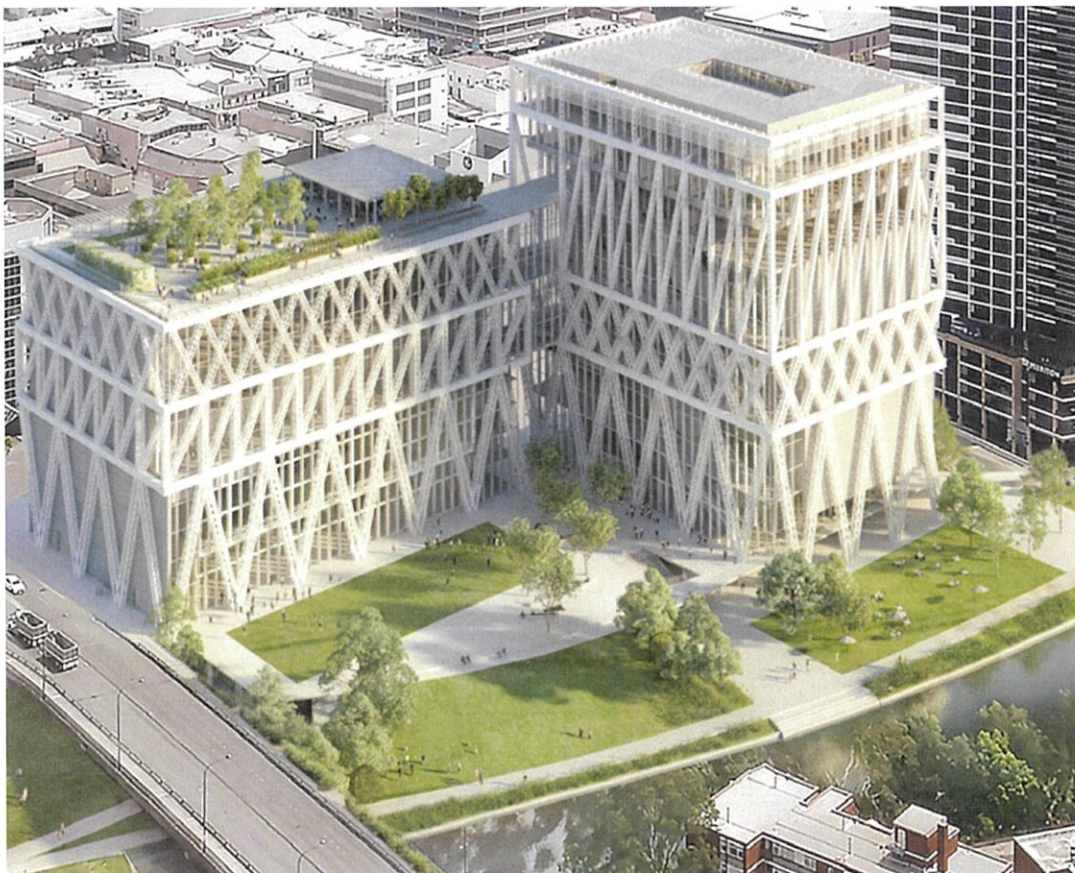


Powerhouse Parramatta

State Significant Development Assessment
SSD 10416

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Cover image: *Perspective looking south-west across Parramatta River towards the proposed development*
(Source: Applicant's RtS)

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Glossary

Abbreviation	Definition
Applicant	Infrastructure NSW
AHD	Australian Height Datum
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CIV	Capital Investment Value
CFMP	Coach Facility Management Plan
CMP	Conservation Management Plan
Consent	Development Consent
Contribution Plan	Parramatta City Centre S94A Development Contribution Plan
CPTMP	Construction Pedestrian Traffic Management Plan
DCP	Development Control Plan
Council	Parramatta Council
DES	Design Excellence Strategy
Department	Department of Planning, Industry and Environment
EESG	Environment, Energy and Science Group of the Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FSR	Floor space ratio
FTE	Full time equivalent
GANSW	Government Architect of NSW
GFA	Gross Floor Area
GPOP	Greater Parramatta and Olympic Peninsula
GSC	Greater Sydney Commission
GTP	Green Travel Plan
Heritage NSW	Heritage Division of the Department of Premier and Cabinet
ICNG	Interim Construction Noise Guidelines
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
LGA	Local government area
Minister	Minister for Planning and Public Spaces
NVIA	Noise and Vibration Impact Assessment
OMP	Operational Management Plan
PDCP	Parramatta Development Control Plan 2011

PSB	Parramatta Sand Body
PLEP	Parramatta Local Environmental Plan 2011
Planning Secretary	Planning Secretary of the Department of Planning, Industry and Environment
PPTMP	Point to Point Transport Management Plan
PV	Photovoltaic
RtS	Response to Submissions
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SHR	State Heritage Register
SoHI	Statement of Heritage Impact
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SRtS	Supplementary Response to Submissions
SSD	State significant development
St George's Terrace	St George's Terrace, 44 Phillip Street
TfNSW	Transport for New South Wales
TIA	Transport Impact Assessment
vph	Vehicles per hour
Willow Grove	'Willow Grove' 34 Phillip Street, Parramatta

Executive Summary

This report provides an assessment of a State significant development (SSD) application seeking approval for the Powerhouse Parramatta development, located at 30B, 34, 36-38, 40, 42 and 44-54 Phillip Street, Parramatta (the Proposal).

The application seeks approval for:

- the relocation of Willow Grove and retention of St George's Terrace
- demolition of existing commercial buildings at 36 to 42 Phillip Street,
- construction of two buildings providing museum, information and education facilities and ancillary accommodation
- an undercroft area and flood mitigation infrastructure
- on-site loading, on-street pick-up/drop-off facilities and road amendments
- new publicly accessible open spaces, landscaping and the creation of a through-site link.

The development is predicted to generate up 1,100 full time equivalent (FTE) construction jobs, 2,430 FTE indirect jobs and 300-400 FTE operational jobs.

The Applicant is Infrastructure NSW. The site is located within the City of Parramatta (Council) local government area (LGA). The Minister for Planning is the consent authority for the application as the Applicant is a public authority.

Community engagement

The Department of Planning, Industry and Environment (the Department) publicly exhibited the Environmental Impact Statement (EIS) for an extended period between 10 June 2020 and 21 July 2020 (42 days). The Department received 1,311 submissions, comprising seven from public authorities, one from Council and 1,303 submissions from the public (including 27 special interest groups) comprising 1,244 objections, 24 comments and 35 in support of the proposal.

On 8 October 2020, the Applicant submitted its Response to Submissions (RtS) which included confirmation that the existing Powerhouse museum would be retained at Ultimo. In addition, the proposal was amended to retain St George's Terrace and relocate Willow Grove within the Parramatta area, instead of demolishing them. It also provided additional information and included other amendments to the proposal including reducing the floor area and the number of serviced apartments, increasing open space and building setbacks. Amendments were also made to the design of the building, undercroft and public domain. The RtS was notified to Council and relevant agencies and made publicly available on the Department's website. The Department received 383 submissions on the RtS including five from public authorities, one from Council and 377 objections from the public.

The Applicant also submitted additional information and responses to the issues raised in submissions in November and December 2020 and January 2021. Collectively these responses form the Applicant's Supplementary RtS (SRtS).

Council provided its conditional support to the proposal. However, it raised concerns about heritage impacts, flooding, public domain, the design and use of the undercroft, the design of the Civic Link (a landscaped pedestrian and cycle link connecting Parramatta River to Parramatta Railway Station,

identified in Council's Civic Link Framework Plan) and provision of pick-up/drop-off facilities on George Khattar Lane.

The key concerns raised in the public submission relate to heritage impacts and relocation of Willow Grove, flooding, design and visual impacts, traffic and car parking.

Assessment

The Department has undertaken a detailed assessment of the proposal having regard to the relevant matters and considers the proposal is acceptable for the following reasons:

- it is consistent with the Greater Sydney Region Plan and the Central City District Plan's vision to grow Parramatta as the Central River City and deliver a new world class cultural precinct on the banks of the Parramatta River, providing economic, social and cultural benefits for the local and broader community
- the proposal was selected as the competition winner of a two-stage international design competition, it exhibits design excellence and it displays landmark / civic qualities appropriate for a public building of this nature
- the proposal fully complies with the height and density controls applying to the site and it provides an appropriate relationship to the Parramatta River and neighbouring buildings within its CBD context
- while the Department appreciates the concerns raised about the impact of the proposal on the locally heritage listed Willow Grove, the Department accepts that Willow Grove cannot be retained in its current location without significantly compromising the delivery of the museum, the competition winning design and the provision of public open space and public domain upgrades. The Department also considers the revised proposal would appropriately mitigate heritage impacts on Willow Grove as it:
 - would preserve the heritage fabric and significance of the building and fence, subject to a detailed methodology for deconstruction and relocation
 - would reconstruct the building on a new site within the Parramatta LGA, to be selected in consultation with key stakeholders and the community
 - would allow the building to be adaptively re-used with increased public access
- the retention of St George's Terrace would preserve one of the existing local heritage items on the site, facilitate its adaptive reuse and provide additional activation of the Phillip Street frontage, without compromising on the delivery of the proposal
- the Department engaged an independent flood expert to review the proposal. In summary, the review found that the proposal has been appropriately designed to mitigate and manage flooding impacts on the site and prevent adverse flood impacts on surrounding properties, subject to conditions
- it would create 15,000 m² of publicly accessible open space and associated public domain including the creation of the northern portion of Civic Link within the site, lawn areas for recreation and hard and soft landscaping and provision of 120 new trees providing 30% tree canopy cover across the site
- it would not result in any adverse traffic impacts as it is conveniently located close to public transport, provides adequate drop-off, pick-up and loading facilities, and there is sufficient capacity within the existing on and off-street parking facilities to accommodate museum visitation

- the proposal would provide significant public benefits including the creation of a new world class cultural facility for Western Sydney (providing museum, arts, exhibition and event spaces) new public open spaces, the northern portion of Civic Link, improved public domain, retention of St George's Terrace and creation of approximately 1,100 construction and 300-400 on-going operational jobs.

Conclusion

Following its detailed assessment, the Department considers the proposal is acceptable as it is consistent with the strategic planning framework adopted for the site and it would deliver a new world class cultural facility for Western Sydney.

While, the Department appreciates the concerns raised about the impact of the proposal on Willow Grove, the Department's assessment concludes the proposal is acceptable as the retention of Willow Grove would significantly compromise fundamental aspects of the proposal, potentially reducing its size, function and associated social and cultural benefits for Parramatta and Western Sydney. Further, the Department supports Willow Grove being relocated rather than demolished and is satisfied the potential heritage impacts of its relocation can be appropriately mitigated and managed to an acceptable level.

The issues raised by public authorities, Council and the community have been addressed in the proposal, the Department's assessment report or by recommended conditions of consent.

For these reasons, the Department concludes that the proposal is in the public interest and is approvable, subject to conditions.

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1 Introduction

1.1 Introduction

This report provides an assessment of a State significant development (SSD) application (SSD 10416) for the Powerhouse Parramatta development (the proposal), located at 30B, 34, 36-38, 40, 42 and 44-54 Phillip Street, Parramatta.

The application seeks approval for the construction of new multi-purpose museum and innovation and creative industries precinct including:

- removal of existing buildings and trees, relocation of Willow Grove and retention of St George's Terrace
- construction of two buildings up to RL 79.2 m (75.7 m above ground), providing for:
 - a total of 24,516 m² GFA
 - seven major public presentation spaces, studios, library and collaboration spaces
 - 30 serviced apartments and a dormitory with 56 beds for students and five for teachers
 - commercial kitchen, retail spaces, outdoor dining areas and other ancillary spaces
- on-site loading and on-street pick-up/drop-off facilities, bicycle parking and road amendments
- new publicly accessible open spaces, landscaping and creation of a through-site link.

The application has been lodged by Infrastructure NSW (the Applicant) under Part 4, Section 4.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.2 The Powerhouse

The Powerhouse is an Australian contemporary museum for excellence and innovation in applied arts and sciences. The museum currently houses over 500,000 items spanning history, science, technology, industry, arts and transport. The Powerhouse collection and facilities are spread over three sites located at Ultimo, Castle Hill and Millers Point.

In 2015 the NSW Premier announced the Government's intention to investigate the potential relocation of the Powerhouse from Ultimo to Parramatta within a new cultural precinct. Following this, the Government identified the site as the preferred site for a new cultural precinct and the land was acquired in 2019.

In 2020, the NSW Premier announced that in support of Sydney's global city status, Powerhouse Ultimo would be retained and continue to operate in its current location and the Government would continue to pursue the creation of a new state-of-the-art Powerhouse facility at Parramatta.

1.3 The site

The site is located at the northern end of the Parramatta Central Business District (CBD), approximately 20 kilometres (km) west of Sydney CBD (**Figure 1**).

The site is irregular in shape, covers an area of 19,438 m² and is bound by Phillip Street to the south, Wilde Avenue to the east, Parramatta River to the north and 330-338 Church Street to the west. The site also wraps around the side and rear boundaries of 30 Phillip Street and a narrow portion of the site extends along the Parramatta River foreshore to Church Street / Lennox Bridge (**Figure 2**).

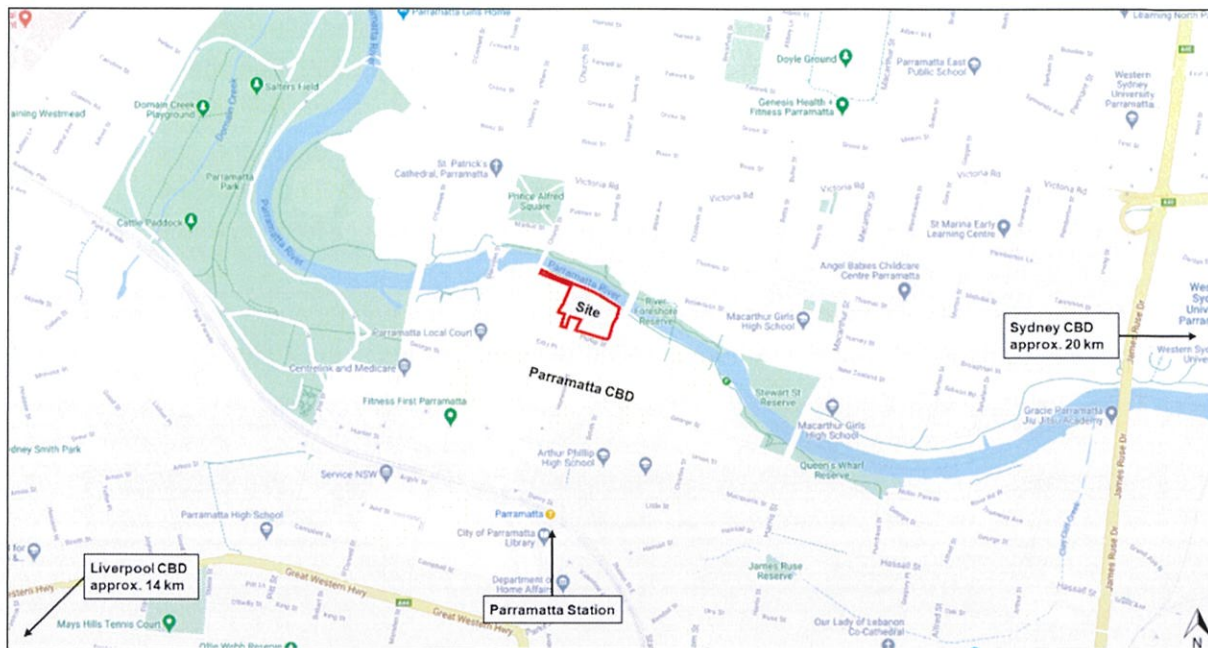


Figure 1 | Site location (Base source: Nearmap)

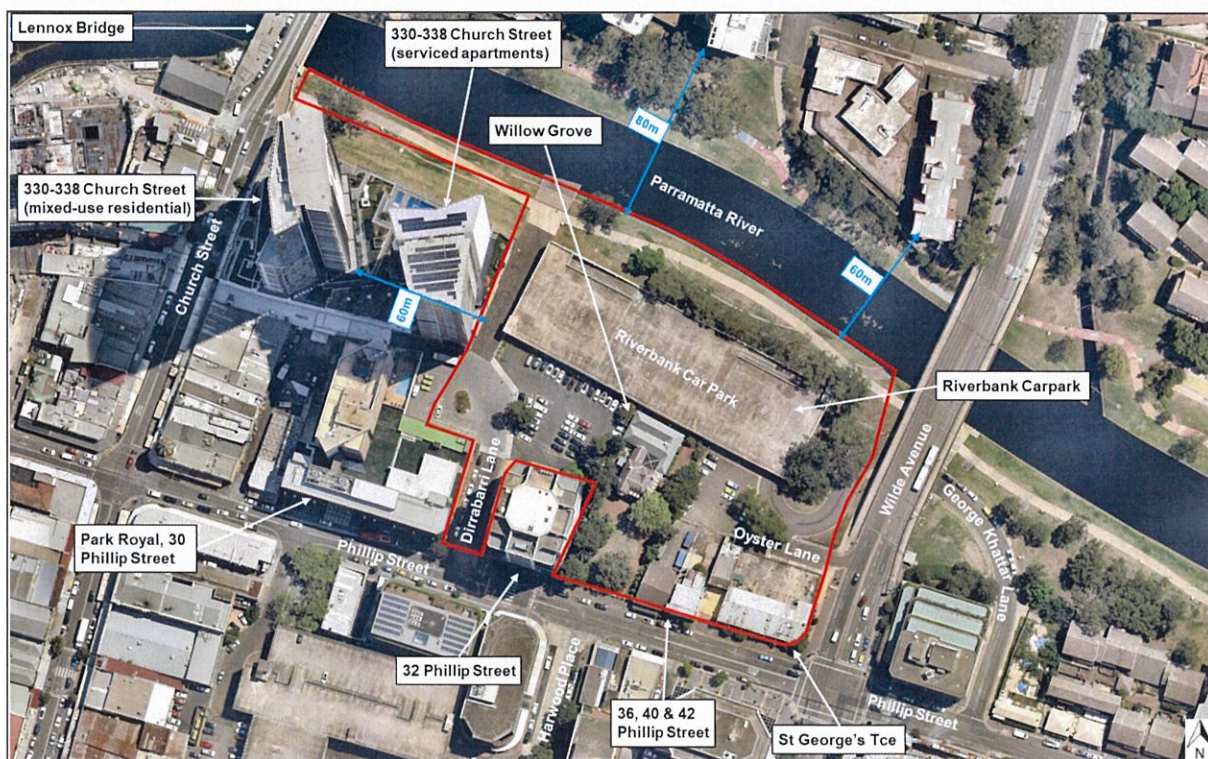


Figure 2 | Aerial view of the site and its immediate surroundings (Base source: Nearmap)

1.3.1 Existing development

There are six buildings on the site (Figure 3 to Figure 5) including:

- **Willow Grove, 34 Phillip Street** (Willow Grove) – located centrally within the site and comprising a two storey locally heritage listed Victorian Italianate style dwelling house constructed in the 1870s

- **St George's Terrace, 44 Phillip Street** (St Georges Terrace) – located at the south-eastern corner of the site fronting Phillip Street and comprising a two storey locally heritage listed terrace of seven houses constructed in the 1880s
- **Riverbank Carpark** – located along the Parramatta River foreshore and comprising a four-story public car park accessed from Oyster Lane, George Khattar Lane and Dirrabarri Lane
- **36 and 40 Phillip Street** – located at the southern boundary of the site fronting Phillip Street and comprising two separate two storey commercial properties
- **42 Phillip Street** – located at the southern boundary of the site fronting, and setback from, Phillip Street and comprising a two-storey substation building constructed in the 1930



Figure 3 | Willow Grove (left) and St George's Terrace (right) (Source: Applicant's EIS)



Figure 4 | Views towards the Riverbank Carpark from the Parramatta River foreshore (left) and from Dirrabarri Lane within the site (right) (Source: Applicant's EIS)



Figure 5 | Views towards 36 and 40 Phillip Street (left) and 42 Phillip Street (right) from Phillip Street (Source: Applicant's EIS)

1.3.2 Heritage and archaeology

The site contains two locally listed heritage items under the Parramatta Local Environmental Plan 2011 (PLEP), Willow Grove and St George's Terrace (**Figure 4** and **Figure 6**).

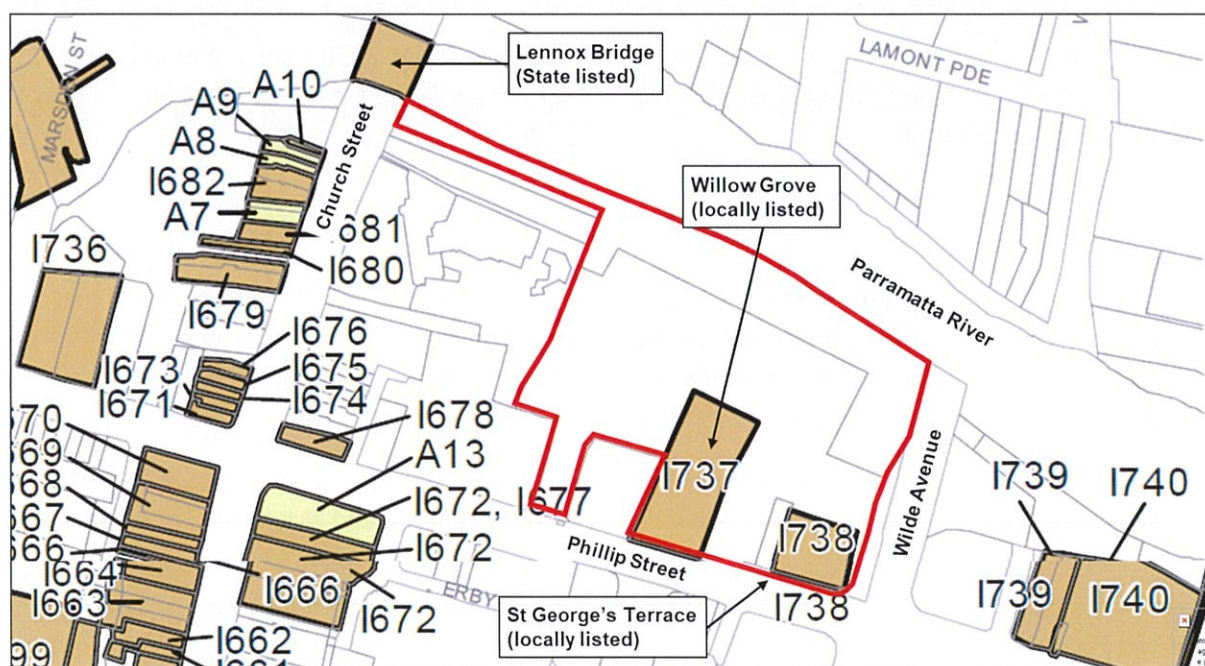


Figure 6 | The location of heritage items on and nearby the site (Base source: PLEP)

The heritage significance of the buildings is summarised below (extracts from listing):

Item	Significance
Willow Grove	<p>'... notable residence built c.1870-1880 is a good, representative example of a Victorian Italianate two-storey villa, readily identifiable as part of the historic building stock. It is a local landmark, strongly contributing to the streetscape... The site grounds may contain archaeological material relating to European settlement prior to the construction of 'Willow Grove'. Albeit not rare, Willow Grove is representative of its type, style and date of construction.'</p> <p>The Phillip Street front fence (comprising a spearhead palisade iron fence set in plinth and into large rendered posts with decorative tops, with iron scroll work on decorative iron gate) and mature trees on the Willow Grove site are also considered to have local heritage significance.</p> <p>The site is considered to have potential to contain archaeological material.</p>

St George's
Terrace

'... a representative example of modest Victorian period terraces constructed during an early wave of development in the area. The group presents as having a relatively high degree of integrity when viewed from the street and strongly contributes to the Phillip Street streetscape and the character of the Parramatta townscape...'

Like Willow Grove, the site is considered to have potential to contain archaeological material.

The site does not contain any heritage items listed on the State Heritage Register (SHR). However, the site contains three identified Archaeological Management Units (AMU) relating to the Colonial occupation from 1804 along the southern and eastern boundaries of the site, with potential for archaeology of State significance.

1.3.3 Access and car parking

There are three vehicle access points to the site including Dirrabarri Lane off Phillip Street, George Khattar Lane beneath Wilde Avenue (both two-way roads) and Oyster Lane, which is a one way, left turn only, exit onto Wilde Avenue from Oyster Lane.

Dirrabarri Lane and George Khattar Lane are partly contained within the site and Oyster Lane is wholly contained within the site.

A total of 550 car parking spaces are accommodated on the site including 504 within a multi-storey Riverbank Carpark and the remainder provided as surface car parking on the site and located behind 32, 36, 40 and 42 Phillip Street.

1.3.4 Site topography and trees

Due to levelling associated with the previous development of the Riverside Carpark, the northern half of the site is generally flat, approximately 2 m above the river level and 5 m below the southern half of the site, which is located at Phillip Street level. The change in topography is marked by a long retaining wall that forms the southern boundary wall of the Riverside Carpark and a relatively steep grassed sloped area adjacent to George Khattar Lane.

The site contains 58 existing mature native and exotic trees, the majority of which are located along the Parramatta River foreshore north and east of the Riverside Carpark and within the garden of Willow Grove.

1.3.5 Flooding

The site is located adjacent to the Parramatta River and the low-lying northern half of the site including the Riverbank Carpark and Parramatta River foreshore is subject to riverine flooding. In addition, overland flows can occur across the site from waters that converge on Phillip Street (from the Parramatta CBD) and flow via Dirrabarri Lane and Willow Grove towards Parramatta River (Figure 7).



Figure 7 | Existing potential riverine and overland flood intensity and flows (Base source: Applicant's RtS)

1.4 Surrounding context

Existing and surrounding development in the vicinity the site vary significantly in use, form, age, height and architectural design. The surrounding context is summarised below:

- adjoining the western boundary of the site is (**Figure 2**):
 - 330-338 Church Street, a 36-53 storey mixed-use development comprising residential and serviced apartment towers over a shared commercial podium. Vehicle access to the site is via Dirrabarri Lane and a right of access easement exists over this road
 - Park Royal Hotel, 30 Phillip Street, a hotel development consisting of an eight-storey building fronting Phillip Street and a 12-storey building behind
- north of the site is Parramatta River and beyond the river there is a variety of mixed-use and residential apartment buildings ranging in height from three to nine storeys
- the southern boundary of the site wraps around the side and rear boundaries of 32 Phillip Street, which comprises a 12-storey commercial office development. Further south, beyond Phillip Street are a number of mixed-use commercial buildings ranging in height from one to eight storeys. A new 28-storey commercial office tower is currently under construction on the south-eastern corner of the Phillip Street / Wilde Avenue / Smith Street intersection
- east of the site, on the opposite side of Wilde Avenue is a five-storey commercial office building, George Khattar Lane and the river foreshore area.

The closest residential properties to the site are apartments located approximately 60 m away from the site (**Figure 2**) at:

- 330-338 Church Street, comprising the 53-storey tower component of the building (the tower closest to Church Street)
- 14-16 Lamont Street, a six-storey building located on the northern side of Parramatta River.

1.4.1 Transport and access

The site is located approximately 350 m south of Victoria Road, 400 m east of O'Connell Street and 600 m west of Macarthur Street, which all form part of the regional road network.

The closest major intersections to the site are Phillip Street / Church Street and Phillip Street / Wilde Avenue / Smith Street, which are controlled by traffic lights. Other minor intersections near the site,

including Dirrabarri Lane / Phillip Street, Oyster Lane / Wilde Avenue, George Khattar Lane / Phillip Street and Horwood Place / Phillip Street, are priority controlled.

There are approximately 12,500 on and off-street car parking spaces in the Parramatta CBD. In addition to the Riverside Carpark on the site, there are an additional five multi-level Council and private car parking facilities (fee controlled) located within 500 m of the site providing for approximately 7,580 parking spaces. On street metered car parking is available on the surrounding streets and is subject to a variety of time restrictions. Six existing on-street passenger pick-up/drop-off areas are provided within 200 m of the site on Phillip Street, George Khattar Lane and Smith Street.

Pedestrian access to the site is via existing streets, signalised pedestrian crossings at the two major intersections and a zebra crossing is located on Phillip Street, in front of 32 Phillip Street. The Parramatta Valley Cycleway is located along the southern side of Parramatta River and passes through the site along the foreshore.

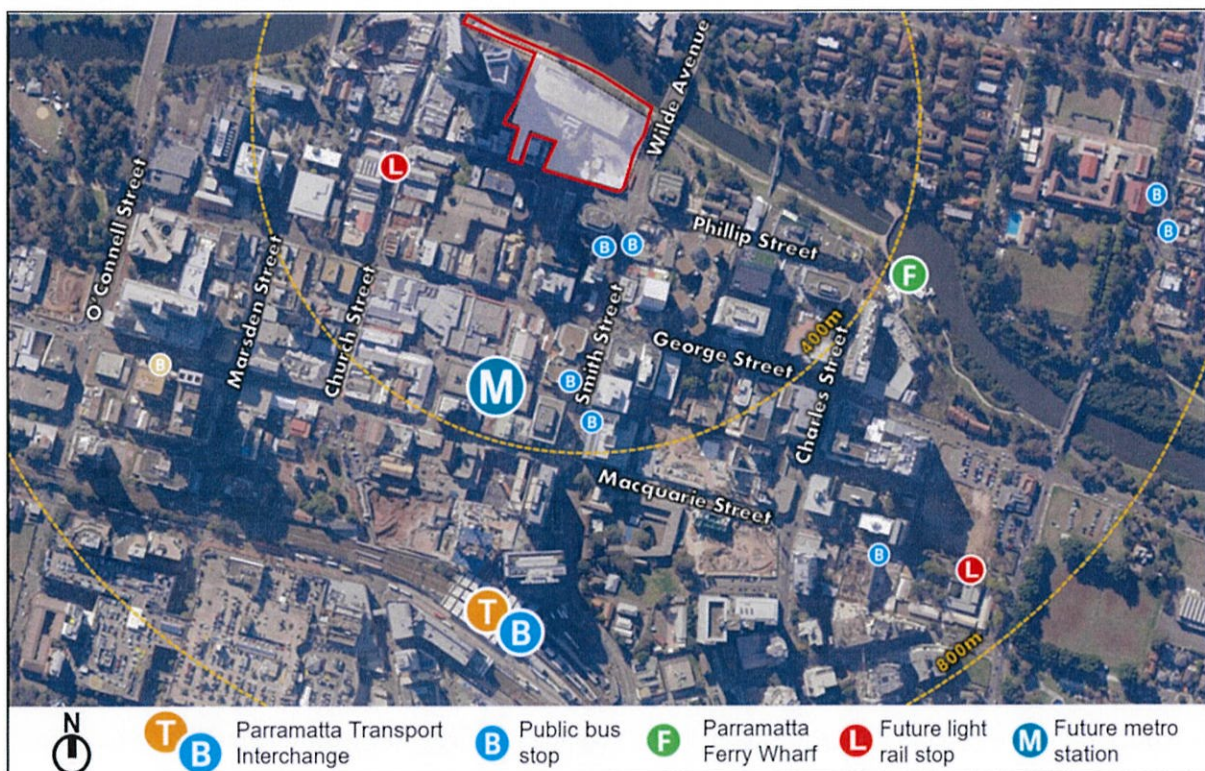


Figure 8 | Existing and planning public transport connections and services (Base source: Applicant's RtS)

The site has excellent access to existing public transport services, including the:

- Smith Street bus corridor (which includes 18 bus services), 150 m to the south
- Parramatta Ferry Wharf, 400 m to the east
- Parramatta Station and bus interchange, 500 m to the south

The NSW Government is planning two major public transport projects, which when complete, would operate high frequency services within the vicinity of the site, including Parramatta Light Rail (expected completion 2023) and Sydney Metro West (expected completion 2030). In addition, bus lane extensions are proposed along Smith Street and Wilde Avenue.

1.4.2 Surrounding heritage and archaeology

The site is located near a number of State and locally heritage items as shown at **Figure 6**.

Lennox Bridge is listed on the State Heritage Register (SHR) and comprises a road and footways (Church Street) over the Parramatta River and is one of the earliest bridges in NSW and Australia. Lennox Bridge adjoins the narrow portion of the site that extends along the Parramatta River and is the closest State heritage item to the site.

The Parramatta Sand Body (PSB) is a fluvial sand profile comprising a rare geomorphological body specific to Parramatta and has been demonstrated to contain stratified Aboriginal archaeological materials. The PSB is predicted to be located on the southern side of Parramatta River and the site may therefore fall within the potential zone for finding the PSB.

The PSB in its entirety is not a local or State heritage archaeological item. However, the previously identified part of the PSB is located at Robin Thomas Reserve (700 m east of the site) is listed as an 'Ancient Aboriginal and Early Colonial Landscape' on the SHR.

