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122-130 Pyrmont Bridge Rd & 206 Parramatta Rd, Annandale

Urban Design Peer Review

Revision	03 FINAL
Date	10 September 2021

Contents

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1. Introduction

1.1. Background

DesignInc have been commissioned by Inner West Council (IWC) to review a Planning Proposal for the site at 122-130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale. The site forms a 2570m2 triangle of land fronting Parramatta Rd, Pyrmont Bridge Rd, Cahill St and Mathieson Street, sloping down towards Johnstons Creek to the north. The land is currently predominantly a collection of low scale retail and warehouse uses. While providing some low levels of employment, it has suffered from poor quality public domain and street activation for a number of years.

The site is strategically significant at the regional and local levels, with a role to play in supporting the NSW health and education sectors as well as contributing to the revitalisation of Parramatta Road. The key strategic documents are:

- Parramatta Road Corridor Urban Transformation Strategy (Urban Growth), a NSW Government endorsed strategy given statutory force via a Section 9.1 Ministerial Direction in November 2016;
- Parramatta Road Corridor Urban Transformation Fine Grain Study (Urban Growth) (called up by the Urban Transformation Strategy)
- Camperdown-Ultimo Collaboration Area Place Strategy 2018 by the Greater Sydney Commission (GSC)
- 'Our Place Inner West', Inner West Council's (IWC) Local Strategic Planning Statement, Local Housing, Employment and Retail Lands and Transport Strategies, which together endorse the vision of Camperdown as an innovation precinct.
- Camperdown Innovation Precinct Land Use and Employment Strategy, developed by IWC with the Camperdown Alliance
- Parramatta Road Urban Amenity Improvement Plan for Camperdown – master plan design proposal.

The multiple studies for the precinct highlight its current status as an area in transition, with aspirations for both transformation of land uses and a significant change in the urban form, including greater density on and around the subject site. The Planning Proposal anticipates this urban transformation in its proposed uses and overall scale; it pre-dates a Council-led masterplan for the precinct. As the 'first cab off the rank' therefore, the built form scale, massing and public domain interface are critical to creating a 'road map' for future development in the precinct. A successful scheme in this 'gateway' location would be one that improves the quality of the public domain and provides the best urban design and sustainable built form outcomes for the wider area.

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1.2. The Planning Proposal

The Planning Proposal seeks to:

- Rezone the site from IN2 Light Industrial to B5 Business Development
- Amend the Floor Space Ratio (FSR) from 1:1 to 4:1
- Introduce a new height control of 32m
- Include retail premises as an additional permitted use on the ground floor.

The key urban design aspects of the proposal include:

- Eight storey commercial building with a total floorspace of 10,264 sqm for medical and ancillary retail uses
- 0m setback to Pyrmont Bridge Road with 8 storey street frontage
- 6m setback to Mathieson Street with 1-8 storey street frontage
- 3-6m setback to Cahill Street with 8 storey street frontage
- 2 levels of basement parking with 100 bays accessed from Cahill Street
- Ambulance Bay with access from Cahill Street
- Drop off area with three indented car parking spaces on Mathieson Street
- Main building entry from Mathison Street.

The Proposal seeks to amend the *Inner West Local Environmental Plan 2021* (LEP) and *Leichhardt Development Control Plan 2013* (DCP), and to that end is accompanied by an Urban Design Report and draft site-specific DCP with controls relating to: Land use; Building layout, height and form; Building design and design excellence; Amenity and land use conflict; Access and parking; Landscaping; and Sustainability.

1.3. Purpose of the UD Review

The purpose of the review is to assess the Proposal for compatibility of the likely outcome with the vision and aspirations for the site as part of the Camperdown Innovation Precinct, and to make recommendations that will help align it with those aspirations.

This report summarises the findings from the urban design review, including an urban design analysis of the Planning Proposal in its context with particular attention paid to visual, character and amenity impacts; an assessment of the proposed built form (LEP/DCP) controls; and recommendations for building envelopes and associated changes to those proposed controls should the Planning Proposal proceed further in the plan-making process.

The review is necessarily at the scale of the building envelope rather than at the level of detailed design. However, it takes into account the proposed floor plans, ceiling heights, façade openings and ground plane treatments.

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2. Future desired character

2.1. Strategic documents' vision statements

Under the Parramatta Road Corridor Urban Transformation (PRCUTS) Planning and Design Guidelines, the corridor will be a "high quality, multi-use corridor with improved transport choices, better amenity and balanced growth of housing and jobs". The Camperdown Precinct will be home to high-quality housing and workplaces right on the edge of the CBD, well connected to the surrounding city, parklands, health and education facilities and focused on a busy and active local centre:

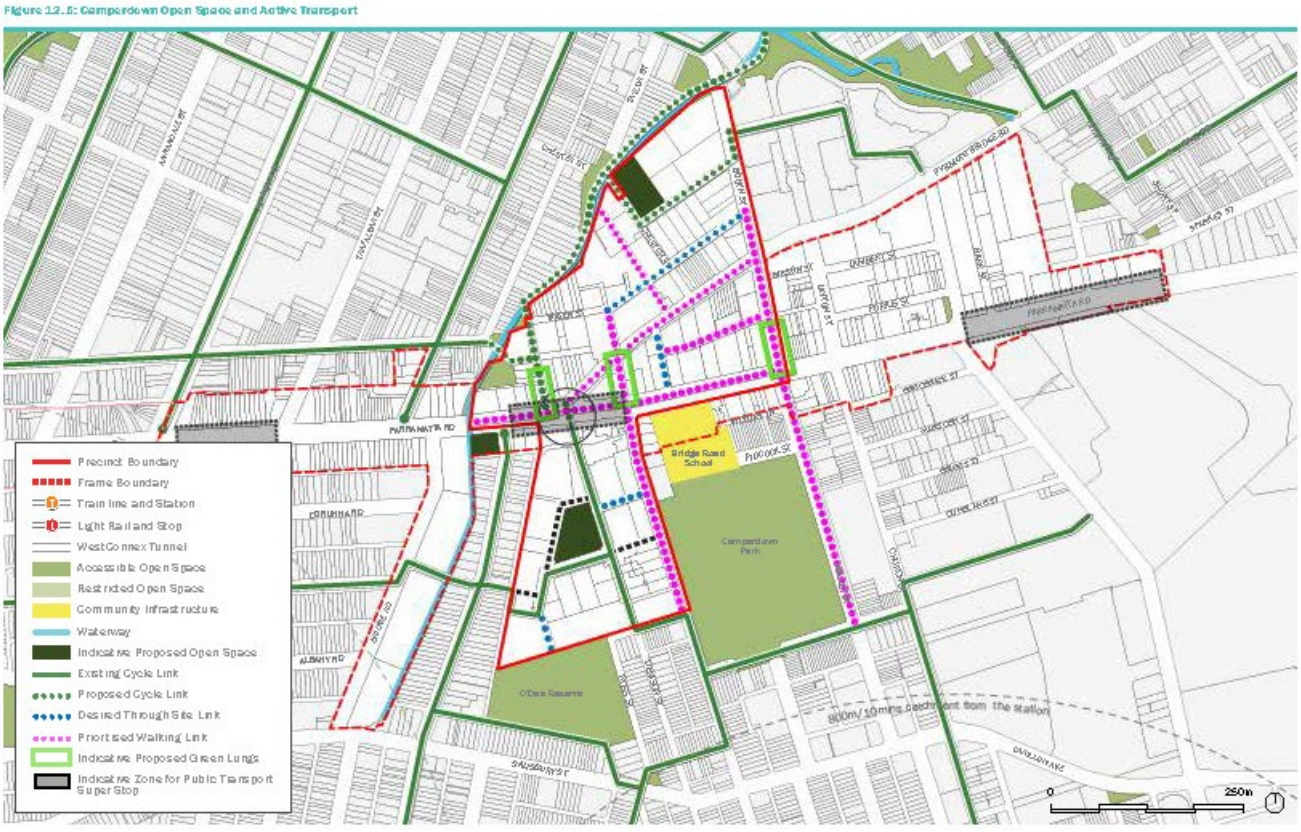
- An attractive, highly urbanised neighbourhood
- Pyrmont Bridge Road an activated, green, local high street with retail and commercial uses
- New open spaces and road connections will provide a network of footpaths to support a fully walkable and revitalised centre.

PRCUTS also includes design guidelines around amenity, connectivity, heritage and sustainable design, all of which are to "ensure high quality outcomes" and respond to the distinct local character. Controls for the subject site are intended to recognise its 'gateway' potential:

- zoning: B5 business development;
- height 32m (8 storeys);
- FSR 4:1.

A key requirement to deliver the vision for the Camperdown Precinct is to provide activated streetscapes and improved public domain (particularly 'green fingers' on north-south streets).

Figure 12.5 Camperdown Open Space and Active Transport, below, sets out the PRCUTS sets out the open space, linkages and connections and public domain requirements.



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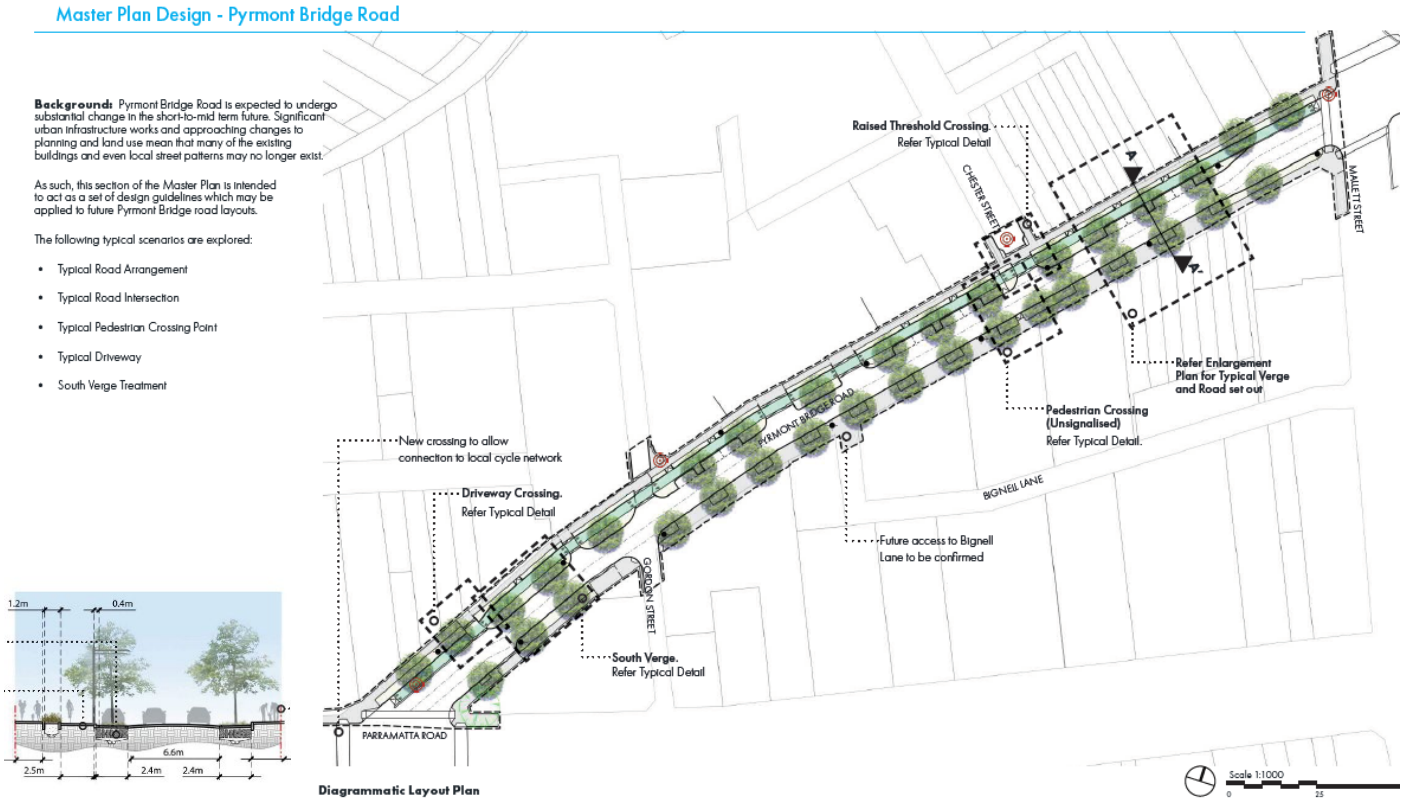
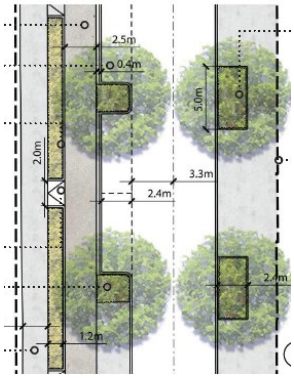
The importance of a green network is reinforced in the supporting PRCUTS Fine Grain Study, whose objectives for the relevant character areas (areas 2,3 and 6) include the transformation of Pyrmont Bridge Road into an "activated, green, local high street". It illustrates a possible built form by way of a 'podium/tower' sectional diagram with a 3-4 storey street wall height (Cahill Street and Pyrmont Bridge Road respectively) as a podium with deep setbacks to 5 levels above.

