

**GOVERNMENT ARCHITECT NSW
ADVICE**

St Leonards and Crows Nest 2036 Plan

26 September 2018

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September 2018
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Executive Summary

Government Architect NSW (GANSW) has been requested to provide urban design advice on the draft St Leonards Crows Nest 2036 (the Draft 2036 Plan). This urban design advice is intended to investigate opportunities for built form within the Plan study area around the area to the south of Oxley Street extending towards Crows Nest.

The analysis undertaken by GANSW has taken into account the current planning principles as proposed, with a focus on the outcomes from engagement with community and the subsequent draft Local Character Statement. The analysis also identifies effects of other known controls established by North Sydney Council, in particular the solar access controls which are applicable to the precinct.

The outcomes from the draft Local Character Statement forms the Vision for the Plan. This Vision reinforces the strong preference from community to retain the character of the Willoughby Road village and the area around the Fiveways junction.

In reviewing the overall context for the Plan, GA NSW considers that there is a requirement for the Plan to balance both measured growth, and retaining and enhancing the qualities of place which give St Leonards and Crows Nest their distinct areas of character.

The new Metro station planned for Crows Nest will bring more people to live and work in the area. In turn, offering opportunities to enhance local services and amenity. The built form and public realm response to this new station in the immediate surrounding areas should ensure that this opportunity is optimised and that the creation of sustainable, liveable communities is enabled and supported. This needs to be done in a way which both protects existing character, and improves and enhances it, to ensure village places such as Willoughby Road to continue to thrive.

The design principles which support the Vision are an important aspect of the Plan. GANSW has reviewed the current principles and has identified other considerations to further understand the elements which contribute to the character of important areas such as Willoughby Road and the Fiveways junction. This takes into account transition of scale and built form which is an important consideration in the draft Plan. A key factor which informs this is the pedestrian experience at street level.

Two test cases have been presented, which each compare the outcome alongside the current Draft Plan. The test cases identify the benefits and impacts of each. These tests illustrate building envelopes only and do not represent architectural forms which meet requirements of the Apartment Design Guide and the urban design considerations.

In summary, GANSW considers that there may be the potential for further intensity within the precinct. There may be opportunity through a significant sites approach that would rebalance height, density and form across the precinct into more appropriate locations. Such an approach would require a Design Excellence strategy to support it. The Design Excellence Strategy should be part of the draft Plan and would holistically ensure that buildings on significant sites undertake a design competition process to ensure the highest design quality for the precinct.

This approach needs to be closely considered in relation to the urban design considerations that are identified in this report and an understanding of cumulative development impacts to amenity such as open space, social services and apartment amenity.

A summary of key urban design considerations include:

- Streetscape - consideration aspects such as setbacks, street wall height, heritage buildings
- Key Views and Vistas - key long distance vistas which offer sky views, and vistas where a building may terminate the view.
- Distribution of higher buildings to avoid a monolithic street wall effect.

These urban design considerations are described in detail in Section 2. These should form part of the principles within the draft Plan.

1. Context of advice

1.1 Introduction

The draft St Leonards Crows Nest 2036 Plan (the Draft 2036 Plan) was prepared by the Department of Planning and Environment following release of Planning System Circular *PS 18-001 respecting and enhancing local character in the planning system* (16 January 2018). The draft 2036 Plan has been guided by a draft Local Character Statement for the area consistent with the new approach to planning for local character.

The draft 2036 Plan recommends building height increases to provide capacity for North District Plan job targets and additional residential growth close to St Leonards and Crows Nest stations. Much of the increase to building heights focused around the Pacific Highway with key sites shown at Figure 1.

Proposed building height changes have been informed by a set of planning principles which reflect community feedback ambitions articulated in the draft Local Character Statement. The planning principles as currently documented in the Draft 2036 Plan are included in the Appendix (Appendix 2).

1.2 The Importance of St Leonards and Crows Nest

St Leonards and Crows Nest have been identified as a precinct on the north side of Sydney CBD which can provide sustained residential and employment growth into the future. St Leonards is the location of a significant hospital and education precinct and is supported by a busy train interchange and high density residential development. In addition to these specific health and education uses, St Leonards also plays a key role as a commercial core providing office space to complement North Sydney as a high activity commercial centre, which is located just over a kilometre to the south along the Pacific Highway.

The new planned Metro which connects these key places is a significant city changing opportunity for the area. Crows Nest is the location of one of the stations, and its location here is important. It is the opportunity to connect the established vibrant mixed-use neighbourhood of Crows Nest, which has previously relied on a sole public transport mode for immediate connections to the Sydney CBD and to the north or east. The village of Crows Nest, focused around Willoughby Road has typically relied on local employment and surrounding residential areas of Crows Nest, Naremburn and Wollstonecraft to maintain its vibrancy and economy.

The new Metro will provide a significant boost to population requiring a commensurate increase in services, open space, housing, commercial and retail opportunities, and all with the prospect to improve the neighbourhood through thoughtful design and a clear understanding of local conditions and character.

The community engagement which has been undertaken as part of the draft Plan process has identified the social value of Willoughby Road to the local community. Retaining this value in relation to the village is important. The role of Metro in bringing more people to the area cannot be understated to assist in maintaining and enhancing this value.

In order to ensure the key objectives of achieving sustainable, walkable, liveable neighbourhood with a vibrant high street, a strategic approach to growth and the appropriate density near the station is required.

This density needs to be balanced with the important aspects of place which are particular to St Leonards and Crows Nest. These aspects are identified in the subsequent sections.

1.3 Scope of Advice

The advice of GANSW has been sought prior to exhibition of the Draft 2036 Plan. Refer to Appendix 4 for the letter of request for advice.

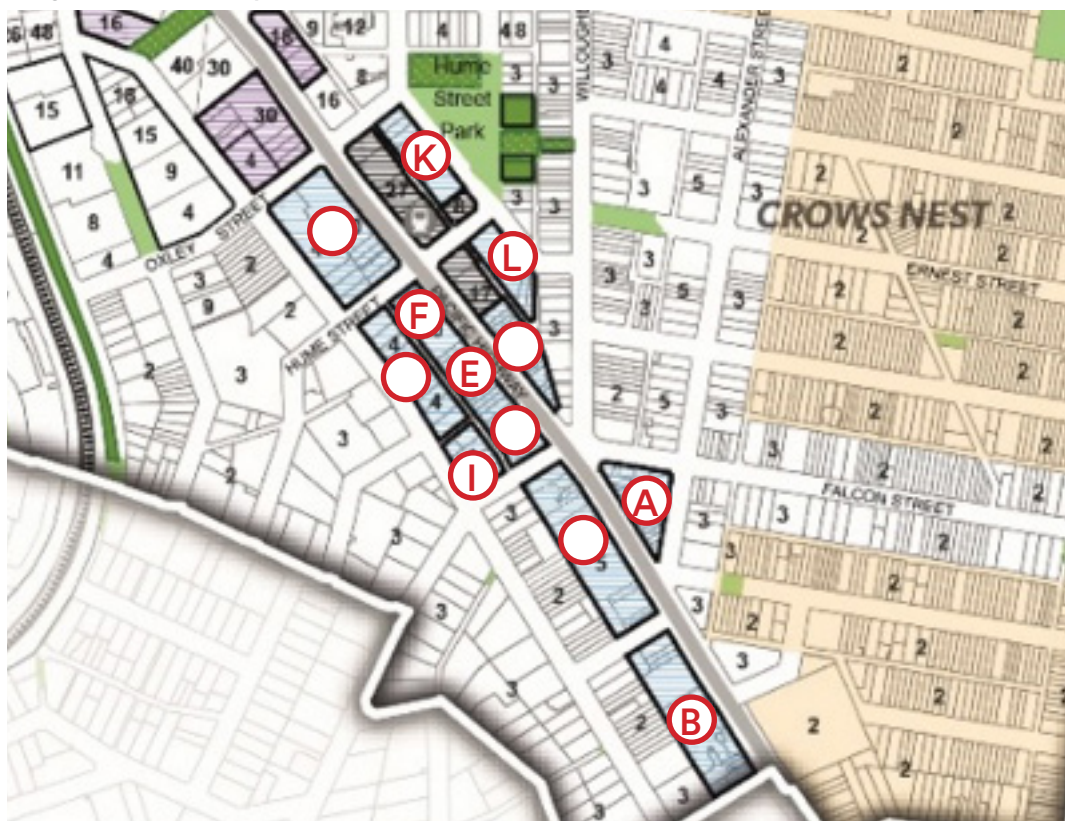
Analysis is required to test different building height options of the area blue in Figure 1 below, identify the advantages and disadvantages of each option and compare the impacts of each built form option against each of the planning principles identified in the Draft 2036 Plan, with supporting commentary.

GANSW's analysis has focused on testing different building heights along Pacific Highway south of Oxley Street at Crows Nest. This is identified in the map (Figure 1) below.

The following draft and confidential information was provided by DPE to assist with GANSW's advice.