2 Project

2.1 Description of development

The SSD application seeks approval for the construction of new multi-purpose museum facility with exhibition and educational spaces, retail spaces, serviced apartments, a dormitory, landscaping and flood mitigation works.

It seeks to deliver a new world class cultural facility for Western Sydney with new public open spaces, public domain upgrades (including the northern portion of Civic Link) and incorporation of the St George's Terrace into the development.

The key components and features of the proposal (as amended by the Response to Submissions) are summarised at **Table 1** and shown in **Figure 9** to **Figure 14**.

Table 1 | Main components of the proposal

Component	Description
Site preparation	<ul style="list-style-type: none"> Demolition of existing buildings including the Riverbank Carpark, two storey commercial buildings at 36 and 40 Phillip Street and 42 two storey substation building at 42 Phillip Street and other structures on the site. Tree removal, excavation, earthworks and remediation.
Heritage	<ul style="list-style-type: none"> Relocation of Willow Grove from the site to an alternative site within the Parramatta LGA (to be determined in consultation with Council, NSW Heritage Council, the community, key stakeholders and landowners/managers) Incorporation of the St George's Terrace into the development, demolition of the modern rear extension and internal and external alterations to the buildings.
Built form	<ul style="list-style-type: none"> Construction of two interconnected buildings comprising the: <ul style="list-style-type: none"> Eastern Building: maximum height RL 60.8 m (57.3 m above ground) Western Building: maximum height RL 79.2 m (75.7 m above ground). Construction of an undercroft beneath the Western Building and "Presentation Space 1" open space.
Use	<p>Multi-purpose museum (information and tourist) facility including:</p> <ul style="list-style-type: none"> seven major public presentation spaces film / photography studio, public research library and collaboration spaces 30 serviced apartments managed by the Powerhouse to provide non-commercial short term accommodation for researchers, scientists, artists and students a dormitory with 56 beds for students and five for teachers to provide non-commercial short term accommodation for students to engage in science education programs commercial kitchen, retail spaces and outdoor dining areas front and back-of-house spaces.
Gross floor area (GFA) and floor space ratio (FSR)	<ul style="list-style-type: none"> A total of 24,516 m² GFA. FSR of 1.25:1.

Access and roads	<ul style="list-style-type: none"> • Primary service vehicle and emergency vehicle access from Dirrabarri Lane (off Phillip Street). • Service vehicle access for "Presentation Space 1" and "Presentation Space 2" directly from Wilde Avenue. • Alter existing roads including: <ul style="list-style-type: none"> ◦ closure of Oyster Lane ◦ part closure of George Khattar Lane (within the site).
Vehicle parking and pick-up/drop-off	<ul style="list-style-type: none"> • Two on-site loading bays located in a dock within the Western Building and accessed via Dirrabarri Lane. • Two on-street Coach pick-up/drop-off bays located on the northern side of Phillip Street. • Seven short-term, pick-up/drop-off bays and turnaround area on George Khattar Lane. • No on-site car parking.
Bicycle parking	<ul style="list-style-type: none"> • 78 bicycle parking spaces including: <ul style="list-style-type: none"> ◦ three spaces for serviced apartments ◦ 15 spaces for staff and associated end of trip facilities ◦ 60 spaces for visitors within the public domain.
Landscaping	<ul style="list-style-type: none"> • 15,000 m² public open space, including: <ul style="list-style-type: none"> ◦ a sloped embankment and separate lawn open spaces along the Parramatta foreshore ◦ Presentation Space 1 open space at ground floor level and located above the undercroft ◦ an urban plaza / forecourt between Phillip Street and the Eastern Building. • Provision of the northern portion of the Civic Link comprising a pedestrianised through site link extending from Horwood Place to the Parramatta River foreshore (note: the southern portion between Parramatta Station and Horwood Place does not form part of this application). • Provision of a roof terrace and pavilion on the roof of the Eastern Building. • Retention of two existing trees and provision of 120 replacement trees • Hard and soft landscaping throughout the site.
Events	<ul style="list-style-type: none"> • Use of public domain / open space on the site to support programs and functions.
Flooding	<ul style="list-style-type: none"> • Provision of flooding infrastructure, including an undercroft beneath the eastern and western buildings for flood storage. • Provision of drainage infrastructure.
Signage	Provision of three signage zones.
Jobs	1,100 full time equivalent (FTE) construction jobs, 2,430 FTE indirect jobs and 300-400 FTE operational jobs.

2.2 Building design and layout

The proposal includes the construction of two buildings comprising the:

- Eastern Building: maximum height RL 60.8 m (approximately 57.3 m above ground).
- Western Building: maximum height RL 79.2 m (approximately 75.7 m above ground)

The Western Building and Presentation Space 1 open space are located directly above an undercroft to store flood waters during flood events (**Section 6.5**).

The Western Building has a north-south orientation with its shortest side fronting Phillip Street, whereas the Eastern Building has an east-west orientation, with its longest side fronting Phillip Street. The buildings frame the southern and western sides of Presentation Space 1 open space and are separated by the Civic Link. The buildings are connected at upper levels by a 11.5 m wide bridge-link (over three floors) over Civic Link.

The buildings contain seven presentation spaces together with associated support spaces and infrastructure relating to the museum/exhibition use. In addition to this, the Western Building also includes a retail unit at ground floor level fronting Parramatta River and serviced apartments on the top floor. The Eastern Building also contains a dormitory on mid-floors and a large roof terrace with pavilion on the top floor.

2.3 Undercroft

The proposal includes the creation of an undercroft located beneath the northern half of the Western Building and Civic Link and the Presentation Space 1 open space (**Figure 10** and **Figure 11**). The undercroft has a floor to ceiling height of approximately 4 m and a depth ranging between 25 m to 40 m

The purpose of the undercroft is for the conveyance of floodwaters, which would enter through the open northern and western sides of the undercroft pass beneath the development and exit from the eastern side of the undercroft next to Wilde Avenue bridge (**Figure 10**). The undercroft is also proposed to be occasionally used for exhibitions, events and other uses associated with the museum (when safe to do so).

Operable screens are proposed to the open northern, western and eastern sides of the undercroft to prevent public access when the space is not in use. The screens would mechanically open during a flood event to allow the passage of water through the undercroft.

2.4 Landscaping, open space and public domain

The proposal includes a variety of key landscaping and public domain features including (**Figure 10** and **Figure 31**):

- the Presentation Space 1 open space terrace - comprising a lawn area (at street level) with tree planting, lightwells and a lift located above the undercroft area on the northern side of the Eastern Building
- the Lawn Embankment - comprising a sloped lawn embankment rising from the river edge to meet the northern boundary of the Presentation Space 1 terrace and including lawn, tree and riparian planting
- the River Lawn - comprising a lawn area at river level located with tree and riparian planting located between the northern side of the Western Building and the river
- the northern portion of Civic Link within the site - comprising a pedestrianised continuation of Horwood Place through the site and between the Eastern and Western Buildings before terminating at the river via a broad staircase
- the Phillip Street Plaza - comprising an urban plaza with tree planting located between the southern side of the Eastern Building and Phillip Street and west of St Georges Terrace.

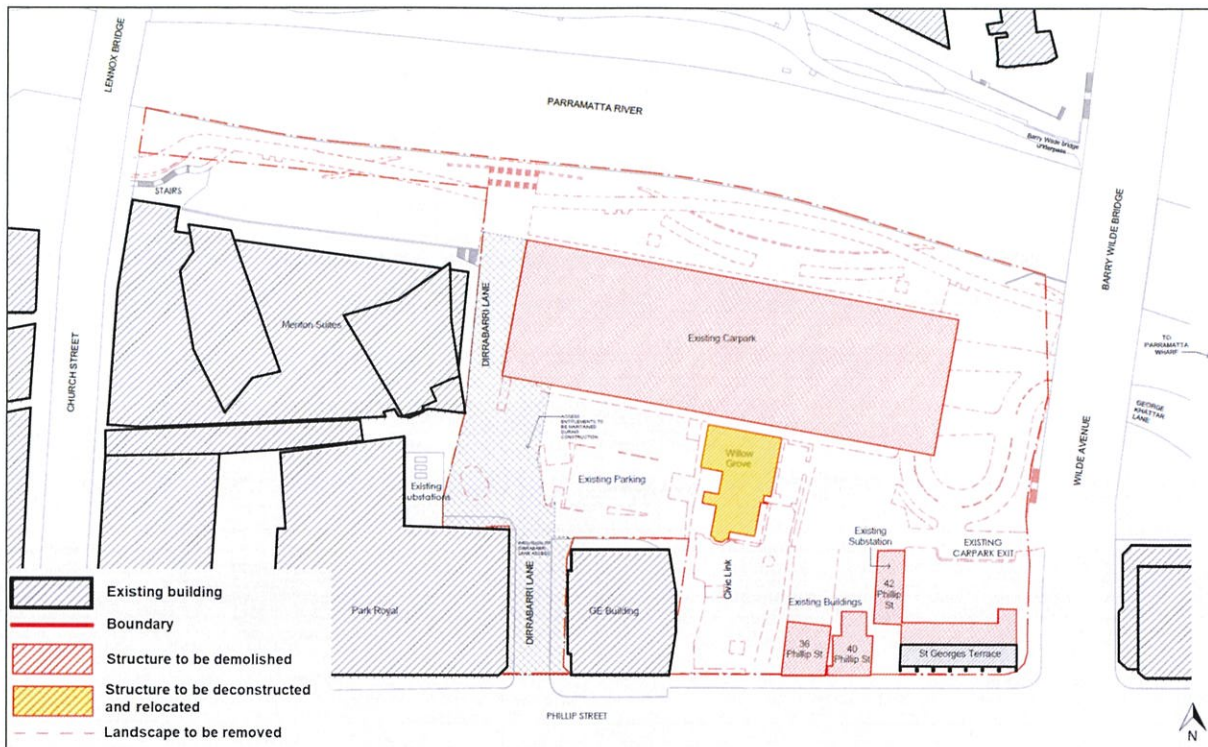


Figure 9 | Proposed demolition plan (Base source: Applicant's RtS)

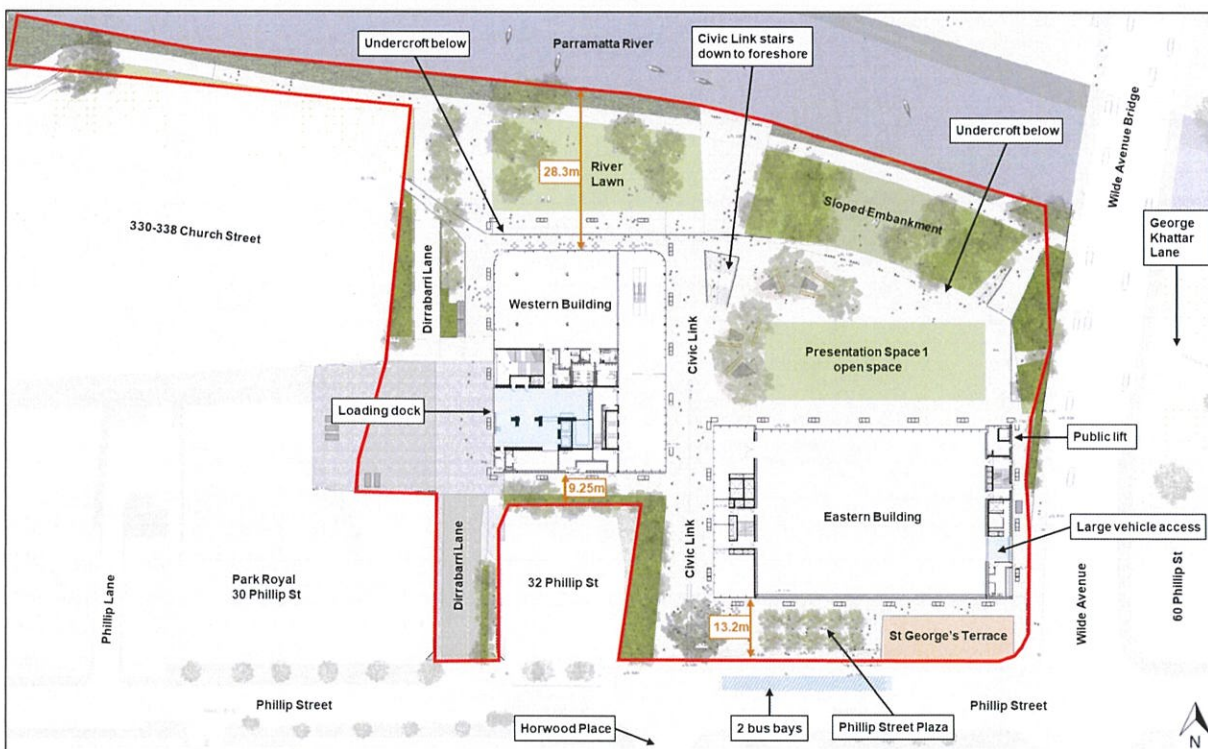


Figure 10 | Proposed ground floor layout and key features (Base source: Applicant's RtS)

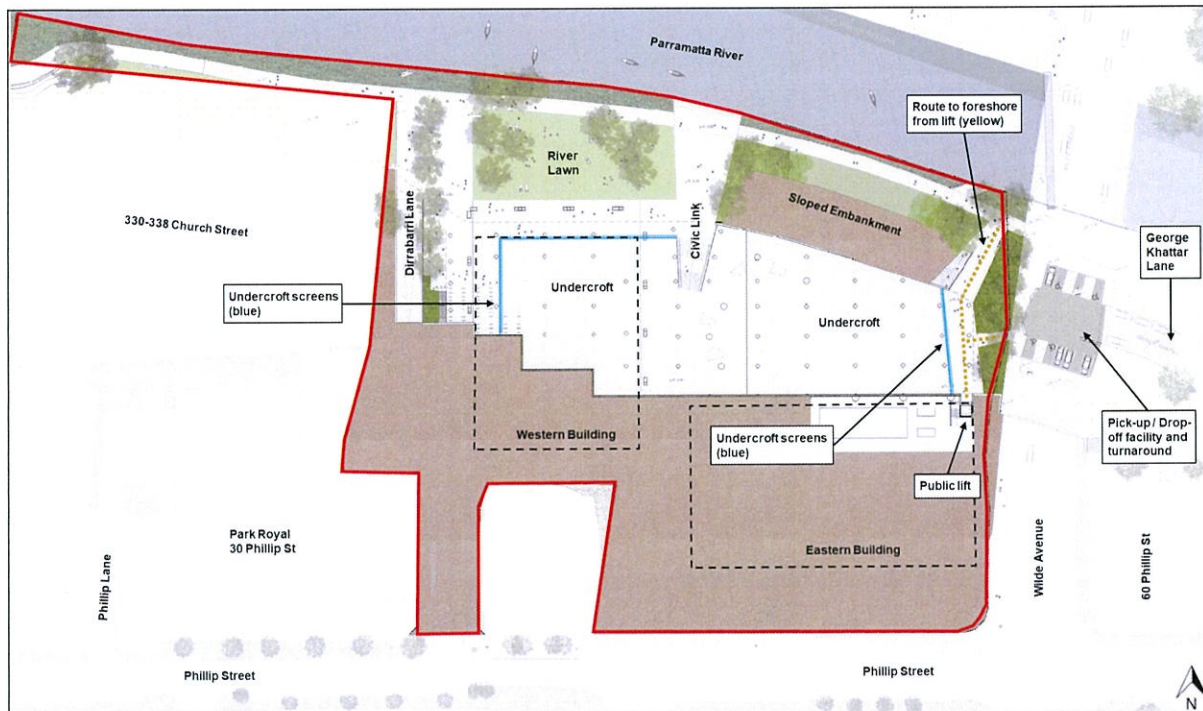


Figure 11 | Proposed lower ground floor and undercroft layout, the undercroft relationship to the river and adjoining proposed spaces and other key features (Base source: Applicant's RtS)

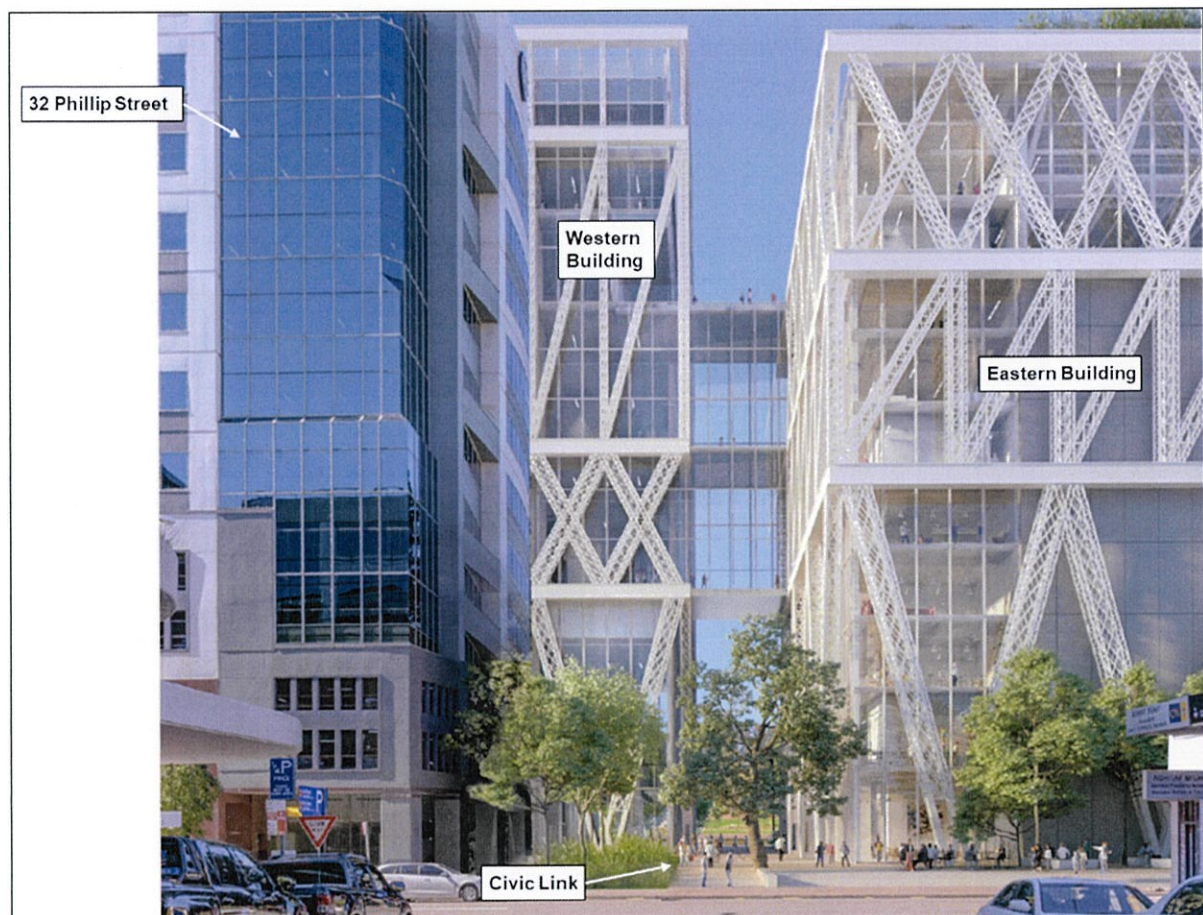


Figure 12 | Perspective looking north along Horwood Place towards the Civic Link (Base source: Applicant's RtS)

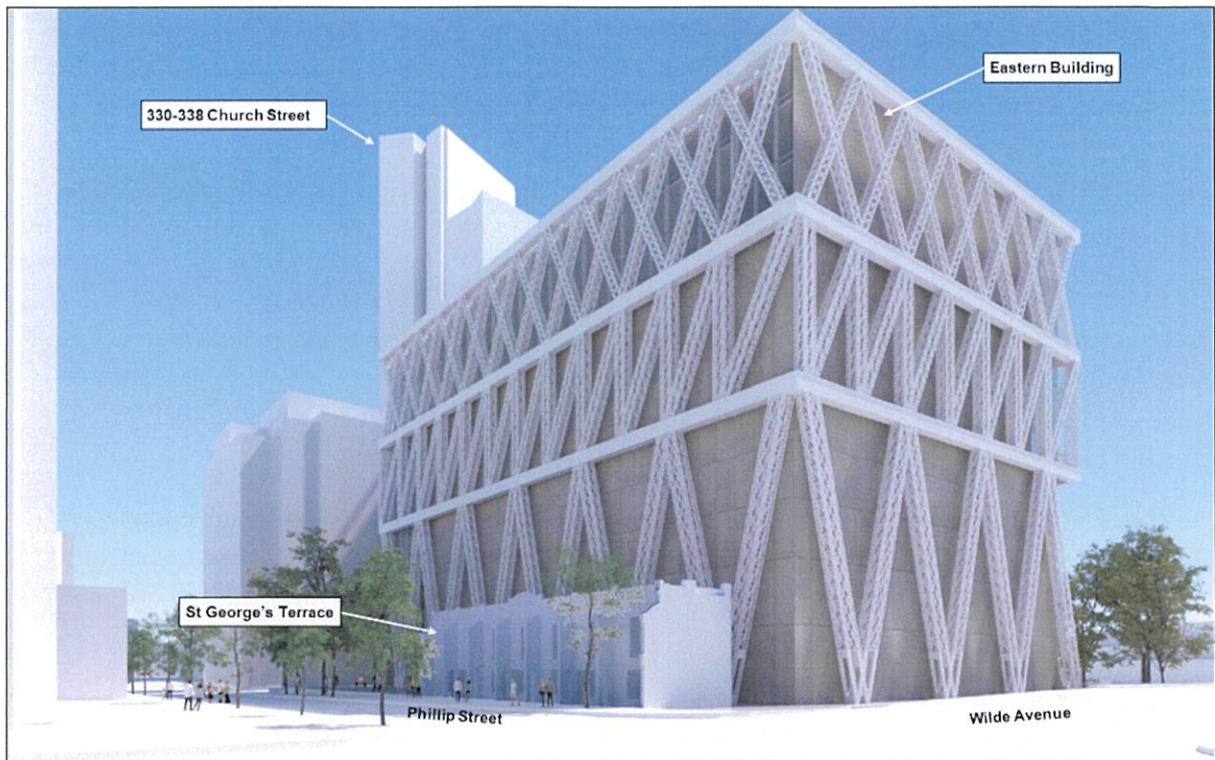


Figure 13 | Perspective looking north-west towards the Eastern Building and its relationship to the retained St George's Terrace (Base source: Applicant's SRtS)

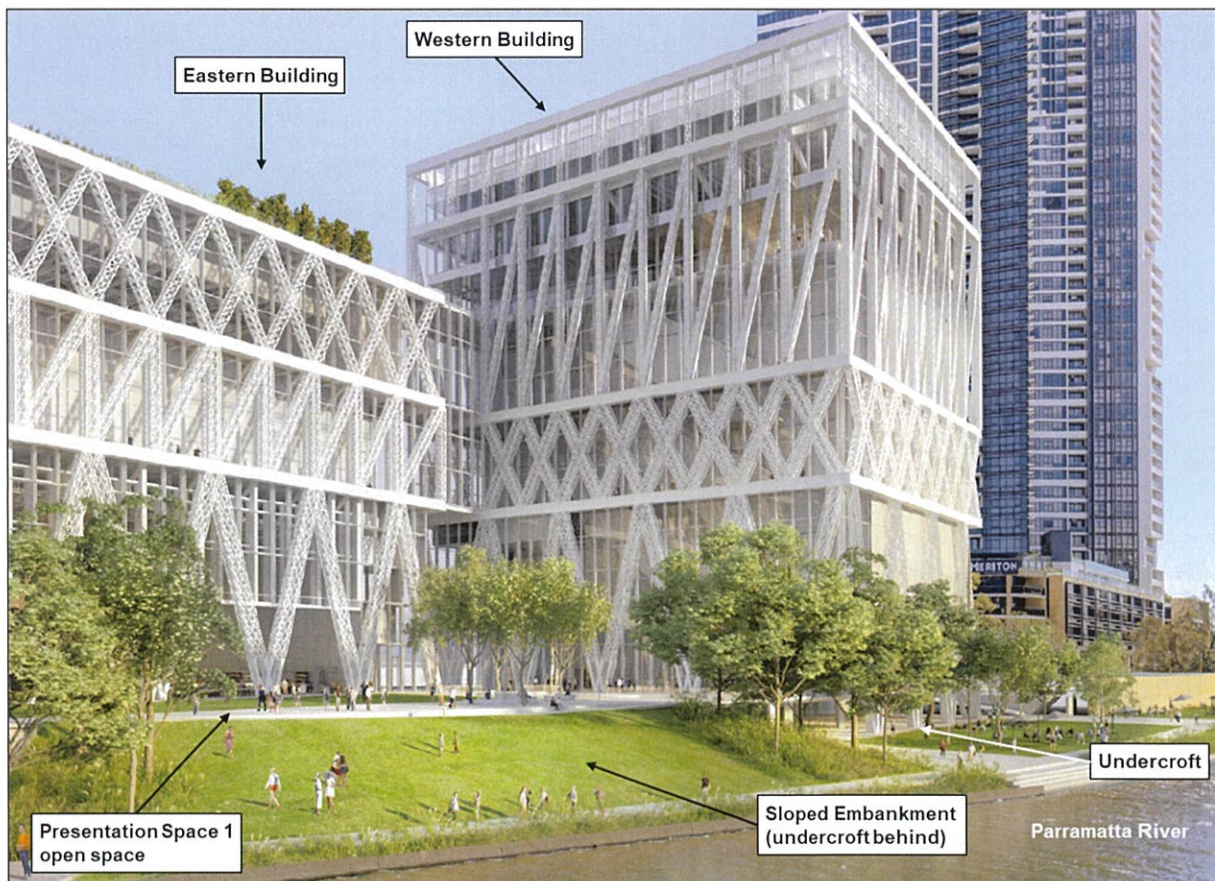


Figure 14 | Perspective looking south-west across Parramatta River towards the sloped embankment, Presentation Space 1 open space and the Eastern and Western Buildings (Base source: Applicant's RtS)

3 Strategic context

3.1 Greater Sydney Region Plan: A Metropolis of Three Cities

In March 2018, the Greater Sydney Commission (GSC) published the Greater Sydney Region Plan (the Region Plan) and the associated District Plans.

The Region Plan outlines how Greater Sydney will manage growth and change and guide infrastructure delivery. It sets the vision and strategy for Greater Sydney, to be implemented at a local level through District Plans. The Region Plan's overriding vision for Greater Sydney is to rebalance Sydney into a metropolis of three unique but connected cities, including Eastern Harbour, Western Parkland (west of the M7) and Central River cities.

The site is located within the Central River City and the Greater Parramatta and Olympic Peninsula (GPOP) Economic Corridor. The proposal is consistent with the Directions and Actions of the Region Plan as the proposal:

- would establish an arts and cultural precinct within the Parramatta CBD that complements the surrounding diversity of uses and would support existing and future arts and cultural facilities to benefit Western Sydney, and NSW more broadly
- has been designed as a new destination that supports social interactions and community knowledge sharing, as well as active and sustainable transport and recreation
- includes serviced apartments that provide for a unique live-work collaboration space for artists and researchers. The temporary dormitory accommodation would complement the program of exhibitions, research, teaching, collaboration and events on the site
- is located in the heart of the Central City District and the GPOP Economic Corridor, with close access to surrounding jobs, schools, services and surrounding strategic centres
- has excellent access to existing and planned public transport connections, including Parramatta Station and local bus routes and the planned Parramatta Light Rail and Sydney Metro West
- would contribute to the long-term strength of the visitor economy by providing new facilities with the ability to attract new exhibitions and major events, and accommodate new programs, research and collaboration
- includes the provision of four new key publicly accessible open spaces (15,000 m²), providing for new recreational focal points along the Parramatta River for the local community, support the arts and cultural facilities within the development and contribute to the visitor economy in Parramatta and Western Sydney. In addition, the new pedestrian Civic Link extension of Horwood Place through the site will connect Parramatta CBD directly to the Parramatta foreshore and support Council's ambition for the creation of a north-south pedestrian spine through the CBD.

The proposed development therefore supports the strategic goals, directions and actions of the Region Plan.

3.2 Central City District Plan

The GSC has prepared District Plans to inform regional and local-level planning and assist the actions of State agencies. The aim of the District Plans is to connect local planning with longer-term metropolitan planning for Greater Sydney.

The proposal is located within the Central City District area. The Central City District Plan contains key priorities relevant to the proposed development including supporting infrastructure and services provision, liveability, growing investment, sustainability and creating a city in which the population has access to housing, jobs and recreation all within 30-minutes.

Planning Priority 7 of the Plan supports the provision of a new museum on the banks of Parramatta River, providing potential opportunities for education and research and provision of space for exhibition, social and digital interaction and cultural exchange.

The proposal is consistent with the above priorities, in particular priority 7, as it facilitates the construction of key cultural infrastructure that would attract domestic and international exhibitions and events, supports the local and visitor economies, includes a mixture of ancillary uses to support innovation, has excellent public transport connections and provides employment opportunities and investment in the GPOP Economic Corridor.

3.3 Greater Parramatta and Olympic Peninsula Vision

The GPOP Vision identifies the Parramatta CBD as the commercial and civic centre of the Economic Corridor and sets out a city shaping vision for the GPOP and supports the Region Plan. GPOP Vision states that through collaboration the GPOP corridor can realise its potential to be an engine of the economy and a centre of creativity and innovation by 2036 and beyond.

The proposal supports the key Directions of the GPOP Vision as it would:

- provide for strong investment momentum within Parramatta CBD which is the principal economic anchor of the GPOP Economic Corridor
- contribute to promoting opportunities and investment in arts and culture for Western Sydney, which has historically been focussed within the Eastern Harbour City
- achieve design excellence in architectural and landscape design and contribute to the prominence of the Parramatta CBD
- foster the innovation, science, education and cultural sector within the Parramatta CBD and the GPOP corridor.

3.4 Future Transport Strategy 2056

The Future Transport Strategy 2056 (FTS 2056) prepared by Transport for NSW sets out a transport vision, directions and outcomes framework for NSW to guide transport investment and policy over a 40-year period. The FTS 2056 aims to achieve greater transport capacity, improved accessibility to housing, jobs and services, continued innovation, address challenges and support the State's economy and social performance.

The proposal is consistent with the key outcomes of the FTS 2056 as it provides new cultural and educational infrastructure near existing and planned public transport. In addition, the proposal would reduce reliance on private vehicles by not including any on-site car parking and would encourage the use of public transport and walking and cycling.

3.5 Greater Parramatta Interim Land Use and Infrastructure Implementation Plan

The Greater Parramatta Interim Land Use and Infrastructure Implementation Plan (LUIIP) prepared by the Department identifies the land use framework to guide future development in Greater Parramatta

over the next 20 years. The plan recognises Parramatta CBD as a commercial core, civic heart, employment, education and research hub.

The proposal is consistent with the key actions of the LUIIP as it would attract investment, creative and innovative activities, promote activity and connectivity along the river foreshore and provide ancillary retail and eateries.

The proposal would reduce reliance on private vehicles by not including any on-site car parking and would encourage the use of public transport and walking and cycling.

3.6 Civic Link Framework Plan 2017

The Civic Link Framework Plan 2017 (CLFP) underpins Council's long-term aspiration to create a linear public open space by converting Horwood Place into a landscaped pedestrian and cycle only link connecting Parramatta River to Parramatta Railway Station (**Figure 15**).

The proposal includes the northern portion of the Civic Link, which passes through the middle of the site. The southern portion of the Civic Link between Parramatta Station and Horwood Place does not form part of this application and would be pursued separately by Council.



Figure 15 | Artist impression of the potential Civic Link along Horwood Place and its relationship to key existing / future developments within Parramatta (the site outlined red) (Base source: the CLFP)

The proposal is generally consistent with the intent of the CLFP and includes the continuation of the Civic Link along the alignment of Horwood Place, through the site and to Parramatta River. In addition, the proposal includes large areas of public open space at the termination of the Civic Link and removes the multi-storey car park from the site.

The Department has considered the design of the Civic Link in detail at **Section 6.6.3**.

4 Statutory context

4.1 State Significant Development

The proposal is SSD under section 4.36 of the EP&A Act as the development is specified in clause 13 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) being for the purpose of an 'information and education facility including museum and art galleries' with a CIV in excess of \$30 million and it is not permissible without development consent under Part 4 of the EP&A Act.

4.2 Consent Authority

In accordance with Section 4.5 of the EP&A Act and Clause 8A of the SRD SEPP the Minister for Planning and Public Spaces is designated as the consent authority as the application has been made by a public authority.

4.3 Permissibility

The site is zoned B4 Mixed Use and RE1 Public Recreation in the PLEP.

The built form component of the proposal is located within the B4 zone. Information and education facilities, are permissible with consent within the zone. The serviced apartments, dormitory, retail and other facilities are also permissible in the B4 zone and considered ancillary to the dominant use of the site for information and education facilities and are therefore also permissible with consent within the zone. These parts of the proposal also come within the SSD declaration under clause 8 of the SRD SEPP.