The Camperdown-Ultimo Collaboration Area Place Strategy is aligned with the PRCUTS documents in its emphasis on greening the area. Action 29 in particular is to "Identify, prioritise and implement projects that enhance the Liveable Green Network and Greater Sydney Green Grid, increase tree canopy cover and vegetation, encourage health and activity, and optimise access to multi-use, shared green spaces, including: Broadway and Parramatta Road and Johnstons Creek".

The Parramatta Road Urban Amenity Improvement Plan gives weight to the vision for a greener, more active Pyrmont Bridge Road with design proposals for a narrower road, separated cycleway, widened footpaths and street tree planting to both sides of the road. This Plan is being currently implemented by Council and NSW Government through the fully funded Parramatta Road Urban Amenity Improvement Program - Masterplan for Camperdown and Leichhardt. Construction anticipated to be completed by 2023.

The Parramatta Road Urban Amenity Improvement Plan – plan and sections for the future Pyrmont Bridge Road streetscape





Together, the documents inform a future vision for the site which is 'of its place' in acknowledging and respecting the warehouse / industrial history of the area, but also which is part of a new, greener, better connected and more active precinct – in other words, one where new development enhances the amenity and useability of the public spaces it edges and connects with.

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2.2. Planning Proposal objectives

The Urban Design Report by BVN that accompanies the Planning Proposal references the relevant strategic documents and extracts two key objectives for the scheme:

- To create a world class biotech, health, education and innovation precinct; and
- To create a 'gateway/iconic building' signifying the entrance of the Camperdown Asset, of high architectural excellence.

The Draft DCP by FPD sets out objectives and controls that respond to the Camperdown Precinct vision statements and design guidelines. These are for a development that:

a) Supports the Camperdown biomedical and biotechnology hub envisaged as part of the strategic planning for the Camperdown Ultimo Health and Education Collaboration Area

b) Provides supporting uses at the ground floor which activate Pyrmont Bridge Rd

c) Responds to the existing character and the future character as envisaged under the Parramatta Road Corridor Urban Transformation Strategy

d) Achieves architectural and urban design excellence

e) Enhances and activates the public domain

f) Maintains adequate solar access and amenity to surrounding residences

g) Ensures appropriate access and servicing arrangements

h) Encourages active transport and supports public transport mode share

i) Ensures an ecologically sustainable development outcome.

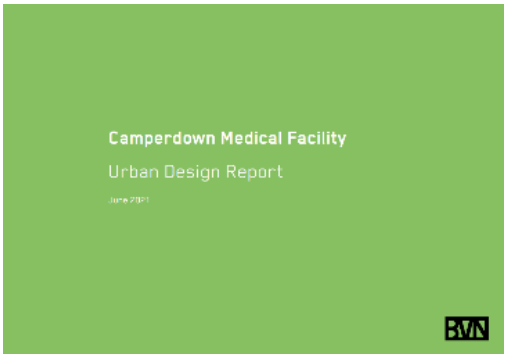
The Draft DCP also states that the new character of the site should:

j) Align with the vision for this area as a biomedical, biotechnology, education and employment hub to support the Camperdown-Ultimo Health and Education Collaboration Area

k) Enhance and activate the surrounding public domain

l) Deliver design excellence quality architecture

m) Consider the residential amenity of neighbouring dwellings.



We found the stated objectives and character aims to be consistent with the vision statements in the PRCUTS and Camperdown-Ultimo Place Strategy documents. The Planning Proposal departs from the envelope envisaged in the Fine Grain Study (a podium and short tower typology) and this is explained in the Urban Design Report as delivering a more appropriate site-specific outcome. This approach is supported – we would expect that robust design principles would work for any number of different building configurations. However, our process was also to test the likely built outcomes against that intent, to ensure that the visions, aspirations and objectives are fully realised.

A table setting out the key desired outcomes from the full range of strategic documents, and tdesign impacts, is appended. Section 4 below comments specifically on the design implications for the Planning Proposal.

2.3. Other factors

To implement PRCUTS aspiration of a cycleway along Mathieson Street to link to Johnstons Creek', Council intends to create a shared zone along Mathieson Street which would provide a shared sense of the 'limited' space available to all users including pedestrians, cyclists and vehicles. This proposed shared zone also links well with the Council's proposed and funded Shared Zones along Cahill Street and Cahill Lane as part of NSW Government Public Spaces Legacy Program. Construction of these links is expected to be completed by December 2022.

Together with the consolidation of nos. 3-7 Cahill Lane as an extended public open space, the proposed shared zone will significantly extend the public domain for pedestrians and cyclists.

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3. Review methodology

3.1. Site and context analysis

The review considered the site itself and its immediate neighbours, as well as its relationship to the wider precinct. The detailed assessment, including preparation and testing of 3D massing models, focussed on the immediate context. A broader analysis of the precinct character and potential view impacts of this (and other future) development was also undertaken for an extended area.

The main tasks were:

- Site inspection and analysis to understand and confirm the key features, opportunities and constraints of the study site and surrounds, including:
  - Geographical features, landscape character, views and vistas;
  - Form of existing development in the agreed study area;
  - Sites that are unlikely to change – heritage sites, conservation areas, strata title;
  - Open space network;
  - Movement patterns – street and lane configuration, access points, and key public transport, pedestrian and cycle corridors.
- Review of all applicable existing planning, policy and design documents and identify any gaps, conflicts, and key strategic directions, and of the Planning Proposal objectives against the Innovation & Collaboration Precinct visions.
- Generation of 3D block model for the site and immediate context of proposed permissible future development (ref State and IWC planning controls in particular PRCUTS)
- Development of 3D model of Planning Proposal (refined / tested that provided by BVN)
- Comparative analysis of permissible versus proposed built form outcome for subject site, including contextual relationships, public domain, overshadowing and visual impacts, considering the nexus between building height, FSR and setbacks
- Iterative testing of 3D options to optimise the envelope design
- Selection of preferred option, with Council, and associated recommendations for LEP and DEP controls to deliver the appropriate built form (scale, massing) and public domain outcomes.

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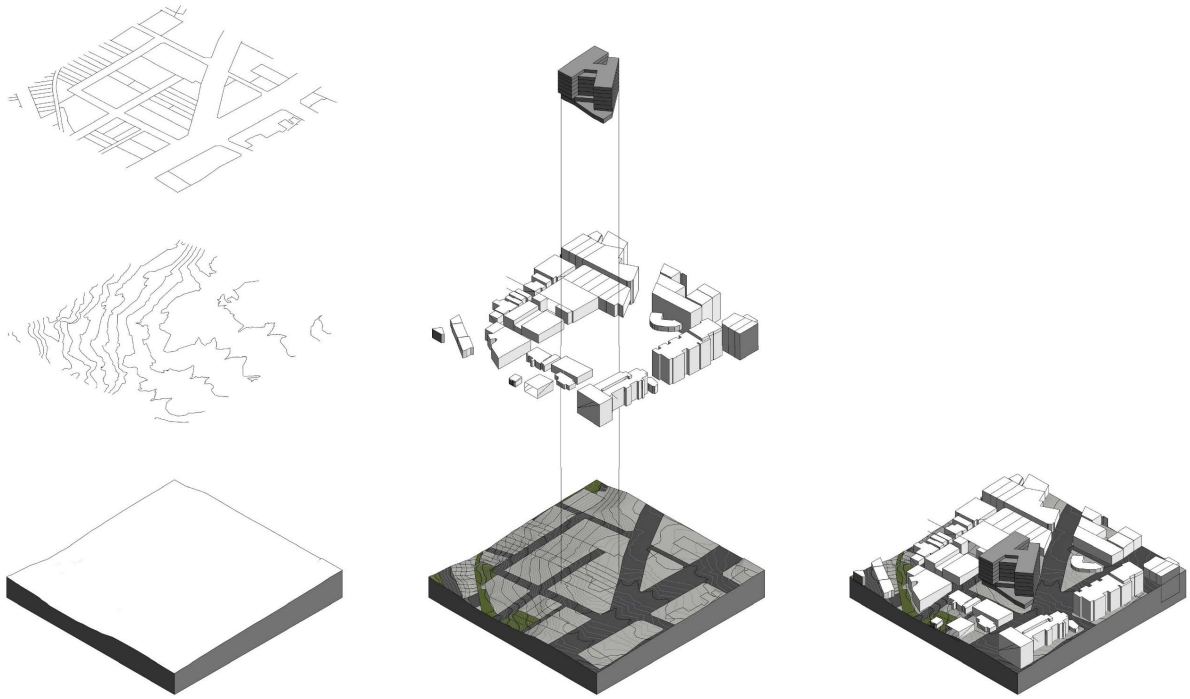
3.2. 3D model testing – Planning Proposal

After setting up the 3D base, the Planning Proposal was modelled in, and the contextual relationships reviewed in terms of existing and desired future character (ie. with and without uplift in the Precinct).

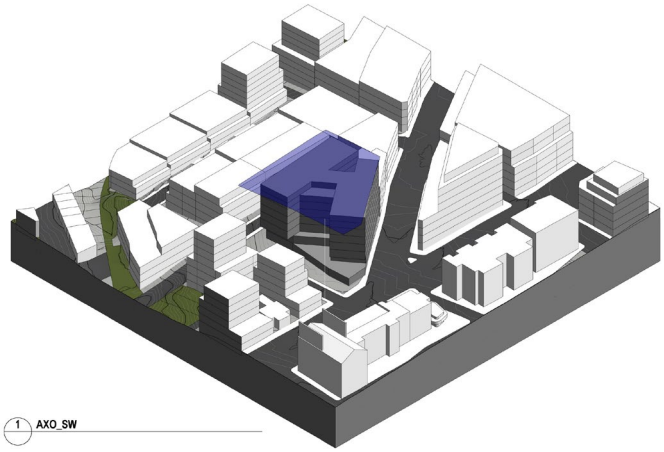


Overshadowing impacts were assessed using the 3D model, as were visual impacts from key locations around the site. These locations were determined in the analysis stage and captured in a view character map, then reviewed with photos and matching photomontages.

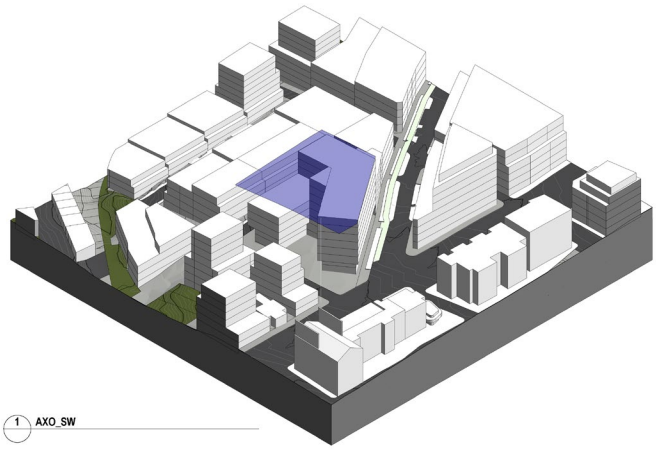
3.3. 3D model testing – options development

The 3D base continued to be used to assess options for the building massing, to enable a 'side by side' comparison with the Planning Proposal as in the example below. FSR was calculated as 85% of the envelope (also applied to the BVN block model for a like-to-like yield comparison). Sectional diagrams were a useful tool, particularly for the relationships between this site and those to the north, and the interface with the public domain.

