



Urban Design Report - Rev B

311 Hume Highway Liverpool

May 2015

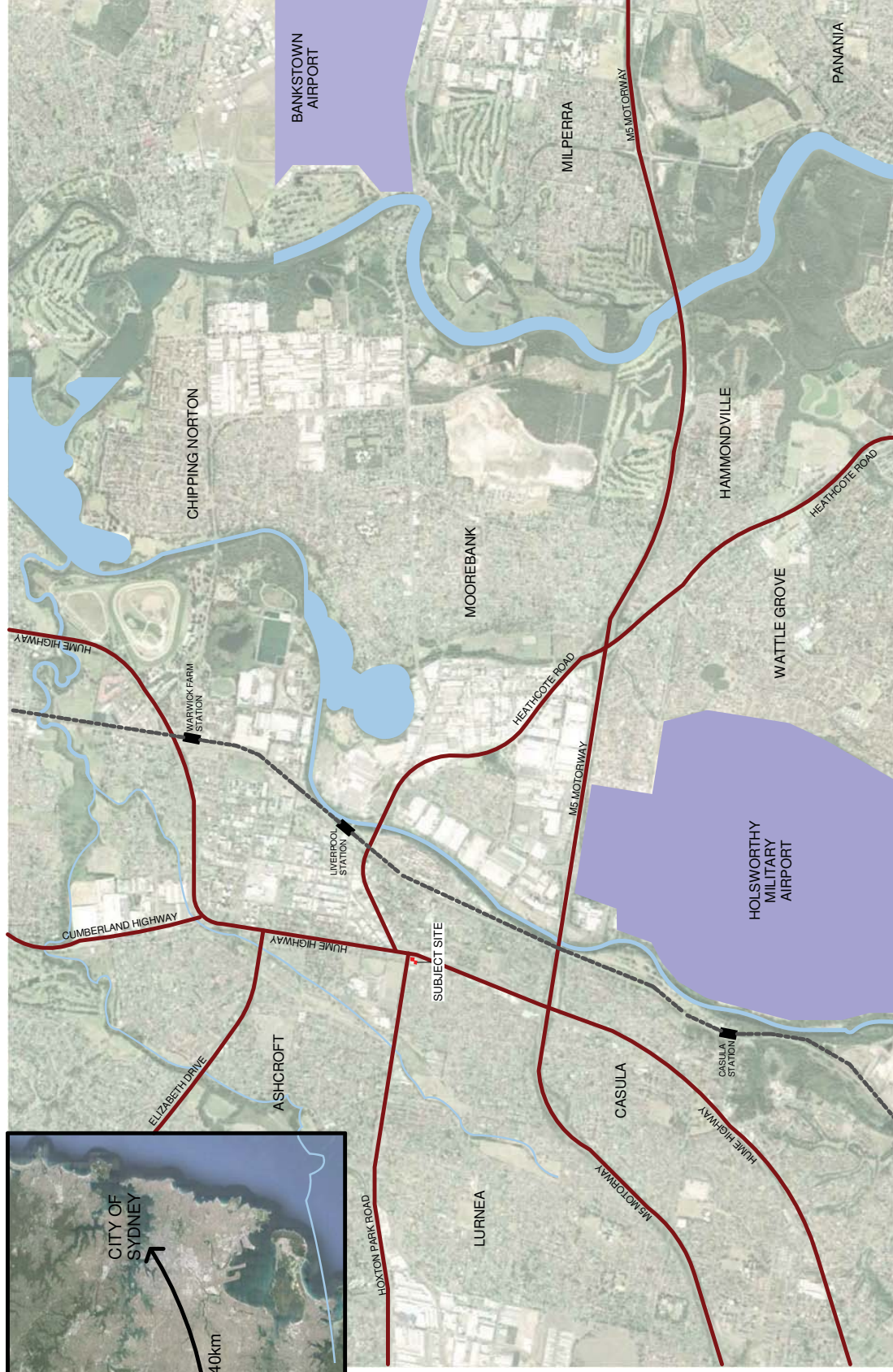
Location and Regional Context



LOCATION MAP
SOURCE: GOOGLE MAPS

Regional Context

The subject site is located within the Liverpool City Centre and is a part of the 25 year Metropolitan Strategy for Sydney. The NSW Government is undertaking sub regional planning across the city including preparing the South West sub regional Strategy. The South West sub regional Strategy will apply to the local government areas of Wollondilly, Canberron, Campbelltown and Liverpool. This strategy is helping to put new housing and jobs in place right across the city. Liverpool is undergoing extensive regeneration responding to Sydney's growing population, located 40km south-west of Sydney's central business district with access to direct freeways (M7 and M5) and train line services to the city and Eastern Suburbs.



REGIONAL CONTEXT PLAN
SOURCE: GOOGLE MAPS

Location and Surrounding Context

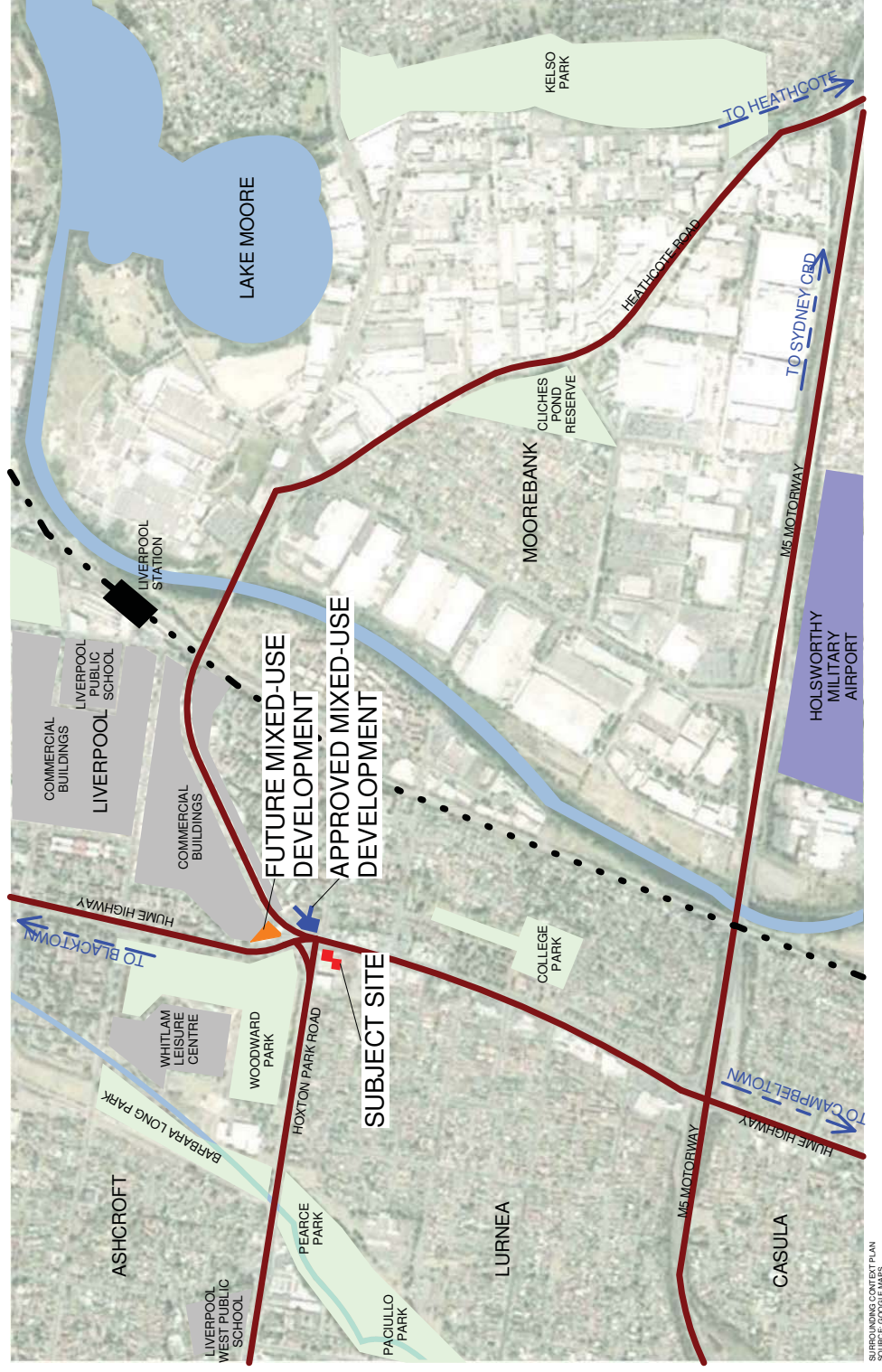


SOUTH-WEST OF LIVERPOOL CITY CENTRE
SOURCE: LIVERPOOL CITY CENTRE VISION 2006, LIVERPOOL CITY COUNCIL AND
NSW DEPARTMENT OF PLANNING

Liverpool City Centre

The site is in a prominent location at the intersection of Hume Highway, Hoxton Park Road and Macquarie Street, Liverpool and is a key entry to the south western side of the Liverpool City Centre. The Liverpool City Centre is endowed with a number of highly desirable attributes, which if appropriately harnessed could be the catalyst for meeting a high quality environment and vastly improved and strengthened economy. These attributes include established transport connections (rail and highways), the Georges River, heritage elements and public open spaces within the City Centre.

The Liverpool City Centre possesses favourable economic elements including established retail and commercial cores. The dominant health and educational precincts also contribute to the City Centre. The subject site is principally located to the south-west of the City Centre and is principally a mix of use including residential, commercial and public buildings. The subject site is a large plot of land, large enough to accommodate a range of large mixed use buildings will establish and characterise the area.



SURROUNDING CONTEXT PLAN
SOURCE: GOOGLE MAPS

Site Photos



1.



5.



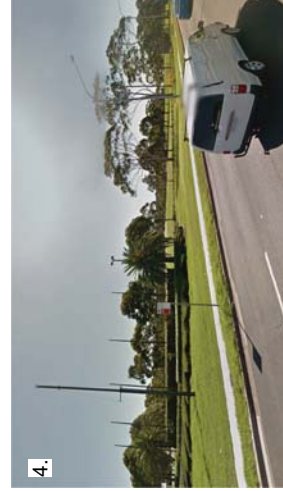
6.



2



3.



4.



7.

1 - Existing subject site - at the corner of Hume Highway and Hoxton Park Road.
SOURCE: GOOGLE MAPS

2 - Approved mixed use development at the corner of Macquarie Street and Mill Road. Comprises of up to 29 storeys.
SOURCE: S&P PLANNING REPORT

3 - Collingwood Hotel - Heritage listed building adjoining to subject site.
SOURCE: GOOGLE MAPS

4 - Woodward Park - Fronting Hoxton Park Road and Hume Highway, adjacent to subject site.
SOURCE: GOOGLE MAPS

5 - Hume Highway - main street with commercial activity along the street.
SOURCE: GOOGLE MAPS

6 - R2 Low Density Residential zone characterising surrounding area.
SOURCE: GOOGLE MAPS

7 - R3 Medium Density Residential zone characterising surrounding area.
SOURCE: GOOGLE MAPS

Existing Site and Context

Site Description

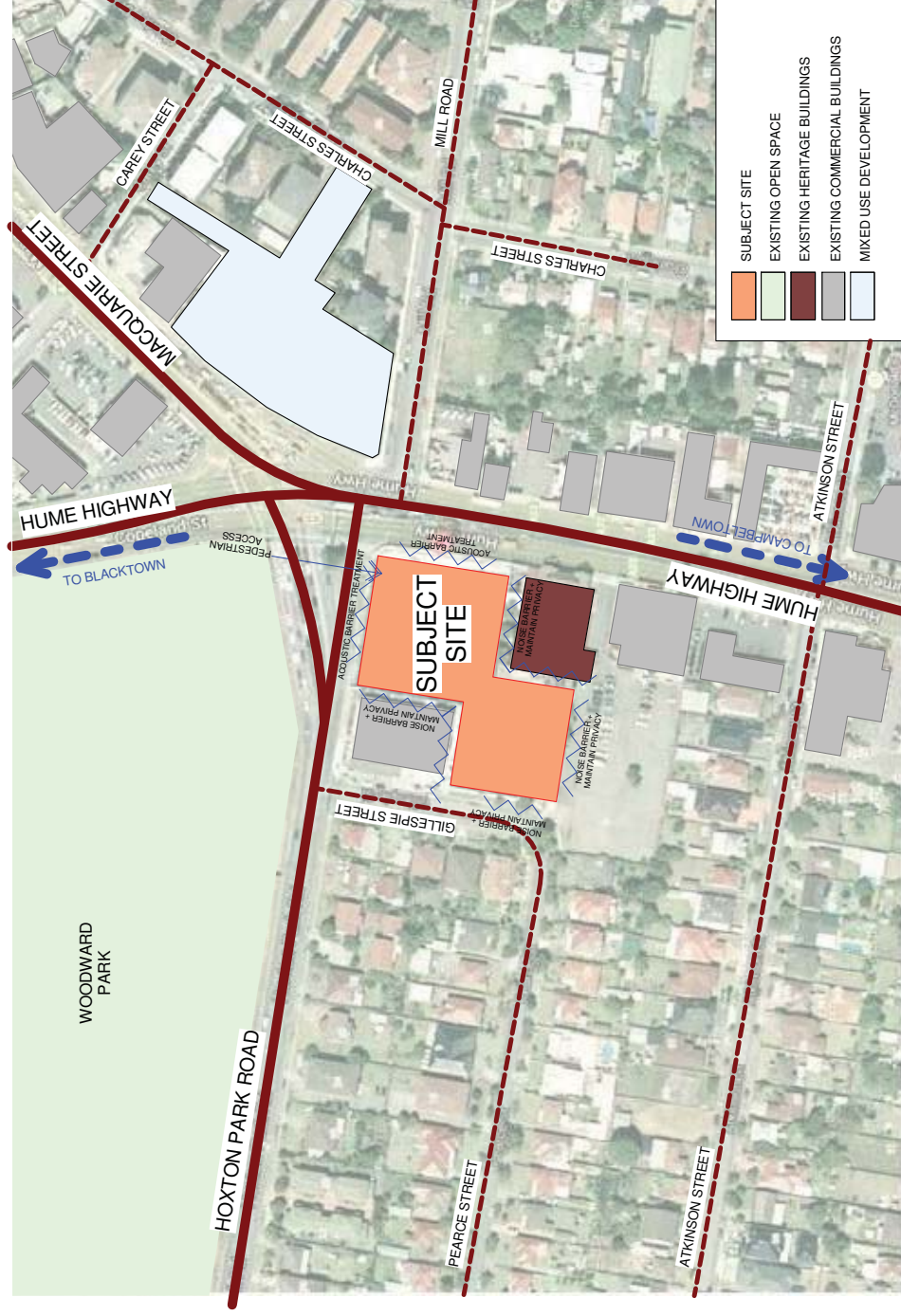
The site is bounded by the Hume Highway, Hoxton Park Road and Gillespie Street and includes 1 land parcel: Lot DP 1004792, known as No. 311 Hume Highway, Liverpool.

