitigation be detected, then contingent groundwater measures will need to be implemented.

Excavation and Off-site Disposal – Involving excavation of impacted soils from bulk excavation followed by off-site disposal of surplus impacted soils to licensed waste landfill.

In-site Soil Vapour Extraction – Coarse grained soils impacted with VOCs (including chlorinated VOCs, light fraction petroleum hydrocarbons and BTEX), may be treated in-situ by extracting soil vapour under vacuum, via horizontal vent pipes installed in trenches throughout the impacted area. The contamination is drawn out of the soil as vapour and liquid, which are collected for appropriate on-site treatment and/or offsite recycling.

Ex-situ Bioremediation with Soil Vapour Extraction – Coarse grained soils impacted with VOCs (including chlorinated VOCs, light fraction petroleum hydrocarbons and BTEX), may be treated ex-situ by extracting soil vapour under vacuum, via horizontal vent pipes installed in bio-piles created from the excavation of impacted soils. The contamination is drawn out of the soil bio-piles as vapour and liquid, which are collected for appropriate on-site treatment and/or off-site recycling.

Furthermore, several options have been provided in relation to remediation of contaminated groundwater. These options include:

In-situ Groundwater Treatment – including bio-remediation, chemical oxidation, air sparging and vapour extraction.

Ex-situ Groundwater Treatment – including washing, bioremediation and pumping with off site treatment.

Groundwater Management and Monitoring – ongoing monitoring and management obligations.

Overall, once the data gap closure investigations are available, the remedial strategy may be refined. A detailed, site-specific RAP (**RAP**) is required for each site before the commencement of site remediation. The site-specific RAP must include an Unexpected Finds Protocol (**AFP**) to provide guidance on addressing unexpected contamination that may be identified during the course of site redevelopment.

Acid Sulfate Soil Analysis and Recommendations

Based on a review of the available data, there is a high probability of acid sulfate soils (**ASSs**) within portions of precinct. The precinct development will require widespread soil disturbance, including excavation in excess of 1m depth. The Preliminary Acid Sulfate Soils Management Plan (**Appendix 17**) provides several management options for ASSs where disturbance cannot be avoided. Management options include:

Option 1 – Excavation PASS and disposal beneath the water table at a NSW EPA licensed premise, prior to oxidisation.

Option 2 – Excavation, on site neutralisation and disposal of neutralised PASS AASS at NSW EPA licensed premise.

Option 3 - Excavation, on site neutralisation and on-site re-use of neutralised PASS/AASS, subject to characterisation and assessment of risks.

Option 4 - Excavation, on site neutralisation and off-site re-use of neutralised PASS/AASS, subject to characterisation and assessment of risks, as well as regulatory (Council and/or EPA) approval.

Sustainability

The PP is supported by a Sustainability Statement (**Appendix 18**), which identifies and responds to the relevant state and local government policy and statutory planning instruments in relation to sustainable development.

Principles

Moore Point will position itself as a catalyst for decarbonisation transformation, and the priorities and actions of the seeking to adopt and implement the following climate positive principles:

1. Build with lower upfront emissions,
2. Deliver efficient buildings that reduce the stress on the transitioning grid,
3. Create a walkable and liveable precinct through good urban design that promotes active and low carbon transport options,
4. Transition all stationary energy uses to fossil fuel-free operation as rapidly as possible,
5. Deploy on-site generation technologies to supply a proportion of stationary energy uses,

6. Integrate storage solutions and develop a demand response strategy to facilitate grid resilience,
7. Utilise decarbonisation of the grid and electricity supply system, and
8. Implement nature-based solutions on-site to off set emissions.

Net Zero

The PP recognises the significant investment under way into decarbonisation of the electricity supply system and the part that Moore Point may play in planning a transition to a net zero economy. This transition planning acknowledges a shift away from fossil fuel use for on-site stationary energy applications.

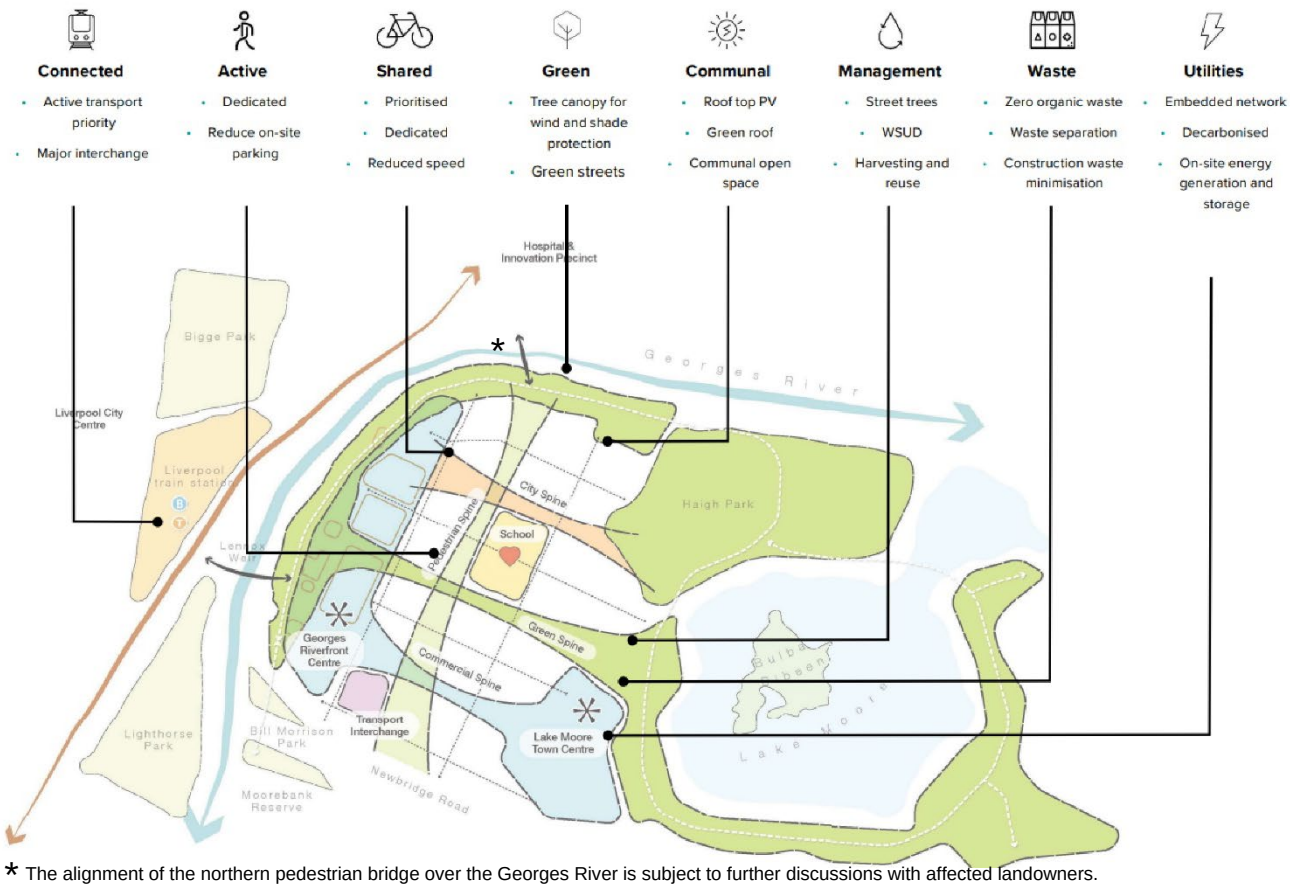
Where fossil fuel using equipment is installed, a Zero Carbon Action Plan will be developed that details the interventions and future ready requirements needed to electrify these systems when it reaches its end of life. The intent is that by the completion of the Precinct, Moore Point will be operating fossil fuel-free and connected to a decarbonised electricity supply system.

Rating Strategy

With regard to tracking and rating environmental performance, a range of sustainability rating tools may be utilised that respond effectively to the scale, staging and complex landownership structure of Moore Point. This may include *Green Star Communities, Green Star Buildings* or other international rating tools as appropriate.

Implementation

A range of initiatives and strategies are outlined within the Sustainability Statement for further consideration and represent a comprehensive precinct response to sustainable development. These strategies centre around climate analysis, net zero, precinct utilities, future mobility, water and waste. **Figure 71** below summarises the opportunities and priorities for the precinct.



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 79: Sustainability Opportunities for Moore Point

Source: Mott MacDonald

Recommendations

It is recommended that the climate positive principles, and implementation strategies identified within the Sustainability Statement are explored in more detail and committed to as the project progresses. As time progresses, new sustainability benchmarks and rating systems may be adopted as appropriate to reflect best practice in sustainable precinct development.

Aeronautical

As identified previously in this report, the PP seeks to adopt a range of new building height controls including 9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136).

Due to the proximity of the site to the Bankstown Airport, the proposed building height controls have been informed by an Aeronautical Impact Assessment (**AIA**), provided at **Appendix 22.**

Aviation Parameters

The site is located 5km to the west of Bankstown Airport and as such is subject to the Prescribed Airspace of the airport. The site is also located approximately 270m south of the Liverpool Hospital helipad. As the proposal is subject to the Prescribed Airspace of the airport, making any future building development subject to the maximum permissible height constraints of that airspace under the *Airports (Protection of Airspace) Regulations 1996* (**APAR 1996**), which are administered by the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts (**DITRDCA**).