BVN Envelope Proposal



Urban Design Envelope Proposal



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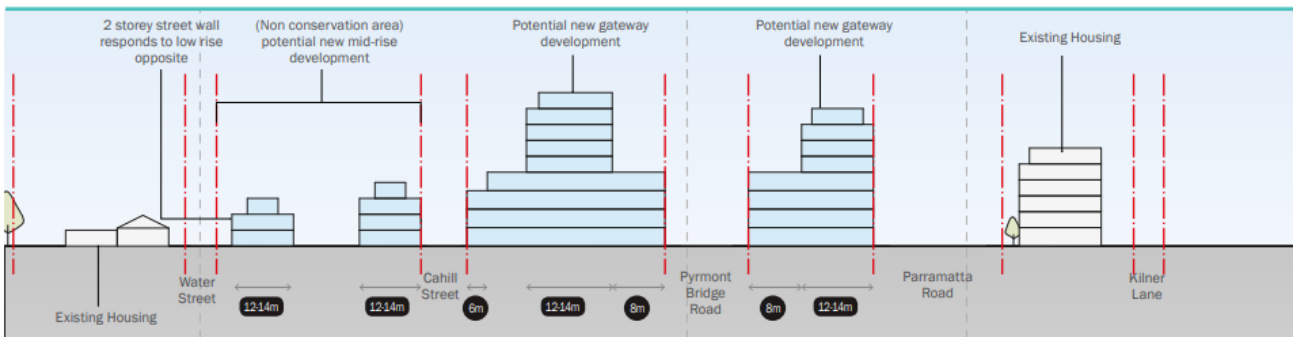
4. Assessment of the Planning Proposal & Draft DCP

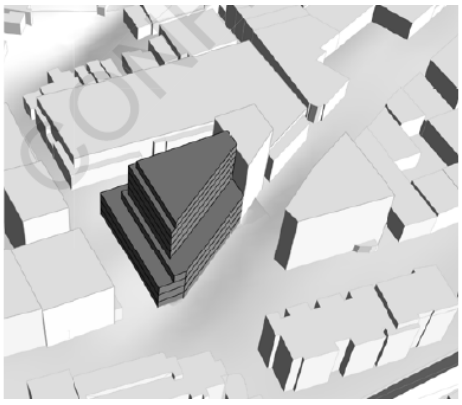
4.1. Contextual design

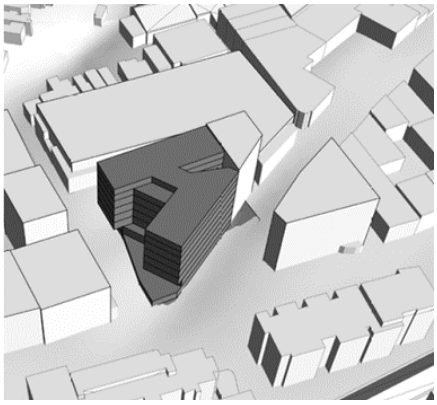
The Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) provides the State Government's future direction for development along Parramatta Rd, and the design of the subject site should reinforce its importance as a nodal gateway. As noted in Section 2, the Fine Grain Study includes proposed building envelopes for this and adjoining sites, with significant upper-level setbacks above a four-storey street wall-defining podium. This is illustrated below in the (split) section through the site. We note that the controls are 'coarse-grained' and that PRCUTS promotes a more fine-grained analysis to resolve the built form.

Figure 51. Camperdown Precinct Section - Section A-A - part 1



The BVN Urban Design Study takes this section and turns it into a 3D envelope (left), as a starting point for comparison with the Planning Proposal envelope (right). It is noted that the 3D study does not model the 3D built form outcomes proposed by PRCUTS on adjoining sites. The Study also describes, through sketch diagrams, the rationale for modifying the PRCUTS envelope (below).

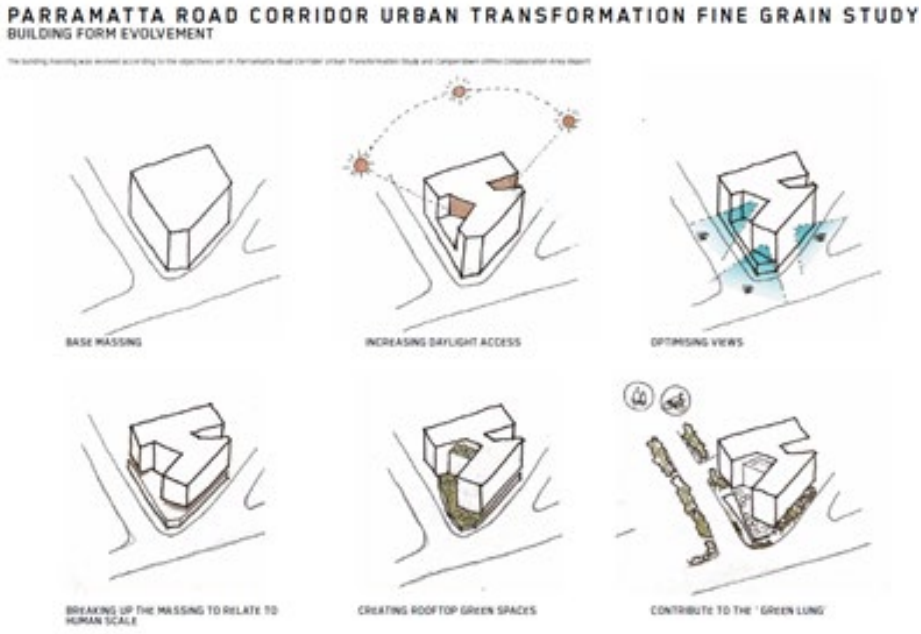




Findings

The Planning Proposal envelope is based on a predominantly 'site-centric' analysis, rather than on the impacts and/or benefits for the context. The single contextual response relates to 'contributing to the green lung' with street setbacks along Mathieson Street. Otherwise the focus is on:

- Sun access to building
- Views from building
- Scale of building
- Private rooftop green spaces.



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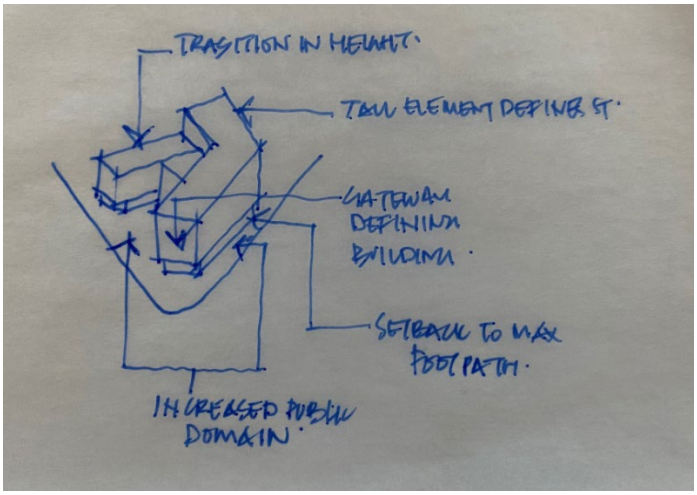
The peer review began with a refocus of design thinking for the building envelope with an emphasis on:

- Improved public domain
- Minimising negative Impacts on adjoining sites
- Improved relationship of built form to context.
- Analysis to include a review of the PRCUTS permissible envelopes in the precinct.

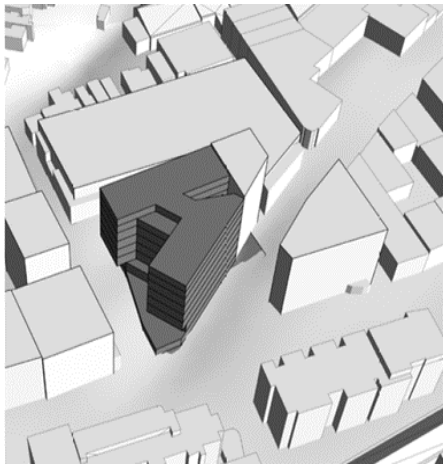
The context analysis, including views towards the site (as opposed to from the site) of the existing condition, generated a different approach to the building envelope which is considered to be more place-sensitive. As sketched below, the key design drivers were: to improve the public domain as well as the gateway definition of the Parramatta Road/ Pyrmont Bridge Road corner; to step the building down with the topography towards Johnston's Creek and to achieve a transition to lower scale development; to effectively widen the public domain both on the corner and along Pyrmont Bridge Road.

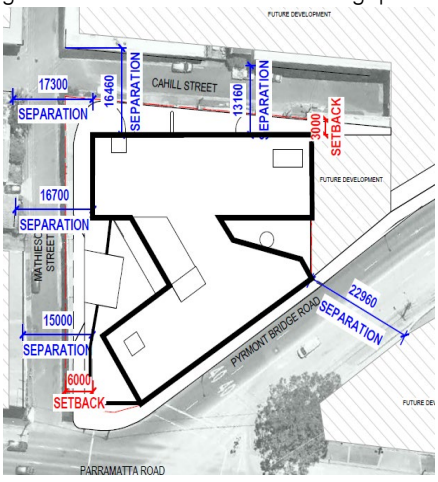


Context-based building form analysis (prepared by DI)

4.2. Building bulk and scale, building separation, floorplate depth

The building envelope for the Planning Proposal, seen as an axonometric, has two clearly defined wings splaying out towards Mathieson Street. The wings are 15-15.5m deep (envelope) and rise to the same overall 8 storey height. Where the two wings come together towards the eastern site boundary, windows from both wings look into each other across a gap of between 4-11.5m (based on the block model provided by BVN) OR 4-7m (based on the Planning Proposal massing and plan, below). In either case, should the adjoining site be developed, this would become a narrow lightwell.





Upper levels (shown in bold outline in the plan diagram lower right that accompanies the Draft DCP) achieve between approximately 16.7m separation (on Mathieson Street) and 13m (on Cahill Street). The 22.960m separation shown on Pyrmont Bridge Road is taken at an angle to future development on the current petrol station site, and would actually be 20m.

The amenity / outlook for building occupants in the eastern portion of the building, facing inwards, is undermined by the narrow building separation. The gap in the built form also results in a 'canyon-like' appearance when viewed from along Pyrmont Bridge Road.

Findings

We consider that there are benefits in having different form / façade treatments for the different orientation and settings. There are both contextual and amenity benefits (to neighbours and building users) by modifying the building envelope: we propose a transition to the north and west responding to the lower scale, laneway-type context, and a tall building element

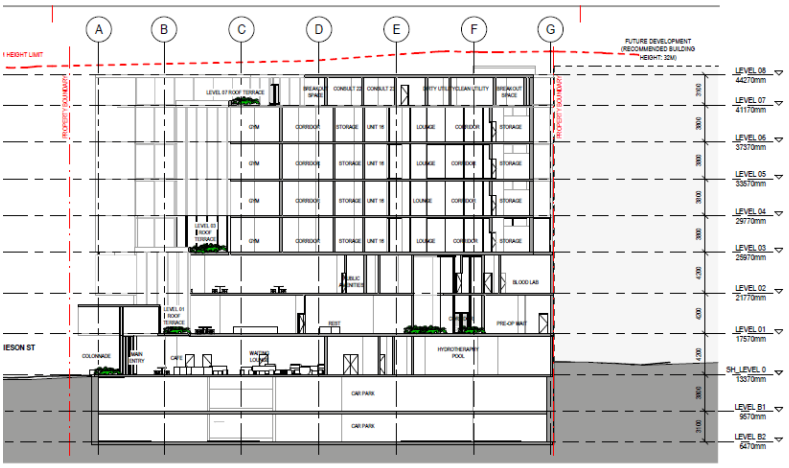
along Parramatta and Pyrmont Bridge Roads that celebrates the corner gateway node and is appropriate to the wider roads. The review found that:

- Stepping down the northern portion of the building breaks down the overall building massing, which is key to good built outcomes for Cahill Street (including future development), and to achieving a sensitive transition down towards Johnstons Creek
- Removing the narrow gap / light well arrangement would provide more certainty for this and future adjoining development
- Providing a floor plate depth of 18m (envelope) for more flexibility for a range of health-related and commercial uses than the narrower 15m depth
- A different configuration (as in the DI sketch in Section 4.1 above) would benefit building users in three ways:
  - allowing more sun access for the Pyrmont Bridge Road portion of the building
  - enabling a rooftop private open space and/or green roof treatment
  - by removing the narrow internal separation between parts of the building, also remove any visual or acoustic privacy issues, and improve the outlook generally.

4.3. Building height

The Planning Proposal is for 8 storeys within a 32m overall height limit, consistent with PRCUTS. The floor to floor heights for the Planning Proposal are:

- Ground Floor retail 4.2m
- 2 x levels above ground floor, including laboratory and operational facilities 4.2m
- 4 x levels with office space 3.8m
- Top floor consulting rooms 3.1m.



Findings

The review found that:

- The 32m overall height is only achievable (as shown in the accompanying section for the Proposal) with a top floor of 3.1m floor to floor height
- Minimal allowance has been made in the Planning Proposal for lift overruns, with no allowance for plant and services on the roof, which would push the envelope above the 32m limit.