The site is an irregular shape and has an area of 4632m² with major frontages to the Hume Highway and Hoxton Park Road and a rear length along Gillespie Street. The site slopes slightly towards the rear of the site with frontages to the Hume Highway of approximately 59m, approximately 60m to Hoxton Park Road and approximately 30m to Gillespie Street. The site is currently vacant and has been previously excavated for a 4 level basement.

Surrounding Development

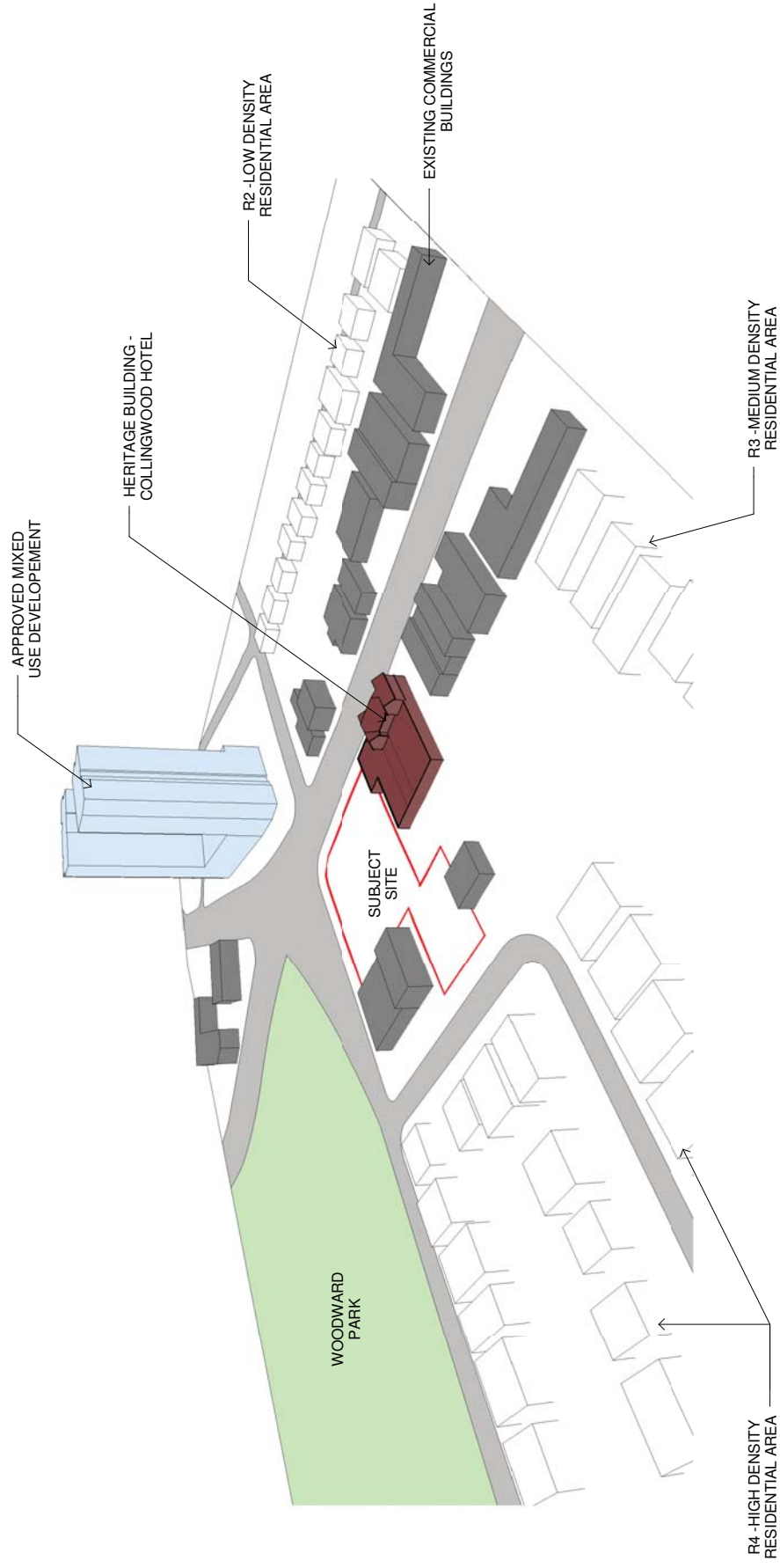
The site marks a prominent gateway to the Liverpool City Centre at the intersection of the Hume Highway, Macquarie Street and Hoxton Park Road. Macquarie Street is a major road which leads into the Liverpool City Centre as well as connecting Liverpool to the Sydney CBD.

Adjacent to the subject site is an approved mixed use development at the corner of Macquarie Street and Mill Road comprising of up to 29 storeys. The site is surrounded by a range of land zones including B6 Enterprise Corridor, B1 Neighbourhood Centre, R4 High Density Residential Area, R3 Medium Density Residential Area, R2 Low Density Residential Area and RE1 Public Recreation with varying heights.



SITE LOCATION AND SURROUNDING CONTEXT PLAN
SOURCE: GOOGLE MAPS

Existing Site and Context - 3D



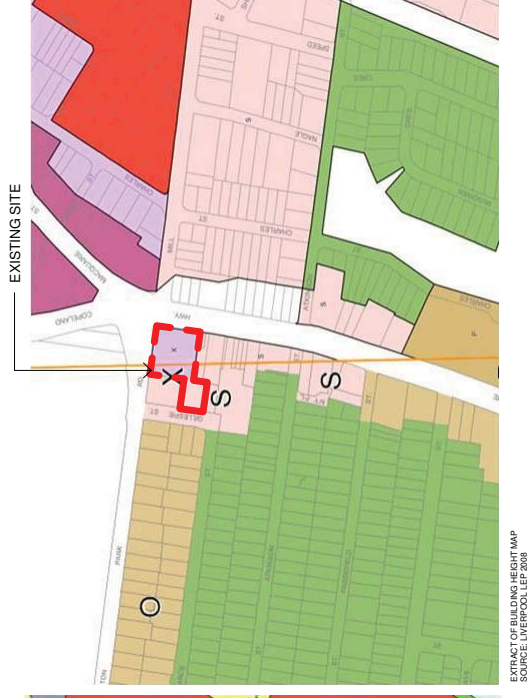
Liverpool LEP 2008 Controls



Land Zoning - B6 Enterprise Corridor

The objectives of the B6 Enterprise Corridor zone are:

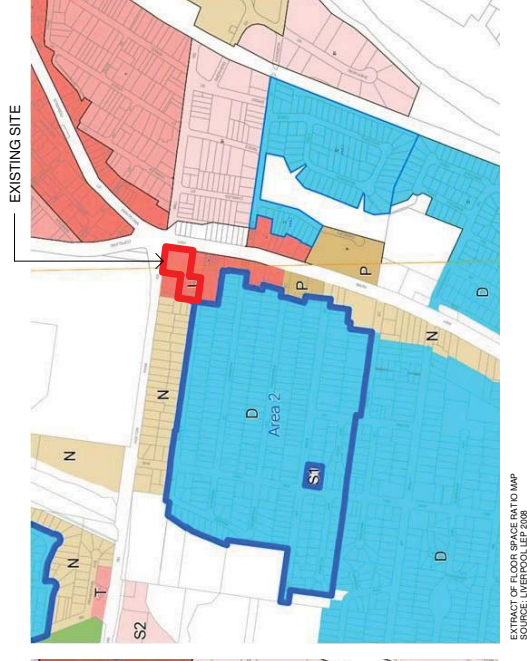
- To allow a mix of commercial and residential developments
- To promote businesses along main roads and to encourage a mix of compatible uses.
- To provide a range of employment uses (including business, office, retail and light industrial uses).
- To maintain the economic strength of centres by limiting the retail activity
- To provide primarily for businesses along key corridors entering Liverpool City Centre, major local/retail centres.
- To ensure residential development is limited to land where it does not undermine the viability or operation of businesses.
- To Provide for residential uses, but only as part of a mixed use development.



Height of Buildings - S-24m and X-45m

The objectives of the Height of Buildings are:

- to establish the maximum limit within which buildings can be designed and floor space can be achieved
- To permit building heights that encourage high quality urban form
- To maintain satisfactory sky exposure and daylight to buildings and public areas
- To provide building heights that ensure sunlight access to key areas and public domain
- To nominate heights that will provide an appropriate transition in built form and land use intensity

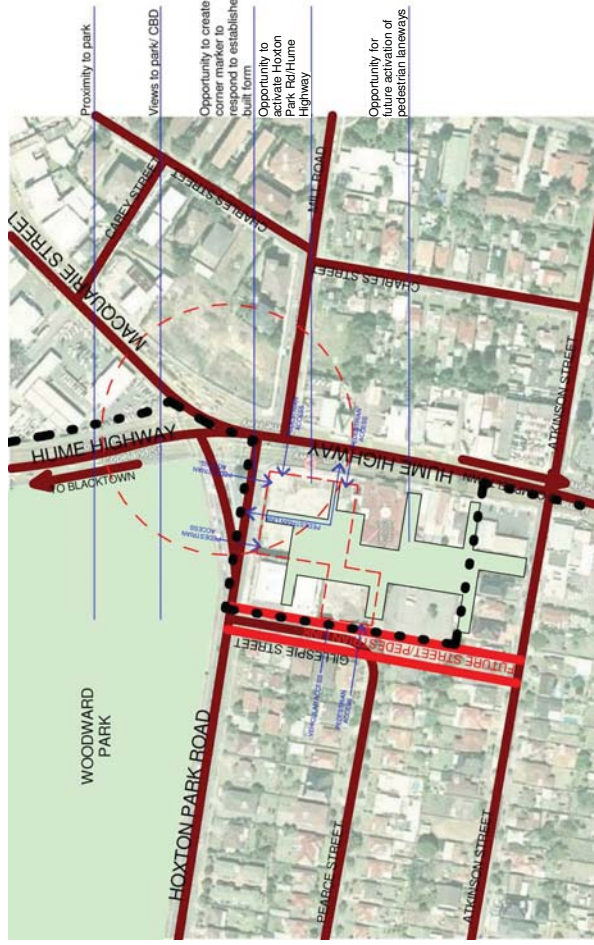


Floor Space Ratio - U-2.5:1

The objectives of the Floor Space Ratio are:

- To establish the maximum development density and intensity of land use, accounting for the availability of infrastructure and generation of vehicular and pedestrian traffic
- To control building density and bulk in relation to the site area and within building envelopes (maximum building height limits) in order to achieve the desired future character of the city centre
- To minimise any adverse environmental impact on the use or enjoyment of adjoining properties
- To maintain an appropriate visual relationship between new development and the existing character of areas or locations that are not undergoing or likely to undergo a substantial transformation
- To provide an appropriate correlation between the size of a site and the extent of any development on that site
- To facilitate design excellence in the Liverpool city centre by ensuring the extent of floor space within building envelopes (maximum building height limits) leaves generous space for the articulation and modulation of design.

Opportunities and Constraints



OPPORTUNITIES DIAGRAM
SOURCE: GOOGLE MAPS

Opportunities

Built Form

- To create corner element markers. This response to the building opposite the site as well as keeping in a contextual scale to the historical Hotel next to the site.
- Create a perimeter block overlooking a central courtyard to define the open space.
- Create built form markers to the adjoining park.
- Provide communal open space within the site.
- Respond to the established pattern of grain and human scale within the precinct.

Connections to Park Land and Open Space

- Connects to the existing Woodward Park throughout the proposed site.
- Address level differences by providing stairs and accessible pathways that are connected to the street and public domain.
- Units are to overlook and address to the open space to provide natural surveillance to the park.

Environmental and Amenities

- Maximise district views for future units.
- Maximise amenity to the interior of the units in terms of solar access and natural ventilation performance, through providing practical unit layouts, size and facilities to residents.



CONSTRAINTS DIAGRAM
SOURCE: GOOGLE MAPS

Constraints

Street Level Treatment

- Provide activity along both the Hume Highway and Hoxton Park Road.
- Commercial footprint should be sleeved by fine grain facade on street level.
- Minimise vehicular access and increase pedestrian amenities.