1. Height of Buildings Map – Identifying areas for GANSW Investigation
2. Site Analysis and Summary of Planning Principles
3. Draft Local Character Statement
4. Draft St Leonards and Crows Nest 2036 Plan
5. SJB Draft Urban Design Report
6. Summary of local character consultation survey results
7. Height considerations
8. Height testing
9. Existing LEP height map
10. Lot consolidation assumptions and map

Figure 1: Area of Study extract (source DPE)



Height of Building (in Storeys)

Plan Area	Railway Station	Existing Public Open Space	Proposed Height Changes	Metro Site
Pacific Highway	Metro Station	Proposed Public Open Space	Subject to Planning Proposals Supported by Councils	Focus of Advice
Railway Line	Council Proposed Open Space	Heritage Conservation Area	Other Height Changes for Consideration in Advice	

*Height of Building is indicative and subject to detailed design

1.4 Methodology

Contributors

Government Architect NSW (GANSW) has been supported by independent advice from Matt Davis, Director, Davis + Davis, Architect and Urban Designer with support from the Urban Design Director of Planning + Design, DPE.

SJB Urban, as the consultant for the draft St Leonards Crows Nest Plan have provided the modelling and the test views (axonometrics, plan and street views).

Methodology

The methodology that GANSW has undertaken is described below in the following steps:

Understanding of key urban design considerations

Identification of the important urban design considerations to the public domain, such as streetscape and key views, consistent with the outcomes of the draft Local Character Statement.

Testing of Solar Access

Undertake comparative analysis of the existing setting and current proposals, against the two tests as outlined below:

1. As Existing – the existing built form of the study area.
2. The draft St Leonards Crows Nest 2036 Plan (the draft 2036 Plan)
3. Test 1 – Planning Principles as outlined in the draft 2036 Plan
4. Test 2 – North Sydney solar access controls under North Sydney DCP 2013

These tests, which are illustrated in the axonometric focuses on the solar access impacts only.

Analysis of key Street views

The third step is to identify some of the key street views which are important in the area with consideration of the key urban design factors which need to be taken into account to ensure the appropriate built form outcome.

General Assumptions

The following are the general assumptions integrated into each of the scenarios. Assumptions in the test scenarios are generally consistent with those established by SJB in the draft 2036 Plan, including:

1. Residential floor to floor of 3.1m.
2. Commercial in podium floor to floor of 3.6m.
3. Street wall – As per current LUIP/ Planning Principles – to respond to established context by integrating with existing street wall heights and heritage items – also to achieve the non residential FSRs
4. Above podium level setbacks – 5m to Pacific Highway, 4m to all other streets
5. Residential Block Depths range from 18-22m for dual aspect. 12m for single aspect

Limits of the study

The following limitations apply to the study:

- Focussed on testing the assumptions (principles).
- Testing of the scenarios against the Apartment Design Guide has not been undertaken.
- Shadow impacts have not been independently verified.
- Reliance on the consultant's 3D modelling.
- Envelopes are indicated only and do not represent intended architectural built form.

2. Urban Design Considerations

The testing which has been undertaken is based on the primary response to solar access. Solar access controls are only one component when considering the subsequent appropriate built form approach, the resulting amenity of the public domain, and achieving quality and character in spaces. In addition to this, GANSW has undertaken initial analysis to determine the other particular urban design factors which should be considered in achieving a good outcome for St Leonards and Crows Nest.

The draft Local Character Statement has identified that the village character of Willoughby Road and the 'Fiveways' junction of the Pacific Highway, Willoughby Road, Falcon Street and Shirley Road are of particular importance. It is important to identify and understand the specific qualities of the place which contribute to this character. Place specific considerations that should influence the preferred planning approach are described below. All of these urban considerations are inter-related and cannot be looked at in isolation.

Streetscape

The quality of streetscape as a pedestrian includes aspects such as the street width to building height (street wall) ratio, footpath widths, building setbacks and the presence of street trees. It also includes the distinct quality of building types, and their subdivision pattern which creates a particular positive interface with the street. This includes heritage buildings which contribute to pedestrian streetscape quality. Key instances within the precinct include:

- 1. Existing streetscape of Willoughby Road** - this includes aspects such as street width, generous footpaths and street trees which all contribute to an established and distinct street character. A distinct building pattern and grain is found along Willoughby Road, incorporating shop top housing and a finer grain of subdivision. This fine grain results in an increase in activity, through increased shop front doors onto the street. This also includes an appropriate response to existing heritage buildings and their contribution.
- 2. Future streetscape of Pacific Highway** ensuring the appropriate street wall built form on both sides of the street, and arrangement and location of higher buildings to ensure the sense of openness and access to sky views as a pedestrian is balanced with new development, in particular to avoid a monolithic street wall effect.

An appropriate response to the existing heritage buildings within the blocks and their contribution as established shop top housing is also important.

Key views and vistas

This can include long distance views towards open sky, or with existing or new marker buildings which terminate important vistas. Open sky is important, to create the sense of space, and the silhouette of building form against the sky.

Marker building have a role in acknowledging an important place and/or terminating a view. In considering them, the approach to height, ensuring slenderness of tower form, and the overall positive effect on the skyline are important. It should be noted that a marker building is not necessarily a tall building.

Key instances within the precinct include:

- 1. Long distance view looking south along Willoughby Road** - the current open vista and sky view at the end of the street is significant.
- 2. The Fiveways junction** plays a significant role in marking Crows Nest as a place and defining character at the termination of Willoughby Road and Falcon Street. Particular to

note is:

- the heritage listed buildings at key corners of the Fiveways. This includes the heritage listed Willoughby House, O.J. Williams Store (429 Pacific Highway) - a significant vista of this building and its setting is seen when facing north, both as pedestrian or travelling in a vehicle along the Pacific Highway. The Crows Nest Hotel which is located on the other side of Willoughby Road is important. Two former bank buildings on Shirley Road are also important to contributing to the character. Termination of the vista along Falcon Street is also important, at Site D. This site is heritage listed and this should be taken into consideration when identifying an appropriate response.

- Site A at the Fiveways junction has potential to mark the significance of the junction, whilst not impacting on the other key vista of Willoughby Road as described above.

3. Testing

3.1 Existing

The existing context

The following plan and axonometric drawings (Figure 2 and 3) indicate the current conditions for the study area, reflecting existing heights as built and approved or progress planning proposals and Development Applications (shown in dark blue) at the time of the survey (late 2016).

Figure 2: Height Plan – Existing

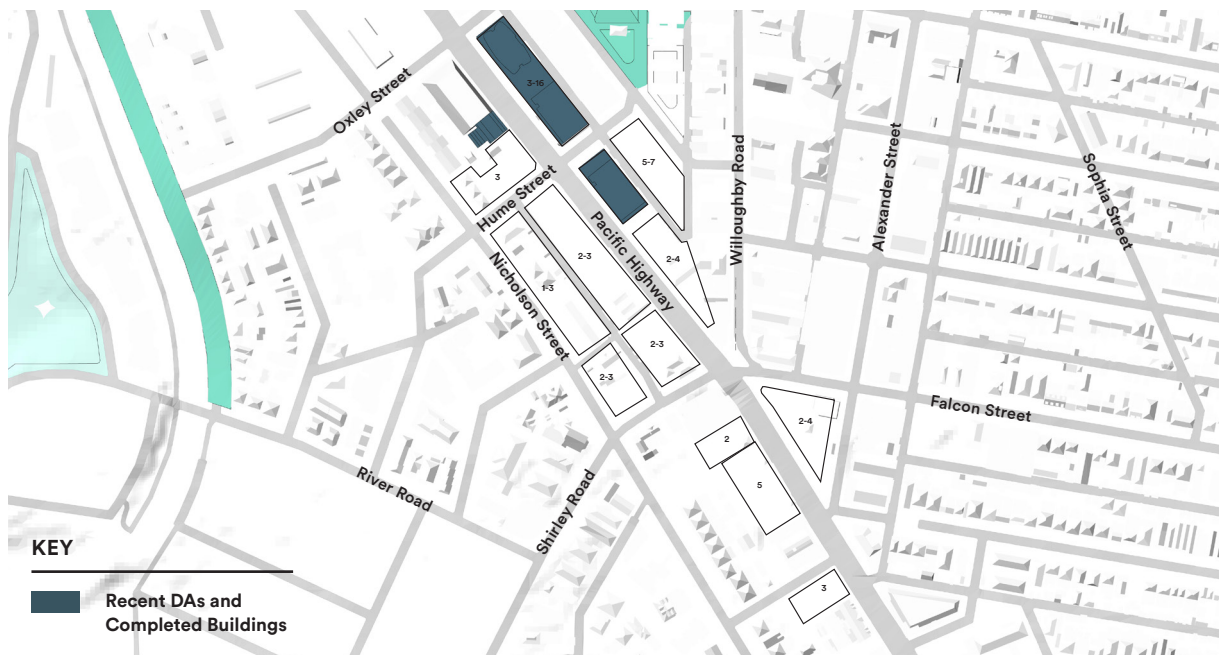


Figure 3: Axonometric View 2: Base Case – Existing



3.2 Draft St Leonards Crows Nest 2036 Plan

Premise:

1. Manage overshadowing of zoned residential land not proposed for height changes
2. No additional overshadowing of residential zone land outside the precinct between 9am and 3pm at winter solstice.
3. No additional overshadowing of Willoughby Road between 11am and 2pm at winter solstice.
4. No additional overshadowing of Conservation Areas between 9am and 3pm at winter solstice.
5. No additional overshadowing of existing and proposed open spaces (hours vary depending on the type of the open space) at winter solstice.
6. Provide transition in heights between existing or proposed high rise buildings and areas not proposed for height changes.
7. Transition heights down towards the Five Ways intersection and Willoughby Road.