In reality therefore the Proposal would need to be 7 storeys to comply with the PRCUTS controls. Testing of the nexus between the building massing, number of storeys and resulting FSR was undertaken to confirm what height was needed to deliver the appropriate yield; and vice versa, testing of a range of FSRs was undertaken to confirm that the building massing would not overwhelm the site or its setting. The review found that:

- Notwithstanding the existing 32m control, an 8 storey building is supported, with careful consideration of the building modelling to respond to the context and to transition down towards the north – in other words, the height across the whole building is preferred NOT to be uniform at the upper limit of the height control. This would result in an adjustment to the LEP height controls in metres, to allow for 8 storeys with lift overruns and services (refer to Section 5.3 Recommended Controls)
- Floor to floors of 4.2 and 3.8 metres are generally supported as applicable to the proposed uses, and as able to be flexible if the use changes (eg. from health-related functions to commercial office space). We benchmarked the Planning Proposal against relevant built examples (Charles Perkins Centre USyd, Health Translation Hub UNSW, North Shore Health Hub among others).
- 3.1m floor to floor is not supported as it is a residential height that limits the flexibility of, and is considered insufficient for, commercial / health-related uses.

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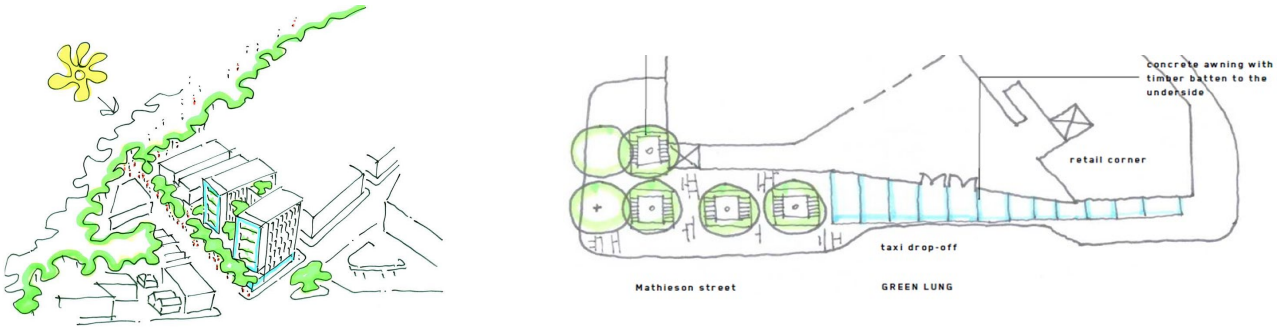
4.4. Street setbacks, street wall heights

The Planning Proposal built form setbacks as shown in the block model provide a widened, improved public domain on Mathieson Street and Cahill Street. The model is more generous than the Draft DCP which sets a minimum 3m setback to Cahill Street and a minimum 6m setback to Mathieson Street. No setback is proposed on Pyrmont Bridge Road.

In terms of street wall heights, the building form includes a single level podium at the corner of Pyrmont Bridge Road and Parramatta Road; an indented portion of the north-west corner to Mathieson Street (2 storeys high), and a consistent 8 storey street wall height to Cahill Street and to Pyrmont Bridge Road.

The Urban Design Study links the Planning Proposal setbacks at Cahill and Mathieson Streets to the aim of supporting the 'green lung' connecting Pyrmont Bridge Road to Johnston's Creek corridor, as per the sketches below.



Sketches accompanying the Planning Proposal showing the aim for a 'green lung'

Findings

As noted, the 'green lung' is a laudable aim; however, the review found that the design as proposed may only achieve it partially, at best. Because our focus has been 'outside in' – that is, on the benefits to the public domain and to precinct character – a range of street and upper level setbacks, and overall and street wall heights, was explored. As with the Planning Proposal, the aim is to optimise a green lung along Mathieson Street. However, the review goes a step further in seeking to maximise public domain outcomes by providing increased setbacks at ground and first floor levels; it found that a deep soil zone and WSUD strategy along Mathieson Street would help secure this; it formalizes a fully public corner plaza at grade, and it improves the footpath width on Pyrmont Bridge Rd. A preferred design approach is to step in the lower two floors of the proposed development, and then allow the building to overhang.

Pyrmont Bridge Road

- This has benefits in creating a widened footpath of at least .5m, which is desirable to service future users of the precinct. It will enable minimum 8.4m high semi-protected – and more generous – awning over the footpath alongside the ground floor retail. This will assist to activate the street, and fits with the planned street tree planting and separated cycle path envisioned in the Parramatta Road Urban Amenity Program (see also Section 4.6 which discusses the public domain outcomes).

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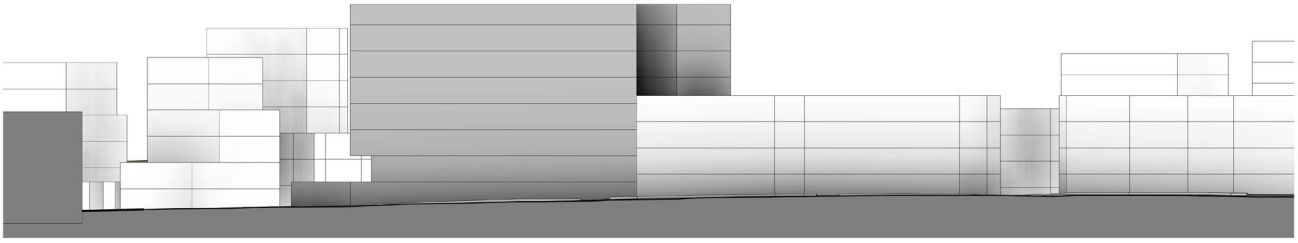
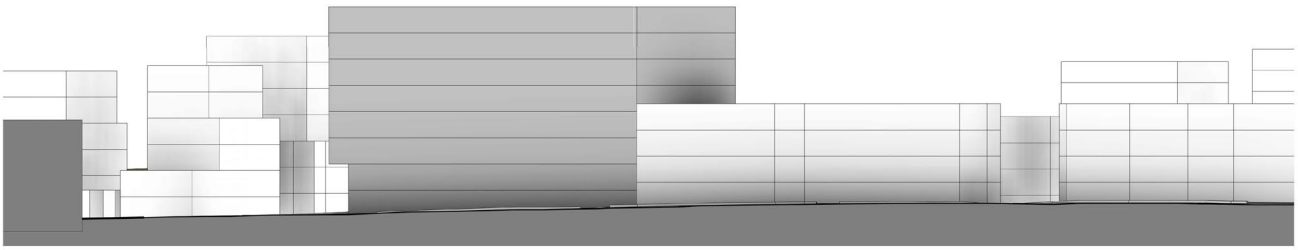
– The street sections below compare the Planning Proposal (top), to the preferred approach suggested as part of this review (bottom). They show the more direct street relationship able to be achieved by removing the ground floor podium in the Planning Proposal along Parramatta Road and Pyrmont Bridge Road intersection as well as the generic 1.5m setback extended along Pyrmont Bridge Road to create the widened footpath with the rest of the building cantilevered above. – creating more public space.



1 Section - Pyrmont Bridge Road - BVN

	the site	
Mathieson Street	*Pyrmont Bridge Rd facade*	*East side*	*adjoining lots*	*Gordon St*



2 Section - Pyrmont Bridge Road - DI

The section is cut through the road and shows the indicative elevation to Pyrmont Bridge Road, including number of storeys, of the subject site (mid grey) and the surrounding future built form. Because of the angled street pattern, the diagrams show both the main (South East) façade of the proposal and the East façade to the adjoining lot.

Mathieson Road

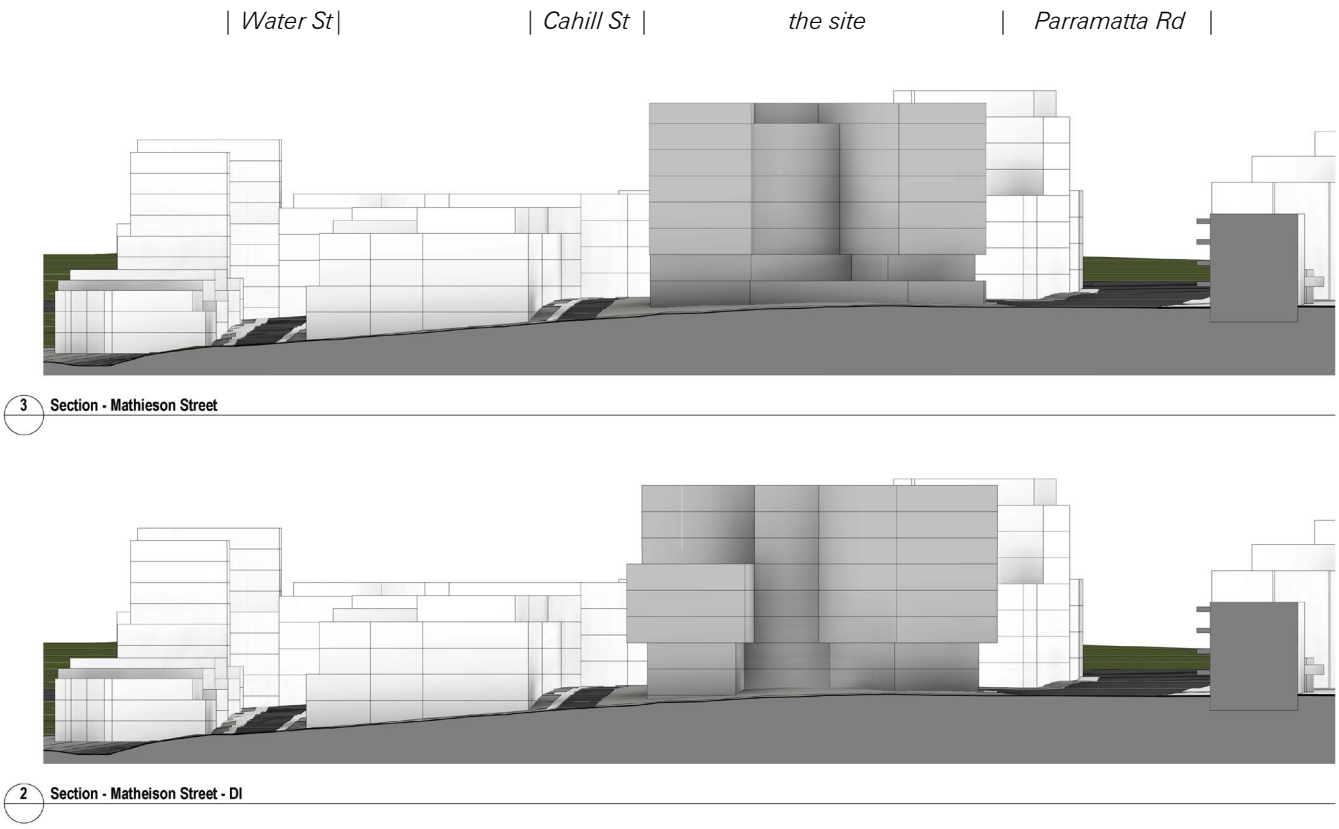
– The sections below show the difference between the Planning Proposal (top) along Mathieson Street, particularly the ground floor podium and the 8-storey street wall to Cahill Street (above), and the preferred approach (bottom) which breaks down and steps the built form to the north while also creating a more open and public corner to Parramatta Road (refer also to the discussion in Section 4.6 below).

– The preferred approach reduces the height of the new building against Cahill Street by 3 storeys, achieving a better transition to the north – especially given the narrowness of Cahill Street and the proximity to the existing live-work development – and stepping down towards Johnstons Creek, with the topography.

– The setbacks along Cahill Street are increased at ground and first floor level in the preferred envelope, but allow for the upper 3 storeys to step out, to optimise the building footprint while still securing the public domain

– Reducing the building height to 5 storeys along Cahill Street has associated benefits of reducing overshadowing impacts on the proposed new public plaza along Mathieson Street.

Urban design peer review



The section is cut through the road and shows the indicative elevation to Mathieson Street, including number of storeys, of the subject site (mid grey) and the surrounding future built form.

4.5. Public domain interface

Mathieson Street

The Planning Proposal provides a widened public domain to Mathieson Street and Cahill Street through adopting a 6m setback to Mathieson Street, and 3-6m setbacks to Cahill Street. The building form includes a single storey podium to Mathieson Street, with a landscaped roof and a privatised entry foyer off the main entrance at Mathieson Street. The Planning Proposal provides part retail and part hospital-related uses on the ground floor at Pyrmont Bridge Road.