Environmental and Amenity Impacts

- Avoid overshadowing and achieve solar access to communal open space.
- Minimise view loss impact on adjoining residents. Establish view corridors for the surrounding developments.

Option A - Site Plan and 3D Views

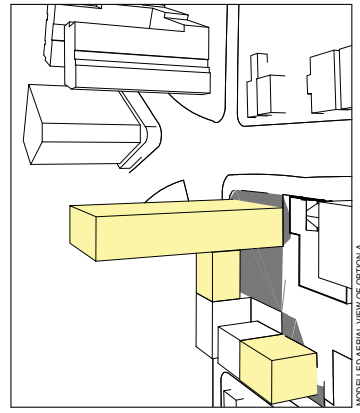
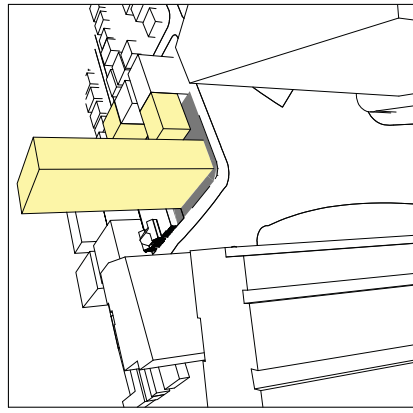
Option A - Objectives

Option A consists of a 32 storey (100m) building on the intersection of the Hume Highway and Hoxton Park Road and two 8 storey (25m) buildings addressing Hoxton Park Road and Gillespie Street. The development results in an increase in the generation of floor space for housing in close proximity to major transport links. This Option will result in a development providing a gateway to the Liverpool City Centre.

The public benefits arising from this option include:

- View corridors between buildings and surrounds
- Proposed open space connecting to surrounds and adjacent park
- Maximise views to adjacent Woodward Park
- Minimal overshadowing to adjoining Heritage building
- Party wall buildings
- Increased open space with green link between buildings
- Future precinct planning

HOXTON PARK ROAD

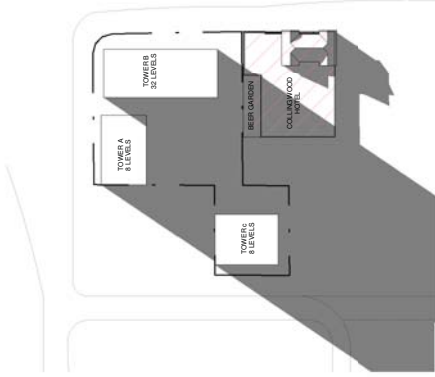


Option A - Overshadowing and Street View

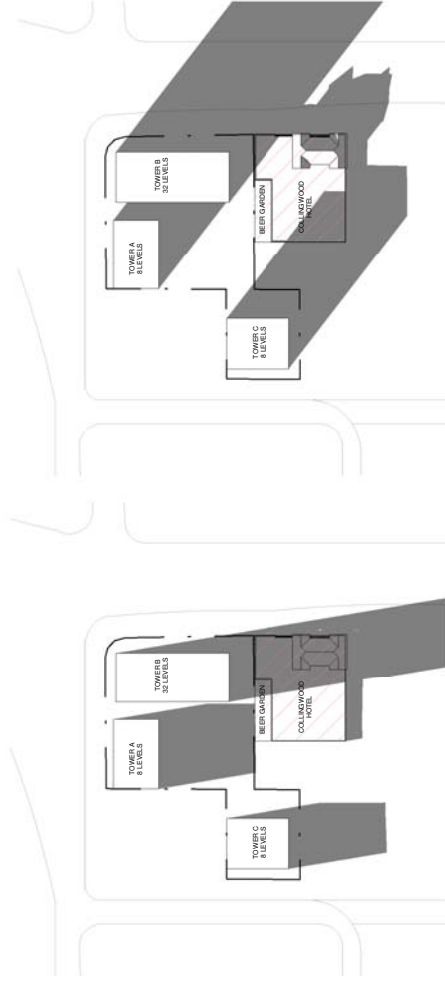
Overshadowing

The overshadowing arising from this option includes:

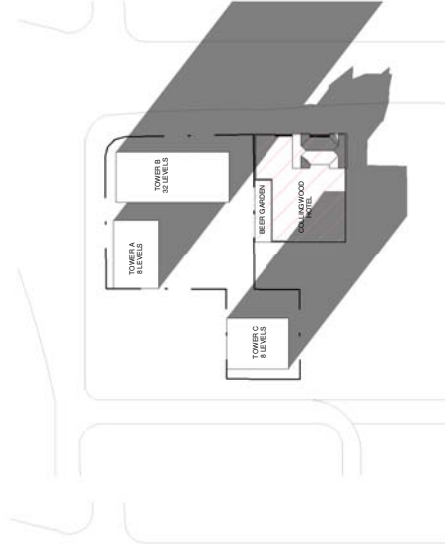
- Proposed building form has overshadowed the proposed new open space in winter
- The bulk of Tower B is positioned along the Hume Highway with Tower A and Tower C having a maximum height of 8 levels (25m). This results in minimal overshadowing in winter to open space of the heritage building.



SOLAR STUDY - OPTION A - WINTER SOLSTICE 9am



SOLAR STUDY - OPTION A - WINTER SOLSTICE 12pm

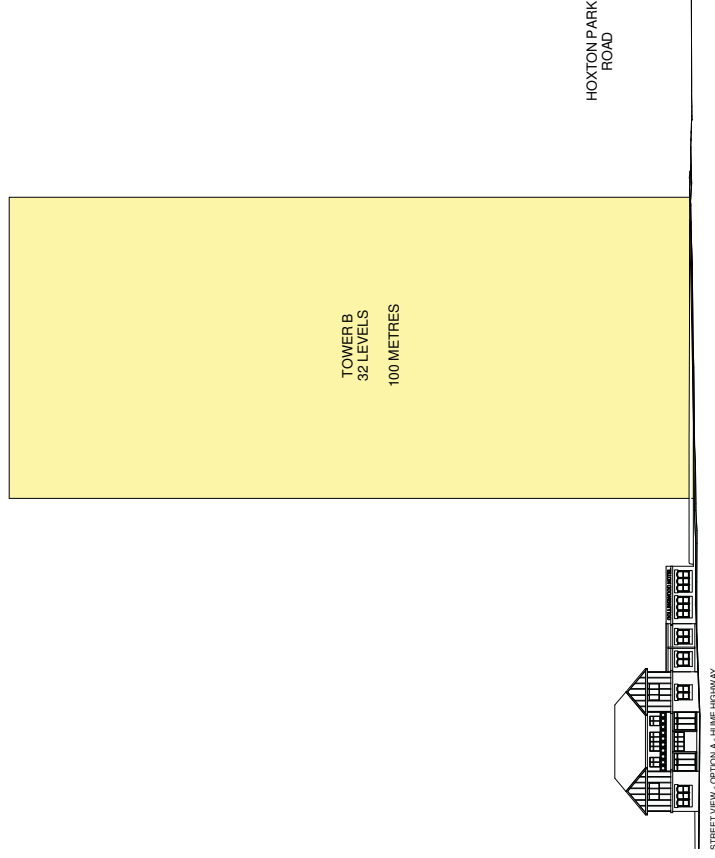


SOLAR STUDY - OPTION A - WINTER SOLSTICE 3pm

Street View

The benefits arising from the option include:

- Retail and commercial footprints on street level
- Three level Facade Projections to Tower B providing an active street frontage with retail/commercial activity to both the Hume Highway and Hoxton Park Road.
- Tower B offset from southern boundary defining separation between Heritage buildings along the Hume Highway.
- View corridor between Tower B and heritage building creating a green buffer/peDESTrian link connecting to proposed open space.
- Facade Projections from Tower B in scale with adjoining heritage building creating a transition along the streetscape



Option B - Site Plan and 3D Views

Option B - Objectives

Option B consists of a 32 storey (100m) building development on the intersection of the Hume Highway and Hoxton Park Road and two smaller buildings of 6 storeys (19m) and 8 storeys (25m) building addressing the Hume Highway and Gillespie Street. The development results in an increase in the generation of floor space for housing in close proximity to major transport links. This Option will result in a development providing a gateway to the Liverpool City Centre.

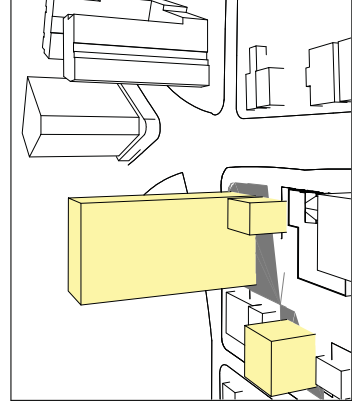
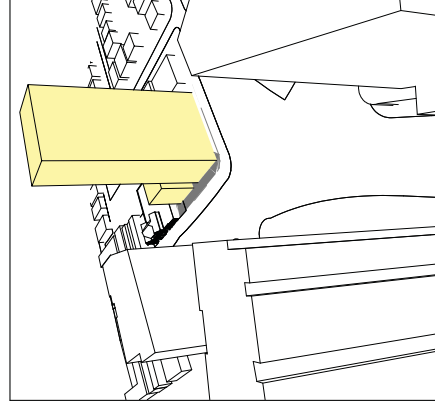
The public benefits arising from this option include:

- View corridor from the Hume Highway between buildings and surrounds
- Maximise views to adjacent Woodward Park

This option however has the following negatives:

- Lack of visual and physical connection to Woodward Park from Building B and communal open space
- Overshadowing to proposed open space
- Overshadowing to heritage building located along the Hume Highway
- Potential overshadowing to existing surrounding buildings

HOXTON PARK ROAD

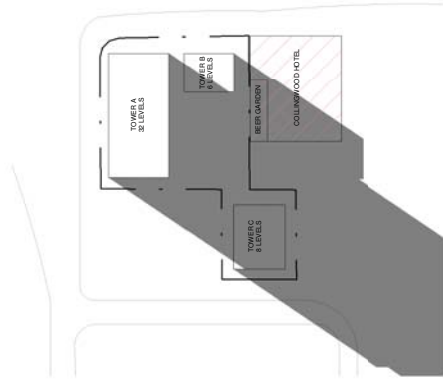


Option B - Overshadowing and Street View

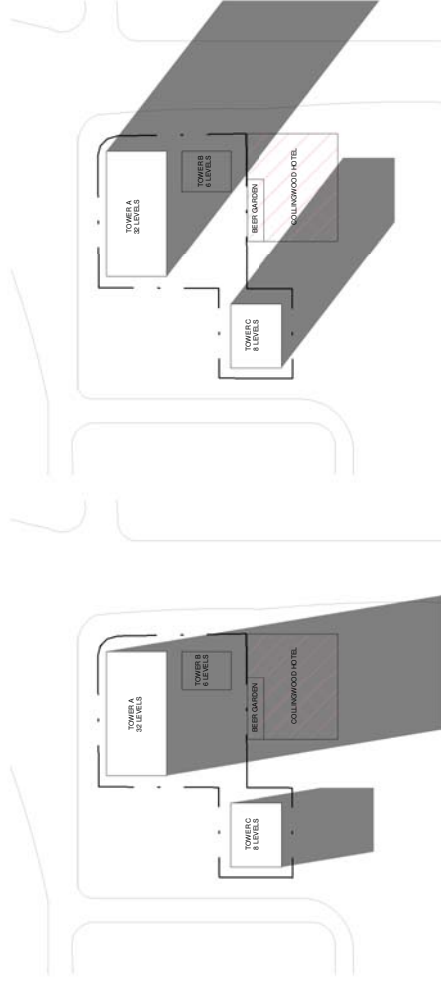
Overshadowing

The overshadowing arising from this option includes:

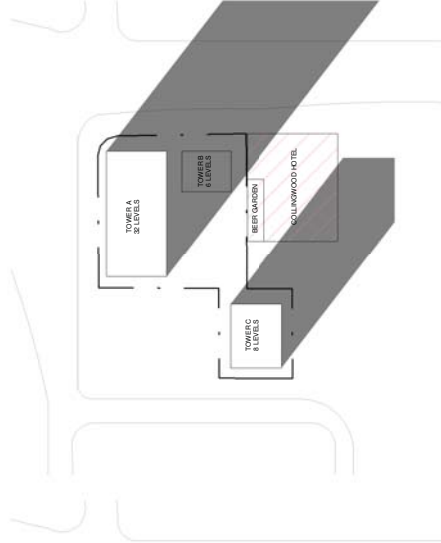
- Proposed building forms overshadow the proposed new open space in winter
- The bulk of Tower A is positioned along Hoxton Park Road with Tower B and Tower C having between 6-8 levels (19-25m).
- Tower A overshadows the open space of the heritage building in winter



SOLAR STUDY - OPTION B - WINTER SOLSTICE 9am



SOLAR STUDY - OPTION B - WINTER SOLSTICE 12pm

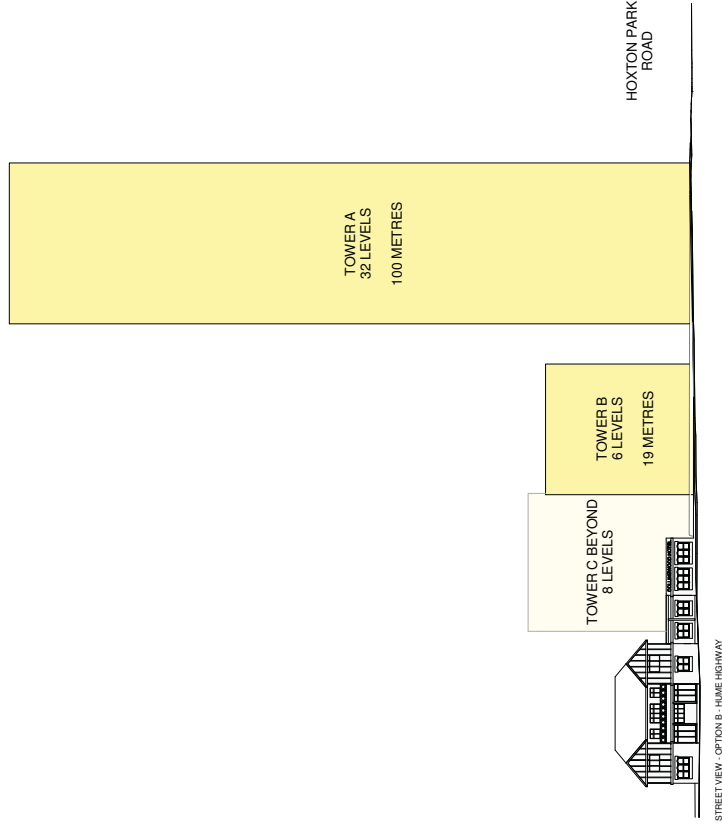


SOLAR STUDY - OPTION B - WINTER SOLSTICE 3pm

Street View

The benefits arising from this option include:

- Tower A having large retail and commercial footprints on street level providing an active street frontage to both the Hume Highway and Hoxton Park Road.
- Tower B offset from southern boundary defining separation between the heritage building along the Hume Highway.
- View corridor between Tower A and Tower B creating a pedestrian link connecting to proposed open space.



