



Attachment D
Architectural Design Statement



Liverpool Civic Place

Supplementary Design Report

Liverpool City Council

fjmt studio architecture interiors urban landscape community
May 4 – Master Plan – Rev 0

A state-of-the-art civic and learning hub colocated with flexible contemporary workplace and hotel. Cosmopolitan retail uses create a critical mass of activity around a revitalised Civic Space, laneways, pocket park and Scott Street frontage.

The Civic Space and Community facilities will combine to create 'stay-a-while' space for the community, visitors and workers to dwell. Like an eddy in the river, Liverpool Civic Place will create a new focus for activity within Liverpool with a distinct and iconic character.

Note: CGI depicts 2019 Master Plan submission reference scheme, not the updated scheme enclosed and detailed herein.

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Introduction

fjmt prepared the Architectural Master Plan Design Statement which formed part of the 2019 formal lodgement. This supplementary report is intended to be read in conjunction with that original design statement, and provides a response to items raised by the approval consent authority. Numerous items are covered as follows:

— **Updated Envelope and Reference Scheme Drawings**, with areas of revision clouded in the Referenec Scheme.

— **Supplementary information**, is provided where required or requested to clarify compliance, provide additional information, or to further explain the design and functioning of the proposal.

— **Design Development** identifies and describes any design amendments or revisions to the proposal subsequent to formal lodgement in response to comments, design development or continued work of the wider project and consultant teams.

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1.0 Summary of Changes

A brief overview, with RFI references, of all items amended and detailed in this report

1.1 Master Plan Envelopes

A. Vehicle Access Strategy has developed from seeking vehicle access flexibility in the 2019 submission, to presenting a definitive strategy predicated on progress with RMS. Included is a provision for vehicle parking off Terminus Street to alleviate Scott Street traffic volumes, an adjustment to the Terminus Street entry location for compliance purposes, a redesign of the Scott Street access including a reduction in width for the internal road and a shared zone classification, and the deletion of the George and Scott street intersection entry point. Refer to Chapter 2 of this Supplementary Design Report for additional material on the vehicle access strategy, and in response to Arch1B, 1D, 3B.

B. Public Domain has been redesigned to prioritise a significant new contiguous 'civic square' area that will be level with Scott Street, the internal road and Augusta Cullen Plaza. This significant change results in a reduction of the public domain envelope height fronting Scott Street by 4.64 metres. A height of 4.35 metres above ground level is still sought for public domain flexibility, for example landscape planters and light features to the library below. Refer to Chapter 3 and 11 of this Supplementary Design Report for additional material on the Civic Square and Public Domain, and in response to Arch1C, 1L, 2C, 3B, 3E.

C. Library Envelope has been redesigned in-conjunction with the public domain. The revised envelope is similar in height and volume to the 2019 Masterplan but the footprint has been rotated / redistributed to the south to ensure a larger contiguous public domain footprint to the east. The library maintains its position at the terminus of Scott and Macquarie Streets, but now presents a slimmer more dynamic elevation, and increases view access to the public domain from the surrounding streetscape. Refer to Chapter 6 of this Supplementary Design Report for additional material and in response to Arch3A, 3B, 3G.

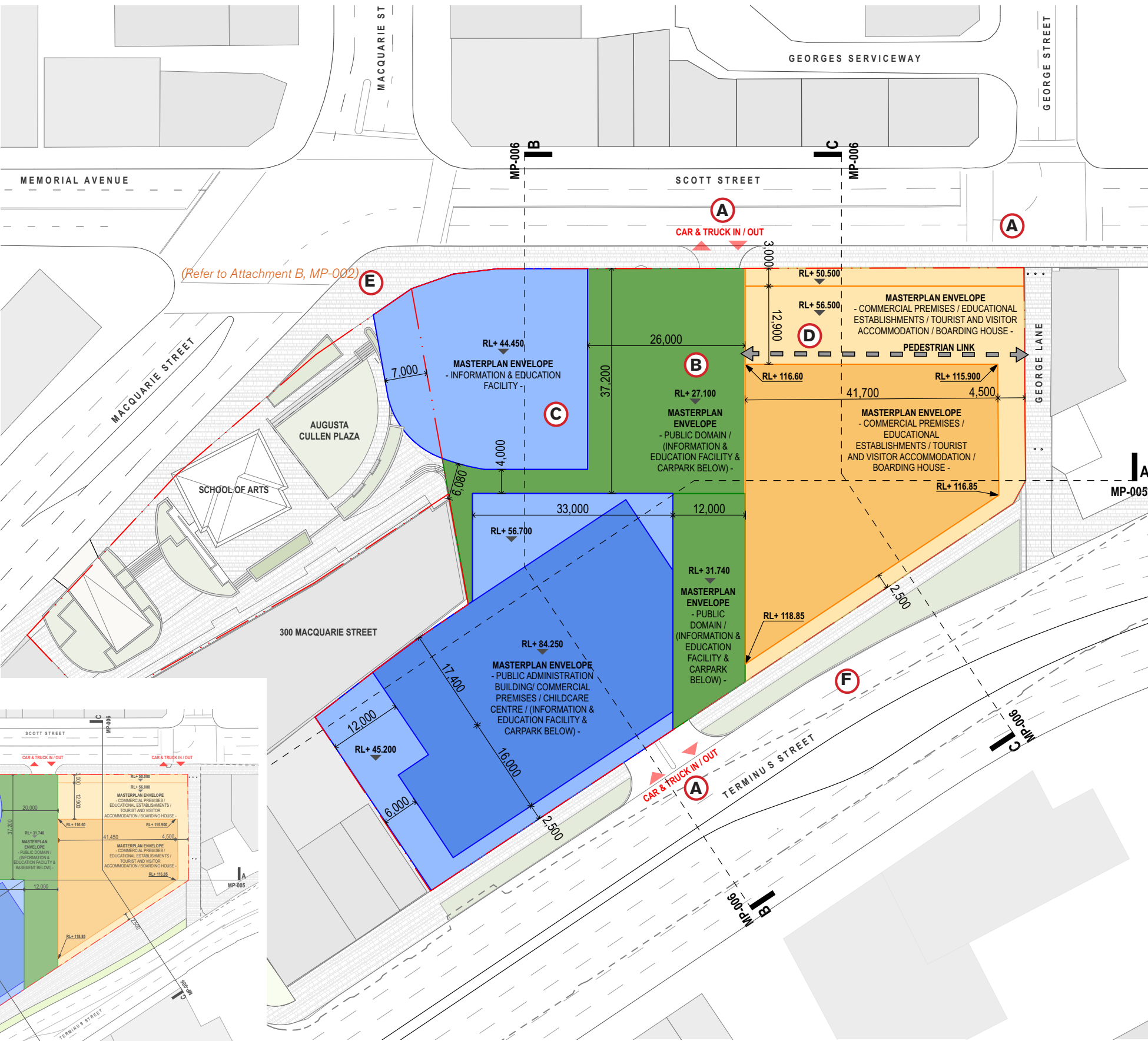
D. Pedestrian Link has been added to the Masterplan drawings to capture the opportune location for an east/west through-site link improving site public permeability and activation, and connecting the 'civic square' with the George Street terminus.

E. Basement Envelope Two changes result from the revised public domain strategy; 1) a basement envelope extension into Augusta Cullen Plaza. This extension is within site boundaries, and enables greater flexibility with library structure and planning. 2) Lowering the public domain has required lowering the basements. A further excavation depth of 2.35 metres is proposed. Not visible in the drawing adjacent, refer to Attachment B for the Envelope Drawing set.

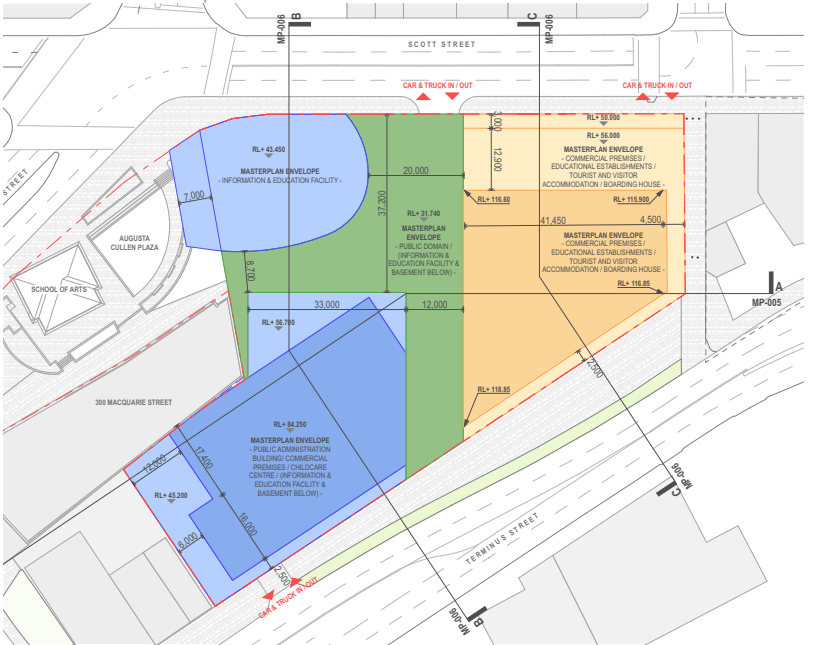
F. Terminus Street The configuration of the planned 6 lane arterial road has been indicated as the base condition. The existing condition is shown dotted. No land use or building envelope is implicated with the road reservation, and the resultant verge is sufficiently wide relative to the Liverpool Public Domain Master Plan and nearby precedents. Refer to Chapter 10 of this Supplementary Design Report for additional material, and in response to Arch1M, 2B

G. Drawing Updates including ground level RLs marked at all 3d envelope corners, with car parking text and extents clarified. Refer to Attachment B of for the Envelope Drawing set and in response to Arch1O.

2020 Masterplan



2019 Masterplan

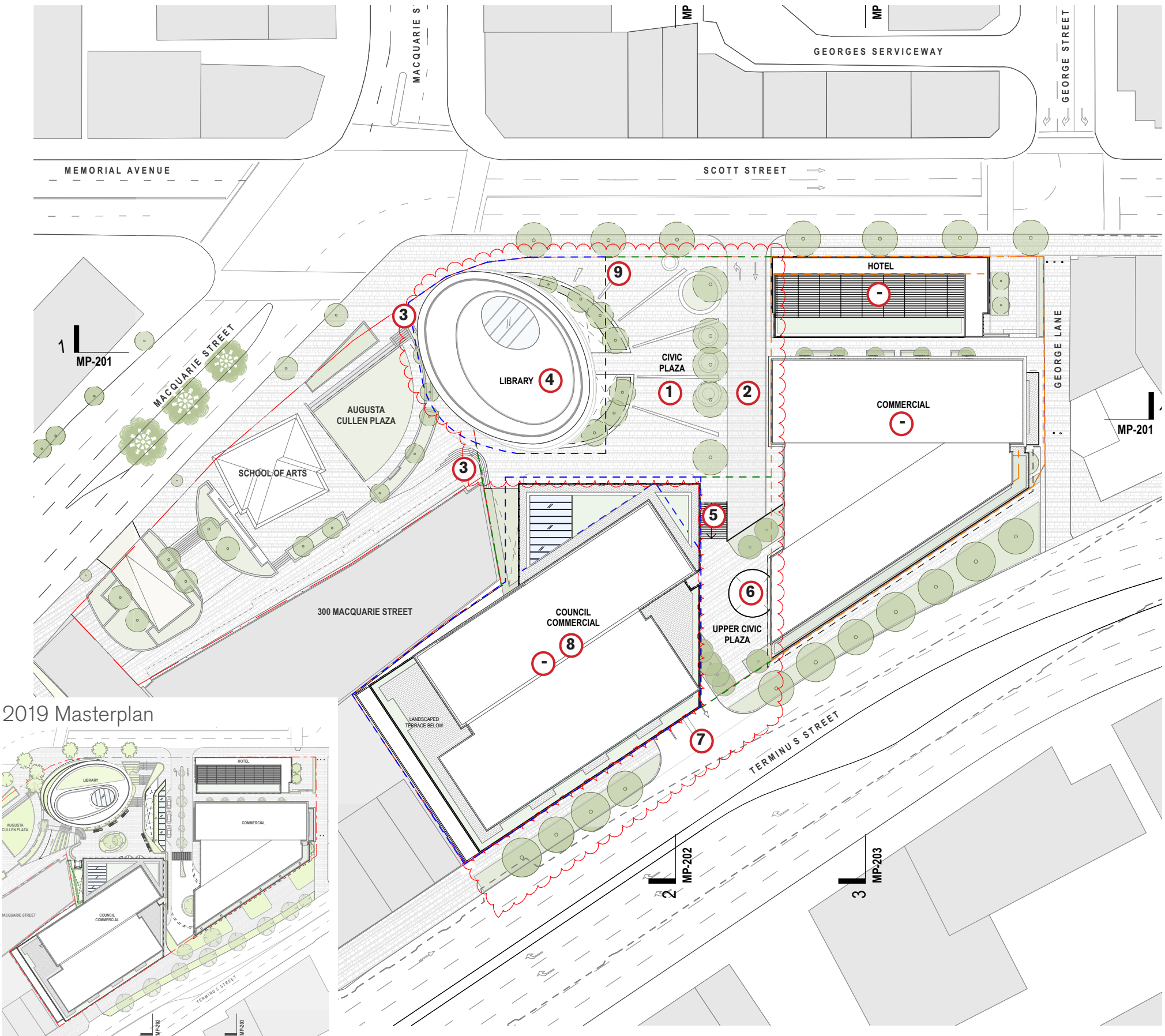


Summary of Changes

1.2 Reference Scheme

- **No changes** proposed for
- Stage 1 commercial tower from Level 03 and up,
 - Stages 2 and 3, east of the shared-zone
- 1. Civic Square** The folded ground plane has been removed and a significantly enlarged public square is proposed, level with adjoining streets and public spaces, and activated by surrounding public and retail uses. *Refer to Chapter 3 of this Supplementary Design Report for additional material on the Civic Square, with responses to Arch1C, 2C, 2D 3B and 3E.*
- 2. Shared Zone** the internal road from Scott Street accommodates Stage 1 and 2,3 private cars and stage 2,3 service vehicles. The drop-off lane has been removed to reduce the total width of the roadway and increase the adjoining civic square footprint. Anticipated traffic rates suggest a shared-zone classification is achievable, with a weekday lunchtime traffic volume of 1 car per 6 minutes, and service vehicle demand of only 10 movements per day. *Refer to Chapter 2 of this Supplementary Design Report for additional material, and responses to Arch3E.*
- 3. Augusta Cullen Plaza** is further clarified along with a revised vision including the reconfiguration of its eastern DDA ramp adjacent to the new library. The southern side of the Plaza, by the existing retail, will have more direct access east through to the Civic Square and Public Administration tower with a level change of 0 to 1.4m. *Refer to Chapter 4 and 11 of this Supplementary Design Report for additional material, and responses to Arch3E.*
- 4. Liverpool City Library Redesign** The above-ground library is the same volume as the 2019 masterplan, but has been reformed and rotated to address the Macquarie Street terminus, improve view access to and enlarge the Civic Square. The two below-ground library levels have been consolidated and lowered to accommodate the “flattened” Civic Square. This has resulted in a lowering of all car park levels. *Refer to Chapter 6 of this Supplementary Design Report for additional material, and responses to Arch3A, 3B, 3G.*
- 5. Scott-to-Terminus Through-site link** has been reconsidered to present a wider, more intuitive and visually prominent link with extended hours passive surveillance and access to DDA lifts in close proximity. *Refer to 11.4 of this Supplementary Design Report for additional material, and responses to Arch2C.*
- 6. Terminus Street Park Address** A new public space off Terminus Street has been proposed; a landscaped plaza atop the through site link with a broad pedestrian frontage to Terminus street, access to both commercial tower lobbies, and vistas over the civic square and to Macquarie street. *Refer to Chapter 9 of this Supplementary Design Report for additional material.*
- 7. Terminus Street** vehicle access, now accommodating public cars and service vehicles, has shifted east to provide sufficient separation to the Pirie Street intersection. The net result is significantly less vehicle traffic off Scott Street and the internal road shared-zone, but more solid to the ground floor south facade of Stage 1. We have sought to address this with the new Terminus street park, provision of public art opportunities, and suitable landscaping. *Refer to Chapter 10 of this Supplementary Design Report for additional material.*
- 8. Stage 1 Commercial Tower GFA** has increased due to the vehicle, library and lobby reconfiguration. GFA changes occur from Level 02 and down only.
- | 2019 Reference Scheme. | 2020 Reference Scheme |
|--|--|
| — Site Area: 9,189.5 m ² | — Site Area: 9,189.5 m ² |
| — Total Reference GFA: 50,033 m ² | — Total Reference GFA: 50,702 m ² |
| — FSR: 5.44:1 | — FSR: 5.52:1 |
- 9. Drawing Updates** all plans, sections and elevations have been updated to illustrate masterplan envelopes, and are clouded to identify areas of change. *Refer to Attachment C for these changes in response to Arch1P*

2020 Masterplan





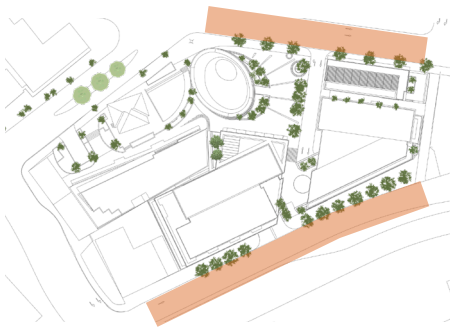
- No changes
- 1. Civic Square
- 2. Shared Zone
- 4. Liverpool City Library Design
- 5. Scott-to-Terminus Through-site link
- 6. Terminus Street Park Address
- 8. Stage 1 Commercial Tower GFA

- No changes
- 1. Civic Square
- 2. Shared Zone
- 3. Augusta Cullen Plaza
- 4. Liverpool City Library Design
- 5. Scott-to-Terminus Through-site link
- 6. Terminus Street Park Address
- 8. Stage 1 Commercial Tower GFA



2.0 Vehicle Access Strategy

The Masterplan has evolved from seeking vehicle access flexibility, to a more definitive strategy with significantly reduced traffic volumes to Scott Street.



2.1 Terminus Street

- Progress with RMS
- One vehicular entry off Terminus Street
 - Number of vehicles commensurate with existing site car park ~200 spaces, however this is not enough for all of stage 1 car spaces (285)
- Revised Proposal accommodates;
- All Stage 1 public cars off Terminus Street, with
 - Stage 1 loading vehicles.
 - Entry relocated further east for distance compliance from Pirie St intersection

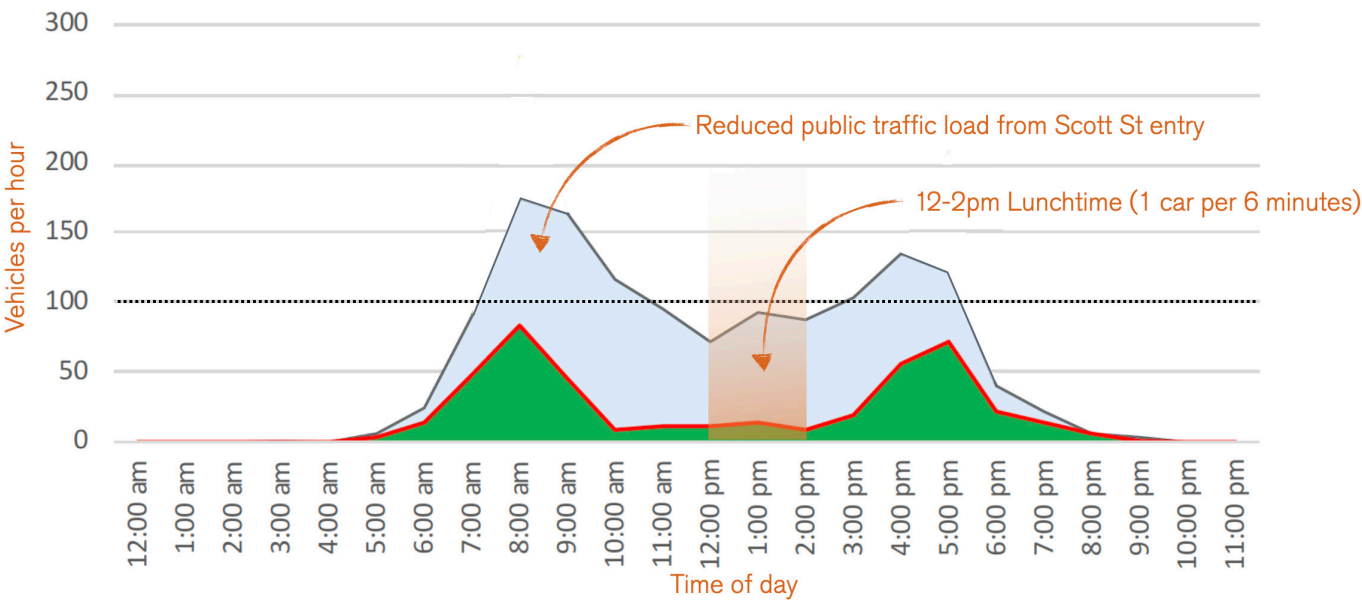
2.2 Scott & George Street Intersection

- SIDRA modelling has been completed revealing a lower than anticipated capacity from this intersection. An entry here would either be;
- In addition to a mid Scott Street entry, or
 - Become 3 to 4 lanes wide to facilitate queuing on-site
 - Accommodating a large vehicular entry here would compromise Scott Street amenity, pedestrian safety, and George Street terminus opportunities (eg no pocket park).

This Vehicular Access option has been removed from our masterplan

2.3 Scott Street

- The central vehicular access point has a significantly reduced traffic load with all public car access relocated to the Terminus Street entry. This entry will accommodate;
- Stage 1,2,3 private cars
 - Stage 2,3 service vehicles
 - Anticipated loading vehicle demand of around 10 movements per day, and can be restricted to avoid the lunchtime period
 - 1 car per 6 minutes through the 12-2pm lunch period



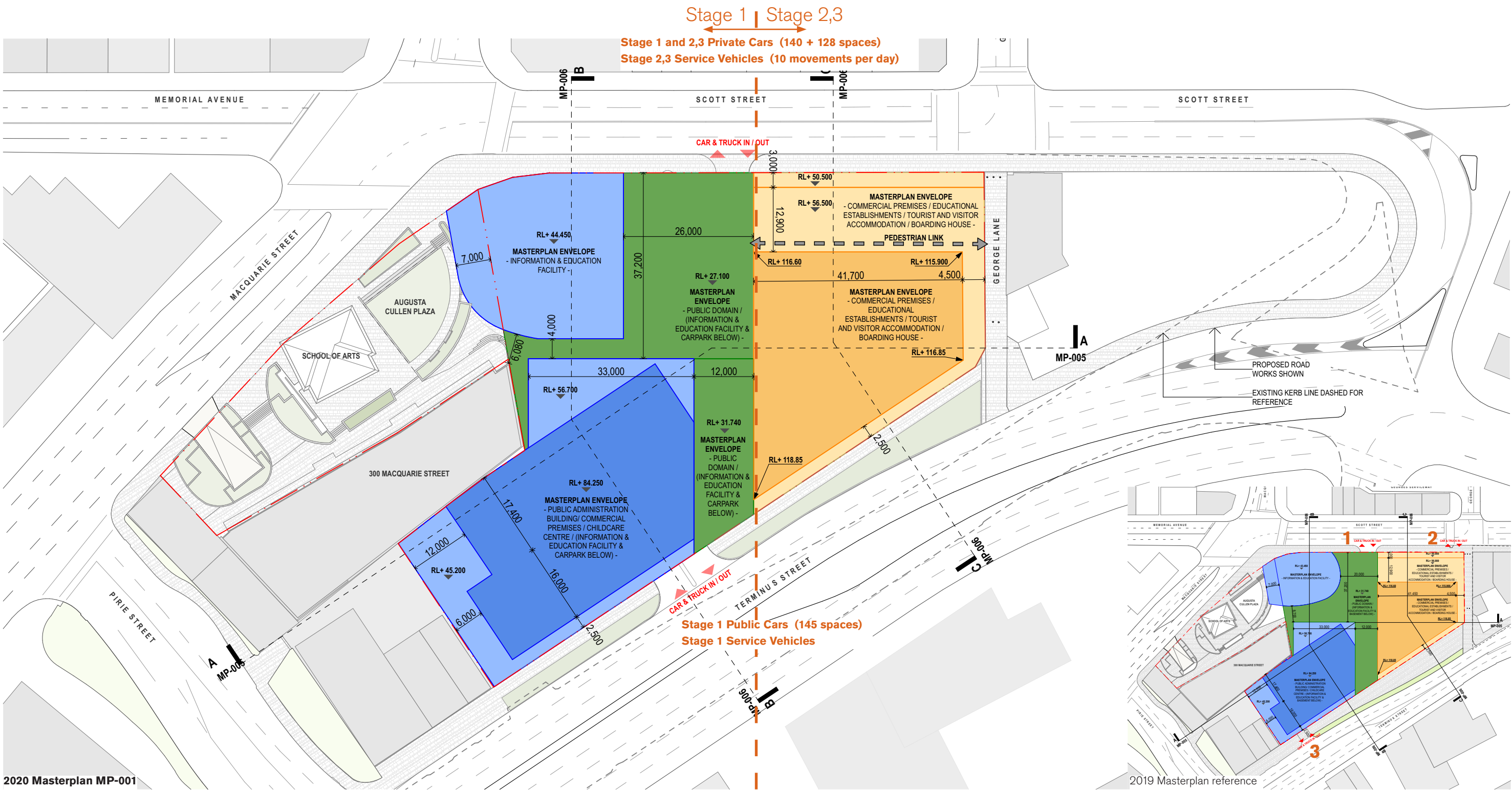
2.4 Weekday Reduction in Scott Street Shared Zone traffic

- Blue zone indicates traffic movement removed from the Scott Street entry, resulting in;
- An hourly average of 1 vehicle every 43 seconds
 - More than halved morning and afternoon peaks
 - 1 car per 6 minutes average through the lunch period (12-2pm) when the public domain would be at its busiest
 - The road carries less than 100 vehicles per hour and is considered suitable for use as a Shared Zone.

Refer to supplementary traffic report for further technical details.



Photorealistic rendering of the reference scheme with Scott Street in the foreground



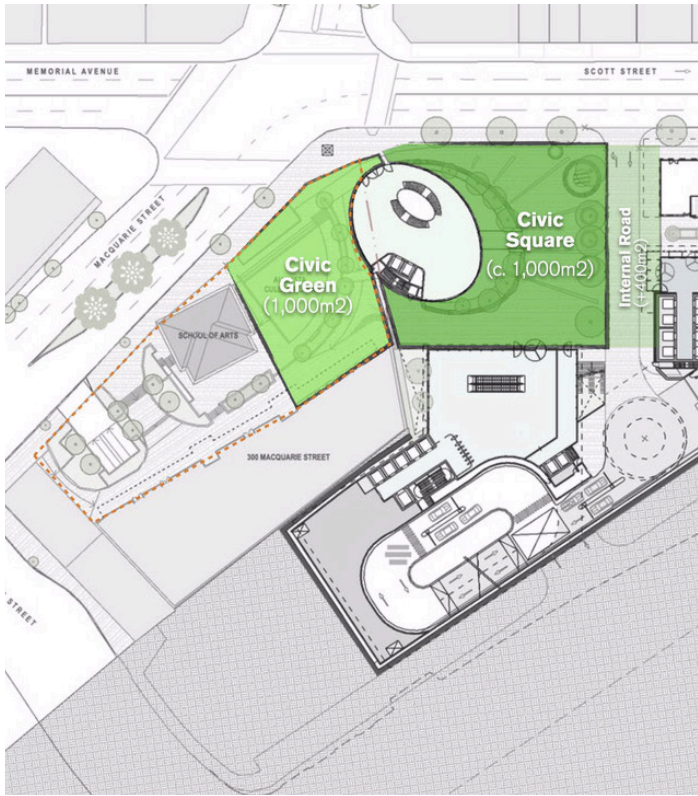
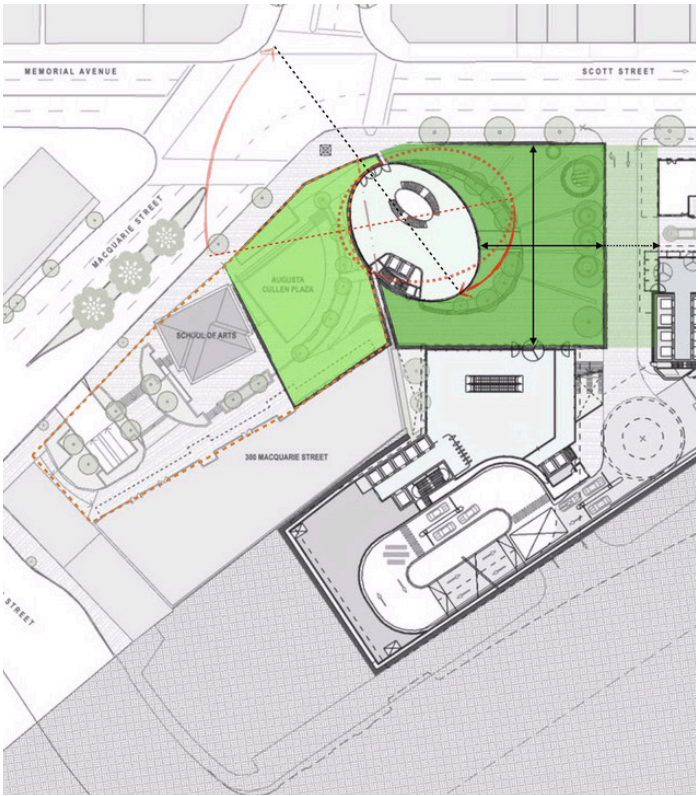
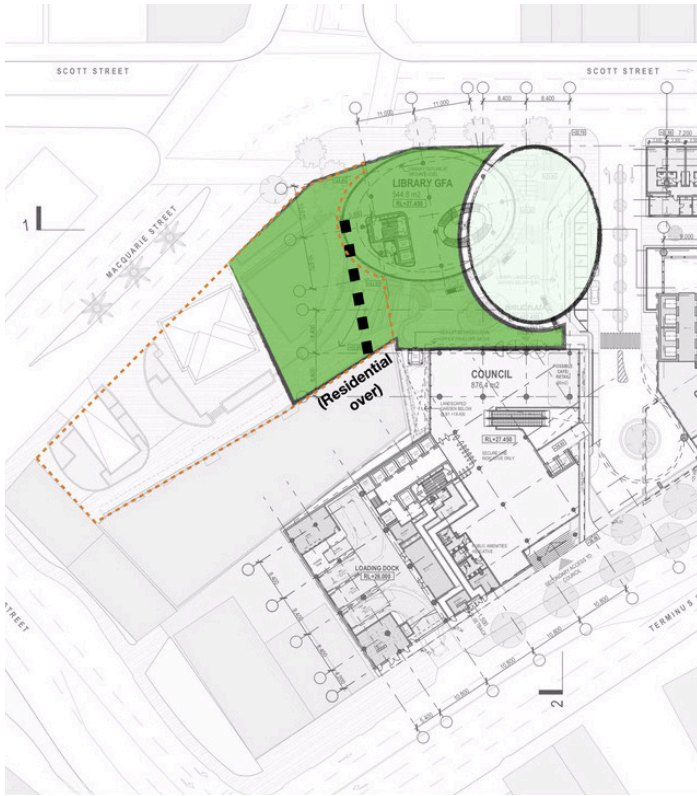
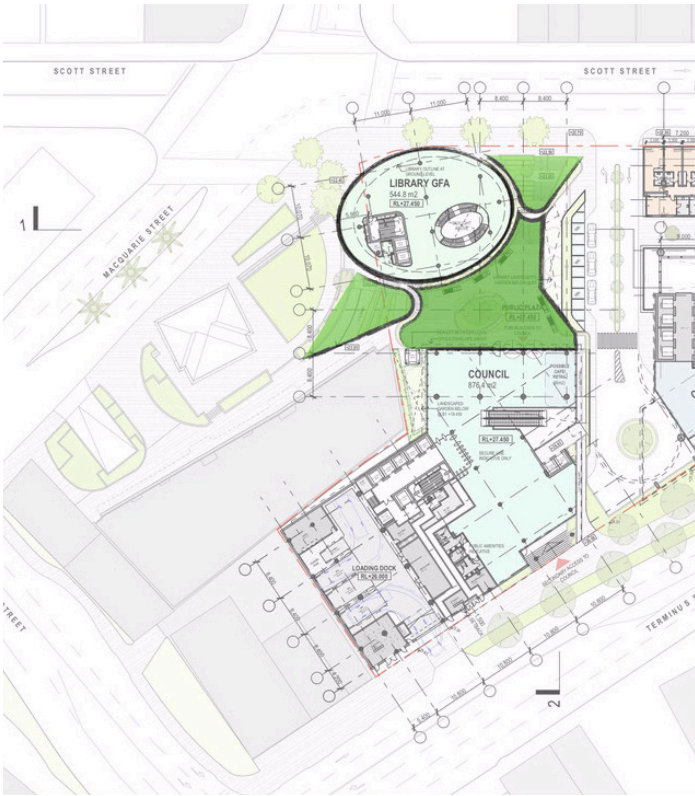
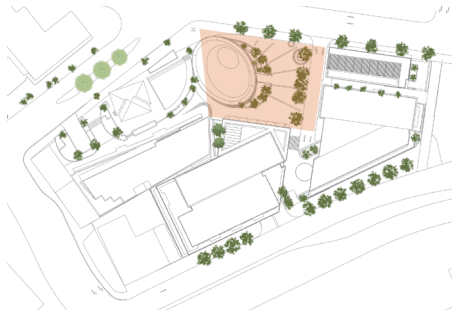
3.0 Civic Square

A major new Public Space proposal for Liverpool City

3.1 Reconfigured Civic Square

As part of this process, we revisited the Civic Square proposal with an end to prioritise it's presence, access, activation and size. The resultant proposal is a major new public space for Liverpool City Council and community.

