

Arthur Street Housing Investigation Area Urban Design Report

June 2021

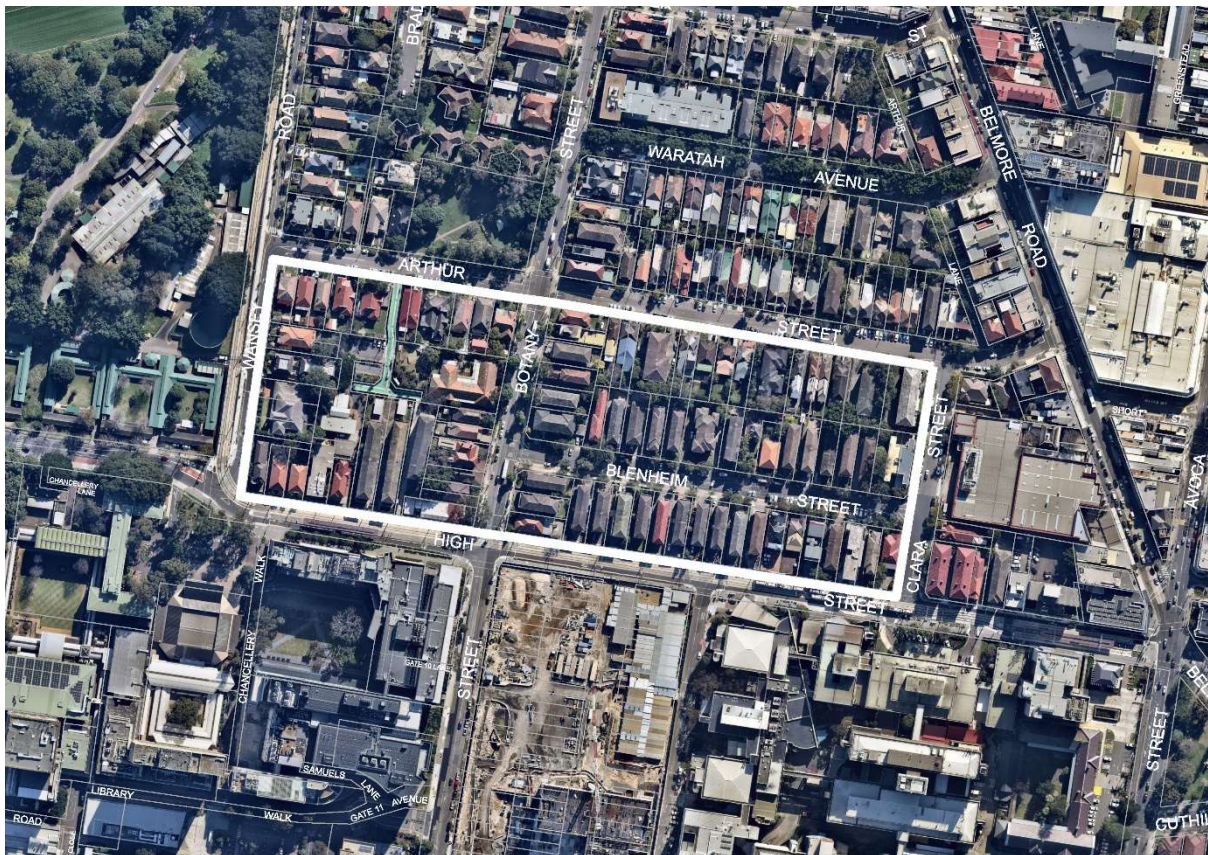
Contents

| | |
|--|-----------|
| 1. Location | 3 |
| 1.1. The Arthur Street HIA | 3 |
| 1.2. Local context | 3 |
| 2. Existing characteristics | 5 |
| 2.1. Description of the investigation area | 5 |
| 2.2. Topography | 7 |
| 2.3. View corridors | 8 |
| 2.4. Building typology | 8 |
| 2.5. Subdivision pattern | 9 |
| 3. Existing planning controls | 11 |
| 3.1. Land use zoning | 11 |
| 3.2. Height of building | 11 |
| 3.3. Floor space ratio | 12 |
| 3.4. Heritage | 13 |
| 3.5. Flooding | 14 |
| 3.6. Significant trees | 15 |
| 4. Draft local character area | 16 |
| 4.1. Description of the investigation area | 16 |
| 5. Analysis | 17 |
| 5.1. Opportunities and constraints | 17 |
| 6. Strategic justification | 18 |
| 7. Planning strategy | 20 |
| 7.1. HIA areas of no change | 20 |
| 7.2. Desired future built form character | 20 |
| 7.3. Site consolidation | 22 |
| 7.4. Transition to surrounding areas | 22 |
| 7.5. Landscape character | 22 |
| 7.6. HIA Feasibility Assessment (Hill PDA) | 22 |
| 8. Conclusion | 24 |
| 8.1. 3D built form testing | 24 |
| 8.2. Indicative Envelopes | 28 |
| 8.3. Recommendation | 28 |

1. Location

1.1. The Arthur Street HIA

- The Arthur Street Housing Investigation Area (HIA) is located in the suburb of Randwick in the LGA's north.
- The HIA is bounded by Arthur Street, Clara Street, High Street and Wansey Road as shown in Map 1.

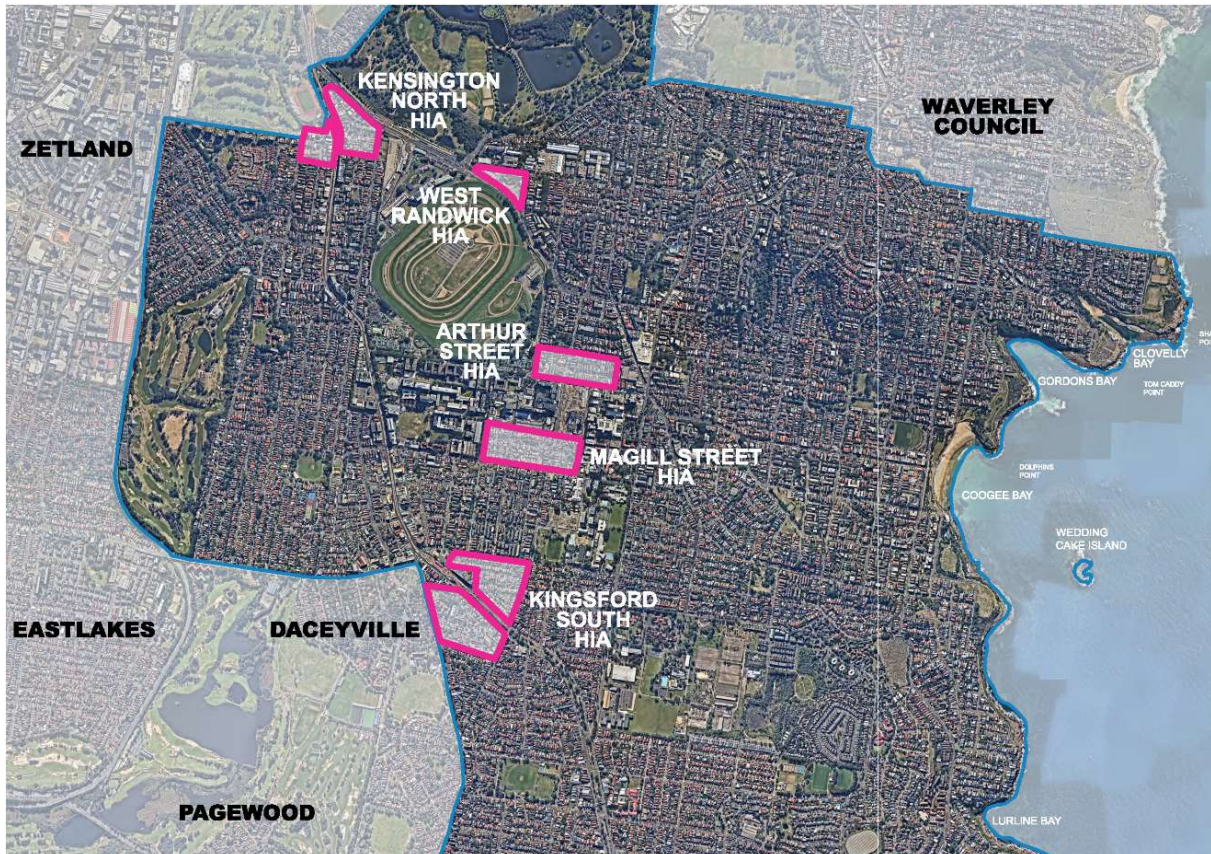


Map 1: Housing Investigation Area

1.2. Local context

- The Arthur Street HIA adjoins the Randwick Health and Education Precinct comprising the UNSW Kensington campus and the Randwick Hospitals Campus.
- Directly east of the HIA is the Randwick Junction town centre with retail, food, cafes, personal services and business uses fronting the high street of Belmore Road with its two shopping centres of the Randwick Plaza (Coles supermarket, retail shops and carpark) and the Royal Randwick (Woolworths, food, retail, Council's Library, fitness centre and office/medical suites) .
- Randwick Junction is also a major transport hub for the LGA, connecting the Randwick city centre to Bondi Junction, Coogee, Maroubra and the Sydney CBD.