Option C - Site Plan and 3D Views

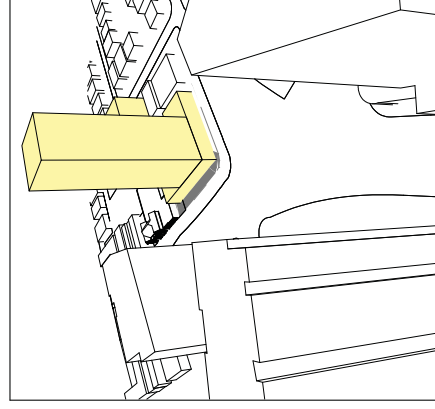
Option C - Objectives

Option B consists of a 32 storey (100m) building development including a 3 level podium on the intersection of the Hume Highway and Hoxton Park Road and one 8 storey building addressing Gillespie Street. The development results in an increase in the generation of floor space for housing in close proximity to major transport links. This Option will result in a development providing a gateway to the Liverpool City Centre.

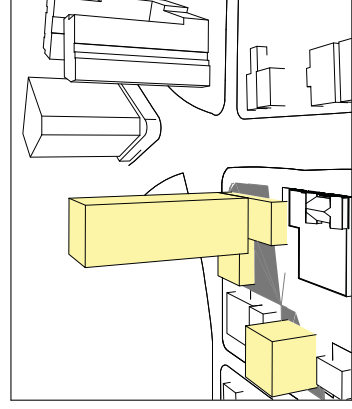
The public benefits arising from this option include:

- View corridor from the Hume Highway between buildings and surrounds
 - Maximise views to adjacent Woodward Park
- This option however has the following negatives:
- Lack of visual and physical connection to Woodward Park from communal open space
 - Overshadowing to proposed open space
 - Overshadowing to heritage building located along Hume Highway
 - Potential overshadowing to existing surrounding buildings
 - Potential view loss for tower on the corner of Macquarie and Mill Street, adjacent to subject site

HOXTON PARK ROAD



Modelled aerial view of Option C



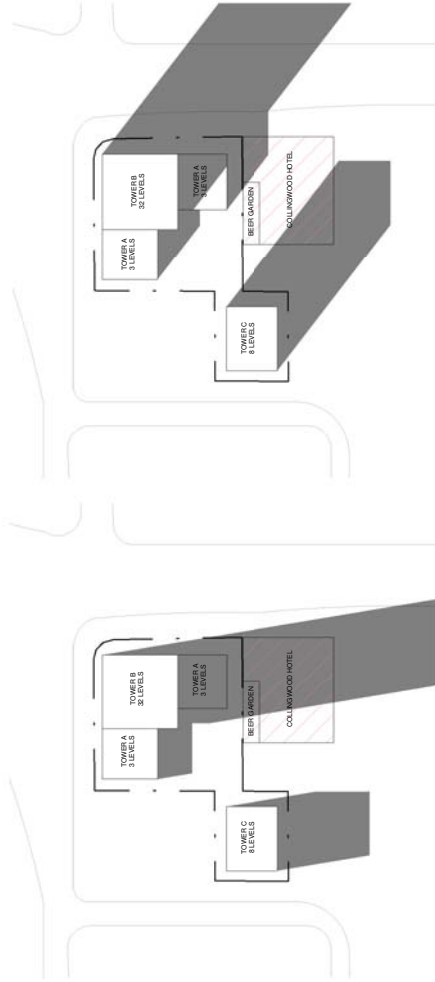
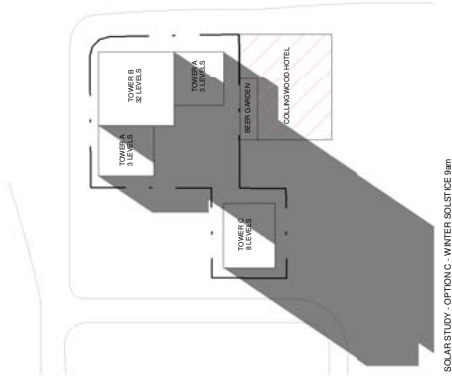
Modelled aerial view of Option C

Option C - Overshadowing and Street Views

Overshadowing

The overshadowing arising from this option includes:

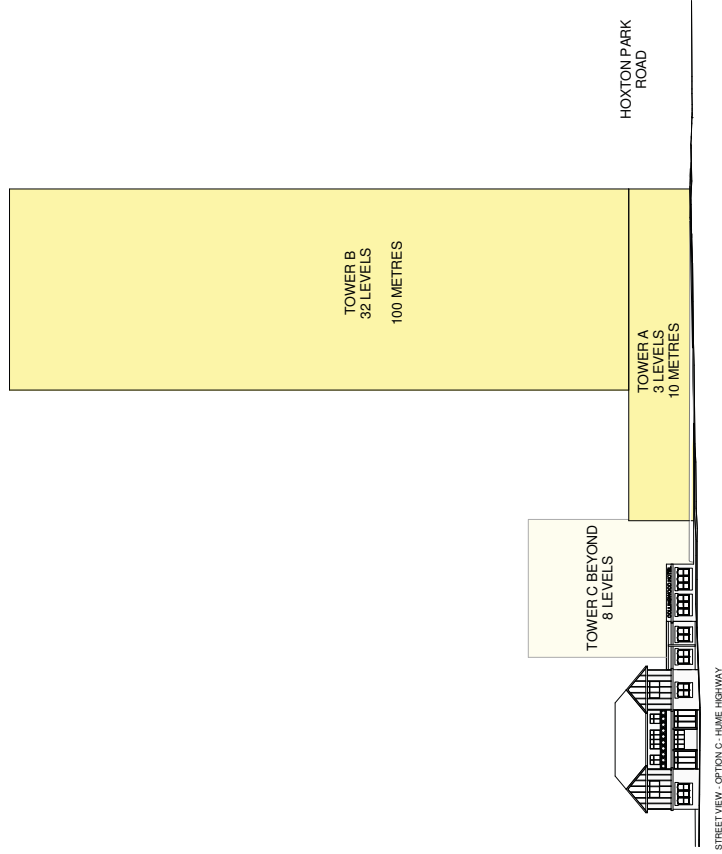
- Proposed building forms overshadows the proposed new open space in winter
- Tower B is positioned on the corner of Hoxton Park Road and Hume Highway. This results with Tower B overshadowing the open space of the heritage building in winter.



Street View

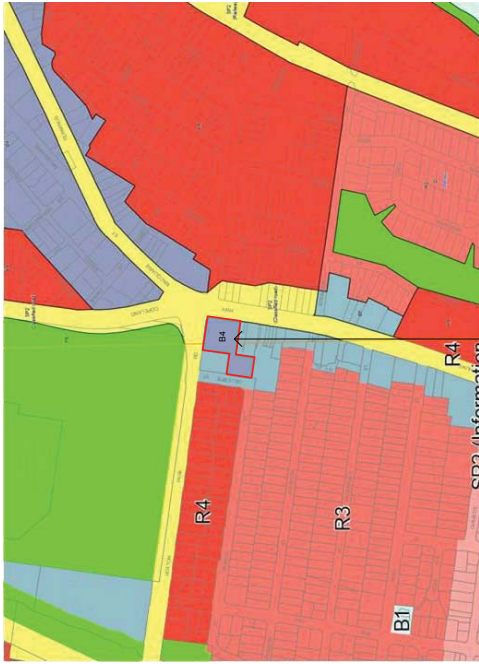
The benefits arising from this option include:

- Tower A having large retail and commercial footprints on street level providing an active street frontage to both the Hume Highway and Hoxton Park Road.
- Tower A offset from southern boundary defining separation between Heritage building along Hume Highway.
- View corridor between Tower A and Heritage building creating a pedestrian link connecting to proposed open space.

