

NOWRA RIVERFRONT

ENTERTAINMENT AND LEISURE PRECINCT

Proposed Planning Controls

December 2019 - Final Report

Prepared for Shoalhaven City Council

by Studio GL

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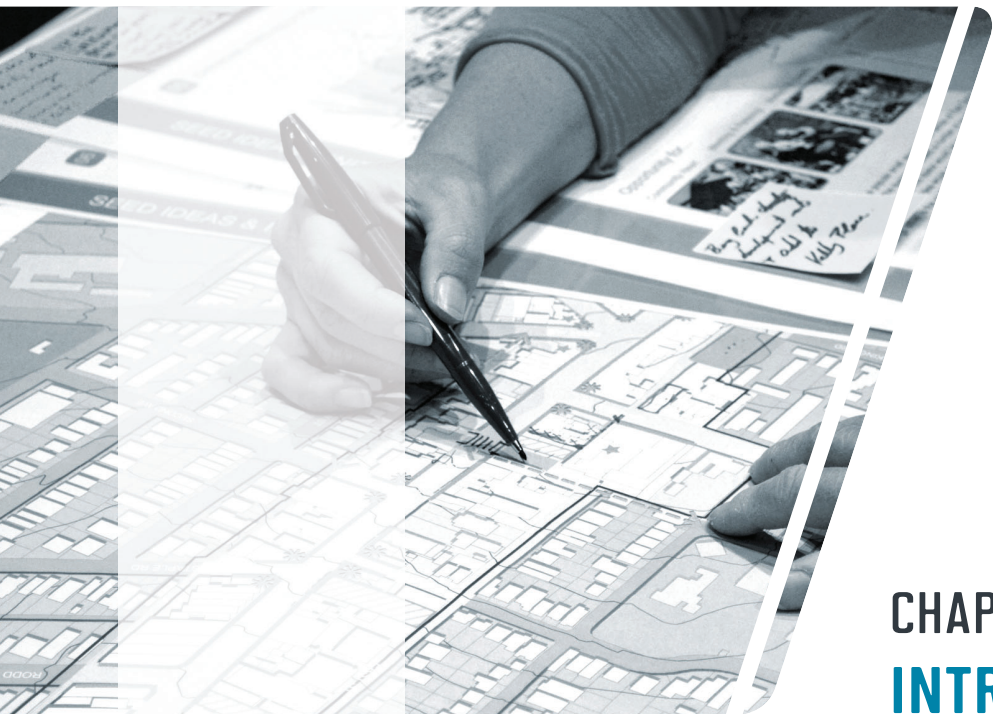
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CHAPTER 1
INTRODUCTION

1-1 About this report

Background

The Nowra Riverfront Precinct has been explored and studied for many years. The area is highly constrained and subject to a variety of challenges including flooding, steep topography, difficulty of access, lack of visual connections, fragmented lot ownership and major road infrastructure including the Shoalhaven Bridge and Princes Highway.

NSW Road and Maritime Services (RMS) is currently proposing a second river crossing (a new bridge) west of the existing Shoalhaven Bridge. This major infrastructure proposal will have a significant impact on the Riverfront Precinct.

The Riverfront Precinct is also a highly desirable area, due to its prominence, proximity to the highway and the high level of amenity provided by the Shoalhaven River and views to the Cambewarra Mountain Ranges. The area provides a significant opportunity to shape the future of Nowra and strengthen its role as the civic, community, tourism and recreational hub for the region.

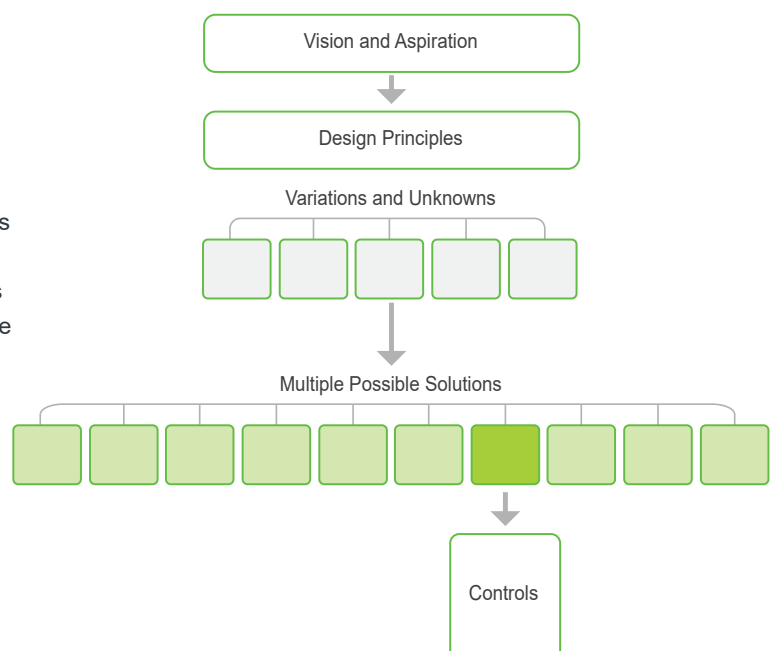
Overview

Studio GL was commissioned by Shoalhaven City Council in December 2015 to recommend a direction for the precinct which was then to inform draft planning and development controls for the precinct. The Strategic Direction report was issued in October 2017.

The Strategic Direction document provides a review of previous strategic studies, a concise summary of opportunities and constraints, and identifies objectives and planning and design principles. It also outlines the unknowns on the area and some of the variations that might occur with increased certainty around these unknown factors.

In March 2018, Studio GL issued draft Precinct Proposed Planning Controls to Council for this area. Around the same time the RMS also exhibited a preferred option for the bridge (between 19 February and 23 March 2018). Later in the same year RMS provided the environmental assessment and concept design of the Nowra Bridge Project (between August and September 2018) and in May 2019 the RMS released the Nowra Bridge Project Submissions Report which noted changes to the design in response to feedback on the concept design. On 10 September 2019 Infrastructure Australia announced that the Nowra Bridge Project had been added to the Infrastructure Priority List as a Priority Project.

This Planning Controls report is to be read in conjunction with the Strategic Direction report. The proposed controls outline one way that the vision for the Riverfront Precinct could be delivered. It should be noted that the level of uncertainty that remains, particularly for some of the sub-precincts, will mean that the final controls may vary from the ones contained in this report (see diagram below).



1-2 Study area



Figure 1 Nowra Riverfront Precinct (aerial photo Nov 2017 source: nearmap.com)

Nowra's Riverfront Precinct is bound by Scenic Drive to the north, Hawthorn Avenue to the east, Hyam Street and Graham Street to the south and Shoalhaven Street to the west. The Princes Highway bisects the precinct along a north south alignment into an eastern and a western area and forms a significant barrier to connections between these two areas.

The area west of the highway has a large amount of low lying open space with key community facilities including the Nowra Aquatic Centre and surrounding public open space. The area also includes a hotel/ motel (currently a cafe) and low density residential housing.

The Council Administration building, the Shoalhaven Visitor Information Centre and the Shoalhaven Entertainment Centre (SEC) are located to the south of the precinct, west of the highway.

The area east of the highway features the historic Nowra Public Wharf and is the site of the former Nowra Sailing Club, a public boat ramp, a restaurant and a steakhouse, a motel, a caravan park and the state heritage listed Graham Lodge. Small lot housing is currently under construction on land to the south east of the precinct, adjoining the highway.

1-3 Structure and process

The process undertaken to develop a Strategic Direction and draft planning controls for the Riverfront Entertainment and Leisure Precinct has occurred over a number of years. It has included a review of previous studies and a series of workshops were held with Councillors, Council staff, state government agencies and landowners. This has allowed the preferred direction to be discussed and tested during focused face-to-face meetings.

Strategic Direction

This Planning Controls report outlines draft controls for the Riverfront Precinct - but these cannot be understood in isolation. The controls must be read in conjunction with the Strategic Direction report issued in October 2017, which provides an understanding of the Riverfront Precinct, a review of the planning strategies and previous studies undertaken and the opportunities and constraints that have influenced both the existing character and the desired future character of the area.

The Strategic Direction report also identifies planning and design principles for the precinct and the actions that need to occur in order to move towards the vision identified in the document.

Structure of this document

This Planning Controls report is structured in four parts:

- Chapter 1 provides an introduction
- Chapter 2 provides a summary of the strategic direction and identifies some of the possible variations that may occur given the current uncertainties around what may happen in the precinct
- Chapter 3 recommends draft Local Environmental Plan (LEP) and Development Control Plan (DCP) controls for six sub-precincts. As there is a high level of uncertainty, the final development controls may vary from the ones outlined in this report.
- Chapter 4 provides a conclusion and next steps
- Addendum identifies the impact of the RMS concept design (December 2018) on the Scenic Drive and Bridge Road sub-precincts.



The Nowra Riverfront Strategic Direction report (October 2017) details the review, analysis, constraints and a strategy to unlock the value of the precinct

1-4 Planning context

The LEP and DCP recommendations included within this report consider the Illawarra- Shoalhaven Regional Plan, prepared by the NSW Government in November 2015, and Section 9.1 Ministerial Directions issued by the Minister for Planning. Below is a summary of the relevant objectives and actions arising from these strategic documents.

Illawarra- Shoalhaven Regional Plan

The Illawarra-Shoalhaven Regional Plan (NSW, 2015) identifies Nowra as the business, retail and services hub of the Shoalhaven, with a concentration of jobs in healthcare, retail and public administration. The priorities for Nowra include improved active transport, and increased recreational and commercial activity. Tourism is identified as a key opportunity for Nowra and the plan states the following:

"The tourism industry has an opportunity to make a significant contribution to jobs growth in the Illawarra-Shoalhaven by increasing the number of visitors to the region and encouraging day trippers to stay overnight or take longer holidays in the area... To capitalise

on these opportunities, it will be necessary to boost the amount of accommodation (such as hotels in Nowra and Shellharbour, and serviced apartments in Wollongong). This will position the region as a year-round destination" (NSW, 2015, p26).

The key actions and directions for the centre are:

- 1.3.1 Renew and revitalise Nowra Centre by coordinating State agency input into precinct planning and reviewing capacity for expanded health-related uses
- 1.3.4 Grow the tourism and light aeronautics industries, and the emergency services roles of the Illawarra Regional Airport
- 2.2 Support housing opportunities close to existing services, jobs and infrastructure in the region's centres
- 3.4.1 Conserve heritage sites when preparing local planning controls

It is noted that this plan was published in 2015 before the Concept plan for the new bridge was issued by the RMS and does not consider the potential impacts of the highway realignment on the properties along the highway.

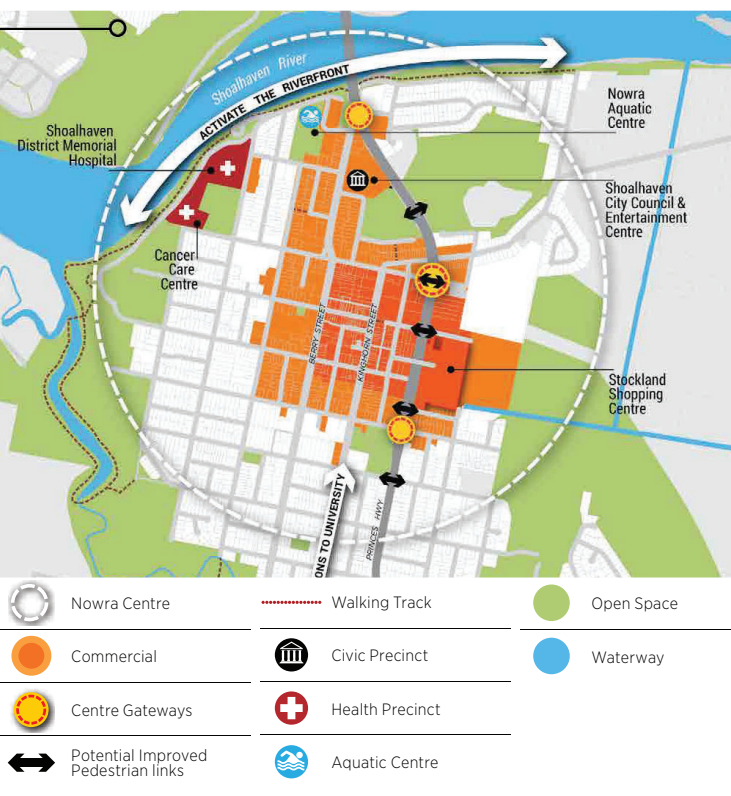
Section 9.1 Ministerial Directions

Section 9.1 (2) of the Environmental Planning and Assessment Act 1979 lists the Ministerial Directions that apply to planning proposals lodged with the NSW Department of Planning Industry and Environment.