The proposed public domain and open space works are located within the RE1 zone and are permissible with consent.

The Department has considered the proposal against the PLEP requirements and development standards in detail at **Appendix B** and is satisfied the proposal is consistent with the PLEP.

4.4 Secretary's Environment Assessment Requirements

On 10 February 2020, the Department notified the Applicant of the Planning Secretary's Environmental Assessment Requirements (SEARs) that apply to the proposal. The Department is satisfied that the EIS and RtS adequately address the requirements of the SEARs to enable the assessment and determination of the application.

4.5 Biodiversity Development Assessment Report

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

On 14 May 2020, EESG determined that the proposed development would not be likely to have any significant impact on biodiversity values and that a BDAR is not required. The Department supported EESG's decision and on 2 June 2020 determined that the application is not required to be accompanied by a BDAR under section 7.9(2) BC Act.

On 2 September 2020 the Applicant submitted a new BDAR request, which considered the revised number of trees to be removed from the site. After considering a new BDAR waiver request reflecting the proposal as outlined in the EIS:

- on 10 September 2020, EESG determined that that a BDAR is not required
- on 2 June 2020, the Department supported EESG's decision and determined a BDAR is not required.

4.6 Matters taken into account

The following relevant matters have been taken into account in the assessment of the development application:

- the relevant matters in section 4.15(1) of the EP&A Act
- strategic planning documents set out above
- the objects of the EP&A Act
- relevant principles of Ecological Sustainable Development (ESD)
- matters in the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

The Department has undertaken a detailed assessment of the above at **Appendix B** and is satisfied the application has appropriately addressed relevant matters for consideration.

5 Engagement

5.1 Department's engagement

The Department publicly exhibited the EIS in the Daily Telegraph, Sydney Morning Herald and on its website on 10 June 2020. Surrounding landowners, Council and relevant public authorities were notified in writing. The Department also published the Applicant's RtS and SRtS on its website and notified Council and relevant public authorities.

A total of 1,698 submissions were received in response to the exhibition of the EIS and notification of the RtS and SRtS comprising 15 from public authorities, three from Council and 1,680 from the public.

A summary of the exhibition and notification is provided at **Table 2**. A summary of the issues raised in the submissions is provided at **Section 5.2 to 5.4**. Copies of the submissions may be viewed at **Appendix B**.

The Applicant has taken steps set out in **Section 5.5** below to address issues raised in submissions. These are discussed in more detail in its:

- Response to Submissions (RtS), dated 8 October 2020
- Supplementary Response to Submissions (SRtS), dated 2 and 30 November 2020 and 19, 20 and 29 January 2021.

Table 2 | Summary of public exhibition and notification of the application

Stage	Submissions
EIS	1,311 submissions comprising: <ul style="list-style-type: none">• 1 Council• 7 Public authorities• 1,303 public
RtS	383 submissions comprising: <ul style="list-style-type: none">• 1 Council• 5 Public authorities• 377 public
SRtS	4 submissions comprising: <ul style="list-style-type: none">• 1 Council• 3 Public authorities

The Department has considered the comments raised by community, Council and public authority during the assessment of the application (**Section 6**) and where appropriate has recommended conditions of consent (**Appendix E**) to minimise the impacts of the proposal.

5.2 Key issues – public authorities

The key issues raised in submissions are summarised in **Table 3**.

Table 3 | Public authority submissions to the EIS, RtS and SRtS of the proposal

Transport for NSW (TfNSW)

EIS	TfNSW did not object to the proposal and provided the following comments:
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	<p><u>Access and vehicle movements</u></p> <ul style="list-style-type: none"> investigate alternative heavy vehicle access to the site to avoid the use of Wilde Avenue and the potential impacts on bus lane operations provide detail of the proposed freight and servicing profile, which should then inform loading and servicing provisions provide management measures to address pedestrian and service vehicle movements / interactions in the vicinity of Dirribarri Lane clarify whether the comparative travel surveys undertaken include school grounds and simultaneous visiting groups from multiple schools <p><u>Parking</u></p> <ul style="list-style-type: none"> consider providing coach, servicing and general pick-up/drop-off spaces on-site (rather than on-street) to avoid contributing to circulating traffic in the CBD justify the adequacy of the proposed coach and pick-up/drop-off parking provision and include appropriate management and mitigation measures engage with Council to confirm the feasibility of proposed changes to kerb-side parking provisions and provide alternatives if the proposed arrangements cannot be implemented provide an appropriate number of visitor and staff bicycle parking spaces and end of trip facilities from the commencement of operations <p><u>Other matters</u></p> <ul style="list-style-type: none"> update the Transport Impact Assessment (TIA) to: <ul style="list-style-type: none"> provide details of the construction program for works on land between the river bank up to Lennox Bridge consider the construction of the Parramatta Light Rail Project and any utilities that may have already been relocated or installed consider Future Transport 2036 and include all existing/proposed bus and light rail stops. <p>TfNSW recommended conditions requiring the preparation of a Green Travel Plan (GTP) and a Construction Pedestrian Traffic Management Plan (CPTMP).</p>
RtS	<p>TfNSW confirmed the RtS has largely addressed its comments raised in response to the EIS. In addition to the GTP and CPTMP, TfNSW recommended additional conditions:</p> <ul style="list-style-type: none"> requiring the preparation of management plans relating to coaches, point to point transport and loading/servicing prohibiting vehicular use of Wilde Avenue between 7am - 10am and 3pm - 8pm weekdays requiring the Applicant monitor bicycle parking and provide additional capacity if needed.
SRtS	<p>TfNSW reiterated its comments provided in response to the RtS.</p>
<p>Heritage Division of the Department of Premier and Cabinet (Heritage NSW)</p>	
EIS	<p>Heritage NSW did not object to the proposal and provided the following comments:</p> <ul style="list-style-type: none"> Willow Grove and St George's Terrace are local heritage items and are managed by the controls in the PLEP provide further detail of the ramp to the SHR listed Lennox Bridge consider the potential heritage significance of the art deco substation at 42 Phillip Street if possible, construction should avoid impacts on archaeology. If avoidance is not possible then a program of salvage excavation is required, which should be supported by a comprehensive Archaeological Research Design (ARD) provide an appropriate assessment and controls for Aboriginal Cultural Heritage values to address the likelihood of sites and objects of importance to the heritage of established

	Aboriginal occupation of the river valley through the Parramatta Sand Body (PSB) interface.
RtS	<p>Heritage NSW considered the RtS and provided the following comments:</p> <ul style="list-style-type: none"> the project should respond to advice from Council about local heritage items archaeological results should be appropriately addressed within the final Heritage Interpretation Strategy where works would impact the PSB Heritage NSW supports the proposed investigation and comparative analysis with other parts of the PSB elsewhere in the area <p>Heritage NSW recommended conditions requiring:</p> <ul style="list-style-type: none"> archaeological testing in accordance with the recommendations of the Archaeological Impact Assessment Report management of the archaeological program by an experienced archaeologist protection of Lennox Bridge during the construction phase of the development preparation of an amended ARD and associated final excavation report, Construction Heritage Management Plan and Interpretation Plan
SRtS	<p>Heritage NSW considered the SRtS and reiterated that the project should respond to advice from Council about local heritage items. Heritage NSW supported the reduction in the impact on archaeological relics resulting from the amended building footprints.</p> <p>Heritage NSW confirmed its previous recommended conditions still apply.</p>

Heritage NSW Aboriginal Cultural Heritage (ACH)

RtS	<p>Heritage NSW ACH did not object to the proposal and provided the following comments:</p> <ul style="list-style-type: none"> undertake a full Aboriginal consultation process and update the Aboriginal Cultural Heritage Assessment Report (ACHAR) and demonstrate how outcomes of consultation have informed the development of cultural heritage management for the project prepare an Aboriginal Cultural Heritage Management Plan (ACHMP), which should include long term care and control procedure for management of any Aboriginal objects.
SRtS	<p>Heritage NSW ACH confirmed the Applicant's SRtS has addressed its comments raised in its submission on the RtS. Heritage NSW ACH recommended conditions requiring the preparation of the ACHMP in consultation with the Remedial Action Plan (RAP) and including a long-term management procedure for care and control of any Aboriginal objects.</p>

Environment, Energy and Science Group of the Department of Planning, Industry and Environment (EESG)

EIS	<p>EESG did not object to the proposal and provided the following comments:</p> <p><u>Flooding</u></p> <ul style="list-style-type: none"> the Flood Risk and Stormwater Management Report should be updated to clarify flood depth and hazard impacts, correct inconsistencies between mapping and report discussion and address structural measures to ensure the building can withstand floodwaters consider emergency management measures for flood events rarer than 1% AEP up to the PMF the emergency evacuation strategy should be amended replacing 'shelter in place' recommendations with actual evacuation procedures developed in consultation with State Emergency Services and Council. <p><u>BDAR</u></p> <ul style="list-style-type: none"> EESG recommended the Applicant prepare an updated BDAR waiver request to take account of the proposed total number of proposed trees to be removed.
RtS	<p>EESG reviewed the RtS and confirmed the proposal has addressed the flood risk management issues raised in its submission to the EIS. In addition,</p> <ul style="list-style-type: none"> it noted the Applicant will refine the emergency management planning and flood modelling to take account of Council's Flood Study at the detailed design stage of the proposal

	<ul style="list-style-type: none"> a BDAR waiver was issued on 10 September 2020.
SRtS	EESG recommended a condition relating to emergency management planning and flood modelling.

Sydney Water

EIS	Sydney Water did not object to the proposal and requested the Applicant lodge a feasibility application to Sydney Water to clarify servicing requirements and potential impact(s) on existing Sydney Water assets in the area.
RtS	Sydney Water reviewed the RtS and confirmed the proposal has addressed its comments provided in response to the EIS.

Endeavour Energy

EIS	<p>Endeavour Energy did not object to the proposal and provided the following comments:</p> <ul style="list-style-type: none"> electricity supply is acceptable, noting the proposal is consistent with the asset relocation application previously submitted to Endeavour Energy any minor contamination of soils or surfaces associated with the former electricity substation can be adequately addressed by the RAP the easement for electricity works over the whole of Lot 1 DP 128474 should be retained.
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Jemena Gas Networks NSW (Jemena)

EIS	<p>Jemena did not object to the proposal and provided the following comments:</p> <ul style="list-style-type: none"> the secondary gas main adjacent to the site should be protected during the construction phase of the development in consultation with Jemena the gas regulator in the footpath of Dirrabarri Lane should be relocated outside the construction zone at the Applicant's expense connection and augmentation of the gas main alignment must be coordinated with Jemena
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Telstra

EIS	Telstra did not object to the proposal and confirmed any relocation of Telstra assets would require an application.
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5.3 Key issues – Council and community

5.3.1 Council key issues

Council made a submission to the Applicant's EIS, RtS and SRtS, as summarised in **Table 4**.

Table 4 | Council's submissions to the EIS, RtS and SRtS

Parramatta Council

EIS	<p>Council supports the proposal and provided the following comments:</p> <p><u>Heritage</u></p> <ul style="list-style-type: none"> undertake further design development to attempt to retain Willow Grove and St George's Terrace on the site or address the social and cultural impact of their removal retain the setting of Willow Grove garden through conservation of significant trees and interpretation of its historic landscape into the Civic Link public domain undertake further assessment of heritage, Aboriginal archaeology and the PSB the proposal should consider Aboriginal cultural significance of the site provide a robust Heritage Interpretation Strategy.
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	<p><u>Public domain and built form</u></p> <ul style="list-style-type: none"> • further resolve the interface of the building and foreshore public domain and provide a sensitive landscape solution along the river foreshore • resolve the termination of the Civic Link at the river, ensuring it: <ul style="list-style-type: none"> ◦ is a minimum 20 m wide and publicly and universally accessible ◦ facilitates cyclist, pedestrian, event, emergency vehicle and flood evacuation access ◦ provides for appropriately designed stairs and a legible connection to the foreshore • the central lawn adjacent to the river should accommodate the site levels and provide a safe, equitable, publicly accessible and programmable space on the river foreshore • provide further art and interpretation detail, including recognition of First Nations people • address the prominence of the substation and loading areas from Wilde Avenue • consider Council's Public Domain Requirements and Guidelines • the application should include detail of its linkages to the following public domain areas: <ul style="list-style-type: none"> ◦ future laneway at El Phoenician site (328 Church St) ◦ Barry Wilde Footbridge connection across the river ◦ access and right of way via 330 Church St (Meriton Site) ◦ pedestrian ramp from river foreshore up to Lennox Bridge. • tree and habitat removal should be considered in greater detail within a BDAR • public domain should maximise tree retention, Tree 2 located on the foreshore should be retained • remove the undercroft as it has inadequate ceiling height, poor natural light, is poorly integrated into the building design and landscaping, would not withstand flood events, has limited event capacity and may attract anti-social behaviour • provide further detail of the superstructure and how it interacts with the ground plane <p><u>Flooding</u></p> <ul style="list-style-type: none"> • following removal of the undercroft the river bank area should be redesigned to protect flood conveyance and occupant safety • the overland flow routes must be designed for conveyance and safety • the central area of the site must be raised / reformed so to not convey flood waters • show how the design and use of spaces have appropriately responded to flooding • address construction stage flooding impacts • provide detail on precinct wide water treatment, catchment and drainage <p><u>Other matters</u></p> <ul style="list-style-type: none"> • consider giving the museum a name that is more reflective of Parramatta and its history • clarify whether any land is dedicated to Council and any future maintenance obligations • provide further detail of construction noise impacts and mitigation measures • a Validation Report should be provided to confirm the remediation objections are met • update the ESD report to consider providing additional sustainability measures • provide details of a turnaround facility at George Khattar Lane • provide details of loading management and coach drop off on Phillip Street • update the Design Excellence Report to include the alternative proposals considered • confirm design changes have been considered as part of the design excellence process.
RtS	<p>Council reiterated its ongoing support for the proposal, noting it represents a significant investment in a new cultural institution for Parramatta. Council also confirmed it supports the location of the proposal on the site stating there is no appropriate alternative location within Parramatta.</p> <p>Council reviewed the RtS and confirmed the following matters raised in its EIS submission remain outstanding and should be addressed:</p> <p><u>Flooding and undercroft</u></p> <ul style="list-style-type: none"> • Council maintains its concern about the undercroft as a riverine flood solution as:

- the design includes only one evacuation route via a limited capacity lift
- there is the potential threat to critical building services during a flood event
- it is contrary to the Floodplain Development Manual and NSW Flood Policy
- 1% AEP floodwaters would flow with substantial velocity (2-3 m deep) and extend to the back wall of the structure
- replace the undercroft with a sloping riverbank section to manage floodwaters
- overland flow paths across the site should consider public useability, safety and risk

Public domain and built form

- the podium / undercroft design results in:
 - a sharp transition that disconnects the museum from the foreshore and open space
 - an inability to achieve a public, accessible and connected public open space that transitions to adjoining areas (as envisaged in the Parramatta City River Strategy)
 - difficulties in achieving universal access, legible and intuitive way finding
 - it being unlikely to conserve sensitive historic or Aboriginal archaeology on site
 - a departure from the original commitment / intent to deliver a free and accessible community space that is readily accessible with flexible uses
- the Civic Link should be no narrower than 20 m and open to the sky
- the termination of the Civic Link should be amended to replace the stairs with a gentle ramp to provide universal accessibility
- internal spaces and building footprints should include greater flexibility to enhance the cumulative benefit to the public domain and realise the aspirations for the civic spine

Other matters

- a turnaround facility at George Khattar Lane should be constructed as part of this project
- Council does not support the inclusion of car parking as part of this facility
- further consider the potential for additional bus parking to address anticipated numbers of daily visitors, in particular school groups and seniors.

SRtS	<p>Council considered the SRtS and reiterated its comments provided in response to the RtS. Council provided the following additional comments relating to heritage:</p> <ul style="list-style-type: none"> ● Council's preference is for Willow Grove to be retained. However, if this is not possible Council provides conditional support for its relocation rather than demolition ● Council should be consulted in relation to Willow Grove relocation methodology, site selection and impact on heritage significance ● Stage 1 of the heritage interpretation planning process is satisfactory. However, Council should be consulted in relation to the detailed strategy and its implementation. <p>Council recommended conditions relating to the relocation of Willow Grove and heritage interpretation.</p>
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5.4 Community key issues

A total of 1,680 public submissions were received (excluding duplicate submissions) in response to the public exhibitions of the EIS and RtS. Submissions comprised 1,621 objections, 24 comments and 35 in support as summarised at **Table 5**. The key issues raised in submissions are summarised in **Table 6**.

Table 5 | Summary of public submissions (excluding duplicates)

Submitter	EIS	RtS	Total	Position
Community	1,276	368	1,644	
	1,230	368	1,598	Object

	20	-	-	Comment
	26	-	-	Support
Special Interest Groups	27	9	36	
National Trust of Australia (NSW) Parramatta Branch	1	1	2	Object
National Trust (NSW)	1	1	2	
North Parramatta Residents' Action Group	1	1	2	
CFMEU	1	1	2	
Save the Powerhouse Campaign	1	1	2	
Dharug Strategic Management Group Ltd	1	1	2	
Australian Unity	1	1	2	
Ryde Community Alliance	1	-	1	
Bathurst Family History Group inc.	1	-	1	
Australian Museums and Galleries Association	1	-	1	
The Hunters Hill Trust	1	-	1	
The King's School Old Boys' Union	1	-	1	
Historic Houses Association of Australia	1	-	1	
The Social Canvas	1	-	1	
The Volunteers of Brislington House	-	1	1	
Powerhouse Museum Alliance	-	1	1	Comment
Mammoth Movers	1	-	1	
Parramatta Chamber of Commerce	1	-	1	
ParraParents	1	-	1	
Parramatta Female Factory Friends Inc	1	-	1	Support
Business NSW	1	-	1	
Western Sydney Business Chamber	1	-	1	
Western Sydney Business Connection	1	-	1	
Western Sydney University	1	-	1	
Museums and Galleries NSW	1	-	1	
Catholic Education Diocese of Parramatta	1	-	1	
FORM Dance Projects	1	-	1	
Dyldam Developments	1	-	1	
Evolve Housing	1	-	1	
TOTAL	1,303	377	1,680	

Table 6 | Public submissions raised in response to the exhibitions of the EIS and the RtS

Issue	Proportion of total EIS (1,303) submissions	Proportion of total RtS (377) submissions
Issues raised in response to both the EIS and the RtS exhibitions		
Adverse heritage impact / impact on Willow Grove	85.6%	91.5
Powerhouse should be retained in Ultimo	27.5%	1.9%
Flooding impacts	17.4%	5.8%
Inadequate business case for the proposal	15.5%	2.7%
An alternative site should be found	16.6%	11%
Inadequate exhibition display / storage space	14%	1.1%
Inappropriate design and adverse visual impact	6.1%	6.9%
Application includes inadequate information	4.4%	<1%
Car parking impacts	3.2%	<1%
Adverse impact on local character	2.3%	<1%
Public domain impacts	2.1%	1.3%
Loss of existing trees	2%	<1%
Adverse bulk and scale of development	1.7%	<1%
Traffic and pedestrian impacts	<1%	<1%
Construction impacts	<1%	<1%
Issues raised just in response to the RtS exhibition		
Objection to Willow Grove relocation and methodology	-	93.4%
Willow Grove should be incorporated into the design	-	6.5%
Adverse impact on St George's Terrace	-	5.2%
Impact on aboriginal archaeology	-	<1%
Issues raised just in response to the EIS exhibition		
Inadequate public consultation	3.8%	-
Adverse impact from use/operation of loading dock	1.2%	
Noise impacts	<1%	

5.5 Applicant's responses to submissions

Following the exhibition of the EIS, the Department placed copies of all submissions received on its website and requested the Applicant to provide a response to the issues raised.

On 8 October 2020, the Applicant provided its RtS, which included additional information and justification in response to the issues raised during the public exhibition of the proposal. The RtS also includes the following key amendments to the proposal (**Figure 16**):

- reduce total GFA by 3,151 m² (from 27,667 m² to 24,516 m²)
- reduce FSR by 0.25:1 (from 1.5:1 to 1.25:1)
- increase open space by 1,450 m² (from 13,550 to 15,000 m²)
- dismantle and relocate Willow Grove rather than demolish the building
- increase eastern building setback from Phillip Street by 4.6 m (from 8.6 m to 13.2 m), facilitating:
 - an enlarged Phillip Street urban plaza / landscaped forecourt area
 - retention and adaptive reuse of the St George's Terrace buildings
- increase Western Building setback from Parramatta river by 6.2 m (from 22.1 m to 28.3 m) and associated increase in the River Lawn foreshore public open space
- reduce Western Building setback from 32 Phillip Street by 1.15 m (from 10.4 m to 9.25 m)
- reduce the height of the Eastern Building by 1 m (from RL 61.8 m to RL 60.8 m)
- amendment of the undercroft and foreshore design including:
 - provision of a sloped embankment closing off the northern elevation of the eastern portion of the undercroft
 - installation of screens to the eastern and western elevations of the undercroft to prevent unmanaged access
- redesign of the northern extent of Dirrabarri Lane including width and level changes
- amend the Civic Link, including revised public stair design, removal of the standalone public lift (adjacent to the Western Building) and provision of public lift within the Eastern Building
- retain an existing Willow Grove tree within the Civic Link
- reduce coach pick-up/drop-off bays by one space (from three to two spaces)
- include seven pick-up/drop-off bays and a vehicle turnaround facility at George Khattar Lane
- changes to the building facades, operable doors and exoskeleton
- reduce the number of serviced apartments by 10 apartments (from 40 to 30 apartments)
- introduce a photovoltaic (PV) panel zone to available roof space
- redesign, reconfigure and amend internal layouts

On 2 and 30 November 2020 and 19, 20 and 29 January 2021, the Applicant submitted documentation which together comprises its SRtS. The SRtS provides a response to issues raised in submissions on the RtS and to the Department's requests for additional information regarding design integrity, St George's Terrace, flooding and other minor matters (**Appendix A**). The SRtS provides additional information and clarification in response to the issues raised. The SRtS did not include any substantive changes to the proposal and includes updated plans and mitigation measures relating to the retention of St George's Terrace and flood mitigation.

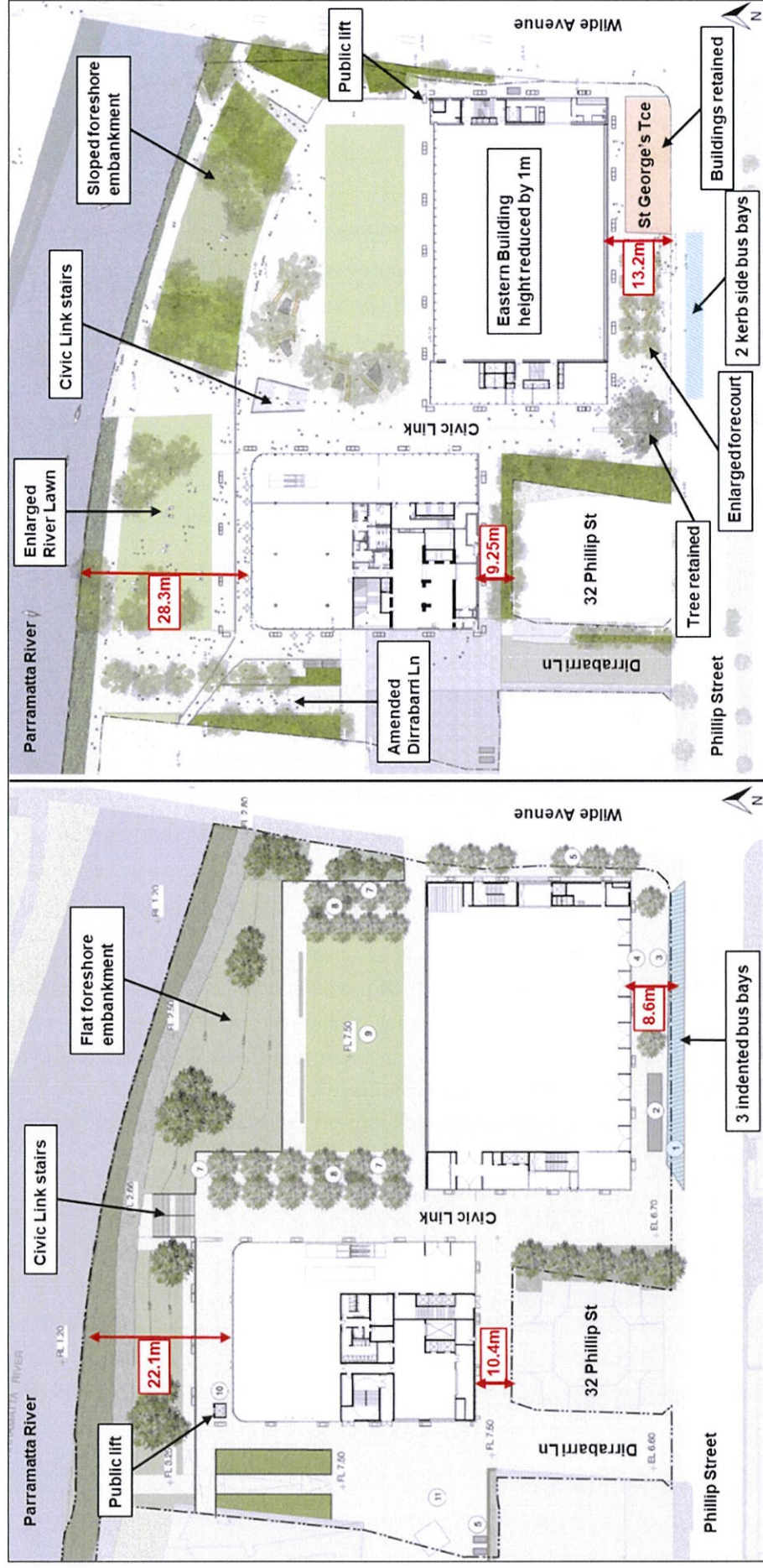


Figure 16 | The EIS (left) and amended RtS (right) site layout and key features (Base source: Applicants EIS and RtS)

6 Assessment

6.1 Key assessment issues

The Department has considered the Applicant's EIS, RtS and SRtS and the issues raised in submissions in its assessment of the proposal. The Department considers the key assessment issues associated with the proposal are:

- design excellence
- built form
- heritage
- flooding
- tree removal, landscaping and public domain
- traffic and parking.

A summary of the assessment and conclusion on each of these issues is set out in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 6.8**.

6.2 Design excellence

Clause 7.10 of the PLEP provides for the delivery of design excellence for development on land within the Parramatta City Centre. In particular it:

- has the objective of delivering the highest standard of architectural, urban and landscape design (clause 7.10(1)).
- prohibits the granting of development consent unless in the consent authority's opinion, the proposed development exhibits design excellence (clause. 7.10(3))
- sets out considerations that the consent authority must have regard to when forming the view of whether a development exhibits design excellence (clause 7.10(4))
- requires a competitive design process be undertaken for development which meets certain criteria including buildings taller than 55 m, and developments on sites greater than 1,000 m² and with a CIV greater than \$100 million (clause 7.10(5)).

The proposal is located within the Parramatta City Centre, both the Eastern and Western Buildings are taller than 55 m, the site is greater than 1,000 m² and the development has a CIV greater than \$100 million. Therefore, the provisions of clause 7.10(5) apply to the proposal and a design competition is required.

The Application includes a Design Excellence Strategy (DES) which confirms a staged design competition was undertaken in accordance with the PLEP design excellence provisions. The competition included:

- the preparation of a DES competition brief endorsed by the Government Architect NSW (GANSW) and the establishment of a Competition Jury including seven members
- expressions of interests in January 2019, resulting in six architectural teams being shortlisted
- the six shortlisted teams undertook an intensive design process to each prepare a concept design that responded to the detailed functional and urban design requirements of the brief

- the Competition Jury met in November 2019 to review the concept designs and in December 2019 Moreau Kusunoki (France) and Genten (Australia) was confirmed the competition winner (**Figure 17**).

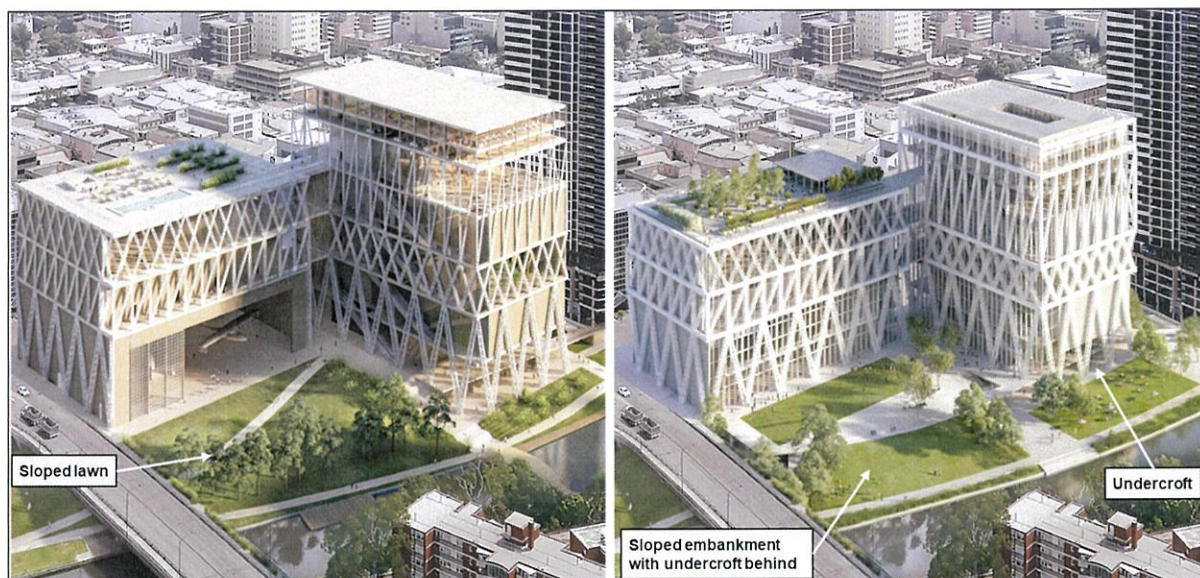


Figure 17 | Competition winning design (left) and proposed development (right) (Source: Applicants RtS)

In accordance with the DES, a Design Integrity Panel (DIP) has been appointed to ensure the integrity of the winning entry is maintained throughout all stages of the proposal from the development application to construction stages. The DIP comprises members of the Competition Jury which are tasked with reviewing the project at key milestones and providing independent expert and impartial advice.

The DIP reviewed the proposal prior to lodgement of the Application and in response to the RtS amendments. The DIP confirmed in all instances that the proposal remained consistent with the design intent of the competition winning design and maintains design integrity. In particular, the DIP considered:

- the proposal has evolved to better balance the competing requirements of flooding, architectural design and creation of usable open space areas, particularly at the Civic Link level
- the undercroft creates usable internal museum spaces and maximises public realm above the 1 in 100 year flood planning level. Alternatives to the undercroft were considered to adversely interrupt the levels adjacent to the river and cohesiveness of the public domain
- the reduction in building footprints and height maintains the overall proportions of the design and retains key elements such as the exo-skeleton and façade composition.

The GANSW considers the DIP will ensure the design excellence awarded through the competition process is maintained through the design development.

The Department has had regard to the matters set out in clause 7.10(4) in considering whether the proposal exhibits design excellence as set out in detail at **Appendix B**, and concludes the proposal meets the objectives of Clause 7.10 as it achieves the highest standard of architectural, urban and landscape design, having also considered the specific site constraints and project complexities.

Subject to the implementation of the DES, including the ongoing involvement of the DIP, the Department is satisfied the development will achieve design excellence and maintain design integrity.

The Department also recommends a condition requiring the DIP be maintained throughout the design development and construction of the proposal to review and provide independent oversight of the project design at key milestones. In addition, the Department recommends the DIP review and provide advice on post approval requirements including design amendments to integrate the eastern building and St Georges Terrace (**Section 6.3.2**), screening of the undercroft (**Section 6.4**) and the detailed design of the public domain and landscaping (**Section 6.5**).

6.3 Built form

The proposal seeks approval for the construction of two buildings located above an undercroft. The two buildings would provide spaces for exhibitions and events, dormitories, serviced apartments and retail floorspace, as summarised at **Section 2**.