- The Arthur Street HIA is situated along the L2 light rail route, connecting Randwick to the CBD via Moore Park. The UNSW High Street light rail station is located in the south western corner of the HIA with the Randwick terminus station located at the intersection of High Street and Belmore Road, just outside the HIA.
- To the west of the HIA is the Royal Randwick Racecourse.
- Directly north of the HIA is Writtle Park Playground, a small neighbourhood park. Also north are residential streets with similar land uses to the existing Arthur Street HIA.



Map 2: Local context – location of five Housing Investigation Areas

2. Existing characteristics

2.1. Description of the investigation area

- The residential character of the Arthur Street HIA is different to the commercial and institutional land uses that surround the area. UNSW Kensington, the Randwick Hospitals Campus, Randwick Junction and The Royal Randwick Racecourse are the predominant land uses near within the HIA. The land uses within the HIA respond to these neighbouring institutions including student accommodation, short term hospital accommodation and local medical facilities.
- The HIA is largely medium density residential, with very few commercial land uses. Despite the largely residential landscape, the HIA covers a number of busy main roads and public transport routes such as High Street, Wansey Road and Botany Street.



Photo 1 – (October 2019) Corner of High Street and Wansey Road, looking east towards the High Street light rail stop



Photo 2 – (October 2019) Corner of Wansey Road looking south with the L3 light rail route on the right



Photo 3 – (October 2019) Corner of Arthur Street and Botany Street, looking south east



Photo 4 – (October 2019) Corner of Highstreet and Clara Street looking west, with Sydney Children's Hospital on the Right



Photo 5 – (October 2019) – Clara Street looking south, with the back of Randwick Plaza Shopping Centre on the right



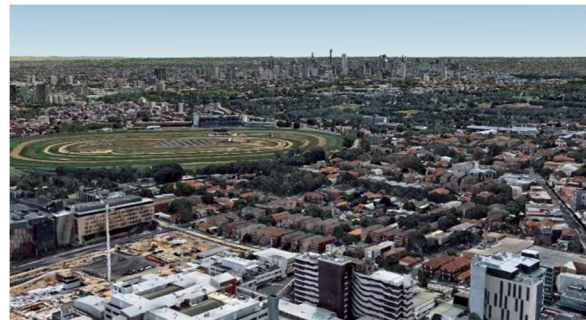
Photo 6 – (October 2019) Blenheim Street looking east



Photo 7 – (October 2019) Corner of High Street and Hospital



Photo 8 – (October 2019) Corner of Arthur Street and Arthur Lane looking south east with UNSW Kensington in the background.



3D Image 1 – (February 2020) Arthur Street HIA from the north west



3D Image 2 – (February 2020) Arthur Street HIA from the south east, with the CBD in the background



3D Image 3 – (February 2020)

3D Image 4 – (February 2020)

2.2. Topography

- The Arthur Street HIA has significant topographic features that impact its built form.
- As shown on Map 3, the length of the HIA runs over a small valley with the lowest point being at the corner of High Street and Hospital Road.
- The changes in topography are most evident and impactful along High Street, Blenheim Street and Arthur Street, as they run east to west.



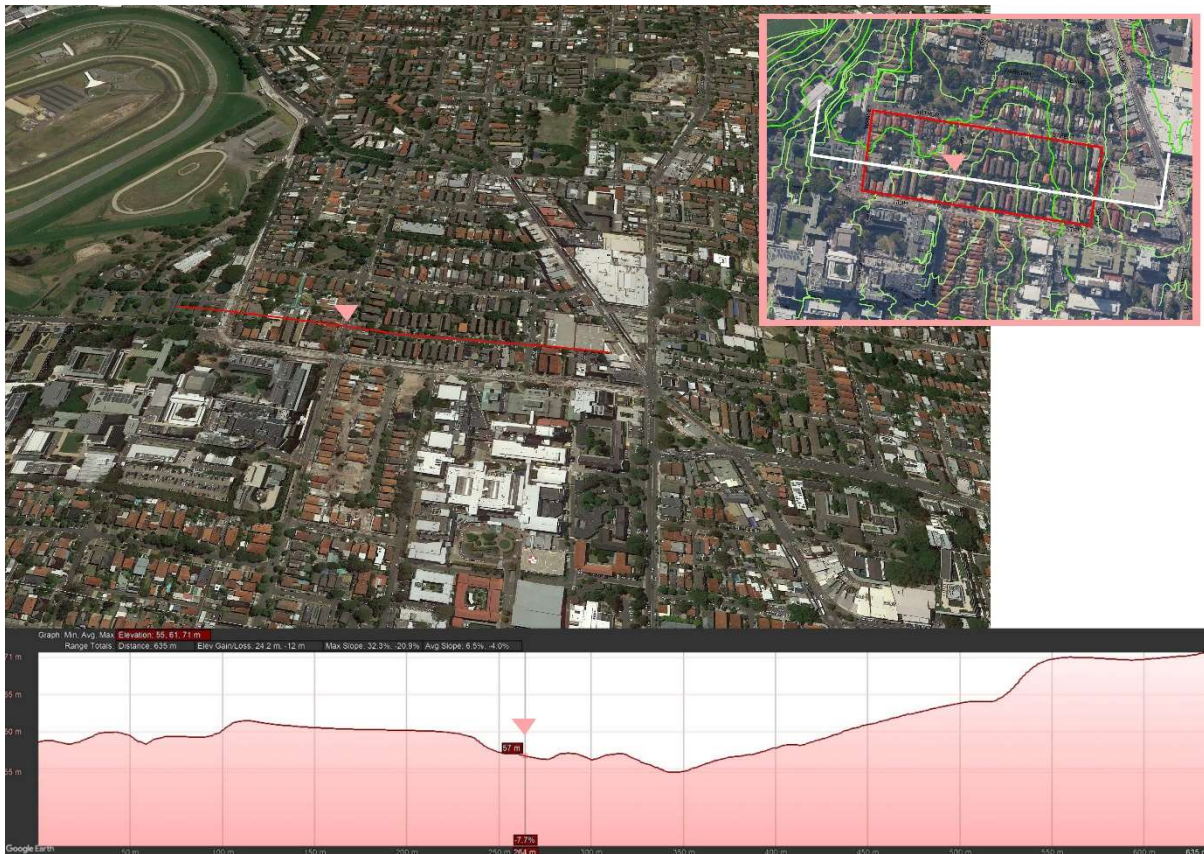
Photo 9: Blenheim Street looking west



Photo 10: High Street looking west



Map 3: Topography



Map 4: Topography

2.3. View corridors

- The HIA contains few significant view corridors, with the exception of the view from the western border of the HIA looking north west towards Randwick Racecourse with the Sydney CBD in the background.