Listed below are the directions most relevant to the LEP and DCP recommendations for the identified sub-precincts:

1.1 Business and Industrial Zones

This direction aims to encourage employment growth in suitable locations and support the viability of identified centres. According to the direction, a planning proposal must retain existing business and industrial zones and not reduce the potential floor space for employment uses unless it is justified by a strategy or study which gives consideration to the objectives of this direction or is in accordance with the Regional Plan or is of minor significance.



Structure Plan for Nowra Centre as per Illawarra-Shoalhaven Regional Plan (NSW, 2015)

Response: Four of the six sub-precincts, Graham Lodge, Hyam Street and Scenic Drive and Bridge Road, are within the B4 Mixed Use business zone. This report recommends that the current zoning within the Hyam Street and Bridge Road sub-precincts are retained. To respond to the change in access created by the RMS Concept Design and to limit the fragmentation of the Nowra Commercial Centre (see section 3.2) this report recommends that the B4 Mixed Use zoning of the Graham Lodge sub-precinct is changed to R3 Medium Density Residential. This change is of minor significance and is consistent with the direction. In order to boost the amount of accommodation (such as hotels) in Nowra in line with the Regional Plan, the report also recommends that, along with site amalgamation and changes to height controls, the zoning of the Scenic Drive sub-precinct is changed from B4 Mixed Use to SP2 (Tourism). A detailed flood study would need to be undertaken to determine if the proposed changes are possible.

3.1 Residential Zones

This direction aims to encourage a variety of housing types with appropriate access to infrastructure and services, and to minimise impacts of residential development on the environment. Existing and proposed residential zones must broaden the housing choice, be well designed and must not reduce the permissible residential density of land.

Response: Of the six sub-precincts only one, Mandalay Avenue, is currently zoned R3 Medium Density Residential and the report recommends this zoning is retained. The Graham Lodge sub-precinct is currently B4 Mixed Use and the report recommends it is rezoned to R3 Medium Density Residential (see 1.1 Business and Industrial Zones).

This change would not reduce the residential density of the land. A small part of the Wharf Road sub-precinct is currently zoned R2 Low Density Residential and to align it with the adjoining area it is recommended that this becomes SP3 Tourist. The Scenic Drive sub-precinct is currently B4 Mixed Use and the report recommends it is rezoned to SP3 Tourist as the area is vulnerable to flooding. While this would reduce the permissible density of this sub-precinct, the overall density of the Riverfront Precinct would be increased with a greater intensity of development on land that is not vulnerable to flooding. The DCP recommendations for all sub-precincts include provision of appropriate setbacks, bulk and scale, public amenity, landscape quality and flood responsive design. The recommendations are consistent with this direction.

4.3 Flood Prone Land

The objectives of this direction are that the development of flood prone land is to be consistent with NSW Government's Flood Prone Land Policy and to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and the potential flood impacts. The direction states that a planning proposal must not rezone land within the flood planning areas from Special Uses, Special Purposes, Recreation, Rural or Environmental Protection Zones to a Residential, Business, Industrial, Special Use or Special Purposes zone. The direction also states that a planning proposal must not significantly increase the development on flood prone land and must be in accordance with the NSW Flood Prone Land Policy and the Floodplain Development Manual 2005.

Response: Two of the six sub-precincts, Wharf Road and Scenic Drive, are located on low-lying land and significantly affected by a 1% AEP. Areas of the Mandalay Avenue, Graham Lodge and Hyam Street sub-precincts also have a vulnerability to flooding. The report recommends that all land use change and future development in the precinct will be dependent on detailed flood studies, however it notes that Wharf Road and Scenic Drive appear particularly vulnerable to flooding. Due to this vulnerability the report recommends retaining the SP3 Tourist zoning for Wharf Road in line with the direction. It also recommends changing the zoning of Scenic Drive from B4 Mixed Use to S3 Tourist to reflect the level of hazard and avoid significantly increasing the amount of development on flood prone land.

It is difficult to ascertain the quantum of development permitted within the sub-precincts that are vulnerable to flooding, since none of the sub-precincts currently have a maximum Floor Space Ratio within the Shoalhaven Local Environmental Plan (SLEP 2014). This report comments that taller buildings with limited site coverage may be needed to respond to flood concerns but also notes the maximum FSR possible is dependent on the results of a detailed flood study. Therefore, while taller buildings are proposed, the changes recommended in the report should not significantly increase the amount of development on flood prone land. The recommendations are consistent with the direction on flood prone land in terms of zoning.



CHAPTER 2 STRATEGIC DIRECTION

2-1 Aspirations and opportunities

'Big picture' approach

The Strategic Direction report for the Riverfront Precinct considers that a 'business as usual' approach is not able to increase the size, usability or activation of the riverfront public open space - nor is it able to increase the visual or physical connections between existing destinations including the pool, hospital, entertainment centre and council administration building. For this reason it is proposed that the urban structure be reconsidered potentially utilising land swaps and changes to the planning controls to maximise land values, and identify ways that development can be used to improve the quality of the open space.

This is not a typical precinct and the Strategic Direction takes a holistic 'big picture' approach to the entire precinct. It outlines a step by step process by which the area of level, high quality public open space with views of the river can be increased. It also provides a strategy to improve safety and surveillance, with new roads that open up access to the area and increase the visibility of the open space.

Overarching objectives

The Strategic Direction has five overarching objectives:

1. Increase safety so that it's a place that more people want to visit;
2. Enhance the open space so that it is a place where it is easier to spend more time;
3. Improved connections so that it is a place that is easier to find and easier to get around;
4. Strengthen the gateway to showcase the attractions and make it easier to access;
5. Provide a catalyst for renewal & encourage investment & development to improve the quality of the place.

Local Character

The Strategic Direction is based on the understanding that the local character of a place is an amalgam of three parts, the land or physical characteristics, the urban structure and the buildings or urban form.



The Land

The underlying physical characteristics of a place including the topography, natural watercourses and drainage, trees and other landscape features and views.



The Urban Structure

The structure or urban pattern created by streets, blocks, areas of open space and infrastructure. This includes the shape and proportions of streets, street blocks and lot sizes and the size, location and character of open spaces.



The Urban Form

The built environment of a place that is created by existing (or future) buildings and the spaces that are created by these buildings and between these buildings.

Nowra Riverfront's urban structure in its current form does not make the most of the qualities of the land nor does it encourage buildings that create a well defined public-private realm and leverage the maximum benefits from its high quality landscape setting.

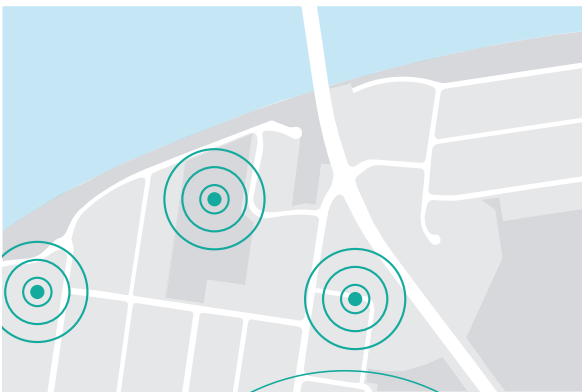
2-2 Planning and design principles

The Strategic Direction report identified the following planning and design principles:



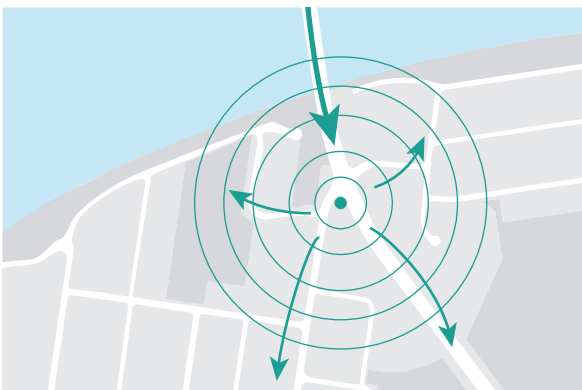
1. A permeable and connected network

Redevelopment of the area should create a more permeable access and movement network with improved links from the CBD and Civic Precinct to the river. It should prioritise connectivity (pedestrian, bike and vehicle) and links across the river and improve wayfinding by creating new routes to the river.



2. Local Activity Nodes

Create development that can leverage off the value and activity created by existing key nodes including the pool, the hospital, Shoalhaven Entertainment Centre (which now includes the Visitor Information Centre), Council Administration Centre and the nearby CBD and large shopping centre.



3. A strong gateway into Nowra

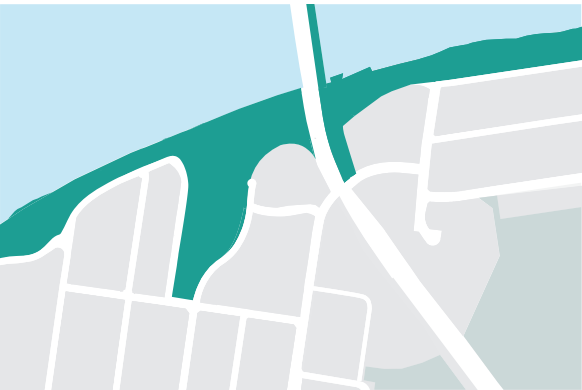
Create a strong gateway into Nowra that showcases the attractions of the location through high quality landscape, built form, signage and public art and that makes it easy to access the town and the key attractions of the riverfront.

2-2 Planning and design principles



4. An effective pedestrian/cycle network

Ensure direct, safe and convenient pedestrian routes from key destinations such as the Entertainment Centre, the hospital and the Council Building to the river front. Link pedestrian and cycle routes across the river to safe convenient routes to the high school and town centre and to the shared walkway along the river front.



5. A safe and well defined public domain

Maximise the size and quality of the public domain open space along the riverfront. Increase the amount of level and easily accessed open space that has views of the river. Reduce the number of areas which have lots backing onto the open space and increase the attractions and value of the existing open space. Retain tall trees and indigenous landscape where possible.



6. Catalyst for urban renewal

Leverage off a high quality public domain as a catalyst for urban renewal and use developer contributions to improve the quality and attractions of the open space.

2-3 Existing urban structure

A key 'structural' issue is that the riverfront and underlying topography of the Riverfront Precinct is at approximately 45 degrees to the grid structure of streets and lots. The existing bridges have an alignment that is perpendicular to the river, which is therefore also 45 degrees to the existing streets. This creates awkward intersections and inefficient triangular shaped lots, and makes understanding the flood liability more difficult (as some sections of a road are vulnerable while others are not).

The majority of land along the bank of the river is vulnerable to flooding and access to this land is also within flood liable land. Open space in the precinct, while generally located on lower lying land, is disjointed and hard to use and the majority of the open space is not well linked, both visually or physically, to the

high amenity riverfront. The edges of much of the open space areas are terminated by back fences, limiting surveillance and creating safety concerns. In addition, areas to the east and west of the Highway are disconnected, making it difficult to travel from one side to the other by car, bike or as a pedestrian.

Existing development in the precinct is one to two storeys high, except the Entertainment Centre and Council Chambers which appear closer to three storeys high (commercial floor to floor heights). Current maximum height limits are generally 11m, except for the area immediately to the north of the Entertainment Centre which has been zoned 16m to 28m.



Figure 2 Existing urban structure

2-4 Potential urban structure

The urban structure outlined in the Strategic Direction report recommends changes to the street, lot and block structure to encourage development at the gateway intersection of Bridge Road, Pleasant Way and Princes Highway that responds to the alignment of the highway.

New roads are proposed to provide a public edge to open space and to increase the usability and activity of these areas. Public open space areas are consolidated, connected and the amount of open space along the riverfront has been increased. The proposed new bridge with a reconfigured intersection creates an opportunity to improve access along the riverfront, under the bridges, across the river (e.g. a pedestrian/cycle link using the heritage bridge) and between the eastern and western sides of the precinct across the highway.

It is recommended that increased height is distributed across the entire precinct with the greatest height allowed on higher, less constrained land. Reduced heights are proposed along the lower lying land adjoining the open space and river to enable view sharing and to reflect the limitations created by potential flooding.

Development on flood liable land will be dependent on detailed flood studies but it is expected that any future built form in these areas would need to have a small site coverage, elevated ground floor levels and access that is as flood-risk-free as possible.