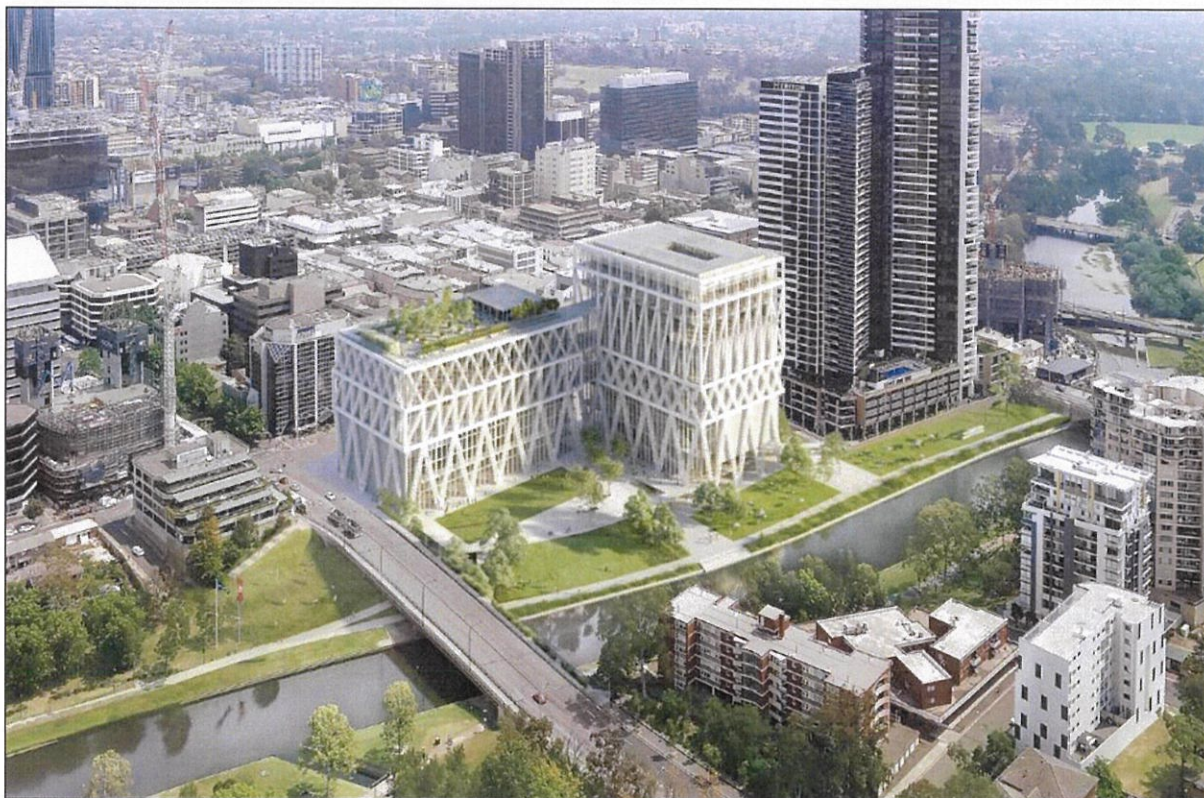


Figure 18 | Elevated perspective looking south-west across Parramatta River towards the development (Base source: Applicants RtS)

The Department considers the key assessment issues to be building height, bulk and scale, design and materials. These matters are considered in the following sections.

6.3.1 Building height, bulk and scale

The proposed maximum building heights are:

- Eastern Building: RL 60.8 m (approximately 57.3 m above ground)
- Western Building: RL 79.2 m (approximately 75.7 m above ground).

Concern was raised in public submissions about the bulk and scale of the development. The GANSW acknowledged the purpose of the development is to enable large gatherings and very large-scale exhibitions.

The Applicant considers the proposed building height and mass appropriately responds to the public, cultural and social importance of Powerhouse Parramatta as well as key aspects and constraints of the site.

The Application also includes a View and Visual Impact assessment (VVIA), which provides perspectives of the proposed development when viewed from key public vantage points around and nearby the site. The VVIA contends the scale of the buildings are appropriate within their context and overall have low to moderate visual impacts.

The Department notes the existing character of the northern part of the Parramatta CBD is diverse, with a broad mix of low, medium and high-rise buildings within the immediate context of the site. In addition, Parramatta CBD is undergoing a period of urban renewal, which has, and will, result in changes and an uplift in the scale of development. In particular, the Department notes Council's draft Parramatta CBD Planning Proposal seeks to enable a significantly greater intensity and scale of development with the CBD, including tall tower developments.

The Department considers the perception of visual bulk and scale of the proposed buildings is attributed to the length of the elevations relative to their maximum height. This is particularly the case for the Eastern Building, due to its larger footprint and lower height. The Department notes the VVIA identifies the longest elevations of the buildings would be visible from close and distance views around the site, including Phillip Street, Horwood Place (**Figure 12** and **Figure 13**), Wilde Avenue and Lennox Bridges and from the northern bank of the river (**Figure 19** to **Figure 21**).

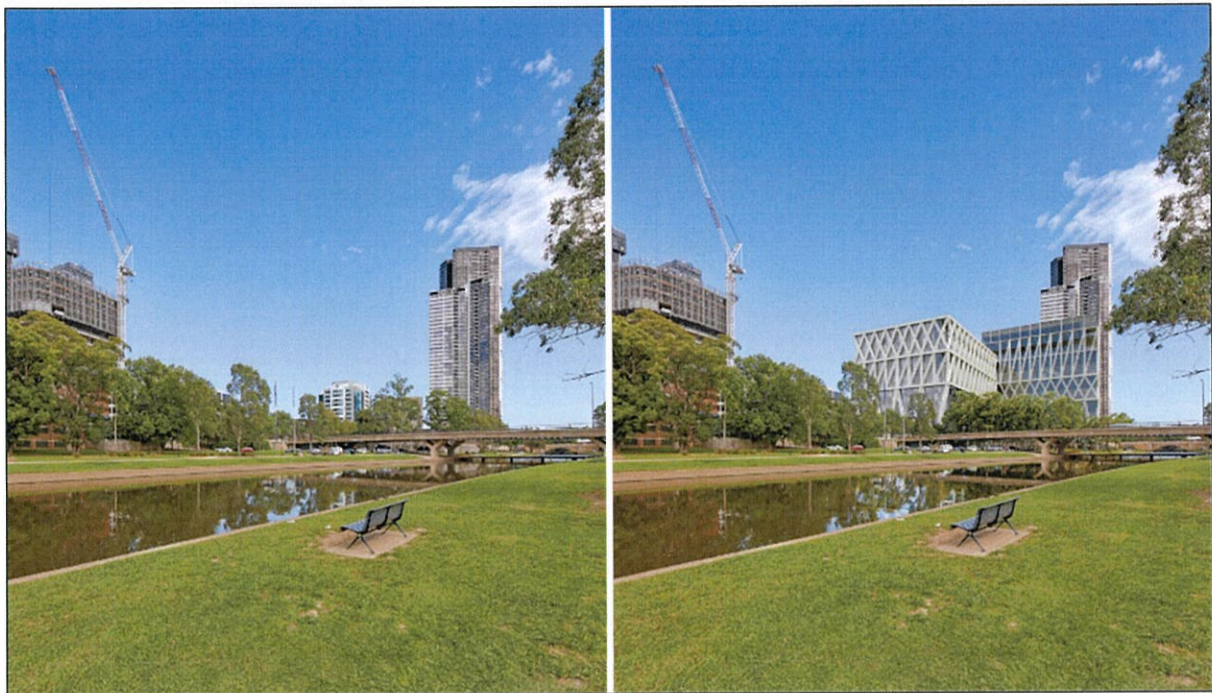


Figure 19 | Existing (left) and proposed (right) view west along the Parramatta River towards the site (Base source: Applicants EIS)



Figure 20 | Existing (left) and proposed (right) view south along Wilde Avenue bridge (Base source: Applicants EIS)

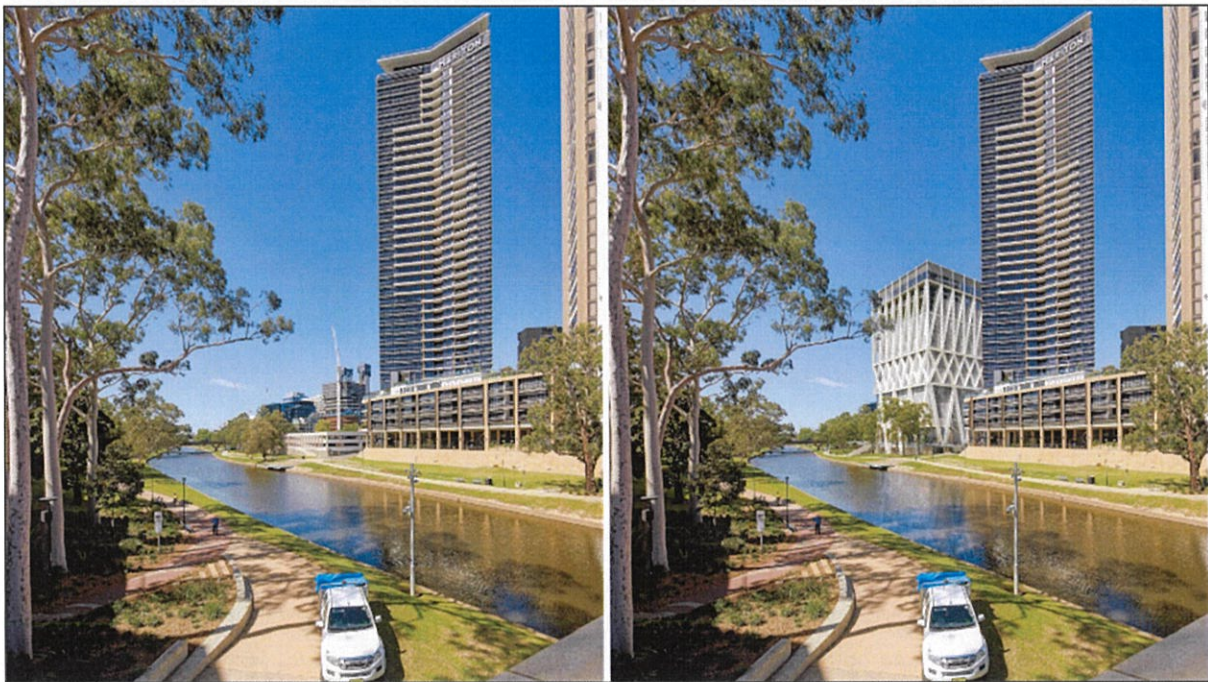


Figure 21 | Existing (left) and proposed (right) east from Lennox bridge along the Parramatta River towards the site (Base source: Applicants EIS)

The Department acknowledges the scale of the proposed buildings differ from the surrounding built form. In particular, the building footprints are larger, the building heights are lower, and the elevation lengths are longer than other (existing and envisaged) more slender tower developments within the CBD.

Notwithstanding, the Department considers the height, bulk and scale of the development is appropriate for the site, as:

- it fully complies with the PLEP maximum building height (80 m) and FSR (6:1) controls for the site, with:
 - the Western Building (75.3 m) being 5 m or 6% less than the maximum height control
 - the Eastern Building (57.3 m) being 22 m or 28% less than the maximum height control
 - the development (FSR 1.25:1) being 4.75:1 or 79% less than the maximum permissible FSR.
- the building heights step down from the towers at 330 Church Street to the lower-scale buildings on the opposite side of Wilde Avenue, providing an appropriate height transition along the river edge and ensuring the buildings relate appropriately to existing neighbouring developments
- the proposed floorspace has been accommodated within two buildings, which has divided the bulk and scale of the development into two unequal parts that frame public open spaces and reduce the perception of scale
- it reinforces the unique public / civic nature of the development and sets the development apart from other commercial and residential developments
- the proposal would contribute positively to the Parramatta CBD skyline by providing for a world class cultural facility with an unique architectural design that has landmark qualities (**Section 6.3.2**)
- the southern façade of the Eastern Building has been setback 13.2 m from Phillip Street to provide for an urban plaza and retain St George's Terrace. In addition, the development has an acceptable built form relationship with St George's Terrace as discussed at **Section 6.4.2**
- the development does not obstruct any identified view corridors within the Parramatta Development Control Plan 2011 (PDCP).

The Department's assessment therefore concludes the proposal is acceptable as it fully complies with the PLEP height and FSR controls for the site. Further, the bulk and scale of the development has been appropriately modulated, through the provision of two buildings that are stepped in height, providing an appropriate built form relationship to the Parramatta River and neighbouring buildings.

6.3.2 Building design and materials

The design and appearance of the Eastern and Western Buildings is highly articulated and defined by an exposed structural steel latticework, which wraps around the façade of each building (**Figure 22**).

The lattice is the main architectural design feature of the buildings and is varied in its design from level to level. There is a strong vertical emphasis to the lattice which elongates each building and reduces the perception of horizontal scale. The lattice allows views through to the solid facades of the buildings beneath, which comprise clear glass and solid cement walls enclosing presentation / exhibition spaces. The proposed materials (glazing, cement and steel) and are in white and grey tones.

Concern was raised in public submissions the architectural design of the buildings is inappropriate and not in keeping with the surrounding area and the riverfront. Council initially raised concern about how the steel latticework met the ground and the potential need for balustrades/bollards to protect pedestrians. Council did not provide comment on the buildings' architectural design or the palette of materials. The DIP has confirmed the design of the building is consistent with the intent of the competition winning design.

The GANSW supports the simplicity and boldness of the design response and the variation of the scale of the external form and structural exoskeleton but noted the eastern elevation of the Eastern Building presents a solid elevation to Wilde Avenue.

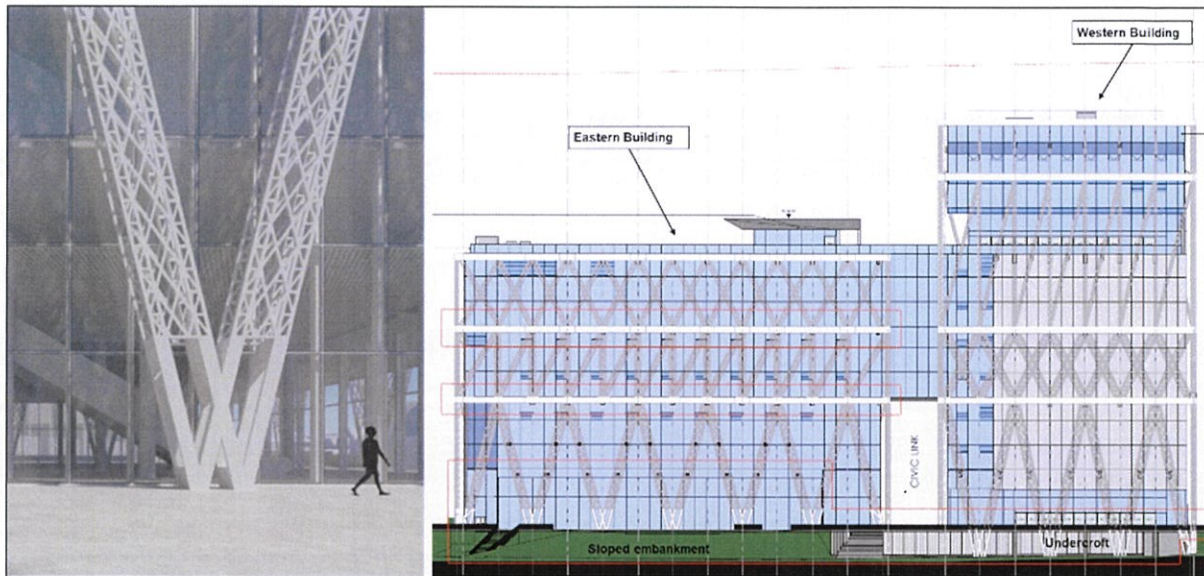


Figure 22 | The external exposed structural lattice (left) and the northern elevation architectural composition (right) (Base source: Applicants RtS)

In response to Council's comments, the Applicant amended the design of the steel latticework. The proposal now includes solid fabricated steel sections 4 m above the ground to prevent the opportunity for climbing and improving the interface with pedestrians.

The Applicant has stated that it is not possible to provide a permeable Wilde Avenue elevation due to operational requirements and the design is consistent with the Competition winning design which has been endorsed by the DIP.

The Department considers the proposal presents a unique and interesting design that would create a landmark public building within the heart of Parramatta. In addition:

- the architectural design approach is highly cohesive and the overall design and appearance of both buildings is elegant and visually interesting
- the exposed structural latticework (which is the defining element of the buildings' appearance) ensures the elevations are highly articulated and the variation in the design at each level adds further complexity and interest to the facades' appearance
- the design of the development appropriately projects a civic aesthetic, which identifies the use of the site as a cultural / educational institution and sets it apart from other commercial and residential developments within the vicinity
- the buildings have been designed to connect with the surrounding open spaces and public domain, particularly by opening out onto and framing the Presentation Space 1 open space and the Civic Link
- materials and architectural treatments appropriately unify the buildings and are appropriate. The grey and white colour palette will contribute to the identity and striking nature of the design
- although the eastern elevation of the Eastern Building is not permeable, the significant architectural expression of the exoskeleton creates visual interest within the urban landscape

- the building is considered to achieve design excellence as discussed in **Section 6.3.1**.

The Department has considered the design of the building and is satisfied the proposal would make a positive contribution to the Philip Street and Wilde Avenue streetscapes and views towards the site from surrounding streets and across the Parramatta River.

The Department's assessment therefore concludes the proposed development has been appropriately designed to respond positively to the site and its context, creating a landmark building on the banks of the Parramatta River.

6.4 Heritage

The site contains two locally listed heritage items under the PLEP, being Willow Grove and St George's Terrace as summarised at **Section 1.3.2** and shown at **Figure 4**. The site also adjoins Lennox Bridge, which is a heritage item on the SHR.

The proposal initially sought to demolish Willow Grove and St Georges Terrace to facilitate the construction of the development. However, in response to significant public concerns, the Applicant now proposes to dismantle and relocate Willow Grove to an alternative site within Parramatta LGA and retain St George's Terrace (with alteration and demolition of modern rear extensions and additions).

The application, as amended by the RtS and SRtS, is supported by a Statement of Heritage Impact (SoHI). The SoHI has considered the historic significance of the site, the buildings within it, the adjoining Lennox Bridge and the impacts of the proposed development.

Public submissions raised concern about the heritage impacts of the proposal, particularly its impact on Willow Grove and its setting. Concern was also raised about the proposed relocation of Willow Grove including its disassembly, reconstruction and the proposed site selection methodology.

The Department has considered the heritage impacts of the proposal in the following sections.

6.4.1 Willow Grove

Willow Grove is a local heritage item (**Figure 4**) located centrally within the site. The building was constructed in the 1870s and was used as a private dwelling until 1919. Subsequently the building has been used as a maternity hospital and nursing facility, telecommunications workshop and for a restaurant and offices (**Figure 23**).

The listing for Willow Grove (summarised at **Section 1.3.2**) states that although it is not rare within the overall LGA, it is of significance as it strongly contributes to the streetscape and is representative of its type, style and date of construction as a Victorian Italianate two-storey villa.

The Applicant's SoHI considered the heritage significance of Willow Grove and, in addition to the listing (above), states Willow Grove is readily identifiable as part of historic building stock and contributes to the streetscape despite its large setback. In addition, Willow Grove is rare example of one of the earliest notable Victorian style houses specifically located within the Parramatta CBD. The front fence along Phillip Street and the established landscaping including mature trees contribute to the heritage significance of the item (**Figure 24**).

The proposal seeks to dismantle and relocate Willow Grove to an alternative site. The Applicant proposes to develop a framework and program for:

- the detailed dismantling and relocation of Willow Grove prior to commencement of works
- site selection (in consultation with key stakeholders) and adaptive re-use of the relocated Willow Grove prior to occupation of the museum.



Figure 23 | View to Willow Grove from Phillip Street (left) and an example of internal fabric (right) (Source: Applicants EIS)

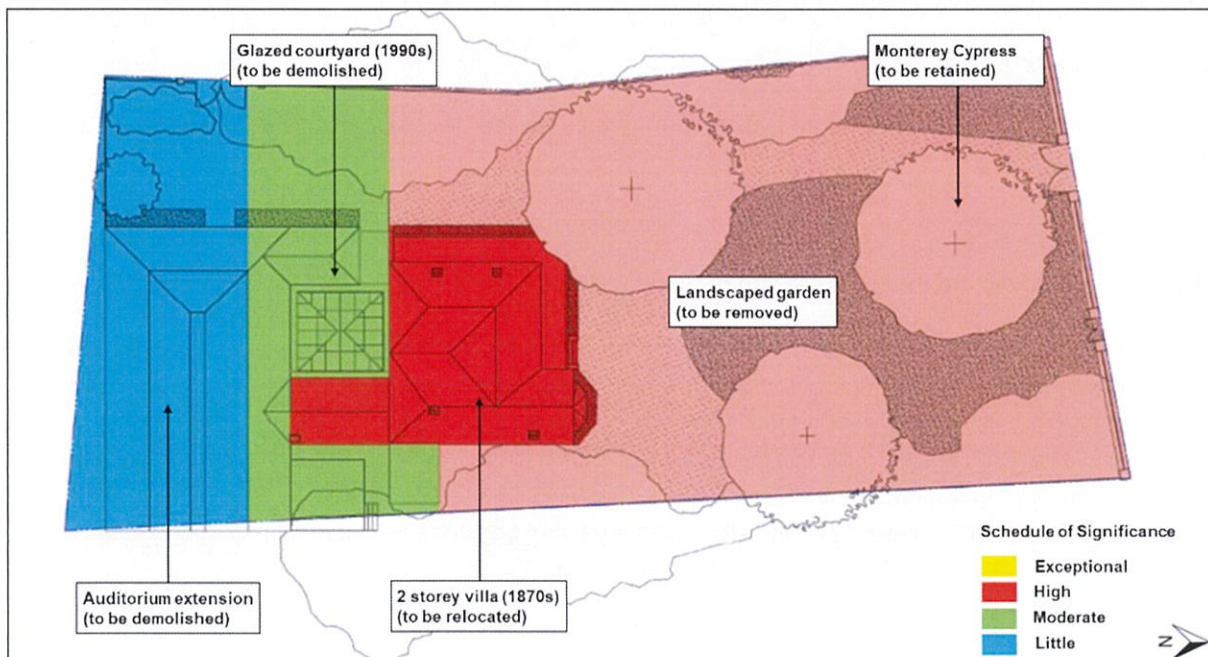


Figure 24 | Schedule of significant elements of the Willow Grove heritage item (Base source: Applicants EIS)

Council requested that every endeavour be made to retain Willow Grove. However, should it be demonstrated that there is no alternative other than complete demolition, it provided conditional support for its relocation. Council advised that further consideration would be required of the method of relocation, future location and the impact of the heritage significance of Willow Grove.

Objections were raised by the National Trust, other special interest groups and over 85% of EIS public submissions about heritage impacts of the proposal. 93.5% of RtS submissions objected to the relocation of Willow Grove, key concerns include:

- the application does not include an options analysis
- the development should be amended to retain and incorporate Willow Grove
- adverse heritage impact due to relocation to a new site and dislocation from its landscape and river-side setting
- loss of heritage significance and fabric due to dismantling and reconstructing the building.

Heritage NSW did not comment on the relocation of Willow Grove, noting it is a local heritage item managed under the PLEP controls.

The GANSW recommended the Applicant provide a spatial analysis around the potential retention of Willow Grove to allow for a better understanding of the chosen design approach and impacts of alternative approaches.

In response to the concerns raised, the Applicant stated that the design of the proposal has been informed by the opportunities and constraints of the site, the physical requirements of the development and a best-practice design excellence process. The cumulation of these factors has meant there is no potential to retain Willow Grove on the site and meet the objectives of the development to create a world class museum of an appropriate size for its purpose, as well as open space, public domain and the northern termination of Civic Link. The Applicant also provided additional information on the alternative options considered to justify the relocation of Willow Grove.

Options Analysis

The Applicant's Options Analysis considers four options for the development / site as summarised in **Table 7** below:

Table 7 | The Applicant's Options Analysis for the development / site

Option 1 – Maintain the Site as is (i.e. 'do nothing' scenario)

The Applicant considers Option 1 is a missed opportunity and is not supported as:

- it is inconsistent with strategic policy and does not realise the strategic need for the proposal to provide a world class cultural facility in Parramatta / Western Sydney
- it would have a negative impact on the ongoing operation of the Powerhouse, which is struggling to meet its obligations to display, conserve, maintain, secure and manage its collections
- it would not result in new jobs for the area and other public benefits associated with the redevelopment.

Option 2 – Develop an Alternative Site

The Applicant considers there is not a suitable alternative site for the development as:

- the site is uniquely positioned at a central point of the CBD's interface with the Parramatta River, ensuring the development acts as a focal point for community interaction and culture in a landmark position

- the site would allow the proposal to positively contribute to the growth of the cultural precinct in Parramatta, complementing the existing civic uses already cluster by the river, including Western Sydney Stadium, Riverside and Roxy Theatres
- the site has excellent access to existing and planned public transport, services and enhanced pedestrian access via the Civic Link through Parramatta
- the Government announced its decision to purchase the site for the museum in April 2016 following a detailed site selection assessment. The assessment was based on a range of criteria including size, existing conditions, location and opportunities to deliver expanded benefits in conjunction with other civic projects.

Option 3 – Retention of Willow Grove and St George’s Terrace within the Development

While the proposal has been amended to include retention of St George’s Terrace, the Applicant considers the retention of Willow Grove within the development is not possible without significant adverse impacts on the vital positive aspects of the proposal, specifically:

- the achievement of sufficiently sized floorplate to achieve the functional objectives of the Powerhouse
- the delivery of a linear, uninterrupted and sufficiently sized Civic Link connection through the site to connect the CBD with the river foreshore
- the provision of an entry plaza on Phillip Street that supports arrivals and departures from the CBD
- the development of buildings that comply with the relevant flood planning requirements and provide ground floors that can withstand riverine flood events and overland flow flood events
- the delivery of significant areas of open space and public domain in accordance with Council’s vision for a new riverside park at the termination of the Civic Link.

In addition, the cumulation of the following site conditions and constraints has influenced the footprints and scale of the development on the site and the retention of Willow Grove is not compatible in this context:

- a carriageway easement exists over the site’s western boundary shared with 330 Church Street
- due to the RE1 Public Recreation land-use zoning and flooding restrictions, it is not possible to relocate the proposed buildings further north, closer to the river
- noting the significant fall in land across the site, existing levels have been used wherever possible
- the retention and incorporation of St George’s Terrace into the development

Option 4 – the Proposal

The Options Analysis concludes the Powerhouse Parramatta proposal is the best possible option as:

- Options 1, 2 and 3 have been shown to be inappropriate
- the development is the result of a design competition and review process, the proposal achieves design excellence and the creation of a landmark building
- the development creates a range of spaces of a scale and with functional parameters that enable the exhibition of the Powerhouse collection and a flexible program
- the development includes the following key public benefits:
 - creation of a world class cultural institution within Western Sydney, providing significant opportunities for participation in the arts and contributing to urban amenity, liveability and tourism within Parramatta
 - establish a use that activates the site and surrounds day and night and diversification of the local night-time economy
 - creation of approximately 15,000 m² new public open space and the Civic Link
 - retention and reuse of St George’s Terrace, a locally listed heritage item
 - significant job creation both during construction and ongoing operational jobs.

Relocation of Willow Grove

The SoHI considered two options for the relocation of Willow Grove:

- **intact relocation:** involving the intact removal, transportation and relocation of the building in whole-building sections by specialist contractors
- **deconstruct and rebuild:** involving recording, dismantling, transporting, relocating and then reassembling the building using specialist contractors.

The SoHI concluded, on advice it received from construction experts, that partial or full intact relocation would not be possible given the age of the building and its solid masonry and brick construction. In addition, the SoHI cites two previous examples for the relocation of local heritage items including the Moore's Bond Store, Walsh Bay and Former Skating Rink, Ashfield. As such, the option to deconstruct and rebuild Willow Grove was chosen.

The SoHI stated the potential relocation site must minimise the loss and damage of heritage fabric and significance, locate the building in an appropriate setting and provide for an appropriate use / adaptive re-use. Such a location could be within the Parramatta LGA.

The SoHI concludes the relocation of Willow Grove could maintain the conservation values of the heritage item and fulfil the heritage criteria for local listing subject to the preparation and implementation following management and mitigation measures:

- prepare a detailed feasibility and heritage assessment (FHA) for the deconstruction and rebuild of Willow Grove
- consultation with key stakeholders and the local community regarding relocation site and adaptive reuse for Willow Grove
- adaptive reuse of Willow Grove in accordance with the requirements of the Burra Charter
- preparation of a Conservation Management Plan (CMP) relating to the care and maintenance
- contents, fixtures and objects at Willow Grove (moveable heritage) form part of the methodology for relocation
- archival recording of Willow Grove be undertaken, prior to and during relocation and capturing the dismantling and reassembly of the building on its relocated site.

Department's Assessment

The Department has carefully considered the advice provided by Council, community opposition to both the demolition and relocation of Willow Grove and the Applicant's response. After careful consideration of the site and the proposal, the Department is satisfied that the Applicant has demonstrated that Willow Grove cannot be retained on site as:

- the retention of Willow Grove in its current location (**Figure 25**) would significantly compromise the proposed development of the site and the delivery of public benefits, noting it:
 - would require a significant reduction in the size and amendments to the layout of the Eastern and Western Buildings, which would compromise the design integrity of the buildings and usability/functionality of exhibition spaces intended to draw large crowds and host exhibitions of large scale
 - would likely require a generous setback around Willow Grove to establish an appropriate setting, which would further impact on the development of proposed buildings and spaces

- is not possible to relocate the Western or Eastern Buildings in alternative locations on the site without compromising the provision of open spaces, flood mitigation measures, the retention of St George's Terrace or existing access easements
- would prevent the realisation of the Civic Link connecting the CBD to Parramatta River foreshore
- the site is an appropriate site for the proposed development as it provides for a landmark cultural facility at the termination of the Civic Link, within an emerging cultural precinct along Parramatta River with excellent access to existing and future public transport links. The Department also notes Council's comments that there is no other appropriate alternative location for the development within Parramatta
- the proposed development was the subject of an international design competition and the final design was selected by an independent Design Competition Jury and endorsed by the DIP. The Department has concluded the proposal achieves design excellence (**Section 6.2**) and the proposal results in significant public benefits including the creation of a cultural facility, 15,000 m² of new public domain and open space including the northern portion of Civic Link within the site and retention and re-use of St George's Terrace.

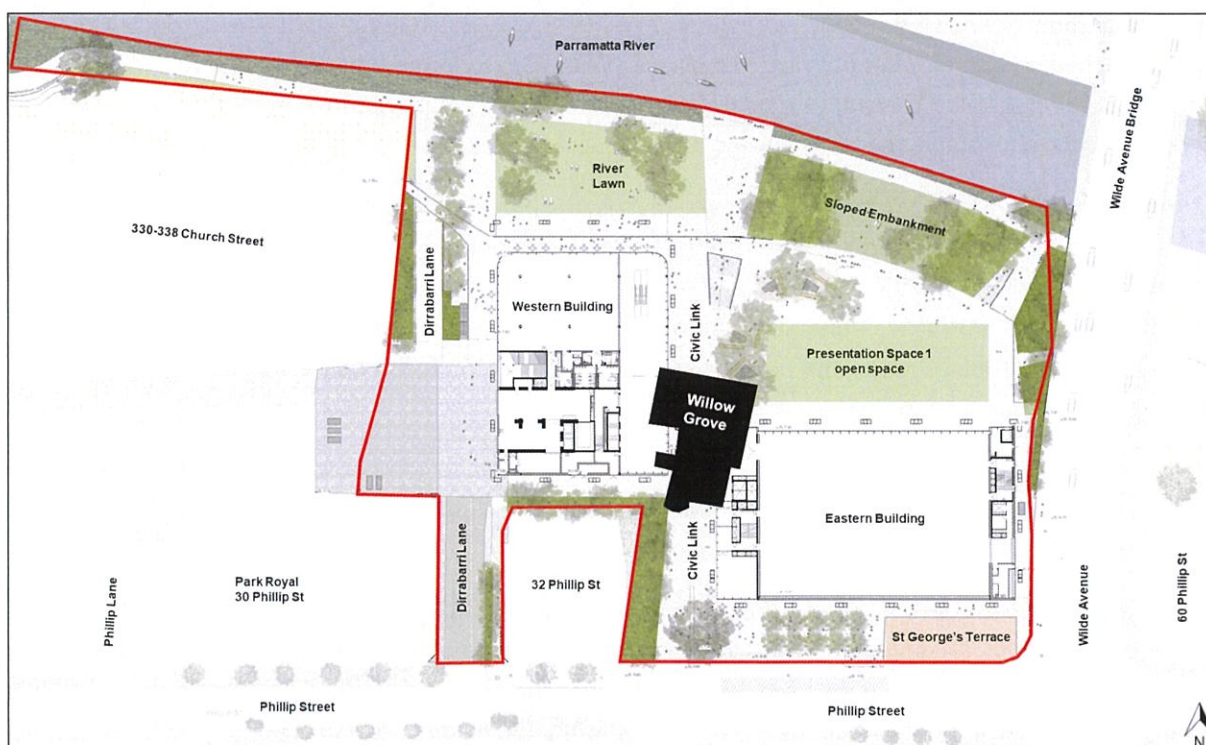


Figure 25 | Location of Willow Grove in relation to the Western and Eastern Buildings, Civic Link, surrounding spaces and existing buildings (Source: Applicant's RtS)

The Department acknowledges the demolition of Willow Grove, as originally proposed, would have adverse and irreversible heritage impacts. However, the Department considers the relocation of Willow Grove and the front fence is preferable to demolition and on balance is acceptable given the significance of the site and public benefits the proposal would deliver for Parramatta and Western Sydney. The Department therefore considers that the Applicant's proposal to dismantle and relocate Willow Grove to an alternate site is appropriate as:

- it will preserve the heritage fabric and significance of the building, subject to a detailed methodology for deconstruction and relocation, in consultation with key stakeholders and the community
- the careful selection of a new site, in consultation with Council and key stakeholders, that either has similar characteristics to the current site, or is complementary, provides an opportunity to preserve the character of the building and establish an appropriate new setting
- it will allow for Willow Grove to be adaptively re-used and increase public accessibility to the building, which is a desirable outcome in the consideration of heritage preservation
- it will be subject to a CMP to maintain and preserve the building
- the Applicant has committed to prepare and implement a Heritage Interpretation Strategy (HIS) for the site, which would include consideration of Willow Grove, its archaeology and the history of the site overall (**Section 6.8**).