Options assessing the optimum location and setting for this new public space were explored throughout this RFI process, summarised below.



3.2 2019 Masterplan Reference Scheme Feedback

- New Public Plaza should be at Macquarie and Scott street level
- Should be large enough for major public gatherings
- Increase of Library GFA to be accommodated in "a meaningful open space offering, rather than object shaping interstitial spaces around it"
- More interaction with Augusta Cullen Plaza

3.3 Civic Square as the terminus to Macquarie Street

- Intended to create a singular large public plaza at the top of the Macquarie Street axis.
- Resultant area is 1900m2
- Exposure of public event plaza to residential conditions (acoustic and visual conflicts) will limit use
- Existing covenant to light and air will compromise a unified landscape response
- Library loses its critical presence at the top of Macquarie Street axis as a cultural and civic anchor. The residential development remains the built axis termination. (Refer to 6.4 of this attachment, Library as a Gateway Urban Marker)
- Council address and outlook is significantly diminished
- Cuts off Stages 2,3 from public plaza with very limited scope for plaza activation, a failing of the existing plaza.
- A 1.45m level change through centre of plaza (concealing 300Maq Car Park)

3.4 Library as Terminus to Macquarie Street

- Library maintains presence anchoring the top of Macquarie Street, experienced and viewed in the round (refer to 6.4 of this attachment, Library as a Gateway Urban Marker)
- Library has been rotated to address the intersection and increase plaza width and view access.
- The library will be designed at ground level to be a seamless extension of the public domain, presenting a unified plaza
- Reduced traffic volume and width to shared zone, at grade with public space for improved throughsite connectivity and major event flexibility

3.5 The Civic Green and the Civic Square

2 major civic spaces of varying character and use affording increased event, use, and environmental resiliency;

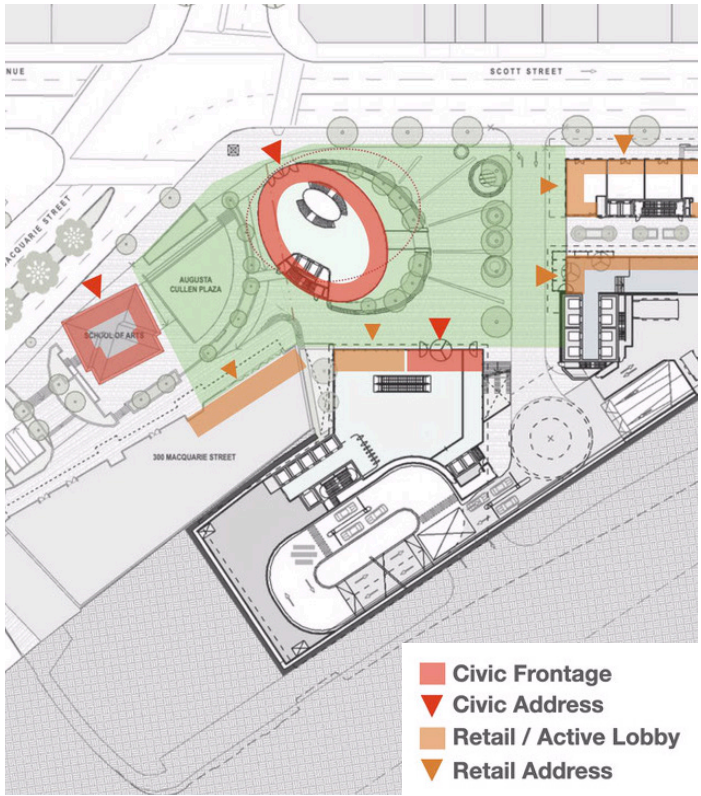
Civic Green

- Passive, softscaped space, creating a buffer to the residential and heritage School of Arts, 1000m2

Civic space

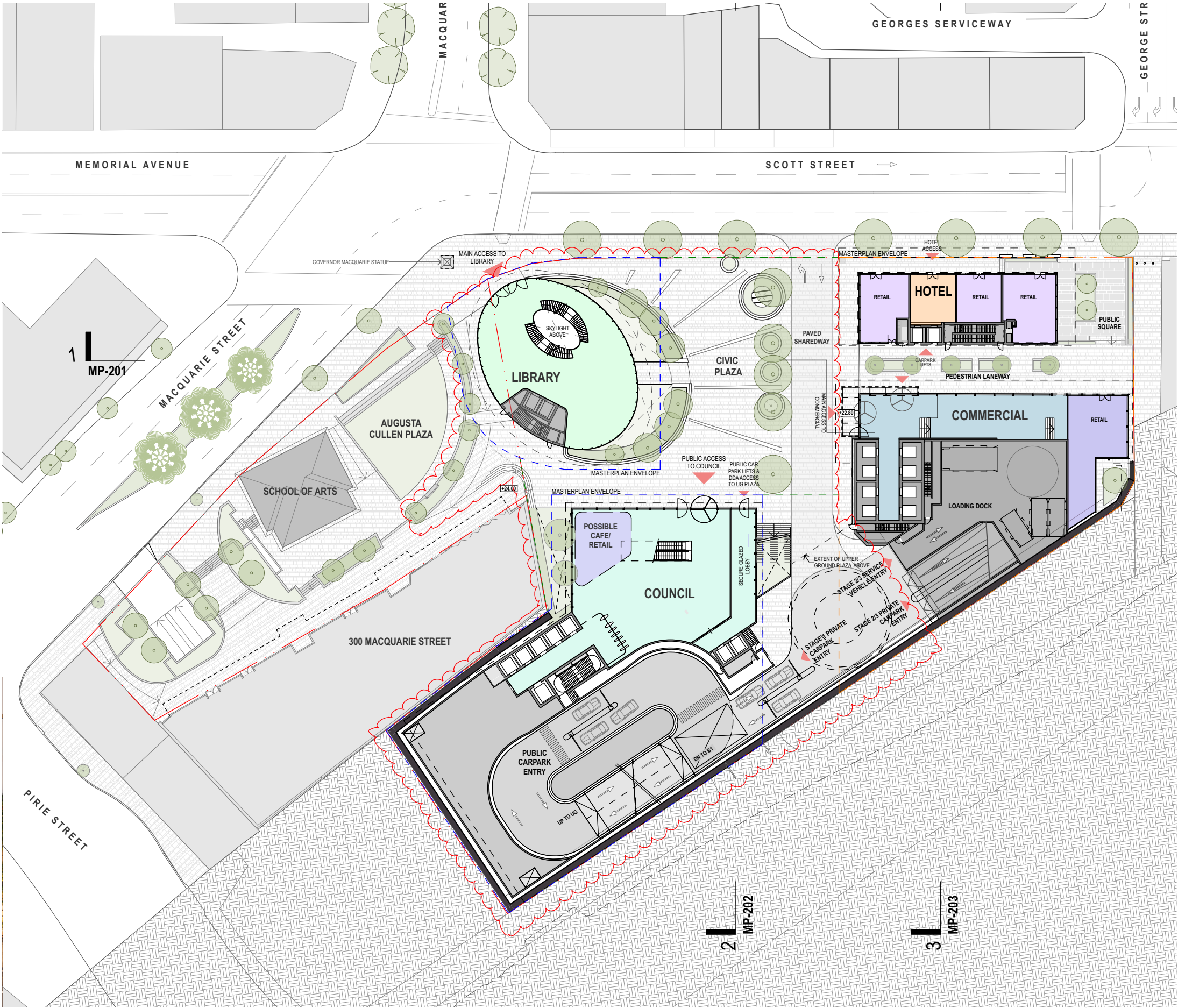
- Active, lined by retail and public functions. ~1100-1300m2 + 450m2 for major events by including the level sharedway

Civic Square



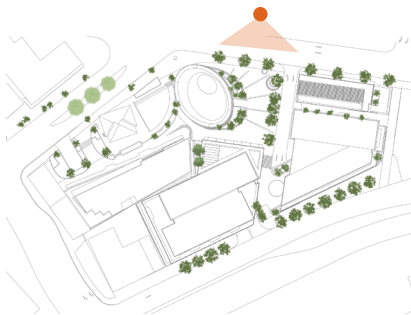
3.6 Activation and Address

Integral to the presentation of a lively, safe and welcoming Civic Square, the revised proposal is activated on three sides by civic, commercial and retail uses. Primary building addresses also front the new plaza increasing foot fall and visual exchange.

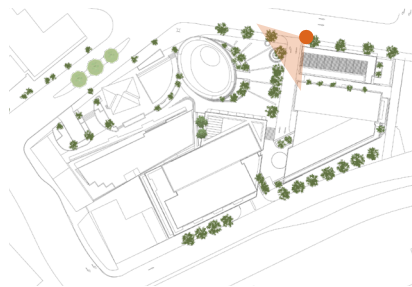


Scott Street / Lower Ground Floor Plan

Civic Square



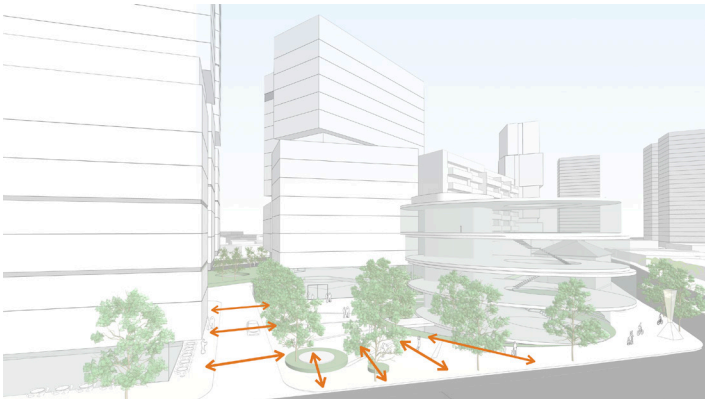
Northern Civic Square perspective, Scott Street in foreground



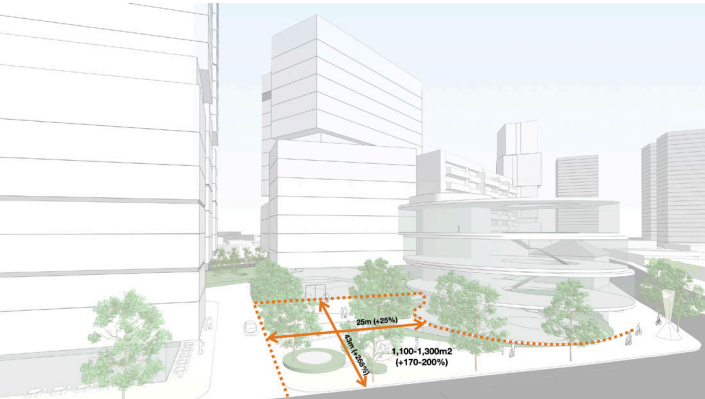
Perspective view from intersection of internal road and Scott Street



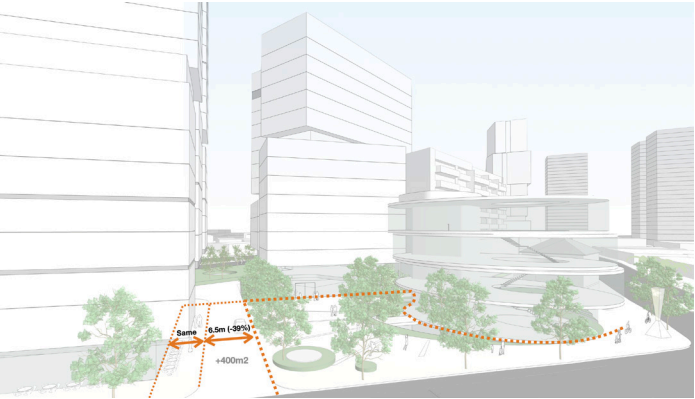
Civic Square level with Scott Street and the internal road.



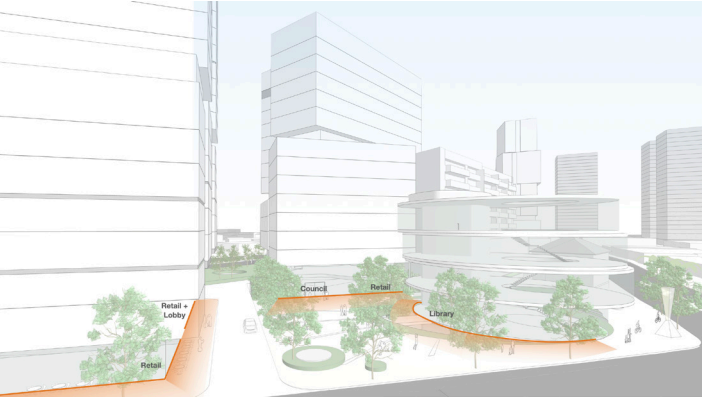
Larger contiguous civic space - 1,100-1,300m2 (previous plaza was 430m2 flat plaza + 230m2 in folded amphitheatres)



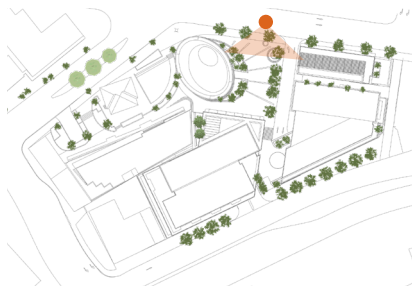
Reduced width internal roadway with shared zone classification, and level with Civic Square, 400-450m2 additional major event area



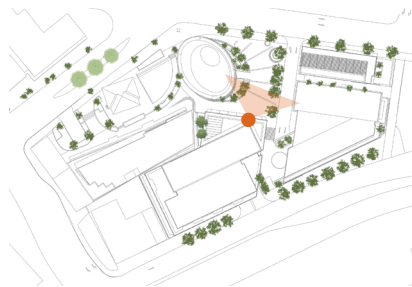
Edge activation maintained and enhanced with an additional retail tenancy in stage 2 fronting the civic square



Civic Square



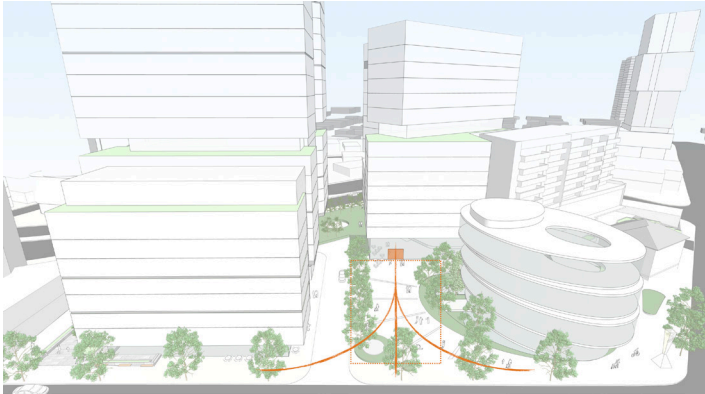
Perspective view from Scott Street looking south toward throughsite link and Terminus Street



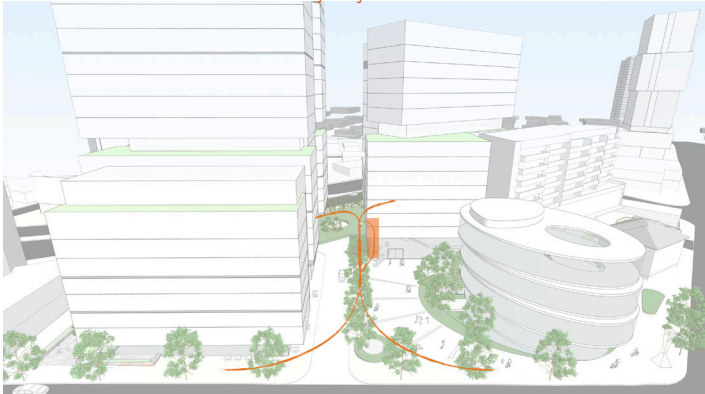
Perspective view from the Council lobby address looking North toward Scott Street



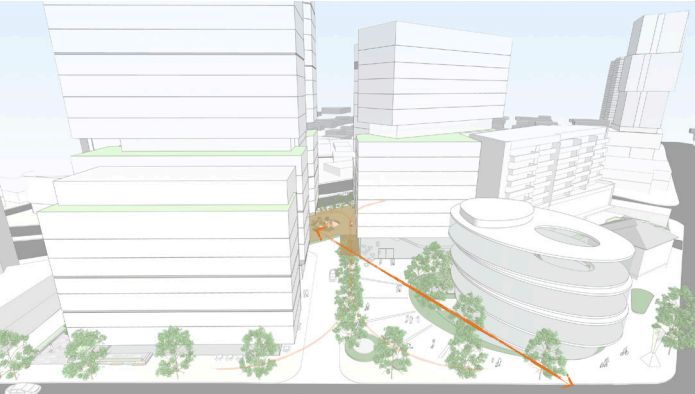
Improved visibility to council services and DDA lifts from Scott Street and Civic Square



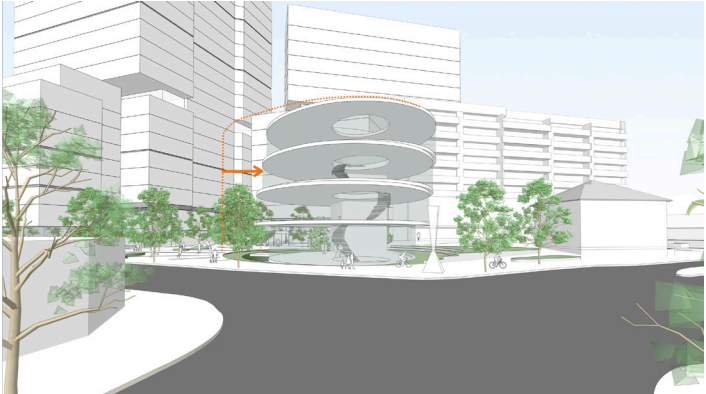
Widened through-site link (5.4m wide, increase of 225%) with increased legibility and visual prominence, and DDA lift access immediately adjacent



New Terminus street park with Civic Square outlook and line of site to and from Macquarie Street



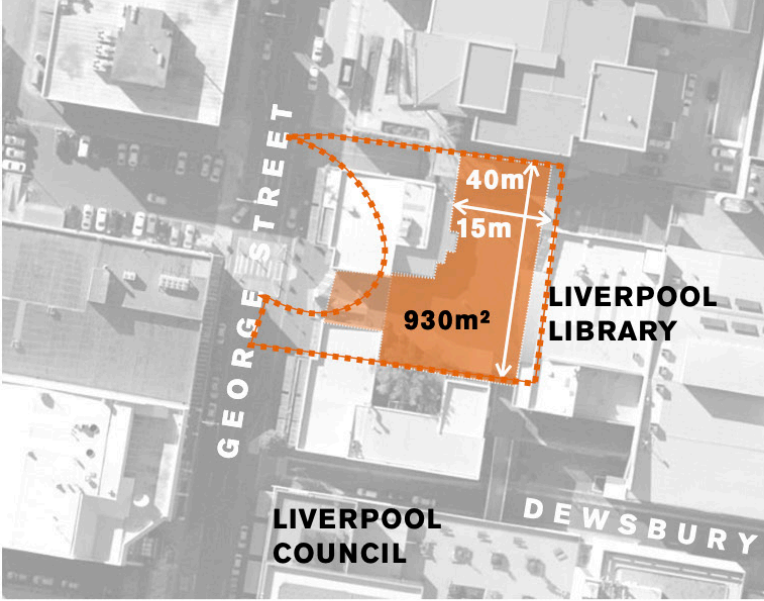
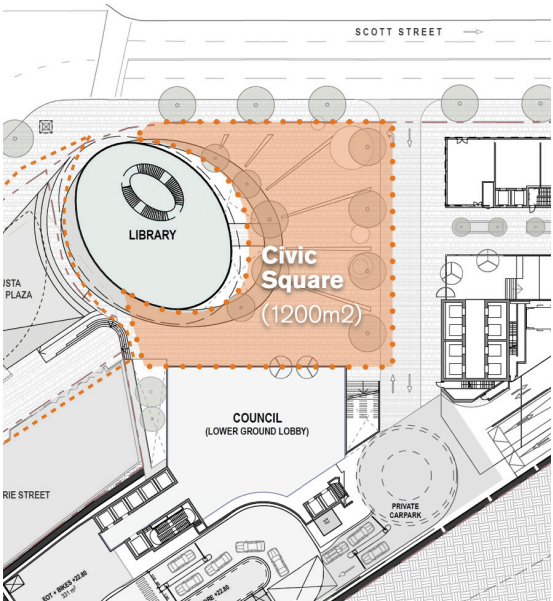
Increased Civic Square visibility from Macquarie Street intersection



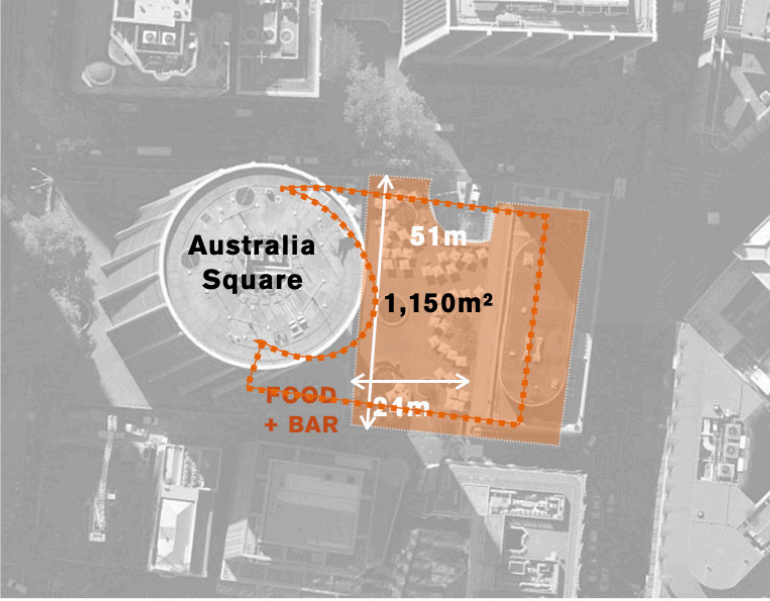
3.7 Civic Square Area Increase

The new Civic Square proposes a 250% area increase to around 1,100m² (formerly 430m²). For context and perspective, this significant new public space is larger than the present Liverpool Library forecourt, and comparable in size to Australia Square's external foodcourt including the undercroft area to Pitt Street, and Customs House plaza in Circular Quay.

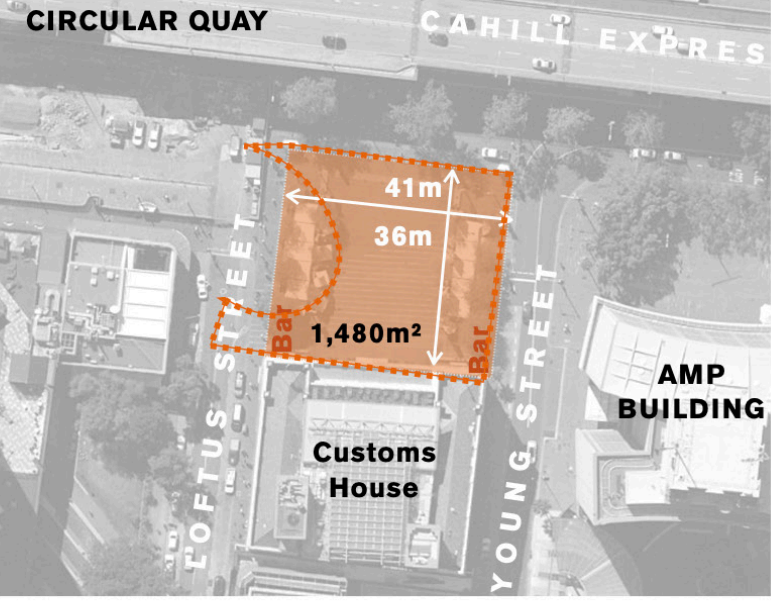
Liverpool Library
930m² (c. 15x40m)



Australia Square
1,150m² (51x24m)



Customs House
1,480m² (36x36m)





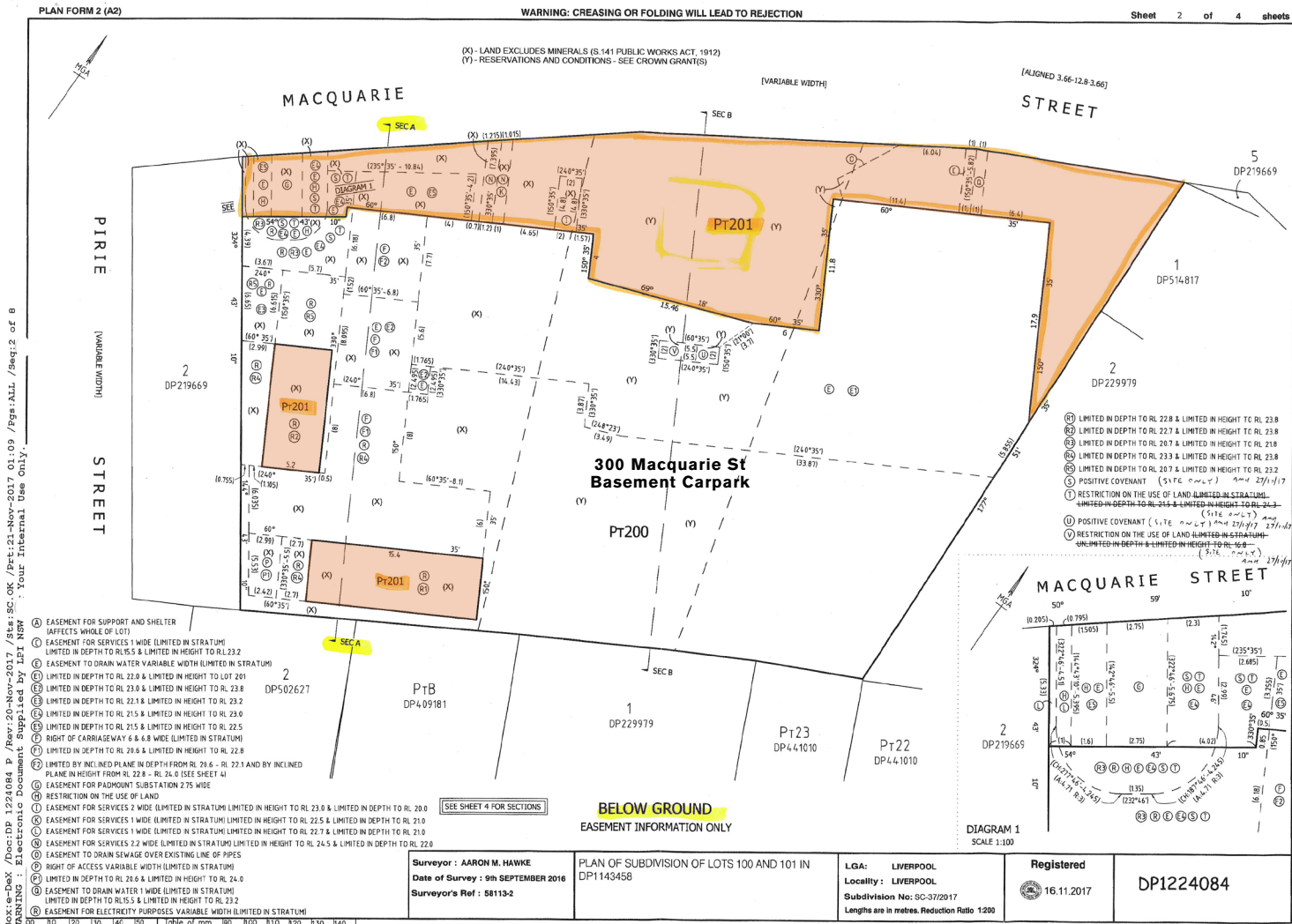
4.0 Augusta Cullen Plaza

4.1 Access Easements over 300 Macquarie Street

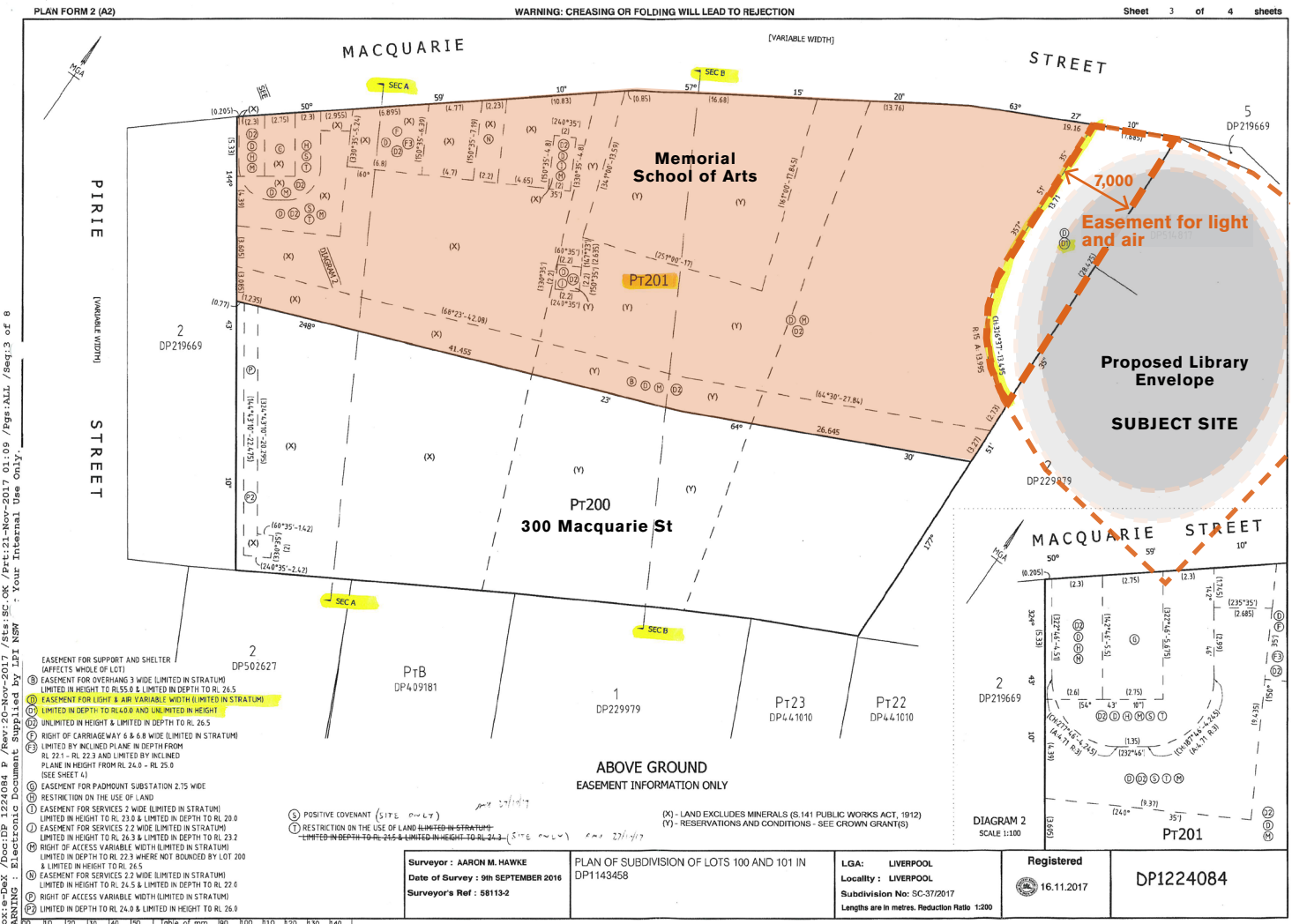
This chapter responds to RFI Arch 1J (Access Easements - 306-210 Macquarie Street) and part of Arch 3E (Landscape) as outlined in the Supplementary Design Report by Ethos Urban.