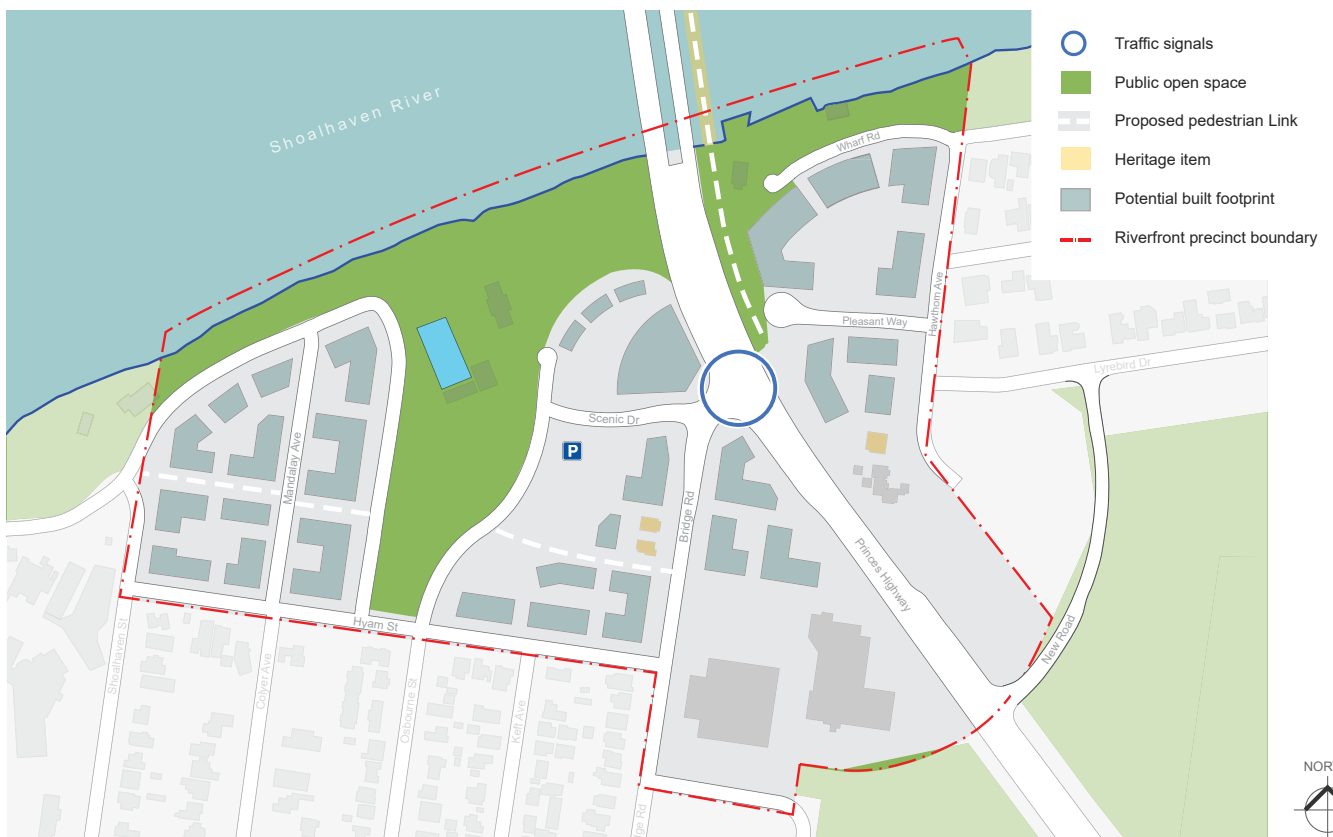


Figure 3 Potential future urban structure - note the potential building footprints shown here may need to be revised (see addendum)

2-5 Variations and 'unknowns'



Unknown factors

As highlighted in the Strategic Direction report there are a number of 'unknowns' or issues that are expected to have a significant impact on the potential development of the precinct which are not yet resolved. These include:

- The availability of local and state government owned land for redevelopment and/or land swaps.
- The constraints created by heritage and the extent of the opportunity for land amalgamation.
- Confirmation of flood levels and impacts is required. This will help to determinate the likely impacts and viability of specific development options
- The level and intensity of development that is possible, which will be informed by a detailed flood study.

Partially known factors

The RMS released information relating to the proposed new bridge (Aug 2018), has provided additional information on the following:

- The impact of the new bridge and highway realignment.
- The location and design of the intersection of Pleasant Way, Bridge Road and the highway.

While the design is still being developed, some factors are starting to become clearer.

2-5 Variations and 'unknowns'

Variations

The following pages explore the possible impacts on the urban structure and built form of just a few of these factors. What the following variations highlight is that, due to the scale of unresolved issues, the potential impacts are large and could substantially change the scale and character of the development that is possible.

It is critical that any consideration of the draft development controls in Chapter 3 recognises that the final development controls may vary from the ones outlined in this report (see diagram on Page 5).



Figure 4 Proposed variation diagrams. Individual descriptions on following pages

2-5 Variations and 'unknowns'

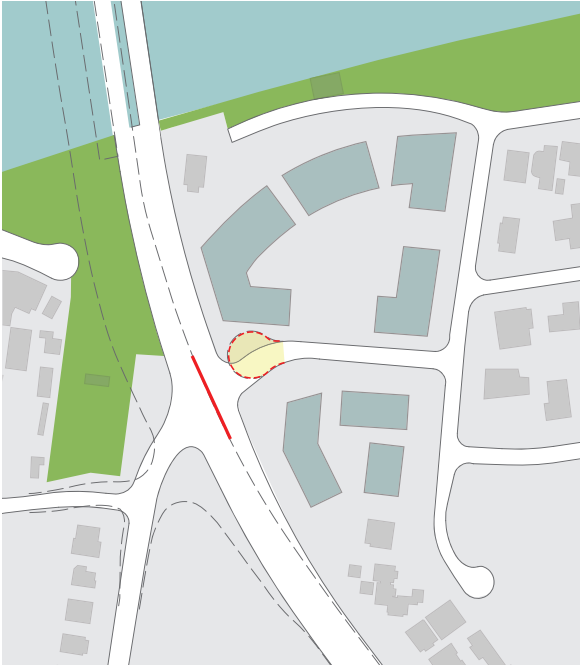


Figure 5 Proposed RMS Variation

Proposed RMS Variation - Intersection off Princes Highway to Pleasant Way closed to traffic

The RMS proposal (August 2018) removes access from Princes Highway at Pleasant Way.

While this may result in Pleasant Way being a quieter street it would result in less direct and attractive access for tourist facilities and restaurants/cafes along the riverfront.

Moving the access to the south may also impact on the ability of residents on the eastern side of the highway to gain access via a higher road during a flood event.

This proposal may become Stage 1, if works in Variation A are considered.



Figure 6 Variation A

Variation A - New road links Pleasant Way and Wharf Road via a section of the former highway

Depending on the amount of road made available by the removal of vehicular access to the heritage bridge, this variation could link the new higher alignment of Wharf Road with Pleasant Way via a redundant section of the Highway. This could form Stage 2 of the proposed RMS variation.

This option would allow development to front the highway and create a legible access loop. It does not address the issue that the area would have less direct access making tourist facilities and restaurants/cafes along the riverfront less attractive.

2-5 Variations and 'unknowns'



Figure 7 Variation B

Variation B - Intensification of land zoned 'SP2 Tourist' is not possible due to flood risk

Council's Nowra 2050 Flood Planning Level Map shows the area to the east of the highway and north of Pleasant Way as High Hazard Floodway and Chapter G9 of the SCDCP *Development on Flood Prone Land* indicates significant limitations to development in this area.

This variation considers the possibility, if large scale development is not possible, of locating smaller development/ building footprints in order to provide activation along the riverfront, ie 1-2 storey riverfront pub/hotel with on-grade parking at rear.

If less development can occur on flood liable land adjoining the river, development on the Graham Lodge site would be likely to have improved views across to the river.



Figure 8 Variation C

Variation C - Multi deck car park to north of Entertainment Centre

Land to the north of the Entertainment Centre currently provides parking for visitors to the Entertainment Centre and the Council Administration Centre. This variation considers an option where one part of the redevelopment of this land is provided as a multi deck car park adjacent to the highway.

While this would reduce the development potential of the Bridge Road site it may free up land to the south of the Entertainment Centre and would increase the activation around the Entertainment Centre and Council Offices. It would also help to make the new ground level retail fronting the town square more viable. A high quality architectural treatment of the car park would be required as it would be in a prominent location.

2-5 Variations and 'unknowns'



Figure 9 Variation D

Variation D - More extensive development on flood prone land to the west of the highway

The current built form proposed for the western side of the highway avoids locating development within a higher flood-risk area.

This variation considers an option with additional development so buildings can be located where they can provide better overlooking and passive surveillance of the public open space.

While desirable this development could exacerbate existing flooding and would be subject to a detailed flood study. Incorporating flood protection/ mitigation measures into this level of development may be prohibitively expensive.



Figure 10 Variation E

Variation E - Increasing the open space and creating a new alignment for Scenic Drive

This variation explores the impact of expanding the existing area of public open space so that it encompass more of the high hazard flood area.

A new road alignment has been proposed to follow existing contours along the edge of this open space allowing a consolidated urban edge to the park which also provides a high level of overlooking of the open space.

Development adjacent to the new road alignment would still be subject to a flood study and this road alignment would significantly affect two existing private properties.

2-5 Variations and 'unknowns'



Figure 11 Variation F

Variation F - Increasing the open space via a new alignment for Scenic Drive and link to Bridge Rd

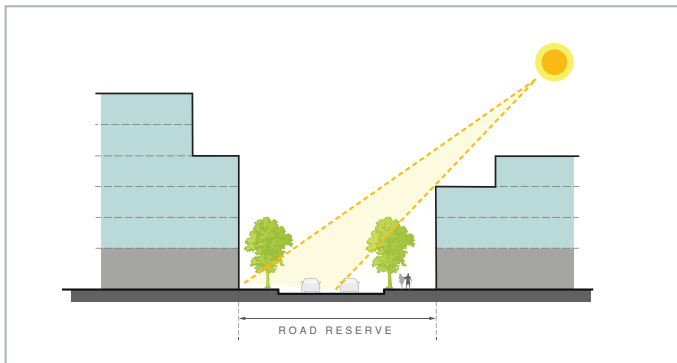
This variation is similar to Variation E and explores the impact of expanding the existing area of public open space so that it encompasses more of the high hazard flood area with a new road alignment that follows existing contours along the edge of this open space.

This variation highlights the opportunities created if the intersection of Scenic Drive and Bridge Road is moved to the south. This would move this intersection further away from the intersection with Princes Highway, increase the size of the land available for a hotel and increase the connections between the Entertainment Centre, Council Administration Centre and the riverfront.

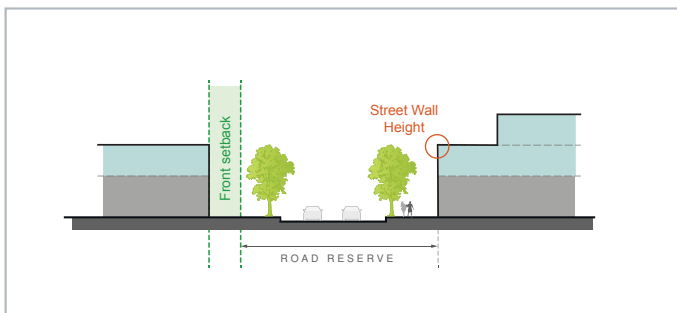
This road alignment would significantly affect many private properties and would require complex negotiation and agreement.

2-6 Principles of successful controls

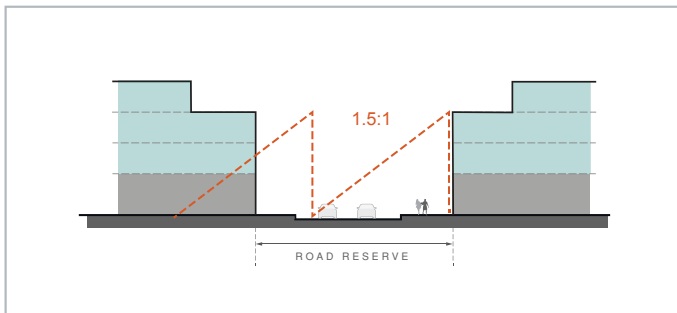
Development controls need to create a clear understanding of the bulk and scale of future built form. They focus on the desired character of an area and the impact of all new development.