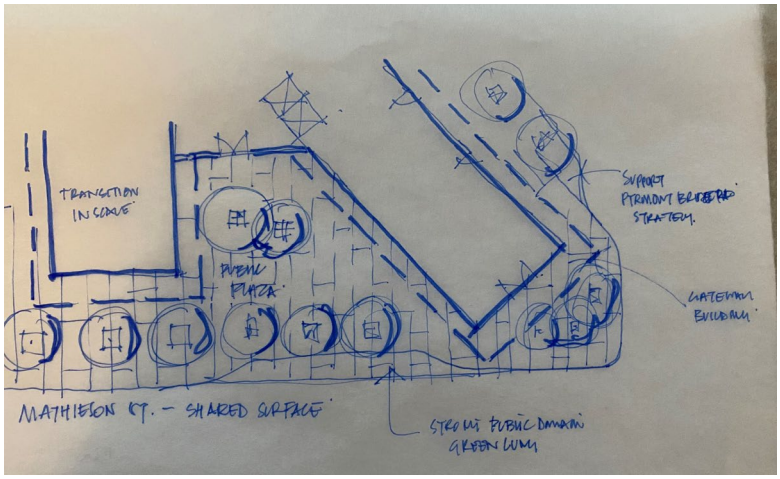
Findings

As noted, the generous setbacks to Mathieson Street can provide a widened public domain. However, there is an opportunity for synergies with both the PRCUTS aspiration of a cycleway along Mathieson Street to link to Johnstons Creek' and Council's intention to create a shared zone along Mathieson Street. The review found the need to further increase the quantity and quality of the public domain on Mathieson Street to ensure its success as part of an extended and enhanced public domain.

The proposed setback to Mathieson Street is supported, but in addition the review proposes expanding the setback to create a new public plaza / open space rather than a privatised foyer. It does this by way of:

- Setting a minimum 6m setback for the ground and first floor, allowing for a generous footpath width and positive interface with the Mathieson Street shared zone.
- Above these lowest two storeys, a 'step out' is proposed by way of a 4.5m upper-level setback, optimising floor space while providing shade / weather protection
- Removing the single storey podium to Mathieson Street and Parramatta Road (as indicated in the sketch below). We note that the size and shape of this area may be varied depending on building depth. Section 5.3 Recommended Controls provides dimensions based on the preferred building envelope developed for this review.

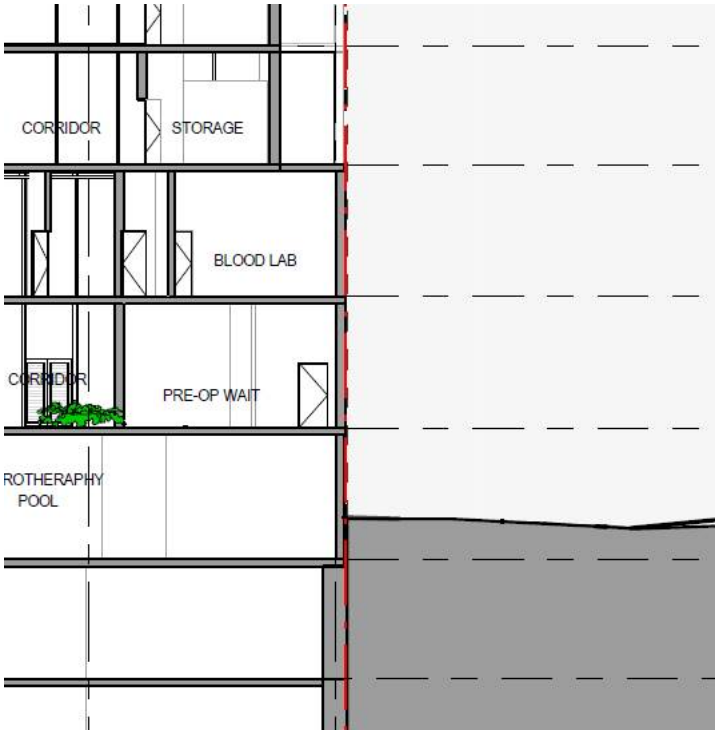
Urban design peer review



– An associated benefit of the approach is for building users. What was private open space – the landscaped terrace atop the ground floor podium – is made available as public open space. The private open space can be relocated to the rear of the site, at the northern boundary, with good solar access.

Parramatta Road and Pyrmont Bridge Road

The Planning Proposal identified the importance of the corner at Pyrmont Bridge Road and Parramatta Road for its 'gateway' qualities. It adopts a zero setback to Pyrmont Bridge Road, consistent with the proposed controls identified within the PRCUTS fine grain study. While the Planning Proposal provides retail uses to the ground floor, the indicative uses shown are only truly outward facing uses at the corner, with the proposed tenancies along Pyrmont Bridge Road primarily accessed off an internal corridor. In addition, we note that in the Planning Proposal the ground floor slab remains at the same RL while Pyrmont Bridge Road rises to the north-east. The section below shows the impact of this condition, with the ground floor uses part below ground.



Urban design peer review

Findings

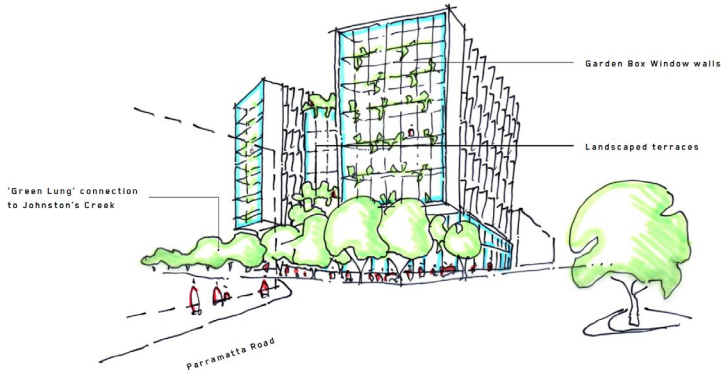
The review proposes:

- an increased setback at the corner with Parramatta Road, to serve multiple public domain and connectivity benefits: to cope with increased pedestrian and cyclist volumes from Pyrmont Bridge Road, to enable adequate space for tree planting to the corner and to ensure the 'gateway' quality of the corner façade.
- an increased setback at Pyrmont Bridge Road of 1.5m for the first two storeys to support the funded public domain works at Pyrmont Bridge Road under the Parramatta Road Urban Amenity Strategy, including the widened footpath, street tree planting and cycleway. While this effectively creates an overhang over part of the footpath, awnings should still be provided to Pyrmont Bridge Road for adequate weather protection.
- Building entrances be designed to prioritise active connections with Pyrmont Bridge Road, by ensuring that the ground floor entries are level with the footpath. This may mean adjustment of slab levels for the active uses that have a direct relationship with the street.

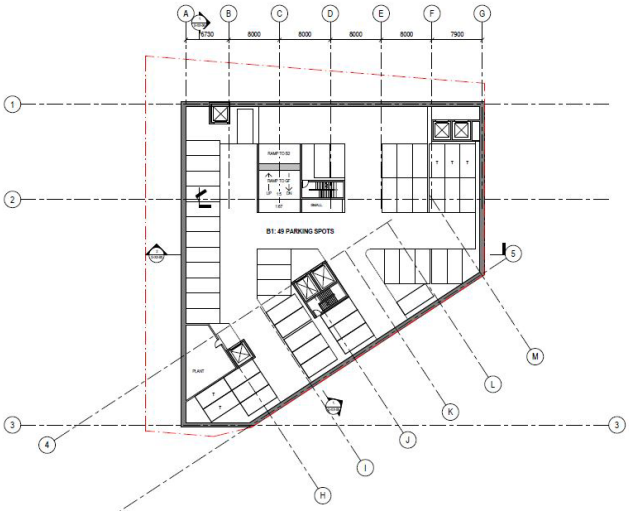
4.6. Landscape and streetscape

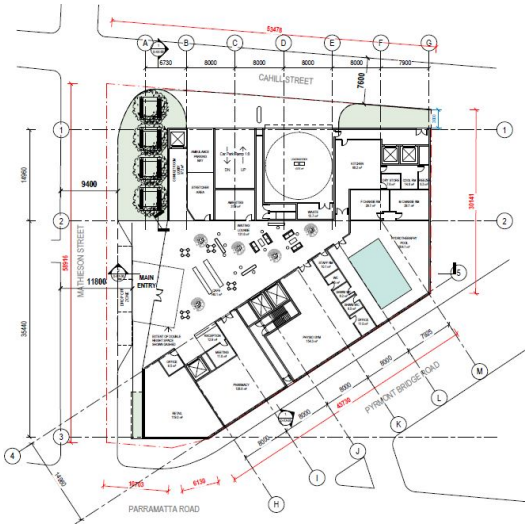
There are currently no street trees or landscaping on the site or along Mathieson Street; there are scant trees on Pyrmont Bridge Road with only one mature eucalypt on the opposite corner to the subject site. PRCUTS and the Parramatta Road Urban Amenity Improvement Program highlight the importance of greening the area for improved amenity and environmental outcomes (refer masterplan drawing, Section 2.1).

The Planning Proposal and accompanying Urban Design Report propose new street tree planting and landscaping to rooftop spaces for the creation of a 'green lung' at Mathieson Street, connecting Pyrmont Bridge Road to Johnstons Creek. Objectives within the site specific DCP support this vision, with 2.5 a) requiring that the site should contribute to the 'green lung' at Mathieson Street, and 2.5 b) requiring the provision of substantial trees. The sketch views within the Urban Design Report show extensive greening of the public domain wrapping around the corner of Pyrmont Bridge Road and Parramatta Road from Mathieson Street, and a green façade to the towers (see image below).



However, the basement setout extends past the above-ground building footprint and encroaches on the area designated for tree planting on Mathieson Street, as shown below (basement and ground floor plans – 4 trees allowed for).





Urban design peer review

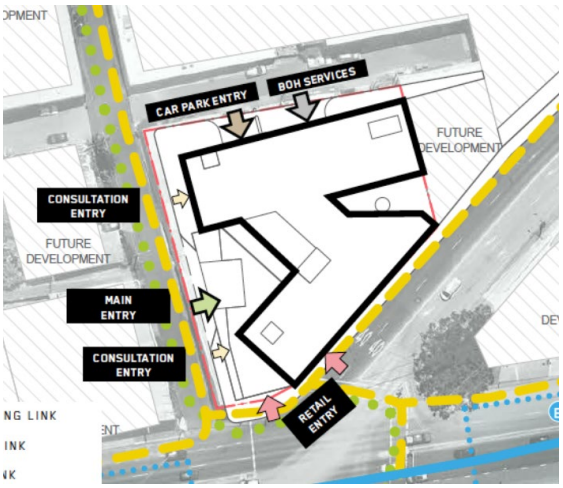
Findings

- The review supports the intention to create a 'green lung' by maximising planting along Mathison Street. However, the basement extent will result in small trees with a maximum tree canopy width of 4-5m, provided the trees are located within an above ground planter; it does not align with Objective 2.5b under the site specific DCP. We recommend that the basement be set back from Mathieson Street to allow for the deep soil required to accommodate 'substantial tree planting' to better support the vision for a 'green lung'. Considerations are:
  - Deep soil is typically only a requirement for residential building types, where the minimum area varies from 14-25% and the minimum dimension from 3-6m, depending on the size of the site (NSW ADG), although there are some planning documents (WA, VIC) with a minimum 3m dimension for industrial/commercial uses.
  - Minimum soil volume for tree of around 5-6m high, for success of the trees as per current best practice, is 15m3. We tested 3m and wider setbacks along Mathieson Street to understand the area of the setbacks and to inform a deep soil recommendation (refer Section 5.3).
- While the imagery within the Planning Proposal urban design report including renders and sketch views show tree planting to the corner of Pyrmont Bridge Road and Parramatta Road, the ground floor setbacks do not accommodate tree planting.
- Species selection for tree planting should be considered in conjunction with the proposed trees for Pyrmont Bridge Road and Johnstons Creek to create a visual link between these elements. The preferred option features a greater setback at this corner to provide ample room for substantial tree planting to soften the presentation of the building to the street, and to accommodate increased foot traffic.
- The landform slopes away to the north towards Johnstons Creek. The review highlighted the need to provide WSUD at Mathieson Street, to improve water quality and control run off to Johnstons Creek which is not currently accommodated within the Planning Proposal.
- The Proposal has the ability to contribute significantly to increased canopy cover within the LGA. While there is no canopy strategy for IWC, the City of Sydney's Urban Forest Strategy (updated 2020) is a useful tool It identifies that Camperdown as a suburb already has a canopy coverage of 21-26%, mostly in the residential area and including Sydney University. The recommended canopy cover for the CBD and industrial areas is 15% - which is considered an appropriate target to extrapolate for the PRCUTS context. Proposed new street tree planting to Pyrmont Bridge Road will contribute to this percentage; this needs to be supplemented through new developments' landscape planning, both on-site and/or by contributing to the public domain.