The site has been examined in relation to the maximum proposed building envelope heights. The assessment concludes the following:

1. Subject to Obstacle Limitation Surface (**OLS**) height limits which slope up from 75m AHD at the north-eastern corner to around 108m AHD at the western edge of the study area. OLS heights can be considered threshold heights; any building or crane which would exceed the relevant height would need to gain airspace height approvals from DITRDCA, under APAR 1996 prior to construction or erection. The low-rise buildings will not require prior airspace approvals as they do not exceed the relevant OLS heights.
2. Subject to maximum building heights where the constraints are defined by the Procedures for Air Navigation Services Aircraft Operations (**PANS-OPS**) Circling surface heights: at the Category B surface height of 123.36m AHD in the east and at the Category C surface height of 142.12m in the west. PANS-OPS surface heights are based on the heights related to the protection requirements of the various PANS-OPS Instrument Flight Procedures for Bankstown Airport. These define the maximum permissible heights for buildings (including all overruns) under the APAR, except where another aviation safety-related airspace constraint is lower. No building envelope in the Planning Proposal exceeds these heights, and so all could be considered technically approvable under the APAR. Cranes up to this height would be approved without operating duration constraints.
3. Ultimately limited by the Radar Terrain Clearance Chart (**RTCC**) / surfaces, at a fixed altitude of 152.4m AHD, across the entire site. This will most likely be the absolute maximum height limit for future cranes. Any cranes which would be permitted to exceed the relevant PANS-OPS surface height limit would be subject to 3-month durations and may also be required to be lowered to the PANS-OPS heights at night. This is the general principle. Applications for buildings are usually submitted at the time of a DA, and for cranes prior to construction.

Proposed building heights have taken into consideration the PANS-OPS height constraints imposed by the circling surface heights. As such, all building envelopes would remain below the relevant PANS-OPS surface height limit overhead, and as such are considered technically approvable under the Airports (Protection of Airspace) Regulations.

Additionally, the PP does not interfere with helicopter routes to/from Bankstown Airport, nor does it prevent safe and flexible approaches and departures to/from the nearby Liverpool Hospital helipad, considered a Strategic Helicopter Landing Site (**SHLS**) because it services emergency management services.

Recommendations

From an aeronautical impact perspective, the PP is supported based on the findings of the AIA. It is considered that future DAs for buildings (supported by an AIA) could be supported by the DITRDCA.

Any future DA applications for buildings would require independent verification by a qualified aeronautical consultant that the final architectural designs of the relevant buildings will satisfy the airspace protection constraints in place at the time of DA lodgement.

Air Quality

An Air Quality Suitability Study has been undertaken (**Appendix 23**) to review local meteorological conditions and ambient air quality to consider the suitability of the proposal with regard to air quality.

Assessment

Analysis of the Liverpool weather monitoring station shows that on an annual basis, winds are predominately from the southwest to west. The autumn, winter and spring distributions are similar to the annual distribution with winds predominately from the southwest to west. During summer winds are predominately from the east. The data show that there is relatively little air movement north and south, as might be expected given the general east–west alignment of the shallow drainage basin.

The main sources of air pollutants in the area surrounding the site include emissions from local anthropogenic activities (such as motor vehicle exhaust) and industrial activities. A review of air quality data from the Liverpool monitoring station shows that the average annual particulate matter (PM10 and PM2.5), sulfur dioxide (**SO_2**) and nitrogen dioxide (**NO_2**) levels were below the relevant criterion. 24 hour exceedances were observed in some instances.

A site visit was conducted to identify potential sources of air pollution in the vicinity of the Site. The figure below provides a summary table of the activities in the general area with any tangible potential for air emissions and outlines the likely risk of impact arising at the site.

Activity	Approximate distance from nearest receptors at the Site	Potential air emissions	Likelihood of impacts at the Site
Water recycling plant	400m	Odour	**Low** - The Site would not be downwind of the plant for the majority of the time at the times of likely peak impacts/ poor dispersion (i.e. winter and shoulder spring and autumn seasons), when inversions can prevent good dispersion. Existing residences are located closer to the odour sources (than the Site receptors) and are generally downwind at times of poor air dispersion.
Paper recycling	250m	Odour	**Very low** - the site is located too far from the Site, and has too low emissions to cause any tangible impact.
Food suppliers	60m	Odour	**Low**, activities appear to occur within enclosed buildings and are unlikely to cause any impacts.
Pet food	360m	Odour	**Nil** - the site is enclosed and is located too far from the Site to have any tangible impact.
Foam packaging and injection moulding	275m	VOC	**Low** - a stack was identified and appears to be suitably located for the dispersion of emissions to minimise impact on the surrounding environment. Existing multistorey residences are much closer to the source than the Site. The Site would experience far less winds from the direction of this source than existing, closer residences.
Plastics fabrication	90m	VOC	**Low** - activities appear to occur within an enclosed building and are unlikely to impact beyond the boundary.
Steel fabrication	150m	Welding fumes	**Low** - activities appear to occur within an enclosed building and are unlikely to impact beyond very much past the fabricator's boundary.
Auto/smash repair	130m	Dust and paint odours	**Low** - the site is located too far from the Site to have any tangible impact at that distance, also the site is not on the predominant downwind axis from this source.
Spray painting	100m	Dust and paint odours	**Low** - the site is located too far from the Site to have any tangible impact at that distance, also the site is not on the predominant downwind axis from this source.
Masonry products	130m	Dust	**Low** - the site is located too far from the Site to have any tangible impact at that distance, also the site is not on the predominant downwind axis from this source.
Concrete products	140m	Dust.	**Low** - the site is located too far from the Site to have any tangible impact at that distance, also the site is not on the predominant downwind axis from this source.

Figure 80: Potential Sources of Air Pollution

Source: Todoroski Air Sciences

While 24-hour exceedances of particulate criteria are common, the annual PM2.5 levels in the vicinity of the site are generally higher than many areas and generally exceed the relevant criteria.

The proposal will remove industrial activities and to replace them with commercial and residential activities which are likely to have lower particulate emissions. Generally, it is expected that the redevelopment of the existing industrial land would lead to a net reduction in particulate levels in the

vicinity of the site as industrial activities are removed from the area. The proposed residential dwellings have adequate setbacks from existing major roads.

Recommendation

There is no reasonable indication of any likely air quality impacts as a result of the planning proposal and the proposed development is supported on air quality grounds. A more detailed assessment of air emissions in the vicinity of the site is recommended at the DA stage as part of the assessment process. Such a study should quantify the most significant potential impacts such as odour from the water treatment facility, and PM2.5 effects from traffic on the main roads, and make recommendations (if any) tailored to the proposed DA.

Health Strategy

The proposal is supported by a Health and Wellbeing Strategy (**Appendix 24**) which has been developed with the following objectives:

1. Understand the health and wellbeing strategic context for Moore Point,
2. Engage with key stakeholders to inform the development of health and wellbeing principles,
3. Determine health components that can be embedded into a DCP or DA, and
4. Define and develop the health vision and strategy of Moore Point.

Moore Point in collaboration with, and through complementing the strategic plans of the State Government and Council and LIP, can together create a unique precinct in Sydney, and Australia. The proximity of the proposed development, being a diverse residential and commercial area at Moore Point, to an established city centre of the Liverpool CBD, alongside health, education, and research organisations of the LIP, is unique. Leveraging the natural, built and community assets of the area will enable Moore Point, Liverpool City and LIP to realise their strategic goals.

The Health and Wellbeing Strategy establishes the following health vision for Moore Point:

> *Moore Point will enable community and connectivity; Moore Point will nurture liveability and sustainability; and, Moore Point will inspire integration and innovation.*

The vision will be achieved through the adoption of 6 core principles, being:

5. Community – diversity, accessible and equitable,
6. Integration – live, learn and work,
7. Liveability – residents, workers and visitors,
8. Connectivity – digital, space and transport,
9. Innovation – think, create and perform, and
10. Sustainability – green, recycle and future oriented.

The Health and Wellbeing Strategy supports the provision of adequate floor space to support future health-related services, the provision of high-quality internet services to enable e-health, and the inclusion a generous open space network and supporting active transport options (among several other masterplan elements). Ongoing research, planning and collaboration is required to ensure adequate service provision for future residents as the precinct is rolled out.

Recommendations

There are seven focus areas recommended for the development of Moore Point to promote and enable the health and wellbeing of the community. These include stakeholder engagement, healthy built environment, a diverse multicultural community, an integrated health system, enabling digital health, sustainable health care, and longitudinal evaluation and research.

Commitment to the focus areas and recommended actions within the Health and Wellbeing Strategy will realise the health and wellbeing potential of the Moore Point development. The recommendations will be considered in further detail and implemented at future stages of the project, including during the development of the site-specific DCP.

Q10. Has the planning proposal adequately addressed any social and economic effects?