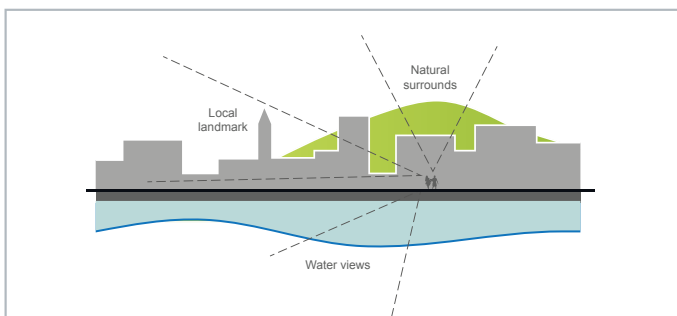
Solar access
 One of the most important factors is the impact of any new development on the solar access to streets and public spaces. Development to the north in particular needs to facilitate adequate sun access to areas to the south.



Streetscape character
 Front setbacks and street wall heights help establish the character of a street. Front setbacks can facilitate more street trees or landscaping. Street wall heights are important in order to define the spatial enclosure of streets.

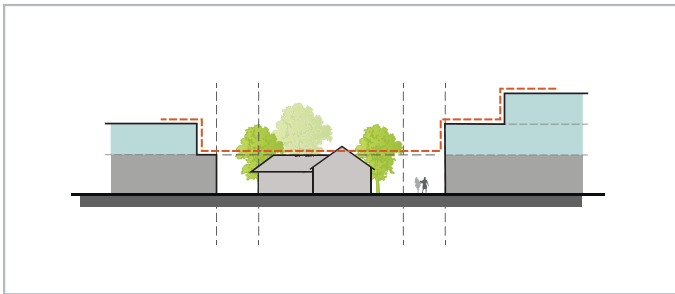


Street proportion
 As a general guidance the height of the building compared to the width of the street or open space creates a level of spatial enclosure which can generate a contained or relaxed streetscape character.



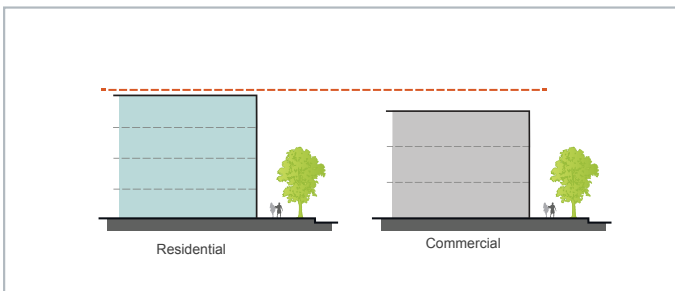
Views and vistas
 Preserving views is critical to placemaking and for retaining the unique character of centres such as Nowra. The most significant views are those from public places to landmarks, heritage items or areas of natural beauty, e.g. the Shoalhaven River or the Cambewarra Mountain Ranges.

2-6 Principles of successful controls



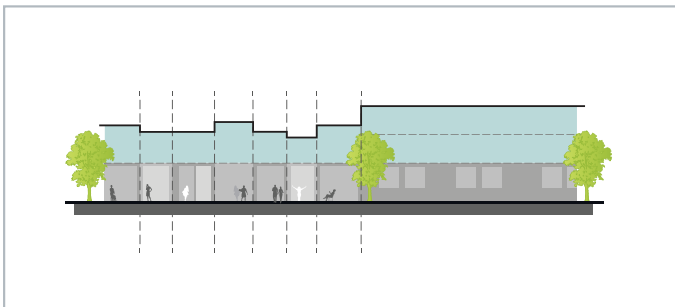
Heritage Integration

Heritage buildings make a substantial contribution to the local character of a place. Development controls need to protect these buildings and their visual curtilage, and facilitate new development that is sympathetic and integrates sensitively.



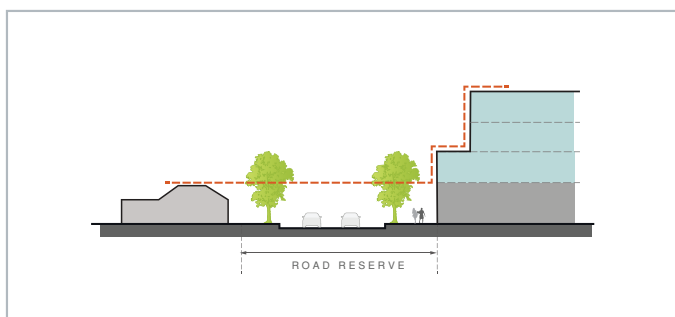
Building use

The intended use of new development has an impact on how many storeys are permissible within a certain height limit because commercial or retail uses require higher floor to ceiling heights compared with residential uses.



Activity & interest

There is a relationship between the width of a lot or retail frontage and the level of activity along a street. In areas where active streets are desired a 'fine grain' of narrow frontage lots (or retail frontages) creates a higher level of variety and interest.



Interfaces

Development in a centre is often of greater scale than that of the surrounding area. Development controls need to consider the interface between these areas and how taller buildings can step down to create well proportioned streets and sensitive transitions.



CHAPTER 3 AREA SPECIFIC CONTROLS

3-1 Sub-precincts of the Riverfront



Figure 12 Riverfront sub-precincts

The Strategic Direction report identifies the desired future character of the Riverfront Precinct, however, within the precinct there are a number of distinctly different areas with different characteristics which face different challenges. To encourage development and change to occur before all of these challenges and uncertainties have been resolved, the precinct has been divided into a number of sub-precincts.

While each sub-precinct plays an important role in contributing to the overall success of the Riverfront Precinct, each is affected by different issues which may allow some sub-precincts to redevelop earlier than others. Identification of each of the sub-precincts is based on a range of attributes including location, ownership, zoning, and current and future access.

This section provides a description of each sub-precinct including a character statement, area-specific objectives, desired future urban structure and location specific development controls. (Note: to enable easy identification of the sub-precincts, their location is shown on the existing urban structure not the desired future urban structure).

In addition to the detailed objectives, each sub-precinct also needs to be developed so that it supports and contributes to the overarching objectives and principles for the Riverfront Precinct identified in Part 2 including:

- Increased safety
- Enhanced open spaces
- Improved connections
- A strong gateway
- A catalyst for renewal

3-2 Pleasant Way & Graham Lodge



Objectives

1. Ensure development does not preclude the ability to create effective access into the area west of the highway.
2. Protect Graham Lodge and its 'wider' curtilage, retain view connections from Graham Lodge to the east and improve view connections from the north to Graham Lodge.
3. Retain tall trees, indigenous landscape and archaeological features where possible
4. Create an attractive place to live and visit through high quality landscape, built form, signage and public art.
5. Provide direct, safe and convenient pedestrian and cycle routes from the precinct to key destinations and the river front.

Desired Future Character

This sub-precinct is located to the east of the Princes Highway and south of Pleasant Way. It is currently a visually prominent area within the Riverfront Precinct when arriving from the north as it is next to the highway, at an intersection and on slightly higher land. Development on this site will contribute to defining the 'character' of the Riverfront Precinct and to providing an attractive gateway into Nowra.

This area also contains the most important heritage item in the Riverfront Precinct, the attractive, state and locally listed Graham Lodge. Redevelopment of this area provides the opportunity to increase the prominence of the heritage building and identify future uses that will ensure its long term protection.

The loss of direct access from the Highway and the possible loss of visual prominence due to the new bridge and realignment of the highway to the west reduces the viability of retail uses which rely on highway traffic. A new access road, south of Pleasant Way will provide access to this sub-precinct, but this access will not be as clear and legible as direct access off the highway. This area will also be disconnected from the commercial core of Nowra making commercial uses less desirable.

An advantage of this sub-precinct is the large site in single ownership which provides increased flexibility and the opportunity for new medium to high density development that benefits from the proximity to the riverfront, hospital and town centre facilities. The sub-precinct could be attractive for serviced apartments and a wide variety of residential uses including seniors living.

This sub-precinct does not directly adjoin public open space and so the site will need to provide improvements to the public domain and high quality landscape amenity. Retaining existing large trees, particularly along the Highway, and if possible along Pleasant Way, will also contribute to providing an attractive landscape setting.

3-2 Pleasant Way & Graham Lodge



Figure 13 Artist's impression of potential future development



The state heritage listed Graham Lodge is a key component of this sub-precinct and a key consideration for any future development.



An example of the bulk and scale of possible future development: a six storey building with the upper two levels set back from the street

3-2 Pleasant Way & Graham Lodge

Desired future urban structure

With the proposed duplication of the river crossing by RMS there will be modifications to the design and location of the intersection of Pleasant Way and Princes Highway. The final design has not been completed, but the current RMS concept design closes Pleasant Way at the highway.

While uncertainty around the final design exists, it is recommended that generous setbacks are provided to Pleasant Way and the Princes Highway to allow for future flexibility.

Flooding

Council's DCP *Chapter G9 Development on Flood Prone Land* provides controls for development in areas at risk of flooding. Council's flood mapping identifies the northern half of this sub-precinct as 'Low Hazard Flood Storage' while the southern part is above the Flood Planning Level Extent. A very small part of the site, to the north east near the intersection of Pleasant Way and Hawthorne Avenue, is in the highest risk category of 'High Hazard Floodway'.

While this area is slightly higher than much of the surrounding area, any development will still have to respond appropriately to the flood risk for this site and impact on the flood risk for the surrounding area. This may involve a minimal habitable ground floor level, smaller building footprints, generous setbacks and open space provision, structural soundness, flood resistant materials and emergency evacuation routes.

LEP Recommendations

Land use and FSR

It is recommended that the sub-precinct is rezoned from B4 Mixed Use to R3 Medium Density Residential as the loss of direct access to the Highway disconnects the sub-precinct from the commercial centre of Nowra, thereby reducing the likelihood of commercial and/or retail uses in this location. Retaining employment uses within this sub-precinct would also risk pulling activity away from the existing Nowra commercial centre which could have a detrimental impact on the viability of the centre. This recommendation is in line with the objectives of Section 9.1 Ministerial Direction 1.1 Business and Industrial Zone which include supporting the viability of identified centres.

Within a R3 zone commercial premises are not permitted, however, neighbourhood shops, residential flat buildings, seniors housing, shop top housing and tourist and visitor accommodation could still occur.

There is currently no maximum FSR for this sub-precinct specified in the SLEP 2014. Initial testing indicates that development on this sub-precinct would be approximately 1:1 (or 1.3:1 FSR if a site around Graham Lodge is excluded from the calculation) and that development will be able to have a maximum site coverage of no more than 35%. This may change with the results of a detailed flood study and heritage advice.

Heritage

The entire sub-precinct area is identified as a heritage item within Council's LEP and Graham Lodge is both a state and locally listed heritage item. The Graham Lodge Precinct, Nowra Conservation Management Plan (CMP) (2000) indicates that the building is located on part of the land that was originally granted to William Graham in 1826.

It is recommended that development of this sub-precinct, including future subdivision, road realignment and draft development controls occurs after the Graham Lodge Conservation Management Plan has been updated. Any additional subdivision of the precinct and reduction in the size of lot for Graham Lodge should also be subject to heritage advice.

Maximum height of buildings

It is recommended that, subject to heritage advice, the maximum building height in this sub-precinct could be increased to 22.0m, which would enable up to six (6) storeys of development. However, it is recommended that this maximum building height only applies to an area of the site located towards Pleasant Way and Princes Highway, with building heights stepping down to the east to integrate with the lower scale dwellings on the eastern side of Hawthorne Avenue.

Most importantly, new built form that is close to Graham Lodge is to be compatible with the height and proportions of Graham Lodge and its visual setting. It is recommended that the current maximum building height of 11.0m (3 storeys) for the R3 zone to the south is retained as per the current SLEP 2014.

3-2 Pleasant Way & Graham Lodge

DCP Recommendations

Maximum height of buildings

<i>Performance criteria</i>	
01	New development responds sensitively to the context and supports the desired future character.
<i>Acceptable solutions</i>	
a)	Development is to conform to the maximum building heights as shown in Figure 14.
b)	Development near heritage items (Graham Lodge) may require lower street wall heights, lower heights and increased setbacks in order to respect and respond appropriately to the visual curtilage of nearby heritage buildings. <i>(Note: a detailed Heritage Impact Assessment/ Statement is required to be submitted to Council)</i>

Setback to Pleasant Way

<i>Performance criteria</i>	
02	Development enables Pleasant Way to be realigned and allows sufficient space for a reconfigured intersection with Princes Highway.
<i>Acceptable solutions</i>	
a)	Development is to provide a setback to Pleasant Way as shown in Figure 14. <i>(Note: a variation to this front setback may be required to retain significant trees and/ or enable proposed road alignment and intersection modification once the design is finalised.)</i>
b)	Land required for infrastructure upgrades within this setback will be acquired by Council/ RMS by agreement.
c)	Due to uncertainties regarding the future design of Pleasant Way, preferred vehicular access to the development (carpark entry/ loading) is off Hawthorn Avenue.