2.4. Building typology

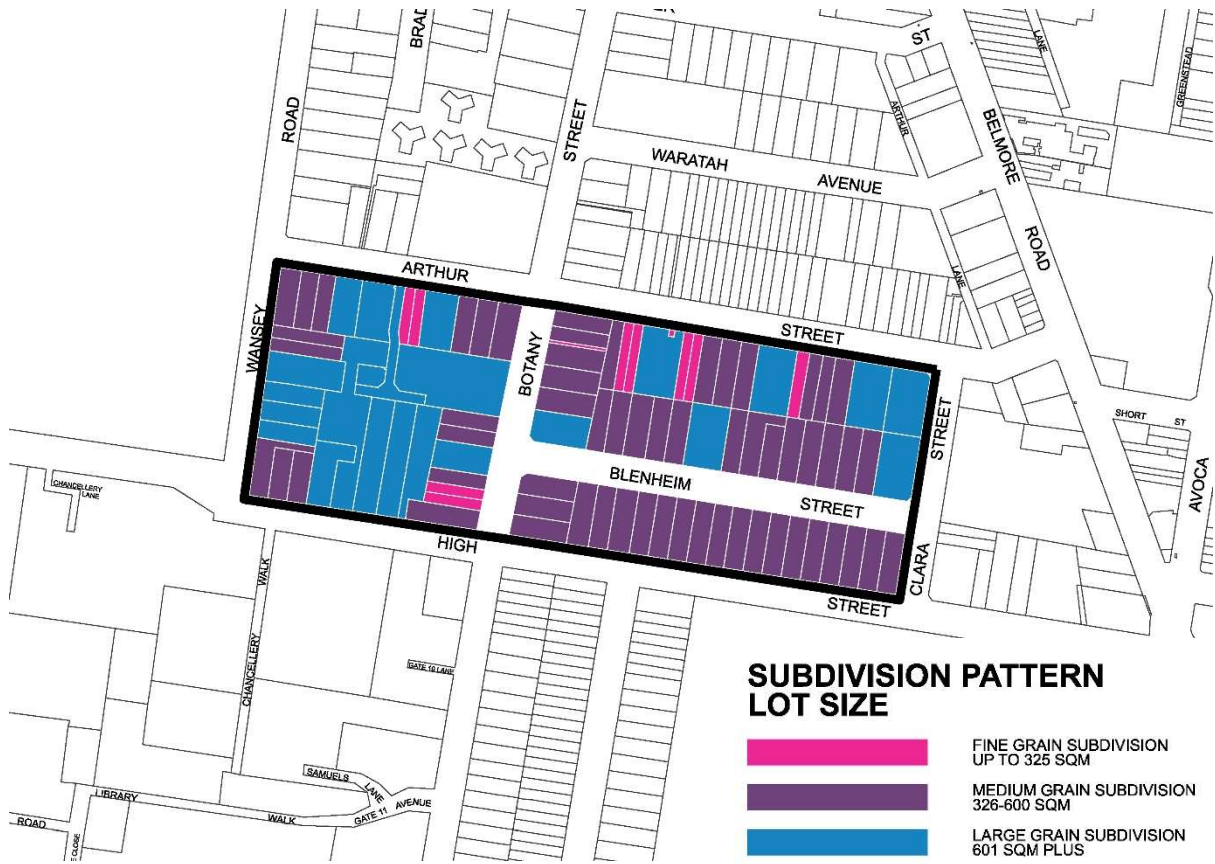
- The Arthur Street HIA has a diversity of building typologies with a predominance of 4 storey or larger apartments along Blenheim Street and High Street (see Map 5).
- In contrast, Wansey Road and Arthur Street contain mainly low-rise buildings. Outside the HIA, the northern side of Arthur Street has a clear typology pattern of 1 storey terraces and townhouses. The southern side has no clear trend, with a variety of different building typologies.
- All commercial buildings have similar typologies to the adjacent lots, with some being mixed use residential buildings.
- Along Blenheim Street, most lots have a hardscape frontage with low or no fencing. The majority of space is taken up by parking and driveways whilst some buildings consist of landscaping within the front setback.
- This typology is also common on High Street. Other lots on High Street have no frontage or a pedestrian entrance only.
- Many lots on Wansey Road and Arthur street have small private frontages with fences and a building setback that leaves space for a front yard.
- Many lots on High Street have dual frontages on Blenheim Street or Arthur Lane.



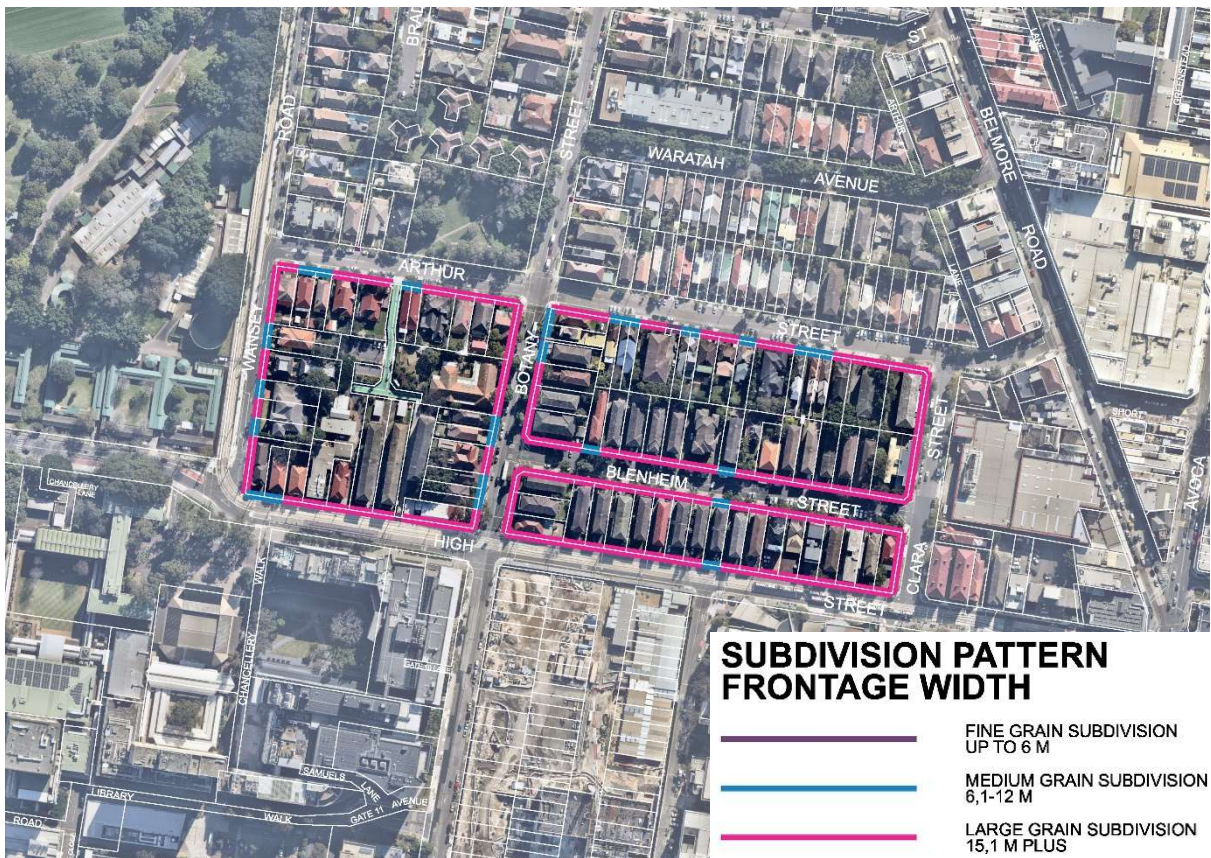
Map 5: Building typology (indicative only)

2.5. Subdivision pattern

- The Arthur Street HIA contains three broad lot sizes as shown in Map 6.
- The Blenheim and High Street block has a uniform, clear pattern of medium grain subdivision of lot between 326m² and 600m² in size.
- The HIAs western block bound by Wansey Road and Botany Street comprises several large lots greater than 601m², several medium grain subdivisions with a smaller number of fine grain lots (less than 325m²).
- The Arthur street to Blenheim Street block comprises a majority of medium grain subdivision lots with six small grain subdivision lots and seven large lots.
- Most lots within the HIA have a large frontage width greater than 15m. See Map 7.