Social Impacts and Community Needs

An Open Space and Community Needs Assessment has been prepared by ATX Consulting (**Appendix 6**), which supersedes the previous Community Needs Assessment prepared for the PP in 2020.

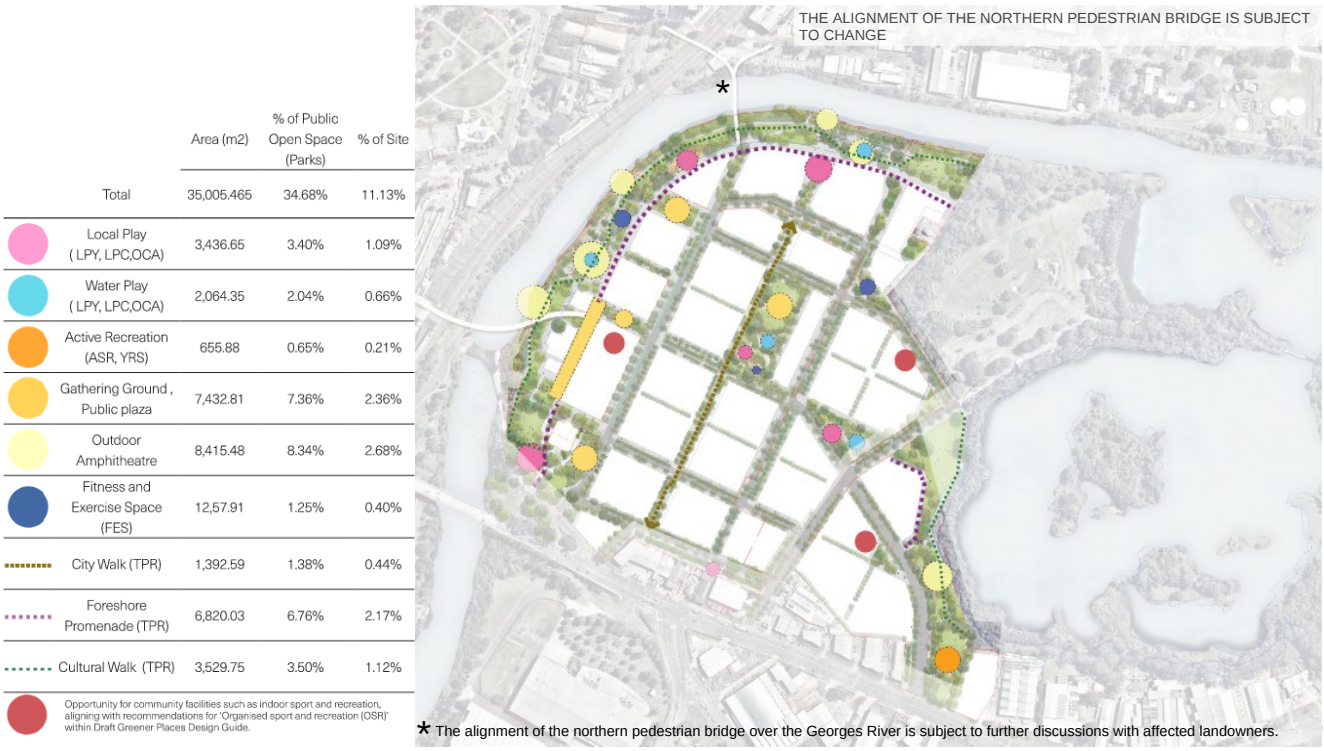
The updated assessment responds to the infrastructure needs required to support the revised Structure Plan. It also provides additional evidence-based analysis for the types and forms of open space and community facilities needed to support the proposal.

Open Space

As described in the UDR and the Public Domain and Landscape Plan, the Structure Plan for the PP identifies 34.5% of publicly accessible open space areas, which has been rationalised to 31.2% based on an open space policy framework approach.

The total provision of open space on this basis equates to 10.1 hectares, which exceeds the standards for similar higher density urban renewal precincts, showing open space ranging from 15-17%. This allows for a diversity of public open spaces types to ensure a wide range of population needs are addressed.

This includes children's play, water play, bike paths, half courts, outdoor multipurpose courts, outdoor gym equipment, linear parks, running paths, the formal central park, pocket and local parks, trail-based recreation, promenade-style walking paths, places for picnics, spaces for civic and cultural events, water access areas for kayaks. Approximately 11.3% of the site will form active recreation. See **Figure 74**.



	Area (m2)	% of Public Open Space (Parks)	% of Site
Total	35,005.465	34.68%	11.13%
Local Play (LPY, LPC,OCA)	3,436.65	3.40%	1.09%
Water Play (LPY, LPC,OCA)	2,064.35	2.04%	0.66%
Active Recreation (ASR, YRS)	655.88	0.65%	0.21%
Gathering Ground , Public plaza	7,432.81	7.36%	2.36%
Outdoor Amphitheatre	8,415.48	8.34%	2.68%
Fitness and Exercise Space (FES)	12,57.91	1.25%	0.40%
City Walk (TPR)	1,392.59	1.38%	0.44%
Foreshore Promenade (TPR)	6,820.03	6.76%	2.17%
Cultural Walk (TPR)	3,529.75	3.50%	1.12%
Opportunity for community facilities such as indoor sport and recreation, aligning with recommendations for 'Organised sport and recreation (OSR)' within Draft Greener Places Design Guide.			

Figure 81: Recreation Elements
Source: Turf

Shared School Space

The provision of a public primary school in the PP will provide additional opportunities for the shared community use of various school spaces. While this shared provision is not relied upon to meet community facility demand, it may provide an additional source of provision of community space for the future community.

Community and Cultural Centre

ATX identify that based on a population of 21,484 people and 80m^2 per 1,000 person standard, the PP would generate the demand for approximately 1,720m^2 for community and cultural centre. The Structure Plan for the PP identifies provision for 2,400m^2 of community and culture space.

The Structure Plan identifies 2,000m^2 will be placed within the heritage quarter and could be used for creative and cultural uses, as well as general activity and community meeting space. The precise use of this space would be subject to discussions with Council and other local stakeholders to develop a detailed functional brief for this space.

The remaining 400m^2 would be provided as a local community facility co-located or connected to a public open space area. This could support a range of community uses including yoga classes, playgroup, community meetings, small cultural events, education classes and other activities.

Activation or Meanwhile Spaces

While not a form of space generated by population demand, there is the potential to temporarily utilise some of the ground floor retail spaces as community and cultural spaces. This has been done in a number of higher density precincts like Honeysuckle at Newcastle and the Carlton United Brewery site in Sydney. The meanwhile use of under-utilised space for short term community projects may be an additional tool in a suite of initiatives to help build a strong and vibrant community and culture at Moore Point.

Indoor Recreation Centre

The Structure Plan identifies a 3,000m^2 indoor recreation facility, which could also be used to host community and cultural events.

Library

It is estimated the PP would generate demand for approximately 1,000m^2 of public library space. How this space is provided will be discussed with Council. Council has recently invested in the new Central Library in the Liverpool CBD and it is thought unlikely that another library at Moore Point would be required. The equivalent to the 1,000m^2 could become part of an off-site contribution subject to discussions with Council however, does not form part of the current infrastructure items.

School Planning

The PP and Structure Plan include a centrally located public primary school of 10,000m^2 GFA. SINSW schools planning guides and Draft Urban Design Guidelines indicate that a 10,000m^2 GFA primary school has capacity for 1,000 students. The UDR has provided preliminary concept massing for a future school site in **Figure 74**.

Figure 82: School Planning

Source: SJB

ATX has undertaken a series of scenario testing for the future completion of Moore Point, and the subsequent demand for schools arising from these tests. Scenario 4 outlines the highest demand scenario and estimates that Moore Point will generate 1504 primary school aged students with 945 of those attending Government primary school.

This would suggest that the highest scenario the Moore Point development will generate demand for one public primary school. The Structure Plan allows for a second school site if one is required. The population scenarios undertaken by ATX suggest that there may be approximately 550 non-government school students resident in Moore Point at the completion of Stage C.

Future planning for Moore Point may want to enable the inclusion of a site for a non-Government school in a later stage of planning. This has been identified on the Structure Plan as a potential educational use subject to population demand and needs.

There is also potential for shared use of school spaces to act as shared community space. This practice requires individual agreement from the School Principal to confirm shared use arrangements. With the timeline of the PP to be developed over 30-40 years, it is anticipated more efficient use to sharing public infrastructure may be achieved. However, the PP is not reliant on this shared approach.

Overall, ATX conclude the approach to open space planning at Moore Point directly addresses, and in many cases exceeds, the key policy directions established by Government for public open space.

Economic Impacts

The PP is supported by an EIA prepared by Atlas Economics (**Appendix 9**) and supersedes the previous EIA submitted with the PP in 2020 to respond to the Gateway Determination conditions and the updated Structure Plan.

Economic Role of Moore Point

Atlas contend that the CBD currently lacks a sufficient critical mass of commercial occupiers. At only 89,000m^2 of commercial floorspace (with just ~20,000m^2 of A-Grade stock), the Liverpool CBD is not a major office market. This lack of quality space is a key barrier to securing new jobs and investment, particularly as the LIP continues to grow and produce economic opportunities for the CBD.