The Department accepts that the proposed relocation of Willow Grove is necessary in view of the above and in the context of the significant economic, social and cultural benefits the proposal would provide for the community, Parramatta and Western Sydney.

The Department acknowledges the relocation of Willow Grove would separate the heritage item from its original setting and that the physical location of Willow Grove forms part of its history.

Notwithstanding this, the Department considers the relocation of Willow Grove from its original setting is, on-balance, acceptable as:

- the only alternative to relocating Willow Grove is its complete demolition. In this context, the heritage impact of separating it from its setting is outweighed by ensuring its survival on an alternative site within the Parramatta LGA
- the relocation of Willow Grove and the front fence presents an opportunity to provide for a new, sympathetic setting, noting the existing setting of Willow Grove has been significantly and negatively impacted in modern times, by:
 - the expansive Riverbank Car Park, which has severed its connection to the river
 - the erection of tall buildings in close proximity to the item
 - use of surrounding land for surface car parking

The Department considers, subject to conditions requiring the implementation of the Applicant's proposed mitigation measures, Willow Grove and the front fence can be dismantled and reassembled on a new site without having a significant impact on its heritage significance. To further safeguard the heritage item, the Department recommends the following additional conditions:

- the preparation of a Relocation Framework and Methodology Plan (RFMP), in consultation with Council, NSW Heritage, the local community and other key stakeholders, including:
 - a detailed site selection assessment to establish the new setting for Willow Grove
 - the methodology for the dismantling and relocation of Willow Grove and its front fence to Phillip Street
 - consideration of heritage impacts
 - relocation program and timeframe for reconstruction
 - future use of the building

- prior to the commencement of any dismantling and relocation works the Applicant shall undertake photographic archival recording of the building, fence and its context
- all works must occur under the supervision of heritage specialists in accordance with the approved RFMP
- preparation and implementation of a HIS as discussed at **Section 6.8**.

In conclusion, the Department appreciates the views expressed in public submissions about the relocation of Willow Grove and has considered the likely heritage impacts associated with the proposal.

The Department acknowledges that the relocation of Willow Grove from its current setting would result in heritage impacts. However, the Department considers preserving Willow Grove is more important than protecting its original setting as it has been compromised by surrounding development. Further, the Department accepts that if Willow Grove was to be retained on the site it would compromise the proposal and its intended function. The Department is also satisfied that a robust RFMP can be prepared to avoid and minimise impacts to the building during relocation.

The Department accepts that the proposed relocation of Willow Grove is necessary in view of the above and in the context of the significant public benefit the proposal would provide for the community. The Department's assessment therefore concludes the relocation is on-balance acceptable subject to conditions.

6.4.2 St George's Terrace

St George's Terrace is a highly modified locally listed heritage item. Due to the substantial alterations / additions relating to its previous conversion from dwellings to commercial use, the front facade and its architectural detailing are the only key features of the buildings that retain heritage significance (**Figure 26**).

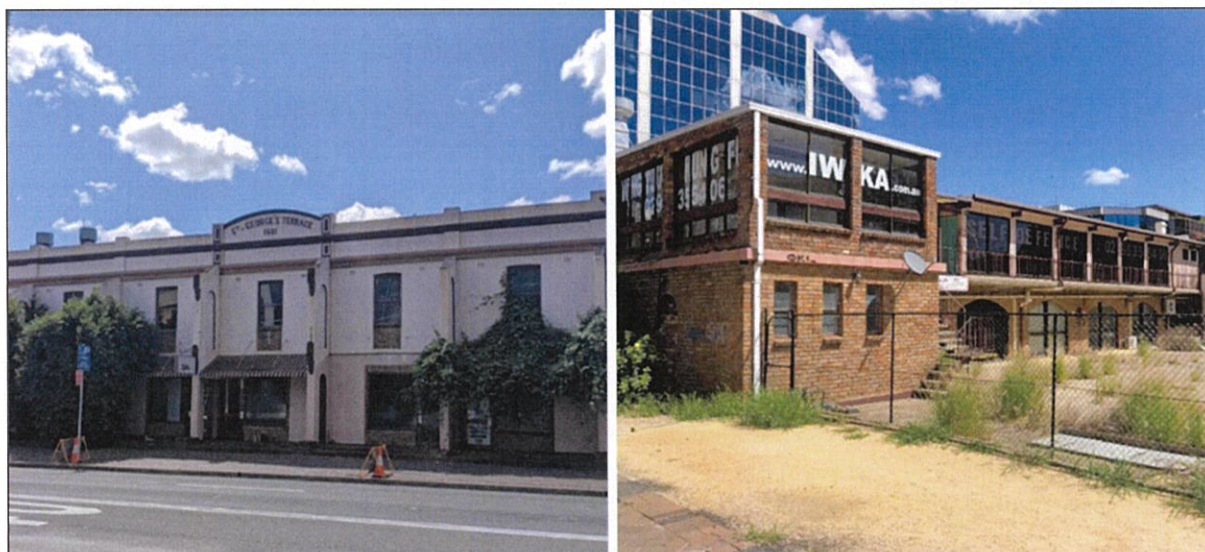


Figure 26 | Front (left) and rear (right) elevations of St George's Terrace (Source: Applicants EIS)

The application originally proposed the complete demolition of St George's Terrace. However, in response to concerns raised in public submissions and by Council, the Applicant amended the

setback and footprint of Eastern Building and now proposes to retain the St George's Terrace and only remove the modern rear additions of the building.

Council acknowledged the amendment to retain St George's Terrace but did not provide specific comments on this aspect of the proposal. The GANSW con the design development process for St George's Terrace should consider the built-form, ground plane, landscape design and spatial programming.

Objections were raised by the National Trust and in public submissions about the proposal having a poor visual / bulk relationship with the retained St George's Terrace and insufficient detail has been provided on the adaptive reuse of the buildings.

The Applicant has confirmed it does not seek consent for the fit-out and use of St George's Terrace or its interrelationship with the Powerhouse at this stage and those matters would be addressed as part of the design development of the proposal. In addition, the Applicant contends the retention of the St George's Terrace would provide an additional layering of smaller, older, built form that would contribute to visual amenity and provide a sympathetic response to the existing streetscape.

The Applicant's SoHI supports the retention of St George's Terrace and states the retention minimises the cumulative impact of the loss of heritage items in the Parramatta CBD and could include options to remove the modern extensions and alternations and restore/reconstruct key components of the buildings.

The application also proposes the following measures to manage and mitigate the potential heritage impacts associated with the works:

- prior to works commencing undertake a photographic archival record of St George's Terrace
- prepare a SoHI in accordance with the Burra Charter and NSW Heritage Manual
- the detailed fit-out and use of St George's Terrace to be the subject of a separate future development application
- prepare a CMP to guide ongoing conservation, maintenance and interpretation of the buildings.

The Department considers the retention of St George's Terrace is acceptable noting this would preserve one of the existing heritage items on the site for incorporation into the development, facilitate the adaptive reuse of the building and activate the Phillip Street frontage. In addition, the proposal includes the creation of a new laneway between the Eastern Building and St George's Terrace.

While the Department acknowledges the scale of the Eastern Building is notably larger than the retained St George's Terrace (**Figure 13**), the Department considers this built form relationship is acceptable as:

- due to the low-rise (two storey) nature of St George's Terrace and the maximum height controls of the site (80 m), any redevelopment of the site would result in a notable difference in scale
- the maximum height of the Eastern Building (57.3 m) is approximately 23 m less than the maximum building height controls under the PLEP (80 m) and therefore the development has not sought to maximise building height efficiency to the limit of what is permissible
- incorporating a significantly greater setback between the Eastern Building and St Georges Terrace would result in the loss of the north facing Presentation Space 1 public open space and is likely to have adverse impacts on the flood mitigation strategy/infrastructure for the site

- the setting, appearance and heritage significance of St Georges Terrace has already been significantly affected by substantial alterations, additions and the incremental development of tall buildings along Phillip Street, which forms part of its greater setting.

The Department considers the laneway between the Eastern Building and St George's Terrace has the potential, subject to detailed design, to be a positive component of the development providing for an inviting, functional and usable public space.

The Department also recommends the following conditions:

- no consent is granted for the fit-out and use of St George's Terrace, which would be subject to a separate future development application
- explore options to amend the design of Presentation Space 1 to integrate the museum and St George's Terrace
- activate and provide public access to the new laneway space between Presentation Space 1 and St George's Terrace
- provide details of the activation and connectivity of the Phillip Street Plaza to existing and proposed buildings and spaces
- implementation of the Applicant's commitments relating to photographic archival record and preparation of a SOHI and CMP.

The Department considers the retention of St George's Terrace is a positive outcome and, subject to the recommended conditions, is satisfied the impact of the retention and alteration works on heritage significance can be appropriately mitigated and managed. In addition, the built form relationship between the Eastern Building and St George's Terrace has been appropriately considered in the design of the development.

6.4.3 Other heritage items

Lennox Bridge

Lennox Bridge is listed on the SHR and is located immediately west of the site (**Figure 2**).

The proposal seeks to remove the existing river foreshore path, which is located along the Parramatta foreshore and passes beneath Lennox Bridge, and construct a new path along a similar alignment

Heritage NSW does not object to the proposed works and has recommended a condition requiring Lennox Bridge be managed and protected during the construction phase of the development.

The Department considers the proposed works would improve the river foreshore pathway and is satisfied the development would not have an adverse heritage impact on Lennox Bridge, subject to Heritage NSW's condition.

Substation

42 Phillip Street comprises an art-deco substation building (**Figure 5**) located within the site boundaries. The building is not a local or SHR listed heritage item and is proposed to be demolished to facilitate the development.

Notwithstanding the lack of a heritage designation, Heritage NSW recommended the Applicant consider the local heritage significance of 42 Phillip Street. Council did not provide any advice on the demolition of 42 Phillip Street.

In response to Heritage NSW's request, the SoHI includes an assessment of the heritage significance of 42 Phillip Street. The SoHI found that while the building is not listed under the PLEP, the item may be considered to have some local significance. In recognition of this, the SoHI recommends that prior to the commencement of demolition of the substation building an archival photographic record should be prepared.

The Department acknowledges the existing substation building may have some local significance. However, it is not heritage listed and Council has not raised any concerns with the proposed demolition of the building. The Department further notes the building's location prevents it from being retained or incorporated into the development without having a significant adverse impact on the footprint and layout of the Eastern Building. The Department therefore considers the demolition of 42 Phillip Street is acceptable subject to a condition requiring the preparation of an archival photographic record.

6.5 Flooding

The site is located within Upper Parramatta River Catchment and adjacent to the Parramatta River. Due to land levelling associated with previous developments, the northern half of the site is lower (between 2.5 m and 4 m Australian Height Datum (AHD)) than the southern half (between 6.5 m and 7.5 m AHD) and is subject to flooding from the Parramatta River. The site is also affected by overland flooding, which sees flows originating from the CBD conveyed to the Parramatta River via Phillip Street, Dirrabarri Lane and east of 32 Phillip Street (**Figure 27**).

Existing riverine and overland flooding impacts are predicted to be:

- 1 in 20 year (5% AEP) flood event levels of between 5.41 m and 6.9 m AHD
- 1 in 100 year (1% AEP) flood event levels of between 6.22 m and 7.0 m AHD
- probable maximum flood (PMF) flood event levels of between 10.39 m and 11.36 AHD.

The site contains three Council owned stormwater trunk drainage pipes, which cross the site and discharge into Parramatta River (**Figure 27**). In addition, the site also contains other minor privately owned drainage pipes and pit infrastructure that connects to Council's network or discharges directly to Parramatta River.

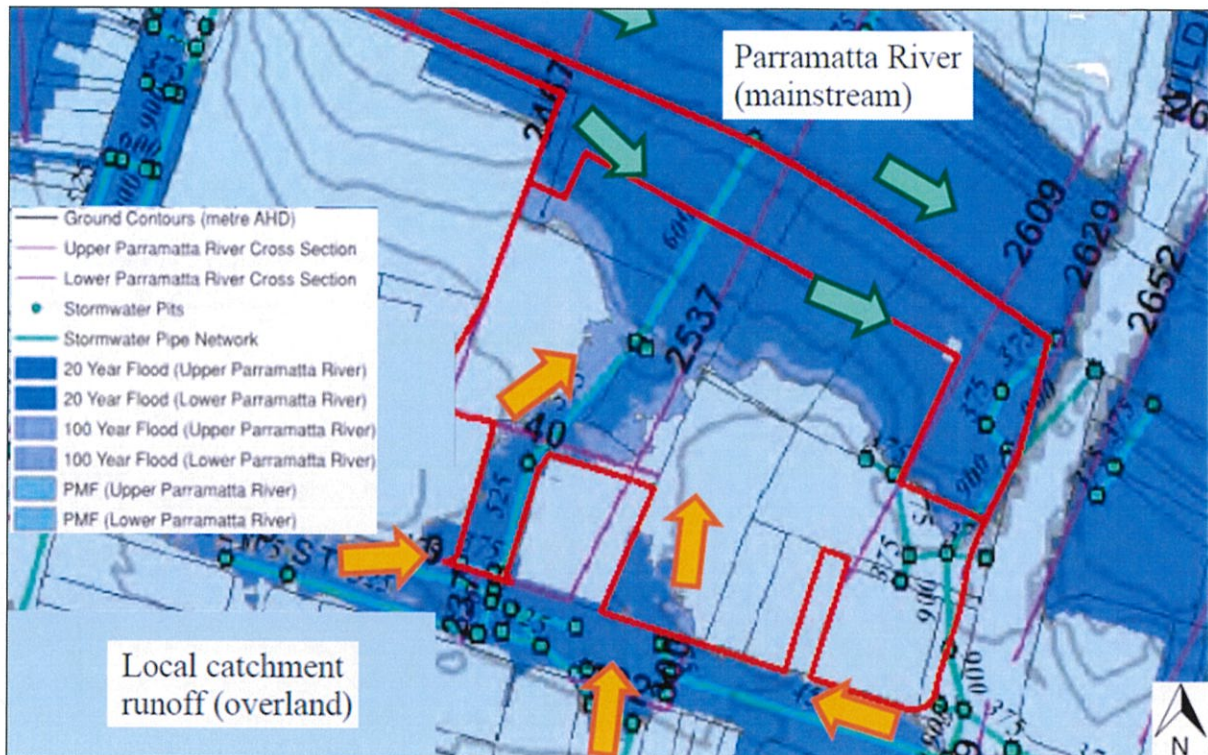


Figure 27 | Existing potential riverine and overland flood intensity and flows (Base source: Applicant's RtS)

The proposal includes the following flooding and drainage strategy for the site (**Figure 28**):

- create an undercroft together with the open landscape area north of the buildings principally to provide mainstream flood storage. The Applicant also intended to occasionally use the undercroft for events and exhibitions and enclose the space with mechanically operated screens
- establish a ground floor level for buildings and electrical substations of 7.5 m AHD
- provide new drainage infrastructure to manage displaced overland flow flooding, remove, replace and augment Council's existing drainage infrastructure to facilitate the development
- provide new retaining walls including one adjacent to 330 Church Street
- prepare Flood Evacuation and Water Sensitive Urban Design Strategies during the detailed design stage.

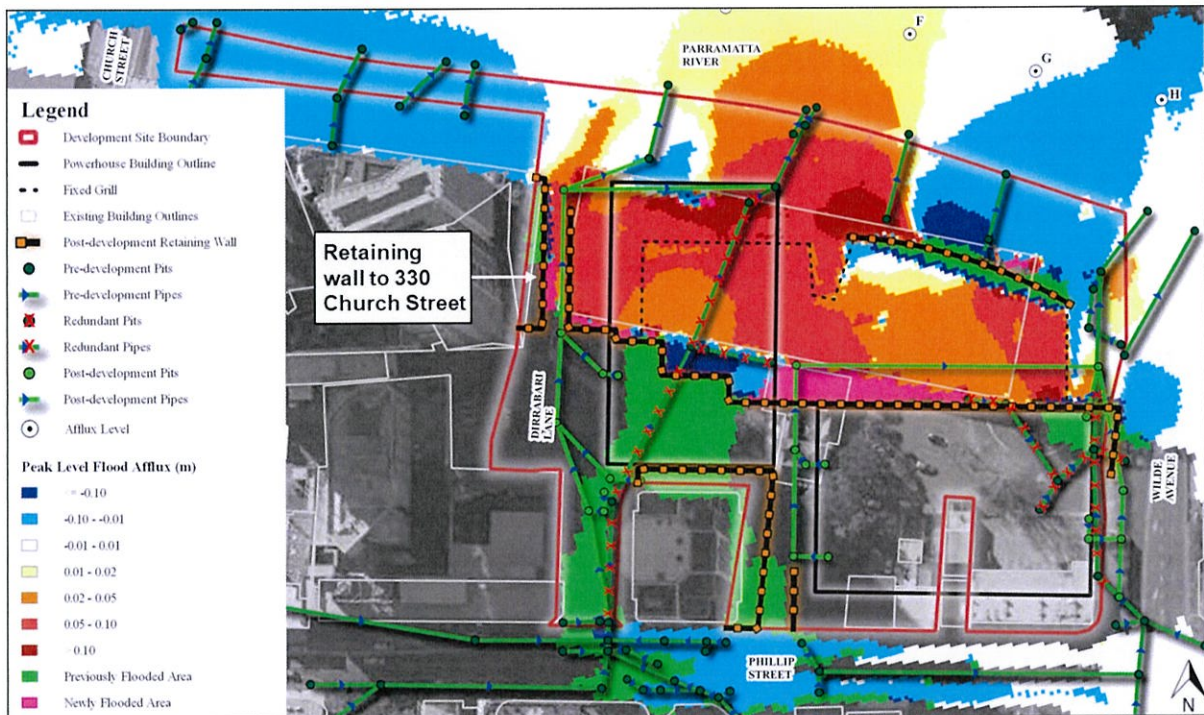


Figure 28 | Proposed flooding and drainage infrastructure (including undercroft) and its mitigation effect during a 1% AEP event (Base source: Applicant's RtS)

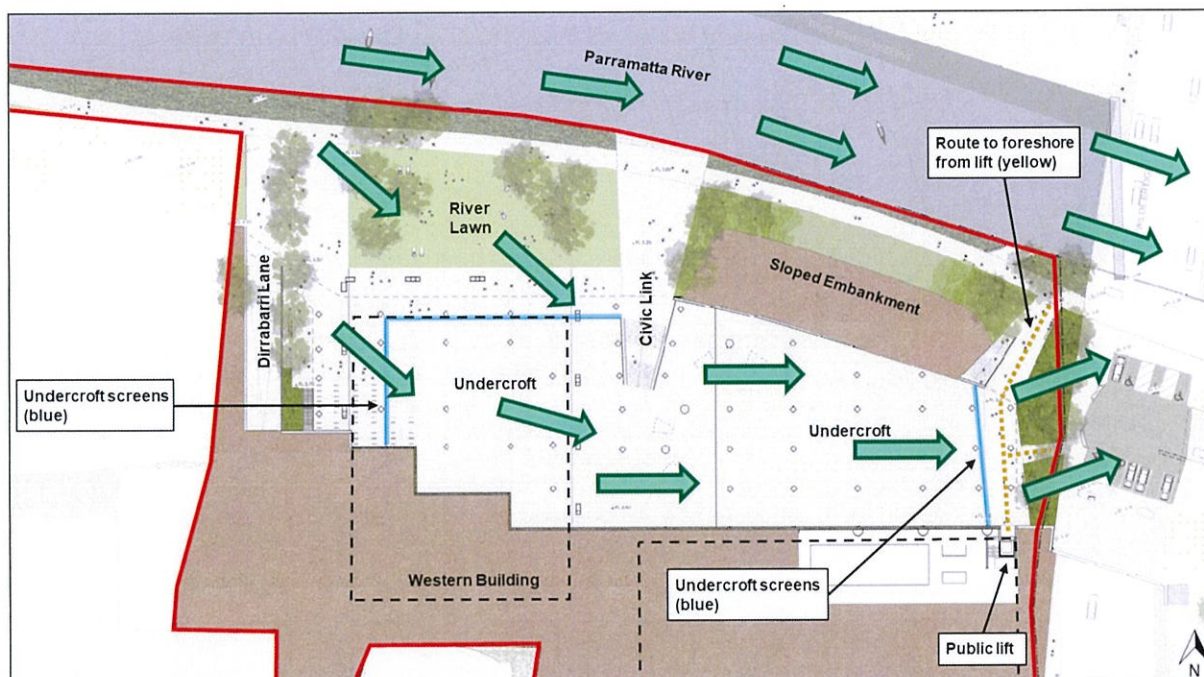


Figure 29 | Proposed undercroft design / layout, flood flows and screen locations (Base source: Applicant's RtS)

The application includes a Flood Risk and Stormwater Management Report (FRSMR), which considers existing and proposed flood and drainage management. The FRSMR states the proposal has been designed to provide passive flood protection for the development up to the 1% AEP (7 m AHD) plus 500 mm freeboard (in accordance with the PDCP). In addition, the proposal replicates existing site flood behaviour for both the mainstream flooding from Parramatta River and overland flooding from the CBD.

Concerns were raised by Council and in public submissions about the design of flood mitigation measures and the impact of flooding on visitor safety and operation of the museum. Public submissions from the Powerhouse Museum Alliance and Australian Unity (owner of the neighbouring property at 32 Phillip Street) were supported by their own independent flooding assessment prepared by Molino Stewart (the Molino Report). EESG did not object to the proposal.

The Department engaged flooding and drainage expert (WMAwater (WMA)), to undertake an independent peer review of the application to assist the Department in its assessment of the flooding impacts of the proposal. WMA concluded the proposal was acceptable subject to conditions.

The Department considers the key issues relate to the:

- undercroft
- other flooding considerations.

6.5.1 Undercroft

Flood mitigation

Concerns were raised in public submissions that the site is inappropriate for the development as it is flood affected and the Molino Report raised concerns about the adequacy of the FRSMR flood modelling. Council raised concern the undercroft is not an appropriate flood solution for the site and recommended the development be redesigned to remove and replace the undercroft with a sloped open space.

EESG confirmed it was satisfied the Applicant has provided sufficient detail on flood risk management and recommended the flood modelling be updated following Council's adoption of its Flood Study (currently being prepared).

In response, the Applicant amended the proposal to include a sloped embankment north of the undercroft located between the Civic Link stairs and Wilde Avenue bridge and provided additional information on flood modelling and management. In addition, the Applicant stated flood modelling demonstrates the undercroft is a suitable flooding response for the development and removal of the undercroft would significantly compromise the development.

WMA supports the approach of having a building floor on piers above the floodplain and concludes the undercroft is appropriate to address flooding impacts, subject to conditions preventing public access, as discussed in the following sections.

The Department notes the undercroft has been included within the design of the proposal to replicate existing site flood behaviour and in particular to create flood water storage capacity so that the development does not adversely impact on the free-flow of water during a flood event.

The Department has carefully considered the Applicant's proposal, the concerns raised in Council's and public submissions and independent advice provided by WMA. The Department considers the inclusion of the undercroft within the scheme is an acceptable flood solution and appropriate for the site as:

- buildings have been designed to provide for a ground floor level of 7.5 AHD (the flood planning level), which:

- is derived from the maximum overland flood 1% AEP flood level and an additional 500 mm freeboard
 - is consistent with the PDCP building flood mitigation design requirements
 - ensures the risk of the building flooding is low, being 1 in 800 years for overland flooding and 1 in 1,000 years for riverine flooding events
- the FRSMR has confirmed the undercroft provides sufficient flood capacity on the site to mimic the existing flood flows through the site and not increase up or down stream flooding impacts
- WMA has confirmed:
 - the approach of having a building floor on piers above the floodwaters is commonly used to enable development within floodplains
 - the undercroft is appropriate to address flooding impacts, subject to conditions relating to screens and use, as discussed in the following sections
- the north-eastern half of the undercroft would be screened by the sloped embankment lawn and the north-western half will be surrounded by high quality public domain and landscaping and architecturally designed to complement the overall development
- replacement of the undercroft with a sloped open space is not in the public interest as it would require the significant redesign of the proposal and prevent the delivery of the competition winning museum on this site.

In light of the above assessment, the Department considers the undercroft is a necessary and an appropriate component of the development to address identified flooding impacts.

Undercroft screens

The proposal seeks to enclose the undercroft with mechanically operated screens which would be opened during a flood event and when the undercroft was in use by the museum. The space would be closed outside of these times to prevent public access.

Concerns were raised in public submissions and by Council that the undercroft screen mechanisms could fail during a flood event, which would magnify flooding impacts and pose a public safety risk.

The Applicant has stated the undercroft screens and their mechanisms would be maintained to ensure they are operable at all times.

WMA considered the proposed undercroft screens as part of the overall flood mitigation strategy. WMA recommended that fixed permeable screens be provided instead of the proposed operable screens as:

- although in theory operable screens could be a viable solution, developments within a floodplain should not be reliant on measures that could potentially fail
- if the screens were to fail and exclude this area from the floodplain, this would cause an increase in flood levels on surrounding lands.

In response, the Applicant advised that fixed permeable screens (**Figure 30**) could be installed and it provided updated flood modelling which demonstrated that such screens would adequately allow the passage of floodwaters through to the undercroft and result in impacts no greater than 10 mm on neighbouring properties. WMA considered the updated flood modelling and the potential for

blockages and considers the analysis to be satisfactory. In addition, given the PMF flood depths in surrounding streets would be between 2 m to 4 m, WMA considers the maximum 10 mm impact is within acceptable limits.



Figure 30 | Indicative undercroft mechanical screen (southern boundary) (Base source: Applicant's SRtS)

The Department accepts WMA's advice and recommends a condition requiring the Applicant to prepare and obtain the Secretary's approval of amended plans (to be reviewed by the DIP) showing the provision of fixed, permeable, permanent undercroft screens that prevent access to the undercroft (other than for maintenance purposes) and allow the passage of flood waters. In addition, the amended plans are to be supported by a:

- Design Report confirming the screens are consistent the overall design of the development
- Flood Impact Assessment confirming the screens will not adversely impact on flood waters
- Crime Prevention through Environmental Design report considering the security and management of the undercroft.

Use of the undercroft

The Applicant proposes to use the undercroft for occasional events and exhibition uses associated with the museum.

Concerns were raised in public submissions and by Council that the undercroft should not be used by the museum for events and exhibitions as it poses a risk to visitor safety and there are insufficient evacuation routes. The Molino Report also raised concerns about risk to life due to use of the undercroft. The Department requested further detail on the design and use of the undercroft and raised concerns about the potential for the undercroft to attract antisocial behaviour.

In response, the Applicant has stated all events and exhibitions held in the undercroft would be managed, the undercroft screens would prevent public access to the undercroft and appropriate lighting and security measures would be developed to prevent antisocial behaviour. In addition, an emergency evacuation plan would be prepared and evacuation would be possible via four staircases and one lift (**Figure 28**).

WMA has confirmed it is against best practice to allow the undercroft area to be used as permanent or temporary usable space as it is below the flood planning level (7.5m AHD).

The Department has considered the concerns raised by Council and public submissions, and the advice provided by WMA and agrees the undercroft should not be used for any purpose other than for flood mitigation as:

- the floor level of the undercroft is located at 3 m AHD, which is approximately 4 m below the maximum 1% AEP flood level and is therefore inconsistent with floodplain management best practice
- four proposed evacuation routes would require visitors to move towards the river (and potential rising flood waters) to access staircases to the ground floor above
- only one lift is proposed which is low-capacity and remotely located.

The Department therefore recommends a condition confirming no consent is granted for the use of the undercroft for any use or purpose other than as flood infrastructure for the conveyance of waters during a flood event.

Conclusion

The Department concludes the undercroft is a crucial component of the flood mitigation strategy for the site and it would ensure the site provides sufficient on-site flood capacity and does not result in adverse up stream or down stream flooding impacts. Further, replacing the undercroft with a sloped open space would compromise the delivery of the competition winning museum buildings on the site.

Based on the information presented, the Department is unable to support the use of the undercroft for events and exhibitions, due to potential risks to visitor safety and recommends a condition requiring it only to be used for the conveyance of flood waters.

To prevent public access to the undercroft area and to ensure the space is safe and secure, the Department has also recommended a condition requiring the installation of fixed permeable screens that prevent public access and allow the free-flow of flood waters.

6.5.2 Other flooding considerations

Museum collection

Concerns were raised in public submissions, the Molino Report and by Council about potential damage to the museum's collection during a flood event.

The Applicant has stated the risk to the museum's collection is low as the buildings are designed to withstand an approximately 1 in 1,000 year flood event and a 1 in 800 year overland flow flood event, and flood risk and mitigation will continue to be developed based on the museum's requirements. In addition, switch boards and back-up generators can supply services for up to 10 hours ensuring ongoing climate control during a flood event.

The Department notes museum collections are generally unique and, in some cases, irreplaceable. However, the Department considers the risk to the museum's collection can be appropriately managed / mitigated as:

- the Department has required the proposal be amended so that the undercroft, which is below the

flood planning level, is not used for any use or purpose other than for flood mitigation

- all of the exhibition space is located above the flood planning level (7.5 m AHD)
- the FRSMR has confirmed inundation of the proposed ground floor is a lower than 1 in 800 chance per year (including freeboard), or approximately a 1 in 12 chance over a 100-year period
- the risk to the museum collection is best assessed and determined by the museum curator(s), based on the museum's requirements, policies and procedures
- WMA has confirmed risk to the museum collection can be addressed through the preparation of a Flood Damages Assessment (FDA).

The Department concludes the potential risk of flooding impacts on the museum collection is low and subject to the preparation of an FDA can be managed and mitigated.

Flood emergency management and evacuation

The development could attract up to 6,000 visitors a day (**Section 6.7.1**) and includes 30 serviced apartments and a dormitory containing 56 beds for students and five for teachers.

Concern was raised in public submissions about the potential risk to safety during flood events. EESG recommended conditions requiring emergency management and planning.

The Applicant has stated a shelter in place strategy is to be adopted catering to flood events up to the PMF and critical electrical infrastructure would be located above the PMF level. In addition, an emergency management plan, providing for multiple evacuation routes, will be prepared that reflects the finalised building and public domain designs.

WMA recommends a detailed Flood Emergency Management Plan (FEMP) be prepared by a suitable consultant covering all flood preparation, response and recovery operations for the full range of design flood events up to the PMF. In addition, the FEMP should:

- be updated following each flood and before any future significant changes to the operation of the museum are undertaken
- consider safe routes for all occupants and visitors to the site, including occupants of the on-site accommodation to travel from the accommodation areas to the designated refuge areas within the building, all of which should be above the PMF level

WMA recommended a detailed Construction FEMP should also be prepared to address potential flood risks during the construction phase of the development. In addition, fire systems and electrical systems should be appropriately designed and buildings must be able to withstand water and debris loads in a PMF.

The Department accepts the advice of WMA and concludes, flood safety risks can be appropriately managed and mitigated during the construction and operational phases of the development subject to the preparation and implementation of a FEMP, CFEMP and appropriate building and systems design.

Drainage and blockages

The proposal includes the removal, replacement and augmentation of Council's existing drainage infrastructure and the erection of retaining walls within the site and adjacent to 330 Church Street (**Figure 28**).

Council recommended the overland flow paths be re-examined and concern was raised in the Molino Report about the FRSMR assumptions about infrastructure blockages.

The Applicant has stated:

- modelling has considered the effect of fully blocked stormwater drainage network on flood levels and concludes the buildings would still be more than 300 mm above flood levels
- the application has been amended so the retaining wall to Dirrabarri Lane wraps around 330 Church Street (to a height equal to the 1% AEP flood level) to prevent water overtopping and inundating the basement car park
- a Water Sensitive Urban Design (WSUD) strategy will be developed for the site.

The Department notes Council's guidelines require that 100% blockage should be analysed to assess whether this would result in a significant change in flood levels.