The proposed library envelope projects 7m west in to an easement within Augusta Cullen Plaza to maximise on site public domain dimensions, and position the public library at the terminus of Macquarie Street.

The deposited plans below show easement information below ground and above, with the outline of the proposed library superimposed onto the easement. The land parcels owned by Liverpool City Council are highlighted in orange (Lot 201), while Lot 200 on which 300 Macquarie Street is built is under private ownership. The subject site has easement rights onto Lot 201 (council owned) that were granted in 2016 based on the 2016 Masterplan Envelopes (refer to chapter 7 Building Separation).



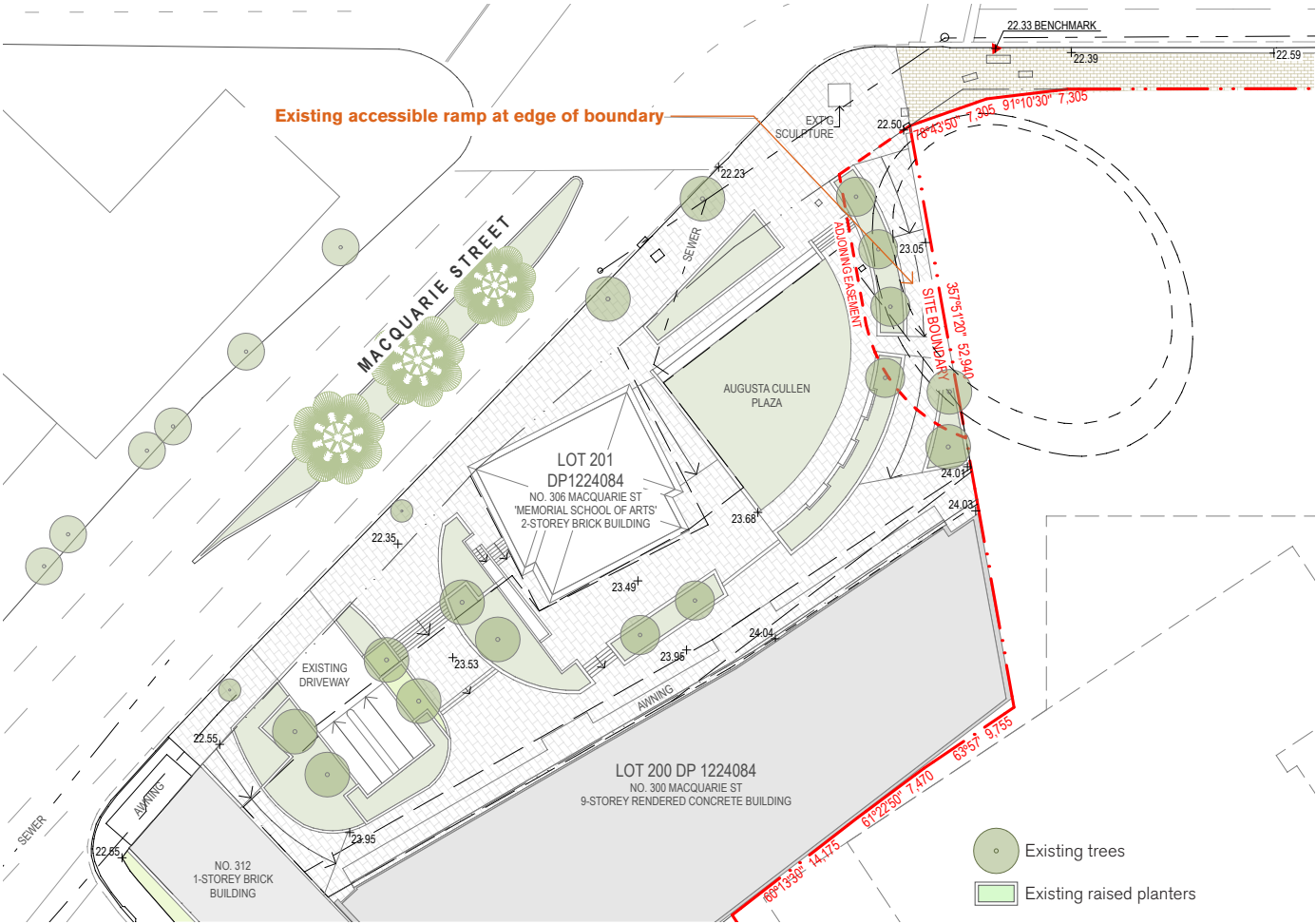
Deposited Plan for Augusta Cullen Plaza (Lot 201- Council owned) and 300 Macquarie Street (Lot 200): Below Ground



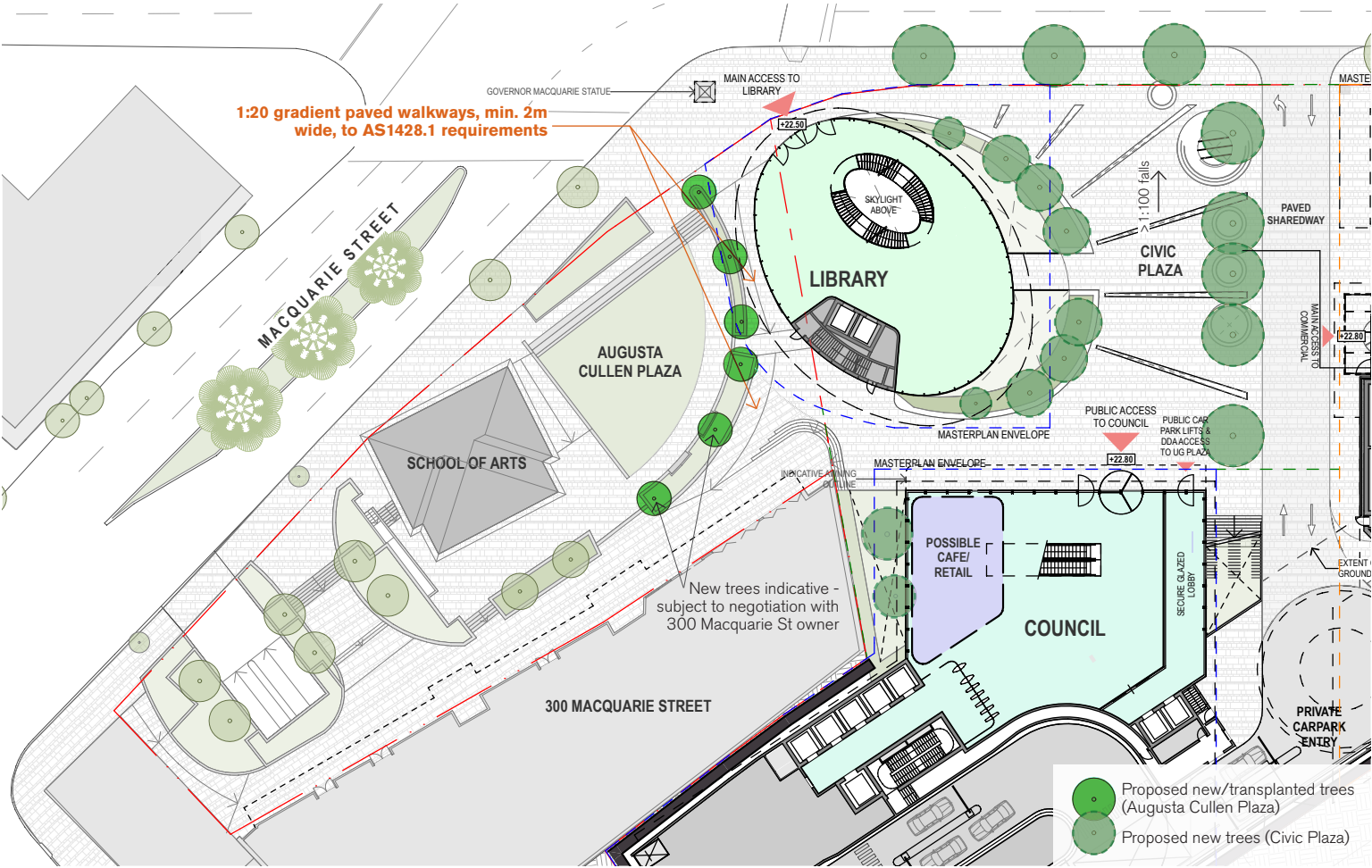
Deposited Plan for Augusta Cullen Plaza (Lot 201- Council owned) and 300 Macquarie Street (Lot 200): Above Ground

Augusta Cullen Plaza

4.2 Integration of new open space with existing Augusta Cullen Plaza



Existing Augusta Cullen Plaza (Outlines of lower ground and upper ground Library shown dashed for information)

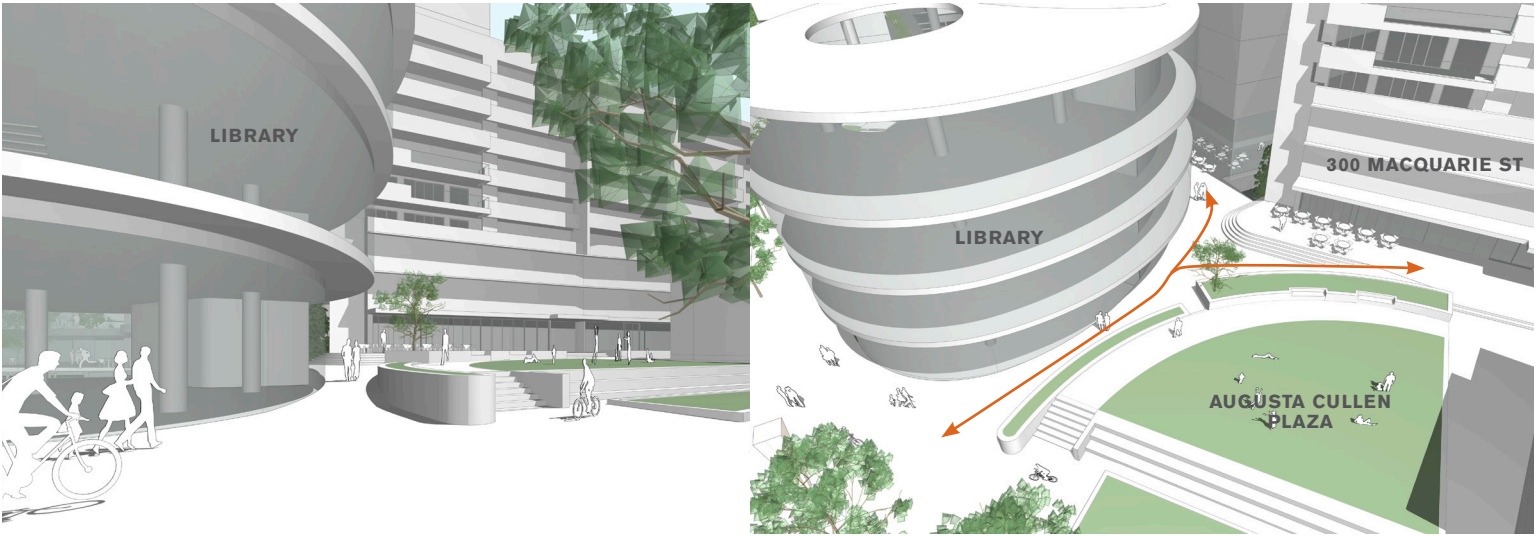


2020 Reference Scheme: Lower Ground Floor Plan, illustrating example of accessible route from Scott Street levels to existing 300 Macquarie Street. Landscaping, interface design and details will be further explored during future design development.

While the reference scheme tries to maintain the current geometry of Augusta Cullen Plaza, it will be desirable to enhance the landscaping between the Library and School of Arts building to create an inviting and shaded civic green complementing its surrounding use.



Existing Augusta Cullen Plaza at elevated level above 300 Macquarie Street's basement carpark, with accessible ramp at edge of eastern boundary



2020 Reference Scheme, illustrating potential resolution of accessible route from Scott Street sidewalk to 300 Macquarie St and new Council Chambers

5.0 Heritage: Governor Macquarie Statue

This chapter seeks to address and clarify RFI Arch2A



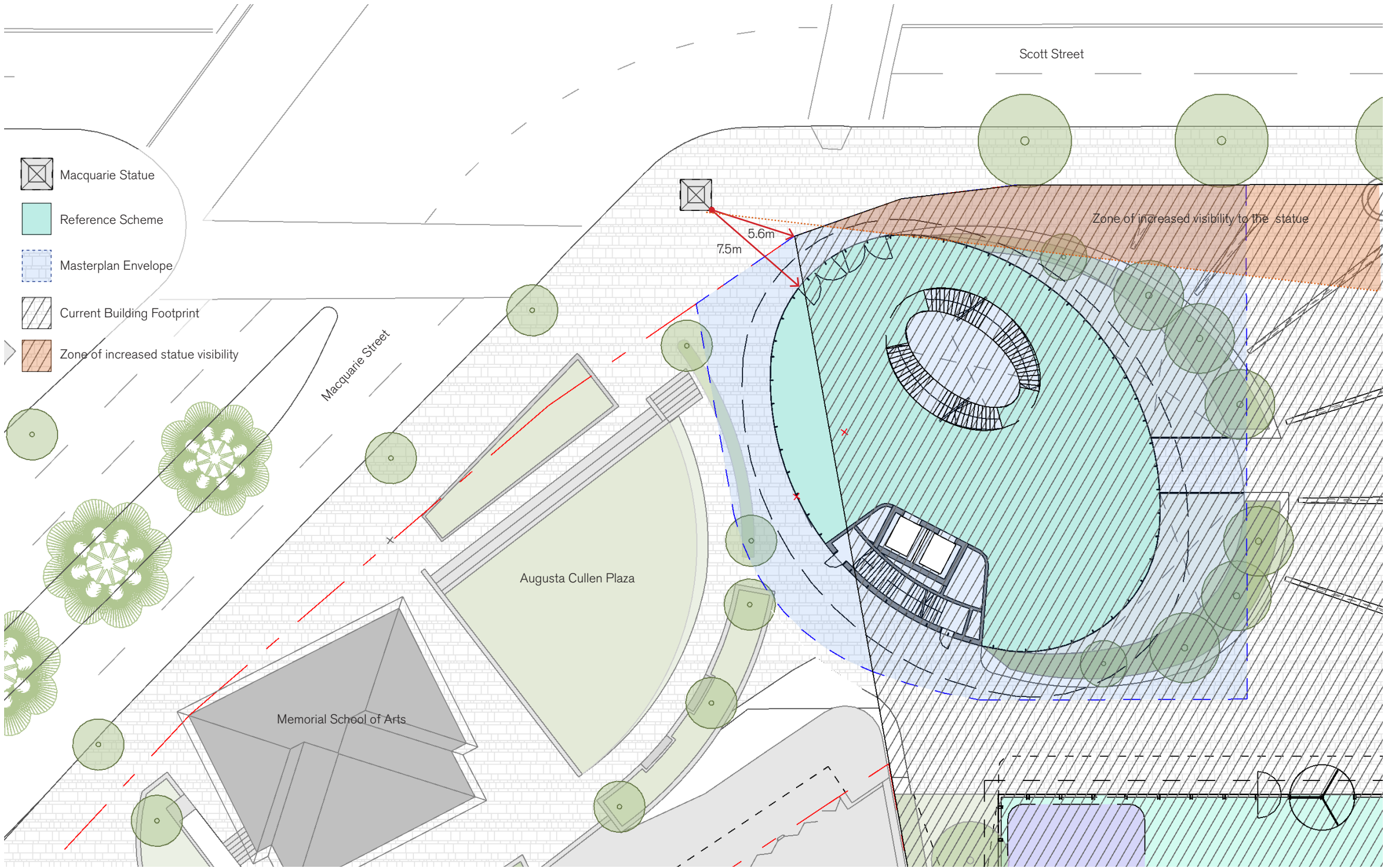
5.1 Governor Macquarie Statue location

The revised masterplan includes the retention of the statue in its present location. No change.

Situated atop Macquarie Street and at the intersection of Memorial, Scott and Macquarie, the statue remains a prominent and highly visible feature from all approaches.

Statue Proximities;

- Existing site structures 5.6m
- Proposed Master Plan Envelopes 4.4m
- Reference Scheme Library 7.5m



Heritage: Governor Macquarie Statue

5.2 Requested Street Perspectives

FJMT to provide perspectives. Perspectives looking from around 77 Scott Street and 327-297 Macquarie Street towards the heritage item are required for further assessment

The perspectives provided illustrate both the master plan envelopes (blue) and the reference scheme design within. The statue is highlighted in orange to assist legibility. Both CGI views are also zoomed in to magnify the relationship between the statue and the proposal. The camera angles and positions in plan are otherwise faithful.

77 Scott Street

- The reference design steps inwards toward the ground floor creating a larger buffer, improving separation and views to the statue.
- Line of site and view access toward the statue along Scott Street will significantly increase with the demolition of the Crunch Fitness building line, replaced with the open northern segment of the Civic Square (as highlighted orange in the plan diagram on the preceding page 46)..

327-297 Macquarie Street

- Similarly in this view, the reference design facade line stepping in toward ground floor increases buffer space around the statue, bringing it and the Memorial School of Arts into primary focus.

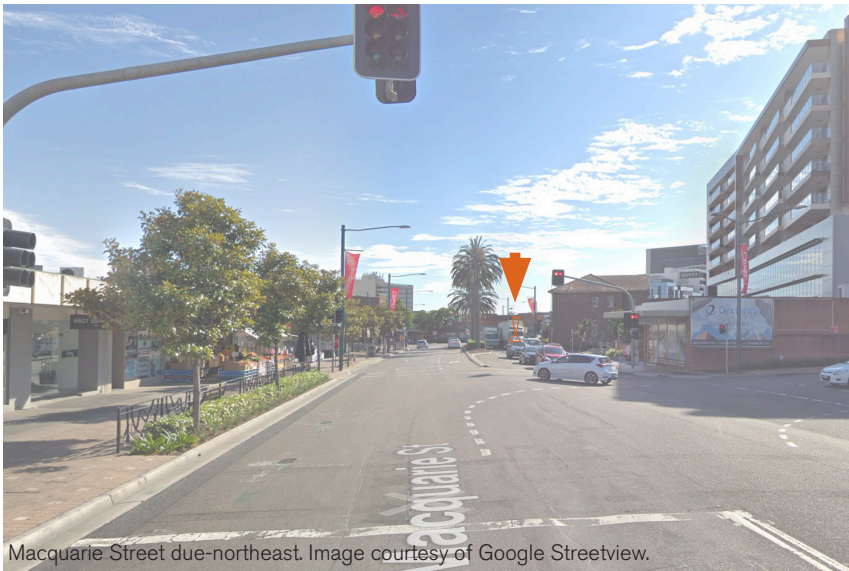
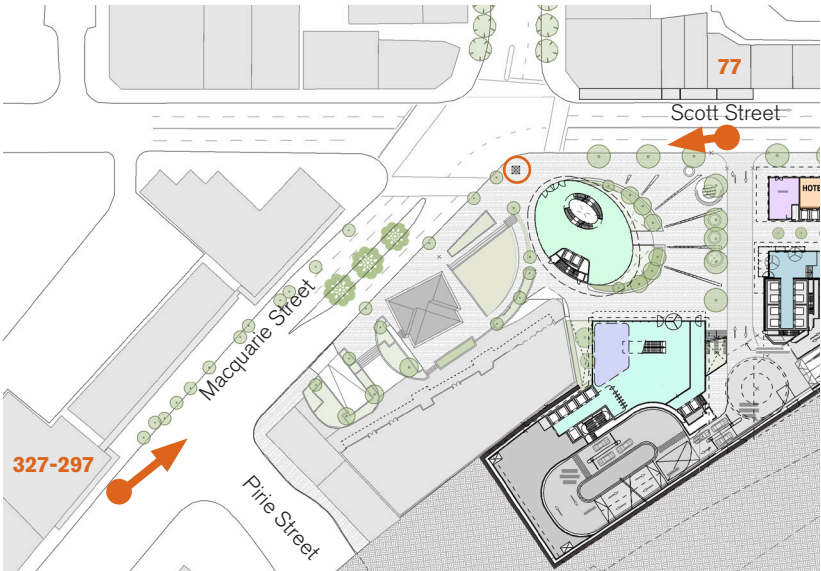
The intent of the prominent statue location is understood. The relationship with the library building form will be carefully considered throughout detailed design processes and subsequent applications.



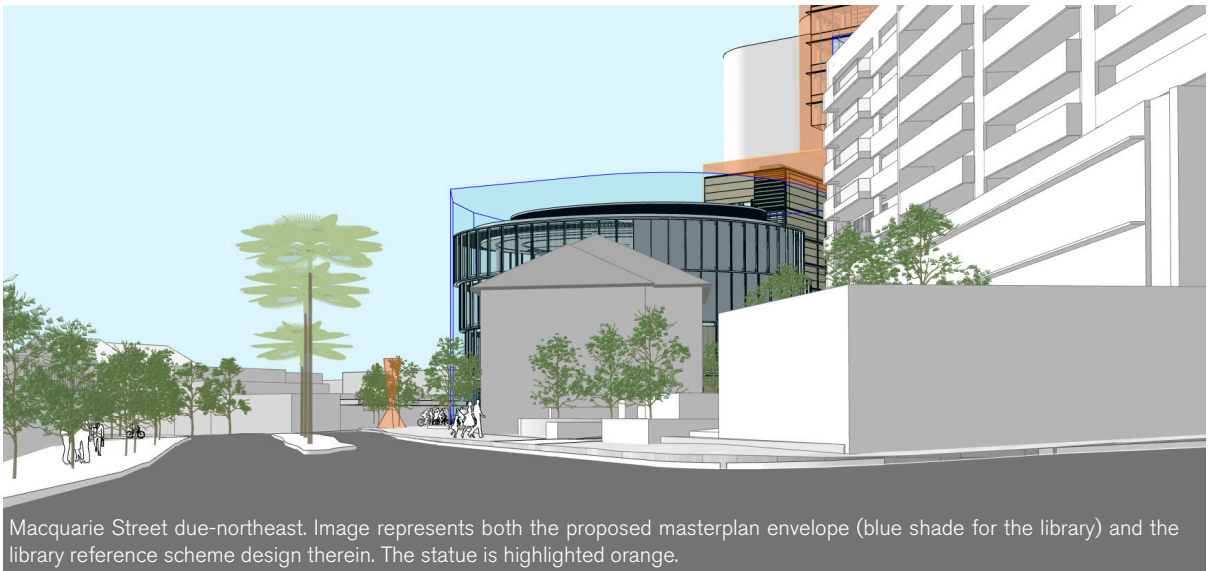
Scott Street due-east. Image courtesy of Google Streetview.



Scott Street due-east. Image represents both the proposed masterplan envelope (blue shade) and the library reference scheme design therein. The statue is highlighted orange.



Macquarie Street due-northeast. Image courtesy of Google Streetview.



Macquarie Street due-northeast. Image represents both the proposed masterplan envelope (blue shade for the library) and the library reference scheme design therein. The statue is highlighted orange.

6.0 Liverpool Central Library

The library will provide a new focal point in the urban landscape of a revitalised Liverpool CBD. Terminating the vistas of three streets, the library will be a highly identifiable and approachable symbol of the community.

6.1 Library Reconfiguration

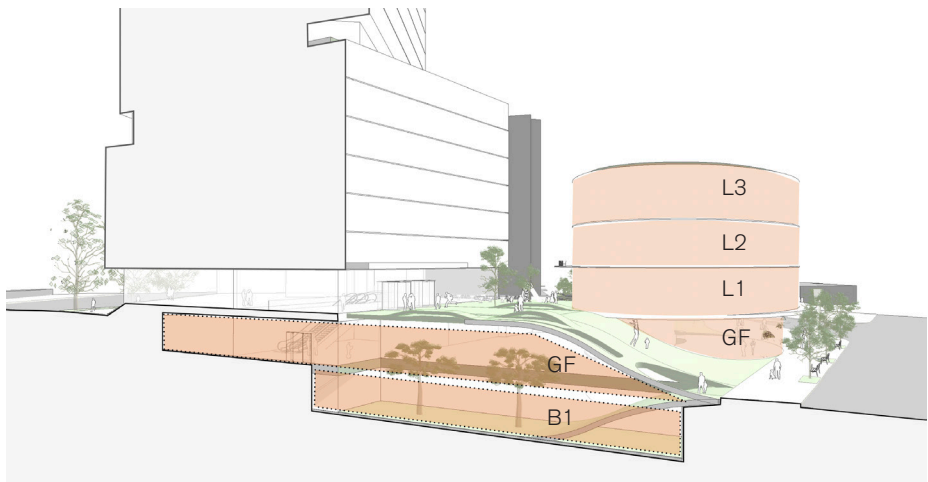
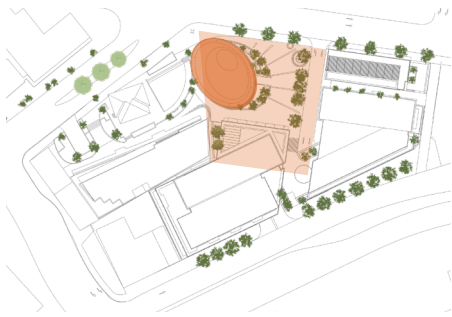
The above-ground ovoid library is programme, height and area neutral to the 2019 masterplan, but has been rotated to address the Macquarie Street terminus and improve view access to and enlarge the Civic Square.

The two below-ground library levels have been consolidated into one large basement floor to accommodate the ‘flattened’ Civic Square over. Daylight access, programme distribution and activation will be key considerations through ensuing design stages.