4.7. Circulation and rooftop spaces

The main entry in the Planning Proposal Scheme is located on Mathieson Street, between the two wings of the building, about one-third of the way down the block. There are other street level entries around the base of the podium as shown in the diagram below. A mix of retail and health-related uses wraps around the Parramatta Road / Pyrmont Bridge Road corner. Car parking and servicing is located on Cahill Street, to the rear of the site (left, below).

There are two vertical cores, one for each building wing. There are roof terraces indicated in the sections in the Urban Design Report, on levels 1 (podium), 3 and 7, shown with planting. The largest area of private open space is on the Level 1 podium, which is accessed from the reception waiting area. The terrace areas are shown in the Planning Proposal visualisations as well planted out, contributing (together with street trees) to a very 'green' presentation that softens the building (right, below). The visualisation also shows a large portico / frame element that marks the entry.



Findings

The presentation of the main entry to the street could be improved. Mathieson Street, where it is located, is narrow (even with the proposed setbacks in the Planning Proposal), slopes relatively steeply down towards Johnstons Creek, and despite efforts to create a visual marker over the entry, is 'offline' from the Parramatta and Pyrmont Bridge Road corner. We appreciate that this means the entry can be quieter and feel more pedestrian-oriented than an entry on the corner itself, but the risk is that the location is intrinsically underwhelming and there is a reliance on architectural gestures like the large framing device atop it to compensate.

The preferred approach is to design the ground floor to prioritise activating the public domain over internal-facing uses:

- Remove the large podium to create a more open, inviting and public space around the entry that extends to and takes in the corner of Mathieson Street / Parramatta Road. It means the main entry can still be off Mathieson Street but with a stronger presence within the precinct and with benefits for the public domain.
- We also consider that a better location for the large area of private open space is atop the northern building rather than between the two wings, where it would be substantially in shade. Moving it towards the north to an elevated position would have uninterrupted sun access, expansive views towards Johnstons Creek and also a pleasant outlook over the precinct.
- Without pre-empting the layout of the development, and appreciating this is a matter for detailed design, research and testing of internal circulation based on suitable building depths for the proposed uses also indicated that one central vertical core would have efficiencies in serving both building wings.
- The relevant consideration for site-specific DCP could be where building entrances are located and how these interact with street and public domain.

4.8. Design excellence and sustainability

The Draft DCP lists design excellence quality architecture' as one of the measures of desired future character. The building design objective "to ensure that buildings have a high quality appearance and enhance and activate the public domain" has an accompanying control for "a high level of built form modulation and articulation". The single objective and paired control for sustainability is "to ensure a high level of sustainability is achieved on the site" by [achieving] "a minimum 4 star Green Building Council rating.

Findings

The Draft DCP is, in our view, 'light on' on terms of both defining design excellence and sustainability, and in linking them. Sustainability encompasses social and cultural opportunities, land use futures, active transport, and the longevity of landscape treatments, as well as building performance. We consider that, for an exemplar and the first building of its type in this precinct, more, and more detail, should be included to assure an excellent design outcome. We also consider that the development controls should demonstrably integrate the building with the public domain, to the benefit of the public domain. The review concluded that:

- A 6 star Green Star rating is an appropriate benchmark for this gateway site and for the proposed uses – to exemplify sustainability and innovation
- The DCP should call up materials and finishes that are robust and durable, with low maintenance needs
- The DCP should link the public domain outcomes strongly to the built form massing and setbacks – in other words, the controls need to deliver against the 'green lung' objective
- Excellence in design should include amenity outcomes for building users and for neighbours – not just aesthetics
- Façade design should be required to be 'orientation-specific' – that is, features like external sun shading whose design will differ depending on which direction the windows face.

Urban design peer review

5. Recommendations

5.1. Desired outcomes

5.1.1 Landscape and the public domain

Controls and guidelines for the site should prioritise the following public domain outcomes:

- Pedestrians:
  - Shared Zones on Cahill Street, Cahill Lane, Mathieson Street between Cahill Street & Parramatta Road
  - Widened footpath on Pyrmont Bridge Road
  - Corner plaza on Pyrmont Bridge Road / Parramatta Road together with a widened public space along Mathieson Street – this is a critical deliverable from an urban design perspective and we consider must be secured, whether by way of development controls (setbacks) or another mechanism for Council to either acquire or secure an easement over the land.
- Cyclists: separated cycleway with Pyrmont Bridge Road upgrade and Shared Zone as part of this redevelopment
  - Safety at all intersections for pedestrians and cyclists (Mathieson/Pyrmont Bridge Road; Parramatta Road; Mathieson/Cahill Street)
  - Safe connection along Mathieson Street and from Mathieson Street to Pyrmont Bridge cycleway, with space to avoid potential conflict with pedestrians and cars
  - Visual cues within the shared zone to a) encourage slow speeds and/or dismount, to prioritise pedestrians and b) link Mathieson Street to the Pyrmont Bridge cycleway.
- Street trees and landscape
  - Boulevard and verge planting as part of the Pyrmont Bridge Road upgrade to be accommodated by the built form
  - Trees on east side of Mathieson Street as part of the shared zone should be ideally in ground not on structure, for optimum growing conditions (ie. to achieve a good size at maturity)
  - Low planting / planter beds on Mathieson Street and in plaza to support vegetation, define the public space and if possible double as casual seating
  - Water Sensitive Urban Design / passive treatment of run-off down Mathieson Street.
- Vehicles
  - Safe access for service and delivery vehicles via Cahill Street
  - Minimise potential for conflict between parking / service access vehicles and active transport users.

5.1.2 Built form massing

Controls and guidelines for the site should prioritise the following built form outcomes:

- Bulk and scale:
  - A building whose height, excluding a small portion for rooftop plant etc, can accommodate 8 storeys of commercial/health-related uses, and whose main envelope (excluding rooftop elements) is not significantly taller than the 32m height plane envisioned in PRCUTS
  - A strong built edge along Pyrmont Bridge Road in keeping with future precinct built context and boulevard treatment
  - A softer built edge to Mathieson Street, achieved by way of breaking down the building massing and by setbacks to support new street tree planting
  - Differentiation of parts of the building to create a height transition 'down the hill' towards Johnstons Creek and respond to the narrow width of Cahill Street
  - Celebrate the corner of Parramatta and Pyrmont Bridge Roads: cut back to create an optimally visible, accessible entry point
- Public domain interface / activation:

- A truly public plaza wrapping the corner of Parramatta/Pyrmont Bridge Roads into Mathieson Street (ie. deliver at grade rather than as a separated, elevated private open space)
- Definition of the base of the building to balance the tall height, and create a 'human scale' zone at the street
- Façade treatment to support an active, pedestrian-focused and green Pyrmont Bridge Road
- Landscaped setback along Mathieson Street to 'read' as fully part of the public space / shared zone

– Amenity:

- Moderate visual impact towards west and south by breaking down the building massing
- Roof design to enclose / conceal services, plant etc in light of the visibility of the site at the low point of the surrounding topography
- Building setbacks and deep soil zones that enable successful street trees along Mathieson Street, to ensure they are capable of achieving mature height of minimum 10m and generous canopy to achieve the 'green lung' sustainability and landscaping outcomes.
- Setbacks and deep soil controls should be linked to urban street tree canopy targets / desired outcomes.

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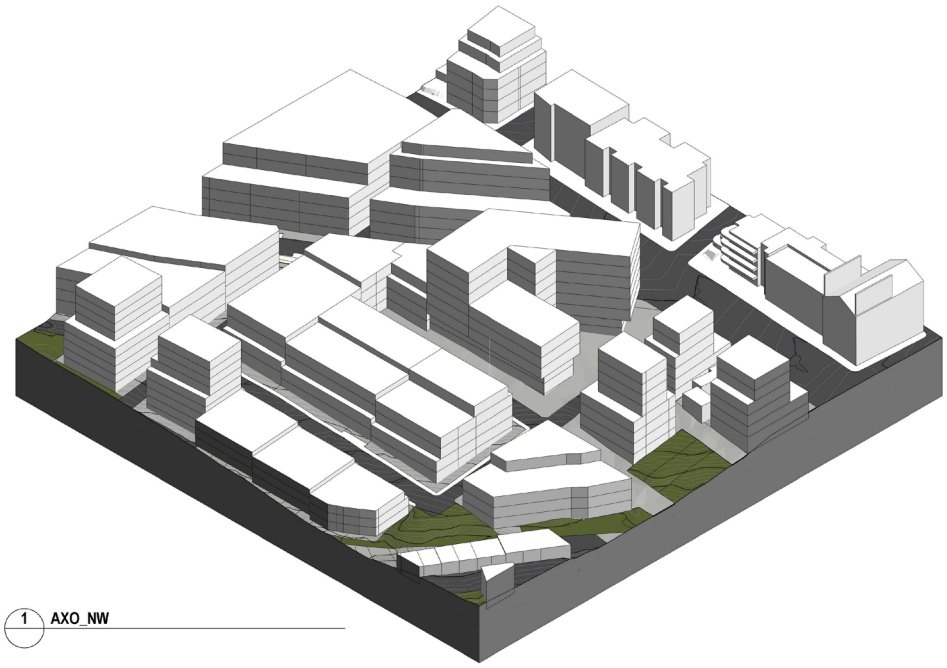
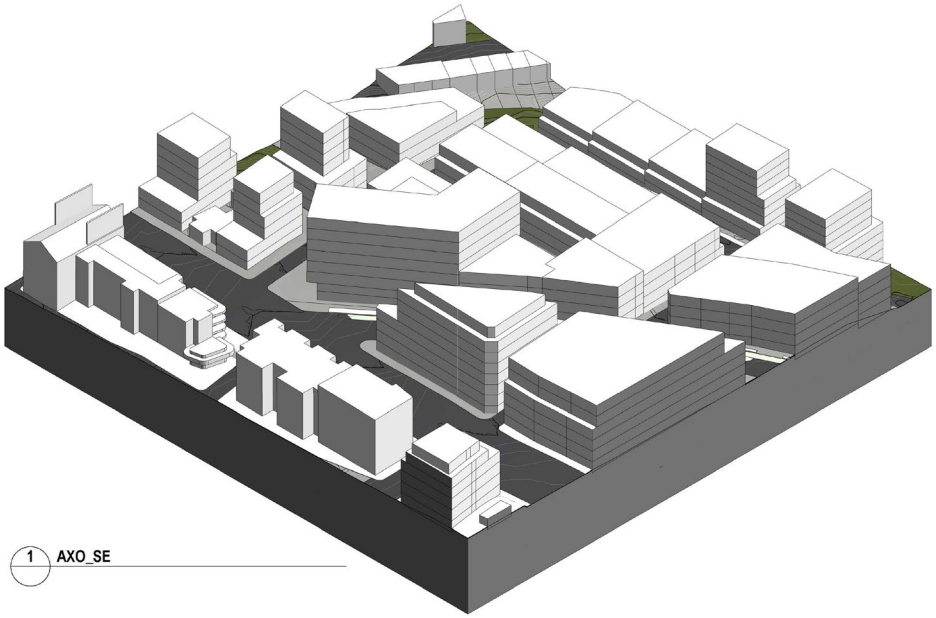
5.2. Preferred option

The preferred option developed as part of the urban design review is shown below in axonometric form (three views). It was used as the basis for the numeric controls recommended for a revised Planning Proposal. We note that the surrounding context has been modelled as per the PRCUTS controls, to fully understand the visual and amenity impacts of the site in its future setting.