WMA considered the blockage analysis and concluded:

- the Applicant's details on the blockage and other factors adopted to simulate the restriction of flow in both overland and mainstream are satisfactory
- it is appropriate to undertake sensitivity analysis assuming 100% blockage. However, this should not be adopted as a design criterion. Instead, typical blockage factors for design purposes under various stormwater and road drainage design guidelines are up to 50% for kerb inlets.

WMA considered the proposed retaining wall adjacent to 330 Church Street and recommended the height of the retaining wall be increased by 500mm (7.5 m AHD) to ensure water does not overtop during a 1% AEP flood event.

The Department accepts WMA's advice and concludes the proposal has undertaken adequate drainage and blockage assessment and is acceptable in this regard subject to conditions requiring:

- inlet structures to any proposed overland flow pipes are designed assuming 50% blockage of the kerb inlets
- the height of the retaining wall to 330 Church Street be increased to 7.5 m AHD
- the Applicant prepare and implement the WSUD strategy and obtain the appropriate licences, certificates and approvals from Council in relation to drainage and infrastructure replacements and augmentation.

6.6 Public domain, landscaping and tree removal

The proposal seeks approval for the construction of new areas of open space, public domain and hard and soft landscaping as summarised at **Section 2** and shown at **Figure 31**.

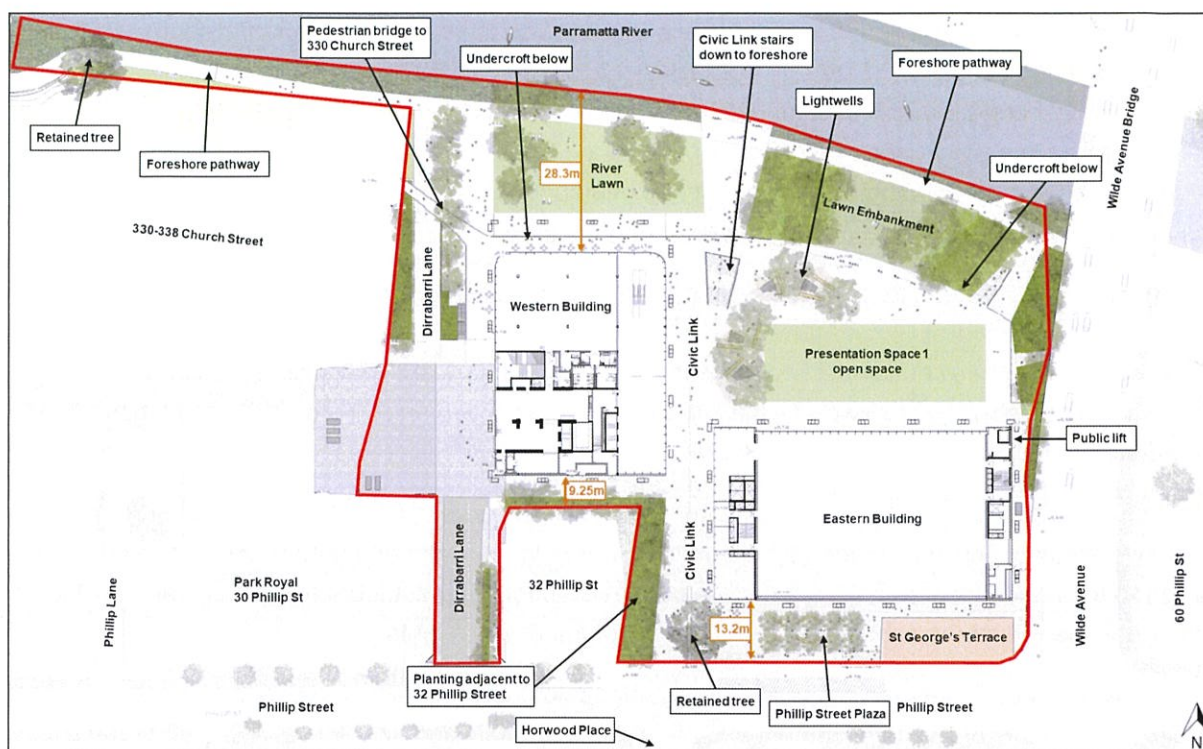


Figure 31 | Proposed landscaping (Base source: Applicants RtS)

Concerns were raised in public submissions about the proposed public domain, including tree removal, use of spaces for events and the accuracy of the landscaping plans. Council raised concern about the impact of the undercroft on the design of the public domain and the design and accessibility of the Civic Link.

The Department considers the key assessment issues to be:

- landscaping / public domain design
- tree removal
- Civic Link
- events.

6.6.1 Landscaping / public domain design

The proposal includes four new public open spaces (Presentation Space 1, Lawn Embankment, River Lawn and Phillip Street Plaza), the northern portion of the Civic Link and hard and soft landscaping as summarised at **Section 2** and shown at **Figure 31**.

Council raised concern that the landscape design departs from the winning competition scheme which provided a gently sloped open space between the museum and the river (**Figure 17**). Council is concerned the inclusion of the undercroft disconnects the museum, river and public domain. Council recommends the undercroft be removed and flood mitigation be integrated into the landscaped design.

GANSW considered the landscape design is unresolved at this stage. In addition, the connection between the museum, open spaces and the river, activation of spaces and weather protection strategies are not clear.

As discussed in **Section 6.5**, and in response to Council's concern, the Applicant has confirmed the undercroft is the best option in order to address significant potential flooding events that may occur on the site and is therefore a critical component of the development. In addition, the Applicant clarified that flood impacts had not been resolved as part of the Competition winning design (which shows a sloped lawn, **Section 6.2**) and the undercroft has been added following detailed consideration and modelling of flood impacts and consultation and endorsement of the DIP.

The Applicant has stated the landscaping and public domain areas within the site have been designed to be permeable, accessible, and adaptable to support the functions of Powerhouse Parramatta whilst also creating a new welcoming destination within the Parramatta CBD. In addition, the detailed design of the landscaping will be reviewed by the DIP prior to construction and the composition of the DIP will be updated to include a landscape architect.

The Department considers the landscaping for the site is acceptable, noting the proposal includes extensive areas of new public open space that are varied in their size and nature, buildings are designed to provide for a seamless transition between indoors and outdoors and spaces are flexible and adaptable with some capable of potentially accommodating events.

The Department considers the proposed landscaping and public domain of the development are crucial components of the development and the attainment of design excellence. The Department therefore considers that careful consideration is needed of these aspects of the proposal to ensure they achieve the highest standard of design commensurate to the significance of the proposal. The Department therefore recommends conditions requiring:

- the Applicant prepare a detailed landscaping plan for the site to be submitted for approval of the Secretary prior to the commencement of construction of the museum
- the landscaping plan be reviewed by the DIP, which includes an additional member with qualifications and experience in landscaped architecture, prior to being submitted for approval
- details of hard and soft landscaping and the activation and connectivity of open space to proposed/existing buildings and spaces
- details of weather protection adjacent to and/or as part of proposed buildings fronting open spaces, public domain and including Wilde Avenue.

As discussed in **Section 6.5**, the Department does not support the use of the undercroft for any purpose other than flood mitigation noting the potential flooding and associated safety risks with the use of this area. The Department therefore recommends a condition requiring the Applicant submit detailed designs for fixed, permeable and permanent screens to be installed, to prevent people entering/using the undercroft.

6.6.2 Tree removal and replacement

A total of 58 existing mature trees and tree groups are contained within the site. The proposal seeks to retain two existing trees and remove all others.

The application includes an Arboricultural Impact Assessment (AIA), which surveyed the existing trees on the site and identifies the health, structural condition and landscape significance of the trees. The AIA concludes that there is no feasible option to retain 56 of the 58 existing trees and tree groups on the site due to their position within the site and the extent of the development proposed (**Figure 32**).

To offset the proposed removal, the proposal includes the planting of 120 replacement trees within the public domain.

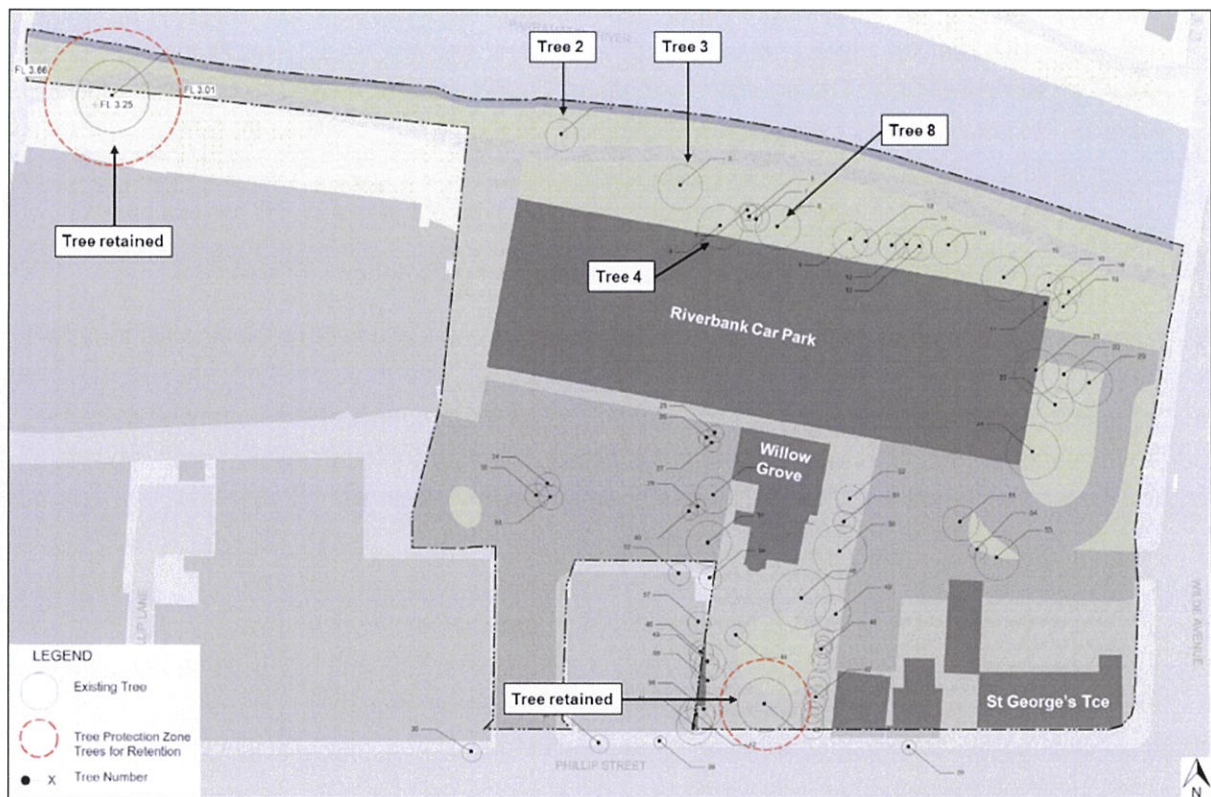


Figure 32 | Proposed tree retention and removal plan (Base source: Applicant's SRTS)

Concern was raised in public submissions about the extent of the proposed tree removal suggesting more effort should be made to retain existing mature trees on the site. The Department requested the Applicant to investigate options to:

- retain Tree 2 (She Oak), 3 (Jacaranda) 4 and 8 (Spotted Gum) due to their landscape significance and as they are located within the proposed future River Lawn
- provide for additional tree planting within or at the periphery of Presentation Space 1 open space.

Council initially recommended further consideration be given to retaining trees. Council supported the retention of the Monterey Cypress (part of the Willow Grove landscape) into the Civic Link. EESG did not raise any concern about the proposed tree removal and confirmed a BDAR was not required.

The Applicant has stated it is not possible to retain trees 2, 3, 4 and 8 due to land levels and existing retaining walls. In addition, it is not possible to provide additional tree planting at Presentation Space 1 open space due to access requirements.

The Department has considered the proposal and the issues raised in submissions and is satisfied the proposed tree removal is acceptable as:

- the removal of these trees to facilitate the redevelopment is unavoidable due to the location of the majority of trees on the site

- the AIA identifies that 33 of the 58 trees to be removed (57%) are of poor health, structural condition and/or of low retention value and their removal and replacement is therefore appropriate regardless of the extent of the proposed development
- the Applicant's has committed to plant 120 replacement trees, which would result in a site tree canopy coverage of 30%. The proposed tree planting represents an increase above the current situation (11.5%) and also exceeds the 16% canopy coverage target within the NSW Government's draft Greener Places Design Guide 2020
- the use of advanced tree stock would ensure rapid achievement of the 37.5% canopy cover.

The Department recommends the Applicant provide further details of the potential to:

- retain trees 2, 3, 4 and 8 as these trees are unaffected by the location of proposed built form and are of high retention value,
- increase tree planting above the undercroft within, or at the periphery of Presentation Space 1 open space, noting the eastern edge of the space in particular could potentially accommodate additional planting without affecting access or functional requirements.

In addition to the above conditions, the Department also recommends conditions requiring:

- the two identified trees be retained and protected during the construction
- the proposal provide for no less than 120 replacement trees comprised of advanced tree stock
- the proposal provide for a mature tree canopy cover of no less than 30%
- consultation with Council about whether it requires the provision of new or replacement street trees on Wilde Avenue and Phillip Street.

The Department concludes that subject to the above conditions requiring tree replacement, retention and protection, the proposed tree removal is, on-balance, acceptable.

6.6.3 Civic link

It is Council's long term aspiration, as outlined in the CLFP (**Section 3.6**), to create a linear public open space by converting Horwood Place into a landscaped pedestrianised link connecting Parramatta Railway Station to the Parramatta River. In response to this, the proposal includes the creation of the northern portion of Civic Link, comprising a pedestrianised extension of Horwood Place through the site, to complete the connection between the CBD to the Parramatta River foreshore (**Figure 31**).

The proposed Civic Link is 21.5 m wide south of the Eastern/Western Buildings, narrows to 11.5 m between the buildings and then opens out towards Parramatta River (**Figure 33**). A staircase is located at the northern end of the Civic Link, and a lift is located at the north-eastern corner of the Eastern Building, providing access down to the foreshore (**Figure 31**).

Council acknowledged the proposal seeks to address the objectives of the CLFP to extend Horwood Place as a pedestrianised route through the site to the river foreshore and creation of open space. However, Council stated:

- the part of the Civic Link between the Eastern and Western Buildings is 11.5 m wide, which is 8.5 m narrower than Council's aspiration of a minimum 20 m wide Civic Link open to the sky
- the Civic Link terminates in a stair leading to the foreshore with separate lift, which may not achieve a fully public and universally accessible space.

Australian Unity Office Fund, the owner of neighbouring 32 Phillip Street, has raised concerns about the provision of landscaping along the western side of the Civic Link (**Figure 31**) as this may prevent the potential redevelopment of the ground floor of 32 Phillip Street to open out onto the Civic Link.

The Applicant has stated:

- the Civic Link is as wide as possible given spatial requirements of the development, location of Dirrabarri Lane and other services. The narrowest point (11.5 m) extends for only 11.3 m and has the beneficial design effect of creating a point of urban constraint and release, which signals the end of a civic environment and transition into a more natural environment (**Figure 33**)
- the proposed termination of the Civic Link with stairs is the best option for the development, as the site is unable to accommodate a length of ramp with a gradient suitable for accessible access
- a lift is provided at the north-eastern corner of the Eastern Building, which provides access to the lower-ground floor and a pathway that connects northwards to the foreshore (**Figure 11** and **Figure 33**)
- the landscaping design of Civic Link adjacent to 32 Phillip Street could be modified/removed to facilitate access should that site be redeveloped in the future.

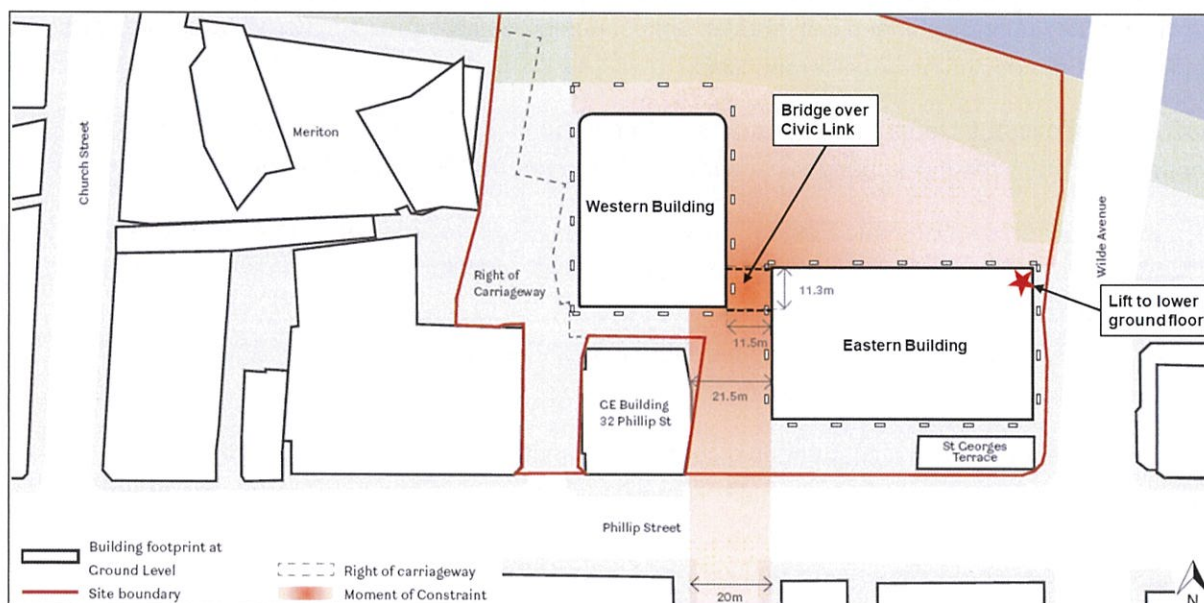


Figure 33 | Width and transition of the proposed Civic Link (Base source: Applicants RtS)

Civic link width

The Department has considered the design of the Civic Link and considers the narrowing of the Civic Link is acceptable in this instance, noting:

- the narrowing of the Civic Link:
 - has the effect of creating a gateway entrance to the significant public open spaces and the Parramatta River foreshore on the northern side of the site
 - would provide views of the Powerhouse at the end of the Civic Link (**Figure 12**), creating a landmark destination point for pedestrians coming from Parramatta Station
 - would continue to provide for sightlines through the site to Parramatta River, which is a key aim of the CLFP

- provides for a varied and interesting pedestrian experience.
- the length of the narrowest point of the Civic Link is relatively short (being 11.3m long) and although a pedestrian bridge exists above this space (preventing it being open to the sky), the lowest level of the bridge is located approximately 4-5 storeys above the Civic Link and therefore would not have a significant enclosing impact on the space
- further widening of the Civic Link, wider than 11.5 m, would require a reduction in the size of either or both of the Eastern and Western Buildings. Given the above considerations, reducing the museum floor space to widen the Civic Link to is unlikely to result in proportional increase in benefit.

Civic Link accessibility

The Department considers buildings and spaces should be designed to ensure equitable and universal access throughout and acknowledges level changes are often best managed through the use of ramps. However, given the significant level changes across the site, the Department accepts that it is not possible to design the Civic Link as a ramped access without significant redesign of buildings or public spaces, in this instance. In addition, the inclusion of such a ramp is likely to require significant length, or if designed with shorter ramps, numerous switch-backs, which would make it impractical from design and use perspectives.

Noting the above, the Department considers the provision of publicly accessible (available 24/7) lifted access to address the level change is acceptable. However, the Department is concerned:

- the proposed lift (within the Eastern Building) is located approximately 70 m away from the Civic Link public stair and may therefore not be immediately identifiable as an alternative/accessible route to the river foreshore
- only one lift has been provided and therefore disabled access to the foreshore would not be provided in the event the lift is out of service or under repair.

The Department therefore recommends a condition requiring the provision of a second lift conveniently located to the Civic Link stairs (potentially near the ground floor, north-east corner of the Western Building) to ensure appropriate access is provided. In addition, the Department recommends the lifts are provided prior to first occupation and made available for public use.

Interface with 32 Phillip Street

32 Phillip Street contains above ground car parking on ground to third floor levels and its eastern and northern elevations face into the site. In response to this, the proposal includes landscaping along the eastern and northern boundaries of 32 Phillip Street to screen the existing above ground car parking.

The Department met with the owners of 32 Phillip Street during assessment of the proposal to discuss the proposed interface of the proposal with the existing and potential future redevelopment of 32 Phillip Street. The 32 Phillip Street owners presented a number of options to refurbish the existing building including potential active ground floor uses facing the future Civic Link and façade amendments to improve the external appearance of the building and screen the existing above ground car parking.

The Department notes that the 32 Phillip Street owners have not progressed any plans and that any works to the building would be subject to assessment in a DA to Council. Noting this, the Department

considers the design of the landscaping adjacent to 32 Phillip Street appropriately responds to the existing building including planting to screen the above ground parking facing Civic Link. However, to ensure the proposal does not prevent future redevelopment potential of 32 Phillip Street, the Department recommends the Applicant consult with the owner of 32 Phillip Street during the detailed design of the landscaping plan to ensure the landscape design takes account of the potential for 32 Phillip Street to connect with, and provide active uses to, the Civic Link.

6.6.4 Events

The proposal identifies that the public domain, public open spaces, ground floor of the Eastern Building and the undercroft are capable of supporting small to large scale temporary community activities and events. This could include live performances, temporary public art, public lectures, film/cinema pop-ups, cultural events such as Diwali, Eid, or Parramasala and other events on the cultural calendar of Sydney and NSW. Events hosted in the public domain outside of day to day operations of the Powerhouse would be subject to separate and future approval.

Concern was raised in public submissions about the potential amenity and traffic impact of the use of the site for events.

The GANSW considered the use of the site for events has potential to create a visually dynamic, 24 hour cultural facility catering to a broad range of user groups and visitors. In addition, the GANSW supports the adaptability of the ground level spaces to connect with open spaces and the riverbank.

The Department considers the use of the public domain, open space and parts of the development for a range of events is acceptable, noting the use of the site for events would represent significant social and cultural benefits. However, the Department considers events must be carefully managed to prevent unacceptable noise, traffic or other amenity impacts. As discussed at **Section 6.5**, the Department does not support the use of the undercroft for events due to potential risks associated with flooding.

The Department recommends the Applicant prepare an Operational and Event Management Plan, including information on the likely operational management, vehicular servicing, noise impact, number and frequency of events, in consultation with Council and TfNSW.

The Department also notes the proposed roof terrace and pavilion on the top floor of the Eastern Building is of a size and design that could be used for events or large gatherings. Although not expressly noted for this purpose in the Applicant's application, the Department considers it should also be subject appropriate operational management within the Operational and Event Management Plan.

The Department concludes the site has been appropriately designed to accommodate events and the use of the site for events would have social and cultural benefits for the local and broader community. The Department considers the use of the site (excluding the undercroft) for events is acceptable subject to the preparation and implementation of an Event Management Plan to address operational event management.

6.7 Traffic and parking

Parking and vehicle trip generation are key considerations of the Department's assessment. The Department acknowledges parking supply and pick-up/drop-off facilities have a direct link to the amount of traffic generated by the development and its impact on surrounding roads.

The application includes a Transport Impact Assessment (TIA), which considers the existing and proposed vehicular and pedestrian conditions, car parking, pick-up/drop-off facilities and potential traffic impacts on the surrounding area.

The Department considers the key assessment issues to be:

- traffic generation
- car parking
- pick-up/drop-off facilities

6.7.1 Traffic generation

Public submissions raised concern about the proposal increasing traffic in the surrounding area.

The Applicant's TIA indicates that over a course of a typical day the proposal would generate trips based on the following predicted patronage of the museum:

- 5,000 visitors per day during weekdays
- 6,000 visitors per day during the weekend.

The TIA also notes visitation to the museum would occur relatively consistently throughout the day, being approximately between 5% and 10% arrivals/departures each hour.

The TIA considered travel surveys of existing visitation at the Powerhouse Museum at Ultimo and the existing and future transport options in Parramatta CBD (noting the absence of on-site car parking). Based on the above, the TIA anticipates a visitor travel mode share for the proposal as summarised at **Table 8**.

Table 8 | Anticipated visitor travel mode share for the proposal

Travel Mode Type	Travel Mode Share Percentage
Train / Metro	30%
Car (Park Nearby)	25%
Light Rail (under construction)	15%
Walk only	13%
Bus / Coach	10%
Taxi / ride-share / drop-off	3%
Bicycle	2%
Ferry	2%

With reference to standard peak traffic hours, the TIA confirms the proposal would have a negligible impact, generating only 32 vehicle trips in the AM peak (8am-9am) and 90 vehicle trips during the PM peak (5pm-6pm). In addition, the TIA has provided a comparison between the total daily vehicle trips

associated with the existing Riverbank Car Park and the proposal and concludes proposal would result in 50 fewer trips than the existing, noting the:

- Riverbank Car Park generates approximately 1,300 daily vehicle movements
- proposal is predicted to generate approximately 1,250 daily vehicle movements.

The TIA includes SIDRA traffic modelling which confirms the surrounding road network would continue to perform at similar levels of service during the predicted future 2026 PM peak hour. The overall degree of capacity of the Smith Street / Phillip Street / Wilde Avenue intersection remains unchanged, with a minor increase in average vehicle delay of six seconds – equivalent to an 8% increase.

The Department has considered the Applicant's TIA, in consultation with Council and TfNSW, and considers the proposal would not have adverse traffic impacts as:

- the development results in a reduction of 50 vehicle trips when compared to the existing situation and the surrounding local road network including key intersections would generally function at the same level of performance with or without the development
- visitor arrival/departure would be spread throughout the day, rather than concentrated within AM/PM peak periods, which mitigates impacts on the transport network
- the development is located within the Parramatta CBD and has access to a range of different public transport options to access the site
- the absence of on-site car parking and preparation of a Green Travel Plan (GTP) encourages alternative travel modes to private car use, as discussed at **Section 6.7.2**.

The Department concludes the proposal would not result in adverse traffic generation as trips are spread throughout the day, the predicted number of trips during the AM and PM peak hours is minor and the proposal results in a reduction of daily vehicle movements when compared to the existing Riverbank Car Park. Overall, the Department is satisfied the proposal would not have an adverse impact on the operation of the surrounding local road network or performance of intersections.

6.7.2 Car parking

The proposal results in the removal of the 550 existing car parking spaces within the Riverbank Car Park and does not propose the provision of any on-site car parking for private vehicles. The Applicant has committed to preparing and implementing a GTP to encourage visitors and staff to use sustainable modes of transport.

Concern was raised in public submissions about the absence of on-site car parking and potential increase in parking pressure on existing surrounding car parking. TfNSW recommended a GTP be prepared to further mitigate any impacts on the transport network.

The Applicant's TIA estimates the proposal would generate a parking demand of approximately 140 cars on any given day (to be accommodated off-site). The TIA has also considered a 'worst-case' scenario where the total capacity of all proposed buildings and the public domain is reached (10,000 patrons) during a single hour of the day (representing a 'stress-test' of the transport network). In the event of such a scenario the TIA estimates a parking demand of up to 833 cars.

The TIA concludes there is sufficient capacity within the 12,500 existing surrounding on/off-street car parking facilities in Parramatta CBD to accommodate the predicted (and 'worst-case') parking demand.

The Department considers the creation of a car-free development is appropriate, noting:

- there are approximately 12,500 publicly available on/off-street car parking spaces within the Parramatta CBD, of which, 7,580 are located within multi-storey parking facilities conveniently to the site (within an 800 m walk)
- the absence of on-site car parking spaces would actively encourage a shift in travel modes from private car use to active and public transport use consistent with strategic policies for reducing car dependency in highly accessible locations. This approach would also be reinforced through the implementation of the GTP
- the Applicant has commitment to prepare a GTP in consultation with TfNSW, prior to the issue of an Occupation Certificate to actively encourage active and public transport use over private vehicles
- the lack of car parking on the site has allowed the proposal to maximise public domain, open space, landscaping and to create an inviting and highly permeable pedestrianised environment
- the dispersal of car parking spaces across a number of off-site locations will benefit the operation of the road network in the immediate vicinity of the site.

The Department concludes the creation of a car-free development is appropriate and the proposal would promote sustainable modes of transport subject to the preparation and implementation of a GTP.

6.7.3 Pick-up/drop-off facilities

Coach parking

Council and TfNSW initially requested additional information on coach parking. The Department initially raised concern about the design, visual prominence and pedestrian safety implications of the original design of the coach parking facility (being an indented on-site facility for three coaches).

In response, the Applicant revised the proposal. The amended proposal now includes two kerbside coach pick-up/drop-off bays on the northern side of Phillip Street outside the frontage of the Eastern Building. The bays would:

- provide a capacity to accommodate over 100 passengers at any one time
- be for temporary use only, any layover requirements would be met by existing bays outside Parramatta CBD (potentially Grand Avenue and Colquhoun Street in Camelia)
- be restricted to coach parking between 9:30am and 3:30pm on weekdays.

Following review of the RtS, TfNSW recommended the Applicant prepare a Coach Facility Management Plan (CFMP) providing detail of the development's coach profile, layover parking, management of visitor groups and concurrent events, traffic impacts and coach vehicle and passenger queuing. Council recommended further consideration be given to increasing coach parking provision.

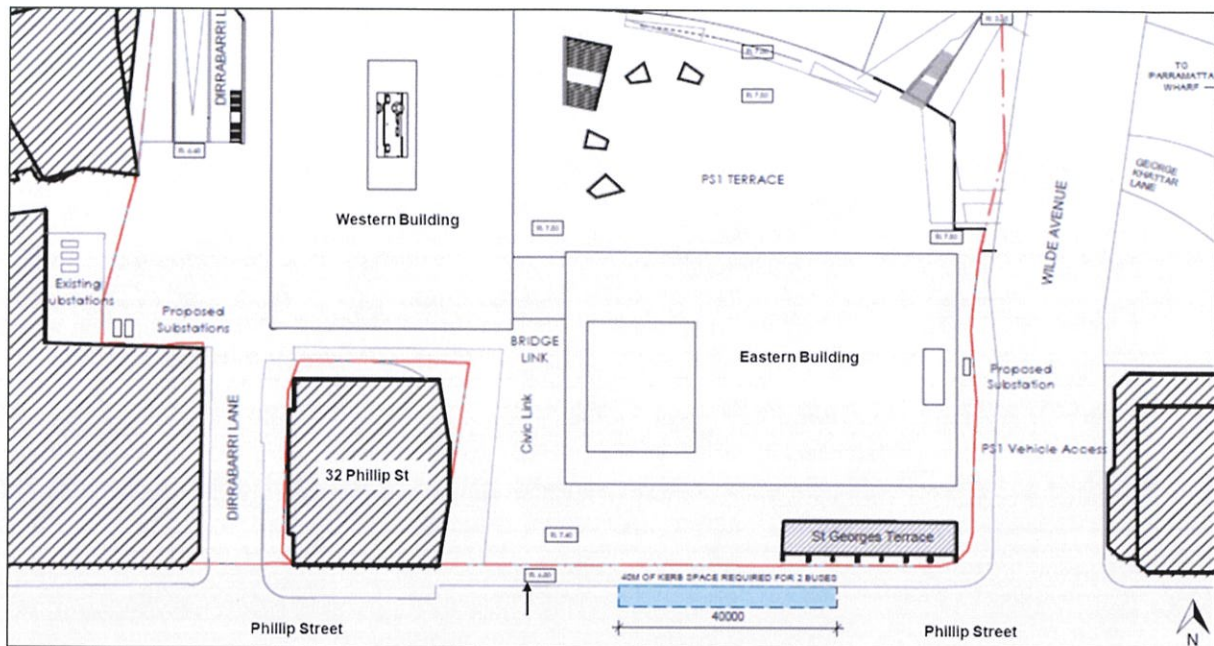


Figure 34 | Proposed kerb side coach parking area (2 bays) highlighted blue (Base source: Applicants RtS)

The Department considers the proposed amendments to the coach pick-up/drop-off bays are acceptable noting the kerb side (rather than indented) facility would not obstruct the free-flow of pedestrians and the reduction of one coach bay reduces the visual prominence of the facility and ensures views towards St George's Terrace are largely unobstructed when the bays are in use.

The Department notes the Government has confirmed the proposal is an expansion (rather than relocation) of the Ultimo Powerhouse Museum (**Section 1.2**). In addition, the RtS states the demand for school and other groups to access the museum via coach would now be shared between the Ultimo and Parramatta sites. In this context, the Department considers the provision of two coach pick-up/drop-off bays is appropriate for the site and notes the proposed bays would be restricted exclusively as a coach pick-up/drop-off facility between 9:30am and 3:30pm on weekdays.

The Department agrees with TfNSW that additional information is required to ensure the proposed coach pick-up/drop-off bays are appropriately managed to ensure smooth operation, prevent adverse impact on traffic and pedestrians and that layover facilities are suitable. The Department has therefore recommended TfNSW's proposed condition requiring a CFMP. In addition, the Department recommends the CFMP ensure that the parking restrictions on the coach bays be limited to ensure that coaches do not layover in the bays or dwell in the bays for an unreasonable amount of time.