6.2 Liverpool Library Consultation

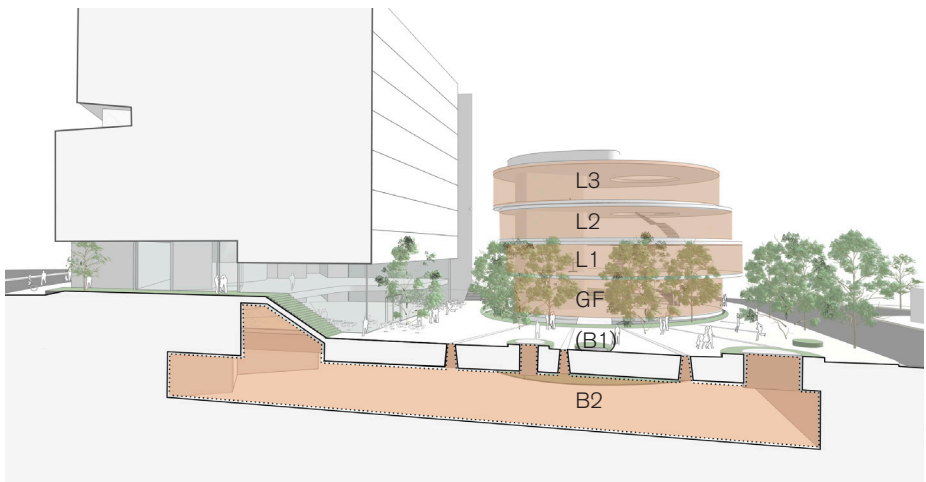
During the RFI process the design team consulted and reviewed the proposed design revisions with the Liverpool Central Library team. The library team strongly endorsed the proposal and noted;

- The importance of the library being considered and designed as an extension of the public domain, not an obstacle. The library can unify the Civic Square and Augusta Cullen Plaza to present a continuous and connected public domain.
- The large single basement floor plate enables greater library planning flexibility and operational efficiencies.
- The new basement mezzanine level would not adversely impact library operations if admin/ Boh is proposed.
- The loss of semi-public external child’s play space from the 2019 elevated Civic Square was noted. The design team will look to accommodate this within a large sunken garden, or similar, in the future design.
- Daylight access and amenity will be sensitivities, though options discussed and enclosed herein were endorsed favourably.



2019 Reference Scheme

— Basement 1	1813m2
— Ground Level	1612m2
— Level 1	545m2
— Level 2	545m2
— Level 3	545m2
— TOTAL	5059m2



2020 Revised Reference Scheme

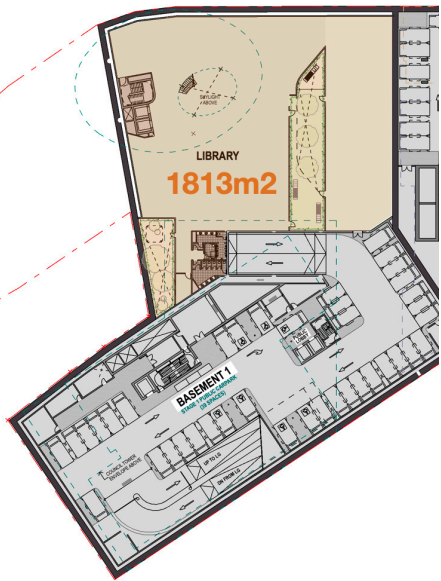
— Basement 2	2700m2
— B1 (Mezz)	245m2
— Ground Level	420m2
— Level 1	545m2
— Level 2	545m2
— Level 3	545m2
— TOTAL	5000m2



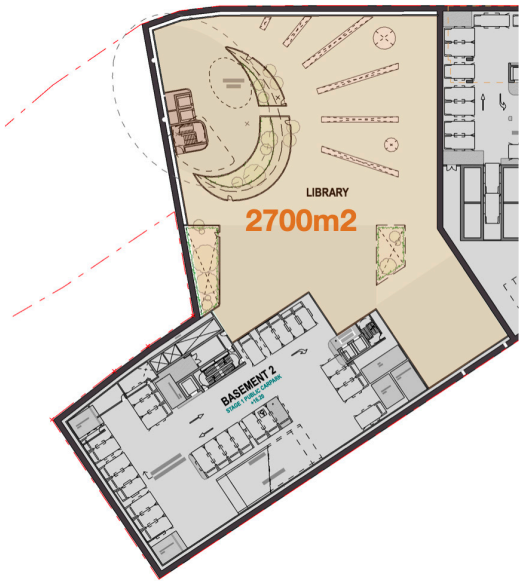
View from Macquarie and Scott Street intersection. CGI from 2019 Masterplan submission



2019 Lower Ground Floor Plan

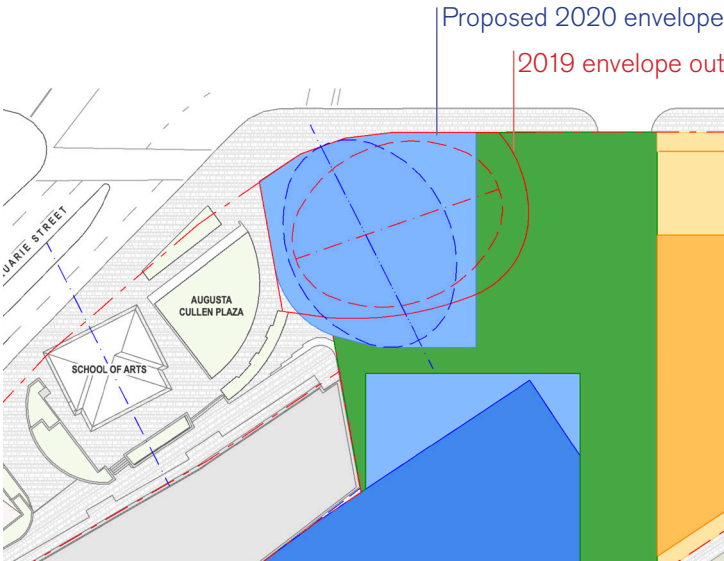


2019 Basement Library Plan



2020 Basement Library Plan

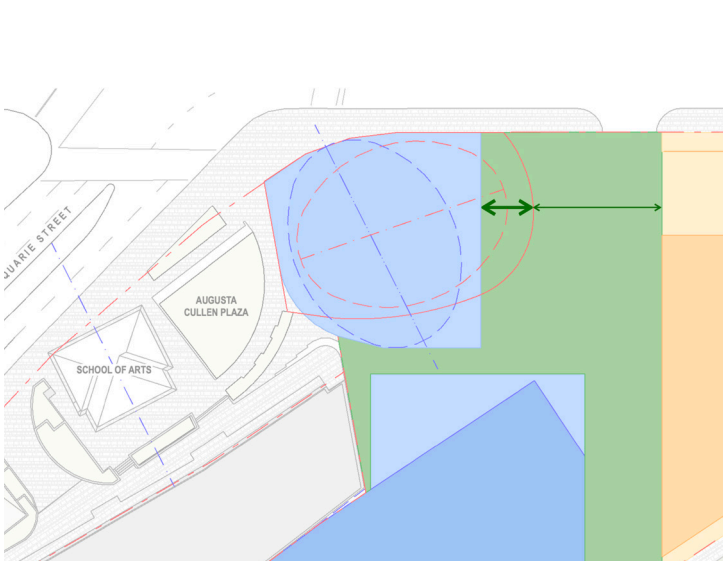
Liverpool City Library



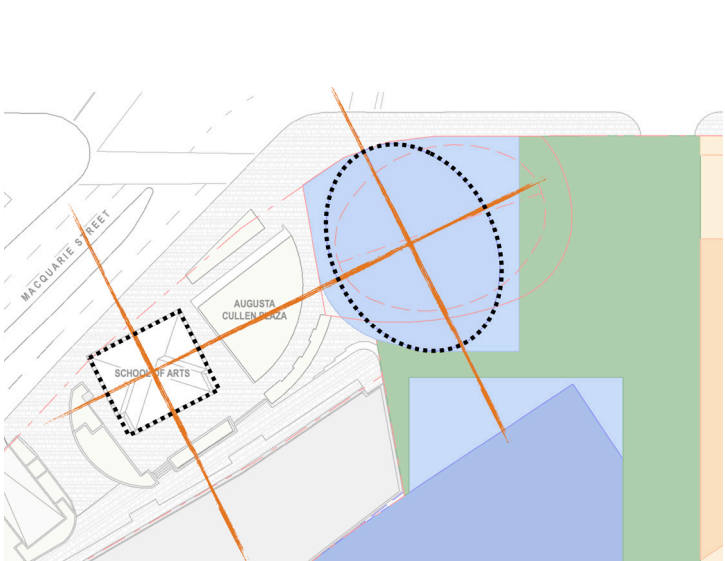
Library form rotates, hugging the north and western boundary



Ovoid long axis addresses the primary street intersection



Resulting in a widening of the public domain area available to the east, and

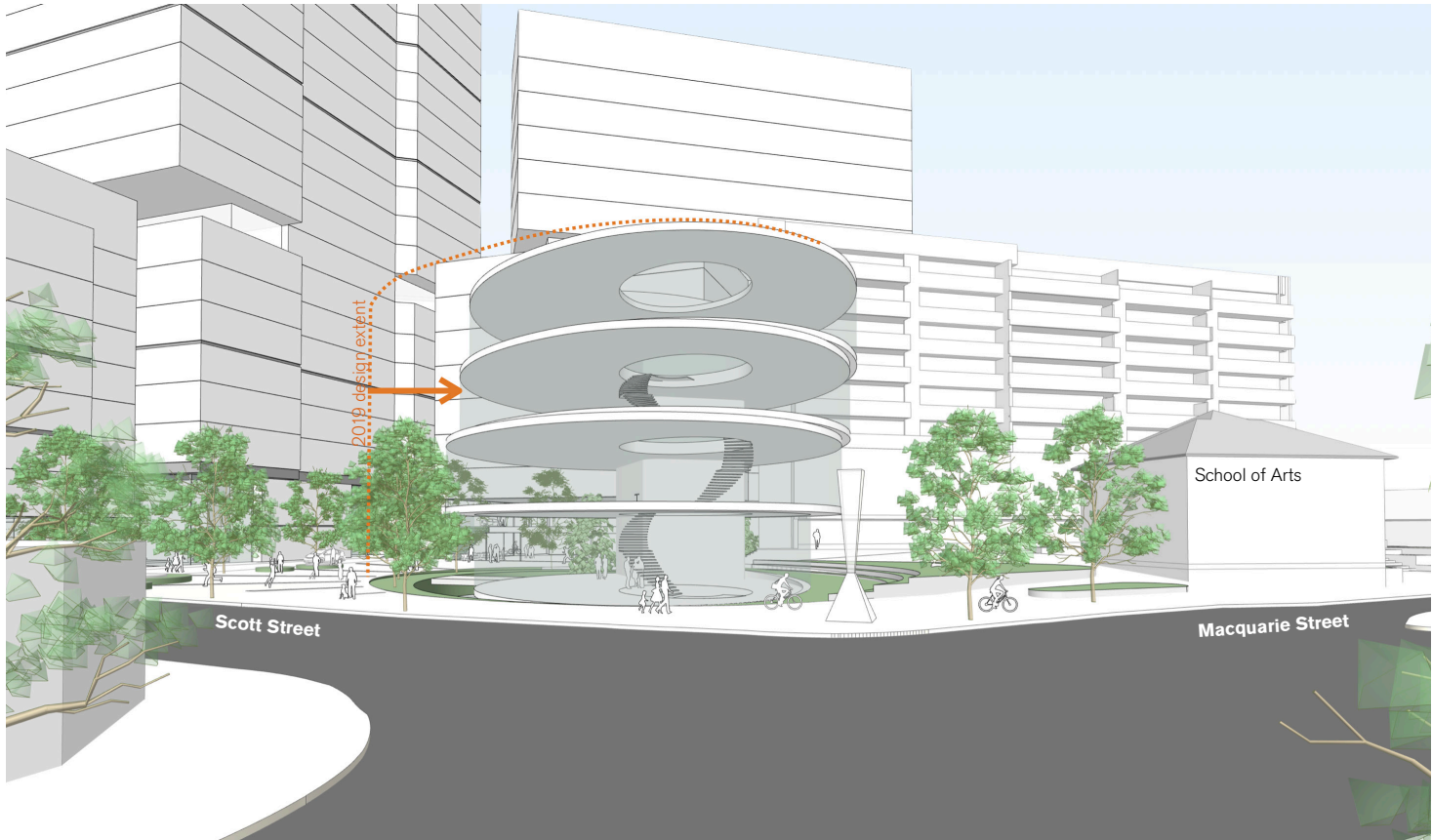


A stronger geometric and proportional relationship with the Memorial School of Arts

6.3 Library Volume

Flexibility is sought in the envelope volume proposed as future library design must navigate privacy and separation with 300 Macquarie Street, the public administration tower and council front door, the new Civic Square, the Governor Macquarie Statue and the Memorial School of Arts.

Library rotation increases the visual connectivity between the Macquarie Street intersection and the proposed Civic Square and throughsite link. The library presents a slimmer, more dynamic form, more similar in scale and proportion to the Memorial School of Art.



Liverpool City Library

6.4 New Civic Library as a Gateway Urban Marker

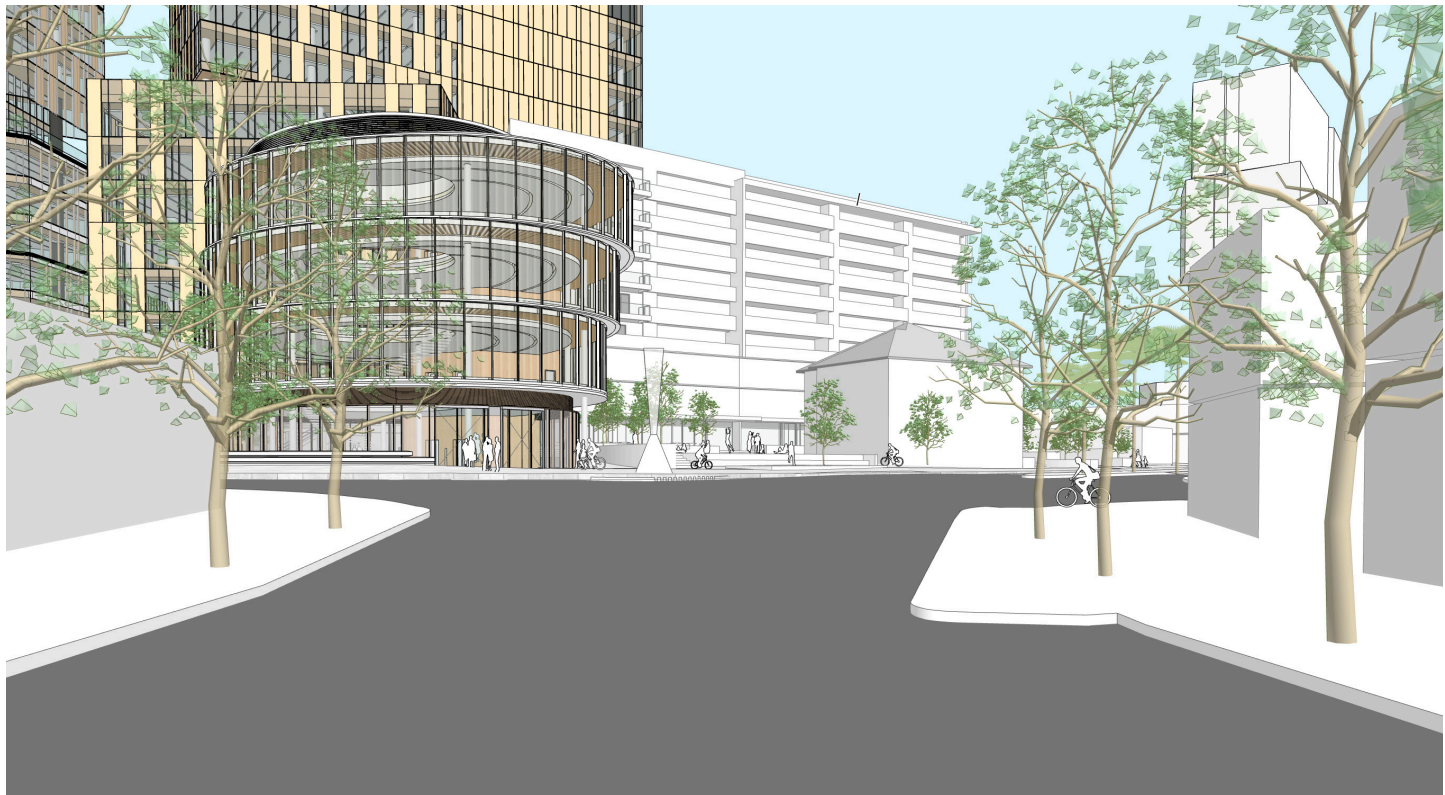
This new Civic Precinct has always been considered as the cultural counterpoint to Westfield on the northern end of Macquarie street. The library will provide this focal point in the urban landscape of a revitalised Liverpool CBD. Terminating the vistas of three streets, the library will be a highly identifiable and approachable symbol of the community.

Its location is set apart from the rest of the proposed development and placed within the public realm, adopting a distinct eddy form which enhances the paths which travel around it, optimising sun access to open spaces and clearly stating its public function.

Ground level geometries funnel pedestrians into the public realm and around the library with public infrastructure (library and council facilities) facing each other across the public open space. The library design provides a human scale complementing the existing heritage School of Arts as well as mediating between the predominantly low streetscapes of surrounding areas and the new higher scale beyond.

The soft geometry of the library contrasts with its rectilinear backdrop allowing landscaped elements to filter into the footprint of the proposal offering shaded settings, seating elements and planted zones. The concept scheme considers a highly transparent materiality which complements and contradicts the introverted nature of the School of Arts building.

The library is viewed 'in the round'. Each orientation activates a portion of the public realm - streetscape, plaza and adjacent open space. Its highly transparent facade allows the activity within to be displayed to the street and adjacent open spaces, seamlessly connecting exterior and interior public space. Brimming with community activity, the ground level community lounge will offer comfortable seating spaces, reading areas, help desks and technology, as well as cafe kiosk. Upper levels will overlook the public open space and streets creating a theatre set / dolls house elevation with multiple storeys of vibrant use. This highly effective strategy promotes the use within the library from streets and public spaces.



The library atop Macquarie Street

Gateway urban marker for both segments of Macquarie Street



Liverpool City Centre Public Domain Master Plan identifies a landmark for the southern end of Macquarie Street



The new civic precinct envisioned as the cultural counterpoint to westfield to the north



Liverpool City Library



Macquarie Street Terminus - Southbound



South-bound on Macquarie Street. Image courtesy of Google Street-



Macquarie Street Terminus - Northbound



northeast-bound on Macquarie Street. Image courtesy of Google Streetview



6.5 Opportunity Zones for Natural Light

With the proposition of a large basement library level, access to daylight is a critical environmental and amenity factor. The 2019 two-basement-level masterplan configuration proposed a sequence of three large sunken gardens for natural light. The new single consolidated basement level, though considerably larger, is easier to naturally light than the previous configuration due to access to skylights in addition to sunken gardens. Skylights can be trafficable and pose a minimal imposition on the civic square above the library, unlike sunken gardens. The diagram below identifies the opportunity zones for natural sky lights.



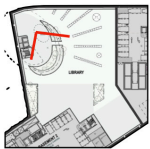
6.6 Indicative Daylight Strategy

The strategy reflected in the reference scheme is provided for indicative purposes, to proof up the basement library proposition, and subject to design development in subsequent DA's. The strategy is underpinned by a combination of;

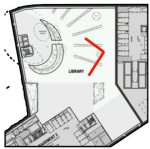
- 1. **Feature skylights** big or small, objects that either pop up and feature within the public domain, for example creating opportunities for playful forms and visual exchange, or concealed within planters and landscape.
- 2. **Multistory Stair Voids** bringing light and volume down, as well as visual and atmospheric connections between the above and below ground library programme. This connection point will be a key design focus.
- 3. **Sunken Gardens**, secure external landscaped gardens, accessible from the basement library and open to the sky.
- 4. **Trafficable Skylights** in a variety of potential configurations and sizes, bringing natural diffuse light down with minimal interruption to public domain operations and flexibility over.



Indicative internal basement library perspective; looking through the crescent sunken garden to library floor beyond



Indicative internal basement library perspective; looking back toward the multi-story stair void and crescent sunken garden. Radiating trafficable skylights in the ceiling draw focus back to the geometries of the above ground library and primary circulation core



Feature Skylights



University of Sydney Law School, fjmt

Amos Rex Museum Helsinki, JKMM

Multistory Stair Voids



Surry Hills Library, fjmt

Macquarie University Library, fjmt

Bunjil Place, Casey VIC, fjmt

Accessible Sunken Gardens



Macquarie University Library, fjmt

Green Square Library, Stewart Hollenstein

Macquarie University Library, fjmt

Trafficable Skylights



Green Square Library, Stewart Hollenstein

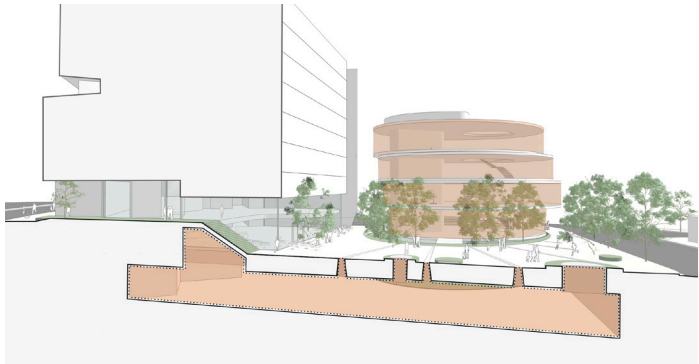
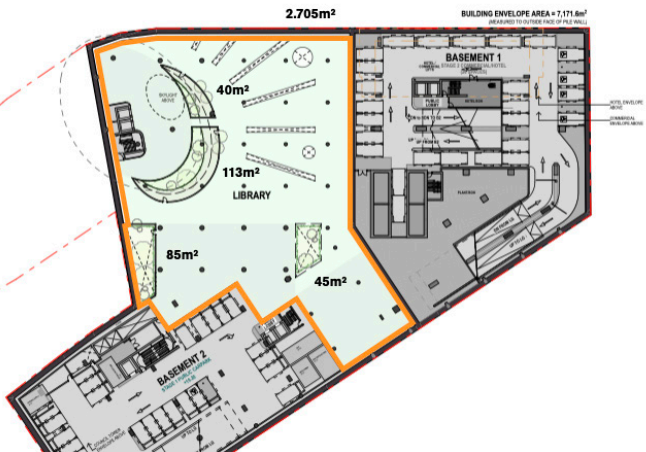
University of Sydney Law School, fjmt

Kimbell Art Museum, Louis Kahn (not trafficable)

Liverpool City Library

6.7 Underground Library Precedents

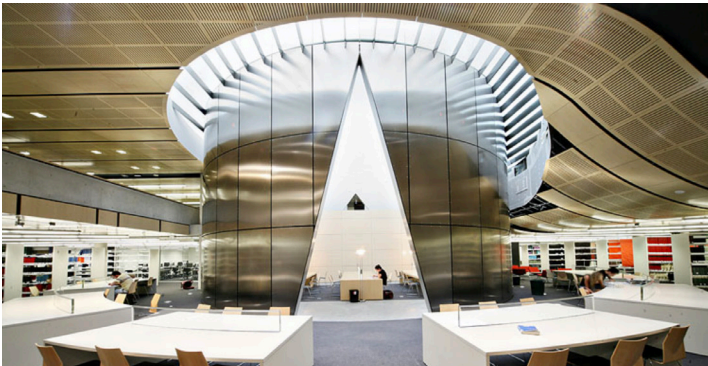
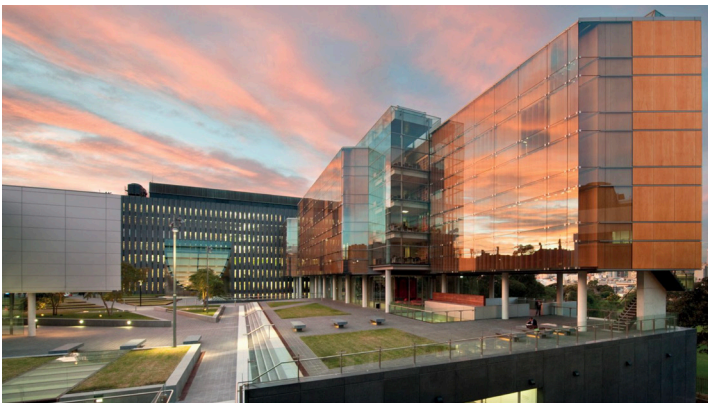
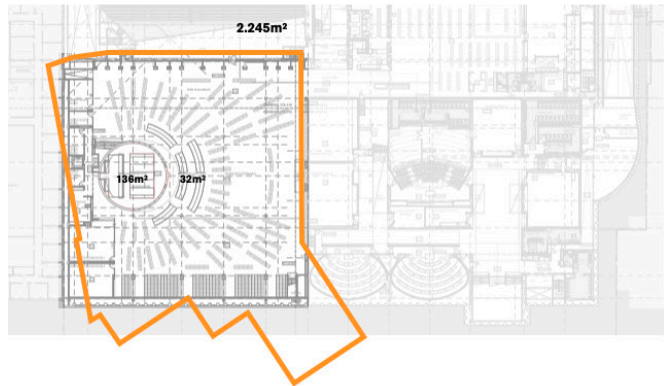
This combination of recent and local precedents represent similarly sized basement libraries or relevant fjmt experience, and their exemplary resolution of volume and light amenity.



francis-jones morehen thorp

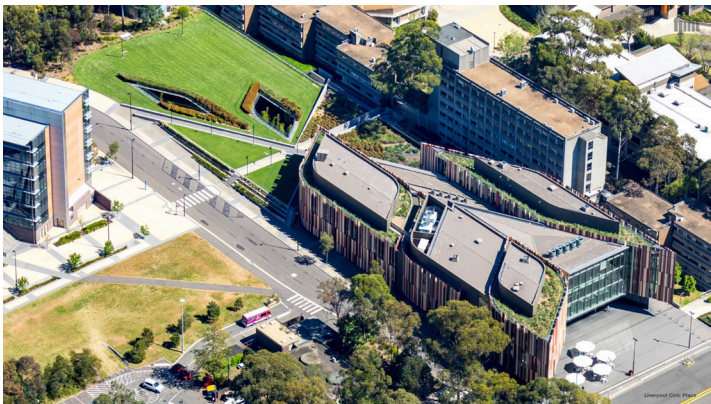
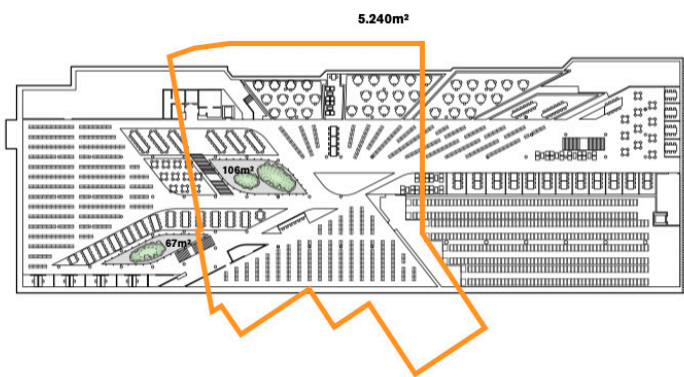
University of Sydney Law Library, fjmt

- Comparable floor area
- Trafficable folded ground plane over
- Feature skylights
- Trafficable skylights
- Double height volumes



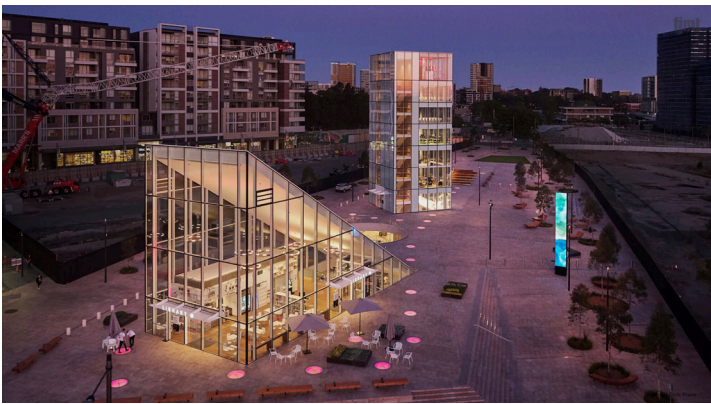
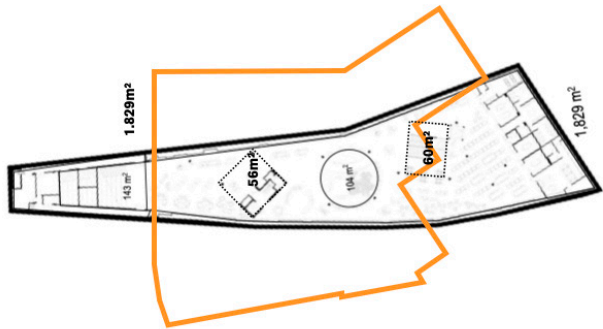
Macquarie University Library, fjmt

- Over 5000m2 floor plates
- Trafficable ground plane over
- Sunken gardens
- Multistory circulation voids



Green Square Library, Stewart Hollenstein

- Just under 2000m2
- Sunken gardens, internal voids and volumes
- Small trafficable skylights dotted in groundplane over



supplementary design report liverpool central library

7.0 Building Separation

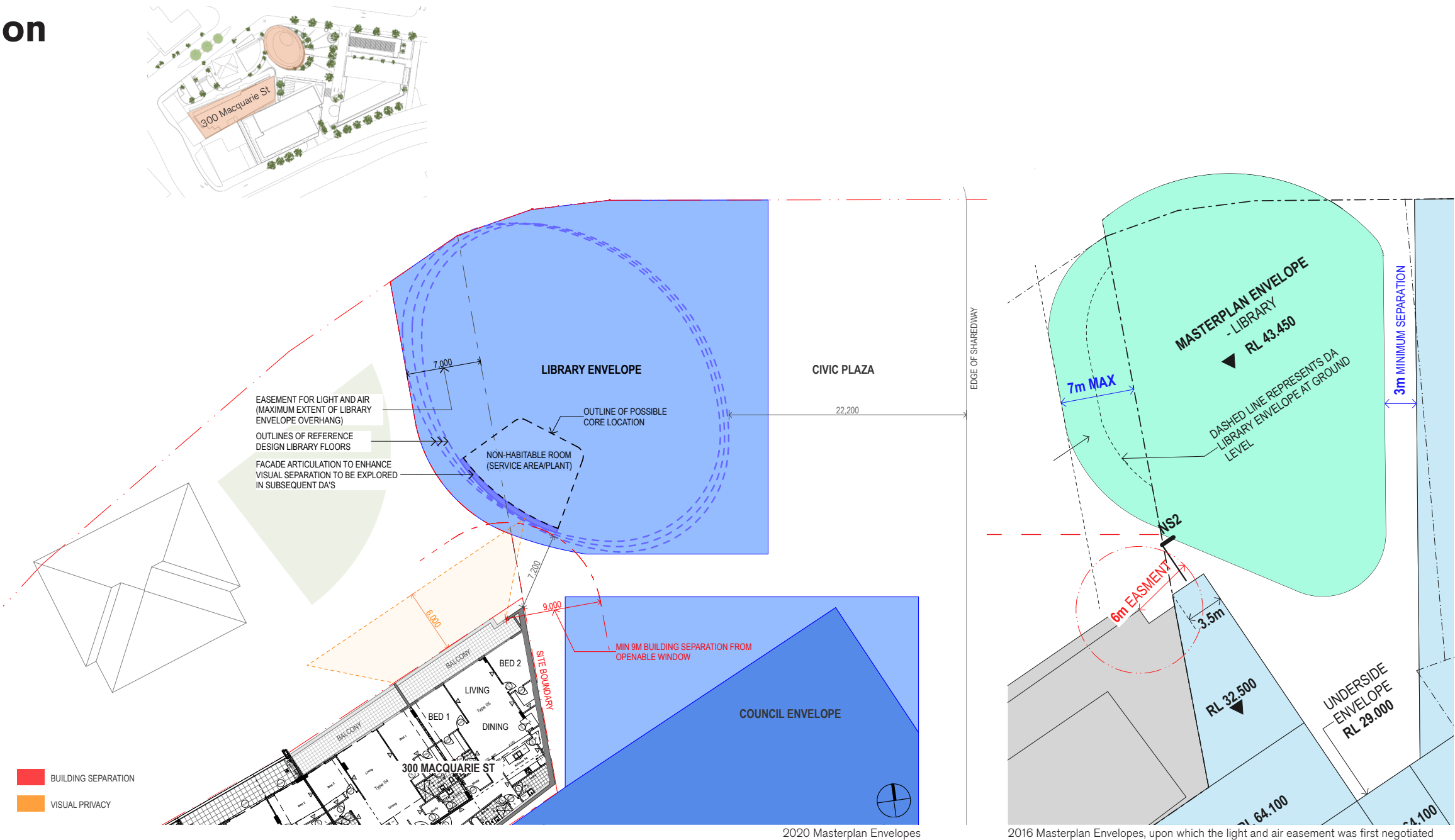
This chapter responds to RFI Arch 1G (Residential amenity of 300 Macquarie Street) as outlined in the Supplementary Design Report by Ethos Urban.