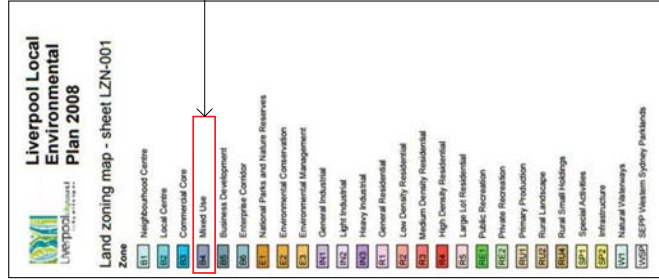


Proposed Liverpool LEP Controls

Land Zoning



SUBJECT SITE
PROPOSED - B4 MIXED USE



SUBJECT SITE
PROPOSED - B4 MIXED USE

Height of Buildings

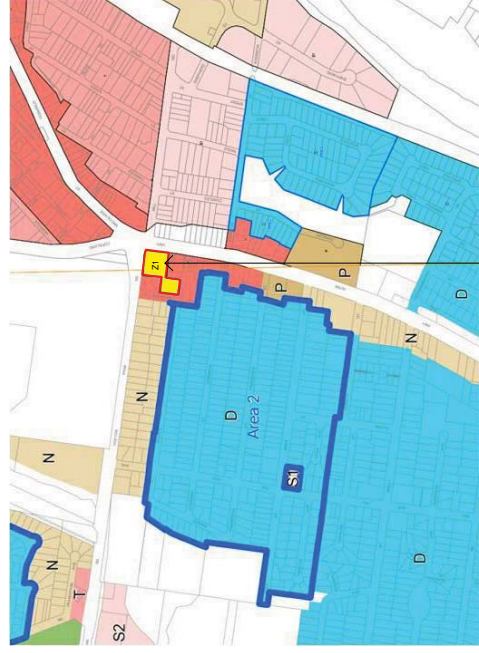


SUBJECT SITE
PROPOSED - S1 25 & AC 100

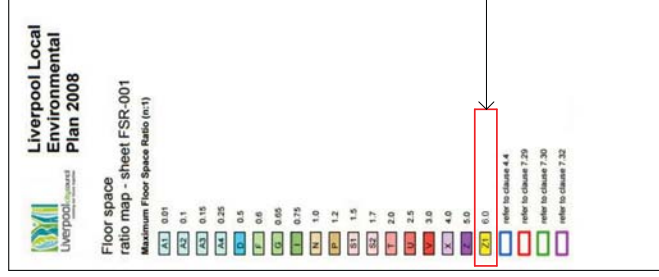


SUBJECT SITE
PROPOSED - AC 100

Floor Space Ratio



SUBJECT SITE
PROPOSED - S1 6.0



SUBJECT SITE
PROPOSED - S1 6.0

PROPOSED FLOOR SPACE RATIO MAP KEY
SOURCE: LIVERPOOL LEP 2008

PROPOSED HEIGHT OF BUILDINGS MAP KEY
SOURCE: LIVERPOOL LEP 2008

Proposed/Future Context

Proposed/Future Context

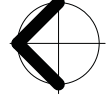
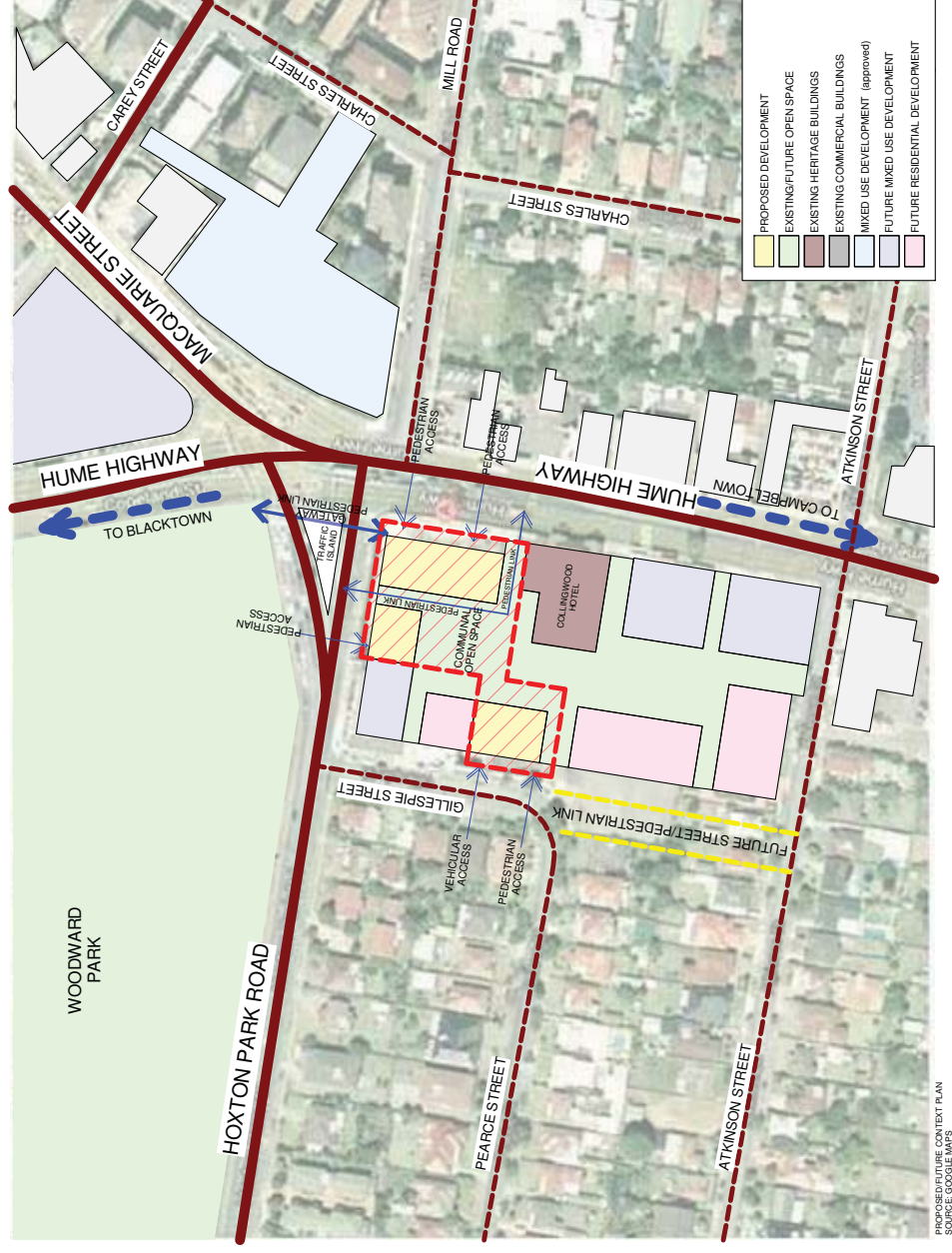
A key component of the preferred option is the introduction of an active street frontage along the Hume Highway and Hoxton Park Road, Liverpool and the increase of pedestrian access in and around the subject site.

The preferred option demonstrates a redevelopment of the area, resulting in an urban development replacing the subject site (currently vacant and excavated) with an active retail and residential site.

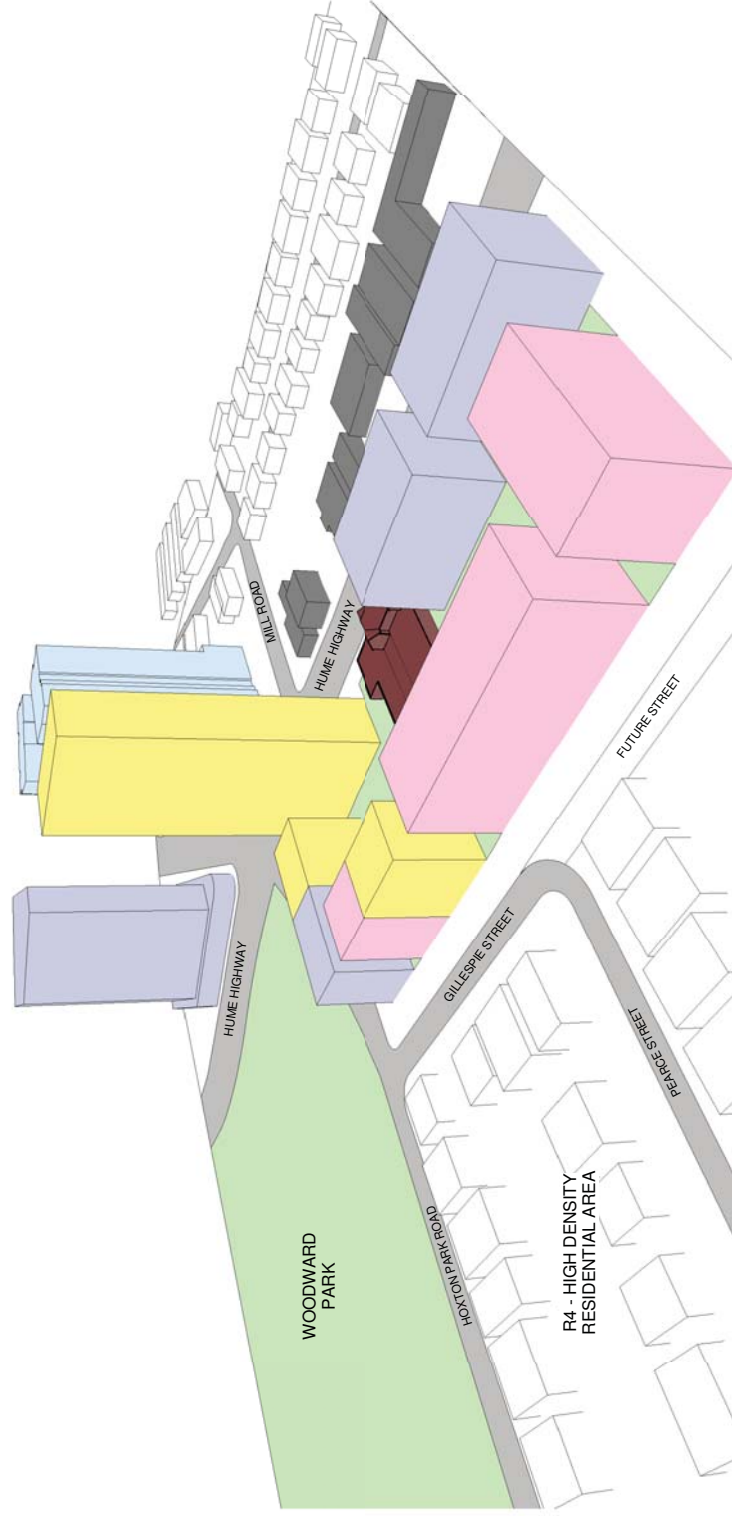
The proposed and future development of this site can also facilitate a new through site pedestrian link from Hoxton Park Road to Atkinson Street. This demonstrates the benefits for the site, and the locality, by:

- Provides a pedestrian link that improves the connections north and south
- Provides a strong pedestrian and visual link to Woodward Park
- Provides an open friendly area with the opportunity to introduce a large open communal area for all surrounds.

The proposed/future redevelopment of the subject site will result in economic benefits and increased vibrancy for the broader Liverpool City Centre, as well as contributing to strengthening links between the south-western edge of the City Centre and the retail and transport core.



Proposed/Future Context - 3D



PROPOSED DEVELOPMENT
EXISTING FUTURE OPEN SPACE
EXISTING HERITAGE BUILDINGS
EXISTING COMMERCIAL BUILDINGS
MIXED USE DEVELOPMENT (approved)
FUTURE MIXED USE DEVELOPMENT
FUTURE RESIDENTIAL DEVELOPMENT

Proposed/Future Development - Site Plan

The subject site is ideally located to deliver increased housing outcomes within a key corner of the Liverpool City Centre being in close proximity to a major public transport hub. The proposed future developments consists of a 32 storey (100m) building on the intersection of the Hume Highway, Macquarie Street and Hoxton Park Road and two 8 storey (25m) buildings addressing Hoxton Park Road and Gillespie Street. The redevelopment will achieve an increase in housing in a strategic location providing the public with benefits including:

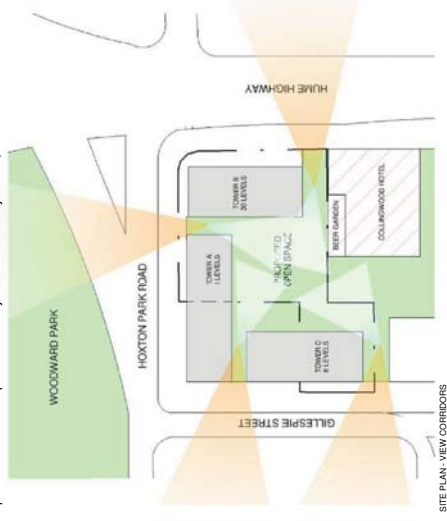
- View corridors between buildings and surrounds
- Proposed open space connecting to surrounds and adjacent park
- Maximise views to adjacent Woodward Park
- Minimal overshadowing to adjoining heritage building
- Party wall buildings
- Increased open space with green link between buildings
- Future precinct planning

Achieving the housing outcomes on this site is achievable at the same time as minimising impacts on the medium and high density residential areas to the south and west of the subject site and surrounding open spaces such as the Woodward Park adjacent to the north of the subject site



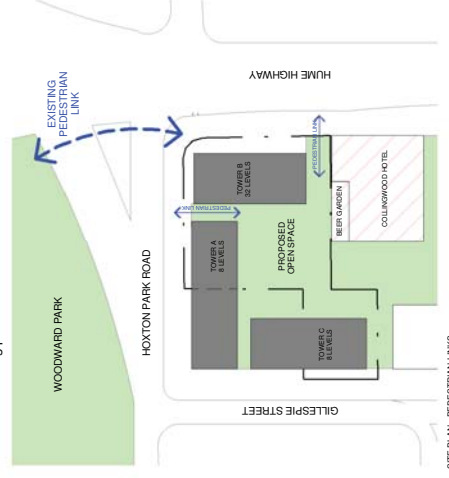
View Corridors

The proposed development takes into consideration the view corridors and the opportunities of connecting visually to the surrounds as well as a visual connection within the subject site. This proposal takes advantage of the views of important spaces such as the public area adjacent to the subject site, Woodward Park.



Pedestrian Links

The proposed development is designed to encourage to maintain and enhance the existing form of pedestrian access across Hoxton Park Road to Woodward Park, providing increased pedestrian amenity and accessibility. New pedestrian links into the subject site are encouraged providing access, lighting and visibility ensuring a safe and interesting pedestrian environment



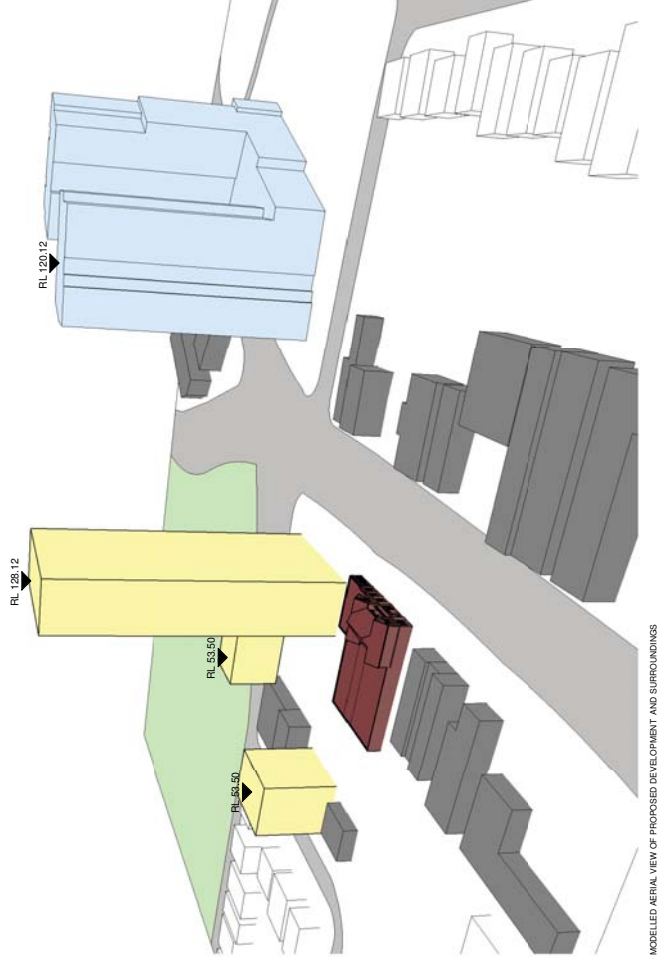
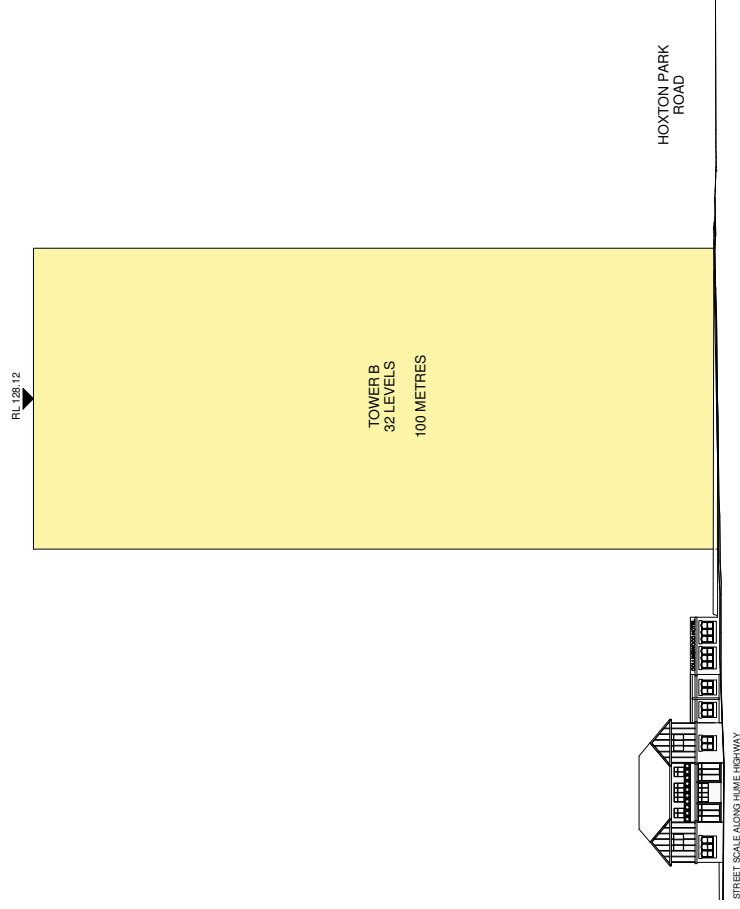
Proposed/Future Development - Building Envelope