Figure 4: Height Plan – draft St Leonards Crows Nest 2036 Plan



Figure 5: Axonometric View: draft St Leonards Crows Nest 2036 Plan



3.3 Test 1

Test 1 investigates changes to the heights that are possible by applying Planning Principles from the current plan as identified by Department of Planning and Environment, but excluding height transitions to the Five Ways intersection and areas not proposed for height changes.

Premise:

1. Manage overshadowing of zoned residential land not proposed for height changes south of the Pacific Highway. In Test 1 an assumption was made that 3 hours of solar access achieved in the afternoon was sufficient (consistent with North Sydney Council's existing DCP).
2. No additional overshadowing of residential zone land outside the precinct between 9am and 3pm at winter solstice.
3. No additional overshadowing of Willoughby Road between 11am and 2pm at winter solstice.
4. No additional overshadowing of Conservation Areas between 9am and 3pm at winter solstice.
5. No additional overshadowing of existing and proposed open spaces (hours vary depending on the type of the open space) at winter solstice.

Figure 6: Height Plan – Test 01 – Current Planning Principles

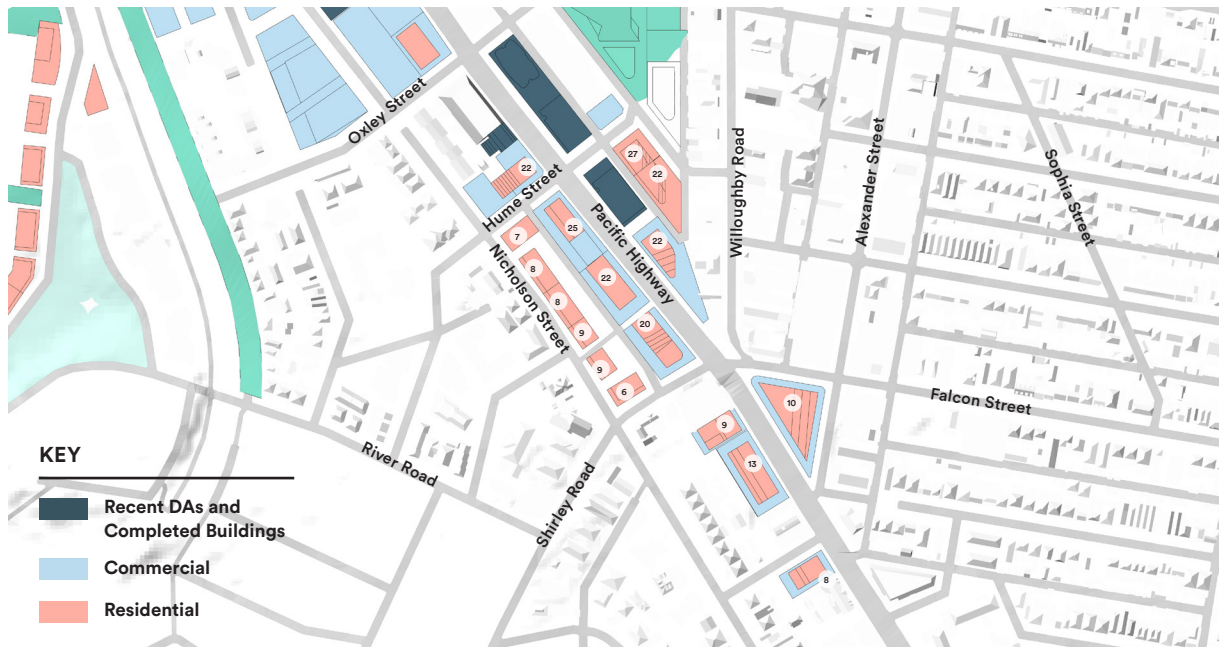


Figure 7: Axonometric View: Test 01 – Current Planning Principles



3.4 Test 2

Responding to the key solar controls from North Sydney DCP 2013

Premise:

1. Manage overshadowing of residential zoned land not proposed for height changes south of the Pacific Highway. As per the approach taken in Test 1, in Test 2 an assumption that 3 hours of solar access achieved in the afternoon is sufficient was applied (consistent with North Sydney Council's existing DCP).
2. Manage overshadowing of residential zoned land not proposed for height changes east of Willoughby Road which incorporates the Heritage Conservation Areas. As per above, an assumption that 3 hours of solar access achieved in the morning is sufficient was applied (consistent with North Sydney Council's existing DCP).
3. No additional overshadowing of Zoned RE1 land (public open space) between 11.30am to 2.30pm at winter solstice (consistent with the North Sydney Council's existing DCP).

Figure 8: Height Plan – Test O2 – Existing North Sydney Solar Access Criteria



Figure 9: Axonometric View: Test O2 – Existing North Sydney Solar Access Criteria



4. Comparisons and observations

4.1 Base Case – draft St Leonards Crows Nest 2036 Plan

The base case examines the potential building envelopes resulting from adhering to the following planning principles:

1. Manage overshadowing of zoned residential land not proposed for height changes
2. No additional overshadowing of residential zone land outside the precinct between 9am and 3pm at winter solstice.
3. No additional overshadowing of Willoughby Road between 11am and 2pm at winter solstice.
4. No additional overshadowing of Conservation Areas between 9am and 3pm at winter solstice.
5. No additional overshadowing of existing and proposed open spaces (hours vary depending on the type of the open space) at winter solstice.
6. Provide transition in heights between existing or proposed high rise buildings and areas not proposed for height changes.
7. Transition heights down towards the Five Ways intersection and Willoughby Road.

In addition to the primary planning principles, the following assumptions have been applied:

- Podiums – typically 3-4 storeys with consideration of prevailing street-wall context
- Highest density and tallest buildings located around the metro and transitioning of built form down to the south and at interface with adjacent neighbourhoods.

Advantages

- Legible urban form with higher density around Metro and Pacific Highway with reduction in scale at edges. **Refer to Figure 22.**
- Moderate amount of development in proximity to the new Metro.
- Existing characteristics of Willoughby Road are maintained and substantially protected, with solar access preserved and visual impact of new development minimised. Street level views demonstrate that the existing low-scale and open qualities of the street will be substantially maintained. **Refer to Figure 10.**
- Low scale in southern portion, such as site-A, is compatible with the varied but prevailing low scale of existing context. **Refer to Figure 10 and 13.**
- Significant solar access is maintained to private properties and important places, including Willoughby Road.
- Moderate with some variability in scale along Pacific Hwy may enable a positive pedestrian environment and experience. **Refer to Figure 16.**

Disadvantages

- The social value that can come with new infrastructure (Metro) and existing services has not been optimised - i.e. the potential to leverage from new infrastructure with an optimised appropriate population, who benefit from a sustainable walkable, thriving neighbourhood, and in turn enhance and improve the existing village character and economy.
- Potential for poor quality built form outcomes due to relatively low scale mixed-use buildings with substantial commercial component, which also may not be viable.
- Poor amenity to residential buildings, which may be affected by noise / emissions and not benefit from district views available in these locations.
- Importance of Five-ways as a gateway to Willoughby Road and Falcon Street, and the changing qualities of the precinct is not acknowledged in the built form. **Refer to Figure 28.**

4.2 Test 1 – ‘Current planning principles’

Test 1 examines the potential building envelopes resulting from adhering to the following planning principles (consistent with the Base Case):

1. Manage overshadowing of zoned residential land not proposed for height changes south of the Pacific Highway. In Test 1 an assumption was made that 3 hours of solar access achieved in the afternoon was sufficient (consistent with North Sydney Council’s existing DCP).
2. No additional overshadowing of residential zone land outside the precinct between 9am and 3pm at winter solstice.
3. No additional overshadowing of Willoughby Road between 11am and 2pm at winter solstice.
4. No additional overshadowing of Conservation Areas between 9am and 3pm at winter solstice.
5. No additional overshadowing of existing and proposed open spaces (hours vary depending on the type of the open space) at winter solstice.

In addition to the primary planning principles, the following assumptions have been applied:

- Podiums – typically 3-4 storeys with consideration of prevailing streetwall context
- Stepped tower forms – providing a practical floor plate at uppermost levels.

The intent of Scenario 1 is to establish an objective demonstration of the affect of the quantifiable planning principles (primarily relating to solar access).

Advantages

- New Metro station is acknowledged with an increased amount of resident and worker populations in close proximity. In particular, increased development north-east of Pacific Highway provides opportunities for high-amenity development in close proximity to Metro, open-space, and services (retail), without the need to cross Pacific Highway and with good orientation.
- Modest heights around five-ways provides some additional residential and worker population to support the Willoughby Road ‘high-street’ retail.
- Legible urban form with higher density around metro and Pacific Highway with reduction in scale at edges. **Refer to Figure 26.**
- The lower scale around Willoughby Road is maintained. Taller elements, including those along Clarke Street are visible from Willoughby Road, but set back a significant distance. The street views indicate that the perception of a low-scale environment would be generally maintained. Refer to Figure 14.
- Significant solar access is maintained to private properties and important places, including Willoughby Road.