7.1 Amenity to 300 Macquarie Street

The proposed library envelope extends 7m west into a Easement. This positions the library atop Macquarie Street to ensure maximum visibility from the city's important axis. Architectus has requested that we provide further information on the proposed separation between the library envelope and 300 Macquarie Street.

This study focuses particularly on three stacked residential 2 bedroom apartments and their balconies and windows located adjacent to the proposed library, and assesses impact to solar access, outlook and privacy.

These apartments have aspects oriented towards the north-west with views over Augusta Cullen Plaza and Liverpool City. There are no windows east or south. Sensitive to this view dependence, the library envelope peels away to the north to improve separation and view access. The reference scheme design proposes situating the core at this point, which would present an opaque screened element to apartment views, to ensure acoustic and visual privacy, and minimise light spill.

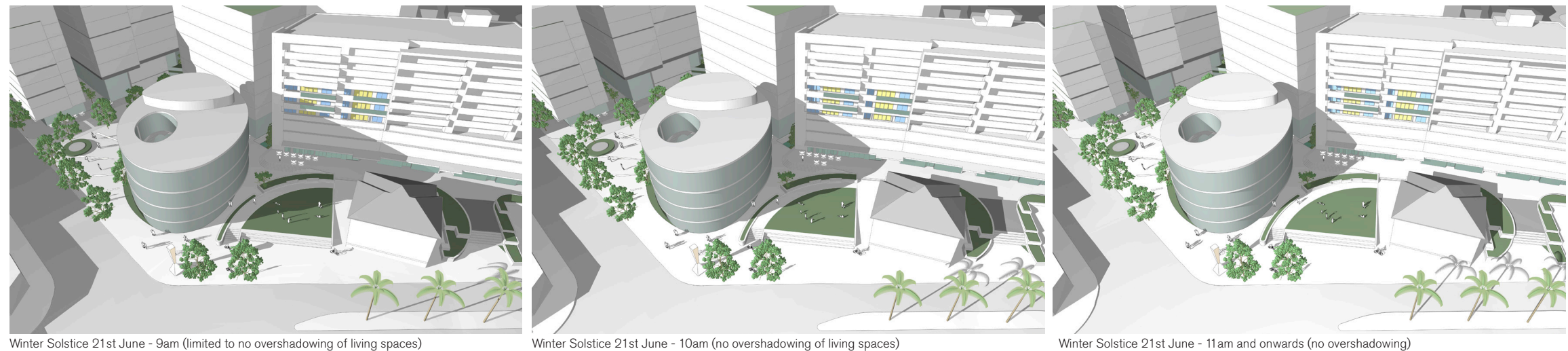


7.2 Overshadowing of residential apartments

The diagrams adjacent study the potential worst-case overshadowing, 21st June, and show that living spaces in affected apartments are only impacted for a short duration in the morning. There is no overshadowing of living spaces after 10am.

While the Library's location will inevitably result in shadows cast over the existing development, this overshadowing is limited to early morning and all apartments will still achieve compliant solar access, well over the minimum 2 hours.

Important to note also, that ground level retail receives full sun light from 11am onwards and throughout the lunchtime period.

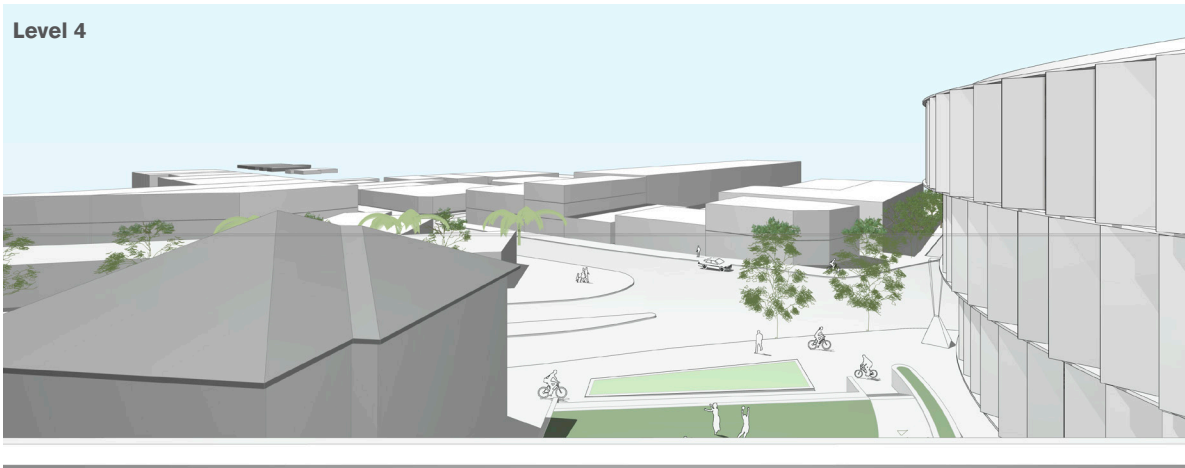
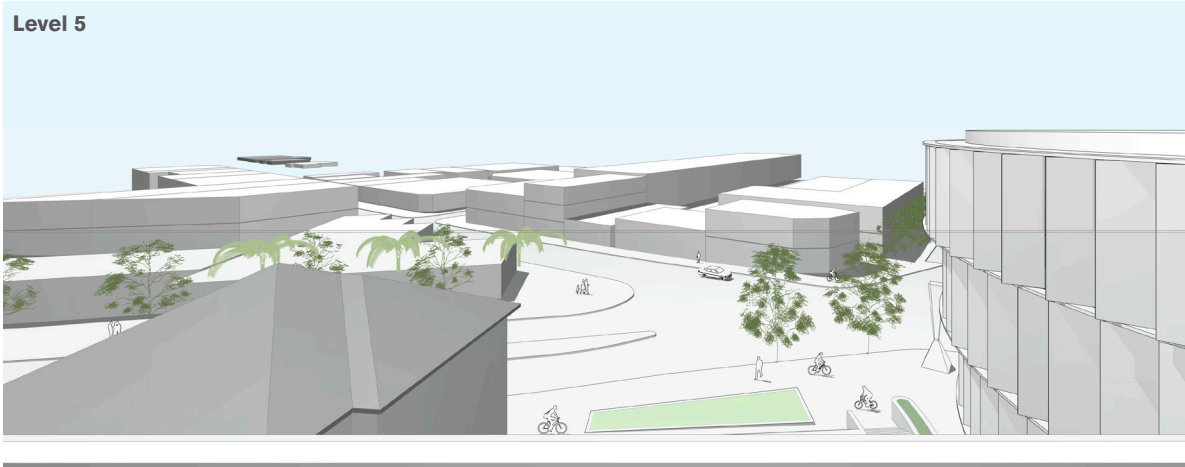
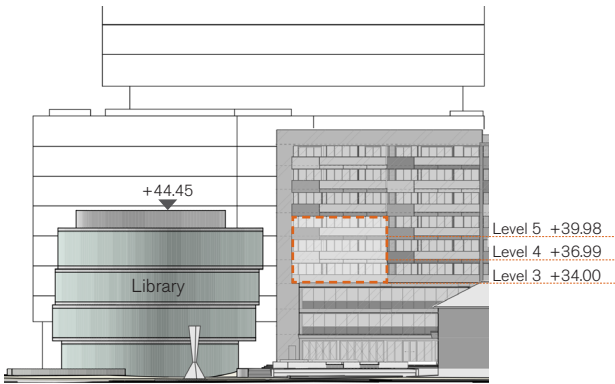


Building Separation

7.4 Outlook & Privacy

The 3 affected apartments closest to the library's envelope will still enjoy their views of Augusta Cullen Plaza, as well as panoramic views of Liverpool's city centre especially towards the north and northwest, as evidenced in the 3D views below projected from the balconies and from within the living areas.

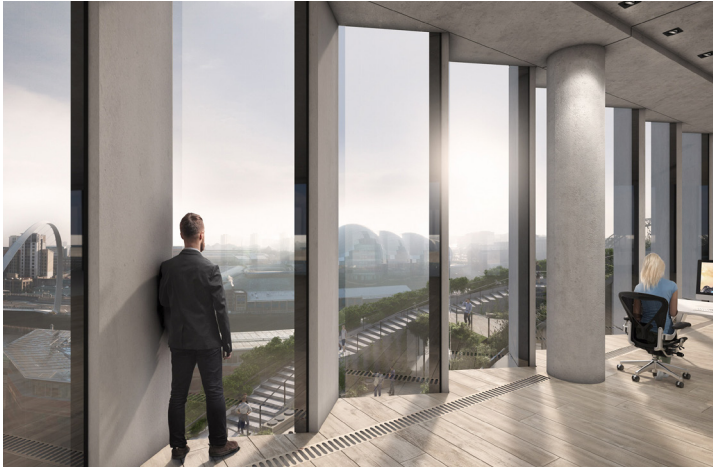
Privacy will be managed via internal planning and facade treatments, for example core positioning and articulated screen panels. Options to be explored further in detailed design and subsequent DA phases. The library's rooftop will be partially landscaped with suitable species that will help soften the built form when viewed from above, and any rooftop plant sufficiently acoustically attenuated.



7.3 Facade treatment precedents

Early facade detail considerations for the library have explored a faceted design with a glazing overlap. Parallel panels are opaque directing and controlling internal views toward key vistas, or preserving privacy to neighbours.

A similar facade system was proposed for No.1 Quayside in Newcastle, UK (images below).



8.0 George Lane

This chapter responds to RFI Arch 1D, 1H (George Lane) and Arch 3A(Context)

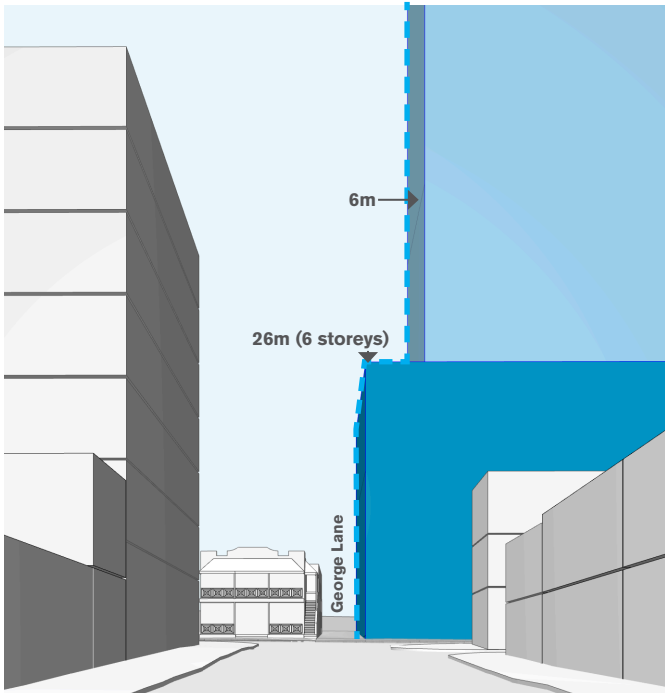
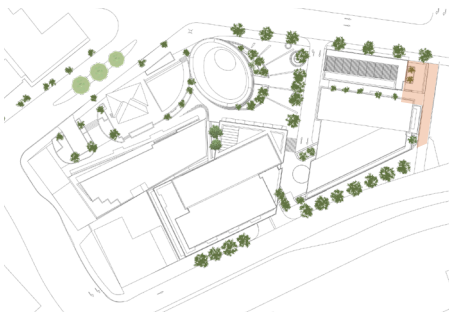
8.1 Proposed Street Wall Height and Tower Setback

George Lane is an important at-grade pedestrian link between Scott and Terminus Streets, with a width of approximately 4.2 to 4.6m. Architectus has requested that the amenity of the laneway be improved, with consideration given to appropriate street wall heights and setbacks to ensure a desirable pedestrian environment.

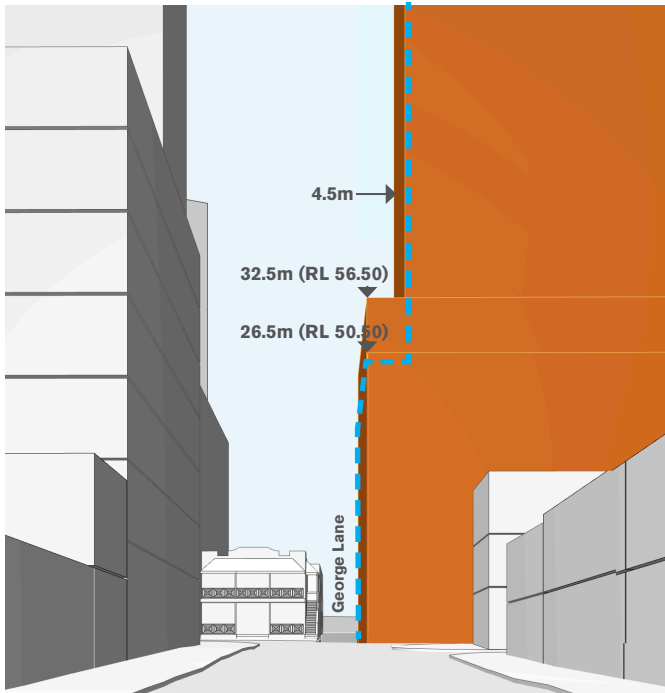
The diagrams in this section compare the DCP compliant envelope (in blue) with our proposed envelope (in orange), and attempt to show that the non-compliant extra height is negligible in terms of visual bulk, sun access and amenity impacts to the pedestrian environment, particularly when considered in-conjunction with the proposed 15.9m tower setback.

Notwithstanding the proposed envelopes, which have been crafted to maintain flexibility for ensuing design phases, any future detailed design will be expected to incorporate appropriate means of celebrating and terminating the important George Street axis of the city grid. Building to the envelopes proposed is unlikely to achieve this.

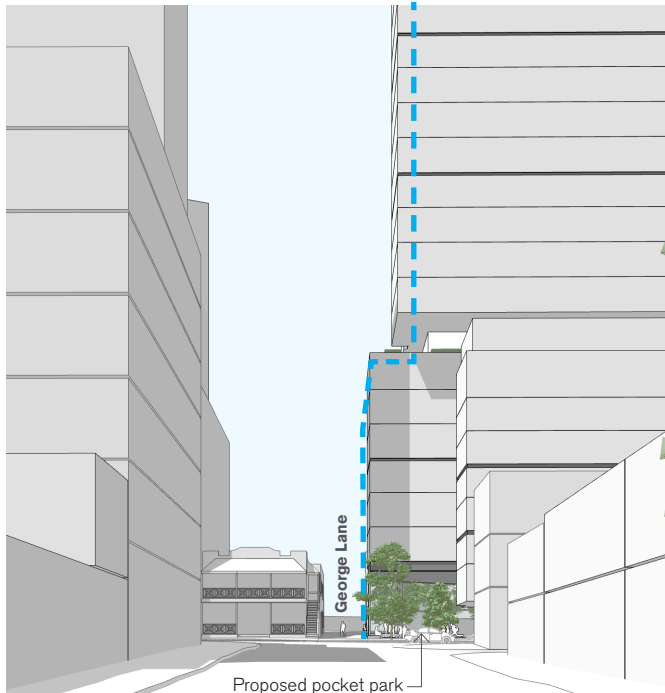
The reference scheme, for example, illustrates a retail activated and landscaped pocket park with a layered building form backdrop, as detailed in the masterplan report.



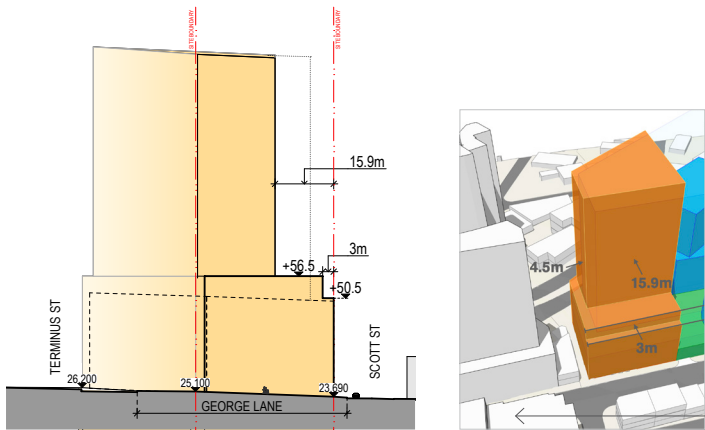
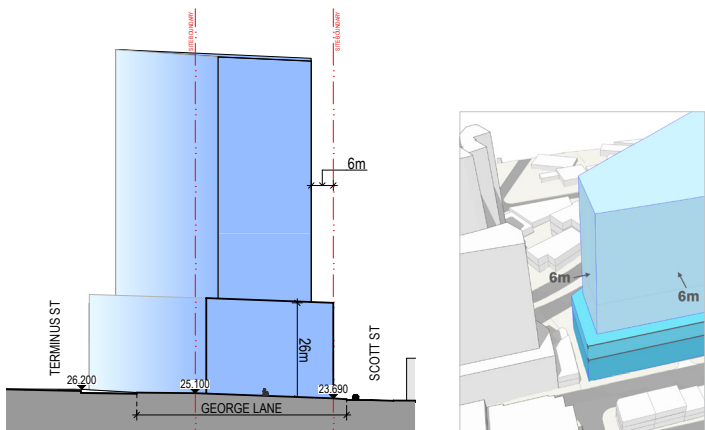
DCP Envelope: George Street, southbound



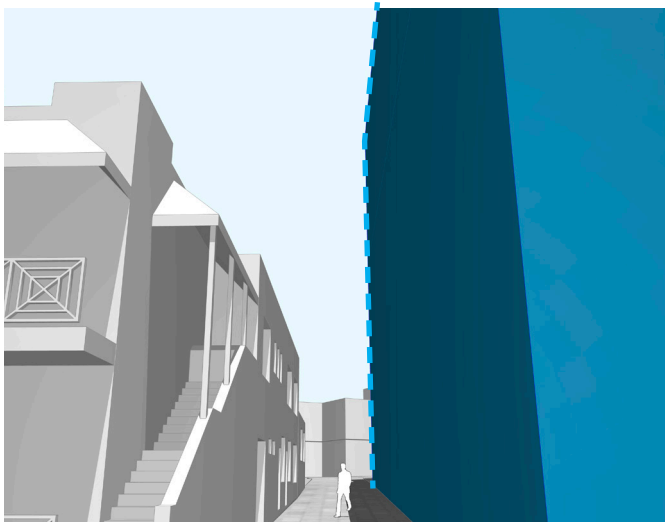
Proposed Masterplan Envelope: George Street, southbound



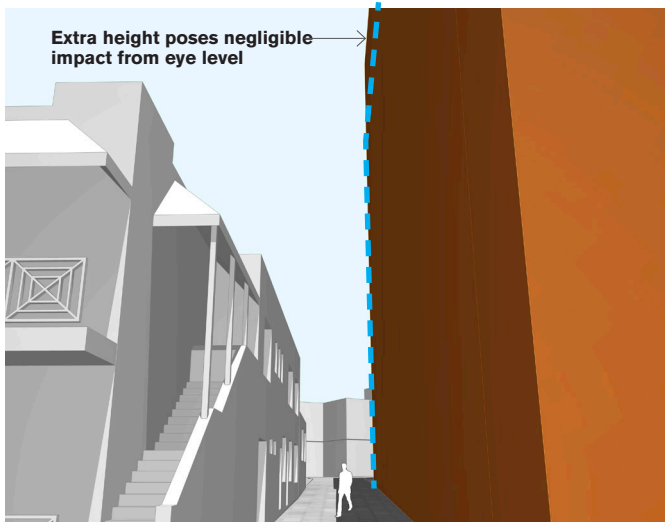
Reference Scheme Design: George Street, southbound



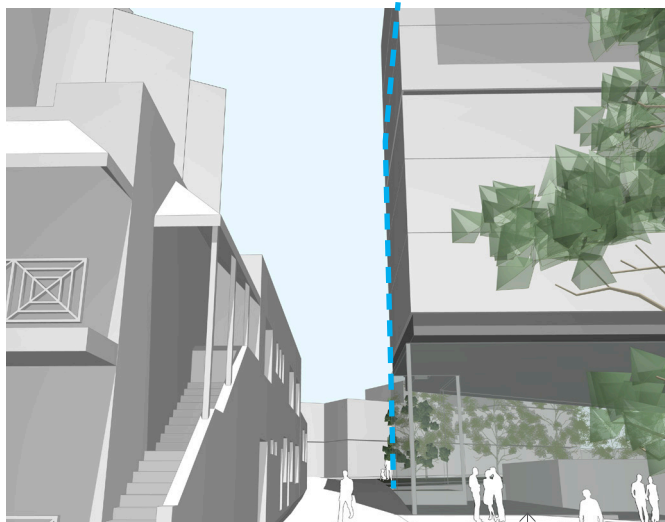
George Lane Elevation: Compliant envelope (blue) vs. Proposed envelope (orange)



DCP Envelope: George Lane @ intersection with Scott Street, camera at pedestrian eye level looking south to Terminus Street



Proposed Envelope: George Lane @ intersection with Scott Street, camera at pedestrian eye level looking south to Terminus Street



Reference Scheme Design: George Lane @ intersection with Scott Street, camera at pedestrian eye level looking south to Terminus Street

George Lane activated by pocket park, laneway link to civic plaza, retail and commercial lobby

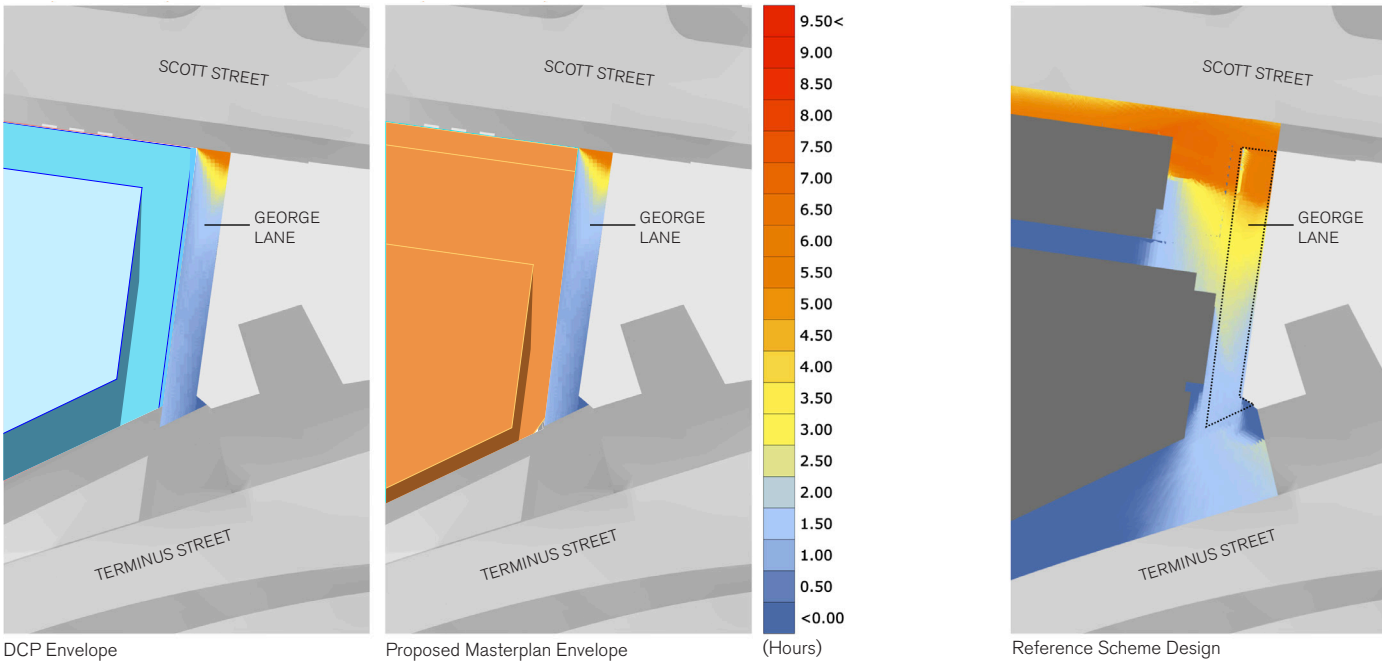
The established street wall height across Scott Street to the east of George Lane is more than 6 storeys - Quest Hotel (10 storeys), 25-35 Scott Street (11 storeys). Refer to page 59 of the Architectural Design Statement (2019 Masterplan Report) for more information on current and emerging height datums.

George Lane

8.2 Winter solar access

The solar heat map analysis diagrams below accurately compare the sun access to George Lane on 21st June (Winter Solstice), for both the DCP and proposed envelopes. They show there is no change to direct sunlight.

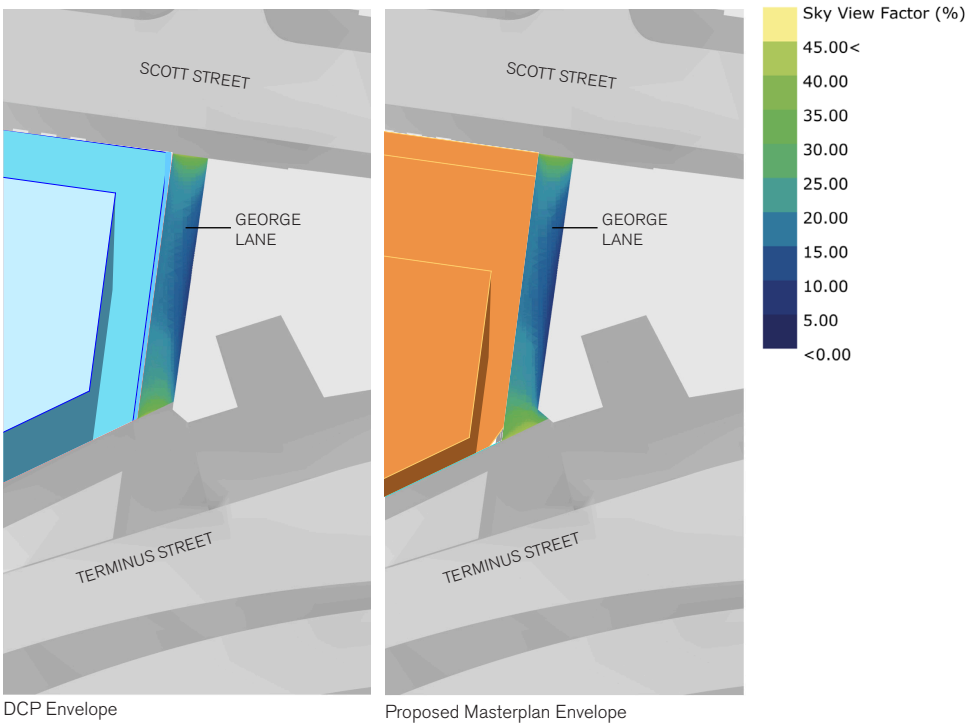
A solar analysis of the reference scheme (below right) has been included to illustrate a marked improvement in the amount of sunlight.



8.3 Sky View Factor

The proportional measurement of visible sky from a public space is a good representation of pedestrian amenity and the perception of safety. A sky view factor assessment, confined to George Lane, has been conducted

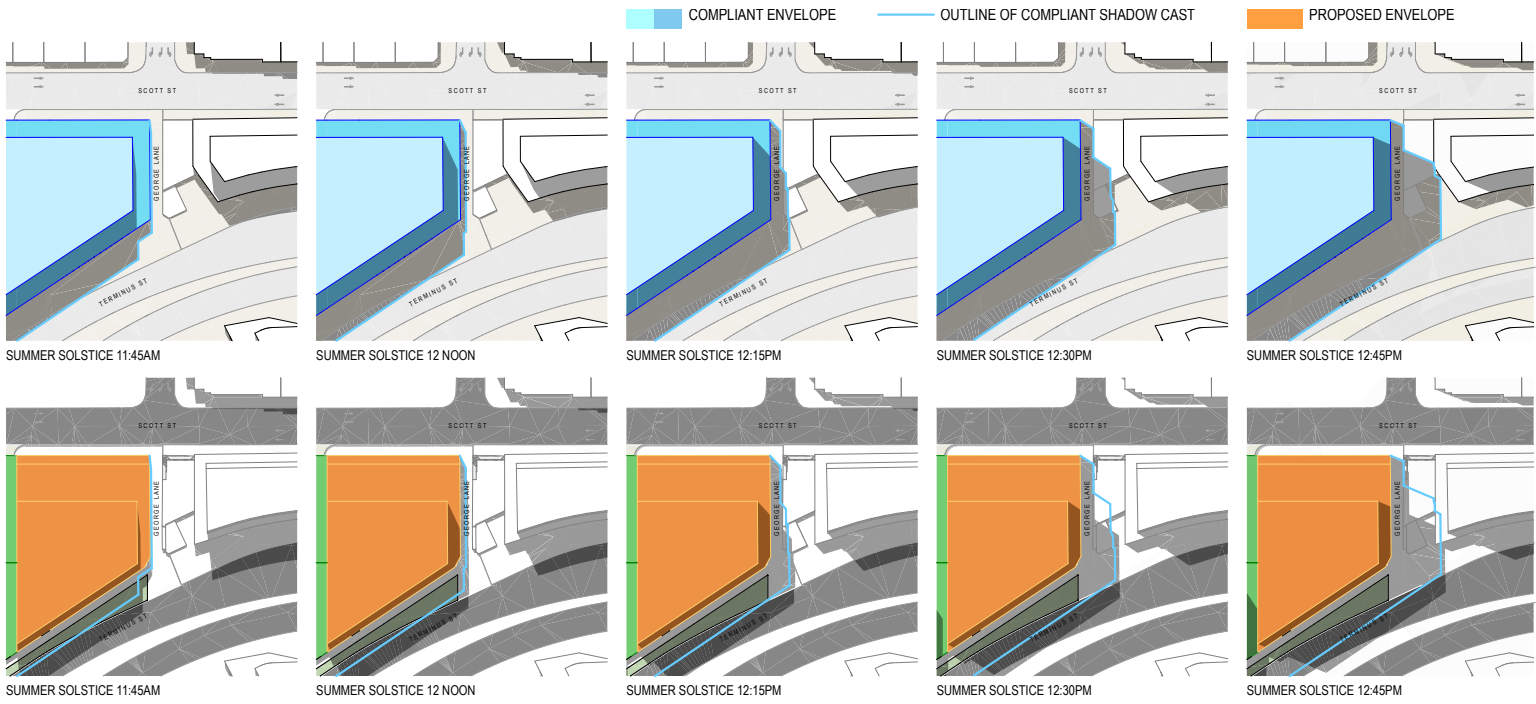
and found a virtually imperceptible total percentage decrease of 1.147% (less sky view) from the extra height in our proposed envelope.