The PP presents an opportunity for the Liverpool CBD to grow and achieve critical mass. When including the commercial floorspace envisaged in the Proposal (~160,000m^2), along with others in the pipeline, the Liverpool CBD would effectively become akin to the St Leonards/Crows Nest office market at ~372,000m^2. It could play a similar role to the St Leonards/Crows Nest office market, which complements the St Leonards Health and Education Precinct.

Impact and Justification

The development of the PP is shown to deliver significant and positive economic impacts to the Liverpool economy. When operational, the Proposal is estimated to result in an annual net increase in economic activity with:

- $6,843.5 million additional in output (including $3,781.0 million in direct activity),
- $3,957.7 million additional in contribution to gross regional product (**GRP**) (including $2,255.3 million in direct activity),
- $2,479.4 million additional incomes and salaries paid to households (including $1,591.2 million directly), and
- 23,503 additional full time equivalent (**FTE**) jobs (including 15,300 additional FTE jobs directly related to activity on the Site).

The PP would also generate significant economic impacts during construction and from an increase in household expenditure. The economic impacts estimated demonstrate the Proposal has economic merit, having the ability to contribute significantly to the Liverpool economy. Relevantly, the EIA finds PP will strengthen the existing role and offering of the Liverpool CBD and cater for the flow-on growth of the Liverpool Innovation Precinct.

The current footprint of the CBD is small (<90,000m^2) and does not have sufficient critical mass to support the various ingredient uses that are necessary for city centres to thrive (e.g. hospitality, leisure, short term accommodation, etc.). The PP offers the opportunity to expand the footprint of the CBD (playing a similar role to Pyrmont in the Sydney CBD).

Atlas state the PP will assist in Liverpool emerging as Greater Sydney's 'third CBD'. It will deliver a mixed-use precinct that supports the Liverpool CBD in maintaining its status as a major employment market. Whilst the Structure Plan comprises commercial floorspace, this will be delivered as part of broader uses, including residential, education and public open space. This includes new connecting bridges linking the Liverpool CBD to Moore Point, providing workers with direct access to rich amenity delivered within the site. This supports the vibrancy of the Liverpool CBD, rather than compete with it.

Overall, Atlas states the PP meets the relevant Ministerial Direction 7.1 and is aligned with the District Plan and LSPS. As such, the EIA finds that the relevant requirements of Gateway Determination are met and it is recommended that the PP be supported from an economic standpoint.

7.4 Section D Infrastructure (Local, State and Commonwealth)

Q11. Is there adequate public infrastructure for the Planning Proposal?

Utilities and Servicing Infrastructure

A Utilities and Servicing Infrastructure Assessment (**Appendix 19**) has been provided which includes a review of the existing critical infrastructure services and proposed upgrades required to support the proposal.

Existing Services

The assessment of the existing site conditions confirms that the site is currently serviced by:

- **Stormwater:** Stormwater runoff towards Georges River surrounding the site.
- **Wastewater:** Wastewater servicing is provided by Sydney Water Corporation (**SWC**) which is directed to the Liverpool Water Recycling Plant for secondary treatment before transporting recycled water to Malabar and/or re-used at Liverpool Golf Course and Warwick Farm Racecourse.
- **Potable Water**: Drinking water is provided by SWC from Prospect South Water Delivery System sourced from Warragamba Dam.
- **Telecommunications**: Some telecommunications providers have assets in the vicinity of the site including AARNet, Telstra, Nextgen, Superloop, Optus, TPG, Uecomm, Vocus and NBN Co.
- **Electrical:** Low voltage electrical supply is provided by Endeavour Energy via the Moorebank Zone Substation.
- **Gas:** Gas supply is provided by Jemena West ultimately via the Eastern Gas Pipeline.

Demand Modelling

Indicative demand modelling has been undertaken to consider the lead in utility requirements, based on the parameters of the proposed structure plan. A summary of indicative demand modelling is provided in the figure below.

Service Type	Total Demand Range[1]
Wastewater (L/s - Average Dry Weather Flow including BASIX)	219 – 297
Potable Water (kL/day - Maximum Daily Demand including BASIX)	5840 - 7901
Telecommunications	Unable to be calculated. Outcomes of the feasibility application to be incorporated into later revisions of the report.
Electrical (MVA - Peak Demand including 0.8 Diversity Factor)	53 – 71
Gas (m^3/day - Daily Demand including BASIX)	14860 – 20105

[1]Demand values provided in the table are considered to be accurate to within ±15% (although greater inaccuracies are possible due to the level of design). Demand values are to be updated when development yields are updated.

Figure 83: Indicative Services Demand Modelling.
Source: Mott McDonald

Key Servicing Constraints

The following key servicing constraints have been identified, which will require further resolution in the design development stages through further consultation with the relevant stakeholders:

- **Wastewater:** Limited capacity in the existing sewer pumping station and likely amplification required of lead-in wastewater mains with potential future opportunity for a recycled water network. Protection works on Bridges Rd for DN750 and DN900 existing sewer mains.
- **Potable Water:** Potential localised upgrades to provide required firefighting pressure and potable water ring main redundancy but current capacity in the main network**.**
- **Telecommunications:** Backhaul of new feeder cables to the nearest exchange**.**
- **Electrical:** Endeavor Energy has noted that the total required load of the entire development is beyond their 10-year load forecasting window and that the final supply arrangement cannot be determined at this stage of the project. However, preliminary analysis has identified that, presently, capacity can be made for the 20-year development period. Additionally, they have advised that four (4) double-cabled 11kV underground feeders will be required from their Moorebank Zone Substation to the relevant locations on site.
- **Gas:** DN200 1050kPa high pressure gas**.**

Utility servicing works and infrastructure upgrades will be undertaken with consideration for the proposed development staging. We note road networks shall be constructed with sufficient sized mains and capacity to support the full development build-out.

Intersection Upgrades

In addition to utility service works, the precinct development will trigger the need for upgrade works at two key intersections, including:

- **Bridges Road and Newbridge Road Intersection**

The intersection of Bridges Road and Newbridge Road, which is located on the south side of the precinct, is to be upgraded with the following:

- Verges along Heathcote Road, Moorebank Avenue, and Newbridge Road,
- High-entry left-turn lane onto Newbridge Road,
- T-intersection at Moorebank Avenue and Heathcote Road,
- Additional lanes on Moorebank Avenue and Newbridge Road,
- Left turn slip lane into Heathcote Road, and
- Four-way intersection between Newbridge Road, Moorebank Avenue, and Bridges Road.

- **Anchor Place and Newbridge Road Intersection**

  The new signalised intersection of Anchor Place and Newbridge Road, which is located on the southeast side of the precinct, will include the following works:

  - Multi-lane road (Anchor Place) connecting Bridges Road and Newbridge Road,
  - Verge at Newbridge Road and Anchor Place intersection,
  - Kerb adjustments along Newbridge Road and Kelso Crescent/Field Close, and
  - Lane adjustments to Newbridge Road, on east side of Anchor Place.

The proposed intersection upgrades and associated utility works are detailed further within the Servicing Infrastructure Report.

Critical Infrastructure and Flooding

In response to the Gateway Determination conditions, the proposal adopts several strategies to ensure that critical infrastructure is resilient during flood events. Critical utility infrastructure includes electrical substations, wastewater management stations, water reservoirs and telecommunication towers and base stations.

The following utility response measures have been developed in relation to maintaining critical infrastructure during flood events

- **Placement of trunk CSR routes on main roads set at a minimum of the 1% AEP level**

  The precinct has been designed such that the major combined services route (**CSR**) follows the main entrance road for the precinct. This ensures that key services are located on the highest points of the site with reticulation off-takes to service individual building lots.

- **Installation of key infrastructure within low-risk flood areas**

  Key building infrastructure such as electrical substations will be designed in accordance with the local utility authority guidelines to ensure that they are located in low-risk flood areas outside of the 1% AEP flood extents.

- **Internal building provision for Shelter-in-place for PMF**

  It is acknowledged that the proposed utility response measures account for flood events up to the 1% AEP, however it is noted that other utility services to the precinct may still be disrupted during larger flood events particularly as they rely on connections external to the precinct that may be subject to higher flows and longer periods of flood affectation.

It is demonstrated in the FERP that evacuation by vehicle or foot are two viable options for the Precinct. Any residents and visitors that decide to remain within the site will have adequate options for sheltering in place at locations that are above the predicted PMF. Should residents shelter in place, access to onsite systems to provide power, water and sewerage services would be required. Key controls for PMF events includes:

  - Backup generators for areas sheltering-in-place,
  - Storage of potable water,
  - Ensuring any water pumps for carparking are powered by backup generators located above the PMF,
  - Any water pumps for potable water are located above the PMF with separate pumps for retail and residential uses,
  - Overflow facility to accommodate sewer discharge from each superlot, and
  - Communications provided through mobile phone networks.

- **Inclusion of utility supply in the FERP**

  The continuation of critical building services is identified within the FERP.