Building Heights

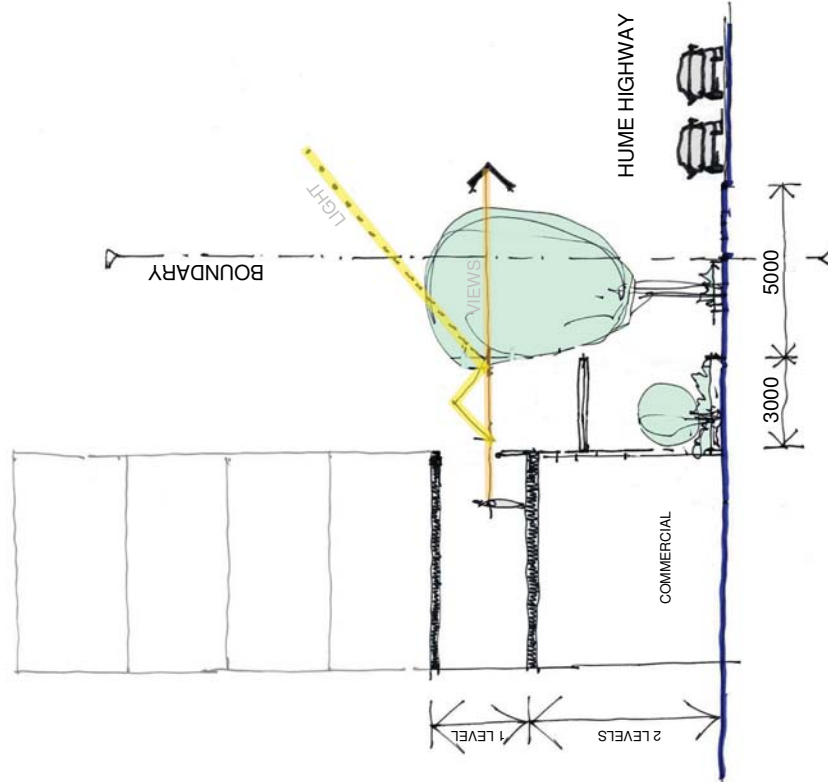
An analysis of the proposed building heights in relation to the surrounding buildings in the Liverpool City Centre has been undertaken during urban design process of the subject site. This was undertaken whilst also analysing the potential shadowing impacts on the adjacent Heritage site, the Collingwood Hotel.

The overall height of the tower in the proposed development relates to the approved mixed development on the corner of Macquarie Street and Mill Road, adjacent to the subject site. This building reaches a top of RL120.12. These heights allow for a gateway to be created between the two buildings connecting back to Liverpool City Centre.

The proposed development of Building A and Building B along Hoxton Park Road and Gillespie Street address the neighbouring residential buildings. By restricting these heights it will allow for the development to fit within its context and enable less overshadowing of both the proposed and existing context.



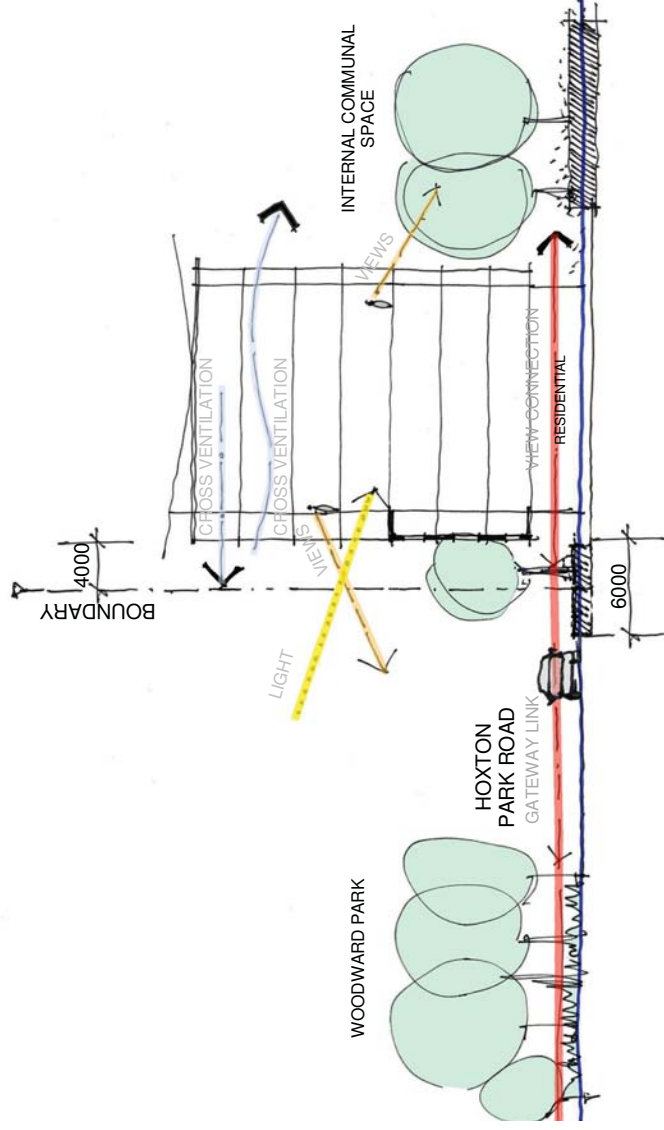
Proposed/Future Development - Connections



Connection to Street

The proposed development integrates and connects to the Hume Highway, enabling safety and passive connection by:

- Provide activity along both Hume Highway and Hoxton Park Road.
- Minimise vehicular access which increases pedestrian amenities along the to large setbacks
- Provides surveillance to street from overhead
- Allowance for light to enter building



Connection to Park

The proposed development integrates and connects to Woodward Park (across Hoxton Park Road), enabling safety and passive connection by:

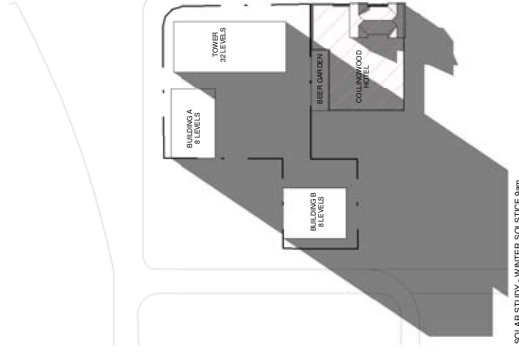
- The existing traffic island on the intersection of Hoxton Park Road provides a safe form of pedestrian access across Hoxton Park Road to Woodward Park
- Units overlook and address the open space to provide natural surveillance to the park.
- View corridors between proposed buildings looking out towards the existing Woodward Park, linking communal open spaces and the park, both visually and physically
- Allows for cross ventilation within built form

Proposed/Future Development - Overshadowing

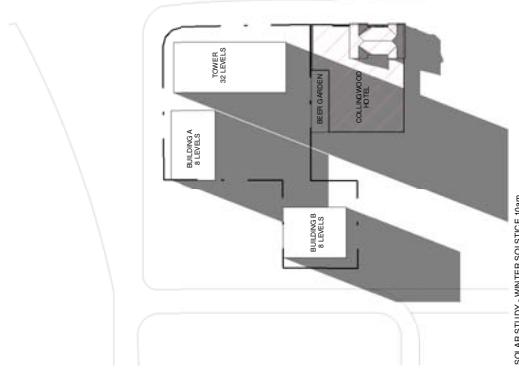
Winter Shadowing Performance

It is acknowledged that the proposed development of the site has the potential to overshadow the low scale developments to the south and west of the subject site. The design of two 8 storey buildings on the site has enabled the heritage Collingwood Hotel to gain afternoon sunlight to the existing beer garden during winter.

The built forms with overshadow the proposed open space in the mornings during winter, however some sunlight is gained in the afternoons.



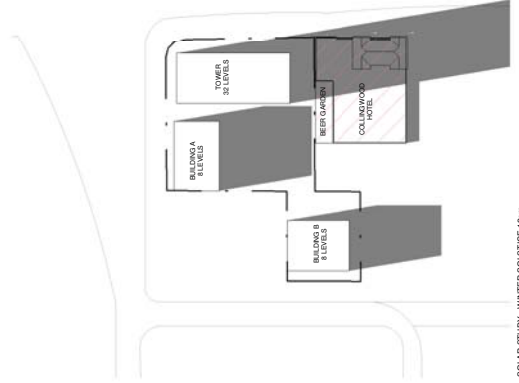
SOLAR STUDY - WINTER SOLSTICE 9am



SOLAR STUDY - WINTER SOLSTICE 10am



SOLAR STUDY - WINTER SOLSTICE 11am



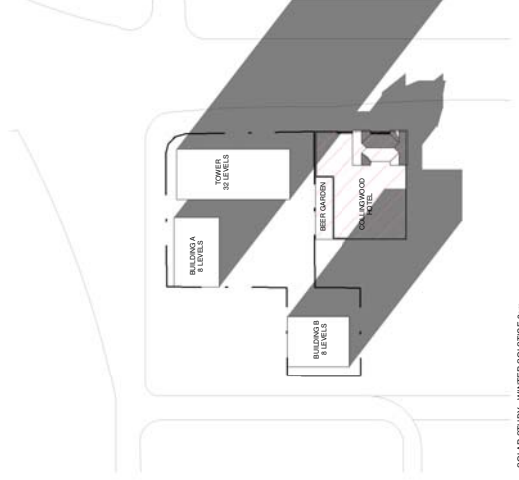
SOLAR STUDY - WINTER SOLSTICE 12pm



SOLAR STUDY - WINTER SOLSTICE 1pm



SOLAR STUDY - WINTER SOLSTICE 2pm



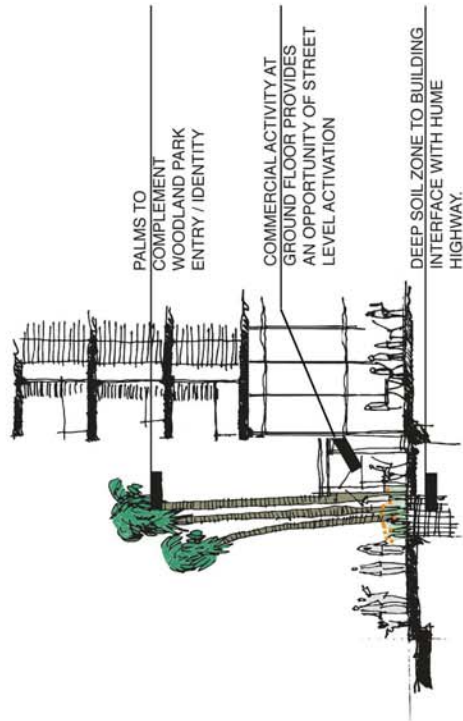
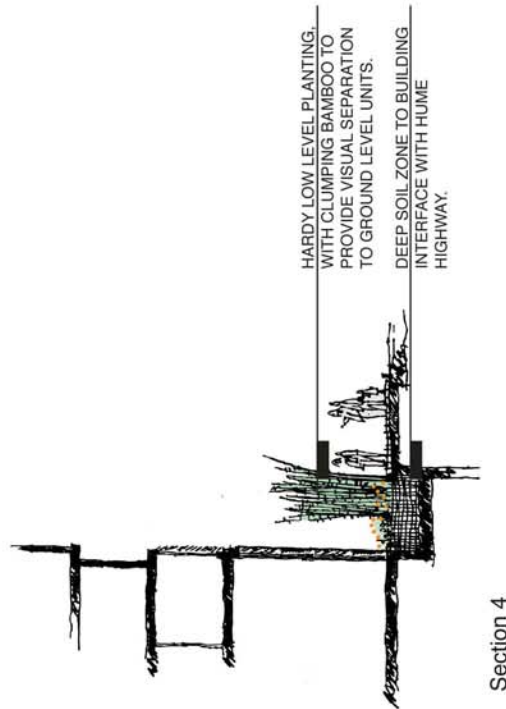
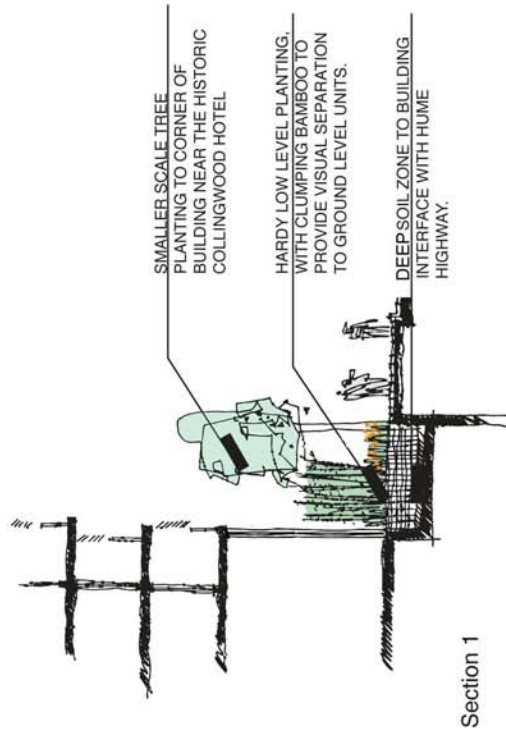
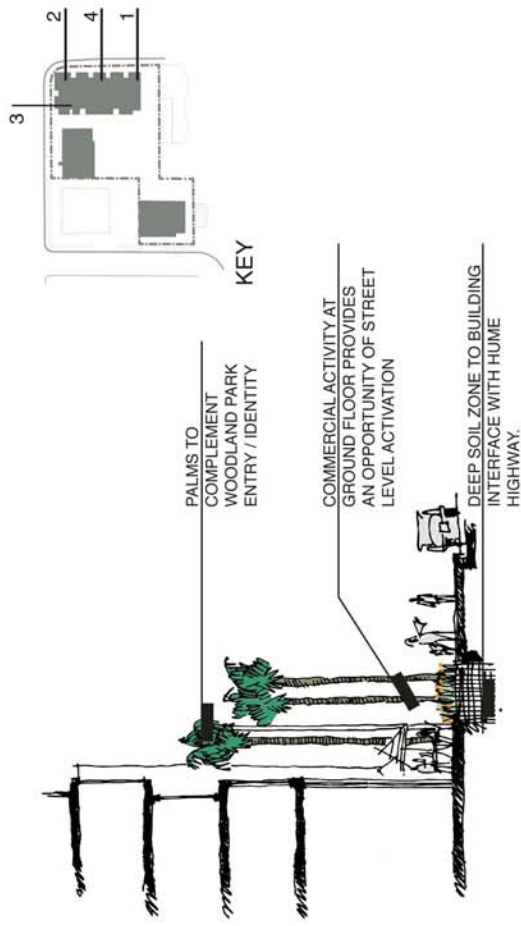
SOLAR STUDY - WINTER SOLSTICE 3pm