<i>Performance criteria</i>	
03	The setback to Pleasant Way is landscaped, facilitates casual surveillance of the street and adds to the desired streetscape character.
<i>Acceptable solutions</i>	
a)	At least 50% of the setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures. At least five (5) trees with a mature height of at least 20m are required along the street edge. <i>(Note: temporary landscape, e.g. no trees and ground cover, is permissible if development occurs before road alignment and intersection design is known.)</i>
b)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
c)	Balconies, ground floor terraces or entrance structures can protrude into the Pleasant Way setback by up to 0.6m beyond the front setback (articulation zone). <i>(Note: no protrusion is permissible if development occurs before road alignment and intersection design is known.)</i>
d)	Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.

3-2 Pleasant Way & Graham Lodge

Setback to Hawthorn Avenue

<i>Performance criteria</i>	
04	Graham Lodge is visible from the intersection of Pleasant Way and Hawthorn Avenue.
<i>Acceptable solutions</i>	
a)	New development is to provide a front setback to Hawthorn Avenue in line with Graham Lodge to the south as shown in Figure 14.
b)	At least 50% of the setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures. At least five (5) trees with a mature height of at least 20m are required along the street edge. Trees should have a narrow trunk and high canopies to allow view connections to Graham Lodge.
c)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m. Fences should not obstruct views to Graham Lodge when viewed from the intersection of Pleasant Way and Hawthorn Avenue.
d)	Balconies on the upper levels can protrude into the setback by up to 0.6m (articulation zone). No protrusions are permissible on the ground floor with the exception of entry awnings.
e)	Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.
f)	Direct access to ground floor apartments is to be provided along this street to increase surveillance of the street, visible activity and encourage social interaction.

Setback to Princes Highway

<i>Performance criteria</i>	
05	Development is screened from Princes Highway by dense, mature vegetation.
<i>Acceptable solutions</i>	
a)	New development is to provide a setback to Princes Highway as shown in Figure 14.
b)	70% of the setback is deep soil to retain existing and allow for more mature vegetation with a preference for native planting species, creating an effective buffer to the highway.
c)	Fences and walls can be as high as 2.0m to provide an increased buffer to the highway and to mitigate noise and visual impacts.

Graham Lodge side setback

<i>Performance criteria</i>	
06	Sufficient space is located around Graham Lodge to protect the building's integrity and visual setting.
<i>Acceptable solutions</i>	
a)	New development is to provide a side setback to Graham Lodge as shown in Figure 14.
b)	At least 70% of the side setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures.
c)	New development only occurs after thorough archaeological investigation.
d)	The viewscape to the east of Graham Lodge towards grazing areas, family cemetery, riverscape and Coolangatta Mountain is retained and enhanced.

3-2 Pleasant Way & Graham Lodge

Gateway function

<i>Performance criteria</i>	
07	New development in this prominent gateway location strengthens the arrival experience to Nowra as an integrated landmark.
<i>Acceptable solutions</i>	
a)	Built form towards the redesigned closure at Princes Highway and Pleasant Way displays quality architectural design, including corner treatments, well proportioned facades, and quality material and finishes selection.
b)	While an articulated corner treatment towards the highway is desired, development should be sensitively integrated into the context and landscape and not display 'look-at-me' architecture. This includes using non-glaring and non reflecting materials, neutral colours, signage that is integrated into the facade and reduced obtrusive light spilling beyond the development's boundary, e.g. through large glazed areas of the facade.

Bulk and scale

<i>Performance criteria</i>	
08	Development is designed to reduce the perceived visual impact of its bulk and scale.
<i>Acceptable solutions</i>	
a)	Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 15 & Figure 16.
b)	Gaps between buildings are provided to reduce visual bulk and scale. The maximum length of built form is 40m.
c)	The bulk, scale and height of new development sensitively transitions to Graham Lodge. Built form directly adjacent to Graham Lodge addressing Hawthorne Avenue is compatible with the massing of the heritage item.

Articulation and exteriors

<i>Performance criteria</i>	
09	Building articulation and exteriors positively contribute to the desired future character of the area and streetscape.
<i>Acceptable solutions</i>	
a)	The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
b)	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
c)	Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complement the architecture of the building.
d)	The character of Graham Lodge is considered, with new development compatible in terms of setbacks, awnings, parapets, cornice lines, selection of materials and finishes, and façade proportions.

Amenity

<i>Performance criteria</i>	
10	Separation between buildings allows for adequate daylight access, ventilation, view sharing and privacy.
<i>Acceptable solutions</i>	
a)	Residential components of development satisfy the requirements of <i>SEPP 65</i> and the <i>Apartment Design Guide</i> .
b)	Siting and built form configuration optimises solar access within the development and minimises overshadowing of Graham Lodge.

3-2 Pleasant Way & Graham Lodge

Addressing the street

<i>Performance criteria</i>	
11	Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.
<i>Acceptable solutions</i>	
a)	New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
b)	Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
c)	Residential uses on the ground floor can be raised to a maximum of 1.2 metres above the footpath level to improve internal privacy. Direct access from the footpath to individual dwellings is encouraged.

<i>Performance criteria</i>	
12	Building users are protected from negative impacts (noise, air quality, vibration) from Princes Highway.
<i>Acceptable solutions</i>	
a)	Windows located along the western facade fronting Princes Highway are double-glazed (or use laminated glazing) and have acoustic seals.
b)	For residential components of new development, noise sensitive areas (living rooms, bedrooms) are located away from the highway. Also see <i>Development near rail corridors and busy roads - Interim Guideline NSW 2008</i> .

Floor to ceiling heights

<i>Performance criteria</i>																				
13	Buildings are adaptable to a variety of uses over time.																			
<i>Acceptable solutions</i>																				
a)	The following minimum heights apply:																			
	<table border="1"> <thead> <tr> <th>Use</th> <th>Minimum floor to floor height</th> <th>Minimum floor to ceiling height</th> </tr> </thead> <tbody> <tr> <td>Retail</td> <td>4.4m</td> <td>4.0m</td> </tr> <tr> <td>Commercial</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Adaptable</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Community</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Residential</td> <td>3.1m</td> <td>2.7m</td> </tr> </tbody> </table>	Use	Minimum floor to floor height	Minimum floor to ceiling height	Retail	4.4m	4.0m	Commercial	3.7m	3.3m	Adaptable	3.7m	3.3m	Community	3.7m	3.3m	Residential	3.1m	2.7m	
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Community	3.7m	3.3m																		
Residential	3.1m	2.7m																		
b)	Residential uses on ground floors are to have an adaptable ceiling height.																			

Access and parking

<i>Performance criteria</i>	
14	Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.
<i>Acceptable solutions</i>	
a)	The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are recessed by at least 0.5m behind the building line.
b)	Long driveways, e.g. off Hawthorne Avenue to the front building line, display a curved alignment to slow traffic speeds of vehicles entering and existing. They should be partly screened by low vegetation to further lessen their visual impact when viewed from the street however this should not impact on clear sightlines between vehicles and pedestrians.
c)	The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.

3-2 Pleasant Way & Graham Lodge

- d) A continuous footpath to Council specifications is provided along all street frontages adjoining the development.

Performance criteria

15 Parking is visually unobtrusive to the street frontages and Graham Lodge.

Acceptable solutions

- a) At grade parking, if unavoidable, is screened from public view and not permissible within any of the setback zones.
- b) Basement car parking cannot extend more than 1.0m above ground where it faces Pleasant Way, Hawthorne Avenue and Graham Lodge (unless required to ensure ground floor is above the flood level). Basement parking is screened and/ or integrated with the architectural building design and visually recessive.
- c) Below-grade parking structures may not protrude into any deep soil zones, but can extend beyond the building line towards Hawthorn Avenue.

Flood responsive design

Performance criteria

16 Development does not increase the risk of flooding elsewhere.

Acceptable solutions

- a) Development retains the current flood storage capacity on site. *(Note: if it is not practical/ possible to provide sufficient open space, this performance criteria may be able to be met in the form of a 'sacrificial' basement carpark/ ground floor which would be able to be flooded.)*
- b) If the natural ground level is modified, compensatory flood storage in addition to the existing capacity may be required to be provided.

Performance criteria

17 Development is designed to allow for safe movement of people in or out of the area in the case of a flooding event.

Acceptable solutions

- a) Development adheres to requirements as set out in Council's DCP Chapter G9 *Development on Flood Prone Land*. This includes the use of adequate flood proofing measures, construction methods and selection of materials.
- b) Reliable access must be provided from the building, commencing at a minimum level, equal to the lowest habitable floor level, to an area of refuge above the PMF.
- c) Emergency evacuation strategies and procedures are in place such as regular drills with building users/ occupants on what to do in a flooding event.
- d) Adequate flood warning systems, signage and exits must be available to allow safe and orderly evacuation.

Performance criteria

18 Development is designed so that damage to property is minimised and recovery is speedy and inexpensive.

Acceptable solutions

- a) Suitable pumps are provided on all levels at risk of flooding.
- b) A freeboard protection (crest) may be considered within internal driveway(s) prior to descending into basement parking levels.
- c) Motor vehicles are able to be relocated, undamaged, to an area with substantially less risk from flooding, within effective warning time. A secondary alternate entry/ exit to the basement carpark may be required.