Disadvantages

- Variable built form and heights around Five-ways does not reinforce a ‘gateway’ or marker of importance.
- Continuous, tall street-wall along Pacific Highway (between Shirley Road and Oxley Street) is unlikely to provide good pedestrian amenity or experience, and is a significant change to the prevailing low-scale buildings. **Refer to Figure 17 and 26.**
- 8 Storey frontage to Nicholson Street presents an abrupt transition to residential area, this has not been demonstrated in detail this study.

4.3 Test 2 – North Sydney Solar Access criteria

Test 2 examines the potential building envelopes resulting from adhering to North Sydney DCP 2013 solar access objectives and principles:

1. Manage overshadowing of residential zoned land not proposed for height changes south of the Pacific Highway. Like in Test 1, in Test 2 an assumption that 3 hours of solar access achieved in the afternoon is sufficient was applied (consistent with North Sydney Council's existing DCP).
2. Manage overshadowing of residential zoned land not proposed for height changes east of Willoughby Road which incorporates the Heritage Conservation Areas. Like the above, an assumption that 3 hours of solar access achieved in the morning is sufficient was applied (consistent with North Sydney Council's existing DCP).
3. No additional overshadowing of Zoned RE1 land (public open space) between 11.30am to 2.30pm at winter solstice (consistent with the North Sydney Council's existing DCP).

In addition to the primary planning principles, the following assumptions have been applied:

- Podiums – typically 3-4 storeys with consideration of prevailing streetwall context
- Stepped tower forms – providing a practical floor plate at uppermost levels.

The intent of Scenario 2 is to establish an objective demonstration of the affect of the alternate solar access requirements as defined in the North Sydney DCP, but without the requirement of maintaining solar access to Willoughby Road.

Advantages

- New metro station is optimised with increased resident and worker populations in close proximity. In particular, increased development north-east of Pacific Highway provides opportunities for high-amenity development in close proximity to metro, open-space, and services (retail), without the need to cross Pacific Highway, and an optimal north orientation for residential buildings.
- Illustrates site A as a possible visual marker, subject to modelling to ensure a slender form and design excellence, and responding to the urban design considerations. It could reinforce Five-ways as a place of importance/interest, commensurate with its role as entry to 'village' retail precinct. **Refer to Figure 12.** It could provide an opportunity for high amenity residential development with good orientation, district views, access to transport, access to retail, and services (including multiple schools within 800m).

Disadvantages

- Site L is in excess of 50 storeys is significantly taller than other buildings in the vicinity. The pedestrian level views indicate that these buildings are visible from key places such as Willoughby Road and likely to be perceived as out of character with the prevailing low-scale and open qualities of the area. **Refer to Figure 24.**
- Willoughby Road will be subject to additional overshadowing in the afternoon by site L, impacting the amenity of the street and potentially compromising its desirability as a place for outdoor dining.
- Consistent, tall street-wall along Pacific Hwy (between Shirley Road and Oxley Street) is unlikely to provide good pedestrian amenity or experience, and a significant change to the prevailing low-scale buildings.
- 8 Storey frontage to Nicholson Street presents an abrupt transition to residential area. May be managed with setbacks and detailed design, but not demonstrated in this study.
- The nominal building envelope of site-A presents an overly bulky tower form with significant negative visual impacts, in particular when viewed from the low-scale area to the east. **Refer to Figure 21.**
- Building envelopes do not comply with the Apartment Design Guide (ADG) requirements.

WILLOUGHBY ROAD AT ERNEST PLACE

VIEW 1

Figure 10:
BASE CASE

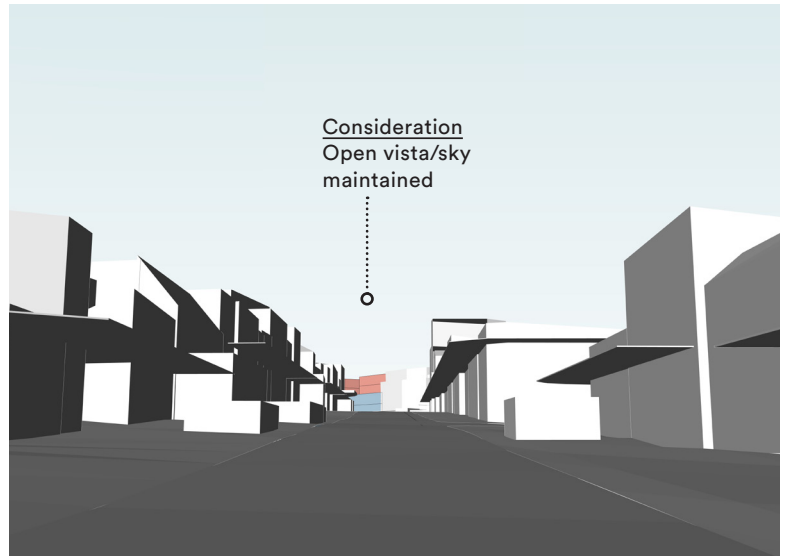


Figure 11:
TEST 1

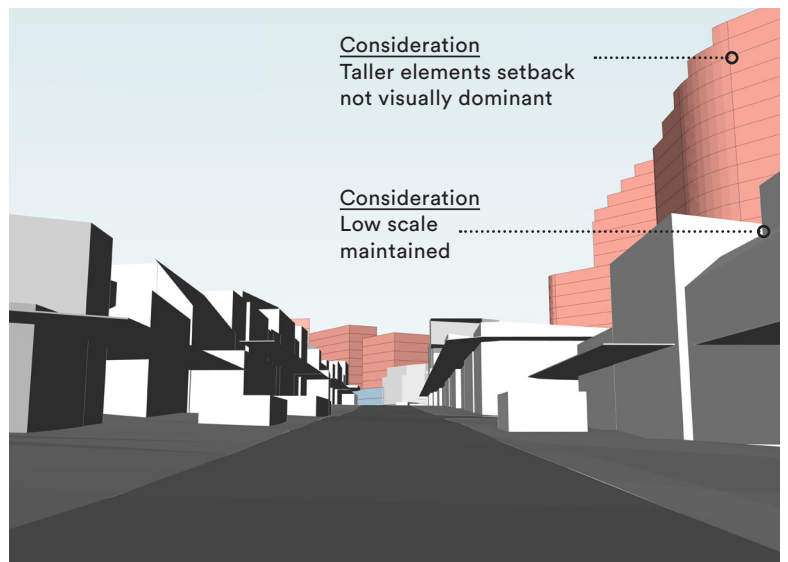
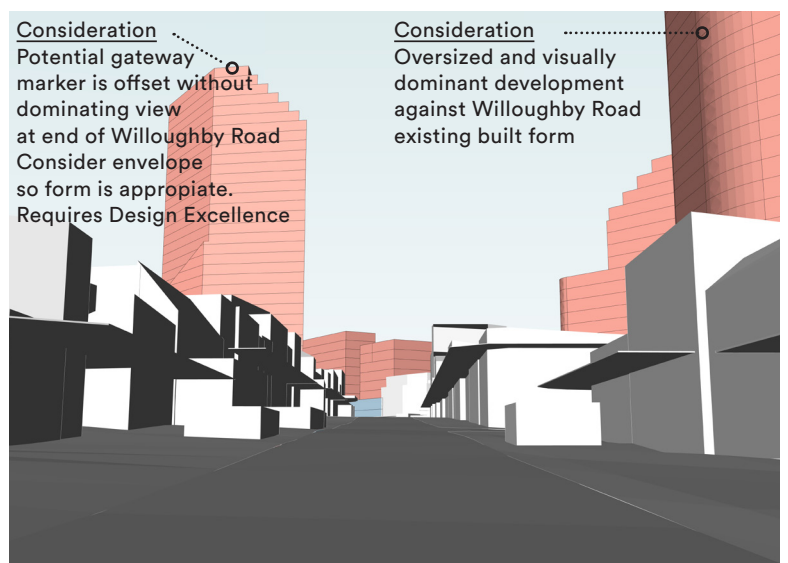
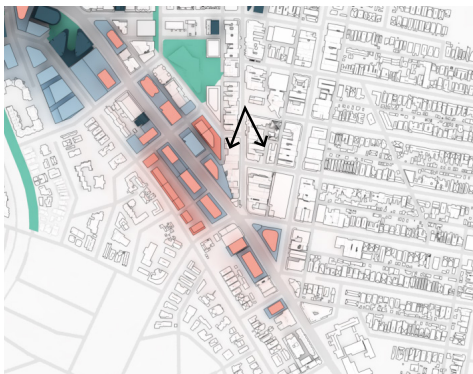