The establishment of these controls is consistent with flood planning contained within similar flood affected areas of Sydney and will ensure that critical infrastructure will be provided above the PMF for all residents. With the inclusion of the above planning controls, Condition 2(c) of the Gateway Determination will be satisfied.

It is noted that no wider network upgrades are required beyond the placement of trunk services within the main entrance road as supply cannot be guaranteed by utility providers during an event above a 1% AEP.

Sustainability Initiatives

The interrelationship between sustainability initiatives and the role of utility infrastructure has been identified. Key opportunities in relation to utility infrastructure include embedded network initiatives and smart infrastructure.

- **Embedded Network**

  An embedded network may support the elimination of fossil fuels, electrification of stationary energy uses and supply of stationary energy uses with renewable electricity generated either on or off site. It facilitates an effective and commercial response to precinct-level electrification as well as optimising of the HV incoming electrical feeder configuration.

  Benefits of an embedded network include the ready integration of embedded generation and energy storage technologies, including electrical vehicle bi-directional capabilities.

- **Smart Infrastructure**

  The exploration and adoption of smart infrastructure is recommended. Initiatives such as robust public Wi-Fi systems and fibre to the pole technology are recommended, both due to general public benefit and communication during emergencies. Examples of other international technologies recommended for consideration are included within the assessment Report.

Infrastructure Delivery Plan

To support the long-term delivery and implementation of the PP and its intended outcomes, an IDP has been prepared (**Appendix 21**).

It has been prepared to respond to the Gateway Determination conditions in relation to infrastructure provision and ownership and has been informed by a suite of detailed technical studies that have informed the Structure Plan.

Infrastructure delivery at Moore Point will be entirely developer-led, enabling public amenities and supporting infrastructure to be provided as the development occurs. Development will be undertaken in stages, with the supporting infrastructure to be provided before the completion of each stage (i.e. some infrastructure may be required prior to commencing each stage).

Meeting Needs of Residents

Moore Point will be home to approximately 21,000 people. The infrastructure provided has been tailored to meet the needs of future residents on-site, and those within Liverpool CBD and the wider LCA. These align with both State and local strategic planning objectives for the renewal of the site and include:

- New housing and jobs within a highly accessible location (5 minutes' walk to Liverpool CBD and transport interchange) via new bridge crossings over the Georges River. This will support active and sustainable modes of travel within the LCA,
- Critical links from the CBD and LCA to the Georges River, Haigh Park and Lake Moore. This will support the creation of a new interconnected high performance green and blue infrastructure network, which will support healthy urban growth,
- A genuine riverside precinct with high levels of activation, amenity and accessibility, facilitating Council's vision of celebrating the river and prioritising great places for people, and
- A diverse range of new and enhanced social and civic infrastructure outcomes to benefit both current and future generations.

Open Space and Recreation Offering

As described in previous sections, the open space and recreation offering in the PP is unparalleled. It will deliver:

- Approximately 34.5% provided as publicly accessible open space, which is higher than other comparative urban renewal areas (standard being approximately 15-17%),
- Diversity of spaces including children's play, water play, bike paths, half courts, indoor multi-purpose courts, outdoor gym equipment, linear parks, running paths, pocket and local parks, trail-based recreation, promenade style walking paths, picnic areas and spaces for civic and cultural events,
- A 5.5 ha riverfront park that provides active transport, walking and cycling connections and emphasises a focus on community health and wellbeing,
- Off-site contributions to sporting fields in a location considered desirable to Council, and
- Options to embellish Haigh Park to bring it up to standard that is best practice and include a wide variety of recreational amenities.

Total Infrastructure Provision

The total infrastructure provision for Moore Point is provided in **Table 28**. It has been broken down into three categories of being State, local and with development.

Table 25: Infrastructure Provision

Infrastructure Summary	
State	
Intersection 1 – Anchor Place / Newbridge Road	$99M
Intersection 2 – Bridges Road / Newbridge Road (22%)[1]	$25M
School (land only)	$7M
Recycled Water Plant[2]	$38M
Total	**$169M**
Local (amendment to Section 7.12 Contributions Plan)	
Foreshore land dedication, landscaping and public domain upgrades	$109M
Foreshore remediation	$65M
Central Park	$32M
Revetment	$29M
Southern Bridge	$54M
Northern Bridge	$76M
Community and Cultural Hub (2,400m^2)	$11M
Community Indoor Recreation Centre (3,000m^2)	$4M
Total	**$380M**
With Development	
Site establishment (internal roads)	$29M
Internal utility upgrades	$123M
Privately owned/publicly accessible open space areas including through-site links and civic areas	$104M
Stormwater infrastructure – bioretention and WSUD	$17M
Total	**$273M**

[1] *Applied to 22% of the whole of intersection cost based on SIDRA modelling*

[2] *Future Development Servicing Plan offset*

Infrastructure Implementation

It is proposed that all infrastructure items identified as local, will be included in an expansion to the City Centre Contributions Plan (**City Centre CP**), while State infrastructure items will be subject to agreement with DPHI and State agencies via a State Voluntary Planning Agreement (**VPA**) as an offset to the Housing and Productivity Contribution (**HPC**) and Developer Service Plan (**DSP**).

From a local infrastructure perspective, Moore Point would require a total contribution amount of $255 million (3% of the total development cost). As all of these works would be delivered via Works-In-Kind (**WIK**), the additions to the City Centre CP equate to a value of $432 million, which is an addition $176

million in value or an equivalent contribution rate of 5%. This exceeds the standard levy requirements under the City Centre CP (at 3%).

All detail relating to the proposed implementation and mechanisms for the PP are addressed in the IDP.

Staging and Delivery

Moore Point will be delivered over a 30-40 year period. While the sequencing of individual development sites will be determined by market demand, the project team has established three broad stages of development that contain a list of essential infrastructure items needed at each stage to support the incoming population.

An indicative staging plan provided in **Figure 76**.

Figure 84: Staging Plan
Source: SJB

As part of future DAs, applicants will need to ensure that infrastructure is provided with development. A summary of these infrastructure components by each stage provided in **Table 29**.

Table 26: Staging and Infrastructure Delivery

Stage	Dwellings	Pop	Infrastructure items	% of infrastructure	% of dwellings
1	4,372	8,474	• Remediation and establishment of northern foreshore	60%	39%

Stage	Dwellings	Pop	Infrastructure items	% of infrastructure	% of dwellings
			• Partial site establishment/utility, stormwater and road works • Publicly accessible privately managed open space and through-site links • Anchor Place intersection works • Central park embellishment and dedication • Construction of northern bridge • School site dedication		
2	3,111	6,622	• Remediation and embellishment of western foreshore • Partial site establishment, utility, stormwater and road works • Multi-purpose community and cultural hub • Partial delivery of privately owned public space/civic areas • Newbridge Road intersection works • Construction of southern bridge	33%	31%
3	3,194	6,388	• Partial site establishment, utility, stormwater and road works • Partial delivery of privately owned public space/civic areas • Indoor recreation centre	7%	30%

The PP will provide substantial front-loading of infrastructure in the early stages of the project. Approximately 58% of the total infrastructure spend will be provided at the completion of Stage 1 with only 40% of dwellings delivered, and an additional 34% of total infrastructure spend at the completion of Stage 2 (70% of dwellings delivered for the project). Refer to **Figure 77.**