3-2 Pleasant Way & Graham Lodge

Key development parameters

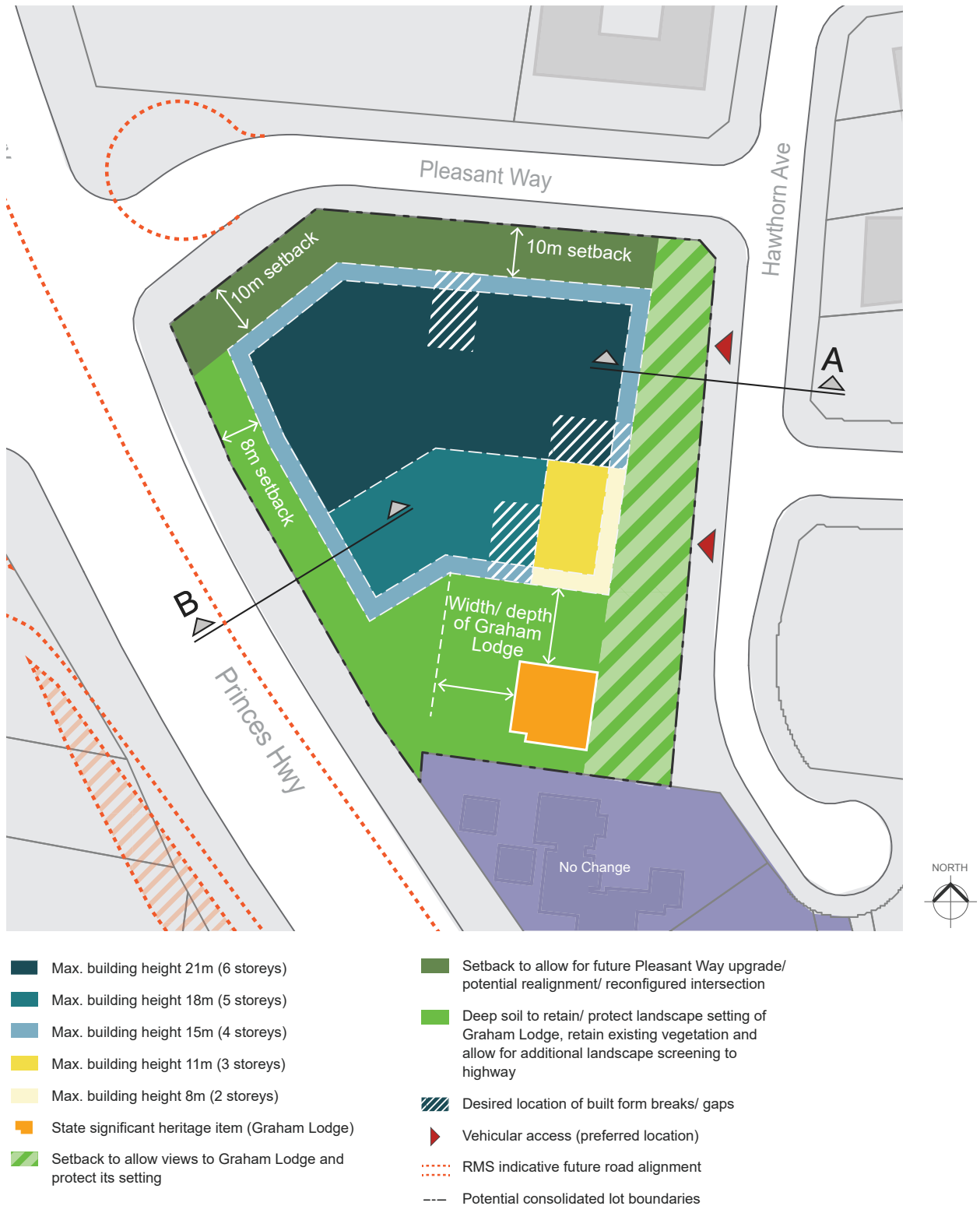


Figure 14 Key development parameters

3-2 Pleasant Way & Graham Lodge

Interface sections

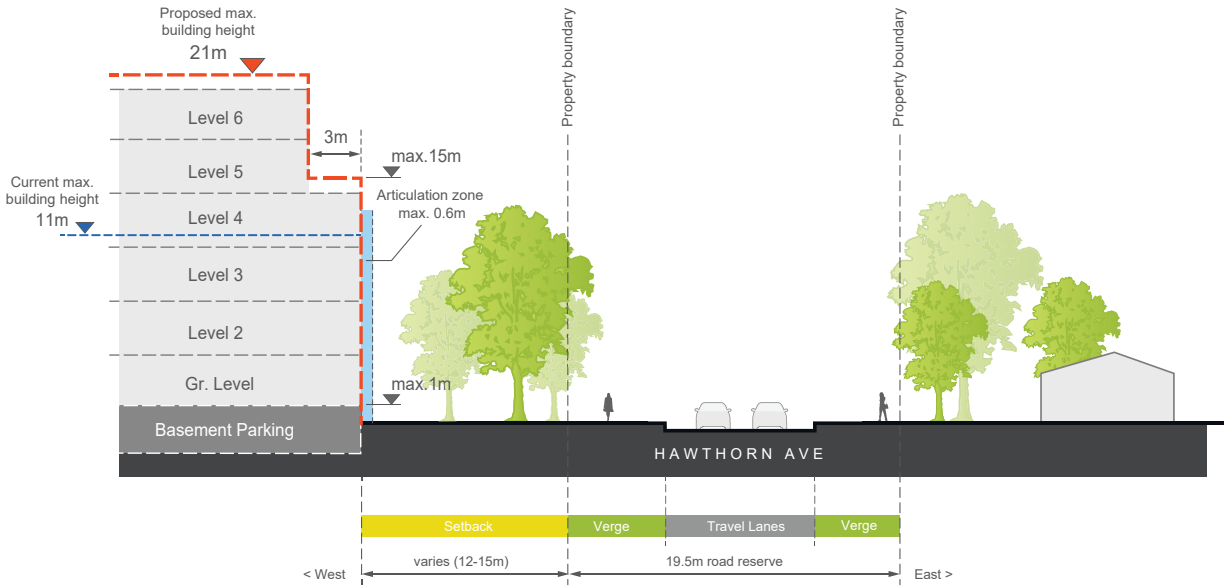


Figure 15 Section A

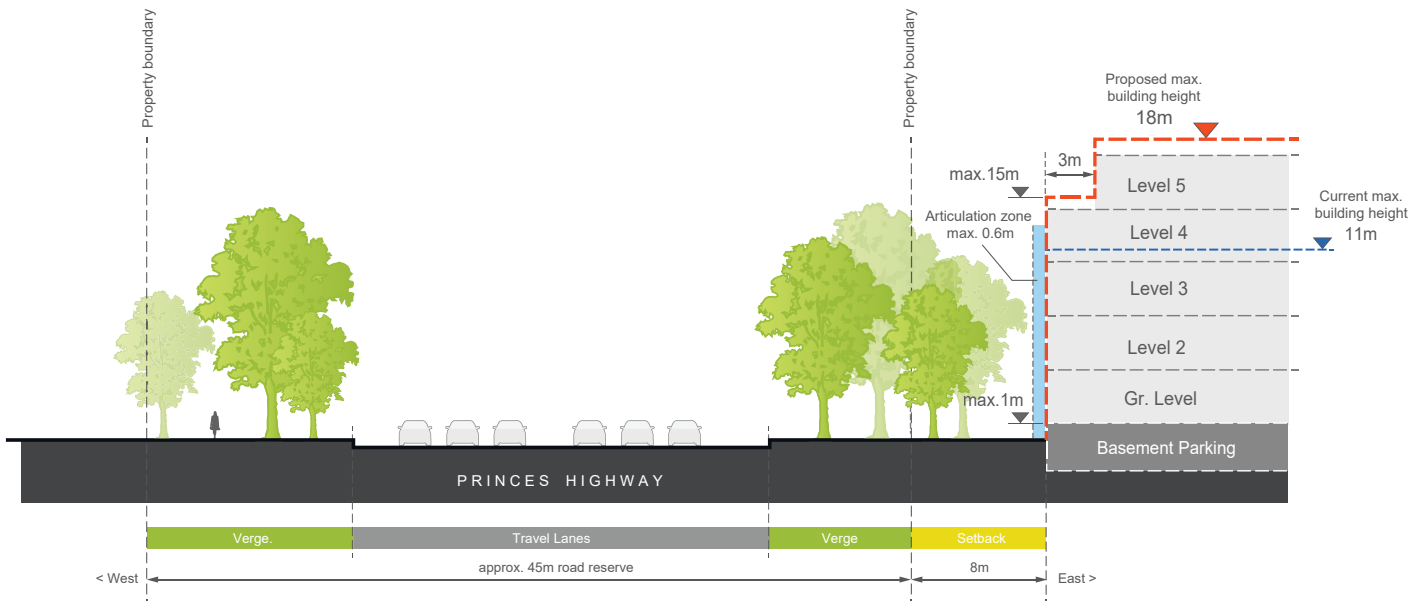


Figure 16 Section B

3-3 Wharf Road



Objectives

1. Ensure development does not preclude the ability to create effective access into the area west of the highway.
2. Maximise the size, amenity and usability of the public open space along the river and create a high quality place that attracts people.
3. Retain tall trees, indigenous landscape and archaeological features where possible
4. Create an attractive place to live and visit through high quality landscape, built form, signage and public art.
5. Create a well connected access and movement network for pedestrians and cyclists along the river and across the river.
6. Encourage tourist related uses that are appropriate given the flood risk and help create an attractive gateway into Nowra and expand and activate the riverfront open space.
7. Provide connections for pedestrians and cyclists to the retained heritage bridge.

Desired Future Character

This sub-precinct is located to the east of the Princes Highway and north of Pleasant Way. Existing development on this sub-precinct includes a restaurant, motel, caravan park and a few dwellings. This area also adjoins the site of the former Nowra Sailing Club, a local landmark and 'flood marker', and the heritage listed Nowra Bridge.

The location of this sub-precinct benefits from north facing views across the river and close proximity to the heritage bridge which the RMS has proposed as a pedestrian and cycle link after the construction of the new river crossing. Development on this site will contribute to activating the riverfront and expanding the area of public open space along the river. It will help to define the 'character' of the Riverfront Precinct and contribute to providing an attractive gateway into Nowra.

While the realignment of the highway to the west may reduce the visual prominence of the precinct, it may also create a positive effect by reducing the highway impacts and providing an opportunity to create development that helps activate the heritage bridge. Access from the highway will also be significantly changed by the closing of Pleasant Way. Access further south will be more convoluted.

Another key challenge for this sub-precinct is its significant vulnerability to flooding and so the scale and location of any new development can not be determined without a detailed flood study. Given the desirable location, on the riverfront and adjoining the heritage bridge, the sub-precinct is ideal for tourist related uses including hotel or motel accommodation, serviced apartments, backpackers' accommodation, hotels, restaurants, cafes, bars and indoor recreation facilities, although access will not be as clear.

This sub-precinct directly adjoins riverfront public open space and development of this area provides the opportunity to provide a key destination in an attractive landscape setting and create improvements to the public domain.

3-3 Wharf Road



Figure 17 Artist's impression of potential future development



An example of a wide level pathway next to a river, attracting pedestrians and cyclists



Restaurants and cafes along the Kingston foreshore in Canberra that benefit from the waterfront location and amenity

3-3 Wharf Road

Desired Future urban structure

This sub-precinct will be affected by changes to the design and/or location of the closed intersection of Pleasant Way and Princes Highway, however with the highway moving to the west, away from this area, the impacts should be less than in other areas.

With new development, there should be an opportunity to expand the size and usability of the riverfront open space. This area is also likely to play a critical role in encouraging pedestrian and cycle access along the riverfront, across the riverfront and in providing access between the riverfront and the bridge. It will also provide an essential access link to the heritage bridge, which is proposed as a pedestrian/ cycleway.

Flooding

Council's DCP *Chapter G9 Development on Flood Prone Land* provides controls for development on land at risk of flooding. Council's flood mapping identifies this sub-precinct as 'High Hazard Floodway' which is the highest risk category. The DCP prohibits intensification of development of land that falls into this category.

However, due to the prominence and value of this sub-precinct there may be an economic and/ or social justification to allow tourist related development. It is recommended that a detailed flood risk assessment and a feasibility study is undertaken to determine to what extent, if at all, development will be possible in this location. As a minimum, any proposed development would have to respond to the significant flood risk and bear the associated cost including increased structural strength to withstand the force of moving flood waters, 'sacrificial' levels and other flood resistant methods.

LEP Recommendations

Land use and FSR

The current land use Zone SP3 Tourist encourages a wide range of uses that are suitable for this location. In line with the Ministerial Directions it is not recommended that this zoning is changed. A small

area of the sub-precinct on the corner of Hawthorn Ave and Wharf Road is currently zoned R2 Low Density Residential which could remain. However, this area could also become SP3 Tourist with increased height and FSR to encourage uses that are compatible with the adjoining sites. Any changes to the planning controls would require a detailed flood study.

There is currently no maximum FSR for this site specified in the SLEP 2014. Initial testing of buildings with small footprints and limited site coverage to respond to flood concerns indicates that the FSR of development in this sub-precinct would be approximately 1:1 with a maximum site coverage of approximately 35-45%, although this may change with the results of a detailed flood study. (*Note: The FSR estimate is based on the entire sub-precinct area, and the FSR of individual properties may vary depending on location and constraints.*)

Heritage

The sub-precinct adjoins the heritage listed bridge and the site of the former Nowra Sailing Club. It is recommended that development of this sub-precinct consider the impact on these items.

Maximum height of buildings

It is recommended that the maximum building height in this sub-precinct increase to 18.0m which would enable up to five (5) storeys of development above semi basement carparking. However, it is recommended that this maximum building height only applies to a portion of the site that is located towards Wharf Road and Princes Highway, with building heights stepping down to the east to integrate with the lower scale dwellings on the eastern side of Hawthorne Avenue.

3-3 Wharf Road

DCP Recommendations

Height of buildings

<i>Performance criteria</i>	
01	New development responds sensitively to the context and supports the desired future character.
<i>Acceptable solutions</i>	
a)	Development is to conform to the maximum building heights as shown in Figure 18.
b)	Development near low density housing along Hawthorne Avenue will require lower street wall heights, lower heights and increased setbacks.

Wharf Road frontage

<i>Performance criteria</i>	
02	Development enables Wharf Road to be realigned to create a larger and higher quality public space along the riverfront with a slow speed, shared access road.
<i>Acceptable solutions</i>	
a)	Development is to provide a setback to Wharf Road as shown in Figure 18 (<i>Note: a variation to these setbacks may be required to enable proposed road alignment and bicycle access once the design is known</i>)

<i>Performance criteria</i>	
03	The setback creates a high quality public domain with attractive outdoor dining areas.
<i>Acceptable solutions</i>	
a)	Development at the raised ground floor (level of the levee) fronting the river is to provide active uses that activate the area and provide surveillance of the adjoining public open space.
b)	Active frontages are a minimum 70% of the street frontage shown in Figure 18. They have transparent glazing to allow unobstructed views from the adjacent footpath to at least a depth of 15m within the building.

c)	New development at the ground level: <ul style="list-style-type: none"> maximises entries or display windows to shops and/or food and drink premises and activities which provide pedestrian interest and interaction. minimises fire escapes, service doors, car park entries and plant and equipment hatches and grilles, to the active frontage. provides a high standard of finish for shopfronts. avoids blank walls that inhibit natural surveillance and encourage graffiti.
d)	Street frontages are activated through retail and shop fronts, cafés or restaurants and entries and lobbies.
e)	The ground levels of buildings in the tourist zone have a minimum 4m floor to ceiling height to ensure flexibility for a variety of active uses.