8.4 Summer solar access

The diagrams below compare solar access to George Lane on 21st December (Summer Solstice). There is a small window of time between 11:45am and 12:20pm where minor solar access differences can be observed; wherein addi-

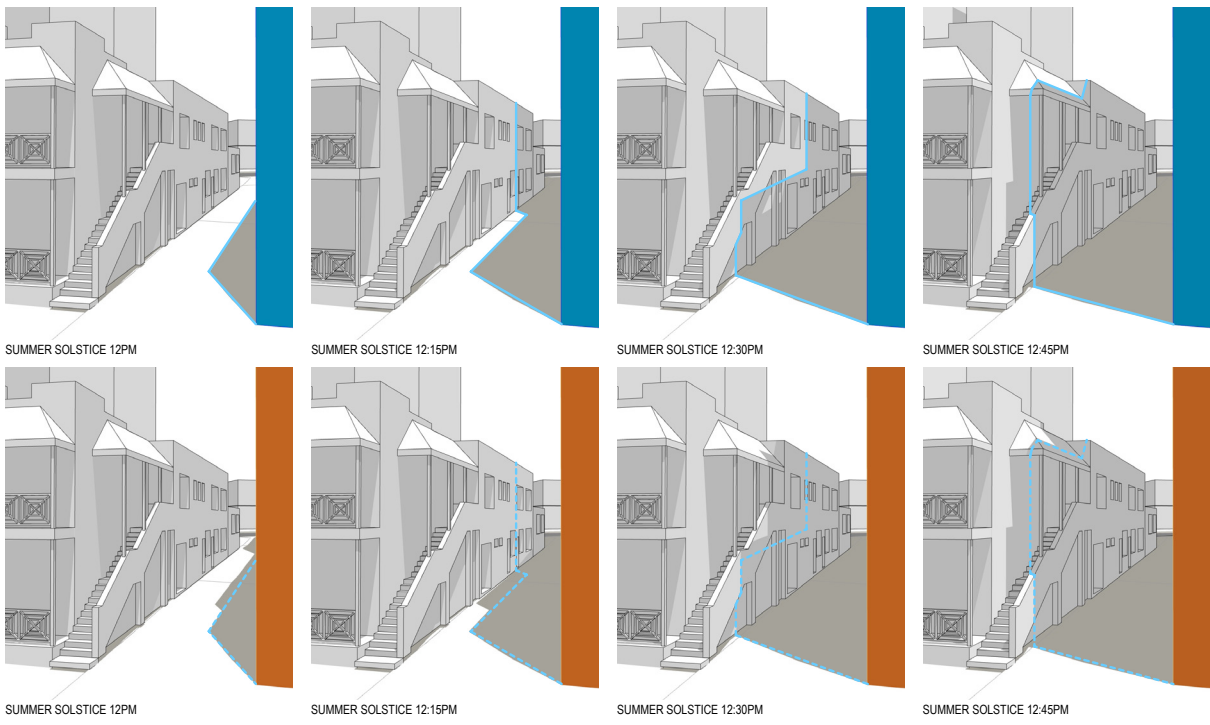
tional overshadowing by the proposed increased streetwall height is negated by the reduced overshadowing from the increased tower setback.



8.5 Sun Access to neighbouring building (38 Scott Street)

We have also analysed the impact of sun access to neighbouring 38 Scott Street, which is used as commercial premises. The diagrams below show that 4 rear windows will benefit from extra sun access around 12:15pm due to the sizeable 15.9m tower setback from Scott Street, while the extra height in the laneway frontage will

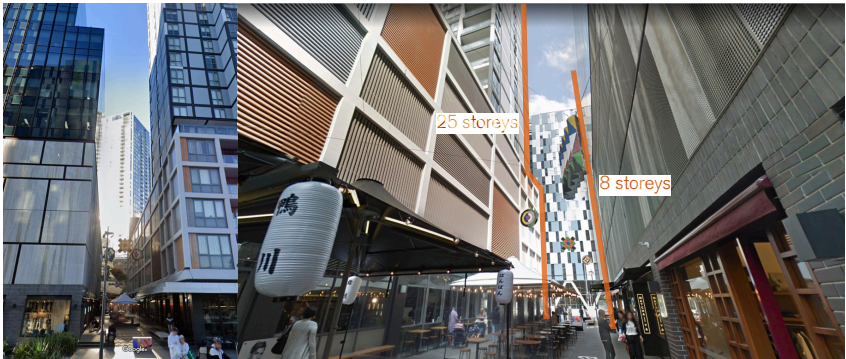
affect sun access for 1 window at around 12:30pm. There is net increase in sun access from the proposed envelopes.



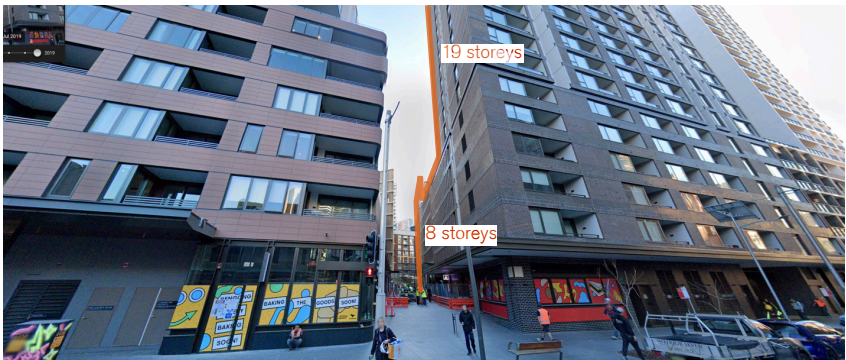
George Lane

8.6 Laneway precedents with street wall heights greater than 6 storeys

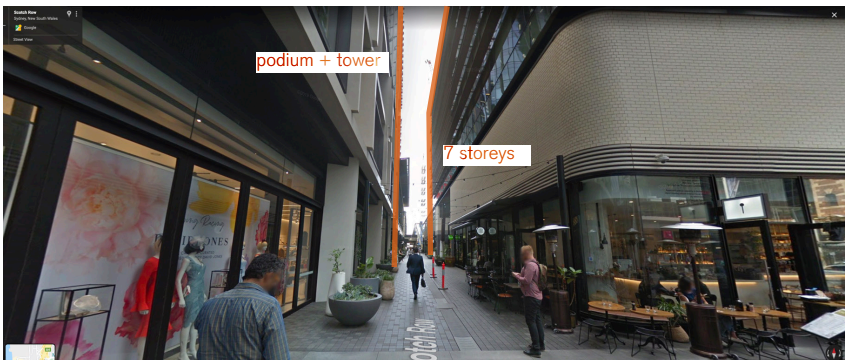
There are many recent and local precedents for street wall heights above 6 storeys that do not impact the success of pedestrian laneways with ground level activation.



Steam Mill Lane, Haymarket



Little Hay Street, Haymarket



Scotch Row, Barangaroo



Ash Street, Sydney

8.7 Scale, safety and activation, amenity and wind

The impact of the proposed envelopes on George Lane, and the wider public domain, will be further studied during detailed design phases, where careful consideration will be given to improving the amenity of this through-site link with good planning principles, sensitive landscaping, the use of materials,

sufficient lighting, as well as amelioration methods to reduce the impact from wind tunnel and downwash. Refer to the updated Pedestrian Wind Environment Statement by Windtech for more information.

The images below show possible impressions of a future George Lane activated by the new commercial buildings and an improved extended public domain.



George Lane

8.8 DEP Comments

As noted in the Minutes of the Design Excellence Panel Meeting held on 17th March 2020, the panel has “no objection to the minor non-compliance of the building envelope... given the demonstrated potential performance in the proposed design.”



Eastern perspective view of the proposed George Lane Pocket Park and laneway through to the Civic Square

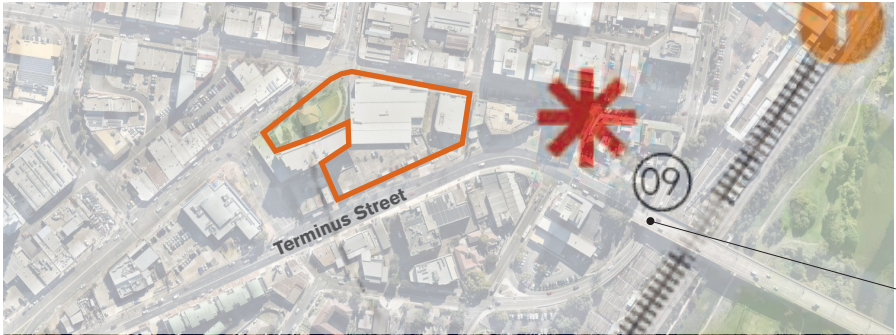
9.0 Terminus Street Address

9.1 New gateway experience

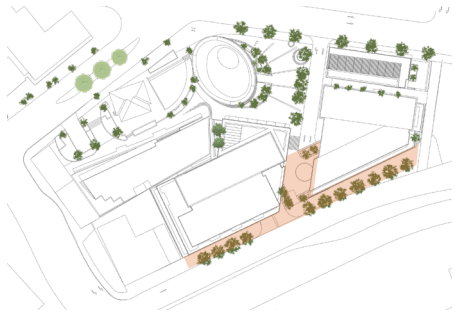
This chapter responds to the DEP recommendations noted in the Minutes to Design Excellence Panel Meeting on 17th March 2020.

The southern frontage of our site has been identified to be in close proximity to a primary entry gateway into Liverpool's city centre. Improvements proposed in Liverpool City Council's Public Domain Masterplan (Nov 2019 Draft) include custom lighting and public art on the bridge and trees, and landscape treatments within the parcels of land located between Scott Street, Terminus Street and New Bridge Road.

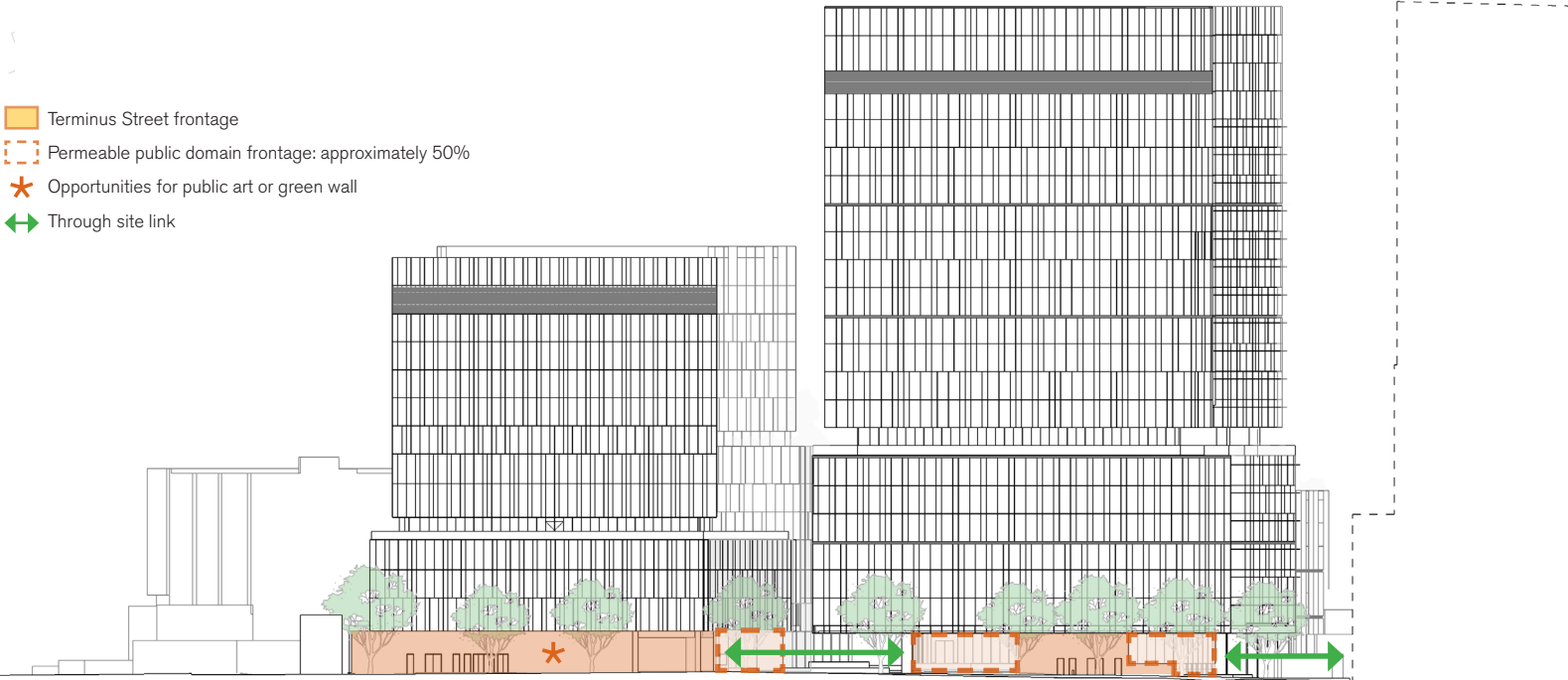
The DEP panel has requested that the Terminus Street frontage "be developed as visually and physically permeable where possible and that a blank 'back of house' approach be avoided." We have taken note of this advice and will further develop Terminus Street frontage in subsequent DA's to balance the public domain frontages with our necessary back-of-house facilities in order to contribute to this gateway experience for pedestrians, cyclists and motorists.



Newbridge Road
(Primary Gateway)



- Terminus Street frontage
- Permeable public domain frontage: approximately 50%
- Opportunities for public art or green wall
- Through site link

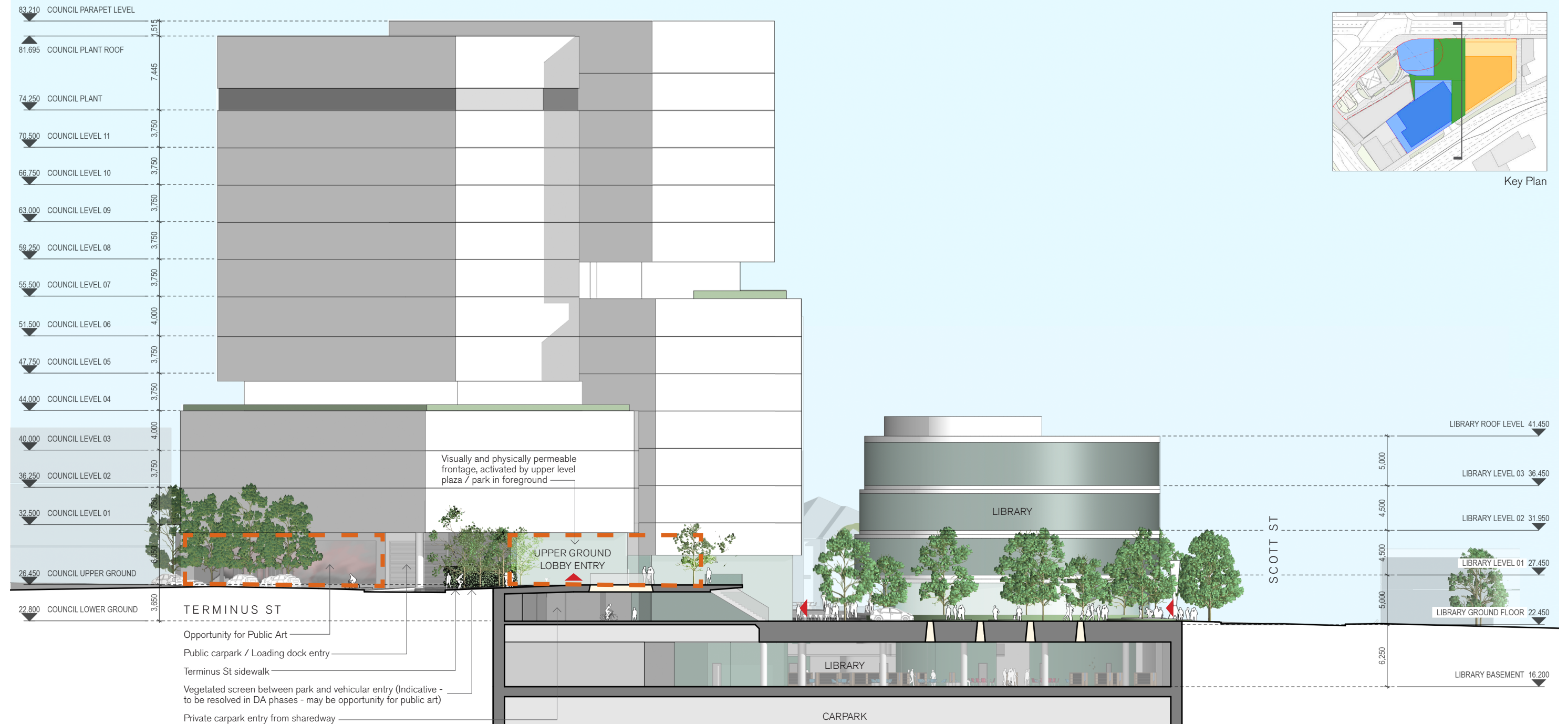


Reference Scheme: Terminus Street Elevation



Vignettes of the Upper Ground Plaza leading into the secondary entries along Terminus Street. The design of the new central pocket park along Terminus Street will be further explored in future design phases.

Terminus Street Address



Reference Scheme design: Section through Shared-zone and Civic Plaza Link to Terminus Street



Vignettes of the Upper Ground Plaza / Park at Terminus Street level and the larger Civic Plaza at Scott Street level.

10.0 Terminus Street

This chapter responds to RFI Arch 1I (Terminus Street) and Arch1M (Road reservation acquisition area)

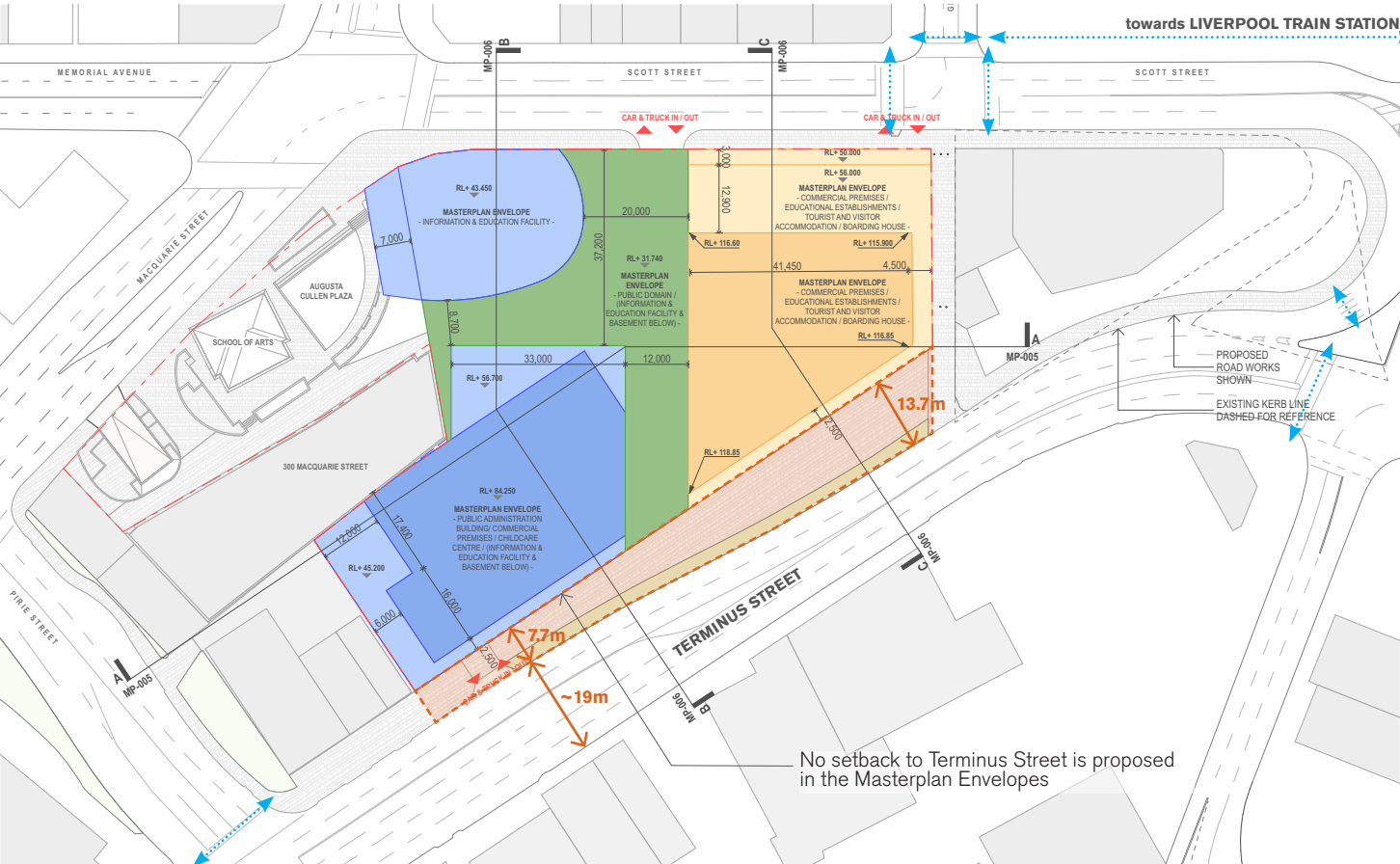
10.1 Street Setback and future road widening

Terminus Street is a main arterial road and vehicular thoroughfare that is subject to future road widening. Architectus is concerned that increased traffic volumes and the resultant narrower footpath and landscape verge, considered in tandem with the nil proposed envelope setbacks, will impact pedestrian amenity.

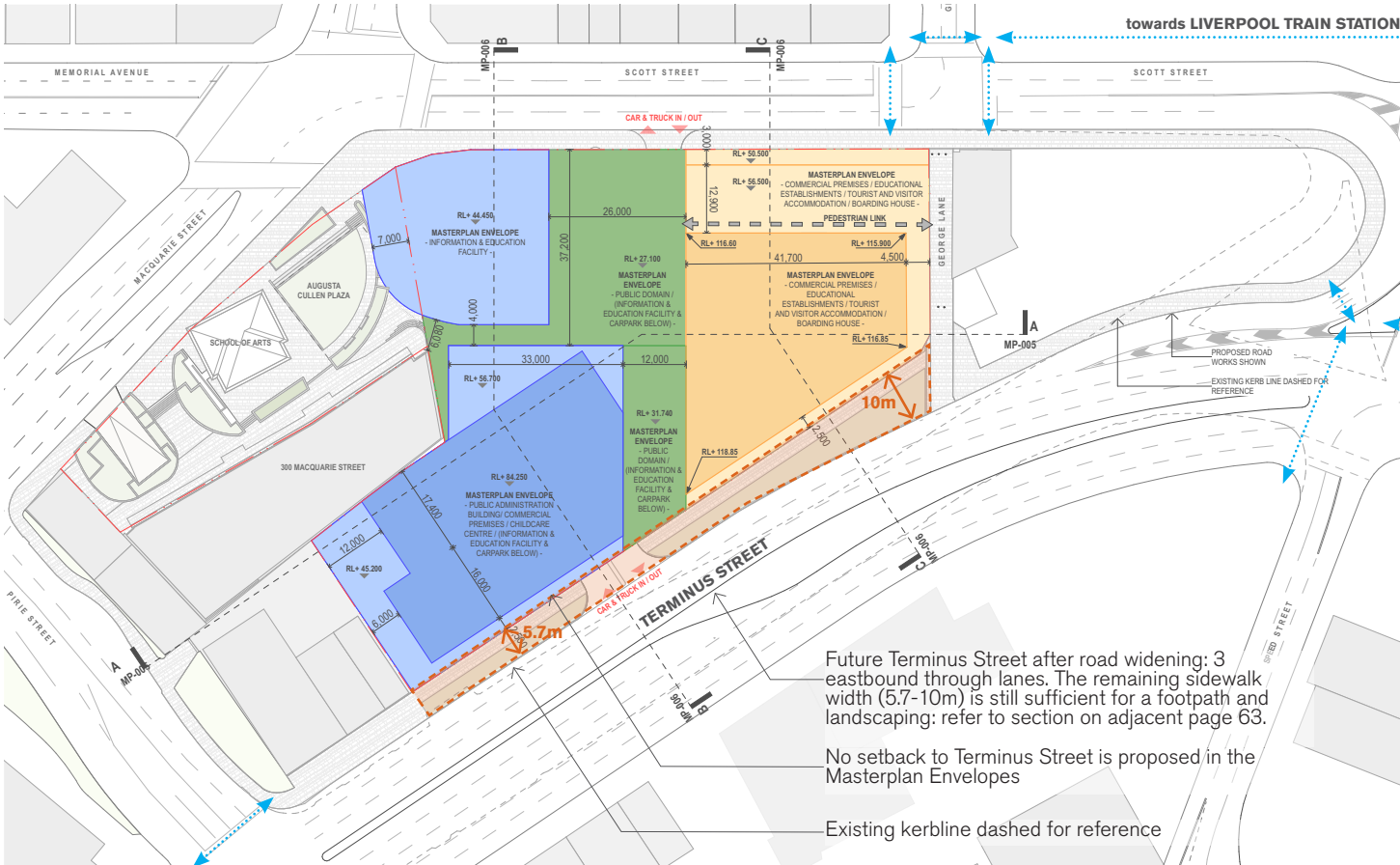
The plans below compare the existing Terminus Street configuration with the future 6-lane configuration after road widening, with key dimensions highlighted in orange. No land use or building envelope is proposed in areas subject to road reservation acquisition.

Comparing the resultant sidewalks (5.7-10m wide) to the Liverpool City Centre Public Domain Master Plan and Transport NSW's Shared Paths research, suggests ample width is provided for a shared pathway and a landscape verge in this setting. This is supported by local precedents cited in chapter 10.2.

The design and landscaping of the sidewalk along Terminus Street will be explored in further detail in ensuing DA phases.



2019 Masterplan Envelopes (with existing Terminus Street configuration): Terminus Street is not currently a highly used pedestrian sidewalk due to its lack of a direct pedestrian crossing and vehicular lay-bys, as well as its industrial nature.



2020 Masterplan Envelopes (with future Terminus Street, after road widening): There is ample area for a shared pathway and landscape verge even with nil setbacks to Terminus Street.

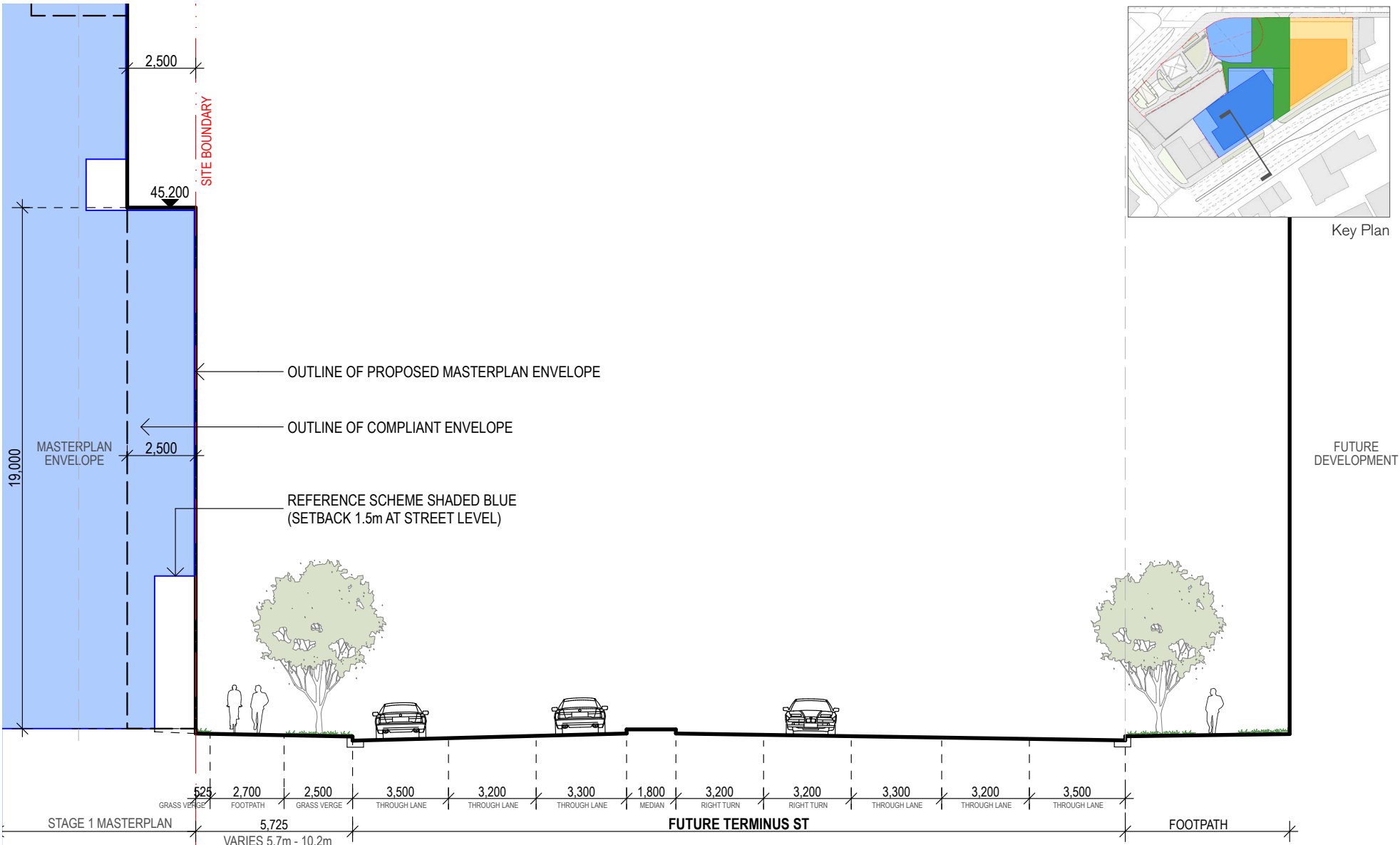


Google street capture of existing Terminus Street sidewalk with approximately 3.5m wide pedestrian footpath

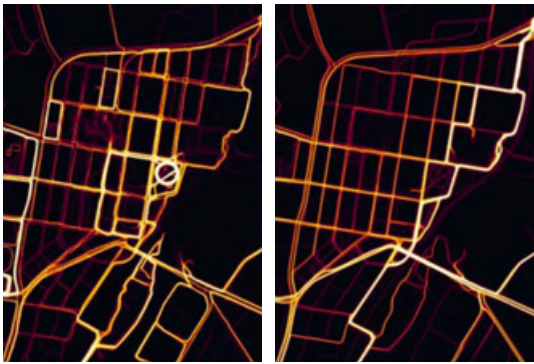


View of future Terminus Street sidewalk with proposed envelopes (with 2.7m wide pedestrian/bike shared pathway)

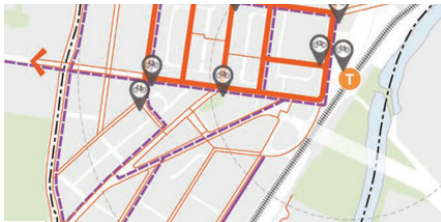
Terminus Street



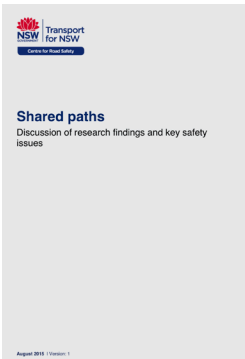
Section through future Terminus Street (after road widening)



Strava Labs - Pedestrian Activity Map Strava Labs - Cyclist Activity Map



Extracts from Liverpool City Council's Public Domain Masterplan (Draft Nov 2019) identifying moderate pedestrian use and higher cyclist activity along Terminus Street. The Masterplan has highlighted the opportunity for bicycle paths along Terminus Street.