Map 6: Lot sizes

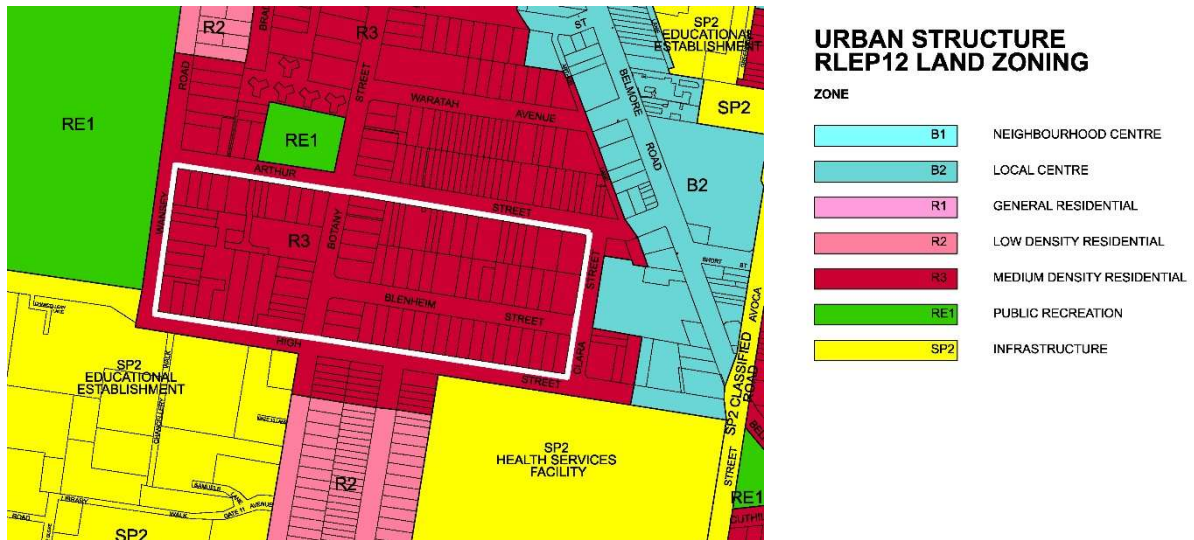


Map 7: Frontage widths

3. Existing planning controls

3.1. Land use zoning

- All lots within the HIA are zoned R3 Medium Density Residential under the Randwick LEP 2012.



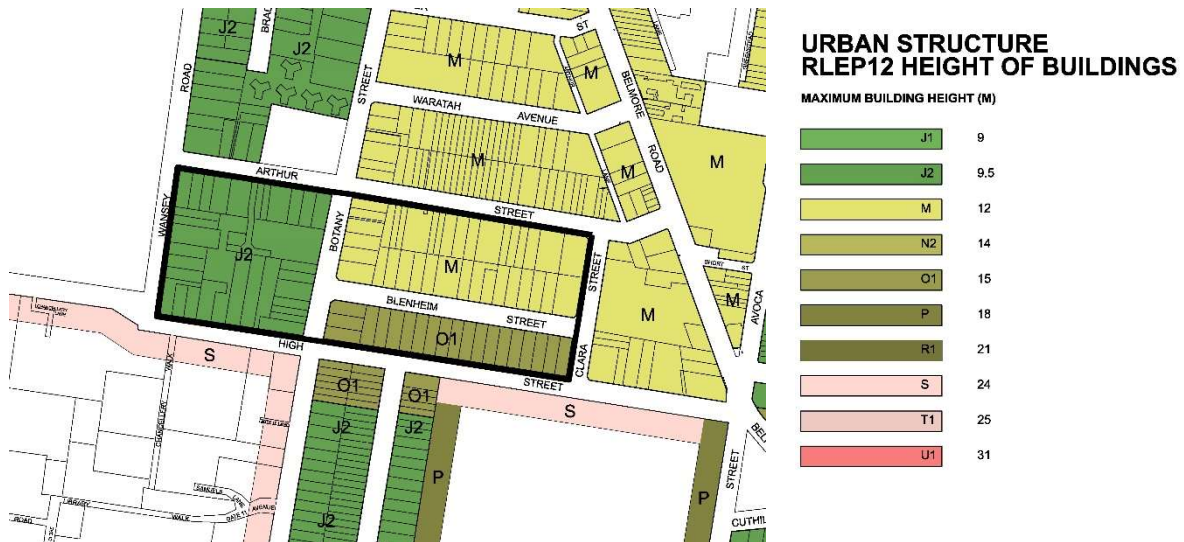
Map 8: Land use zoning under Randwick LEP 2012

Land use zoning key

3.2. Height of building

There are three building heights in the HIA under the Randwick LEP 2012. See Map 9. These building heights are:

- 15m for the Blenheim and High Street block in the HIAs south.
- 9.5m for the Wansey Road block in the west of the HIA.
- 12m for the Arthur to Blenheim Street block in the HIAs north.

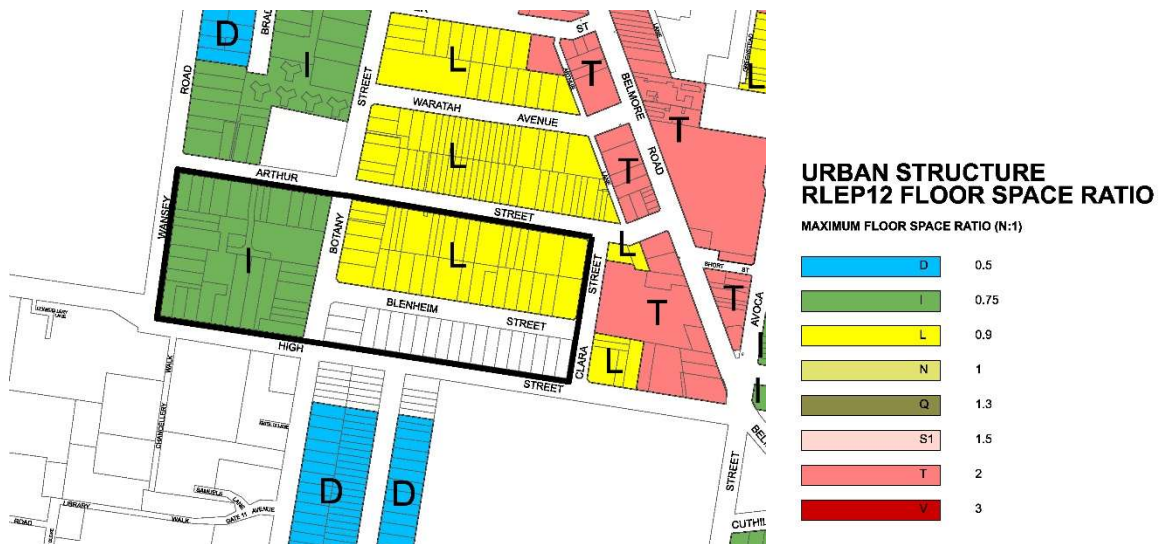


Map 9: Maximum height of buildings under Randwick LEP 2012 Height of buildings key

3.3. Floor space ratio

The Arthur Street HIA consists of two Randwick LEP 2012 floor space ratios (FSR). See Map 10.

- The northeast block (L) has a FSR of 0.9 and the western block (I) has a FSR of 0.75.
- The southeast block along High Street has no floor space ratio controls.



Map 10: Maximum floor space ratio under Randwick LEP 2012 Floor space ratio key

3.4. Heritage

- Within the HIA there is a single heritage item listed, in the Randwick LEP, ‘Blenheim House’ (completed in 1848 by Simeon Pearce, Randwick’s first Mayor) at 17 Blenheim Street. The property is owned by Randwick City Council. See Map 11.
- There are 2 heritage listed lots on Clara Street opposite the HIA.
- The Randwick Junction Heritage Conservation Area also borders the HIA on the eastern side of Clara Street. The Randwick Racecourse Heritage Conservation Area borders the HIA to the west.



Map 11: Heritage items and conservation areas under Randwick LEP 2012

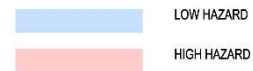
3.5. Flooding

- The Arthur Street HIA has some areas prone to low hazard, minor flooding.
- These flood prone areas have a strong correlation to the HIAs topography as shown in Map 3.
- The lowest point of Blenheim Street is most prone to flooding as shown in Map 12.
- Flooding is also significant on High Street, particularly on the stretch of road between Hospital Road and Botany Street.
- All of these areas are considered low risk flood areas with a maximum ARI flood depth reading of 0.25
- Flooding impacts will be subject to further detailed assessment at the DCP stage.