Hawthorn Avenue frontage

<i>Performance criteria</i>	
04	Development considers impacts on low density dwellings on the eastern side of Hawthorn Avenue.
<i>Acceptable solutions</i>	
a)	New development is to provide a front setback to Hawthorn Avenue as shown in Figure 18.
b)	At least 50% of the setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures. At least five (5) trees with a mature height of at least 20m are required along the street edge.
c)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
d)	Balconies on the upper levels can protrude into the setback by up to 0.6m (articulation zone). No protrusions are permissible on the ground floor with the exception of awnings.

3-3 Wharf Road

Setback to Pleasant Way

<i>Performance criteria</i>	
05	Development enables Pleasant Way to be realigned and allows sufficient space for a reconfigured closure adjacent to Princes Highway.
<i>Acceptable solutions</i>	
a)	Development is to provide a setback to Pleasant Way as shown in Figure 18. <i>(Note: a variation to this front setback may be required to retain significant trees and/or enable proposed road alignment and intersection modification once the design is finalised.)</i>
b)	Land required for infrastructure upgrades within this setback will be acquired by Council/ RMS by agreement.
c)	Due to uncertainties regarding the future closure design of Pleasant Way, vehicular access to the development (carpark entry/ loading) may not be possible in which case Hawthorn Avenue is preferable. <i>(Note: vehicular access off Pleasant Way may be possible/ considered once road alignment and intersection closure is finalised).</i>

Princes Highway frontage

<i>Performance criteria</i>	
06	Development responds to the future use and design of the historic Nowra Bridge.
<i>Acceptable solutions</i>	
a)	New development is to provide active uses on the ground floor wrapping around the north west corner as shown in Figure 18.
b)	The proposed future use of the historic bridge is as a pedestrian and cycle link, development should respond to the link by providing surveillance (windows, doors), good lighting levels and clear sightlines to and from the Riverfront Promenade.

Gateway function

<i>Performance criteria</i>	
07	New development in this prominent and highly visible gateway location strengthens the arrival experience to Nowra.
<i>Acceptable solutions</i>	
a)	While development is to 'face' the river, an articulated facade and corner treatment towards the highway is also desired. Development should be sensitively integrated into the context and landscape and not display 'look-at-me' architecture. This includes using non glaring or non reflecting materials, neutral colours, signage that is integrated into the facade and minimal obtrusive light spilling beyond the development's boundary, e.g. through large glazed areas of the facade.
b)	Built form towards the former intersection of Princes Highway and Pleasant Way displays quality architectural design, including corner treatments, well proportioned facades, and quality material and finishes selection.

Bulk and scale

<i>Performance criteria</i>	
08	Development is designed to reduce the perceived visual impact of its bulk and scale.
<i>Acceptable solutions</i>	
a)	Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 19 & Figure 20.
b)	Gaps between buildings are provided to reduce visual bulk and scale. The maximum length of built form is 40m.
c)	The bulk, scale and height of new development sensitively transitions to lower density housing on the eastern side of Hawthorne Avenue.

3-3 Wharf Road

Articulation and exteriors

<i>Performance criteria</i>	
09	Building articulation and exteriors positively contribute to the desired future character of the area and streetscape.
<i>Acceptable solutions</i>	
a)	The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
b)	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are of high design quality.
c)	Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complement the architecture of the building.

Addressing the street

<i>Performance criteria</i>	
10	Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.
<i>Acceptable solutions</i>	
a)	New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
b)	Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
c)	Habitable uses on the 'ground floor' are to be raised above the flood level. Parking is to be screened from the street. Direct access from the footpath is encouraged.
d)	Grilles and transparent security shutters are to have a minimum of 70% transparency. Solid roller shutters, screens or grills on shopfronts and dwellings are not permitted.

Amenity

<i>Performance criteria</i>	
11	Separation between buildings allows for adequate daylight access, ventilation, view sharing and privacy.
<i>Acceptable solutions</i>	
a)	Siting and built form configuration optimises solar access within the development and minimises overshadowing of adjoining properties.

<i>Performance criteria</i>	
12	Building users are protected from negative impacts (noise, air quality, vibration) from Princes Highway.
<i>Acceptable solutions</i>	
a)	Windows located along the western facade fronting Princes Highway are double-glazed (or use laminated glazing) and have acoustic seals.
b)	Noise sensitive areas (living rooms, bedrooms) are located away from the highway. Also see <i>Development near rail corridors and busy roads - Interim Guideline NSW 2008</i> .

3-3 Wharf Road

Floor to ceiling heights

Performance criteria		
13 Buildings are adaptable to a variety of uses over time.		
Acceptable solutions		
a) The following minimum heights apply:		
Use	Minimum floor to floor height	Minimum floor to ceiling height
Retail	4.4m	4.0m
Commercial	3.7m	3.3m
Adaptable	3.7m	3.3m
Community	3.7m	3.3m
Residential	3.1m	2.7m

Access and parking

Performance criteria	
14 Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.	
Acceptable solutions	
a)	The width and height of vehicular entries is kept to a minimum. Gates should be integrated with the architectural design of the development and consider flood impacts. Vehicular entry/ exit points are recessed by at least 0.5m behind the building line.
b)	Driveways should be partly screened by low vegetation to lessen their visual impact when viewed from the street however this should not impact on clear sightlines between vehicles and pedestrians.
c)	The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.
d)	A continuous footpath to Council specifications is provided along all street frontages adjoining the development.
e)	Vehicular access to the development (parking, loading) is not permitted off Wharf Road.

Performance criteria	
15 Parking is visually unobtrusive.	
Acceptable solutions	
a)	At grade parking is fully integrated into the built form and screened from public view.
b)	At grade and any potential basement parking levels cannot extend into any of the setback zones.

Flood responsive design

Performance criteria	
16 Development does not increase the risk of flooding elsewhere.	
Acceptable solutions	
a)	Development is able to retain the area's function as a floodway during flooding events as much as possible. <i>(Note: Council's DCP prohibits intensification of development in areas categorised as 'high hazard floodway'. A detailed flood study/ assessment is required to determine if any development is possible and if so, to what extent and specifications. One on-site design solution to help meet this performance criteria may be to provide a 'sacrificial' ground floor level and/ or basement levels which would be able to be flooded.)</i>
b)	The impact of any proposed modifications to natural ground level, new structures and other obstructions would need to be assessed, including the impact on flood behaviour, conveyance, storage capacity, surrounding properties and the environment.
c)	Flood mitigation options off site (further up- or downstream) may be able to be explored and applied to offset the development's impact.

3-3 Wharf Road

Performance criteria

17 Development is designed to allow for safe movement of people in or out of the area in the case of a flooding event.

Acceptable solutions

- a) Development adheres to requirements as set out in Council's DCP Chapter G9 *Development on Flood Prone Land*. This includes the use of adequate flood proofing measures, construction methods and selection of materials.
- b) Reliable access must be provided from the building, commencing at a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF.
- c) Emergency evacuation strategies and procedures are in place such as regular drills with building users/ occupants/ hospitality staff on what to do in a flooding event.
- d) Adequate flood warning systems, signage and exits must be available to allow safe and orderly evacuation, and, given the proposed tourism use, be designed with short-term visitors new to the area in mind.



Performance criteria

18 Development is designed so that damage to property is minimised and recovery is speedy and inexpensive.

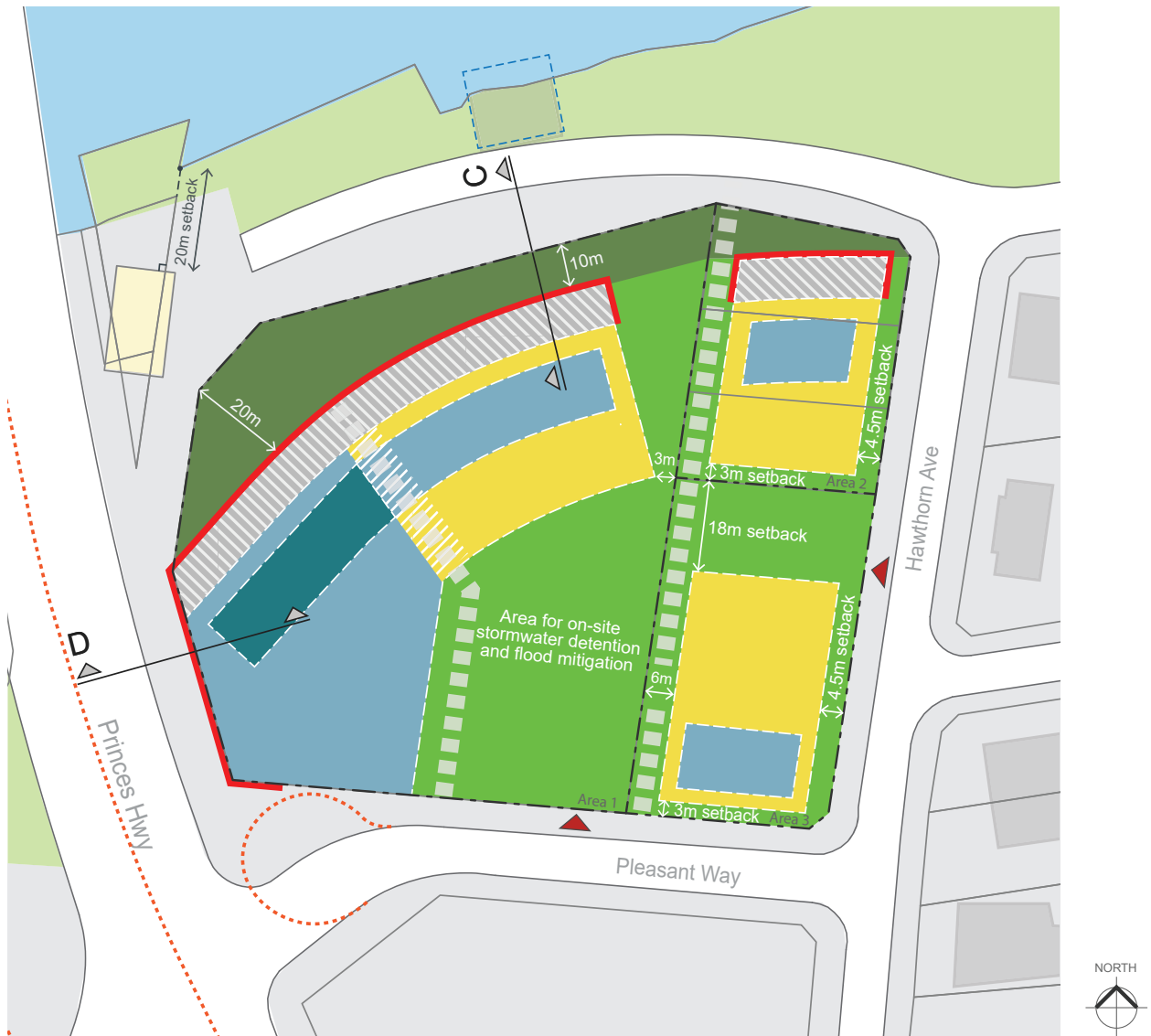
Acceptable solutions

- a) Suitable pumps are provided on all levels at risk of flooding and natural ventilation is maximised.
- b) Motor vehicles are able to be relocated, undamaged, to an area with substantially less risk from flooding, within effective warning time. A secondary alternate entry/ exit to the carpark may be required.