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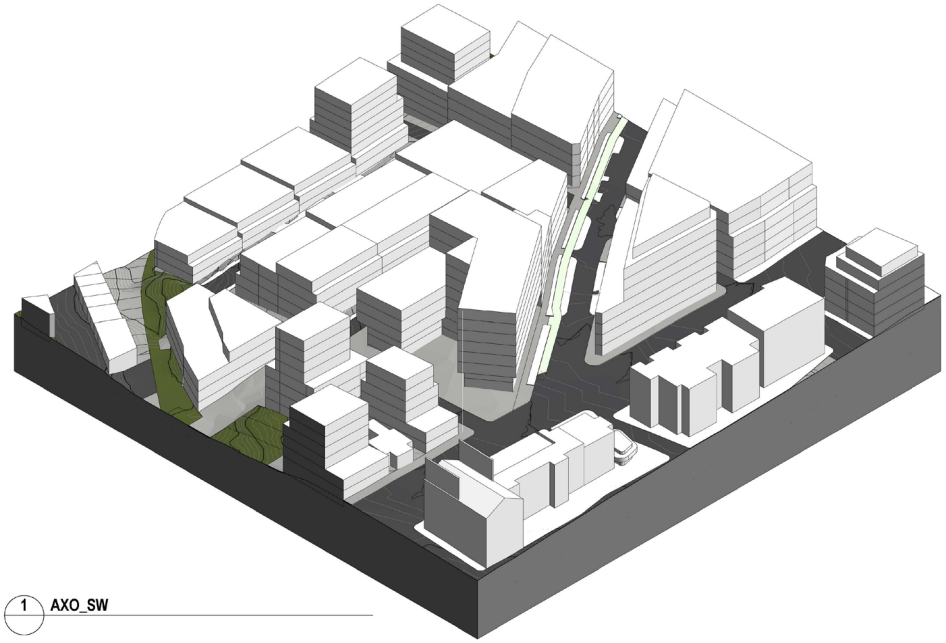
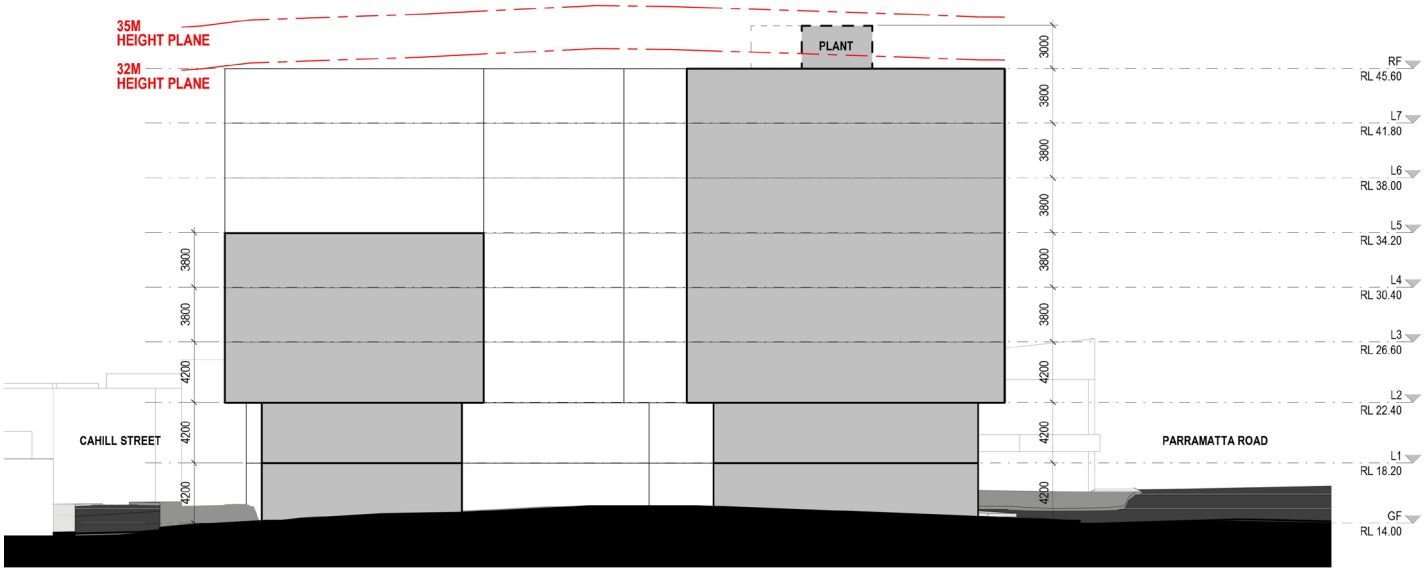


5.3. Recommended controls

The built form controls to deliver an optimum outcome for the site, balancing an enhanced public domain, yield and form consistent with the Precinct vision, are recommended to be:

- FSR 4:1
- Height in metres 35m – refer section below
  - 32m to building parapet
  - 35m to top of plant and lift overrun
  - location and size of plant is indicative
- Height in storeys 8



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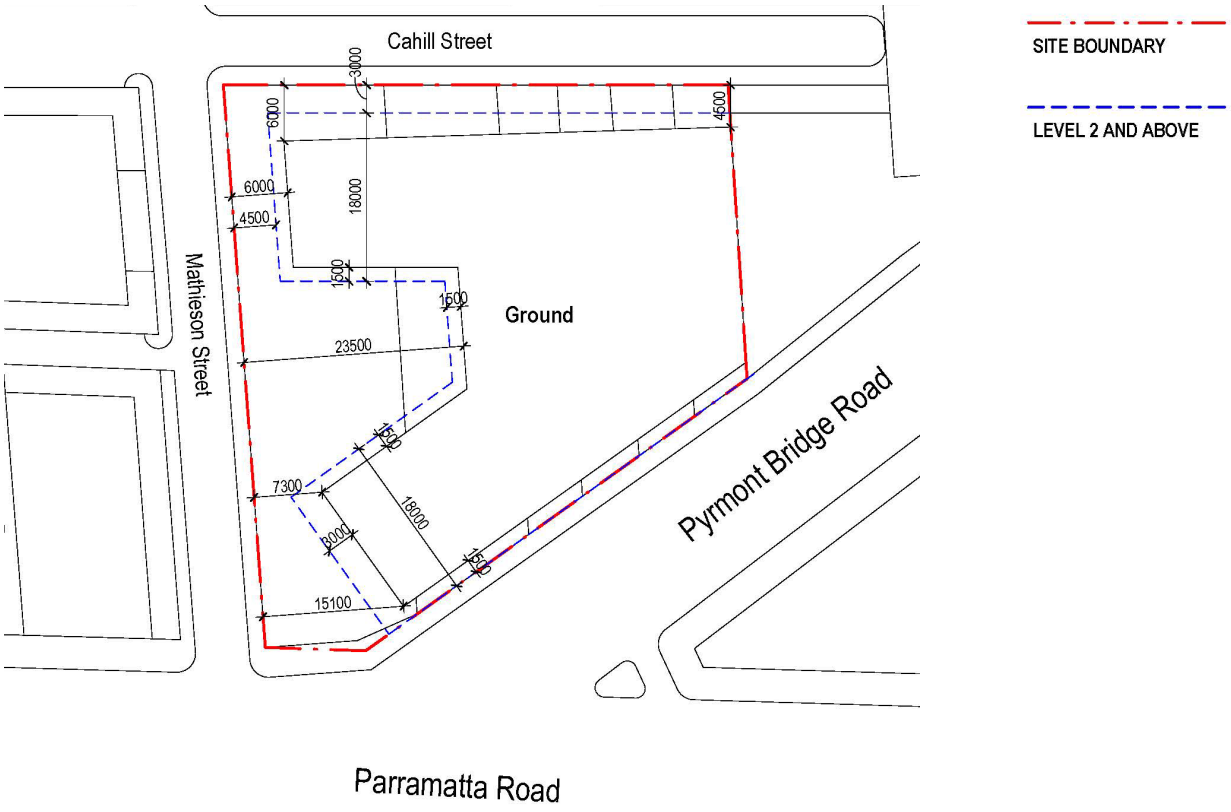
- Setbacks
  - As per plan below: solid black line for Ground/Level 1 & dashed blue line for Level 2 and above.

    Note: The setback diagram is 'shrink-wrapped' to the preferred massing option, which we appreciate constrains other envelope designs that could deliver the desired outcomes. Consideration may be given to consistent street setbacks along some boundaries (eg. Cahill Street) but perhaps in tandem with a deep soil dimension where street trees are required.

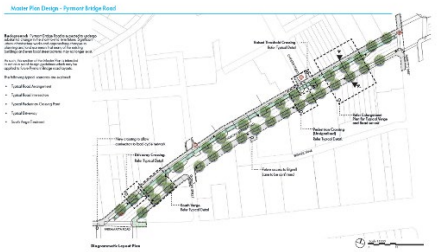
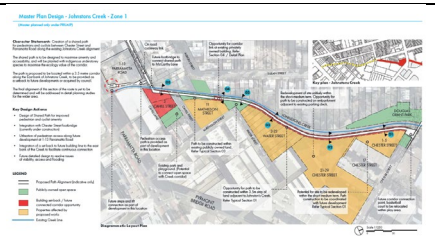
    The triangular shape forming the corner plaza at Parramatta Road / Pyrmont Bridge Road is critical and could also perhaps be dimensioned as a minimum 'no build' area to secure it for public open space. As shown below, from the 7300mm dimension to the corner, it measures approximately 200m2.

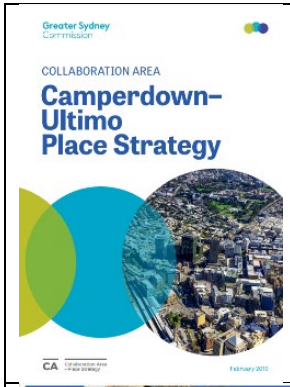
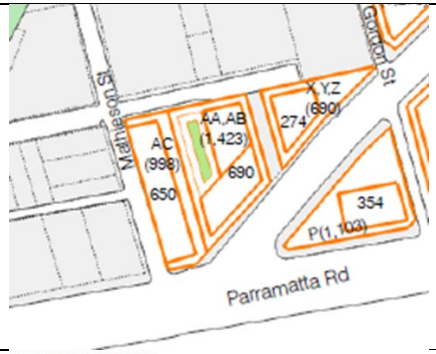
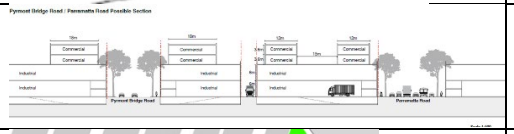
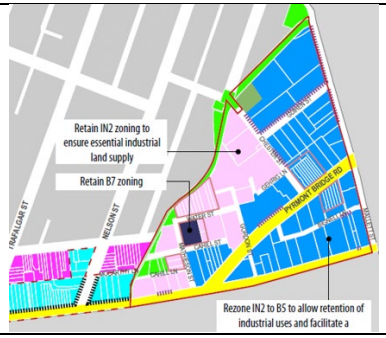


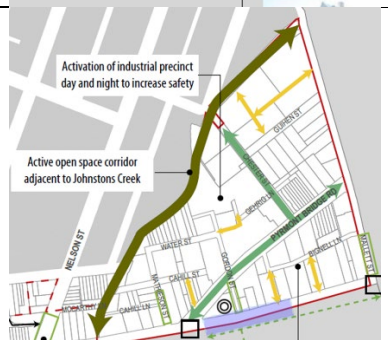
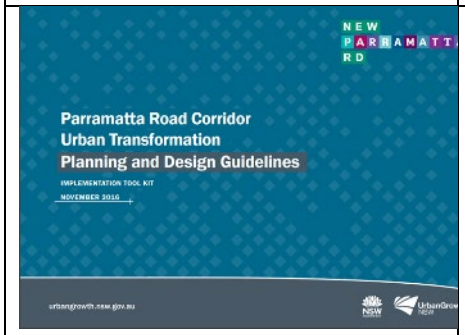
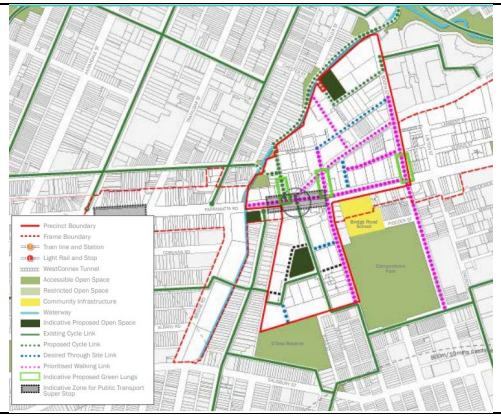
- Deep soil
  - Minimum area 10% of site area.
    NOTE: without the corner plaza 7.5% would be acceptable, but we prefer 10% for this specific site befitting the landmark status of the corner.
  - Minimum dimension 3m, so long as this is a continuous dimension over minimum 15m

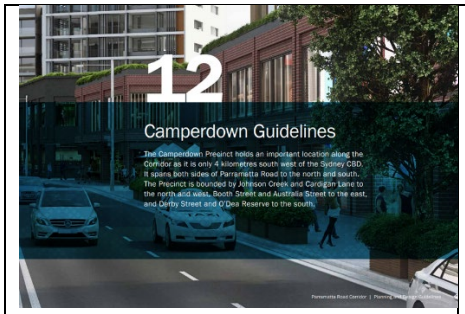
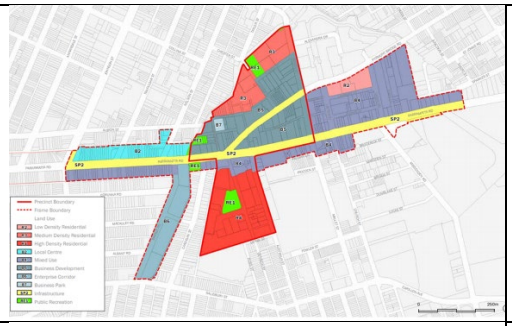
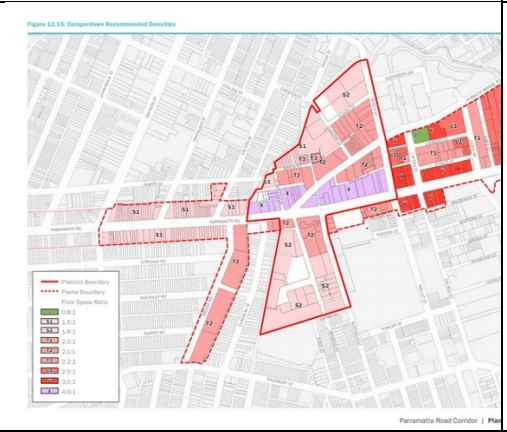
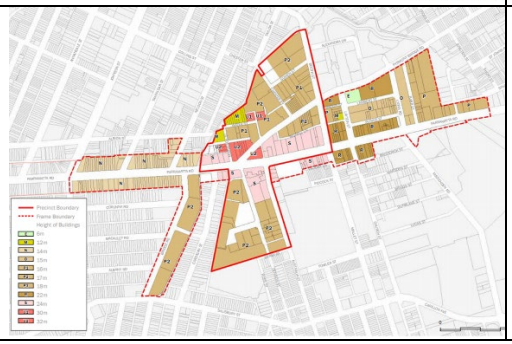
- Canopy cover
  - Contribute to a 15% target for canopy cover for the Collaboration Area.