Map 12: Flood hazard

ENVIRONMENTAL CONSIDERATIONS FLOOD HAZARD

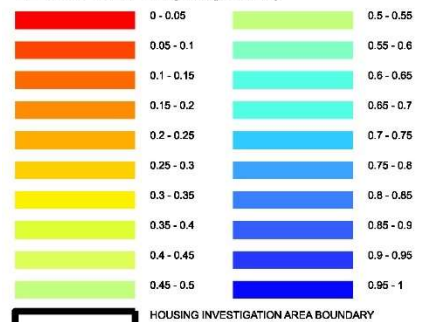


Flooding hazard key



Map 13: Flood depth

ENVIRONMENTAL CONSIDERATIONS FLOOD DEPTH (100yr ARI)



Flood depth key

3.6. Significant trees

- The Randwick City Significant Tree Register has identified a significant tree, a Pepperberry Tree (*Cryptocarya obovate*) at 45 Wansey Road. See Map 14.
- The HIA however has a variety of tree coverage with the western and north eastern portion covered by 20-30% tree canopy with the remaining area being 10-20% tree canopy.
- Lots along High Street (between Clara and Botany Streets) have a tree canopy cover of less than 10% and is reflective of the carparking and driveways around buildings.

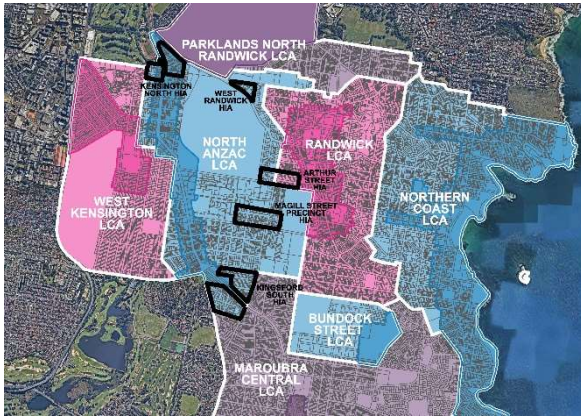


Map 14: Proportion of tree canopy cover

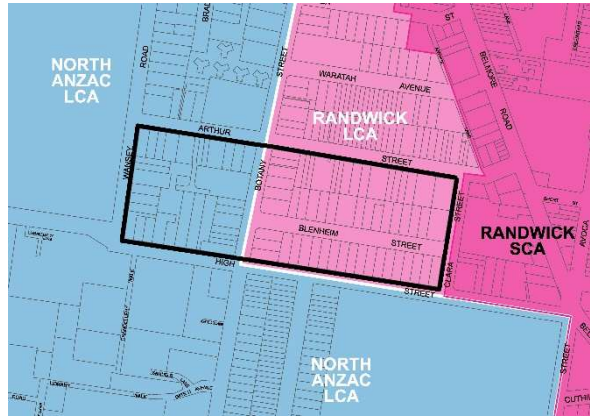
4. Draft local character area

4.1. Description of the investigation area

- The Arthur Street HIA is within 2 draft Local Character Areas (LCAs), the Randwick LCA and the North Anzac LCA defining the HIA's character and features. See Map 15.
- The draft North Anzac LCA comprises Randwick City's major Health, Education, Transport and Economic infrastructure as well as the residential and commercial precincts adjacent to them. This includes the Randwick Health and Education Precinct, Randwick Boys and Girls High Schools, Kensington and Kingsford town centres, Randwick Racecourse, TAFE and Randwick Bus depot.
- The future character principles for the draft North Anzac LCA are:
 - Greater activation along Anzac Parade through new development.
 - Increased active transport connections and infrastructure for a growing population.
 - Reinstating Anzac Parade as a tree-lined boulevard with increased street tree canopy.
 - Greater interaction between the community and the key institutions within the LCA through improvements to the public domain.
 - Increase in arts and cultural facilities to support the local population and visitors.
 - Improvements to the economic vibrancy in the Kingsford and Kensington town centres.
- The draft Randwick LCA comprises active and bustling entertainment and dining precincts, pockets of recreational open space, medium density residential development and large numbers of older medium-density apartment dwellings. Many of these qualities are present within and around the Arthur Street HIA.
- The future character principles for the draft Randwick LCA are:
 - Leverage opportunities for a more diverse and vibrant Randwick Junction town centre.
 - Street enhancements as part of a Randwick Junction town centre strategy.
 - Improve pedestrian and cycling safety along Avoca Street and surrounding areas.
 - Ensure that view corridors across the Coogee Basin towards the ocean are maintained.
 - Ensure the form, scale and density of new development is compatible with local heritage and surrounding land uses.
 - Increase tree canopy cover across the area.
 - Art and culture to be key elements in Randwick Junction and The Spot.
 - Maintain important values of Fred Hollows for future generations.
 - Improve active transport opportunities throughout the area.



Map 15: Excerpt of draft local character areas (northern part of LGA)



Location of Arthur Street HIA within North Anzac and Randwick LCAs

5. Analysis

5.1. Opportunities and constraints

- The light rail and bus network along with the Randwick Health and Education precinct adjacent to the HIA, provide opportunity for increasing residential densities close to social services and infrastructure.
- The commercial uses on High Street in the form of serviced apartments and private health providers support UNSW and Randwick Hospitals campus giving precedent for promoting low impact commercial land uses on High Street.
- Blenheim House located on 17 Blenheim Street and completed in January 1848 by Simeon Henry Pearce (later Randwick's first mayor) is one of the most significant heritage listed buildings in Randwick City. No changes to development controls are proposed.
- To preserve heritage and the pedestrian experience on High Street, building setbacks that preserve public space are of importance.
- Writtle Park on Arthur Street is opposite the HIA provides important open space/recreation opportunities close to where people live and work.



Map 17: Opportunities and constraints

OPPORTUNITIES AND CONSTRAINTS

| | |
|--|---|
| | HERITAGE ITEM |
| | HERITAGE CONSERVATION AREA |
| | OPEN SPACE AND RECREATIONAL AREA |
| | TOWN CENTRE |
| | INSTITUTIONAL PRECINCT |
| | PLACE MARKER |
| | VIEW AND VISTA |
| | PUBLIC DOMAIN OPPORTUNITY |
| | LIGHT RAIL ROUTE AND STATION WITH 500M BUFFER |
| | BUS STOP |
| | SEPARATED CYCLEWAY ROUTE |
| | PLANNED SEPARATED CYCLEWAY ROUTE |
| | STRATA WITH MORE THAN 20 UNITS |
| | RESIDENTIAL AREA INTERFACE |
| | INSTITUTIONAL AREA INTERFACE |
| | COMMERCIAL AREA INTERFACE |
| | OPEN SPACE INTERFACE |