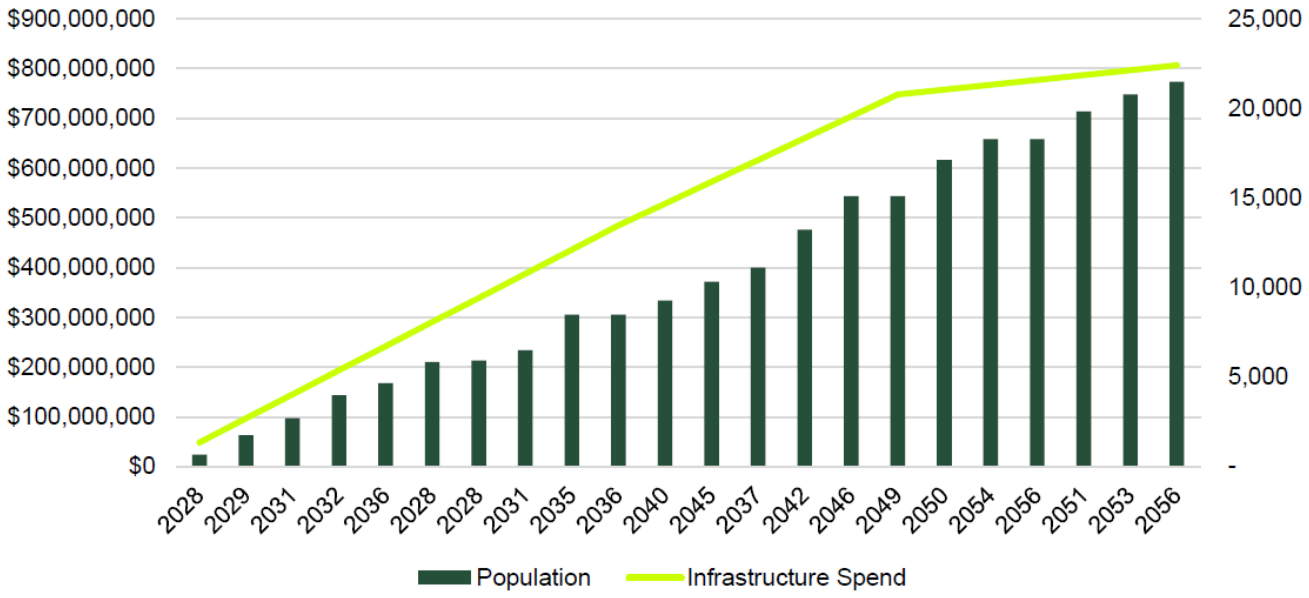


Figure 85: Front Loading of Infrastructure to Population

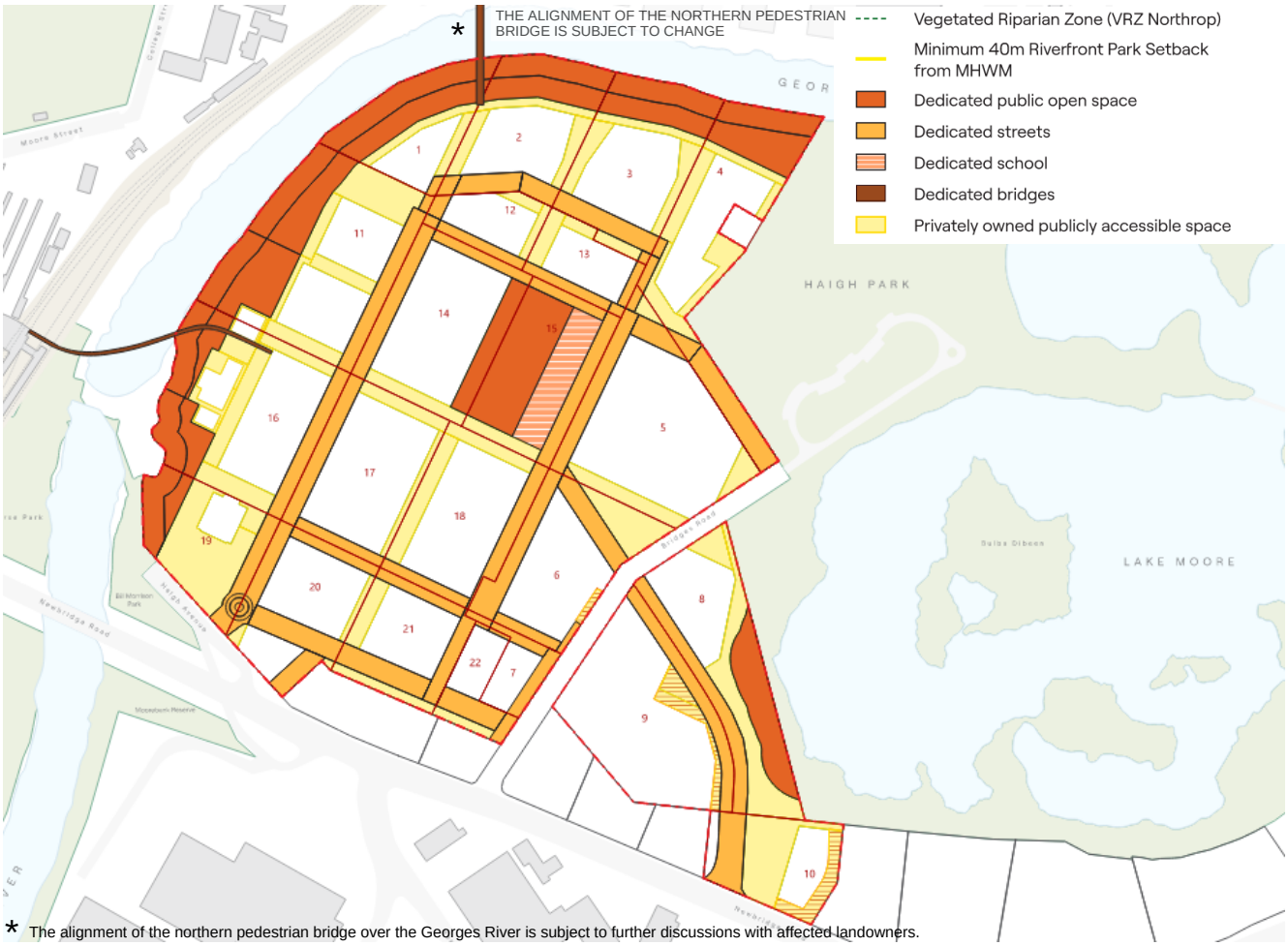
Source: Mecone

Dedication Planning

A number of open space areas, the bridges and roads will be dedicated to Council for ongoing maintenance, with the balance of publicly accessible areas and through-site links to be managed under Strata title arrangements as part of private development sites. A proposed dedication plan has been prepared to guide ongoing discussions with Council and State agencies. Refer to **Figure 78**.

The land costs associated with dedication to Council, SINSW and future private developments under the current zoning are:

- Open space – Approx $158 million in land (51,641m^2),
- School land – Approx $7.5 million in land (4,019m^2), and
- Publicly accessible private open space – Approx. $104 million worth private development embellishments (56,962m^2 of land).



* The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 86: Dedication Planning
Source: SJB

The significant quantum of publicly accessible areas that will be owned via private developments will result in long-term savings for Council, as the cost to upkeep and maintain the quality and amenity of these spaces will be borne by future Strata developments and levies.

Following exhibition, the JLG will engage with Council and DPHI to confirm the infrastructure delivery for the PP.

7.5 Section E State and Commonwealth Interests

Q12. What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway determination?

This PP reflects over a decade of consultation with various stakeholders, in a collaborative effort to realise Council's long-standing objectives to activate the Georges River foreshore with high quality placemaking outcomes and deliver much needed housing supply.

As outlined in **Section 3** of this PPR, pre-lodgement and assessment phases involved iterative consultation with the following parties:

Pre-Lodgement

- Liverpool City Council,
- Liverpool Innovation Precinct,
- Department of Planning, Housing and Infrastructure, and
- Placemaking Working Group.

Assessment

- Flooding Advisory Panel and Technical Advisory Group, and
- Transport Infrastructure Working Group.

Post Gateway

- Transport for NSW,
- Department of Primary Industries – Fisheries,
- Department of Primary Industries – Water,
- Schools Infrastructure NSW,
- Liverpool City Council (infrastructure, maintenance, operations, urban design, open space),
- Liverpool City Council Design Excellence Panel,
- WMA Water (DPHI Peer Reviewer) and Realm (Council Flood Advisor)
- Project Working Group, and
- Project Collaboration Group (including DPHI and Council).

Consultation has also occurred with key stakeholders to inform specific aspects of the PP and the evolution of the Structure Plan. While not representative of every meeting that has occurred since 3 April 2023 when the Gateway Determination was issued, notable consultation processes include:

- Preliminary discussions between the JLG with SINSW in relation to the demand for and design parameters for a new school within the site,
- Ongoing engagement with DPHI and WMA Water in relation to flooding impacts and evacuation,
- Ongoing engagement with TfNSW in relation to traffic management matters and briefing on Stage 1 assessment,

- Engagement with Transport for NSW Transport Asset Holding Enterprise (**TAHE**) in relation to potential future pedestrian bridge connections to Liverpool Station,
- Engagement with South Western Liverpool Health District (**SWLHD**) in relation to potential future pedestrian bridge connections to Liverpool Health Precinct,
- Engagement with Heritage NSW, the Gandangara Local Aboriginal Land Council (**LALC**) and identified Aboriginal stakeholders in relation to development of an Aboriginal Cultural Heritage Assessment (**ACHA**). While the inclusion of an ACHA was not a required by the Gateway Determination condition, the JLG have commenced preparation of this report and will be completed post exhibition to inform finalisation of the PP. The draft ACHA will be provided to the relevant stakeholders for review for a minimum of 28 days in accordance with the consultation requirements, and
- Coordination with utility service providers to inform the Utilities and Services Infrastructure Assessment Report.

Post Gateway

The Gateway Determination was issued on 3 April 2023 and sets out the requirements for the formal public exhibition process and consultation with public authorities/government agencies.

Consultation with public authorities and government agencies is required under section 3.34(2)(d) of the EP&Act 1979.