The Department also recommends a condition requiring the Applicant to obtain the appropriate approvals for any changes to road restrictions, line markings, signage and the like relating to the coach pick-up/drop-off facility.

Car / taxi / ride-share pick-up/drop-off facilities

Private car, taxis and rideshare services would be able to pick-up/drop-off visitors from the existing set-down areas near the site within Parramatta CBD or within the proposed coach bays (outside the restrictions for temporary coach parking) (**Figure 35**).

The proposal also includes the concept layout for a potential turnaround facility to be located at the termination of George Khattar Lane at the eastern boundary of the site beneath Wilde Avenue Bridge, including a pick-up/drop-off area and disabled parking to potentially service the site (**Figure 36**).

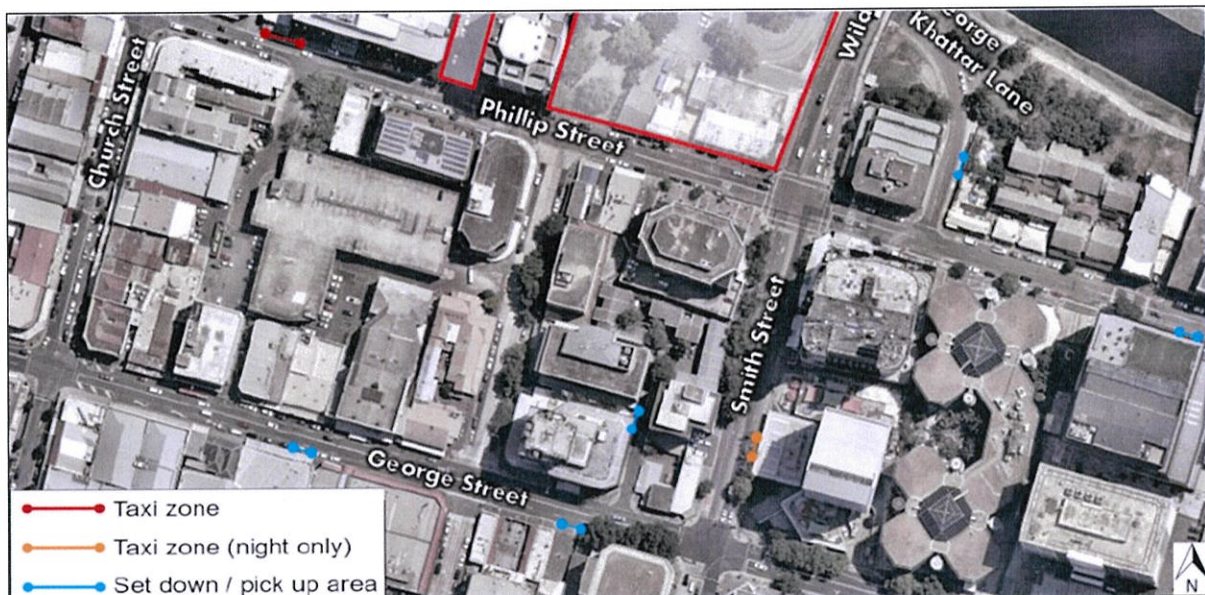


Figure 35 | Location of pick-up/drop-off and taxi bays nearby the site (Base source: Applicants EIS)

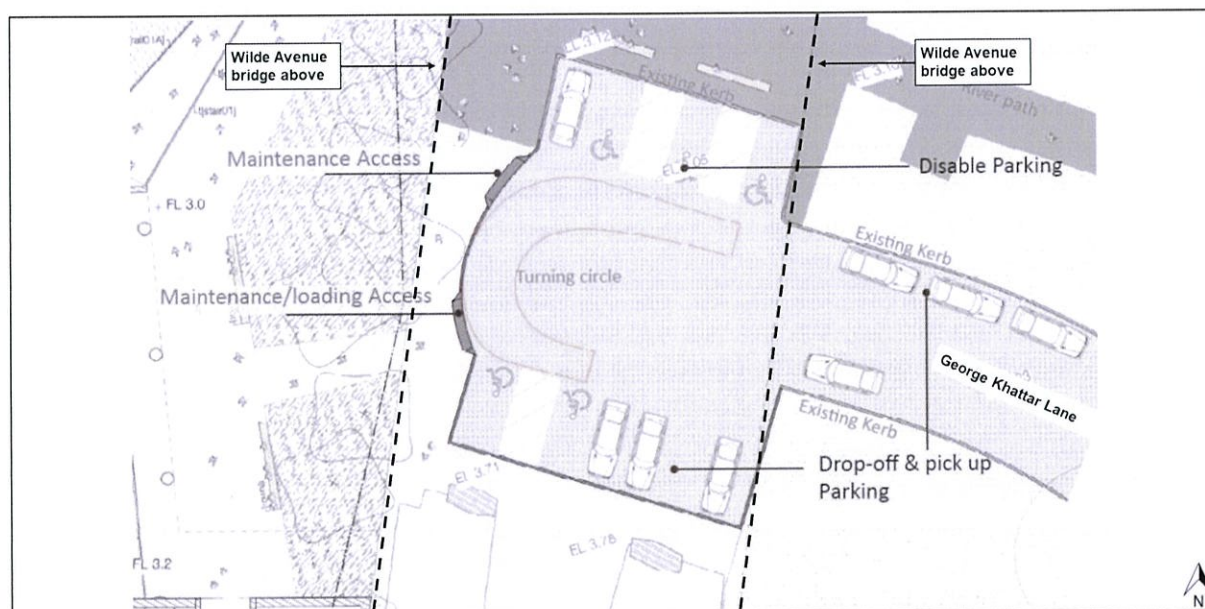


Figure 36 | Proposed concept George Khattar Lane turnaround and pick-up/drop-off facility (Base source: Applicants RfS)

Council supported the provision of the George Khattar Lane turnaround facility and recommended the facility be constructed prior to occupation. However, it did not support the provision of parking and pick-up/drop-off bays as part of the turnaround facility.

TfNSW recommended the Applicant prepare a Point to Point Transport Management Plan (PPTMP) providing detail of the development's pick-up/drop-off profile and location, management of visitor groups and concurrent events, traffic impacts and vehicle and passenger queuing.

In response to the comments provided, the Applicant clarified the turnaround facility and associated parking was designed in response to Council's submission on the EIS proposal. The Applicant has committed to ongoing consultation with Council regarding this matter and noted the proposal is not reliant on pick-up/drop-off facilities and accessible parking in this location.

The Department agrees with TfNSW that additional information is required to ensure that appropriate access is provided to existing and proposed pick-up/drop-off bays and that the use of the bays is appropriately managed. The Department has therefore recommended TfNSW's proposed condition requiring a PPTMP.

The Department notes the Applicant's commitment to continue to consult with Council about the proposed changes to George Khattar Lane. The Department recommends a condition requiring the turnaround facility be designed in consultation with Council, constructed prior to occupation and the Applicant seek Council's approval (in its capacity as the roads authority) for any amendments to the road.

6.8 Other issues

The Department's consideration of other issues is provided at **Table 9**.

Table 9 | Department's consideration of other issues

Issue	Consideration	Recommendation
Dormitory and serviced apartments	<ul style="list-style-type: none"> The application includes the provision of: <ul style="list-style-type: none"> a dormitory comprising six rooms containing 56 beds for students and five separate rooms and beds for teachers located across three middle floors on the western side of the Eastern Building 30 serviced apartments located on the top floor of the Western Building. The Applicant has stated the accommodation is not permanent residential accommodation for resale and it would be fully integrated into the design and operation of Powerhouse Parramatta. The accommodation would operate 24 hours / 7 days per week and is intended to be used by scientists, researchers, artists and students to collaborate, create and research in conjunction with the activities of the museum. It would also provide accommodation for secondary and tertiary students and school holiday programs. The Department notes there are no planning controls or guidelines for the internal design/layout or amenity of dormitories or serviced apartments. The Department has therefore considered the appropriateness of the accommodation based on the merits of the proposal. The Department considers the accommodation is acceptable as: <ul style="list-style-type: none"> the dormitory rooms are of a size capable of accommodating the proposed number of (single) beds, shared bathroom facilities and a small kitchenette the serviced apartments are of various sizes, each provided with a double bed, kitchenette and private bathroom residents would have access to two communal area and an open-aired communal garden the dormitory and serviced apartments would be naturally ventilated have access to sunlight and daylight and have 	The Department has recommended conditions requiring the preparation of an OMP and preventing use as permanent accommodation.

	<p>acceptable southern/western outlooks towards CBD buildings or northern/eastern outlooks over open space and Parramatta River</p> <ul style="list-style-type: none"> o the closest residential property to the site is located 60 m away and as such the accommodation would not result in any overlooking or loss of privacy to those properties o secure access is provided to the dormitory rooms and serviced apartments via lifts and stairs in each building. <ul style="list-style-type: none"> • To ensure the operation of the dormitory and serviced apartments do not have adverse operational or amenity impacts the Department recommends a condition requiring the preparation of an Operational Management Plan (OMP) which would include measures relating to management, access and security, code of conduct, complaints handling and induction. The OMP must also include measures to ensure safety of occupants in an emergency, including flooding as discussed in Section 6.5. • To ensure the accommodation is only used for its intended purpose, the Department also recommends conditions: <ul style="list-style-type: none"> o restricting the occupation of the building to students and staff and guests of the facility o limiting the maximum number of: <ul style="list-style-type: none"> - dormitory beds to 56 students and 5 teachers - serviced apartments to 30 apartments o preventing the subdivision or private sale of the accommodation as permanent accommodation. • Noting the above design features, and subject to appropriate management through the OMP, the Department considers the dormitory and serviced apartments are acceptable. 	
Signage	<ul style="list-style-type: none"> • The application proposes three signage zones: <ul style="list-style-type: none"> o one signage zone located on the south elevation of the Eastern Building and measuring 26 m x 9 m (225 m²) o one signage zone located on the southern elevation of the Western Building and measuring 11 m x 6.2 m (68.2 m²) o one signage zone located on the east elevation of the Western Building and measuring 16.5 m x 6.2 m (102.3 m²). • The Applicant has stated the signage zones are 'loose-fit' to allow for greater design development and testing of future signage options. Future signs may be illuminated. • The Department considers the provision of signage on the building is acceptable in principle. However, the Department is concerned the approval of signage zones is premature, noting their significant size, likely visibility and illumination and the absence of detail on future potential signage. • The Department therefore recommends a condition stating that no approval is granted for the proposed signage zones. 	The Department has recommended a condition confirming that no approval granted for signage zones.
Heritage interpretation	<ul style="list-style-type: none"> • The Application includes a Heritage Interpretation Strategy (HIS), which sets out the framework for finalising the strategy and realising heritage interpretation within the development. • Council has confirmed it supports the HIS. However, it raised concern the Applicant has not consulted with Council about the interpretation strategies. Concern was raised in public submissions that heritage interpretation is not an appropriate mitigation measure for the removal of Willow Grove from the site. 	The Department has recommended Heritage NSW ACH's Aboriginal archaeology management and mitigation conditions.

	<ul style="list-style-type: none"> • The Applicant has committed to finalising the HIS in consultation with Council. • The Department has considered the heritage impact to Willow Grove at Section 6.4.1. The Department concluded the dismantling and reconstruction of Willow Grove is acceptable, on-balance, given: <ul style="list-style-type: none"> ◦ there is no alternative site in Parramatta for the development and relocation of Willow Grove is preferable to its demolition ◦ the adverse impact of retention of Willow Grove on the development ◦ the significant public benefits arising from the proposal ◦ the preparation of a robust RFMP would avoid and minimise impacts to Willow Grove during the dismantling and reconstruction processes. • The Department therefore considers the further development and implementation of the HIS is appropriate and recommends a condition accordingly. In addition, the Department recommends the HIS be prepared in consultation with, and submitted for the approval of, Council. 	
Aboriginal Archaeology	<ul style="list-style-type: none"> • The application includes an Aboriginal Cultural Heritage Assessment Report (ACHAR), which considers the site's potential to contain Aboriginal archaeological remains on the site and the site's potential Aboriginal cultural value. • The ACHAR stated the site has high social and spiritual significance and moderate historical significance for local Aboriginal community. The Site also has a high scientific significance for its potential to contain the PSB. • The ACHAR confirms the proposal will disturb the ground surface, include bulk excavation for the undercroft and piling and would therefore impact archaeology and the PSB. To mitigate and manage the potential impact of these works, the ACHAR recommends the preparation of: <ul style="list-style-type: none"> ◦ an Aboriginal Archaeological Excavation Methodology and Research Design, including testing, monitoring and investigation and salvage ◦ an Aboriginal Heritage Interpretation plan to facilitate long term conservation outcomes. • Heritage NSW ACH considered the ACHAR and raised no objection subject to the Applicant preparing an ACHAR Management Plan (ACHMP), in unison with the RAP and with ongoing involvement of the Aboriginal community, to manage and mitigate Aboriginal sites and objects that may be recovered from the archaeological excavation. • The Applicant has also confirmed the ACHAR has been prepared in consultation with local Aboriginal community and it agrees to finalising the ACHAR by preparing an ACHMP. • The Department is satisfied that the Applicant has adequately considered Aboriginal archaeology impacts in the ACHAR and committed to appropriate mitigation, management and interpretation of archaeology through an ACHMP and Interpretation plan. The Department also supports the Applicant's 	The Department has recommended Heritage NSW ACH's Aboriginal archaeology management and mitigation conditions.

	<p>previous and continued consultation with the local Aboriginal community in finalising its ACHMP.</p> <ul style="list-style-type: none"> The Department accepts the advice of Heritage NSW ACH and, to ensure archaeological impacts are appropriately managed, recommends Heritage NSW ACH's conditions accordingly. 	
Non-Aboriginal Archaeology	<ul style="list-style-type: none"> The site has the potential to contain non-Aboriginal archaeological remains including potential evidence of colonial occupation dating from 1804, which would be of State significance. The application was accompanied by an Historical Archaeological Impact Assessment report (HAIA), which states the preferred approach for detailed building design to avoid impacts to significant archaeological resources and salvage where this is not possible. Heritage NSW supports the HAIA approach and recommends conditions requiring a program of archaeological testing, salvage (including methodology), supervision by a qualified expert, investigation of the PSB (if found) and preparation of a final archaeological report. The Department notes the retention of St George's Terrace results in a reduction in the disturbance of subsurface area and impact on archaeology. The Department is satisfied that archaeological impacts of the proposal have been addressed in the Applicant's HAIA and that measures will be put into place to avoid, manage and mitigate impacts. The Department accepts the advice of Heritage NSW and, to ensure archaeological impacts are appropriately managed, the Department recommends Heritage NSW's conditions accordingly. 	The Department has recommended Heritage NSW's non-Aboriginal archaeology management and mitigation conditions.
Servicing	<ul style="list-style-type: none"> The proposal includes the following loading/unloading facilities (Figure 10): <ul style="list-style-type: none"> two vehicle loading bays located within the ground floor of the Western Building and accessed via Dirrabarri Lane servicing access for large vehicles (up to 19 m) to Presentation Space 1 and Presentation Space 2 (through the floor of Presentation Space 1) directly via Wilde Avenue, except between 7am-10am and 4pm-7pm. Concern was raised in public submissions that the proposal includes insufficient loading and servicing facilities. TfNSW has not raised any objection to the proposed servicing arrangements for the site subject to the preparation of a Loading and Servicing Management Plan (LSMP). TfNSW also recommended servicing of Presentation Space 1 and 2 be prohibited between 7am-10am and 3pm-8pm weekdays. The Applicant has confirmed it does not object to TfNSW recommended conditions requiring a LSMP and amended servicing time restrictions for the Wilde Avenue access. The Department considers the proposed servicing arrangements are acceptable as: <ul style="list-style-type: none"> all servicing would be undertaken on-site, with: <ul style="list-style-type: none"> the majority occurring within the loading dock at the ground floor of the Western Building, which are capable 	The Department has recommended conditions requiring a LSMP and TfNSW's amended servicing time restrictions on the Wilde Avenue access.

	<p>of accommodated 19 m articulated and 12.5 m rigid vehicles</p> <ul style="list-style-type: none"> - use of the Wilde Avenue access being infrequent and only to allow on-site servicing (within Presentation Space 1) relating to exhibition/events in the Eastern Building o the two dedicated on-site loading bays within the Western Building are accessed from Dirrabbarri Lane, which is an existing access lane already used for servicing of 330 Church Street o use of the via the Wilde Avenue access would have minimal impacts on the operation of the dedicated Wilde Avenue bus corridor as use of the access will be prohibited during peak times of 7am-10am and 3pm-8pm weekdays o a LSMP will be prepared to address operational impacts associated with servicing. • The Department has recommended conditions prohibiting the use of the Wilde Avenue access during peak time and requiring the preparation and implementation of a LSMP. 	
Bicycle parking	<ul style="list-style-type: none"> • The proposal includes the provision of 78 bicycle parking spaces including: <ul style="list-style-type: none"> o three spaces for serviced apartments o 15 spaces for staff and associated end of trip facilities within the Western Building o 60 spaces for visitors within the public domain. • TfNSW has recommended a condition requiring the Applicant monitor the use demand for visitor bicycle parking and provide additional capacity if monitoring indicates it is required. Council did not provide comment on bicycle parking. • The Applicant has confirmed it does not object to TfNSW's recommended condition requiring monitoring of visitor bicycle parking. • The Department notes the PDCP does not include bicycle parking rates for serviced apartments, dormitories or museums. However, it does recommend a rate of 1 space per 200 m² of commercial floorspace (15 spaces). The NSW Guidelines for Walking and Cycling (GWC) recommends a bicycle parking rate for serviced apartments of 1 space per 10 rooms (three spaces). • The Department notes the proposed rate of bicycle parking for commercial and serviced apartments is consistent with the DCP and GWC recommended rates and is therefore acceptable. • Noting the PDCP and GWC do not include a visitor bicycle parking rate for museums, the Department calculates, based on the predicted travel mode share for bicycles (1% to 2%) and the typical number of visitors expected at the site at any one time (2,000 people), that there is likely to be a need for a minimum of 40 visitor bicycle spaces. • The Department is therefore satisfied the proposed 60 visitor bicycle parking spaces is acceptable. The Department agrees with TfNSW's recommendation that the demand for visitor parking be monitored and additional capacity provided if required. 	<p>The Department has recommended conditions requiring the provision of the proposed bicycle parking and associated end of trip facilities and that visitor parking be monitored and additional capacity provided if necessary.</p>
Construction noise impact	<ul style="list-style-type: none"> • The site is located between 60 m and 80 m away from existing residential properties and a childcare and educational facility are 	<p>The Department recommends</p>

located opposite the site. Other nearby uses include place of worship, commercial and community use premises.

- Concerns were raised in public submissions about noise impacts associated with the development.
- The Interim Construction Noise Guideline 2009 (ICNG) includes recommended standard hours of construction as follows:

Day	ICNG hours	Proposed hours	Difference
Weekdays	7am – 6pm	7am-6pm	Same
Saturday	8am – 1pm	8am-5pm	+4hrs (pm)
Sunday / public holiday	No work	No work	same

- The ICNG recommends construction noise management level (NML) be limited to +10 decibels (dB) above the background noise level during the standard construction hours. The NML for work outside standard hours should be limited to +5 dB. The ICNG notes that impacts above 75 dB represent a point where sensitive receivers may be 'highly noise affected'.
- The application was accompanied by a Noise and Vibration Impact Assessment (NVIA), which confirms:
 - an extension to ICNG standard hours is requested to maximise efficiency and take advantage of reduced road traffic on Saturdays
 - the NML for residential properties is between 56 and 61 dB, childcare, educational and place of worship establishment is 55 dB and commercial is 70 dB
 - proposed works have the potential to generate noise between 48 to 77 dB at the nearest residential receivers and between 46 to 83 for other non-residential receivers.
- The NVIA acknowledges the proposed construction works may result in noise impacts beyond the NMLs, and in some instances noise generated may be in excess of 75 dB. Therefore, the NVIA recommends the following potential mitigation measures:
 - preparation and implementation of a construction noise and vibration management plan (CNVMP)
 - community liaison, scheduling of noisy activity, community consultation, complaints handling, equipment selection and maintenance, non-tonal alarms, materials handling and work site training.
- The Department has considered the findings of the NVIA and public submissions. On balance, the Department considers, given the dense urban nature of the immediate surrounding area, some noise exceedances during construction would be unavoidable. Notwithstanding, the Department does not consider sufficient justification has been provided for the extended hours of construction, particularly given the significance of potential noise exceedances. The Department therefore recommends a condition limiting the hours of construction to the ICNG standard hours.
- The Department considers the Applicant's proposed mitigation measures are acceptable. However, given the potential noise impacts, the following additional measures are necessary to mitigate impacts to the nearest properties:
 - preparation and implementation of a CNVMP, including appropriate mitigation measures to reduce noise impacts.
 - work to be carried out in accordance with the ICNG

conditions requiring the preparation of a CVNMP, implementation of construction noise mitigation measures and construction works to be undertaken in accordance with ICNG standard hours.

	<ul style="list-style-type: none"> ○ respite periods from the noisiest activities on the site ○ all construction vehicles only to arrive to the work site within the permitted hours of construction ○ no noise to be 'offensive noise' as defined by the POEO Act. • On this basis, and subject to the Applicant's compliance and commitment to implement all reasonable and feasible mitigation measures to mitigate and manage noise, the Department is satisfied construction work can be appropriately managed to minimise disruption to residential amenity. 	
Other construction impacts	<ul style="list-style-type: none"> • In addition to potential construction noise, the proposed works may have other construction impacts in terms of traffic, waste, air quality, dilapidation and the like. • Concern was raised in public submissions about other potential construction impacts, in particular construction traffic impacts on adjoining properties. • TfNSW has recommended the Applicant prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) to address construction traffic impacts and consult with TfNSW about coordinating any interface works that may affect the Parramatta Light Rail. • In response to the concerns raised, the Applicant has committed to preparing a Construction Environmental Management Plan (CEMP), including air quality and waste management assessments, a communications strategy and dilapidation survey. The Applicant has confirmed it agrees with TfNSW's recommendation to prepare a CPTMP and consultation regarding the Parramatta Light Rail project. • The Department notes the site is located within an established CBD environment and in this context, it is likely that some construction impacts would be unavoidable. However, the Department considers subject to construction occurring in accordance with the ICNG standard hours of construction and works being undertaken in accordance with the proposed CEMP and CPTMP construction impacts can be appropriately managed and mitigated in accordance with standard practices for development sites within urban areas and impacts would be kept within acceptable parameters. • The Department considers the preparation of the CEMP, CPTMP and consultation with TfNSW is acceptable. Further, subject to the implementation of these plans, construction impacts can be appropriately managed and mitigated and recommends conditions accordingly. 	The Department has recommended conditions relating to the management of construction impacts.
Contamination	<ul style="list-style-type: none"> • The application included Detailed Site Investigation report (DSI) and a Remediation Action Plan (RAP). • The DSI and RAP conclude the site can be made suitable for its intended use subject to implementation of a remediation strategy including: <ul style="list-style-type: none"> ○ off-site disposal of contaminated soils to licensed facility ○ preparation of an Acid Sulfate Soil Management Plan (ASSMP), Asbestos Management Plan (AMP) and unexpected finds protocol 	The Department has recommended conditions requiring the implementation of the RAP remediation strategy, preparation of ASSMP, AMP and Validation Report.

	<ul style="list-style-type: none"> ○ preparation of a Validation Report following the completion of the remediation of the site. • The Department has considered land contamination in detail at Appendix B. In summary, the Department is satisfied that any contaminants found on the site would be addressed through the implementation of the RAP remediation strategy and site validation. • The Department concludes the site can therefore be made suitable for its intended use and no further land contamination investigation or actions are required. 	
Wind impacts	<ul style="list-style-type: none"> • Concern was raised in public submissions about potential wind impacts of the proposal. • The Application was accompanied by a Wind Impact Assessment (WIA), which considered the existing and proposed wind environment and pedestrian comfort and usability of spaces. • The WIA results indicate: <ul style="list-style-type: none"> ○ all locations in and around the proposed buildings would pass the wind safety criterion and resulting wind impacts would be similar to those currently experienced on the site ○ most spaces suitable for sitting type activities. However, due to downwash from the proposed buildings and neighbouring high-rise buildings, stronger wind conditions may occur between the gap between buildings (Civic Link), which would be suitable for pedestrians walking • The WIA recommends wind mitigation measures including the implementation of the landscape strategy (including tree planting) and strategic placement of vertical screens and downstands. • The Department notes the resulting wind environment would not be substantially different from the existing conditions and is therefore satisfied the development would not result in adverse wind impacts. • The Department notes the WIA recommended wind mitigation measures and considers their implementation would further improve wind conditions throughout the site to an acceptable level. 	The Department has recommended a condition requiring the implementation of the WIA wind mitigation measures.
Reflectivity	<ul style="list-style-type: none"> • Council initially raised concern the proposed reflectivity of materials may result in glare on ferries. • In response to Council's comments, the Applicant has confirmed the façade glazing system will adopt a maximum normal specular reflectivity of 20% to prevent glare for pedestrians, motorists, or occupants of surrounding buildings. • The Department considers the 20% limitation on material reflectivity is acceptable and notes this is the usual industry standard. The Department recommends a condition accordingly. 	The Department has recommended a condition limiting the material reflectivity to 20%.
Site selection	<ul style="list-style-type: none"> • Public submissions raised concern that the site is inappropriate for the development, particularly due to the heritage and flooding constraints associated with the site. • Council has stated that there is no other appropriate alternative location for the development within Parramatta. 	No conditions are necessary.

	<ul style="list-style-type: none"> • The Applicant stated the site was identified as the preferred site for a new cultural precinct and subsequently acquired in 2019. The Applicant also stated that heritage impacts on Willow Grove can be managed and flooding constraints have been addressed by the proposed flood and drainage strategy. • The Department considers there is appropriate justification for the development noting strategic planning policy supports the provision of a new museum on the banks of Parramatta River and the proposal would attract domestic and international exhibitions and events, supporting local and visitor economies. • The Department also considers the site is an appropriate site for the proposed development as it allows for the creation of a landmark cultural facility at the termination of the Civic Link, within an emerging cultural precinct along Parramatta River with excellent access to existing and future public transport links. • The Department acknowledges the proposal would result in the removal and relocation of Willow Grove (Section 6.4.1). However, on balance the Department considers the proposal is acceptable as the retention of Willow Grove would significantly compromise the delivery of the museum and its associated social and cultural benefits for Parramatta and Western Sydney. Further the Department considers Willow Grove being relocated is preferable when weighed against the alternative that it be demolished and is satisfied the potential heritage impacts of its relocation can be appropriately mitigated and managed to an acceptable level. • The Department has considered flooding impacts at Section 6.5 and concludes the proposed flood mitigation measures (including undercroft, landscaped areas and drainage) are acceptable and would adequately mitigate flood impacts, subject to conditions. • The Department therefore concludes the site is appropriate for the development as heritage and flooding impacts can be appropriately mitigated and managed. 	
Economic and Social impact	<ul style="list-style-type: none"> • Concerns were raised in public submissions about the business case for the proposal and the potential cost and appropriateness of spending State funds on the museum. • The proposal was also supported by a Social and Economic Impact Assessment prepared by Ethos Urban. • Section 4.15(1)(b) of the EP&A Act requires the consideration of the likely social and economic impacts of the development in the locality. The Department considers the proposal would result in positive economic and social outcomes for Parramatta and Western Sydney as it would: <ul style="list-style-type: none"> ◦ establish a world class arts and cultural precinct within the Parramatta CBD attracting local visitors and tourists to the area and contributing to the visitor economy in Parramatta and Western Sydney ◦ includes the provision of four new key publicly accessible open spaces (15,000 m²), providing for new recreational focal points along the Parramatta River for the local community, support the arts and cultural facilities within the development ◦ provide a positive investment in arts and culture for Western Sydney, which has historically been focused within the Eastern Harbour City 	No conditions are necessary.

	<ul style="list-style-type: none"> ○ provision of the northern portion of the Civic Link (which when the southern portion is completed by Council) will connect the CBD to the Parramatta River foreshore through the site ○ increase demand for entertainment, food and accommodation from visitors and generate increased employment for residents in the locality ○ generate 1,100 construction jobs, 2,430 indirect jobs and 300-400 operational jobs 	
Development contributions	<ul style="list-style-type: none"> • Developments within the Parramatta CBD are subject to developer contributions payable to Council in accordance with the Parramatta City Centre S94A Development Contribution Plan (Contribution Plan). The Contribution Plan does not identify circumstances where an exemption to paying development contributions can be considered. • The Applicant has stated that as the site is Crown Land and as the proposal provides for new art/cultural facilities (24,516 m² GFA) including significant areas of new public open space it should be exempt from the requirement to pay development contributions. • The Department notes that Circular D6 'Crown Development Applications and Conditions of Consent' states that Crown activities providing a public service or facility lead to significant benefits for the public in terms of essential community services, and these activities are not likely to require the provision of public services and amenities in the same way as developments undertaken with a commercial objective. • Department concludes, having regard to the guidance in Circular D6 and noting the significant public benefits associated with the proposal, granting an exemption from payment of contributions is warranted and acceptable in this instance. 	No conditions are necessary.
Exhibition space	<ul style="list-style-type: none"> • Concern was raised in public submissions that the development includes insufficient exhibition and collection storage space. • The Applicant has stated the development includes approximately 18,000 m² flexible exhibition space. The Powerhouse manages its collection in accordance with their legislation and established collection management policies. • The Department notes the development provides for modern and large-scale exhibition spaces. The design, location and size of spaces has been undertaken in response to the needs of the Powerhouse. In addition, the proposed development is the result of a rigorous design competition and was subject to the advice of the DIP. • The Department considers the design of the proposal is acceptable and concludes the spaces within the development are appropriate for their intended purpose. 	No conditions are necessary.
Relocation of Powerhouse Ultimo	<ul style="list-style-type: none"> • Concern was raised in public submissions that the Powerhouse should not be relocated and should be retained in its current location in Ultimo. • The Department notes that the Government announced that the Powerhouse would no longer be relocated and would be retained in its current location in Ultimo. 	No conditions are necessary.

	<ul style="list-style-type: none"> The Department concludes the proposal provides for a new facility and would not rely on the relocation of the Ultimo facility. 	
Consultation	<ul style="list-style-type: none"> Concern was raised in public submissions that insufficient and inadequate public consultation has been undertaken. The Applicant has confirmed it undertook a range of community and stakeholder engagement prior to, and following, the lodgement of the application. Consultation activities included webinar briefings, one-on-one meetings, enquiries through the project webpage, a print advertisement campaign, establishing a hotline for enquiries, an online survey, letterbox drop, phone calls to local businesses, social media updates, digital banners and advertisements, and Google advertisements. The Department exhibited the EIS for 42 days which exceeds the minimum 28 days statutory requirements of the EP&A Act (Section 5). It also made the Applicant's RtS and SRtS publicly available and has considered all additional submissions received in its assessment (Section 6). The Department is therefore satisfied that the community has had sufficient opportunity to comment on the proposal. 	No conditions are necessary.
Open space	<ul style="list-style-type: none"> Concern was raised in some public submissions that the development should be rethought and redesigned as a public open space. Other submissions recommended the site be redesigned to include a public square similar to the indicative layout in Council's River City Strategy. The Department notes the majority of the site currently comprises public car parking, with the only areas of public open space being located adjacent to the river. In comparison, the proposal provides significant new areas of public open space (15,000 m²), including two large lawn areas along the foreshore, a terrace above the undercroft and the northern part of Civic Link through the site. The Department considers the proposed provision of new public open spaces (Section 6.6) represents a significant public benefit to the local and broader community. In addition, although different from Council's indicative layout, the proposal is consistent with the aims of the River City Strategy as it provide for extensive areas of public open space along the foreshore. The Department's detailed assessment (Section 6) has considered the proposed development, submissions and the planning context and concludes that the development is appropriate for the site. 	No conditions are necessary.
Development precedent	<ul style="list-style-type: none"> Concern was raised in public submissions the proposal may set a precedent for the development of other large buildings within the locality and the removal of other heritage items. The Department notes the any development of surrounding land would be the subject of separate development applications (including public consultation), subject to height, floor space ratio, heritage and other planning controls and would be assessed on their merits. The Department therefore does not consider the proposal would set a development precedent. 	No conditions are necessary.

Property value	<ul style="list-style-type: none"> • Concern was raised in public submissions the proposal would have an adverse impact on property values. • The Department has assessed the merits of the modification in detail at Section 6 of this report and concludes, subject to conditions, the development has acceptable impacts. Therefore, the Department is satisfied the proposal is unlikely to result in any significant adverse impacts on property prices. 	No conditions are necessary.
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6.9 Public interest

The Department is satisfied that the proposal would be in the public interest. While the proposal would result in the removal of the locally listed Willow Grove from the site, the Department considers its relocation is acceptable given the significance of the site and public benefits the proposal will deliver for Parramatta and Western Sydney. Further, the Department is satisfied the heritage impacts of its relocation can be appropriately mitigated and managed to an acceptable level.