Figure 12:
TEST 2



KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential

WILLOUGHBY ROAD AT BURLINGTON STREET: VIEW 2

Figure 13:
BASE CASE

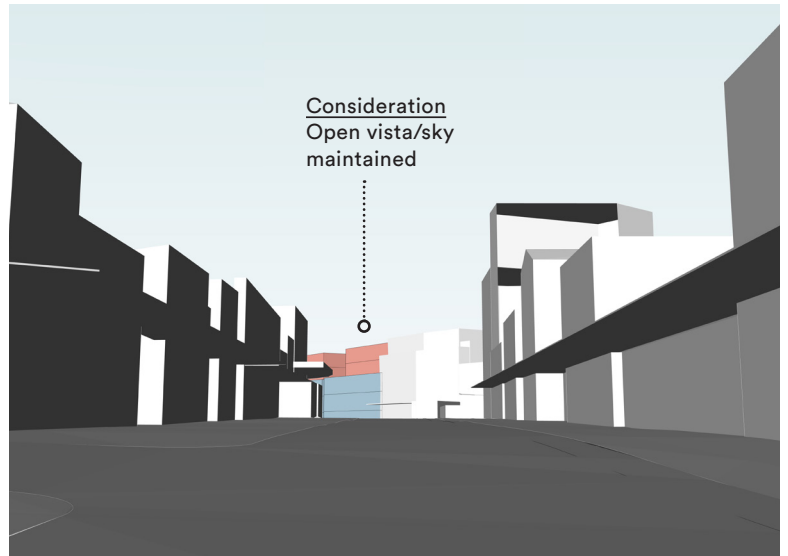
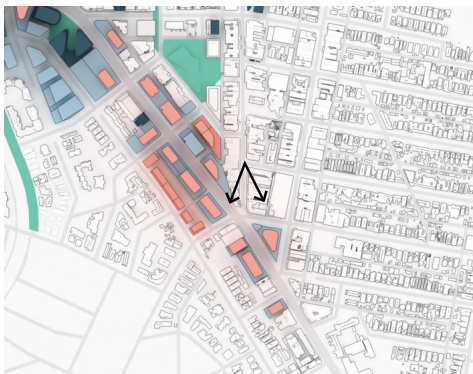


Figure 14:
TEST 1



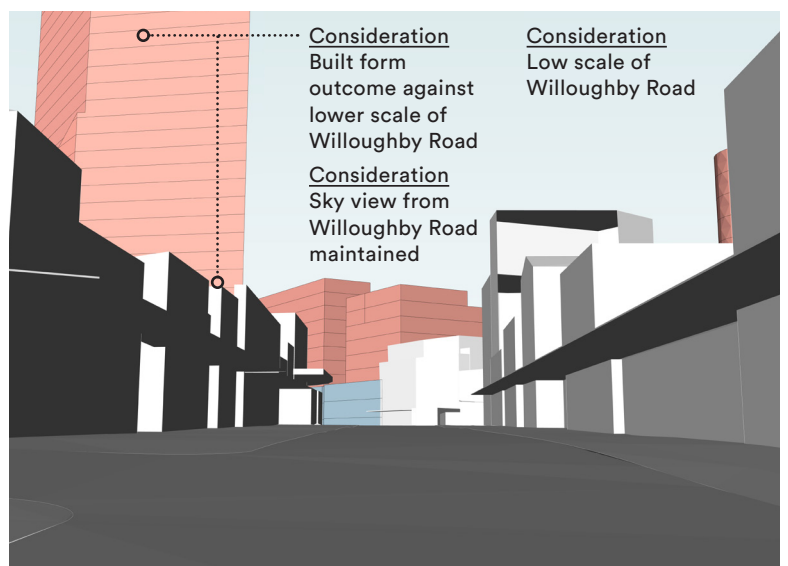
Figure 15:
TEST 2

KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential



PACIFIC HIGHWAY AT HUME STREET VIEW 3

Figure 16:
BASE CASE

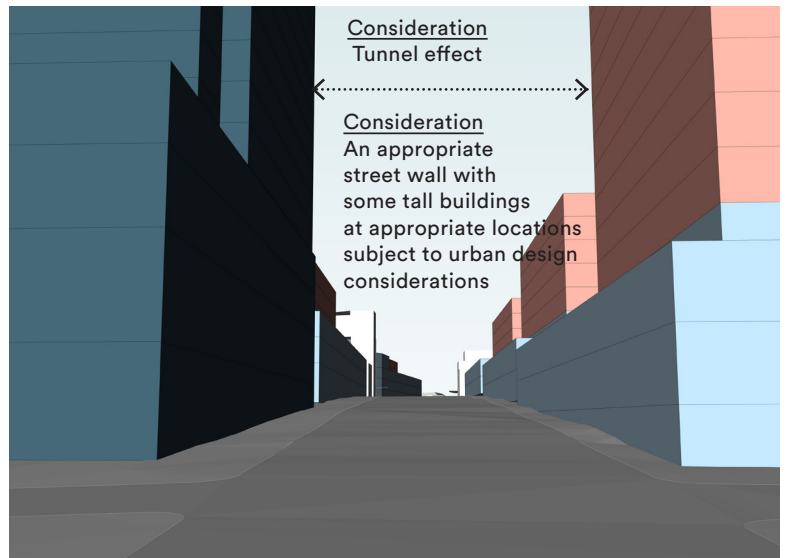


Figure 17:
TEST 1

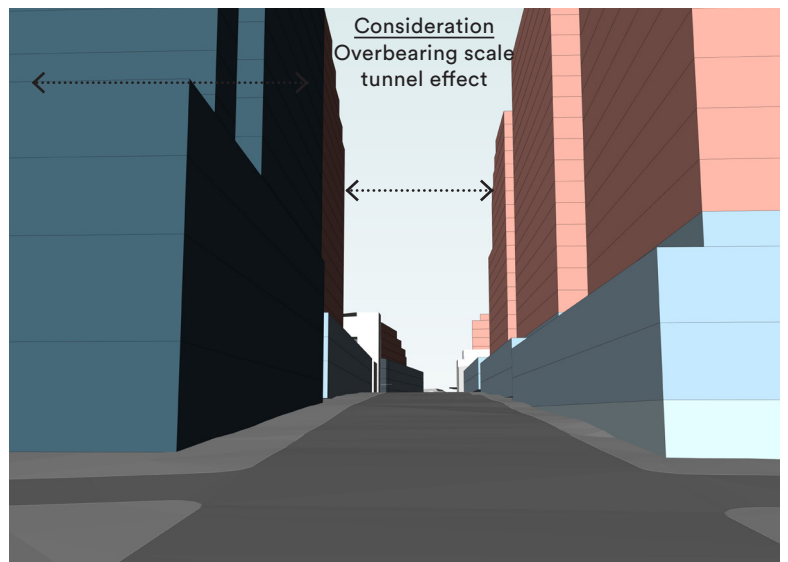
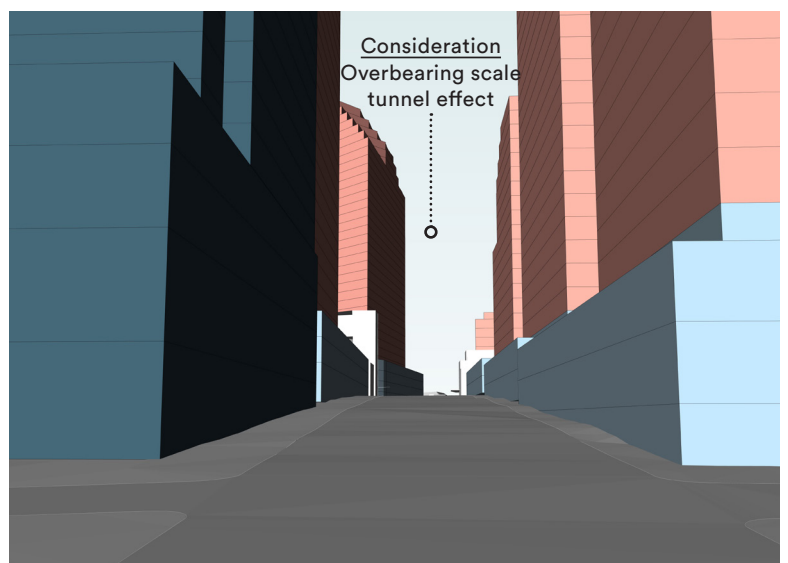
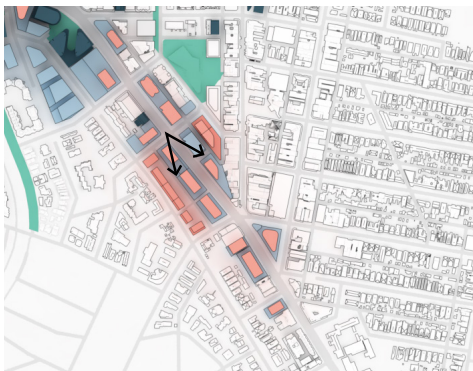