Each public authority is to be provided with a copy of the PP and any relevant supporting material via the NSW Planning Portal and given at least 21 days to comment on the proposal. Public Authorities/Government Agencies identified for formal consultation include:

- Transport for NSW,
- School Infrastructure NSW,
- Department of Education,
- NSW Office of Water,
- Infrastructure NSW,
- NSW State Emergency Services,
- NSW Rural Fire Service,
- Fire and Rescue NSW,
- NSW Environment and Heritage,
- NSW Environment Protection Authority,
- Sydney Water Corporation,
- Jemena,
- NBN Co,
- Endeavour Energy,
- Gandangara Local Aboriginal Land Council,
- NSW Health – South Western Sydney Local Health District,

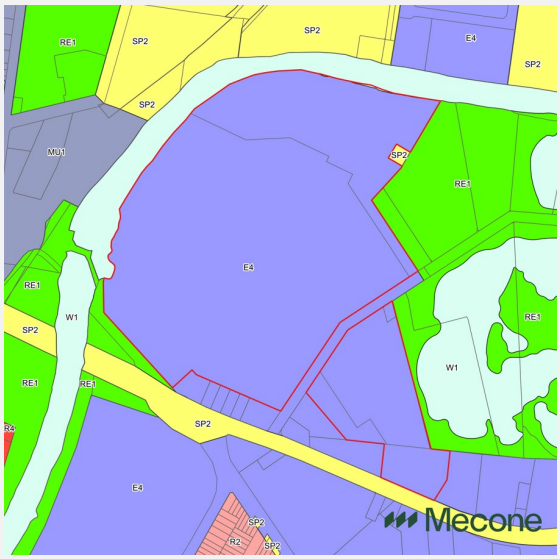
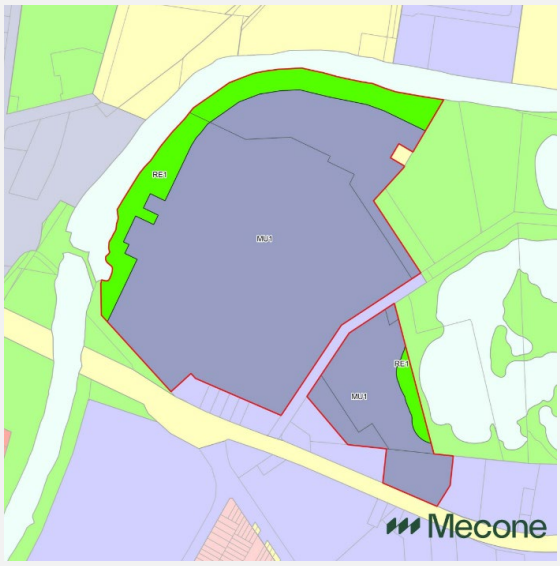
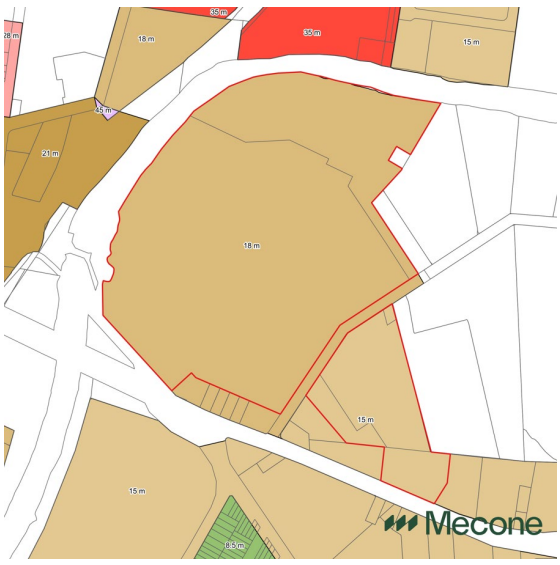
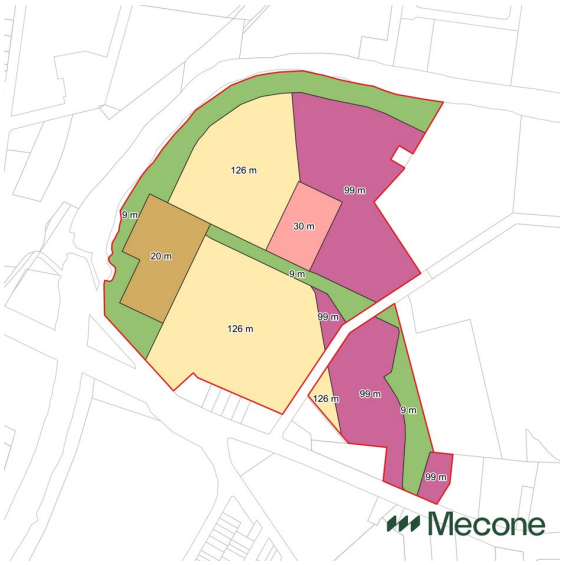
- Department of Primary Industries – Fisheries, and
- Bankstown Airport.

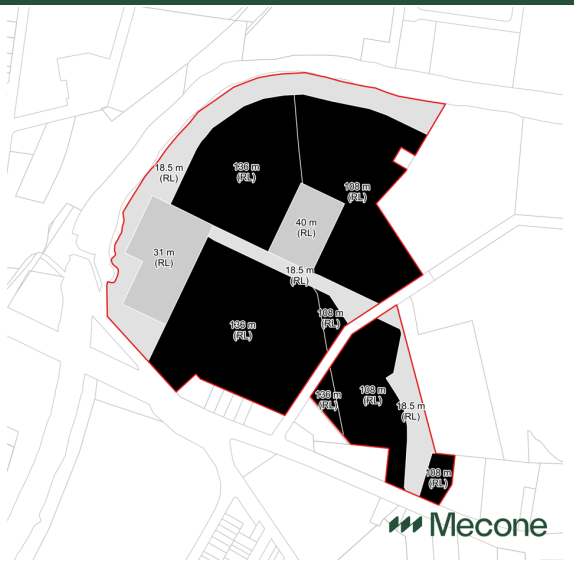
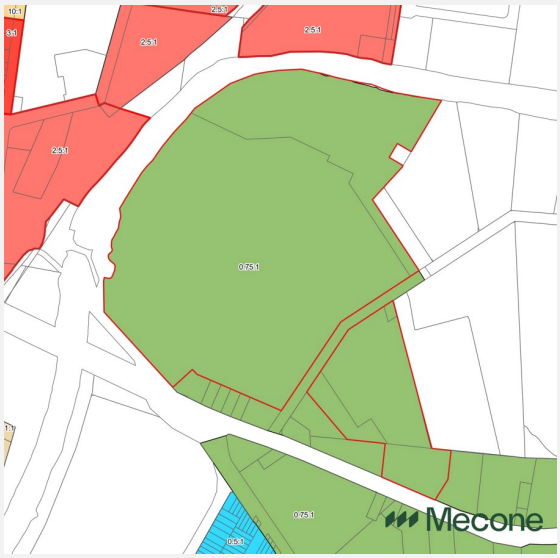
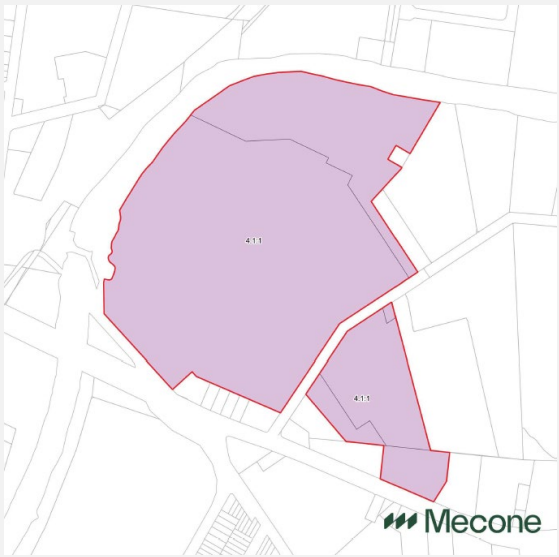
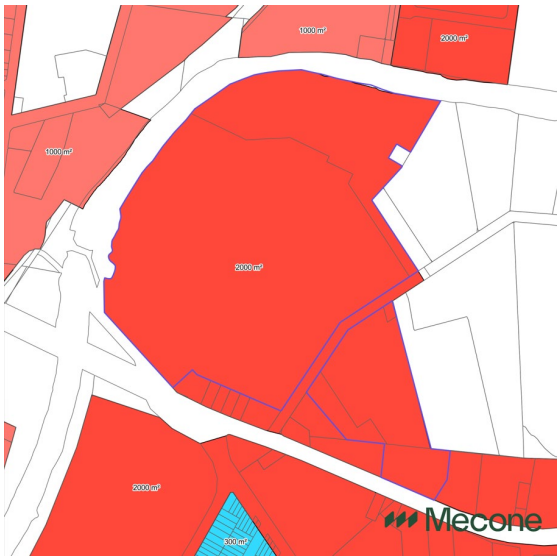
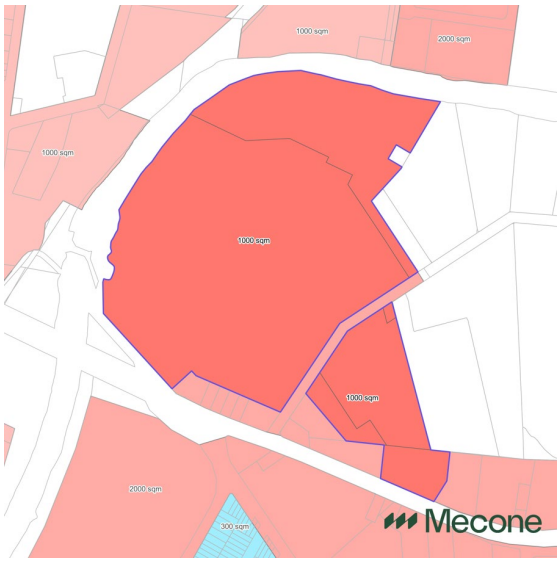
8 Part 4 – Maps