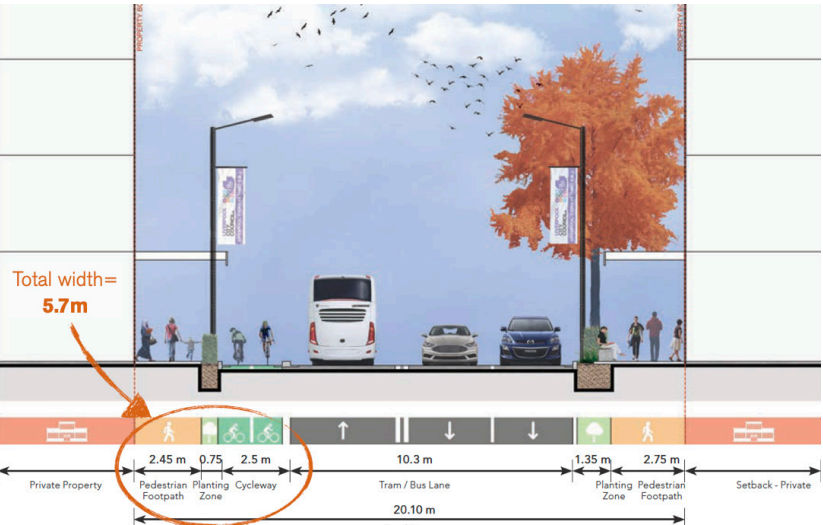


Transport NSW Centre for Road Safety - Shared Paths research (Aug 2015)

The recommended minimum path widths for the purpose of commuting and recreation are 2.5 and 3.0m respectively, according to Austroads guideline.

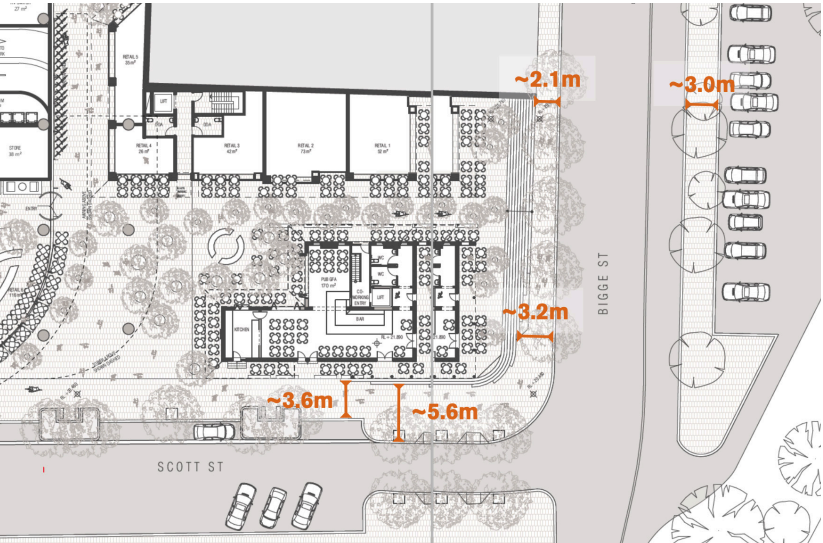
In addition, research has shown that there is a curvilinear relationship between pedestrian safety and path widths, with narrow (<1.5m) and wide paths (>2.7m) being less safe than medium-width shared paths.

10.2 Local precedents: Sidewalk widths



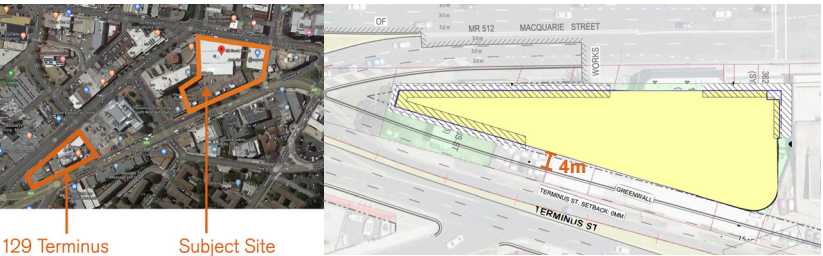
Source: Liverpool City Council Public Domain Masterplan (Draft Nov 2019)

Scott Street: The proposed section from the Public Domain Masterplan above shows the desired alternative road configuration along Scott Street with cycle lanes. The total width of the sidewalk inclusive of cycle lanes is 5.7m.



Source: Fender Katsalidis

9-19 Scott St & 275-277 Bigge St: The proposed commercial development would see high foot traffic as it is directly opposite Liverpool Train Station. The sidewalks around the buildings range from over 2m to 5.6m (approximately).



Source: PTW, RMS Terminus St feasibility plans, Google

129 Terminus St: The proposed mixed-use development has a ground floor with nil set-back to Terminus Street, with a resulting sidewalk of approximately 4m wide. Building envelopes were approved by the SWCPP in June 2019.

11.0 Public Domain Summary

Enhanced accessibility, inter-connectivity, flexibility, amenity and activation

11.1 Public Domain Concept

The revised Public Domain offers **400m2 more public space** to the 2019 masterplan, with improved site-wide permeability, flexibility and amenity. Included in this revision is a significantly larger civic square with on-grade connections, improved connections to Augusta Cullen Plaza, a relocated and widened through-site link, a new public space off Terminus Street along the through site link, and a reconfigured and re-classified internal road.

1. Civic Square 250% area increase to around 1,100m2 (formerly 430m2) with the folded ground plane removed, level access to adjoining streets and public spaces, and activated by surrounding public and retail uses.

2. “Civic Green” Augusta Cullen Plaza 42% decrease of library footprint (45m2, formerly 78m2) within Augusta Cullen Plaza. A reconfiguration of the eastern DDA ramp adjacent to the new library is proposed. The connection between the civic square and the 300 Macquarie retail on the southern side of the Plaza is simplified with a 0-1.2m level change, to be resolved in ensuing DA.

3. Internal Road Reduced by 50% to 6.6m wide (previously 13.2m). **Footprint, including footpaths, reduced by 62% to around 450m2** (previously 1180m2). The usability of the internal road is significantly improved with adjacency and level access to the civic square and significantly reduced

traffic flows commensurate with shared-zone classification.

4. Terminus Street Park 425m2 of new landscaped plaza atop the through site link with a broad pedestrian frontage to Terminus street, access to both commercial tower lobbies, and vistas over the civic square and to Macquarie street.

5. Through site Link 225% width increase to 5.4m wide (formerly 2.4m), with visual prominence from Scott Street, throughout the Civic Square and Terminus Street, and **located immediately adjacent to DDA lifts**. The length of the link connecting public spaces has reduced from 34m to only 8m. This is an intuitive new link of scale befitting it's civic setting.

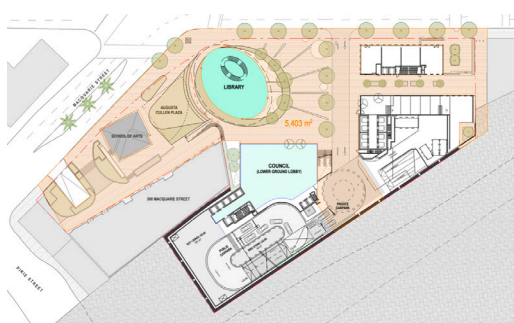
6. George Street Pocket Park - Maintained, no change

7. East-west Laneway - Maintained, no change to area however connectivity is much improved with direct level access west to the civic square.

8. Active Rooftops - Maintained, no change



2019 Master Plan Public Domain 5,000sqm



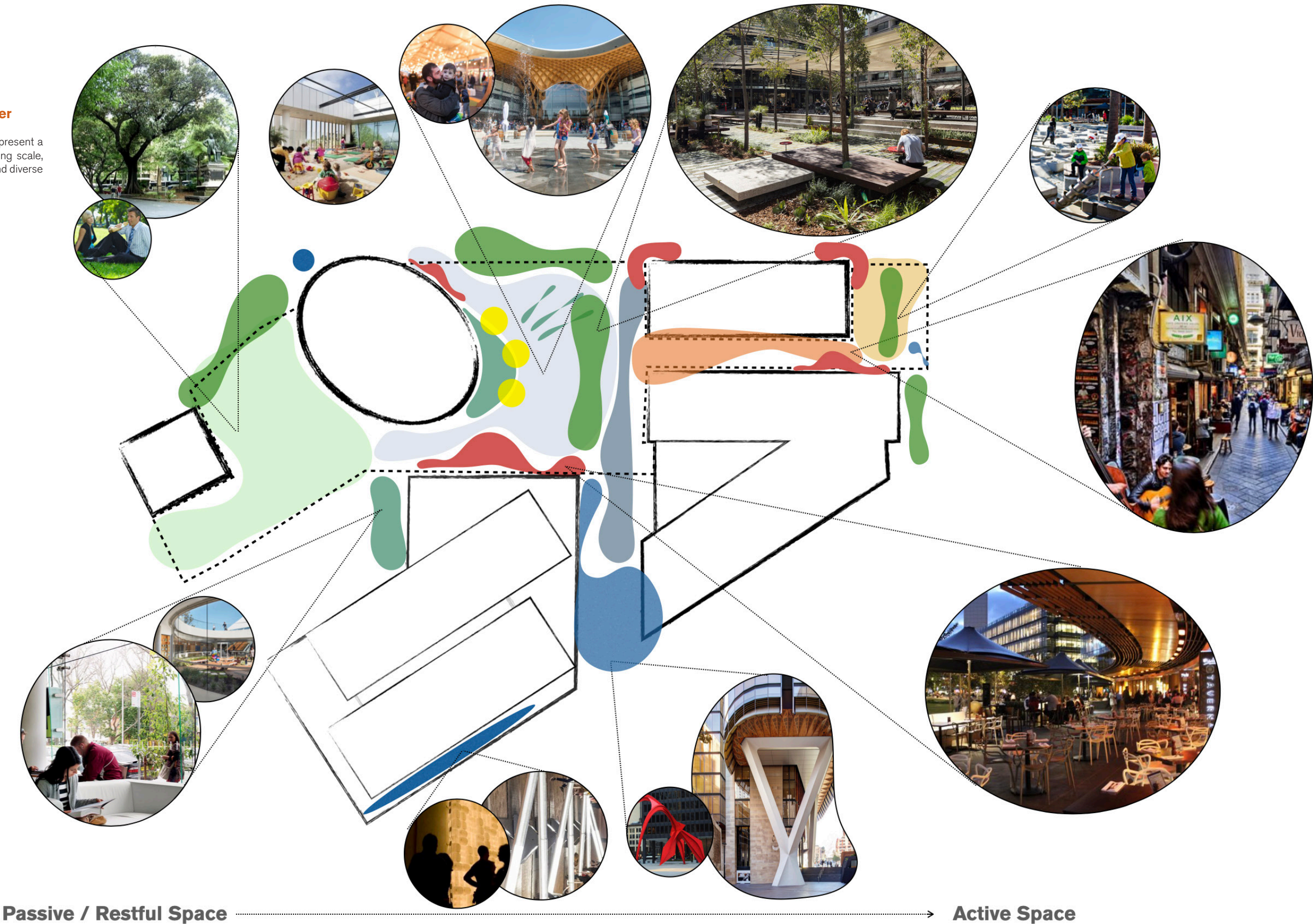
2020 Master Plan Public Domain 5,400sqm



11.2 New Spaces, New Character

The new public domain vision combines to present a collection of spaces and moments of varying scale, conditions, character and use. An exciting and diverse public setting for and reflecting Liverpool.

- Precincts**
- Green Buffer
 - Civic Green
 - Reading Courtyard
 - Art Space
 - Civic Square
 - Dining
 - Eat Street
 - Play



Public Domain Summary

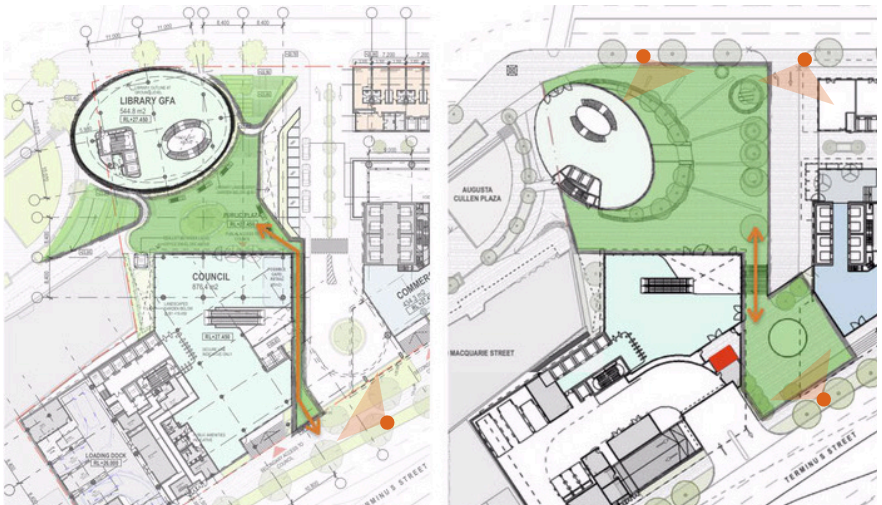
11.3 Reference Scheme Site Levels

Given the inherent level changes affecting the site, including a 4.5m level change from Terminus to Scott streets and through Augusta Cullen Plaza, there are DDA access solutions required in three areas;

- 1. Southern link between Augusta Cullen Plaza and the Civic Square: level change of 0-1.2m. A local ramp solution can resolve, however further resolution of the civic square through detailed DA processes may resolve a flush transition.
- 2. Macquarie and Scott Street intersection access to Augusta Cullen Plaza: 1.5m existing condition level change. The new library affects the existing DDA ramp, necessitating a minor ramp and planter reconfiguration.
- 3. Civic Square to Terminus Street Park: 3.8-5m level change. DDA lift access will be shared with the public car park lifts and accessible via secure lobbies directly from the Civic Square, and terminus street park. These lifts will be highly visible, in the immediate vicinity of the thru-site stair, and safe with passive surveillance from adjacent lobbies.

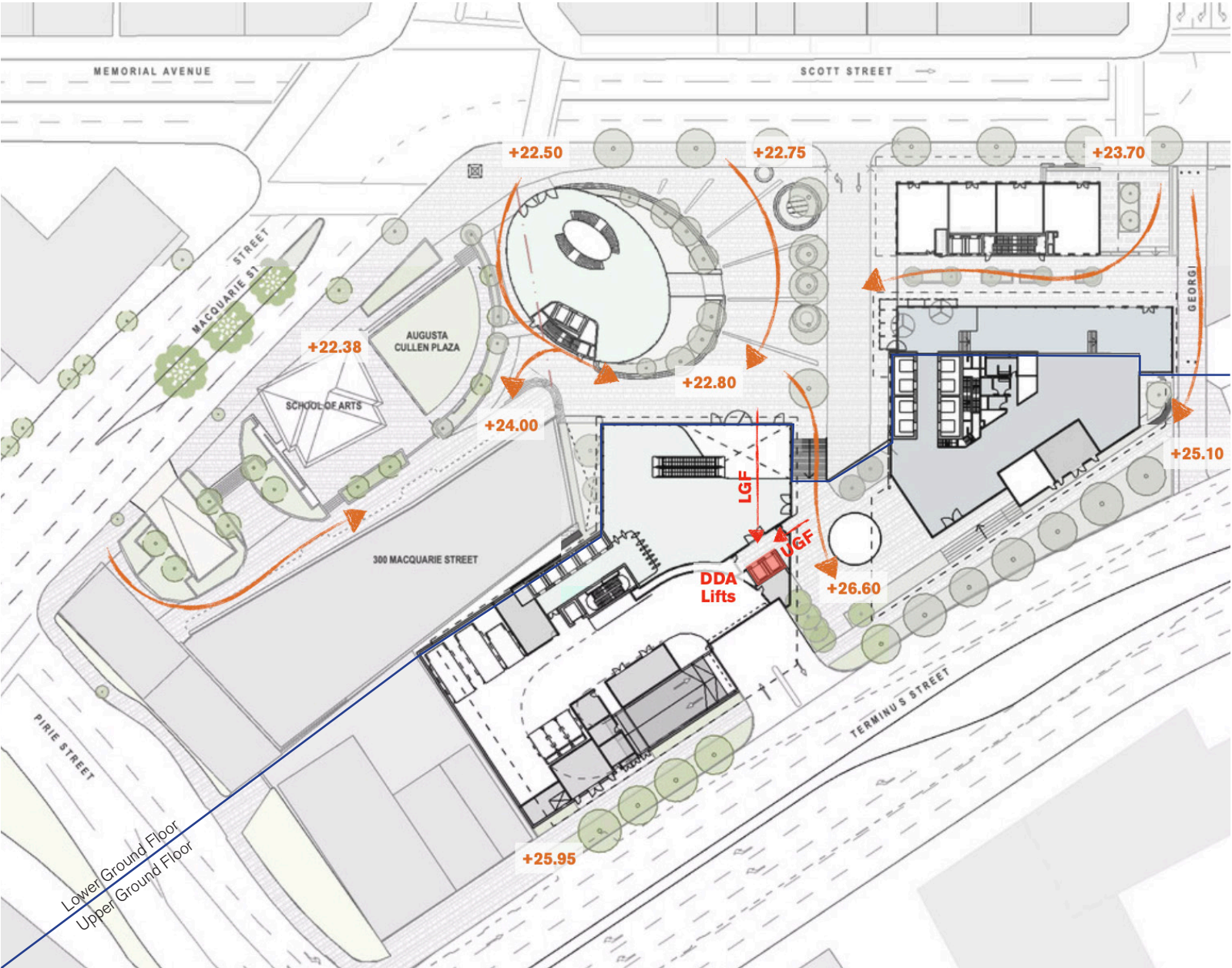
11.4 Through site link

The link, now only 8m in length (formerly 34m), is less a corridor and more a landscaped stair between two visually connected public spaces. The link's width has increased 225% to 5.4m wide (formerly 2.4m), with visual prominence from Scott Street, throughout the Civic Square and Terminus Street, and is positioned immediately adjacent to DDA lift access. This is an intuitive new link with a scale befitting it's civic setting.



2019 through site link

2020 through site link



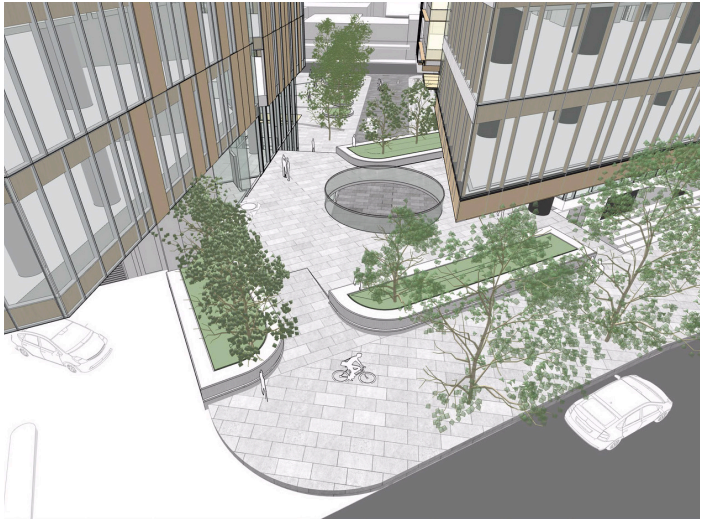
View to thru link stair from Scott Street



View to thru link stair from Internal Road



Aerial view of thru link stair from above Scott Street



Aerial view of thru link from above Terminus Street

Public Domain Summary

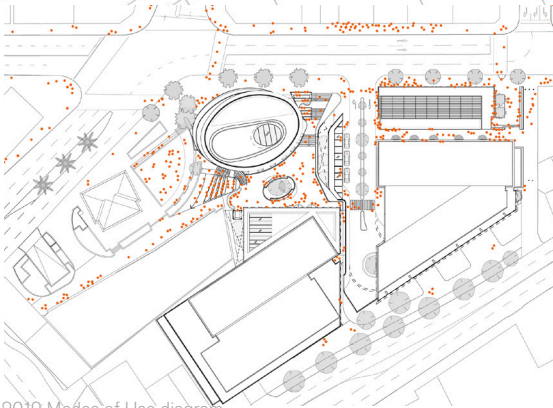
11.5 Modes of Use

With a level setting from Augusta Cullen Plaza, across the Civic Square, over the internal road and through to the George Street pocket park and laneway, the revised public domain presents a far more flexible canvas for hosting community events.

A public domain strategy and management plan is underway to inform subsequent Development Application proposals. The design and landscape of the public domain to facilitate both events and day-to-day self-activation will be critical in the delivery of a great outcome.



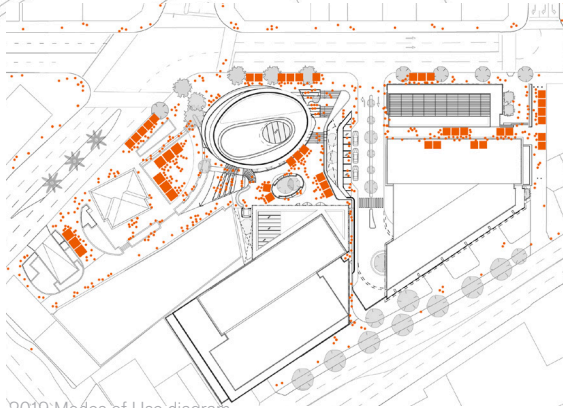
Weekdays at Lunch hour



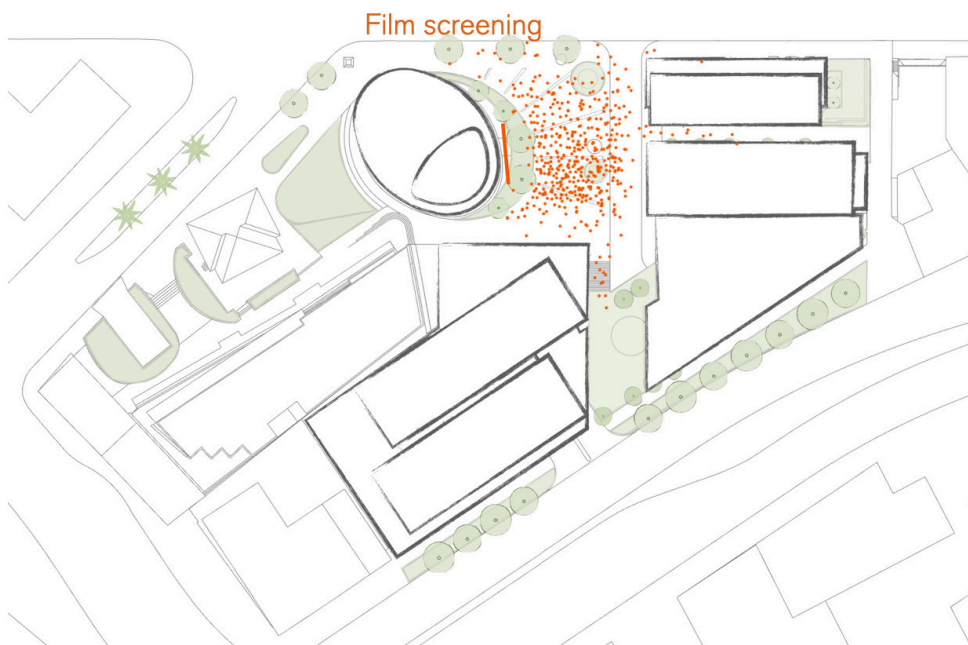
2019 Modes of Use diagram



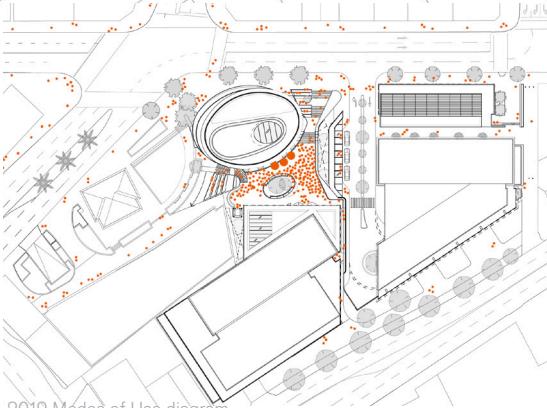
Weekend Markets / Special Fairs



2019 Modes of Use diagram



Outdoor light installations & projections



2019 Modes of Use diagram



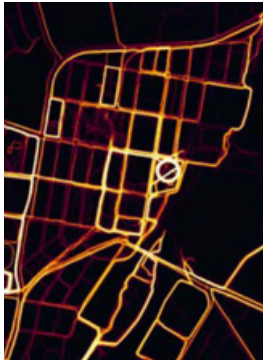
francis-jones morehen thorp



Public Domain Summary

11.6 User Friendly walking and cycling infrastructure

Means of active modes of transport around and through the site is much improved with the civic square level with adjacent road surfaces, including the shared way for new east west through site connections. The revised design proposes a more flexible and permeable public domain interface, to be explored and detailed in ensuing DA's.



Strava Labs - Pedestrian Activity Map

Pedestrian Networks

Awnings for shade/cover
7

Clear signage
Proximity to train station (6 minute walk)

Places to linger
Places to play
1

Ample lighting, Safe sight lines
2

Places to dwell
1

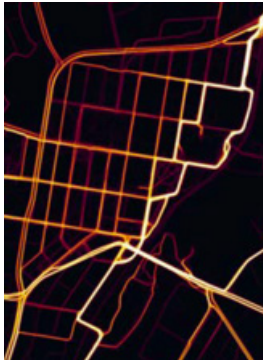
Level paving
6

Accessibility

Street furniture & general amenity
3

Variety of seating
4

Handrails, Tactiles
5



Strava Labs - Cyclist Activity Map

Bicycle Networks



12.0 Landscape Concept - Strategies

This section is to be read in conjunction with the 2019 Masterplan. The contents herein provide additional information and clarification on the issues raised through the independent assessment process. This chapter responds to RFI's Arch 1E, 2C, and 3D.

12.1 Objectives

The Liverpool Civic Centre is an integrated landscape and Architectural response one that is inspired by the natural environment and sustainable ESD initiatives intertwined within a vibrant historic and cultural growing Urban context.

The key landscape objectives are:

- To create a landscape as an integral part of the built form connected with the City.
- To develop the landscape opportunity to enhance the attractiveness and growing City development.
- To provide a visual landscape connection between the Liverpool City and landscape.
- Provide unique landscape character.
- Provision of planting and initiatives to improve air quality and reduce the urban heat island.
- To establish a distinctive community identity and create a strong sense of place and community belonging
- To provide a variety of recreational opportunities that will cater exclusively for residents of different age groups.
- Facilitate surface water recharge to mass planting beds and thereby reduce potable water usage.
- Deep soil zones and Selection of hardy, low water use, indigenous plant species suited to the urban environment and the selection of a range of plant species to support biodiversity
- Provision of increase canopy cover to provide shaded microclimates for recreational amenity.



12.2 Cumberland Plain Landscape

The Liverpool Civic Centre landscape approach recognise the value of the natural ecosystems to our wellbeing and the need to connect with the natural environment that we live in. There exists relatively small remnant native flora is located in patches of open space within and around the city centre, and along the Georges River. The landscape concept draws inspiration from the cross section of vegetation that once rose from the banks of the Georges River to the site.

This Pre European landscape was botanically varied and included broadly three main character types:

- River estuarine - Paperbarks Melaleuca ericifolia, and swamp Oak, Casuarina Blanca, and narrow zone of Grey mangroves.
- Understorey heath -Banksia oblongifolia and Xanthorrhoea minor.
- Cumberland Plain Tree canopy -dominated by Eucalyptus micrarcarpa (Grey Box) and E. tereticornis (Forest Red Gum), often with E. crebra (Grey Ironbark), Corymbia maculata (Spotted Gum) or other less frequently occurring including Angophora floribunda.