Figure 18:
TEST 2



KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential

PACIFIC HIGHWAY AT NICHOLSON LANE VIEW 4

Figure 19:
BASE CASE

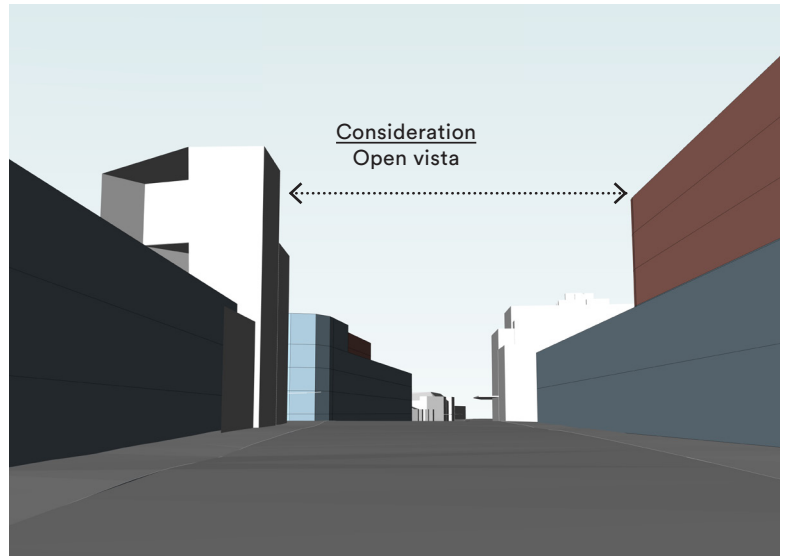


Figure 20:
TEST 1

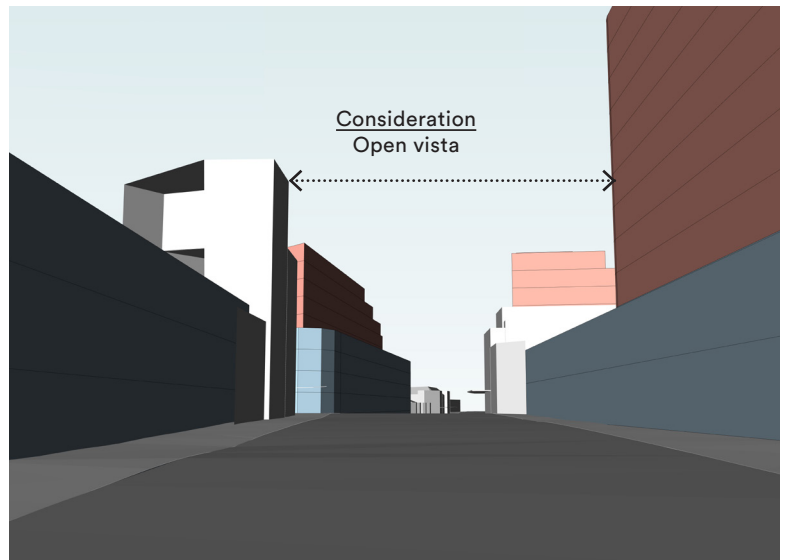
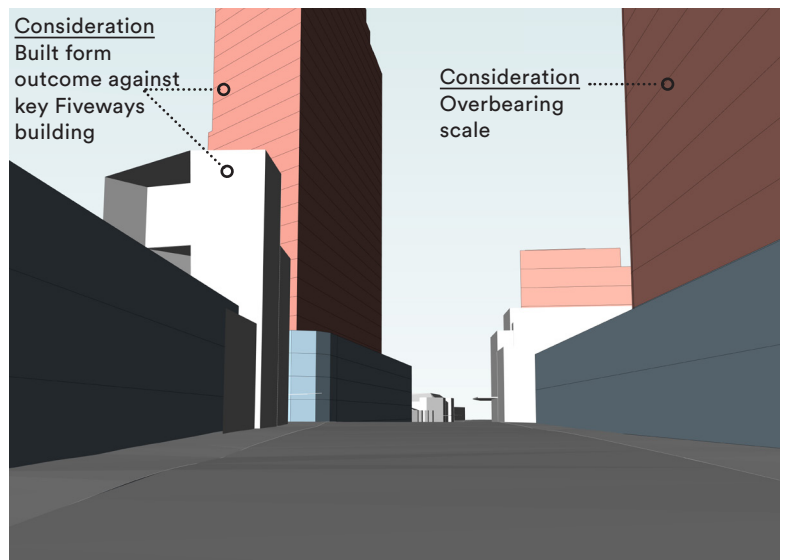
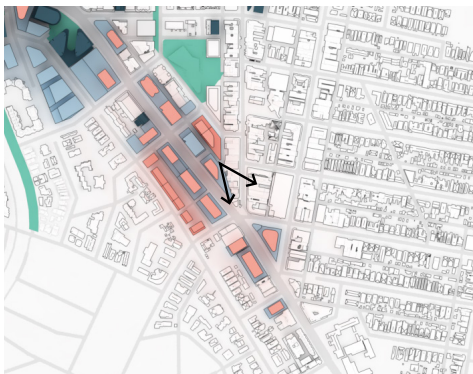


Figure 21:
TEST 2



KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential

PACIFIC HIGHWAY AT ROCKLANDS ROAD VIEW 5

Figure 22:
BASE CASE

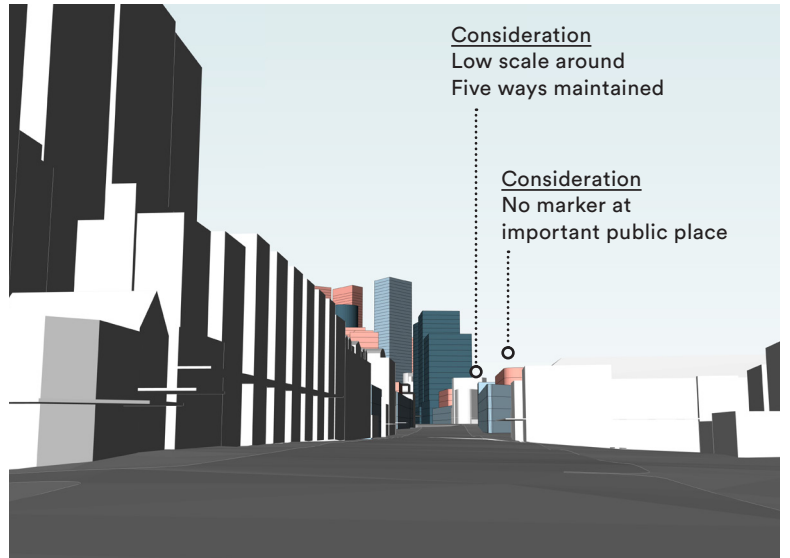


Figure 23:
TEST 1

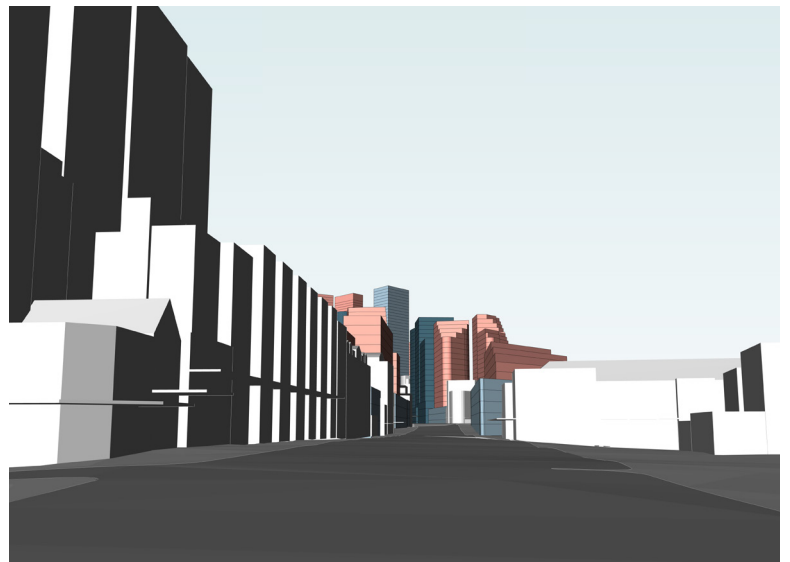
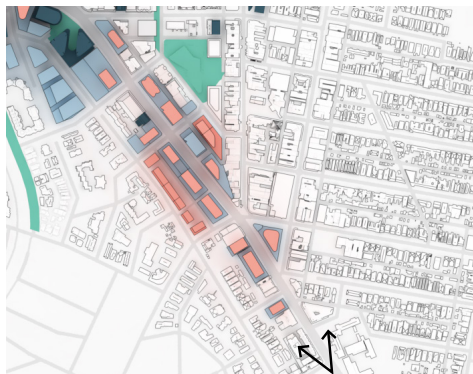