**DESIGN
CONTACT
NSI INC**
WITH
AUSTRALIA

[illegible]

Proposed/Future Development - Landscape

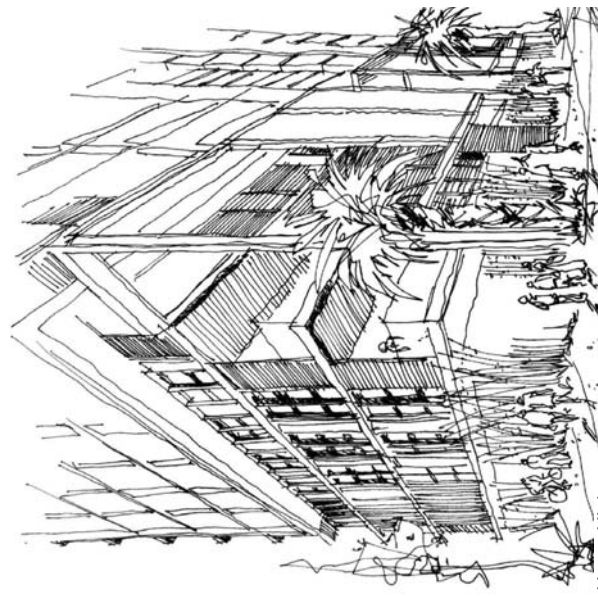


Proposed/Future Development - Landscape



Internal Courtyards

Internal Courtyard space features rainforest style planting, informal paving and incorporated residents recreation and entertainment facilities as well as casual relaxation spaces.



Hume Highway

The building interface is screened and softened with upper story palm canopy and clumping bamboo at the lower levels. Privacy and security fencing and screens have been incorporated within the building.



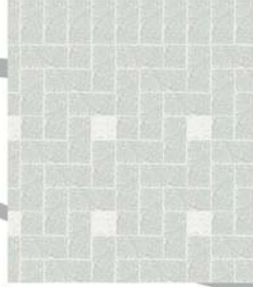
Internal court paving to incorporate textured finishes



Washingtonia palm as identity planting to hume highway and hoxton park road



Clumping bamboo as robust screen



Hume highway and hoxton park road footpath, modular paving to match Liverpool CC "core" paving pattern.



Security and privacy screens to ground level units to be treated as "Art Elements"



Non-invasive vines to boundary walls to soften the the interface and maximise useable space within the courtyard.



Large dimension recycled timber used for internal seating

Proposed/Future Development - Landscape



Internal Courtyard

Internal Courtyard adjacent to the historic Collingwood Hotel.



Hume Highway

Hume Highway interface with Washingtonia Palms and Bamboo

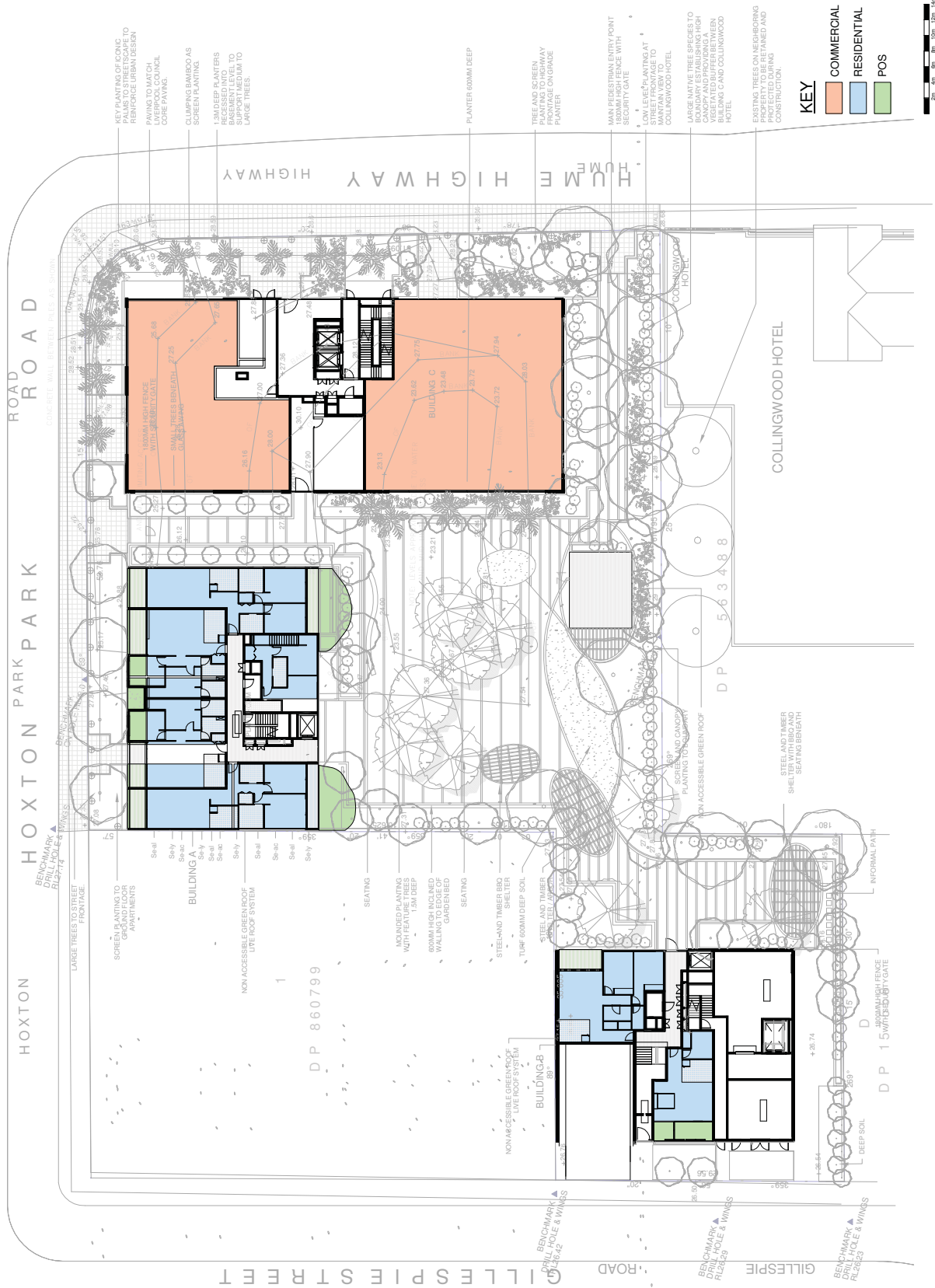
Material and Colour Palette

1. Window Frames - Anodised Aluminium
2. Alucobond Panelling (Vertical)- 'Pure White'
3. Alucobond Panelling (Horizontal) - 'Champagne Metallic'
4. Colourback Glass - 'White'
5. Colourback Glass - 'Light Grey'
6. Louvres - 'Silver Metallic'
7. Louvres - 'Timber Look' (Australian Cedar)
8. White Stone Planter Bed