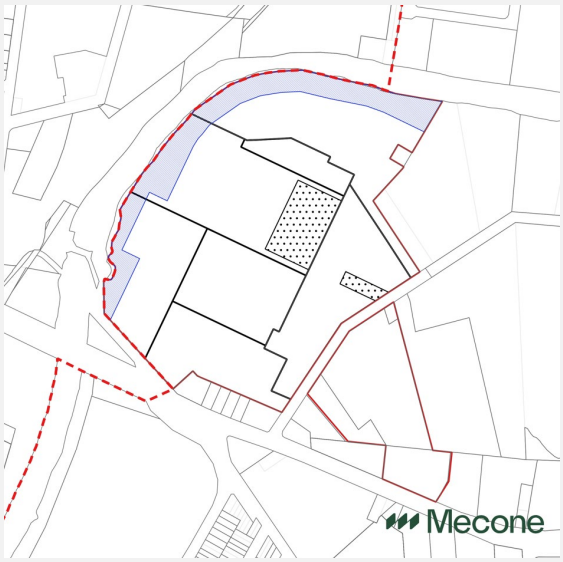
Table 30 below outlines the proposed amendments to LLEP 2008 maps. It is noted that the proposed height of buildings map has been provided as both a conventional height of building map (measured in m above existing ground level) and an RL height control format to demonstrate compliance with the Obstacle Limitation Surface (**OLS**) height limits in relation to the Bankstown Airport.

While DPHI indicated a preference for height in metres, the PP retains an RL as an optimal approach of retaining robustness and flexibility in the Structure Plan. It is anticipated only one of the height maps proposed would be adopted, which is to be resolved following exhibition of the planning proposal.

Table 27: Schedule of Amended Maps

Map	Current Control	Proposed Control
Zone	E4 General Industrial 	MU1 Mixed Use RE1 Public Recreation 
Height of Buildings	18m and 15m 	9m (RL 18.5), 20m (RL 31), 30m (RL 40), 99m (RL 108) and 126m (RL 136) 

Map	Current Control	Proposed Control
		
Floor Space Ratio	0.75:1 	4:1 
Minimum Lot Size	2000m^2 	1000m^2 

Map	Current Control	Proposed Control
Key Sites	Not currently identified on Key Sites Map.	Identify Moore Point (the subject site) on the Key Sites Map, identify block layout in relation to site specific GFA clause and identification of *potential* future school sites (subject to further investigation post-exhibition). 
Heritage	Lot 200 DP 1009044 (3 Bridges Road) entirely identified as Local Heritage Item 76. 	Reduce the extent of Lot 200 DP 1009044 (3 Bridges Road) identified as Local Heritage Item 76. 

9 Part 5 – Community Consultation

Schedule 1, Clause 4 of the EP&A Act 1979 requires the relevant planning authority to consult with the community.

It is noted the PP was placed on public exhibition prior to Council resolution in November 2020. A Fact Sheet was prepared by Council and allowed the community to provide a written submission over August and September 2020.

Subject to the provision of a Gateway Determination, the PP will be placed on public exhibition. Confirmation of the public exhibition period and requirements for consultation will be detailed as part of the Gateway Determination.

The PP will be publicly exhibited for at least **28 days** in accordance with DPHI's Guidelines and as specified in the Gateway Determination.

At a minimum, the notification of the public exhibition of the PP is expected to involve:

- A public notice in local newspaper(s),
- Notification on the Council website, and
- Written correspondence to owners and occupiers of adjoining and nearby properties and relevant community groups.

10 Part 6 – Project Timeline

An anticipated project timeframe is provided in **Table 31**.

Table 28: Indicative Project Timeframe

Stage	Timeframe
Lodgement of PP	April 2020 (completed)
Consideration by Council	October 2020 (completed)
Council (or LPP) decision	November 2020 (completed) April 2022 (completed)
Issue to DPHI for Gateway Determination	April 2022 (completed)
Gateway Determination	April 2023 (completed)
Pre-exhibition	June 2024
Commencement and completion of public exhibition	August 2024
Consideration of submissions	September 2024
Post exhibition review and additional studies	October 2024
Submission to DPHI for finalisation	November 2025
Gazettal of LEP amendment	December 2025

11 Conclusion

This PPR has been prepared by Mecone on behalf of the JLG to support the rezoning of land at Moore Point and seeks to amend the provisions of LLEP 2008 to facilitate a mixed-use development.

It provides a full justification for the PP and has been prepared in accordance with:

- Section 3.33 of the EP&A Act, and
- DPHI's LEP Plan Making Guideline dated August 2023.

The primary aim of the PP is to realise the long-standing objective of Council to expand Liverpool CBD eastward by transitioning industrial land at Moorebank to mixed-use and recreational uses. This has been entirely consistent with the strategic planning framework set at both State and local levels.

The proposal is not only considered consistent with key Government policy, but will expressly meet and deliver a number of key priorities contained with:

- *Greater Sydney Region Plan – A Metropolis of Three Cities,*
- *Western City District Plan,*
- *Liverpool Collaboration Area Place Strategy, and*
- *Liverpool City Council's Local Strategic Planning Statement – Connected Liverpool 2040.*

It represents a once in a generation opportunity to renew the site for mixed-use and recreational purposes, befitting its strategic location and complementing the growth of Liverpool CBD. These include:

- Approximately 11,000 dwellings set within walking distance of Liverpool CBD and LCA,
- Primary school (1,000 student capacity), community facilities and indoor recreation,
- Over 10 ha (34.5%) of publicly accessible open space supported by bridge crossings from Liverpool CBD to a fully accessible Georges River foreshore and Haigh Park,
- 23,503 jobs during operation, contributing to new employment opportunities as part of an expanding Liverpool CBD,
- Local shopping and entertainment, centred around an adaptively-reused heritage quarter that will be the focal point for the community,
- Multi-purpose indoor playing courts, riverbank stabilisation and restoration resulting in river foreshore improvements, and
- New local roads supporting active and public transport and intersection upgrades along Newbridge Road.

The site has a clear strategic line of sight since 2008 and exhibits robust strategic merit, having received endorsement from Council twice and subsequently receiving Gateway Determination.

Moore Point will provide additional housing and jobs and in proximity to the jobs, services, facilities and public transport available in the Liverpool CBD. It I gives effect to the District Plans priorities to deliver a liveable, productive and sustainable Western Parkland City, will assist to strengthen Liverpool CBD as a Strategic Centre and would give effect to the 30-minute city aspiration.

The PP is considered to achieve site-specific merit through delivering a catalyst development in an integrated designed manner that can provide significant public benefit, built form and placemaking amenity and environmental mitigation strategies.

The PP is supported by an extensive PP package addressing flooding, evacuation, riparian, heritage, transport, urban design, public domain, air quality, contamination, aviation, biodiversity an aquatic ecology. The reports provide support for the PP, inferring there is no barrier that would preclude rezoning and the site's redevelopment (subject to the implementation of suitable mitigation measures and recommendations).

A site-specific DCP will be prepared following exhibition, consistent with the Gateway Determination. The site-specific DCP will be informed by the recommendations and findings of the technical reports submitted with the PP and ongoing engagement with Council and stakeholders.

The JLG will continue to work constructively with DPHI, Council, stakeholders and the community post exhibition to progress this significant project for Western Sydney.

Appendices

APPENDIX 1

LEP Mapping

APPENDIX 2

Connecting with Country Concept Report

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APPENDIX 3

Urban Design Report

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APPENDIX 4

Place Framework Plan

MECONE.COM.AU

APPENDIX 5

Public Domain and Landscape Plan

APPENDIX 6

Open Space and Community Needs Assessment

MECONE.COM.AU

APPENDIX 7

Flood Impact Assessment

MECONE.COM.AU

APPENDIX 8

Flood Emergency Response Plan

MECONE.COM.AU

APPENDIX 9

Economic Impact Assessment

APPENDIX 10

Statement of Heritage Impact

APPENDIX 11

Biodiversity Development Assessment Report

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APPENDIX 12

Aquatic Ecology Assessment Report

MECONE.COM.AU

APPENDIX 13

Riparian Assessment

APPENDIX 14

Cut and Fill Strategy

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APPENDIX 15

River Foreshore and Vision Strategy

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APPENDIX 16

Part 1 Contamination Assessment

APPENDIX 17

Part 2 Contamination Assessment, Acid Sulfate Soil Management Plan

APPENDIX 18

Sustainability Statement

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APPENDIX 19

Servicing Infrastructure Report

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APPENDIX 20

Summary of Regional and Local Transport Impact

APPENDIX 21

Infrastructure Delivery Plan

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APPENDIX 22

Aeronautical Assessment

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APPENDIX 23

Air Quality Assessment

APPENDIX 24

Health Strategy

MECONE.COM.AU

APPENDIX 25

Draft Aboriginal Cultural Heritage Assessment

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