The proposal would benefit Parramatta and Western Sydney as it would provide for a new world class cultural facility including museum, arts, exhibition and event spaces, new public open spaces, the northern part of Civic Link (which when the southern portion is completed by Council) will connect the CBD to Parramatta River, improved public domain and retention of St George's Terrace. The proposal is predicted to generate up 1,100 FTE construction jobs, 2,430 FTE indirect jobs and 300-400 FTE operational jobs.

Overall, the Department considers the proposal is in the public interest, having regard to the substantial public benefits to be delivered for Parramatta and Western Sydney. It will result in acceptable environmental impacts, which have been mitigated subject to the recommended conditions of consent.

7 Evaluation

The Department has reviewed the EIS, RtS and SRtS and assessed the merits of the proposal, taking into consideration advice from public authorities and comments made by Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly assessed.

The Department considers the proposal is acceptable as:

- it is consistent with the Greater Sydney Region Plan and the Central City District Plan vision to grow Parramatta as the Central River City and deliver a new world class cultural precinct on the banks of the Parramatta River, providing social and cultural benefits for the local and broader community
- the proposal was selected as the competition winner of a two-stage international design competition, it exhibits design excellence and it displays landmark / civic qualities appropriate for a significant public building of this nature
- the proposal fully complies with the height and density controls applying to the site and it provides an appropriate relationship to the Parramatta River and neighbouring buildings within its CBD context
- while the Department appreciates the concerns raised about the impact of the proposal on the locally heritage listed Willow Grove, the Department accepts that Willow Grove cannot be retained in its current location without significantly compromising the delivery of the museum, the competition winning design and the provision of public open space and public domain upgrades. The Department also considers the revised proposal would appropriately mitigate heritage impacts on Willow Grove as it:
 - would preserve the heritage fabric and significance of the building and fence, subject to a detailed methodology for deconstruction and relocation
 - would reconstruct the building on a new site within the Parramatta LGA, to be selected in consultation with key stakeholders and the community
 - would allow the building to be adaptively re-used with increased public access
- the retention of St George's Terrace would preserve one of the existing local heritage items on the site, facilitate its adaptive reuse and provide additional activation of the Phillip Street frontage, without compromising on the delivery of the proposal
- the Department engaged an independent flood expert to review the proposal. In summary, the review found that the proposal has been appropriately designed to mitigate and manage flooding impacts on the site and prevent adverse flood impacts to surrounding properties, subject to conditions
- it would create 15,000 m² of publicly accessible open space and associated public domain including the creation of the northern portion of Civic Link within the site, lawn areas for recreation and hard and soft landscaping and provision of 120 new trees providing 30% tree canopy cover across the site
- it would not result in any adverse traffic impacts as it is conveniently located close to public transport, provides adequate drop-off, pick-up and loading facilities, and there is sufficient capacity within the existing on and off-street parking facilities to accommodate museum visitation

- the proposal would provide significant public benefits including the creation of a new world class cultural facility for Western Sydney including museum, arts, exhibition and event spaces, new public open spaces, the northern portion of Civic Link (which when the southern portion is completed by Council would connect the CBD to Parramatta River), improved public domain, retention of St George's Terrace and creation of approximately 1,100 construction, 2,430 indirect and 300-400 on-going operational jobs.
- the Department has recommended a suite of conditions to ensure:
 - an appropriate site is selected within the Parramatta area for the relocation of Willow Grove
 - Willow Grove is appropriately dismantled and reconstructed
 - the submission of a future application for the fit-out and future use of St George's Terrace
 - photographic archival recording and conservation management of all heritage items
 - provision of high-quality landscaping, open spaces and the retention and provision of trees
 - appropriate management and operation of events, dormitories and serviced apartments servicing, coach parking and bicycle parking
 - management and mitigation of impacts associated with archaeology, construction, contamination and wind impacts.

The Department's assessment therefore concludes the proposal is in the public interest and is approvable subject to conditions (**Appendix E**).

8 Recommendation

It is recommended that the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of the Powerhouse Parramatta (SSD 10416)
- **signs** the attached development consent and recommended conditions of consent (**Appendix E**).

Recommended by:



Anthony Witherdin
Acting Executive Director
Key Sites and Regional Assessments

Recommended by:



Anthea Sargeant
Acting Deputy Secretary
Assessment and System Performance

9 Determination

The recommendation is **Adopted** / ~~Not adopted~~ by:



The Hon. Rob Stokes MP

NSW Minister for Planning and Public Spaces

Appendices

Appendix A – Relevant Supporting Information

Appendix B – Statutory Considerations

Appendix C – Summary of Department's Consideration of Public Submissions

Appendix D – WMA Flooding and Drainage Report

Appendix E – Recommended Conditions of Consent

Appendix A – List of Documents and Relevant Supporting Information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows.

1. Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>

2. Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>

3. Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>

4. Supplementary Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>

Appendix B – Statutory considerations

B1 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 the Act. The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent / approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant.

The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act as detailed in **Table 10**.

Table 10 | Consideration of the proposal against the objects of section 1.3 the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	<p>The proposal promotes the social and economic welfare of the community by providing a new cultural / museum facility on a highly accessible site and, in doing so, contributes to the achievement of State and regional planning objectives.</p> <p>As discussed in Section 6, the proposal comprises development that would have a positive impact on the economic welfare of the community and would not result in any impacts on the State's natural or other resources. The proposal is predicted to generate 1,100 FTE construction, 2,430 FTE indirect jobs and 300-400 FTE operational jobs.</p>
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<p>The proposal has integrated ESD principles as discussed in Appendix B, Section B3.</p>
(c) to promote the orderly and economic use and development of land,	<p>The proposal involves the orderly and economic use of land through the efficient development of an existing urban site that is in close proximity to existing services and public transport. The development of the site will provide economic benefits through job creation and by attracting tourists and other visitors to Parramatta.</p> <p>The proposed land uses are permissible and the form of the development has regard to the planning controls that apply and the character of the locality. The merits of the proposal are considered in Section 6.</p>
(d) to promote the delivery and maintenance of affordable housing,	<p>The proposal, being an information and educational facility, does not include any affordable housing, and is not required to do so.</p>

	Notwithstanding this, the proposal does include 30 serviced apartments and a dormitory to provide short stay / temporary accommodation to support the operation of the facility.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	<p>The proposed development is located on an existing developed urban site and will have negligible impacts on the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.</p> <p>The proposed removal of existing trees is considered at Section 6.6.2. The Department concludes the tree removal is acceptable subject to the provision of replacement trees and landscaping.</p> <p>On 24 September 2020 the Department determined that the application is not required to be accompanied by a BDAR (Section 4.5).</p>
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	<p>The proposal includes the retention of St George's Terrace and the deconstruction and relocation of Willow Grove locally listed heritage items. The Department concludes the development's heritage impact is acceptable subject to conditions (Section 6.4).</p> <p>The Powerhouse includes programming for Aboriginal cultural heritage exhibitions and education programmes. The Department has recommended conditions relating to the management of Aboriginal archaeology during the construction phase of the development (Section 6.8).</p>
(g) to promote good design and amenity of the built environment,	The proposal achieves a high standard of design and amenity as discussed in Section 6.3 . The Department concludes the proposal exhibits design excellence as discussed in Section 6.2 .
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposal has been designed to be accessible, inclusive and adaptable and will continue to be fit for purpose into the future. The application was accompanied by a BCA Report that concludes the development is capable of complying with the requirements of the relevant sections of the Act.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposal (as outlined in Section 5) which included consultation with Council and other public authorities and consideration of their responses.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal as outlined in Section 5 , which included notifying adjoining landowners, placing a notice in newspapers and displaying the proposal on the Department's website, at Council's office and Service NSW Office during the EIS and RtS public exhibition periods.

B2 Section 4.15(1) matters for consideration

The matters for consideration under section 4.15(1) that apply to SSD in accordance with section 4.40 of the EP&A Act have been addressed in **Table 11**.

Table 11 | Section 4.15(1) Matters for Consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided below, at Section 6 and Appendix B of this report.
(a)(ii) any proposed instrument	Not applicable.
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP, development control plans (DCPs) do not apply to SSD. Notwithstanding, consideration has been given to the relevant controls under the PDCP at Section 6 .
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations Refer Division 8 of the EP&A Regulation	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6), public participation procedures for SSD and Schedule 2 relating to EIS.
(a)(v) any coastal zone management plan	The site is not identified as being located within a designated coastal area under the State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP).
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The impacts of the proposal have appropriately mitigated or conditioned as discussed in Section 6 of this report.
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Section 6 of this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition of the proposal as summarised at Section 3 and considered at Section 6 of this report.
(e) the public interest	The proposal is in the public interest as discussed at Section 6 of this report.

B3 Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity

- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

The development will be designed and constructed to target a 5-star Green Star minimum sustainability target under the Green Star Design & As Built v1.3 rating tool. In addition, the proposal has registered with the Green Building Council of Australia for the early access program to the GBCA's new Green Star for New Buildings tool, which is currently in trial phase.

In addition, to the above minimum sustainability target, the development proposes a range of ESD initiatives and sustainability measures, including:

- high performance glass, external and internal shading and opaque facades to minimise solar gains
- sustainable materials and products with low embodied carbon and energy efficient measures
- use of PV panels and low carbon technology to offset greenhouse gas emissions
- high efficiency mechanical systems and chillers to provide cooling effectively
- investigation of use of 'green concrete' and use of recycled materials
- minimised use of PVC and all timber to be FSC Certified
- water efficient fittings and fixtures and provision of a rainwater harvesting system
- provision of permeable outdoor finishes to reduce run off
- target 30% reduction in energy use and 20% reduction in water use compared to a standard practice building
- no on-site car parking provision to encourage alternative modes of active and public transport.

The Department has considered the project in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision making process by a thorough assessment of the environmental impacts of the development. The conservation principle has been applied through careful consideration of tree removal and replacement and habitat creation on the site. Improved valuation is achieved through the creation of a world class cultural facility that embodies sustainable design, construction and ongoing operation. The proposed development is consistent with ESD principles as described in the Applicant's EIS and RtS, which have been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation.

The Department has recommended conditions requiring the minimum sustainability targets are met.

Subject to the above conditions, the proposed development would be consistent with ESD principles and the Department is satisfied the future detailed development is capable of encouraging ESD, in accordance with the objects of the EP&A Act.

B4 Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

B5 Environmental Planning Instruments (EPIs)

To satisfy the requirements of Section 4.15(a)(i) of the Act, this report includes references to the provisions of the EPIs that govern the carrying out of the proposal and have been taken into consideration in the Department's environmental assessment.

The EPIs that have been considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)
- State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP)
- Parramatta Local Environmental Plan 2011 (PLEP)
- other relevant plans, policies or guidance.

State Environmental Planning Policy (State and Regional Development) 2011

The aims of the SRD SEPP are to identify SSD and State significant infrastructure and to confer functions on regional planning panels to determine development applications. The proposal is SSD as summarised at **Figure 11**.

Table 12 | SRD SEPP compliance table

Relevant Sections	Department's consideration	Compliance
3 Aims of Policy The aims of this Policy are as follows: (a) to identify development that is State significant development,	The proposed development is identified as SSD (Section 4.1).	Yes
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2.	The proposed development is permissible with development consent. The development is specified in Schedule 1 of the SRD SEPP.	Yes
Schedule 1 State significant development — (Clause 13) Development of an information and education facility including museum and art galleries with a CIV of more than \$30 million.	The proposal is development associated with an information and education facility including museum and art galleries with a CIV of more than \$30 million.	Yes

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

The proposal would not generate more than 200 vehicle movements per hour and is not defined as traffic generating development under Clause 104 of the SEPP. In addition, the development is not on a classified road, adjacent to a rail corridor or interim rail corridor.

Notwithstanding the above, the Application was referred to TfNSW. TfNSW has not raised any objections to the proposal and has recommended conditions as summarised at **Section 5**.

State Environmental Planning Policy No.55 – Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application.

The application included a DSI report and a RAP. The DSI indicates that the site has been used as a multi-story and surface car park since the 1960s. In addition, the site has also been used for light industrial, commercial and residential purposes and contains landscaped areas.

The DSI included a review of historical data, aerial imagery, previous site investigations, a site walkover and soil sampling investigations. The DSI also included a review of available background information, field investigation of soil samples along with data analysis and reporting.

The DSI considered potential contamination risks were associated with previous uses of the site, importation of fill materials from unknown origins and the historical operation of an electrical substation. Potential contaminants of concern were identified as heavy metals, hydrocarbons, polychlorinated biphenyls and asbestos.

The DSI undertook an assessment of groundwater and found levels of environmental constituents to be consistent with anticipated levels within an historically urbanised area. Further, there was no indication of a site-specific source of groundwater impact.

To address the potential risks associated with contaminants, the DSI and RAP recommend a remediation strategy consisting of:

- implementation of the RAP detailing the required remediation and/or ongoing management works to address the identified contaminants
- preparation of an ASSMP outlining the relevant management requirements if acid sulfate soils are encountered
- preparation of an AMP to address asbestos removal, control and management
- preparation of an unexpected finds protocol to address any unexpected potentially hazardous substances
- classification of soils in accordance with relevant legislation / guidelines
- excavation and off-site disposal of contaminated soils at appropriately licensed facilities
- preparation of a Validation Report at the completion of the remediation works to verify remedial works have been completed in accordance with the RAP.

The RAP concluded the site can be made suitable for the intended land use subject to the implementation of the RAP remediation strategy.

The Department accepts the findings and recommendations of the DSI and RAP and is satisfied the site can be made suitable for the proposed use, subject to conditions requiring the implementation of the RAP remediation strategy, preparation of recommended plans and a Validation Report.

Draft Remediation of Land State Environmental Planning Policy

The Explanation of Intended Effect for a Draft Remediation of Land SEPP was exhibited until 13 April 2018. The Draft Remediation of Land SEPP proposes to better manage remediation works by aligning the need for development consent with the scale, complexity and risks associated with the proposed works. As the proposal has demonstrated it can be suitable for the site, subject to future DA(s), the Department considers it would be consistent with the intended effect of the Remediation of Land SEPP.

State Environmental Planning Policy No. 64 – Advertising and Signage

SEPP 64 applies to all signage that under an EPI can be displayed with or without development consent and is visible from any public space or public reserve.

The development proposed the inclusion of three signage zones. As discussed at **Section 6.8**, the Department considers the provision of signage on the building is acceptable in principle. However, the Department noted there was insufficient information provided to allow for the approval of signage zones at this stage. A condition is recommended accordingly.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP) provides planning principles for development within the Sydney Harbour catchment.

The site is located within the Sydney Harbour Catchment area. However, it is not located within the 'Foreshores and Waterways Area' and is not identified on the SREP zoning map. The relevant provisions of the SREP have been considered in **Table 13**.

Table 13 | Consideration of the relevant provisions of the SREP

Provision	Department's consideration	Compliance
Part 2 Planning Principles		
Clause 13 Sydney Harbour Catchment		
The Planning principles for the land within the Sydney Harbour Catchment are as follows–		
(a) development is to protect and, where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends,	The development has responded to the flooding constraints of the site and would not have an adverse impact on flood waters (Section 6.5). The development includes the provision of new site landscaping, including the provision of 120 trees (Section 6.6).	Yes
(b) the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity,	The proposal includes the demolition of the Riverbank Car Park and reforming of the foreshore as public open space (Section 6.6). The Aboriginal archaeology and cultural significance of the site has been considered (Section 6.8).	Yes
(c) decisions with respect to the development of	The development has responded to the	Yes

land are to take account of the cumulative environmental impact of development within the catchment,	flooding constraints of the site and would not have an adverse impact on flood waters (Section 6.5).	
(d) action is to be taken to achieve the targets set out in <i>Water Quality and River Flow Interim Environmental Objectives: Guidelines for Water Management: Sydney Harbour and Parramatta River Catchment</i> (published in October 1999 by the Environment Protection Authority), such action to be consistent with the guidelines set out in <i>Australian Water Quality Guidelines for Fresh and Marine Waters</i> (published in November 2000 by the Australian and New Zealand Environment and Conservation Council),		Yes
(e) development in the Sydney Harbour Catchment is to protect the functioning of natural drainage systems on floodplains and comply with the guidelines set out in the document titled <i>Floodplain Development Manual 2005</i> (published in April 2005 by the Department),		Yes
(f) development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour,	As discussed at Section 6.3.1 , the proposal achieves design excellence and would not result in adverse visual impacts from the surrounding area, including Parramatta River. The proposal is therefore consistent with the SREP and will not have any significant adverse impact on the Sydney Harbour Catchment.	Yes
(g) the number of publicly accessible vantage points for viewing Sydney Harbour should be increased,	The creation of the northern portion of Civic Link within the site and new public domain will provide additional access and viewing points of the Parramatta River.	Yes
(h) development is to improve the water quality of urban run-off, reduce the quantity and frequency of urban run-off, prevent the risk of increased flooding and conserve water,	The development has responded to the flooding constraints of the site and would not have an adverse impact on the free-flow of flood waters (Section 6.5).	Yes
(i) action is to be taken to achieve the objectives and targets set out in the <i>Sydney Harbour Catchment Blueprint</i> , as published in February 2003 by the then Department of Land and Water Conservation,		Yes
(j) development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian	The development includes the provision	Yes

corridors, remnant native vegetation and ecological connectivity within the catchment,	of new site landscaping, including the provision of 120 trees (Section 6.6).	
(k) development is to protect and, if practicable, rehabilitate land from current and future urban salinity processes, and prevent or restore land degradation and reduced water quality resulting from urban salinity,		Yes
(l) development is to avoid or minimise disturbance of acid sulfate soils in accordance with the <i>Acid Sulfate Soil Manual</i> , as published in 1988 by the Acid Sulfate Soils Management Advisory Committee.	The Department has recommended the preparation of a CEMP, which includes the preparation of an ASSMP.	Yes

Clause 15 Heritage Conservation

The planning principles for heritage conservation are as follows–

<ul style="list-style-type: none"> a) Sydney Harbour and its islands and foreshores should be recognised and protected as places of exceptional heritage significance, b) the heritage significance of particular heritage items in and around Sydney Harbour should be recognised and conserved, c) an appreciation of the role of Sydney Harbour in the history of Aboriginal and European settlement should be encouraged, d) the natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area should be protected, e) significant fabric, settings, relics and views associated with the heritage significance of heritage items should be conserved, f) archaeological sites and places of Aboriginal heritage significance should be conserved. 	<p>The proposal would result in the relocation of the locally listed Willow Grove from the site, this is considered the best outcome as there is no alternative location for a new museum within Parramatta, retention of Willow Grove would significantly compromise the creation of a world class facility and the only alternative would be complete demolition of the heritage item (Section 6.4.2).</p> <p>The application was amended to retain the locally listed St George's Terrace on the site and incorporate it into the development (Section 6.4.2).</p> <p>Aboriginal archaeology and cultural significance of the site has been considered (Section 6.8).</p>	Yes
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Draft State Environmental Planning Policy (Environment)

The draft Environment State Environmental Planning Policy (Environment SEPP) was exhibited until January 2018 and intends to provide a new policy for the protection and management of our natural environment.

Once adopted, the Environment SEPP will consolidate seven existing SEPPs (including the SREP) to simplify the planning rules for a number of water catchments, waterways, urban bushland, and World Heritage Property. The Environment SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

The Department considers the proposal is generally consistent with the provisions of the Draft Environment SEPP, noting the proposal is consistent with the provisions of the SREP.

Parramatta Local Environmental Plan 2011

The PLEP aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Parramatta LGA. The PLEP also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department consulted with Council throughout the assessment process and considered the matters raised in submissions by Council and the public (**Sections 5 and 6**).

The Department has considered the relevant provisions of the PLEP at **Table 14** and concludes the development is consistent with the PLEP.

Table 14 | Consideration of the relevant clauses of the PLEP

Clause	Control	Department's consideration	Compliance
Clause 2.1 Land use zones	The proposed development is on land zoned B4 Mixed-Use	The proposal is permissible with consent and meets the objectives of the zone.	Yes
Clause 2.7 Demolition	The demolition of a building may be carried out only with development consent.	Development consent is sought for the demolition of some existing buildings on the site.	Yes
Clause 4.3 Height of buildings	The site is identified as having a maximum building height of 80 m.	The proposed maximum building heights are 57.3 m and 75.7 m.	Yes
Clause 4.4 FSR	The site is identified as having a maximum FSR of 6:1.	The site proposes a maximum FSR of 1.25:1.	Yes
Clause 5.10 Heritage conservation	To conserve the environmental heritage of Parramatta, the significance of heritage items and heritage conservation areas, including associated fabric, settings and views, archaeological sites, Aboriginal objects and Aboriginal places of heritage significance.	The site contains local listed heritage items and is nearby a heritage item on the SHR. The Department has considered the heritage impact of the proposal at Section 6.4 . The Department concludes the heritage impacts can be appropriately mitigated and managed.	Yes
Clause 6.1 Acid Sulfate soils	The site is identified as having potential for acid sulfate soils (Class 4)	The EIS includes an Acid Sulfate Soils Management Plan.	Yes
Clause 6.2 Earthworks	Development consent is required for earthworks and the impacts of any earthworks must be considered before granting consent.	The EIS has considered the impact of earthworks and the Department has considered the impacts as part of its assessment of the application.	Yes

Clause 6.3 Flood planning	The site is identified as being on flood prone land.	The application includes a Flood Risk and Stormwater Management Plans. The Department has considered flooding at Section 6.5 and concludes impacts can be managed.	Yes
Clause 7.5 Serviced apartments	Development consent must not be granted for the subdivision of a building for serviced apartments unless it meets the requirements of SEPP 65.	The proposal does not include the subdivision of the building, serviced apartments or dormitory.	Yes
Clause 7.10 Design Excellence – Parramatta City Centre	All developments must exhibit design excellence and when considering whether a development exhibits design excellence. A competitive design competition must be held for buildings greater than 55 m, on land larger than 1,000 m ² . and has a CIV greater than \$100 million.	The Applicant has undertaken a design competition. The Department has considered the design of the proposal and concludes the proposal exhibits design excellence as discussed at Section 6.2 .	Yes

In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters—

7.10(4)(a)	whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,	The proposal achieves a high standard of architectural design, materials and detailing as discussed at Section 6.3 .	Yes
7.10(4)(b)	whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	The proposal includes extensive new areas of public open space. The Department has recommended a condition requiring the submission of a detailed landscaping masterplan to ensure landscaping achieves the highest standard of design.	Yes
7.10(4)(c)	whether the proposed development detrimentally impacts on view corridors,	The proposal does not obstruct any views identified in the PDCP. The Department has considered visual impacts at Section 6.3.1 and concludes the proposal is appropriate.	Yes
7.10(4)(d)	(i) the suitability of the land for development,	The Department considers the development is suitable for the site as discussed at Section 6 .	Yes
	(ii) the existing and proposed uses and use mix	The proposed use (for museum and associated uses) is in the public interest as	Yes

	discussed at Section 6.9 . The proposed use represents a significant improvement over the existing use of the site car parking and commercial uses. The Department has considered the relocation of Willow Grove at Section 6.4 .	
(iii) any heritage and archaeological issues and streetscape constraints or opportunities	The Department has considered heritage impacts at Section 6.4 and concludes the proposal is on-balance acceptable.	Yes
(iv) 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,	Not applicable.	Yes
(v) the bulk, massing and modulation of buildings,	The Department has considered the height, bulk and scale of the development at Section 6.3 and concludes the proposal is appropriate.	Yes
(vi) street frontage heights,		Yes
(vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,	The proposal would not result in any overshadowing or overlooking of residential properties. Noise impacts can be appropriately mitigated and managed. The majority of public open spaces would receive direct sunlight. The Department has recommended a condition limiting the reflectivity of materials.	Yes
(viii) the achievement of the principles of ecologically sustainable development,	The proposal has been designed in accordance with ESD principles as discussed at Appendix B .	Yes
(ix) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,	The Department has considered traffic and parking impacts at Section 6.7 and concludes the proposal is appropriately designed and would not have adverse impacts in this regard.	Yes
(x) the impact on, and any proposed improvements to, the public domain,	The proposal includes the provision of extensive areas of public open space and improvements to the public domain.	Yes
(xi) the impact on any special character area,	Not applicable	Yes

(xii) achieving appropriate interfaces at ground level between the building and the public domain,	The Department considers the landscape plan for the site is acceptable as discussed at Section 6.6.1 and has recommended a condition requiring the submission of further detailed design to ensure landscaping achieves the highest standard of design.	Yes
(xiii) excellence and integration of landscape design.		Yes

Other Relevant Policies

In accordance with Clause 11 of the SRD SEPP, development control plans do not apply to SSD. Notwithstanding this, the Department has considered the PDCP where relevant in **Section 6**.

Appendix C – Summary of Department's Consideration of Public Submissions

A summary of the Department's consideration of the key issues raised in submissions is provided at **Table 15**.

Table 15 | Department's consideration of key issues raised in public submissions

Issue raised	Department's consideration
Heritage impacts and site selection	<p>Assessment</p> <ul style="list-style-type: none"> As discussed at Section 6.4 the site contains two locally listed heritage items, Willow Grove and St George's Terrace. The application proposes to dismantle and relocate Willow Grove and reconstruct it on an alternative site and retain (alter and partly demolish) St George's Terrace. The Applicant prepared an Analysis of Alternatives for the relocation of Willow Grove, which concluded: <ul style="list-style-type: none"> retention of Willow Grove in its current location would severely compromise the development of the site and delivery of public benefits the site is the only appropriate site for the development the proposal has been the subject of an international design competition, achieves design excellence and represents the best outcome. The Department considers, on-balance, the dismantling and relocation of Willow Grove is acceptable given the significance of the site and public benefits the proposal would deliver for Parramatta and Western Sydney and as: <ul style="list-style-type: none"> heritage fabric / significance of Willow Grove would be preserved subject to the preparation of a detailed methodology for works and consultation with stakeholders and the community careful selection of a relocation site will be carried out in consultation with stakeholders and the community to relocate Willow Grove and establish an appropriate setting it will allow for Willow Grove to be adaptively re-used and increase public accessibility to the building. The Department considers the retention and incorporation of St George's Terrace into the development is acceptable noting it would preserve the existing heritage item on the site. <p>Recommended Conditions</p> <ul style="list-style-type: none"> Preparation of a Relocation Framework and Methodology Plan in consultation with Council, Heritage NSW and the local community. Undertaken photographic archival recording of both buildings prior to works commencing. All works to be supervised by a qualified heritage specialist. Preparation and implementation of a Heritage Interpretation Plan, Statement of Heritage Impact and Conservation Management Plan. No consent is granted for the use or fit-out of St George's Terrace, which is subject to a separate future application. Explore options to integrate Presentation Space 1 and St George's Terrace, activate the space between the buildings and also Phillip Street Plaza.

Flooding impacts	<p>Assessment</p> <ul style="list-style-type: none"> • The undercroft is a crucial component of the flood mitigation strategy, which ensures the site provides sufficient on-site flood capacity and does not result in adverse up or down stream flooding impacts. • It is not possible to replace the undercroft with a sloped open space without significantly and negatively impacting on the development. • The Department has not granted consent for the use of the undercroft for any use or purpose other than for the conveyance of flood waters. The Department also requires the installation of fixed, permanent, permeable screens to ensure visitor safety and security. • Subject to appropriate construction and operational flood emergency management plans the museum collection and flood safety risks can be managed and mitigated. • The proposal has undertaken adequate drainage and infrastructure blockage assessment subject to minor design amendments. <p>Recommended Conditions</p> <ul style="list-style-type: none"> • No consent is granted for the use of the undercroft for any purpose other than flood mitigation. • Fixed, permanent and permeable undercroft screens must be provided. • Construction and operational flooding emergency management plans are required. • Inlets shall be designed assuming 50% blockage and the retaining wall adjacent to 330 Church Street shall be increased to 7.5 m AHD.
Built form and visual impact	<p>Assessment</p> <ul style="list-style-type: none"> • The Department notes the proposed building heights are less than the PLEP maximum building height controls, consistent with the existing and emerging character of the CBD and provide for an appropriate built form transition to adjoining developments. • The bulk and scale of the development has been modulated, is appropriate for the site and has been mitigated through the design of buildings. In addition, the scale and design of the proposal reinforces the civic qualities of the development and it would make a positive contribution to the Philip Street and Wilde Avenue streetscapes and to views towards the site from surrounding streets and across the Parramatta River. • The Department concludes that the proposed development has been designed to respond appropriately and positively to the site and its context, has landmark qualities and is therefore acceptable (Section 6.3).
Traffic and car parking	<p>Assessment</p> <ul style="list-style-type: none"> • The application includes a Transport Impact Assessment (TIA), which predicts the museum would be visited by between 5,000 to 6,000 people spread relatively consistently throughout the day and generate minimal vehicle trips during peak hours. • In addition, the TIA confirms the development does not include on-site car parking, would be subject to a Green Travel Plan (GTP) to encourage sustainable modes of transport and there is sufficient capacity within existing off-site car parking facilities to accommodate predicted demand. • The Department concludes the proposal would not have an adverse impact on the operation of the surrounding local road network or performance of intersections. In addition, the creation of a car-free development is appropriate and the proposal would promote sustainable modes of transport subject to the preparation and

	<p>implementation of a GTP.</p> <p>Recommended Conditions</p> <ul style="list-style-type: none"> • Preparation and implementation of a GTP.
Tree removal	<p>Assessment</p> <ul style="list-style-type: none"> • The application includes an Arboricultural Impact Assessment (AIA), which concludes that there is no feasible option to retain 56 of the 58 existing trees on the site and proposed 120 replacement trees achieving a site-wide tree canopy coverage of 30%. • The Department considers due to the location of the majority of existing trees their removal to facilitate the redevelopment is unavoidable and 57% are of poor health, structural condition and/or of low retention value. • The Department has recommended the Applicant assess the potential to retain four additional existing trees located on the foreshore and additional planting within Presentation Space 1 open space. • The Department concludes that subject to conditions regarding tree replacement, retention and protection, the proposed tree removal is, on-balance, acceptable (Section 6.6.2). <p>Recommended Conditions</p> <ul style="list-style-type: none"> • Assess the retention of four existing trees and provision of additional tree planting. • Protect the two trees identified for retention during construction. • Provide at least 120 replacement trees, a tree canopy coverage of 30% and consult Council about the provision of street tree planting.
Construction impacts	<p>Assessment</p> <ul style="list-style-type: none"> • The Applicant submitted a Noise and Vibration Impact Assessment (NVIA), which confirmed construction may result in noise impacts on adjoining properties. The NVIA recommended mitigation measures including preparation of a Construction Noise and Vibration Management Plan (CNVMP), noise monitoring and mitigation measures where noise limits are exceeded. • The Applicant has committed to preparing a Construction Pedestrian and Traffic Management Plan (CPTMP) and a Construction Environmental Management Plan (CEMP), including air quality and waste management assessments, a communications strategy and dilapidation survey. • The Department considers the Applicant's mitigation measures are acceptable and recommends works be restricted to standard hours of construction consistent with the Interim Construction Noise Guideline (7am to 6pm Monday to Friday and 8am to 1pm Saturdays), preparation and implementation of the various construction management plans, respite periods and other controls. • The Department concludes, subject to conditions, noise and vibration impacts can be satisfactorily mitigated and managed to ensure the amenity and operations of surrounding sensitive receivers is not adversely impacted upon (Section 6.8). <p>Recommended Conditions</p> <ul style="list-style-type: none"> • Preparation and implementation of a CEMP, CPTMP and CNVMP. • Construction work shall be carried out in accordance with the Applicant's management and mitigation measures, limited to standard construction hours, include respite periods, not be 'offensive noise' and all construction vehicles shall only arrive at the site during the permitted hours of construction.

Adequacy of exhibition / storage space	<p>Assessment</p> <ul style="list-style-type: none"> • The development includes approximately 18,000 m² flexible exhibition space and the Applicant has confirmed the Powerhouse manages its collection in accordance with their legislation and established collection management policies. • As discussed at Section 6.8, the Department considers the development provides for modern and large scale exhibition spaces, which responds to needs and is the result of a design competition and was subject to the advice of the Design Integrity Panel.
Adequacy of public consultation	<p>Assessment</p> <ul style="list-style-type: none"> • The Applicant has confirmed it undertook a range of community and stakeholder engagement prior to, and following, the lodgement of the application. • As discussed at Section 6.8, the Department exhibited the EIS for 42 days which exceeds the minimum 28 days statutory requirements of the EP&A Act. It also made the Applicant's RtS and SRtS publicly available and has considered all additional submissions received in its assessment (Section 6). The Department is satisfied that the community has had sufficient opportunity to comment on the proposal.

Appendix D – WMA Flooding and Drainage Review Report

The WMAwater flooding and drainage review report can be found on the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>

Appendix E – Recommended Instrument of Consent

The recommended instrument of consent can be found on the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/26576>