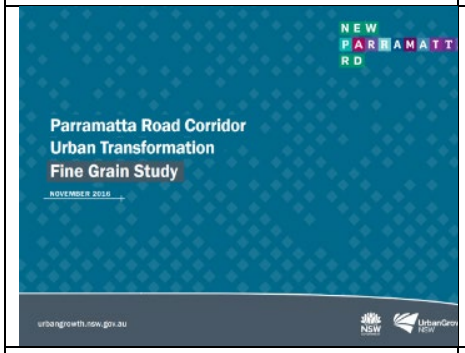
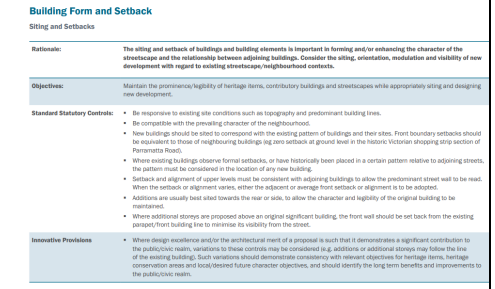
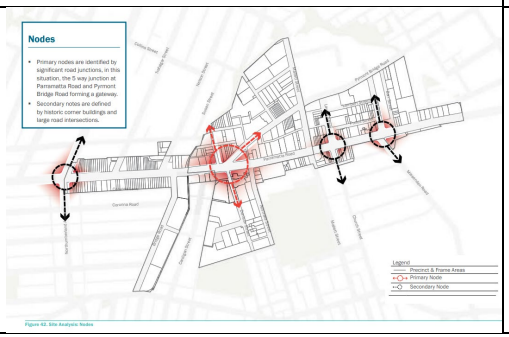
Appendix 1. Strategic documents commentary

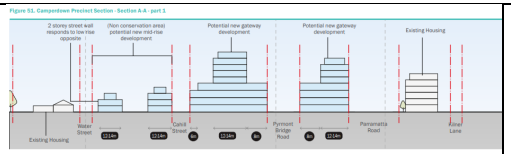
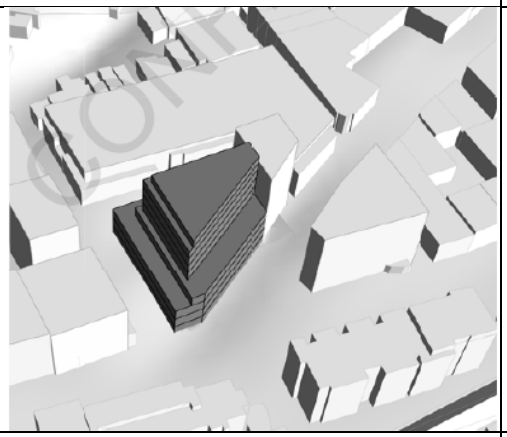
Document	Relevant Material	Comment	Design Impacts
Leichhardt Local Environmental Plan 2013 Current version for 14 July 2021 to date (accessed 15 August 2021 at 11:15) Status information	Planning controls	Current LEP controls allow: IN2 Light industrial use, FSR 1:1	– Current controls not relevant to analysis
	Economic Analysis by SGS various reports: - Camperdown Innovation Precinct – land use, strategic employment/future growth drivers - Biotech Hub Feasibility	Economic analysis supporting biotech, creative, industrial uses for the Camperdown Innovation Precinct.	– Design outcomes to support the proposed uses. Floorplates, floor to floor heights etc.
		Public domain plan for Pyrmont Bridge Rd. Proposed fully funded masterplan to reduce number of car lanes and provide new landscaping and separated cycleway along PBR: important factors in the public domain design outcome for site.	– Integrate proposed Pyrmont Bridge Rd upgrade into model and test outcomes. – Note – existing two metre-wide footpath not improved in works – consider options to widen to 3.5 metres for greater pedestrian amenity.
		Johnstons Creek access strategy indicates potential for pedestrian and cycle route along Johnston Creek. Access via Mathieson St from Parramatta Rd important in this proposal.	– Public domain, landscaping and access strategies along Mathieson St important aspect of the Johnston Creek access Strategy

		Camperdown use focus as a health, education, and research precinct. Focus on jobs, contribution to research and innovation.	– Built form must be capable of providing for a range of health, education, and research uses. – excellent public transport, walking and cycling, and great places – authenticity, character, outstanding architecture, engaging streetscapes and built environment
		Detailed analysis of Camperdown area public domain and built form. Built form recommendations assume industrial zoning. Analysis pre dates proposed health and education innovation precinct.	– Precinct analysis relevant to study – Envelope ideas seek to define the public realm
		Scale of built form limited by industrial development potential of area.	– Envelope scale limited by economic assessment of use and typology.
PARRAMATTA ROAD/ NORTON STREE STRUCTURE PLAN		Proposed rezoning of the site and surrounding IN2 light Industrial land to B5 Business Zone to allow retention of industrial uses and facilitate biomedical, biotechnology/creative hub.	– Built form must be capable providing for a range of health, education, and research uses.

		Max height 4 storeys 2.5:1 FSR – bonus 2 storeys to provide laneways and open space. Potential for adding height and scale where design excellence is demonstrated.	– Controls have been superseded by PRCUTS
		Activate industrial precinct day and night to increase safety. Activate open space corridor adjacent to Johnstons Creek Pyrmont Bridge Rd – Major Street Connection Mathieson St 'green lung'	– highlights importance of public domain in design outcomes.
		Mathieson St 'Green Lung' and Prioritised Cycle Link'. Parramatta Pyrmont + Bridge Rd 'Prioritised Pedestrian Link'	– highlights importance of public domain in design outcomes.

		Proposed B5 Land use.	– Proposed rezoning of the site and surrounding IN2 light Industrial land to B5 Business Zone to allow retention of industrial uses and facilitate biomedical, biotechnology/creative hub.
		FSR 4:1	– PRCUTS recommended maximum FSR being reviewed by IWC through detailed site-testing
		Building height 32 metres (8 storeys)	– PRCUTS recommended maximum height being reviewed by IWC through detailed site-testing

		Parramatta Rd building envelopes.	– A review of the envelope controls is relevant to understanding and testing built form outcomes on other sites fronting Parramatta Rd in the precinct
		The Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) - provides the State Governments future direction for development along Parramatta Rd.	–
		The subject site is one of the key 'gateway' nodes in this section of Paramatta Rd.	– The design outcome should reinforce the nodal gateway importance of the site.

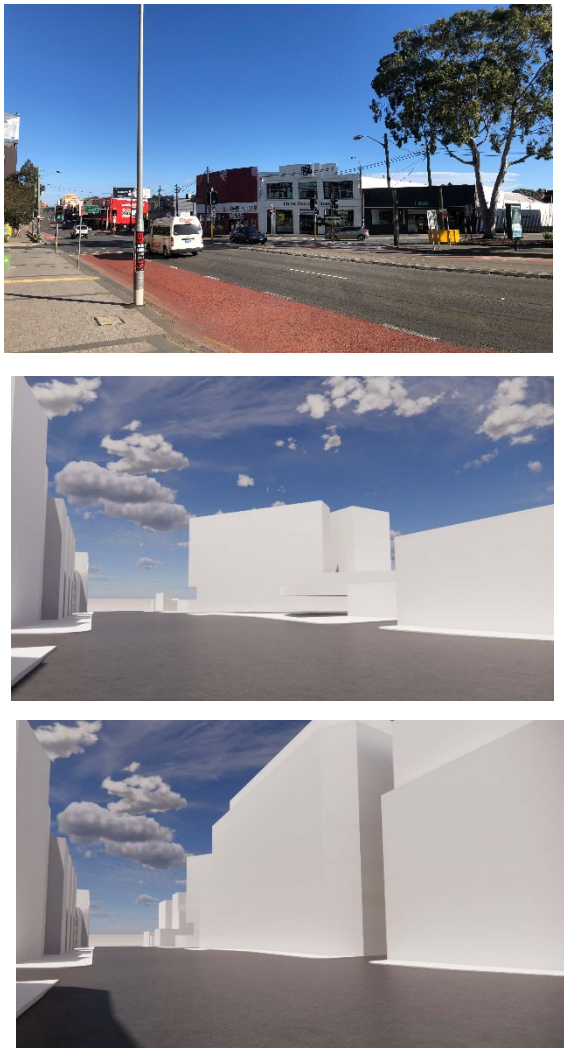
		The PRCUTS document includes proposed building envelopes for the site and adjoining sites. The controls include significant upper-level setbacks above a four-storey street defining podium.	– The controls are 'coarse-grained'. PRCUTS promotes a more fine grained analysis of these controls.
		The image represents the built form outcome on the subject site based on the PRCUTS controls above (source: BVN Urban Design Study).	– The analysis emphasises the resultant-built form from PRCUTS. The adjoining sites have not been modelled in compliance with the proposed envelope controls.

Appendix 2. Key views

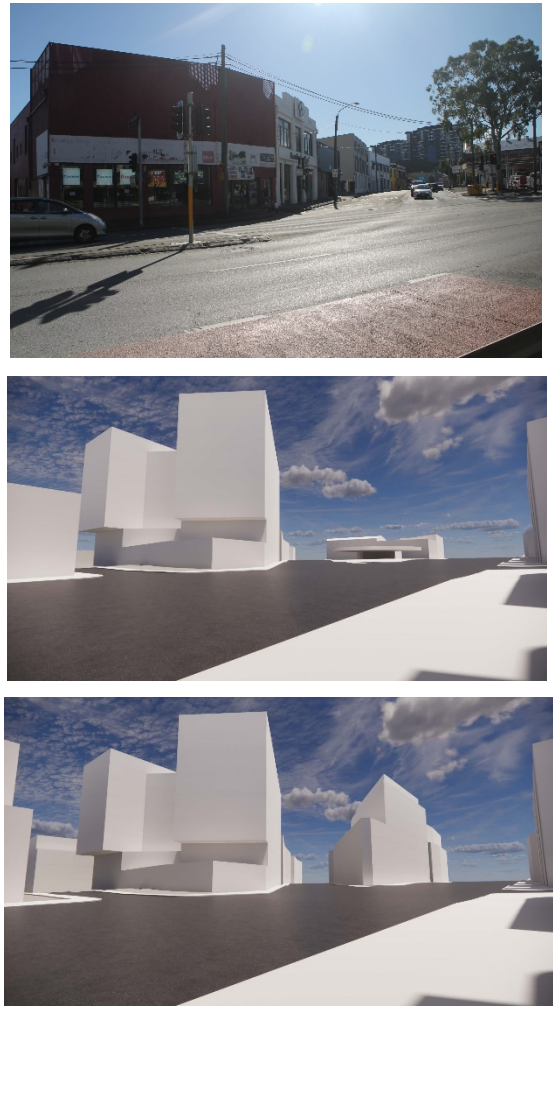
This diagram was developed to capture views towards the site and also the character buildings and elements within the wider study area, as part of the contextual analysis. Photomontages were then prepared to test the visibility of the developed site from key (public) locations. Some examples are included below.

View 9 – down Pyrmont Bridge Road

View 6 – from Parramatta Road looking west



View 5 – to the corner site looking north



Top: photograph of existing condition | Middle: the Planning Proposal in the existing context | Bottom: the Planning Proposal with the PRCUTS envelopes