COLOUR / IMAGE BOARD

PROPOSED RESIDENTIAL UNIT DEVELOPMENT WITH COMMERCIAL / RETAIL SPACE TO GROUND FLOOR
3111 HUME HIGHWAY, LIVERPOOL

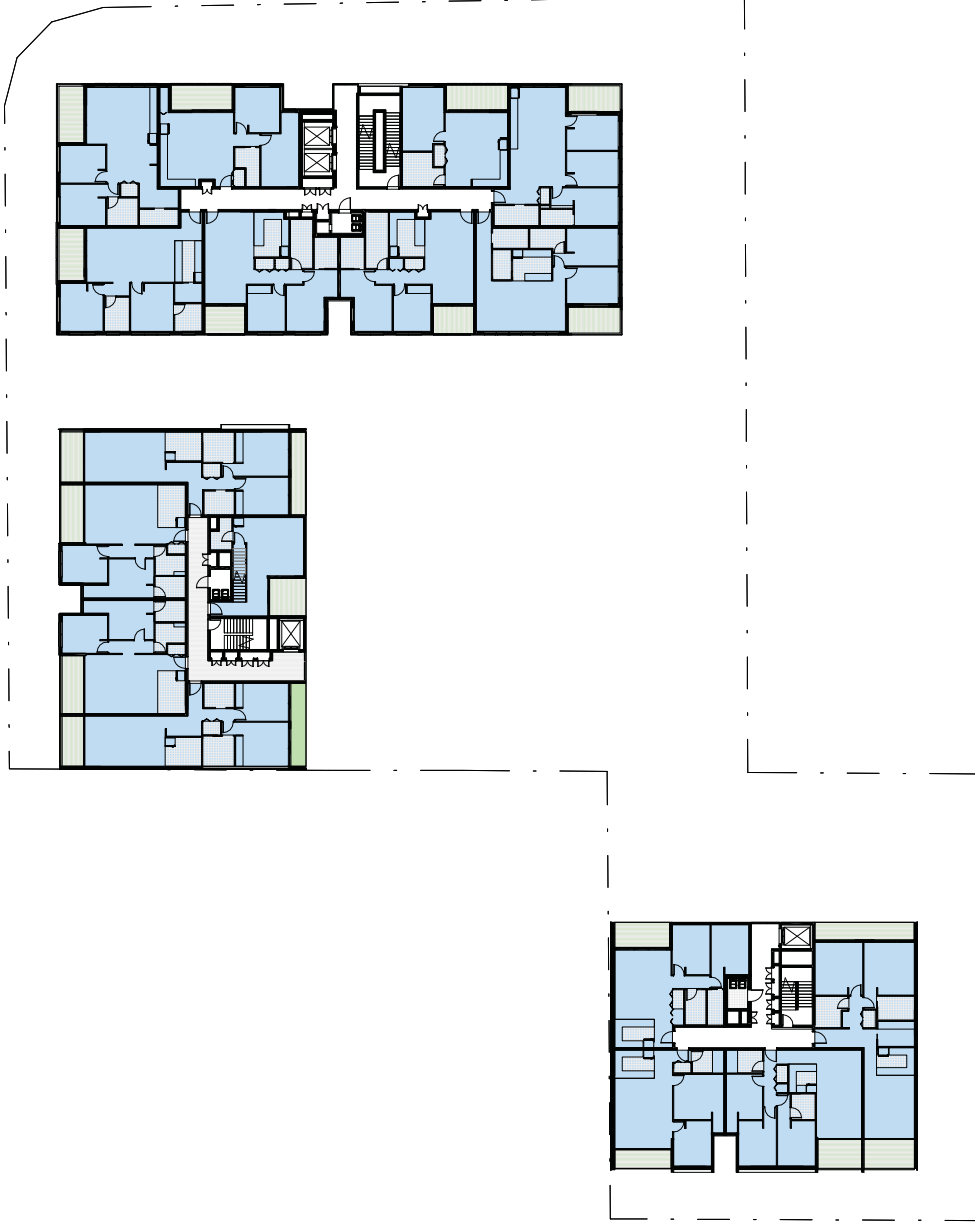


Architectural Drawings - Typical Floor Plan

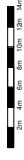
HOXTON PARK ROAD

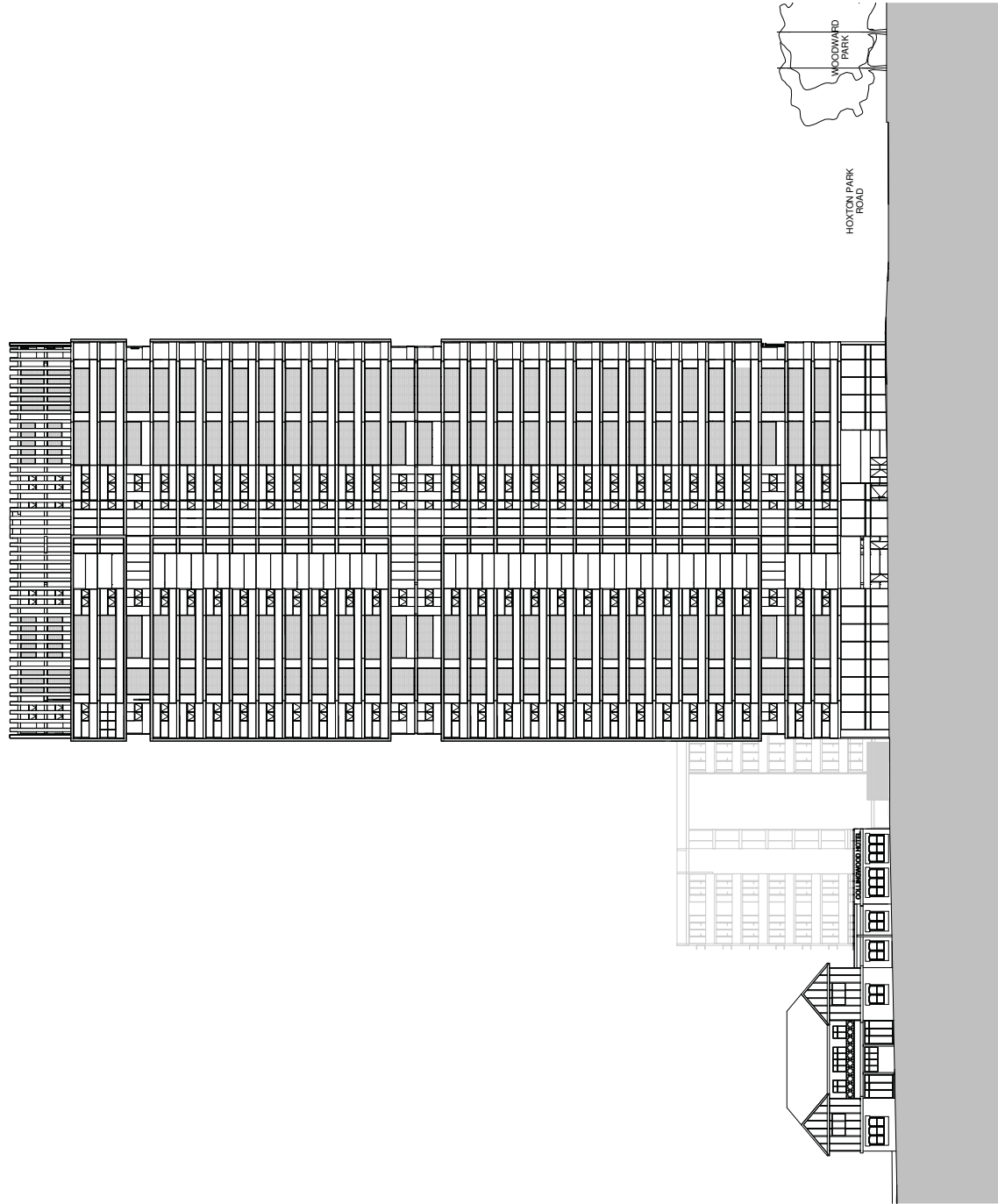
HUME HIGHWAY

GILLESPIE STREET

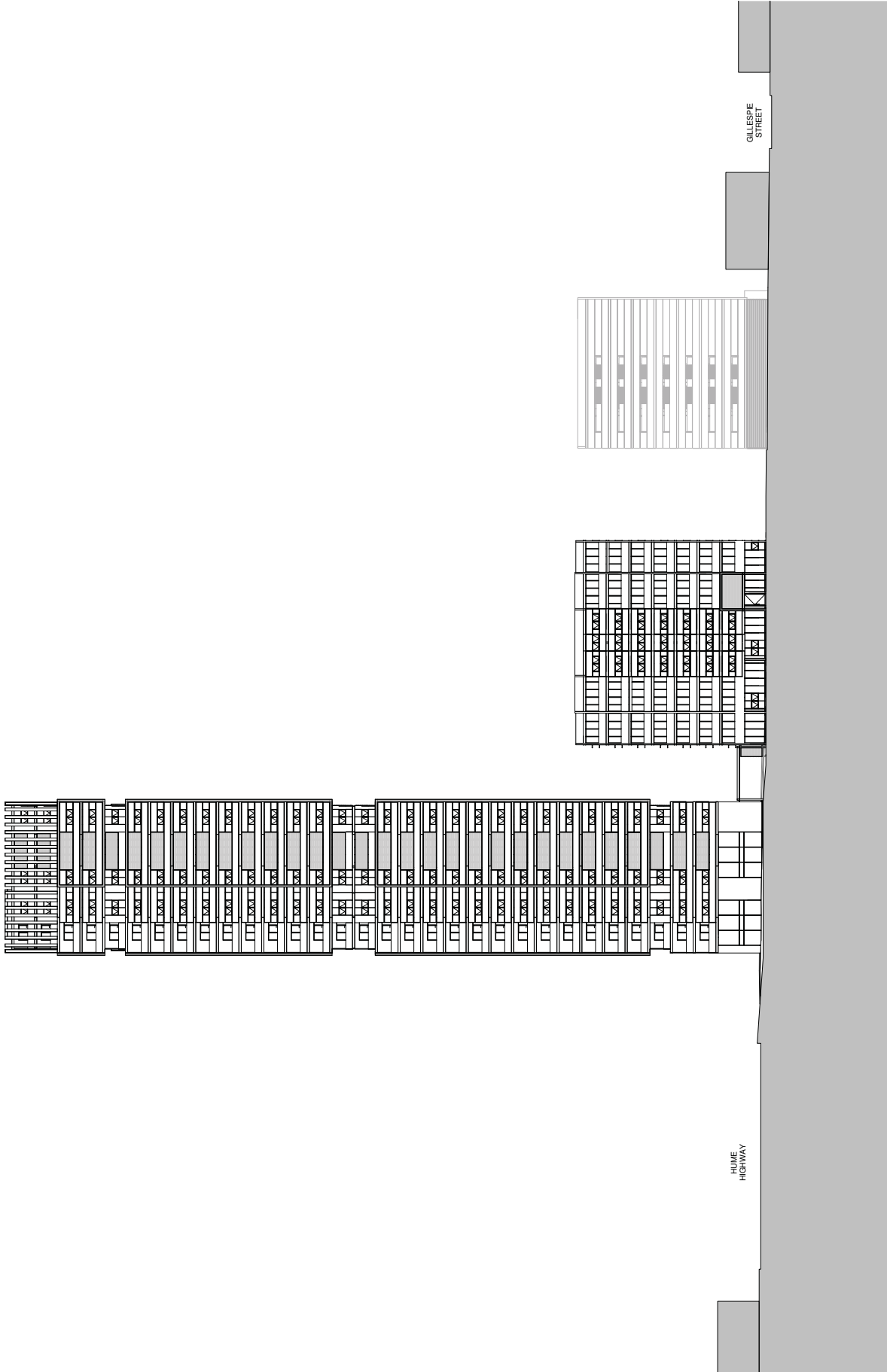


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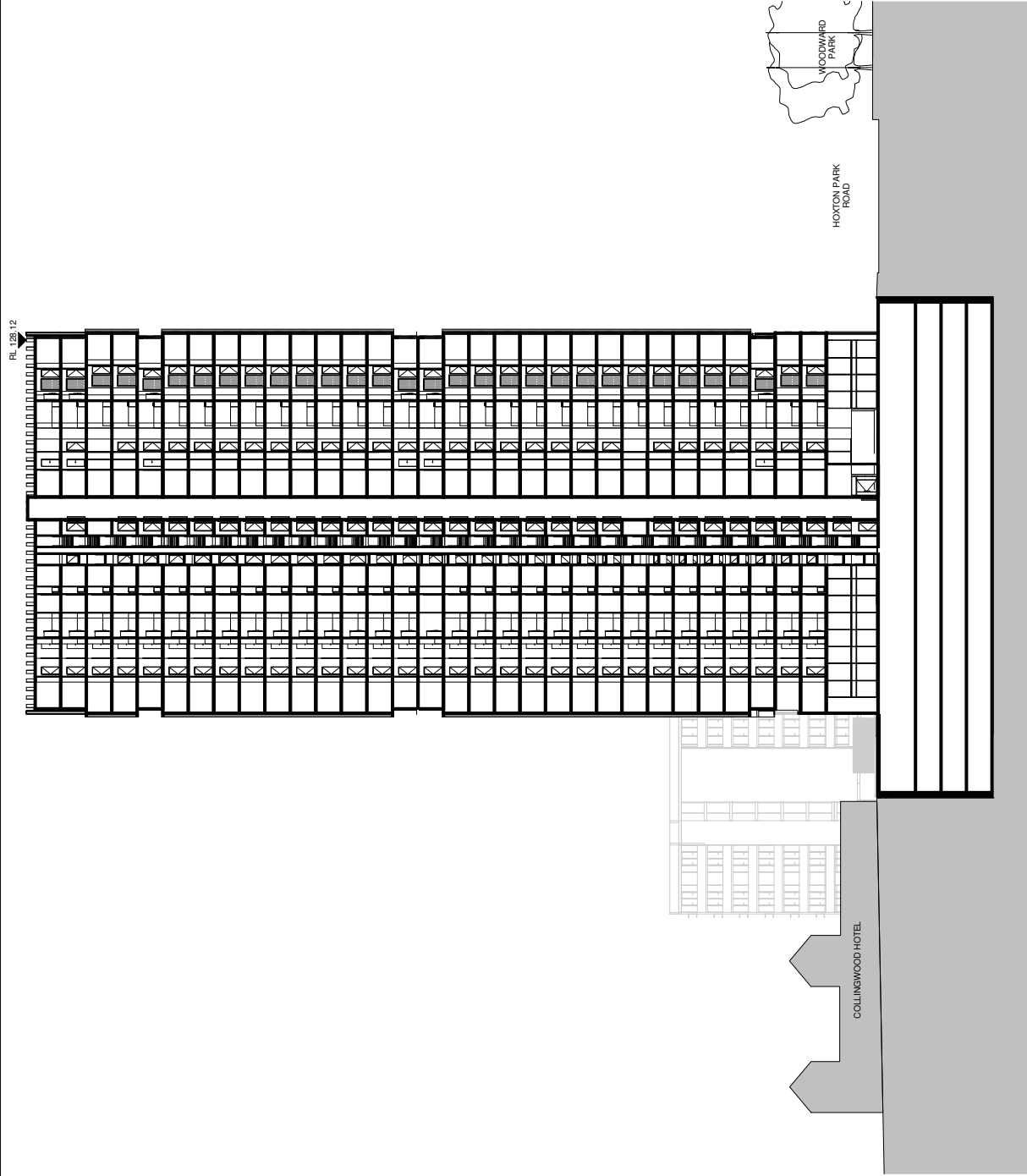




EAST ELEVATION - HUME HIGHWAY



NORTH ELEVATION - HOXTON PARK ROAD





PHOTOMONTAGE - DAY

Conclusion

This report considers the opportunities and constraints of the site at Liverpool amongst its broader developmental context and urban form as well as the desired future character for the area. The analysis suggests that the site has the following potential:

- Its location allows the site to frame Hume Highway and Hoxton Park Road, providing a future marker area
- By incorporating a commercial shop and residential housing at street level, the development can activate the southern section of Hoxton Park Road and the eastern section of the Hume Highway.
- The street activation of Hoxton Park Road and Hume Highway also allows the establishment of a physical connection from Woodward Park to the future development its open spaces for pedestrians
- The development has the potential to provide the area with a built form and provide a consistent edge to the Hume Highway, responding to the built forms of the adjacent development on Macquarie Street as well as the adjoining heritage building on the southern boundary.
- By incorporating a small compartment of commercial at ground level to serve the building on Hoxton Park Road.
- The development can activate the gateway and its connections to Woodward Park.

Based on our investigations of the existing planning controls and the site and surrounding context, three potential development scenarios have been developed. The three scenarios seek to test the corner of Hume Highway and Hoxton Park Road, increasing permeability into the communal open space and establishing a future marker to the area. The preferred design presents the most optimal scheme that addresses all of the design principles.

The preferred scheme has been tested for its overall performance and design parameters to determine the impacts on the adjoining properties; in particular, the heritage Collingwood Hotel and the impacts on its existing open space along the southern boundary of the subject site.

The preferred scheme suggests various heights as different parts of the site to respond to the existing range of built forms and to minimise overshadowing impacts on the communal open spaces and surrounding areas. The proposal provides solar access to public and private spaces.

The proposed built form would deliver the following design elements:

- Provides a street setback from 6m from both street boundaries
- Between 7-9m setback distances between the adjoining buildings
- Street commercial frontage along Hoxton Park Road/Hume Highway
- Permeable communal open space preferably opens to the public and provides pedestrian links from all aspects around the subject site
- Frontage to all site boundaries, in particular to the view corridors to maximise the connections to the surroundings
- Pedestrian linkages throughout site defining the future characteristic of the precinct, connecting communal open spaces to Woodward Park
- Provides a floor space ratio of 6:1

It is recommended that Council considers adoption to establishing the site specific design guidelines to allow the development of this building envelope and to implement the urban design principles put forward in this report.