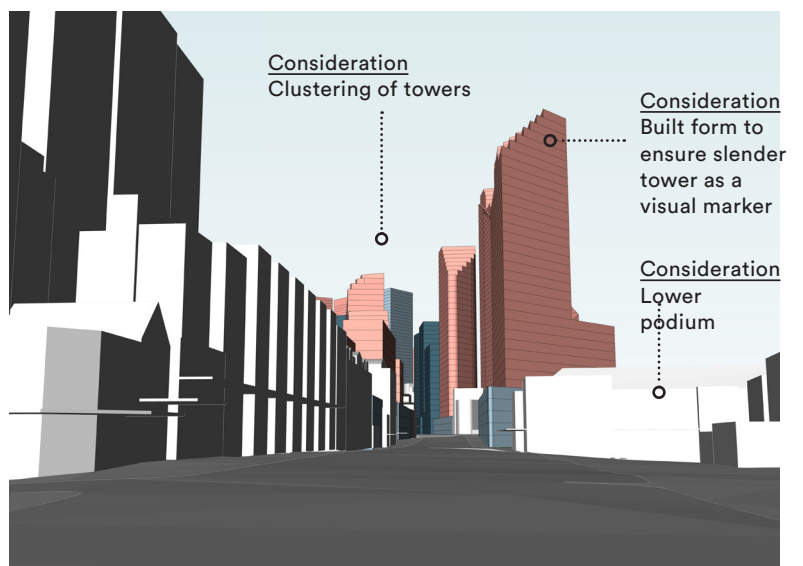
Figure 24:
TEST 2

KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential



PACIFIC HIGHWAY AT ALEXANDER STREET VIEW 6

Figure 25:
BASE CASE

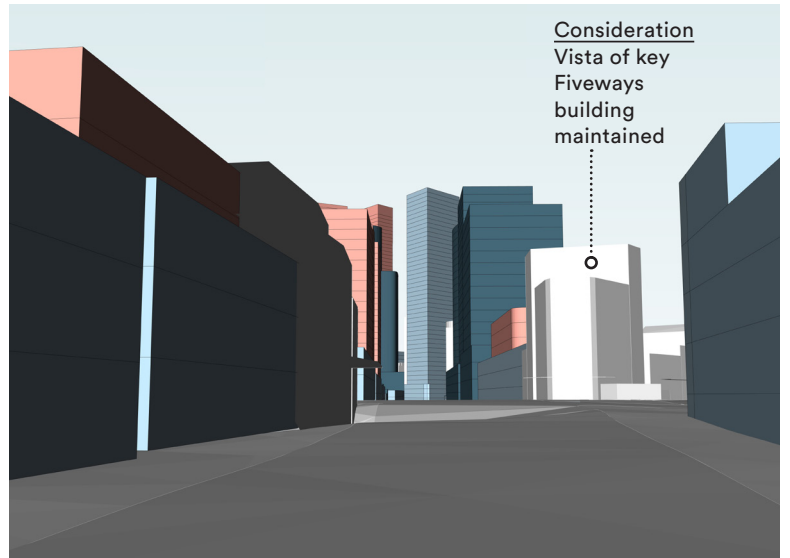


Figure 26:
TEST 1

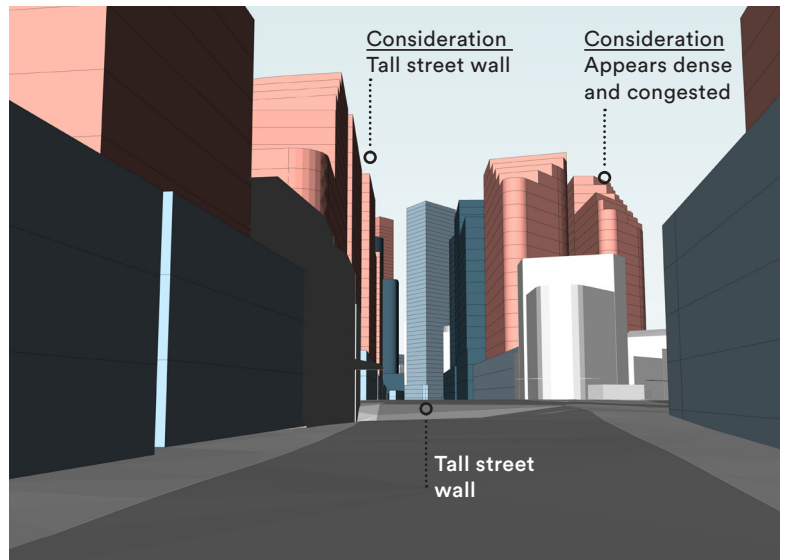
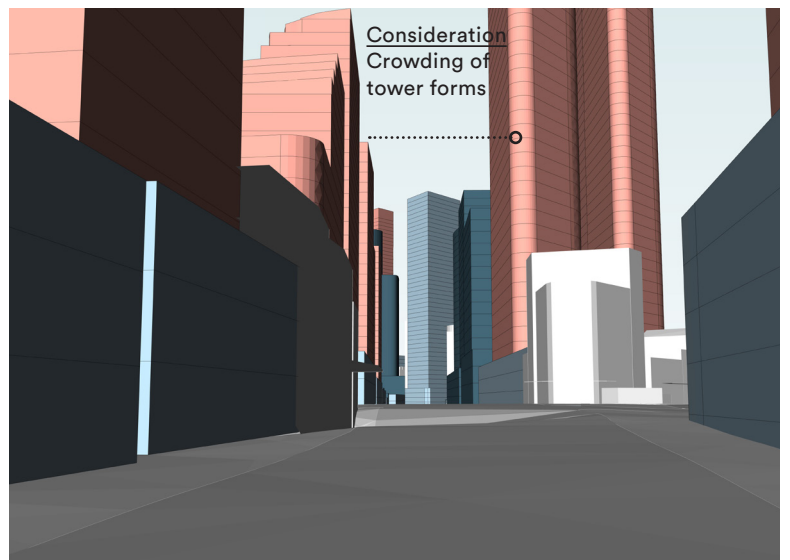


Figure 27:
TEST 2



KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential

FALCON STREET VIEW 7

Figure 28:
BASE CASE



Figure 29:
TEST 1

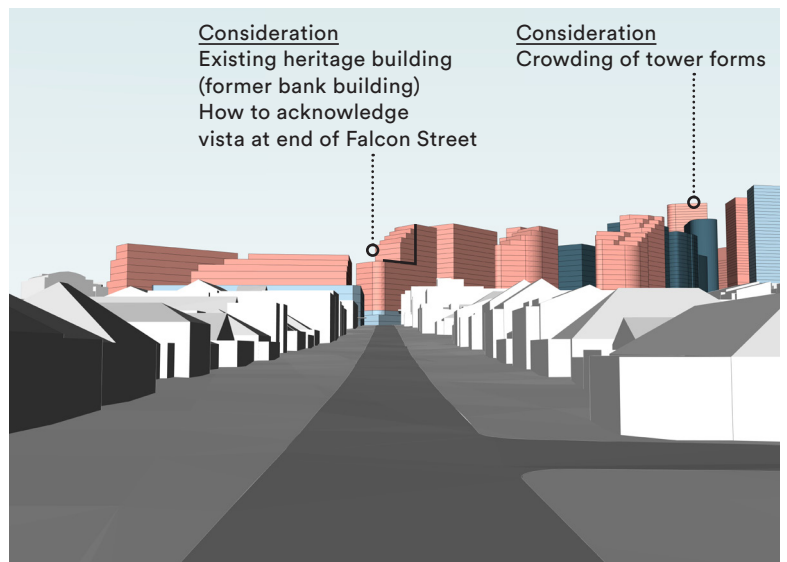
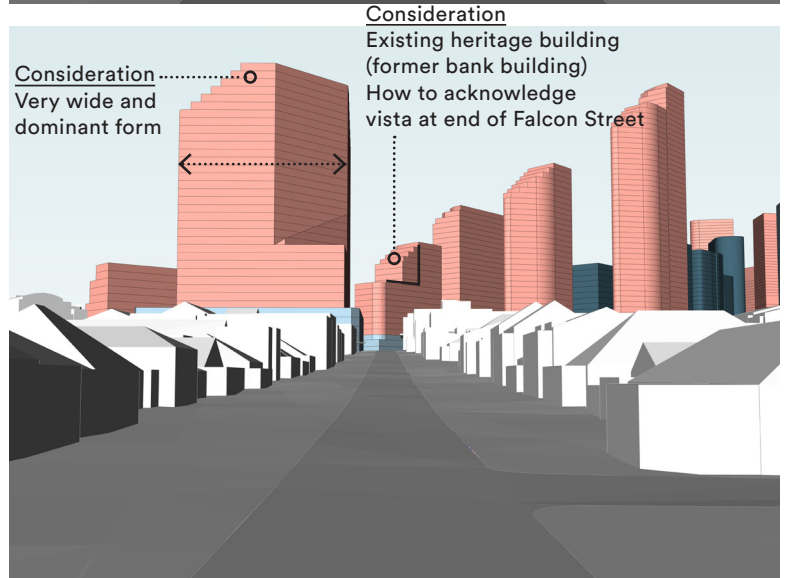
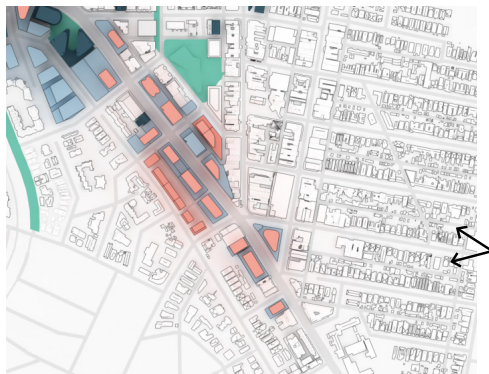


Figure 30:
TEST 2



KEY PLAN



KEY

- Recent DAs and Completed Buildings
- Commercial
- Residential

5.0 Conclusions

5.1 Towards Better Places and Character

Better Placed, the integrated design policy for the built environment provides a clear definition of a well-designed built environment. It should be healthy, resilient, integrated, responsive and equitable. The objectives of Better Fit, Better for People, Better for People, Better Value, Better Performance and Better Look and Feel all work to meet this aim of a well-designed built environment.