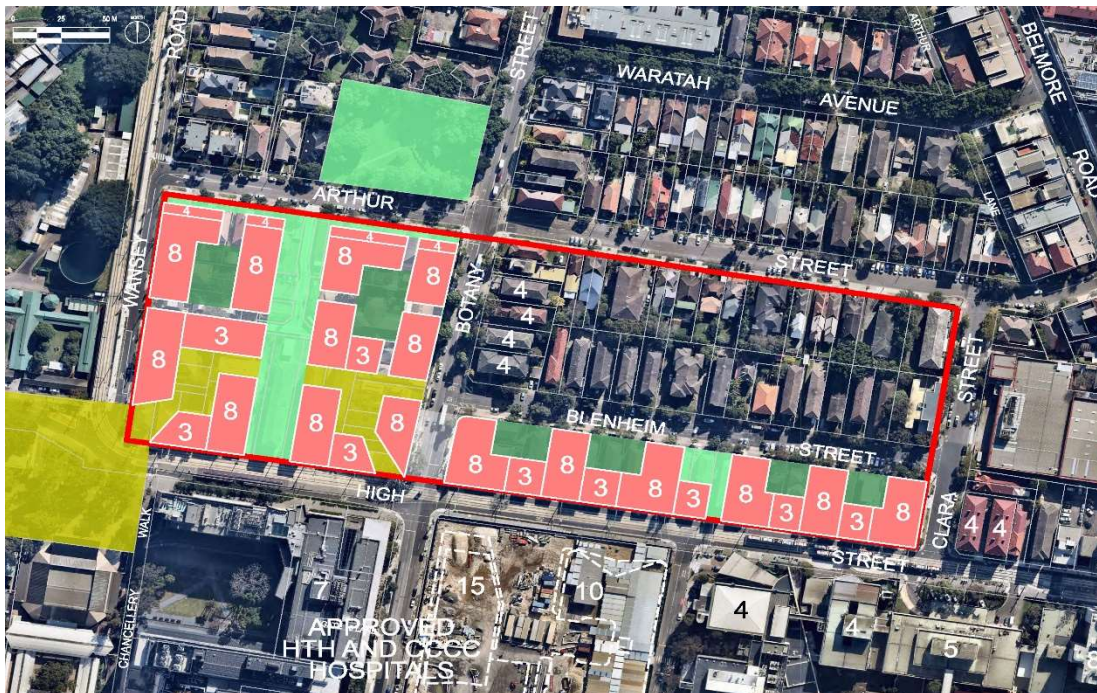
Opportunities and Constraints key

6. Strategic justification

An increase in building height (HOB) and floor space ratio (FSR) can be provided in this HIA to support its strategic location in close proximity to education, employment, health, shopping and transport services - immediately to the north of UNSW and the Randwick Hospitals Campus, and a short walk west of Randwick Junction Town Centre. The HIA is easily accessible and is serviced by two new light rail stations in High Street and from the adjoining streets.

The zoning for this HIA is unchanged. It is proposed that there should be no change in development controls for the northeast part of the HIA, as most of this area is in strata ownership and is already developed as 3-4 storey walk-up apartment buildings at a relatively high density. No height or FSR controls are shown on Map 18 for this area to confirm no change to current controls.

An urban block analysis established that the proposed heights and FSR for the rest of the HIA would sit comfortably within the urban context, would have minimal environmental impact on existing residential properties and parks, and could provide beneficial new public domain and through block links as shown on Map 18.



Map 18: Proposed built form and height diagram (heights shown in storeys)

The Arthur Street HIA can provide for increased medium density residential apartment development and associated facilities and services:

- Within easy walking distance of two light rail stations and public bus services.
- Adjoining several important employment hubs including the UNSW and Randwick Hospital (Collaboration Precinct), Randwick Racecourse and within a short walk of Randwick Junction Town Centre.
- Adjoins recreation and entertainment activities offered at Randwick Racecourse immediately to the west.

- With access to main streets – High Street, Botany Street, Wansey Road and Arthur Street, facilitating vehicular and general access.
- The proposed uplift can be used to incentivise an improved urban built form outcome – potentially comprised of permeable, pedestrian friendly urban quarters with central court gardens or plazas, with improved amenity and access to green space.
- Incorporating new green links from Writtle Park to UNSW High Street light rail station, and increased pedestrian permeability with through-block shared paths.
- Along High Street a maximum 8 storey height limit with a secondary 3 storey podium/frontage height is envisaged that would provide variety in building height, transition in scale, maintain sunlight to the High Street streetscape and integrate with the Randwick Junction built form typology along Belmore Street.
- A 4-storey frontage is proposed along Arthur Street providing a transition in scale to lower height residences and Writtle Park.

7. Planning strategy

7.1. HIA areas of no change

Two residential blocks in the Arthur Street HIA situated to the west of Botany Street and to the south of Blenheim Street have been assessed to be appropriate for redevelopment. This would be achieved through permitting additional building height and density, to contribute towards the overall dwelling target for Randwick LGA.

Through Council's urban design analysis in the preparation of the Planning Proposal, it is recommended that no change occurs for the properties to the east of Botany Street and to the north of Blenheim Street. The properties in this area are generally four-storey 'walk-up' apartment buildings in strata ownership. The ownership pattern restricts the turnover and development of these properties. Further, the block where no change is proposed, includes Blenheim House a heritage property.

The focus of this work is to propose changes to the RLEP to allow for moderate uplift in well-serviced areas contributing to Council's 6-10 year (2021-2026) housing target of 4,300 new dwellings. Strata titled properties comprised of 20 or more units have not been included in our calculations, as it is unlikely, they will redevelop within the next 6-10 years.

7.2. Desired future built form character

The future desired character of the HIA is for new development to be consistent with the aims of the R3 Medium Density Residential zone, that provides for a variety of medium density housing types. The proposed mid-rise typology (generally 8 or 9 storeys) can enhance the character of the neighbourhood by encouraging high quality design outcomes in an area of high amenity – adjacent to public transport (light rail), the UNSW Kensington Campus, the Randwick Hospital Campus, the Randwick Junction Town Centre, Royal Randwick Racecourse and to Writtle Park. The proposed new built form would be a maximum of 8 or 9 storeys, with a four-storey transition down to the lower scale residential neighbourhood and Writtle Park to the north of Arthur Street. The proposed built form would define the High Street and Botany Street streetscapes, and the key HIA residential street frontages and street corners.

Along the High Street frontage, a continuous minimum three storey frontage is proposed, setting a datum that would match the three-storey height of the traditional Randwick Junction - Belmore Road street wall (parapet) height. Along High Street the taller apartment buildings are oriented north-south to maximise solar access to residents, whilst at the same time providing breaks in the 8 storey built form, that mitigates building bulk and allows sunshine, through the gaps between the 8 storey buildings, to the High Street streetscape.

Private green, north oriented court gardens are proposed along Blenheim Street. This would both provide residents with a sunny green common space and break up the scale of the buildings along Blenheim Street, as they would be interspersed with landscaped gardens. A break in the High Street frontage is proposed to provide a through block pedestrian link aligned with Hospital Road to the south and with Blenheim House to the north.

The urban block bounded by Arthur Street, Botany Street, High Street and Wansey Road contains a significant number of UNSW owned properties. The consolidation of larger land parcels opens opportunities for the urban planning of the precinct. Four building 'quarters' are envisaged that are integrated with the surrounding streets and pedestrian connections, through the continuance of visual axis and pedestrian desire lines.

The two central courtyards that open off High Street are envisaged as more hard paved, public plaza spaces with commercial/retail ground floor levels that responding to the diagonal pedestrian crossing movements from UNSW Chancellery Walk and Botany Street (and the light rail station) to the south, through the block, north to Arthur Street, Botany Street and Writtle Park to the north. The Cammeray Square development (see Photos 11 and 12) is a good example of a mixed-use development model, with retail and apartments wrapped around a central urban landscaped plaza, that also responds to a diagonal pedestrian desire line from Miller Street.



Photo 11: Cammeray Square, Cammeray – aerial plan view



Photo 12: Cammeray Square, Cammeray – street view

A generous north-south mid-block landscaped green link/space is envisaged (expanding on the existing shared use pathway) that would open up the middle of the urban block, providing an attractive outlook for residents, providing an important 24/7 pedestrian connection and enhancing legibility through establishing a visual connection between the light rail station on High Street and the residential areas and Writtle Park to the north.

The mid-rise residential apartment buildings would generally be built up to the main street frontages reflecting the urban character of the precinct. The block layout will support buildings with rear or mid-block common gardens, with deep soil tree planting, shielded from the main street frontages. The fine urban 'grain' of the city blocks would be preserved by retaining the series of smaller streets and laneways, and by introducing new pedestrian links, enhancing the overall permeability of the super block.

7.3. Site consolidation

A level of site consolidation would be necessary to achieve the desired optimum urban design and feasibility outcomes. Provisions addressing minimum frontage width and discouraging isolation of sites (which may be difficult to develop on their own) are recommended to be included in the Randwick DCP to ensure that future redevelopment achieves the desired urban design built form outcome, ensure residents have good access to natural light and ventilation, and achieve reasonable efficiencies in building structure and parking configuration.

7.4. Transition to surrounding areas

The Randwick Hospital Expansion area is immediately south of the HIA (on the south side of High Street) and two large hospital buildings are proposed of 10 and 12 storey height, with a small setback from the street. A new plaza is proposed between the two buildings with a northern aspect. Other recent UNSW buildings are the Wallace Wurth Building and the Lowy Cancer Research Centre that are equivalent in height to a nine-storey residential building (approx. 30m high).