12.3 Tree Canopy Cover

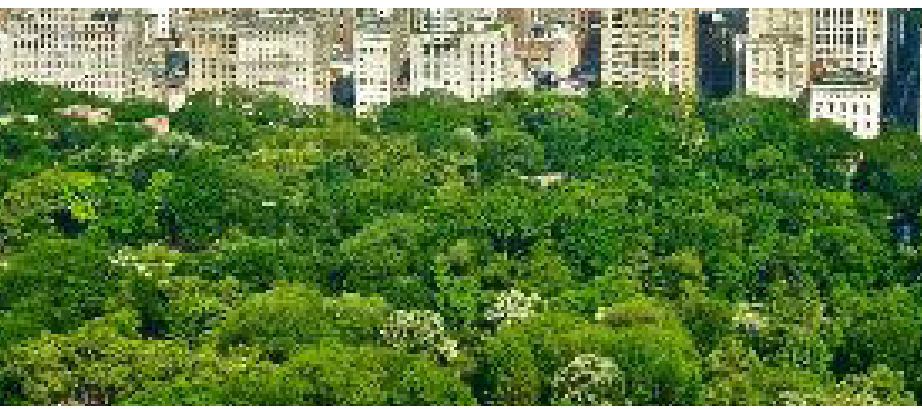
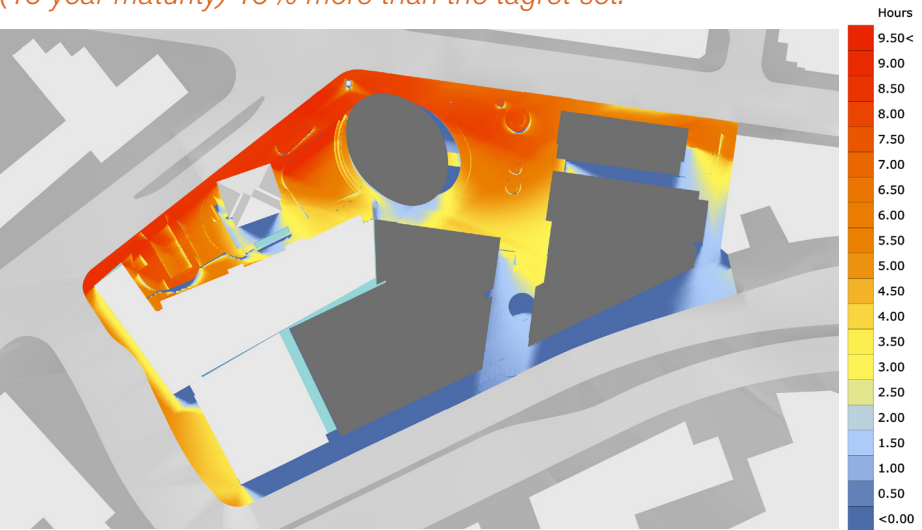
Tree Canopy cover is an important component of the project to address climate change resilience, reduce the heat island effect, increase biodiversity and increase awareness of the natural Australian landscape.

The project sets a goal of surpassing two key existing strategic plans:

- NSW Government "Greening our City" Increase the tree canopy and green cover across Greater Sydney by planting one million trees by 2022.
- Greater Sydney Regional Plan "A Metropolis of three Cities".

As Greater Sydney grows and urban areas become denser, extending urban tree canopy is one of the most effective ways to improve amenity. A target has been set by Objective 30 to increase the canopy cover to 40%.

The Liverpool civic centre target is 50% Canopy cover (10 year maturity) 10% more than the target set.



Landscape Concept - Strategies

12.4 Water sustainable Urban design

It is envisaged that the entire podium stormwater pavement surface runoff will be collected and treated in local bio-retention systems incorporated into the podium built up below street level zones over flat slab structure. The ground plane design approach integrates with the stormwater treatment areas, capture stormwater runoff and convey treated runoff from the rain gardens or bio filtration layers below growing mediums. Seating elements and other landscape built elements ie raised platforms will be used to direct flows and add in capturing stormwater as required.

12.5 Ground Plane

The plaza ground plane approach references the Cumberland Plain geology. This Wianamatta Shale of western Sydney displays a variety of earthy textures and colours. The site is predominately underlain by the Bringelly Shale and the Ashfield Shale of Wianamatta sandstone group. The expression of the natural environment and sense of place seen through a series of pixelated patterns that run through the site to elongate and visually spays out and connect the plaza with the surrounds. This ground plane approach aims at enhancing the permeability and visually creates movement and flows between the various typologies . Council's current paving strategy (i.e. adopted in 2018) includes black granite paving with blue stone kerb & gutter (i.e. for most city core areas and Macquarie Street), and concrete pavement with an exposed aggregate finish (i.e. for periphery city centre areas). The ground plane concept and paving palette will be developed further to ensure appropriate unique character is developed and one that is complimentary to the councils strategy.

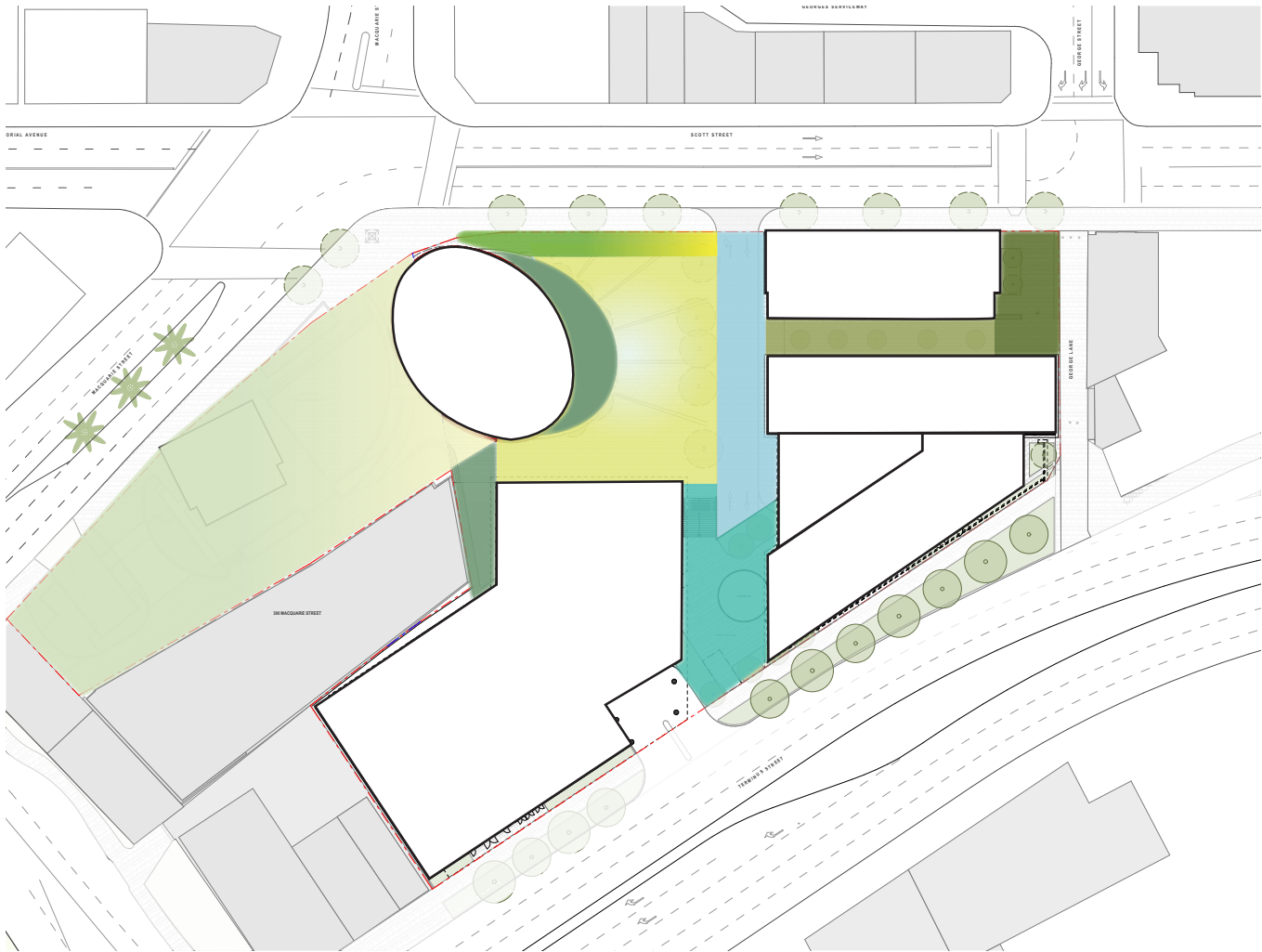
12.6 Green Walls / Trellis

To enhance the Greening of the plaza and Urban environment, particularly where tree planting will not be possible, selected plants can grow in pergola's, providing a sheltered environment, protection from wind, and contribute to sound buffering. These spaces provide opportunity for seating, small gathering and exhibition spaces.

- Provide summer shade & winter sun - Deciduous vines provided
- Increase canopy and vegetation
- Connection to nature /seasonal changes
- Seating exhibition spaces
- Small congregations



12.7 Landscape Concept - Space / Active Zones



CIVIC PLAZA

Area (Approx)	1,000-1,200sqm
Character	Unique Civic human scale with significant tree planting and groundplane interest, clear and legible, connected space, mix of larger open area and smaller spaces.
Modes	Casual gathering and meeting point, performance and events sculpture and exhibitions
Microclimate	North facing towards Scott street space with high exposure to sun and winds mitigated by trees / pergolas trellis. The Street frontage to be softened by significant landscaping and promenade tree avenue.
Infrastructure	3 phase and general outdoor power and data, water connections, General Waste, stage
Planting	Deep soil over structure to provide for significant trees provides mix of smaller clustered and larger tree rows

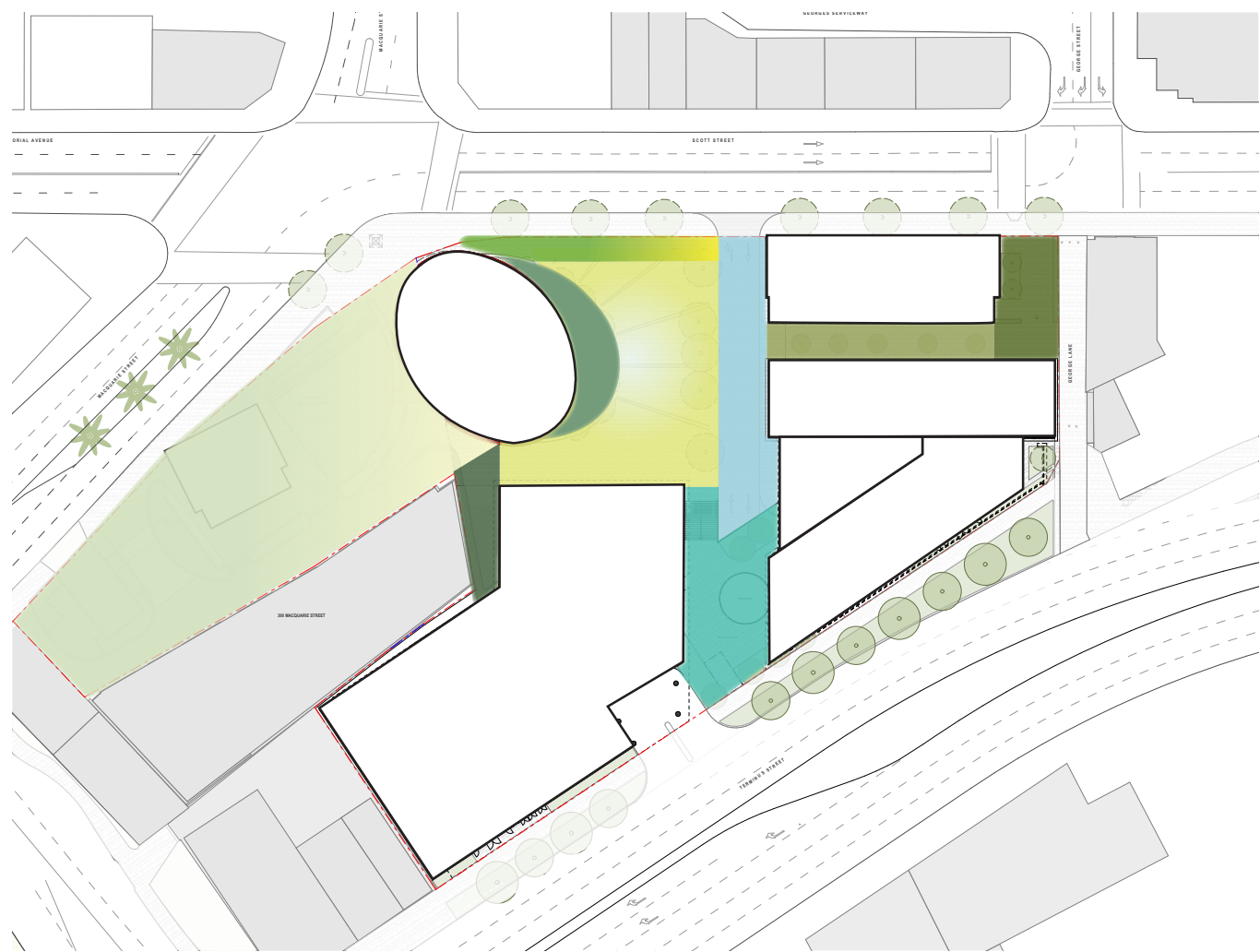
SUNKEN GARDENS

Area (approx)	179sqm
Character	Tranquil secluded Oasis lushly planted respite from the urban city.
Modes	Library reading areas visual landscape
Microclimate	Sunken from the plaza level shaded set back from street in areas
Infrustrcture	Wifi, power and data connectivity
Planting	Raised planter boxes with integrated seating Rainforest species and cascading plants , vertical garden , green walls trellis.

ELEVATED PLAZA

Area (Approx)	504sqm.
Character	Elevated smaller plaza space as part of the through site link, well connected to building entry and pedestrian links to main plaza, street frontage to Terminus Street
Modes	Casual gathering and meeting point, Outdoor meetings, Opportunity for visual element water feature, sculpture
Microclimate	South facing towards Terminus street space high exposure to winds, opportunity for pergola, trellis wind mitigation The Street frontage to be softened by significant landscaping and promenade tree avenue.
Infrastructure	3 outdoor power and data, General Waste
Planting	Raised planter boxes with fig tree integrated seating to the plaza, On grade tree planting to Terminus Street of Jacrandah as per Street tree masterplan

Landscape Concept - Space / Active Zones (Continued)



Pocket Park George / Scott street Intersection

Area (Approx)	189sqm
Character	Smaller well connected to address Scott Street and George Lane, gathering space, areas of terracing to address levels
Modes	Casual gathering and meeting point, area of retail outdoor tables and chairs
Microclimate	North facing towards Scott street, Fronting George lane.
Infrastructure	retail space, General Waste,
Planting	Deep soil over structure to provide for significant trees provides mix of deciduous trees to

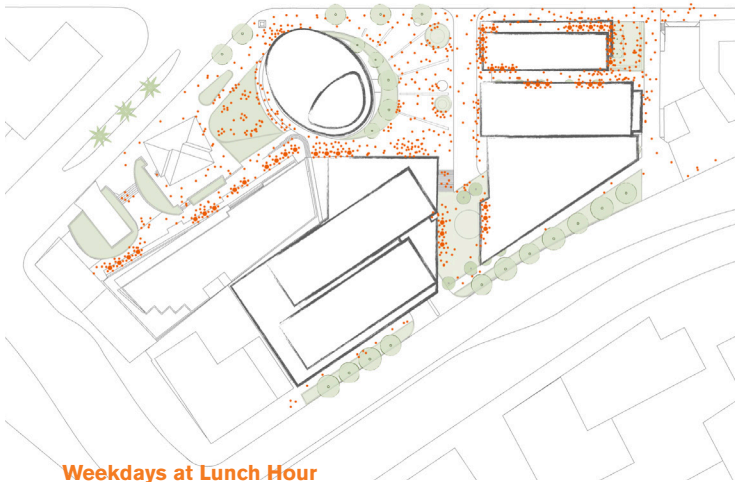
Pocket Park next to Library

Area (approx)	141sqm
Character	Sunken garden displays of rainforest gullies planting.
Modes	Visual landscape
Microclimate	Sunken from the plaza level, shaded
Infrastructure	Irrigation, maintenance absailing or similar
Planting	Raised planter boxes, Rainforest species and cascading plants , vertical garden , green walls trellis.

East west Pedestrian link

Area (approx)	215sqm
Character	Pedestrian oriented and legible connection areas o seating
Modes	Through site link connecting Pocket park and tower entries, lunchtime small gatherings.
Microclimate	Open to sky shaded
Infrastructure	Water connection, garbage
Planting	Raised planter boxes with integrated seating deciduous trees to gain solar access in winter.

WORK



Weekdays at Lunch Hour

- 1 Retail connection / cafe**
Quick detour to grab ethically sourced coffee at great niche cafe set in George lane Pocket Park



- 2 Off to work through Plaza**
Following the sun up Civic Plaza through tree lined green space



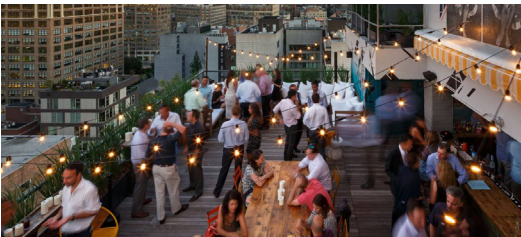
- 3 Afternoon meeting, Collaboration at garden nooks at the plaza edges**
Consultants workshop in shady setting with dedicated seating for groups and collaborations



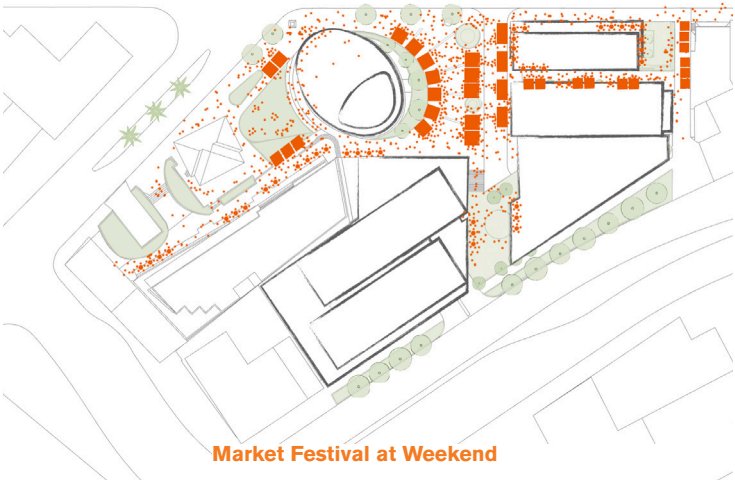
- 4 Civic Plaza Flowers and Choc's**
Buy some chocolates and flowers from the shops for friend's birthday at George Lane



- 5 Terrace Bar Birthday Drinks**
Birthday Drinks at the Terrace Bar



SOCIAL



Market Festival at Weekend

- 1 Library**
Walk from Scott Street to the plaza and sunken library gardens



- 2 Street Performer**
Plaza of people watching the street performer vibrant, fun.



- 3 Selfie Destination**
Lots of selfies at sculpture in the plaza



- 4 Lazy Lunch**
Elevated above the Promenade, great terrace setting for lunch



- 5 Markets**
Weekend Market at special closure of the shareway to convert into market stalls



KID AND FAMILY

Film Festival at Weekend

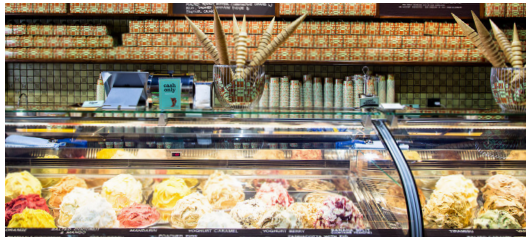
- 1 **Interactive Water Play, Historic Trail**
Explored the plants and water linked to George River.



- 2 **Family learning time**
Enjoy playgroup and reading at Liverpool Public Library



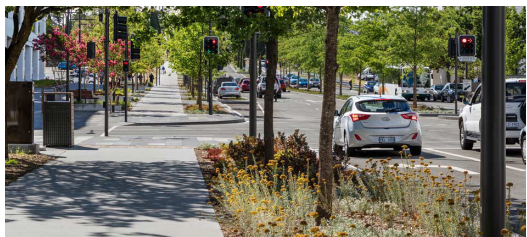
- 3 **George lane Gelato**
A sweet treat at George Lane Local Gelato Sensation - a destination for all families. A kids healthy eating cooking class in the hall made us think of how to make up for our indulgence!



- 4 **Outdoor Cinema**
We finished with sunset outdoor cinema at Civic Plaza.



- 5 **Home Time**
Wandered up Scott Street to Macquarie mall take the train home



COMMUTER

Forum at Civic Plaza

- 1 **Walk from Liverpool Station**
Walk down through Macquarie Mall down to Civic Plaza



- 2 **Best Morning Cafe Breakfast**
Facing east, the cafes facing George Lane pocket park are a great place to start the day



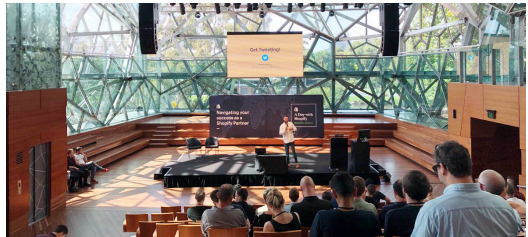
- 3 **Buzzing Hub to Workplace**
Touch base with team in the hub at the Elevated Plaza



- 4 **Park Workout**
Lunchtime workout Park and a run



- 5 **Forum and Seminar at Civic Plaza**
Great symposium at Library and Civic Plaza



Landscape Concept - Strategies

12.9 Landscaping and Trees

Podium Tree requirements

The planting strategy is to create a cohesive design through the use of carefully selected species that demonstrate a connection to the concept of place making and reference to the Cumberland Plain vegetation community that once occupied the Liverpool area. This identity supports the Urban forest initiatives and ecological sustainable design.

The underlying requirements to achieve this strategy is soil specification including type, depth, volume and drainage. These factors are important for the success and longevity of the landscape. Trees can be described as having a root plate rather than root ball and this means that the tree can rely on soil spread over shallower soils depths as to the natural environment as is the case where the landscape is built over structural slabs.

- The specimen trees will be provided with adequate soil volume and takes into consideration the following:
- City of Liverpool requirements
 - Cornell assessment
 - Combined with the 'borrow' from the adjoining area under the Ross Clark assessment
 - FJMT Benchmark projects

LARGE TREE - 12m wide canopy tree = 71m3 soil Dimensions: 9m x 9m x 1.2m or 8 x 4.5m x 1.2m

MEDIUM SIZE TREE - 9m wide canopy tree = 36m3 soil Dimensions: 6m x 6m x 1.0 or 4.5 x 7.0 x 1.0

SMALL TREE - 6m wide canopy tree = 12m3 soil Dimensions: 4m x 4m x 0.8m

- Propose the following depths of growing media (excluding water proofing and drainage requirements):
- Turf: 200-250mm;
- Shrubs: 500-650mm;
- Green roof (native grasses): 150-200mm
- Green roof (heath and small shrubs): 250-500m



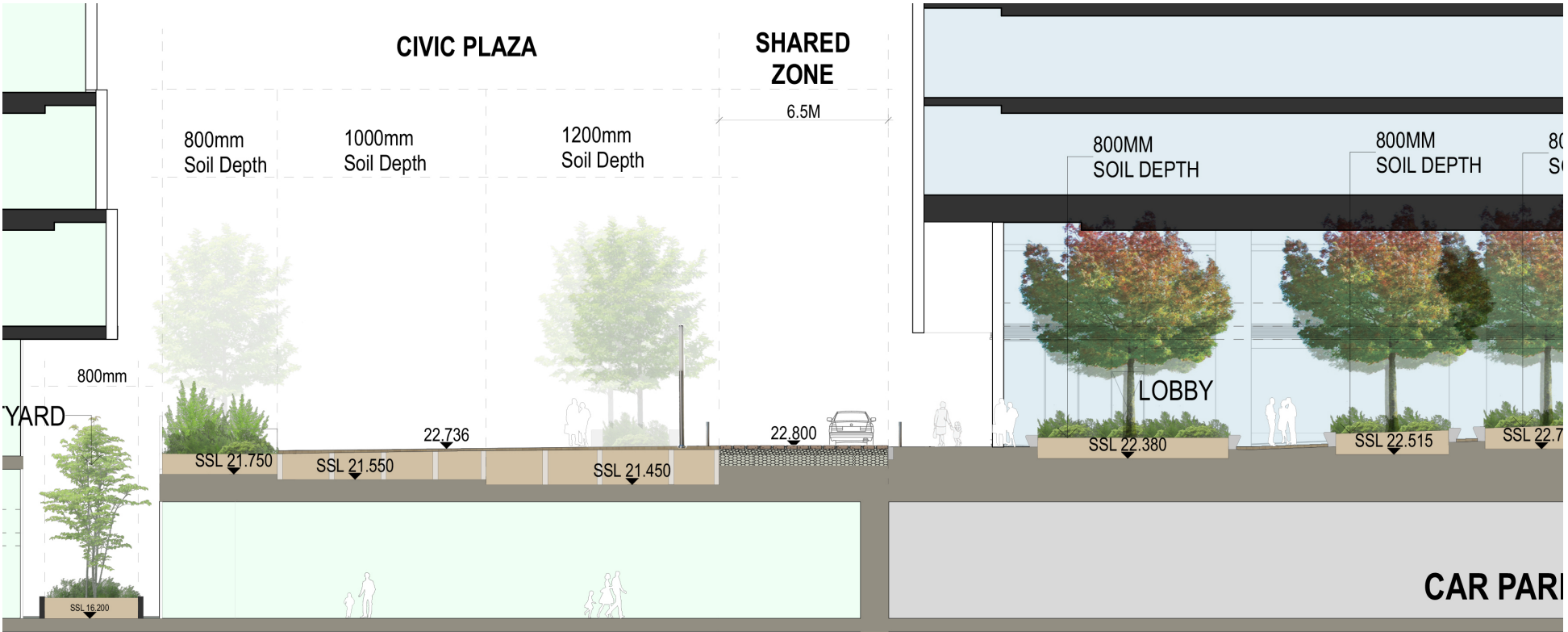
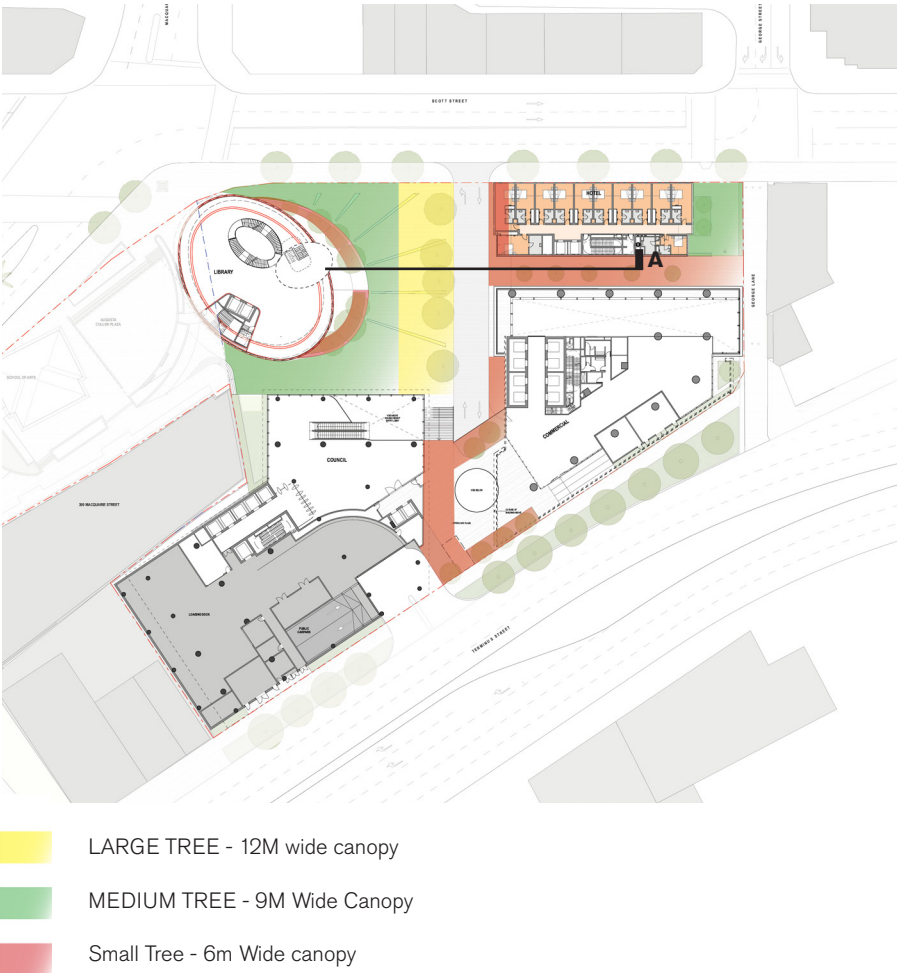
Tree selection criteria

The preference is for endemic plants to the Sydney area and the Cumberland plain however the selection will also address the following;

- Suitability for the existing micro climatic conditions (wind, high dry temperatures, access to sunlight);
- Low water use plant species
 - Maintenance requirements (such as watering regime, fertilising and pruning replacement);
 - Wind breaks to mitigate microclimate conditions within Urban setting
 - Combination of evergreen and some deciduous species for visual interest through form, texture and seasonal colour.
 - Crime prevention through environmental design
 - Privacy and screening
 - Mature height over 8m should be planted a minimum distance of 3m from the building or utility services.

The combination of these factors, along with quality installation and ongoing maintenance are key to a successful planting outcome and will be further investigated through the development application phase.

- Note: Liverpool Councils requirements as per draft masterplan
- Large trees (over 8m high) minimum soil depth 1.3m, minimum soil volume 150m3
 - Medium trees (2 – 8m high), minimum soil depth 1m, minimum soil volume 35m3
 - Small trees (up to 2m high), minimum soil depth 0.8m, minimum soil volume 9m3



Landscape Concept - Strategies

12.10 FJMT Benchmark projects - Healthy Trees planted over structure

UTS One Central

Species - Olive Frantino.

Source - Transplanted from decommissioned olive grove

Aspect- Roof top East facing

Average area of soil per tree -17sqm

Depth of soil - 850mm

Average soil volume - 15m3 per medium tree

Planted - February 2019 (Photo taken Dec 2019)



161 Catlereagh Street

Species - Ficus Hillii.

Source - Nursery grown

Aspect- Plaza overshadowed by Tower to the

Average area of soil -21sqm, 30sqm.

Depth of soil - 1.2m

Soil volume - 24m3, 36m3

Planted - March 2013 (Photo taken 2019)



UNSW Student Accommodation

Species - Cupaniopsis anacardioides, Pyrus Ussuriensis

Source - Nursery Grown

Aspect- Courtyard North facing

Average area of soil per tree - 34sqm

Depth of soil - 900mm

Soil volume per tree - 30m3

Planted - Septemebr 2012 (photo taken 2019)





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