This review is focussed on planning envelopes, identifying nominal building forms and heights. Whilst these elements are important contributors to the future neighbourhood character, the quality of a place will be substantially determined by a range of detailed urban design considerations outside the scope of this urban design advice. Further consideration should be given as to how the objectives of Better Placed, the principles within the draft Local Character statement and the detailed urban design considerations of Part 3.4 can refine the proposal to ensure planning envelopes translate into well-designed built form outcomes.

All of these considerations contribute specifically to the character of a particular area, and contribute to the character as identified in the draft Local Character Statement in Appendix 3.

GANSW considers that it may be possible to introduce further intensity within the study area can be integrated within the study area, but this must be undertaken in a way which balances development with amenity and character.

5.2 Next Steps

1. Testing of Amenity

In determining the preferred approach, consideration should be given to the following factors:

- Open spaces needs
- Social services
- Infrastructure
- Traffic management and movement
- Demonstrable ability for development to meet requirements of Apartment Design Guide

2. Urban Design Considerations

Key urban design considerations as described in Section 2 require further investigation beyond this study. Detailed urban design principles should be developed from these considerations and form part of the draft Plan. This includes aspects such as streetscape (landscape, street wall/street width, building type and pattern, heritage buildings), and key views and vistas (access to sky view or visual markers to define).

3. Design Excellence Strategy

A Design Excellence strategy should be developed and implemented as part of the Plan to ensure the highest design quality for the precinct. This strategy should include the identification of significant sites. Significant sites are those which have been identified to have a contributory quality to the broader precinct. It is important to note that this contributory factor may be either related to heritage significance or the ability to respond as a visual marker, dependent on the location and context.

These sites must be able to demonstrate they meet the detailed urban design principles which will be integrated into the draft Plan, along with other considerations of recently developed sites, strata properties, amalgamation potential and heritage considerations.

The Design Excellence Strategy should respond to the St Leonards / Crows Nest Planning Study (Precincts 2 & 3), adopted by North Sydney Council in May 2015, consistent with the approach taken in regards to tall buildings.

4. APPENDICES

Appendix 1 – The Vision (the St Leonards Crows Nest 2036 Plan)

Vision and Objectives

The Vision

The draft St Leonards Crows Nest 2036 document states:

“The St Leonards and Crows Nest area will be a major centre for workers, residents, students and visitors, offering a variety of homes, jobs and activities for the diverse local population.

Located five kilometres north-west of the Sydney CBD, St Leonards and Crows Nest will become a major health and education centre in northern Sydney. Connected by a world class public transport network, the area will be within 30 minutes of major centres and destinations including the Sydney CBD, the harbour, Chatswood, Macquarie Park and Sydney Airport.

St Leonards and Crows Nest will support a variety of lifestyles from the leafy neighbourhood streets, to the vibrant Crows Nest village and lively inner-city living in the St Leonards core.

Continued growth in the health and technology sectors will deliver approximately 16,500 additional jobs across various industries. New jobs will be encouraged in emerging or evolving industries, while continuing to recognise the importance of traditional industries in the Artarmon employment area and Crows Nest village. Economic growth and an increased number of globally significant jobs, will support both the local and regional economies of NSW.

St Leonards and Crows Nest has a vibrant community that caters for the needs of people of all ages, including a diverse range of homes, connected open spaces, community services, cafés, restaurants and unique local retail experiences. The core of St Leonards will balance commercial and residential development, providing active streets, safe and interesting pedestrian laneways and tree lined public plazas for residents, workers and visitors.

The village atmosphere of Crows Nest will be retained, with Willoughby Road continuing to be a vibrant high street that is valued by the community and an escape from for the hustle and bustle of modern life. A connection to the past will be maintained by protecting Heritage Conservation Areas in Naremburn and Holtermann Estate, ensuring the character of the area is protected and celebrated.”

Objectives

The objectives of the draft Plan are identified as follows, as described through the Vision developed with the community. In 2036, St Leonards and Crows Nest will be:

A Vibrant Community – new development around the Crows Nest metro station will provide energy and life along the Pacific Highway and St Leonards. The existing vibrancy and liveliness of the Crows Nest Village and Willoughby Road will provide a foundation for the revitalisation of the St Leonards Core.

A Place that Protects the Past – Heritage Conservation Areas and buildings are to be retained and celebrated as an important connection to the past.

An Accessible Place – an attractive and easy place to walk, cycle and more through with

improved local and regional connections.

A well-designed place – new buildings that model the highest quality design, respecting and enhancing the existing local character of the area.

An employment hub – providing 16500 additional jobs to support a growing and evolving economy, with opportunities for employment in the industrial, professional, creative, retail, health and education sectors.

A home for people of all ages – a greater mix of homes will be available to the diverse range of people that live in the area.

A greener place – parks and public green spaces will provide areas for locals to be active, creative and enjoy green leafy spaces throughout the area, away from built up areas in St Leonards.

Draft Local Character Statement Principles

What is important? (from the Character Statement)

Place

- Village atmosphere and strong sense of community of Willoughby Road and Ernest Place and ensuring that it is protected. Create more spaces like this around St Leonards Station
- Maintain the Heritage Conservation Area of Holtermann Estate and Naremburn
- Sunny and bright public spaces
- Major pedestrian routes are well lit and safe to walk at night particularly around the hospital
- Ensure new buildings do not increase wind in the areas that are already windy.

Landscape

- More greenery and less concrete
- More tree lined streets and ensure existing tree lined street are retained
- New development to fit in with the natural slope of the lands
- Easier to get to the wide range of green spaces around you.

Built Form

- St Leonards Core should remain the densest part of the area
- A strong sense of connection to Willoughby Road and Crows Nest village, ensure that development does not change its character
- New development to include incorporate best practice design.

Land Use

- More schools to support the growth and changing demographics
- More community facilities that cater to everyone such as galleries, indoor and outdoor sports and recreation facilities, libraries and community halls
- Housing for rent and that is affordable
- Easy access to medical facilities when needed
- Living and working near the range of industrial services in Artarmon
- Many different employment options, however would like to see a range of different spaces provided for small and large scale businesses in the future.

Movement

- More vibrant and safer streets between key destinations in the area
- Better cycling options and connections outside of the area to make it safer and more enjoyable to get around.
- Improve conditions of River Road, Pacific Highway and Chandos Street which are difficult to cross as pedestrians or cyclist and sometimes feel unsafe.

Planning Principles

In order to support these objectives and the vision, DPE has developed a number of planning principles which ensure that the particular elements of the vision can be realised.

- 1. No additional overshadowing of Heritage Conservation Areas between 9am and 3pm (winter solstice)**
- 2. No additional overshadowing of residential areas outside the Plan area boundary between 9am and 3pm (winter solstice)**
- 3. Manage overshadowing of minimal change areas**
- 4. Protect the 'village' character of Crows Nest**
- 5. No additional overshadowing of Willoughby Road between 11am and 2pm (winter solstice)**
- 6. Transition heights down towards the 'five ways' intersection and Willoughby Road**

Appendix 2 – Solar Access Criteria (from North Sydney DCP 2013)

Objectives

- O1. To ensure that solar access is maintained to Special Areas, open spaces and publicly accessible outdoor places.
- O2. To maintain solar access to residential areas surrounding the North Sydney Centre.
- O3. To avoid the creation of long solid masses of development which prevent the penetration of daylight and/or sunlight through to pedestrian levels and to northern and eastern façades of buildings.
- O4. To ensure that all dwellings have reasonable access to sunlight and daylight.

Provisions

P2. Developments located outside of the North Sydney Centre should be designed and sited such that solar access at the winter solstice (21st June) provides a minimum of 3 hours between the hours of 9.00am and 3.00pm to:

- (a) any solar panels;
- (b) the windows of main internal living areas;
- (c) principal private open space areas; and
- (d) any communal open space areas.

located on the subject property and any adjoining residential properties.

Note: Main internal living areas excludes bedrooms, studies, laundries, storage areas.

- P3. Despite P2 above, living rooms and private open spaces for at least 70% of dwellings within a residential flat building or shoptop housing should receive a minimum of 2 hours of solar access between the hours of 9.00am and 3.00pm at the winter solstice (21st June).
- P4. New development should not overshadow existing or proposed public open spaces located outside of the North Sydney Centre between 11.30am and 2.30pm.
- P5. Spaces are to be created between taller buildings to avoid a solid mass of development and to allow daylight and/or sunlight to penetrate through to pedestrian level.
- P6. Setbacks must be provided between buildings above the podium level.

Appendix 4 - SJB Testing