The new residential precinct will provide a transition in height from the taller hospital and university buildings to the south, down to the lower scale residential areas to the north. The proposed built form would provide a consistent building frontage height along important streets in the public domain, including Botany Street and High Street. The proposed continuous three storey frontage to High Street dovetails with the existing street wall height datum (parapet height) of buildings in Belmore Road, Randwick Junction.

Along the northern Arthur Street frontage, a four-storey step in height is proposed, down to the lower scale residential neighbourhood and Writtle Park on the north side of Arthur Street.

7.5. Landscape character

The street tree planting along High Street and Wansey Road has been impacted by the construction of the light rail – with recent replanting of new street trees and general landscaping. Tree planting along Arthur Street, Botany Street and Blenheim Street is inconsistent. There are several sections of streets with excellent mature trees, whilst other streets are sparsely planted, and therefore exposed and lacking shade and green. Interplanting new street trees, on a consolidated theme, would enhance these streetscapes. Encouraging mid-block communal court gardens, including mature tree planting would create a quiet and green refuge for residents from the surrounding streets.

7.6. HIA Feasibility Assessment (Hill PDA)

Following Council's place-based analysis of the five HIAs and investigations into suitable planning controls to increase development capacity, economic planning consultants - Hill PDA, were engaged to assess the economic feasibility of new development and undertake a review of

officers' built form scenarios in terms of the resulting yield achieved in each HIA. The assessment identified the likely 'tipping point' for redevelopment to occur considering the application of an affordable housing contributions scheme at a rate of 0%, 3% and 5%.

The assessment estimates the potential land value of several sites within each of the HIAs based on comparable land sale evidence. Through market research, the end sale values for new development in each of the HIAs has also been identified. It is important that any proposed controls ensure that the purchase of sites and future development is feasible, otherwise turnover of sites for development will not occur and Council may not be able to meet the community's need for new housing in accessible areas.

The assessment sets a target project Internal Rate of Investment of 16% to 18% p.a. as the primary indicator for the modelling*. The results for the Arthur Street HIA are outlined below:

| Zone | FSR required with a 3% affordable housing contribution | Proposed height (storeys) 3% | FSR required with a 5% affordable housing contribution | Proposed height (storeys) 5% |
|-------------------------------|--|------------------------------|--|------------------------------|
| R3 Medium Density Residential | 3:1 | 26m (8) | 3.25:1 | 29m (9) |
| R3 Medium Density Residential | N/A | 13.5m (4) | N/A | 13.5m (4) |

The assessment found that development of the proposed R3 Medium Density Residential zoned land with a 3% and 5% affordable housing contribution would be viable at an FSR of 3:1 and 3.25:1 respectively. To achieve a 5% affordable housing contribution in this HIA requires an increase in the height/number of storeys from eight storeys to nine storeys, when compared to a 3% affordable housing contribution.

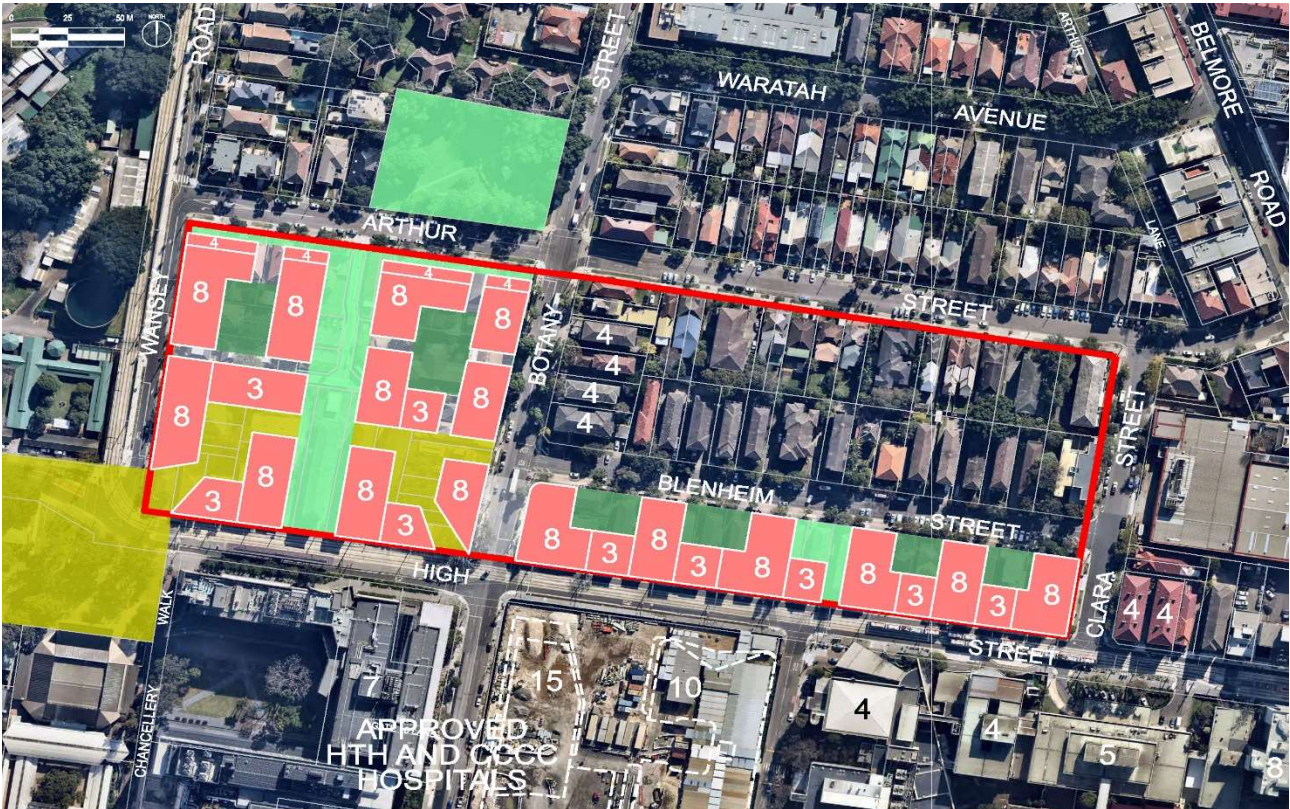
*The Internal Rate of Investment is a developer's actual return on investment on an annualised basis and expressed as a percentage. The approach considers the cost of time in its calculation and indicates the average return for a developer over a period of time.

8. Conclusion

8.1. 3D built form testing




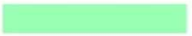


Two building density and height options, representing a 3% and 5% Affordable Housing (AH) contribution, were modelled by computer in 3D to illustrate the maximum building envelopes, to assess their urban design merit. The two options tested in 3D were:

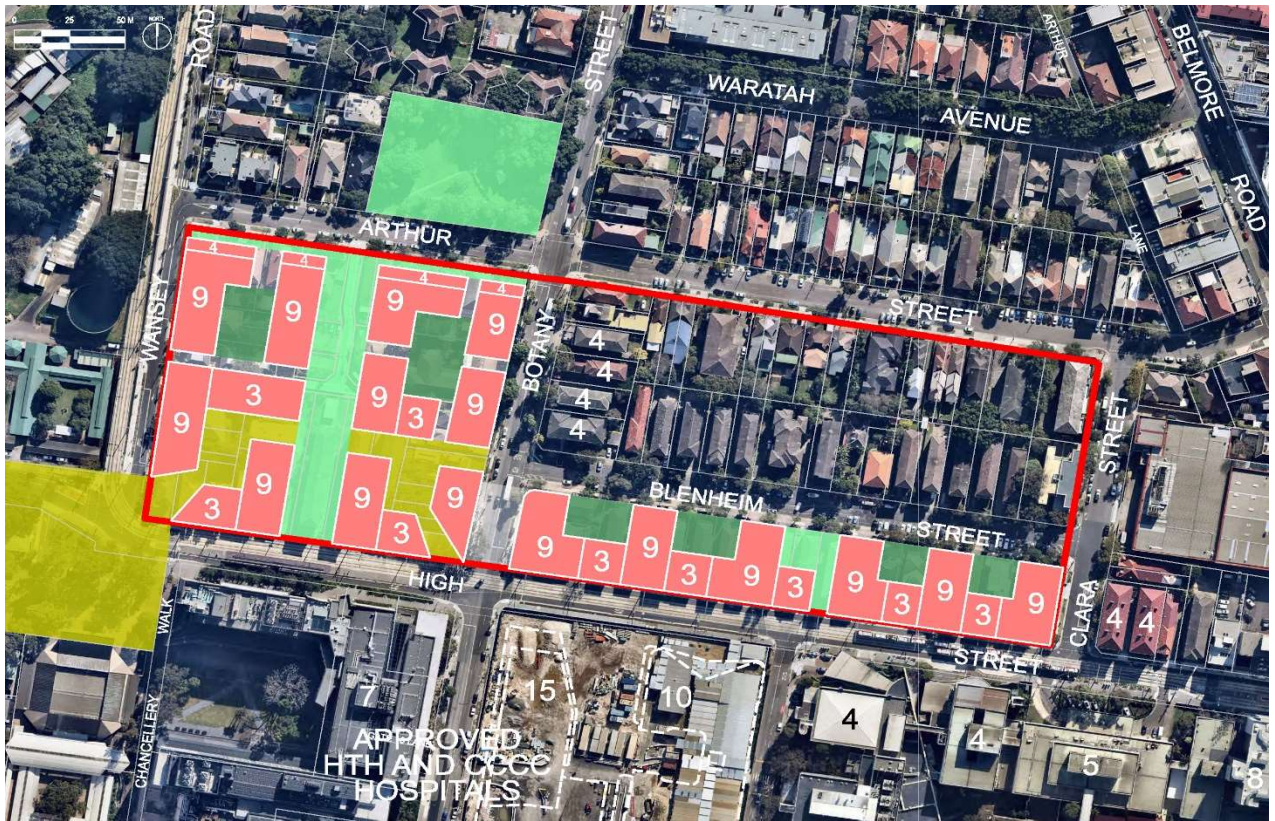
- Option 1 - 3% AH - Maximum 8 storey height
- Option 2 – 5% AH - Maximum 9 storey height



Map 19: Option 1 – Plan View – Maximum 8 Storeys





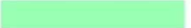


LEGEND

| | |
|---|--|
|  | EXISTING HERITAGE ITEM WITH STOREY NUMBER |
|  | EXISTING STRATA ITEM WITH STOREY NUMBER |
|  |  INDICATIVE BUILDING FOOTPRINT WITH STOREY NUMBER |
|  | PUBLIC DOMAIN OPEN SPACE OPPORTUNITY |
|  | PRIVATE GARDEN |
|  | HOUSING INVESTIGATION AREA BOUNDARY |



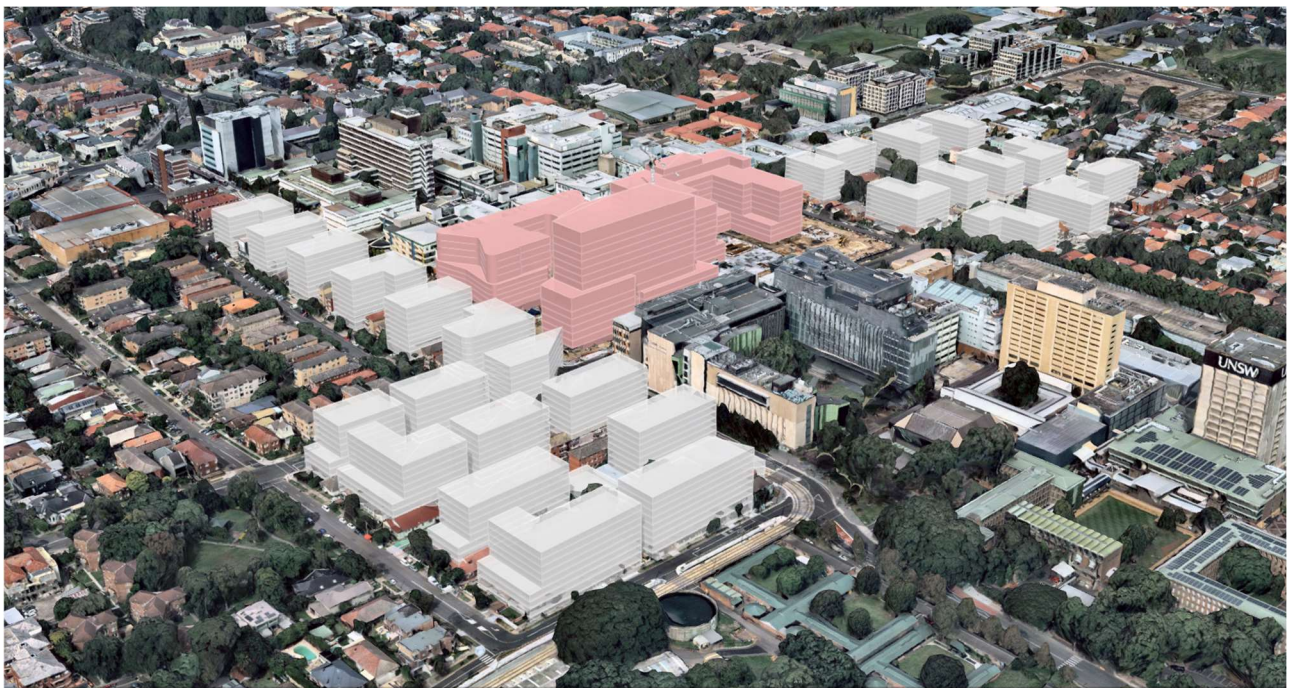
Map 20: Option 2 – Plan View – Maximum 9 Storeys

LEGEND

| | |
|---|--|
|  | EXISTING HERITAGE ITEM WITH STOREY NUMBER |
|  | EXISTING STRATA ITEM WITH STOREY NUMBER |
|  |  INDICATIVE BUILDING FOOTPRINT WITH STOREY NUMBER |
|  | PUBLIC DOMAIN OPEN SPACE OPPORTUNITY |
|  | PRIVATE GARDEN |
|  | HOUSING INVESTIGATION AREA BOUNDARY |



Map 21: Option 1 – 8 Storeys – View Southeast – 3D modelling of building envelope scenarios



Map 22: Option 2 – 9 Storeys – View Southeast – 3D modelling of building envelope scenarios



Map 23: Option 1 – 8 Storeys – View Southwest – 3D modelling of building envelope scenarios



Map 25: Option 2 – 9 Storeys – View Southwest – 3D modelling of building envelope scenarios

8.2. Indicative Envelopes

The 3D aerial views of the HIA illustrate proposed indicative block 'envelopes' and address the Apartment Design Guide (ADG) requirements. The envelopes comply with ADG minimum building-to-building separation guidelines and take into consideration best practice maximum building width to ensure apartments have good access to sunlight and natural cross ventilation.

As recommended in the ADG, a 70% factor has been applied in converting the building 'footprint' (and envelopes) to Gross Floor Area (GFA) and Floor Space Ratio (FSR) to account for overall building articulation, unenclosed balconies, building structure, services and circulation (lifts, stairs, common corridors). Setbacks and height transitions to heritage properties and to sensitive adjoining low-density residential areas have been considered and addressed in the urban planning and yield calculations. Properties constrained by strata ownership (20 or more apartments), established church buildings and an electricity substation, likely to remain undeveloped in the medium term, have been removed from the calculation of dwelling yield.

In developing the building envelopes the minimum heights recommended for residential and non-residential uses in the ADG has been applied, whereby extra floor-to-ceiling height is needed for the ground floor and a minimum height (3.1m floor-to-floor) is set for the residential upper levels of buildings. Some additional height is included (generally 1m) to allow for roof level articulation.

Reasonable assumptions have been made regarding the optimum amalgamation of sites for redevelopment that would realise good urban design outcomes. The planning of the HIAs incorporates building setbacks, building-to-building separation, new pedestrian through block links, plaza, and green spaces. The envelopes illustrate potential development scenarios for site amalgamation that avoids isolated sites and provides access to sunlight and natural ventilation, reasonable efficiencies in structure, vehicular access, and parking provision.

8.3. Recommendation

It is recommended that the optimum urban design outcome (building massing and height) for the Arthur Street HIA, taking into consideration the existing and future surrounding built form context, is Option 1 (maximum 8 storeys). Feasibility testing has demonstrated that this built form scenario is viable with a 3% Affordable Housing contribution.