3-3 Wharf Road

Key development parameters



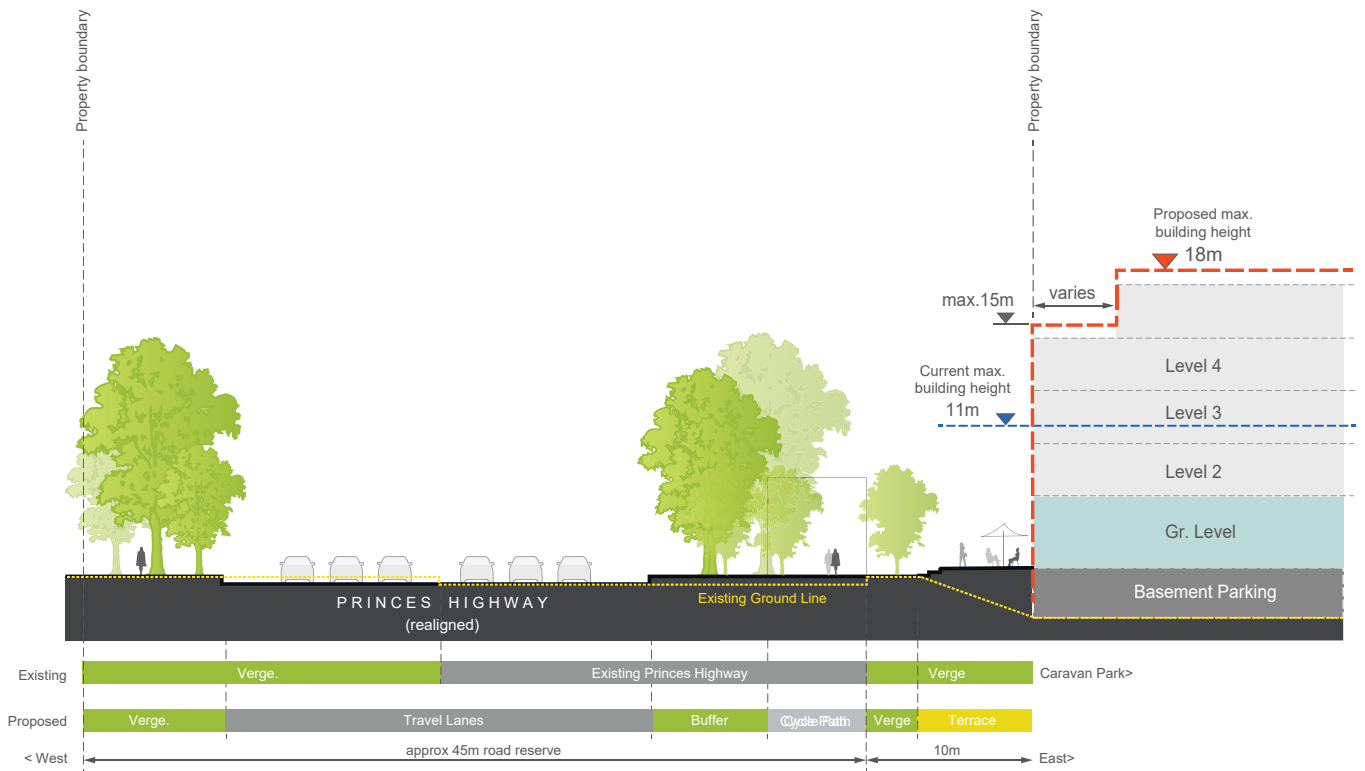
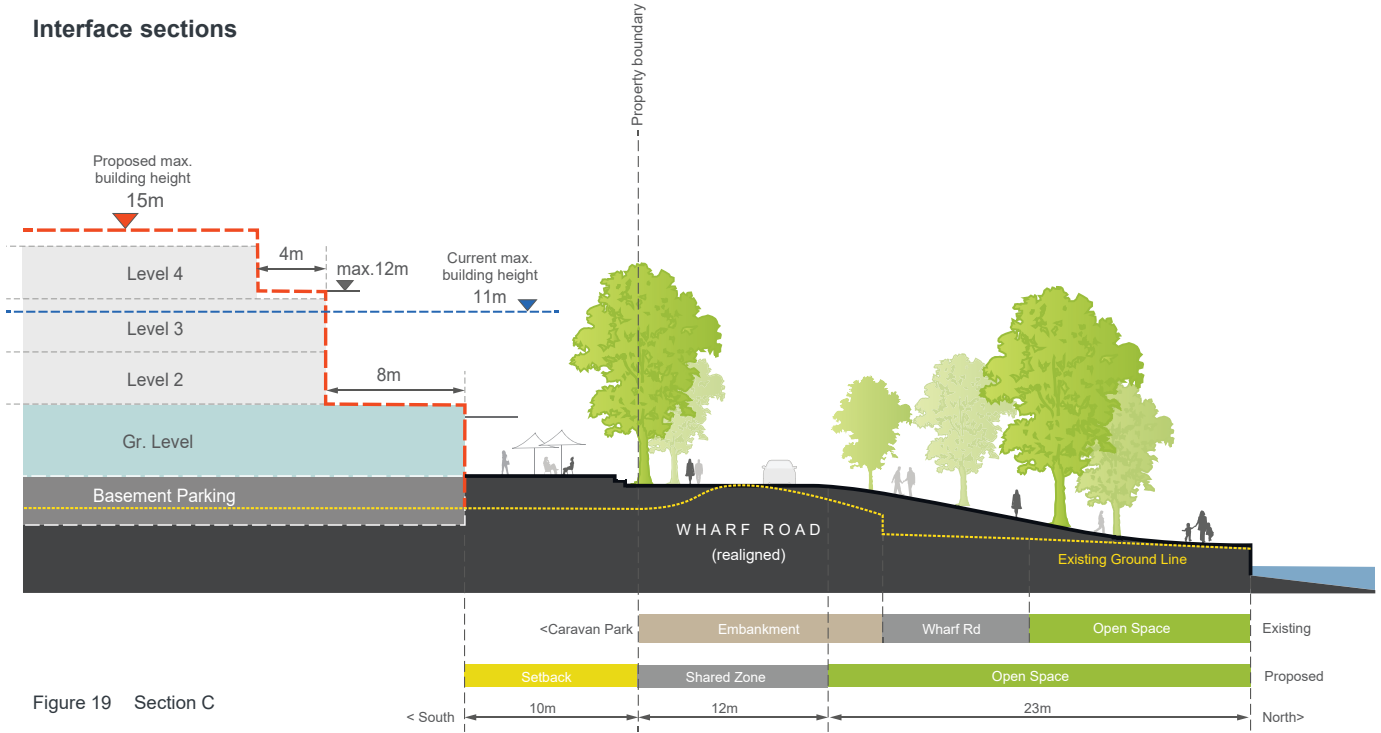
Note: Access to Heritage Bridge to be confirmed.

- | | |
|--|--|
| Max. building height 18m (5 storeys) | Landscape to allow for on-site stormwater detention and flood mitigation |
| Max. building height 15m (4 storeys) | Desired location of built form breaks/ gaps |
| Max. building height 12m (3 storeys) | Vehicular access (preferred location) |
| Max. building height 8m (2 storeys) | Desired pedestrian and cycle access route |
| Max. building height 5m (1 storey) | RMS indicative future road alignment |
| Active frontage required | Nowra Sailing Club site |
| Setback to allow for future Wharf Road upgrade/ potential realignment and increased open space | Potential consolidated lot boundaries |

Figure 18 Key development parameters

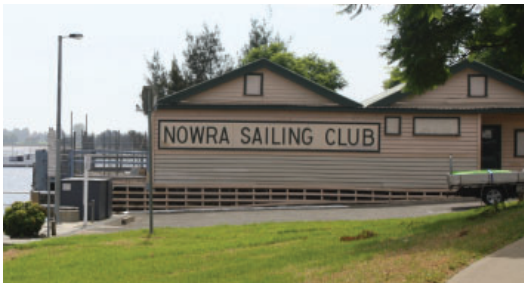
3-3 Wharf Road

Interface sections



3-3 Wharf Road

Nowra Sailing Club Pavilion



Nowra Sailing Club in 2016



Nowra Sailing Club during a flood



The damaged building following the 2017 fire (source: South Coast Register)

The site of the Nowra Sailing Club is located along Wharf Road on the south bank of the Shoalhaven River. It was first built in the 1880's and used by the Illawarra Steamship Navigation Company to bring goods between Sydney and Nowra.

The building was destroyed by fire in June 2017 which resulted in damage to the timber wharf and structure under the building, the majority of which has been demolished.

Recent community suggestions about what the site should become include redeveloping the whole site, rebuilding the Sailing Club or creating a historical monument. A South Coast Register online poll received 101 responses, with the most popular idea being to redevelop the site.

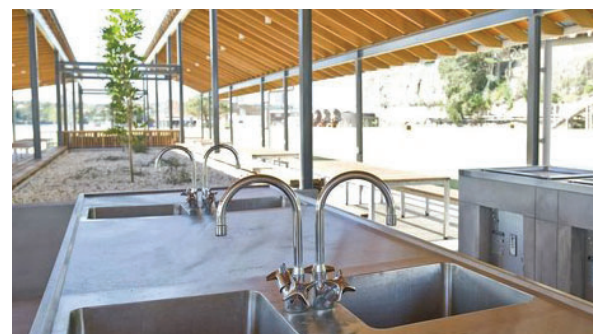
Due to the close proximity of the site to the Shoalhaven River and the frequency of flooding, it is recommended that the site is not redeveloped for uses that require costly recovery following a flood.

A possible option for the site's future is the creation of a lightweight picnic facility that includes seating, barbecues, public toilets and enhances the waterfront public open space.

The design of the pavilion could reflect the historic profile and signage of the sailing club and would address flooding issues by being permeable and durable (see following images).



Shaded public seating under a lightweight structure

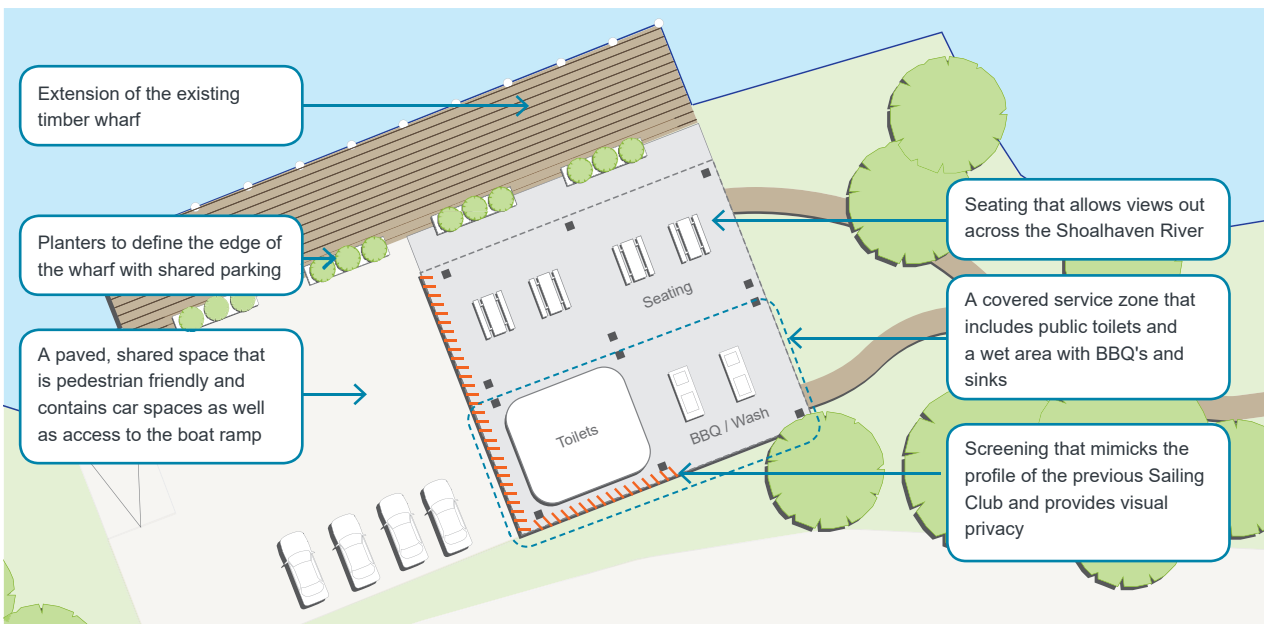


Public wash area and BBQ's

3-3 Wharf Road



3D view of possible pavilion with retention of historic boat shed profile (corten steel screen) and signage of the Nowra Sailing Club



Possible layout of Nowra Sailing Club site, providing amenity for the Riverfront public open space



Examples of public toilets beneath shade structure as a possible option for this site

3-4 Mandalay Avenue



Objectives

1. Maximise the size, amenity and usability of the public open space along the river and create a high quality place that attracts people.
2. Increase the accessibility and surveillance of the open space to the east.
3. Retain tall trees and indigenous landscape where possible.
4. Create an attractive place to live and visit through high quality landscape, built form, signage and public art.
5. Increase the number of direct, safe and convenient pedestrian and cycle routes from the precinct to key destinations and the river front.
6. Encourage development on higher land that is not flood prone but is close to the riverfront and can benefit from the riverfront amenity.

Desired Future Character

This sub-precinct is located to the west of the Riverfront Precinct and bound by public open space to the east, Scenic Drive to the north, Shoalhaven Street to the west and Hyam Street to the south.

The area is one of the least constrained in the Riverfront Precinct, with the majority of land located above predicted flood levels. It is not affected by heritage constraints or the proposed bridge duplication and a number of properties are currently in single ownership (NSW Land and Housing Corporation). These factors offer a degree of planning certainty, making amalgamation and redevelopment likely to be easier to achieve compared to other sub-precincts.

The location of this sub-precinct provides high recreational amenity, with an opportunity for views across the river and public open spaces, and easy access to the riverfront promenade and community assets such as the Nowra Aquatic Centre. The close proximity to the Shoalhaven District Hospital makes the area particularly attractive to key workers and/ or seniors living.

There is an opportunity to significantly improve the quality and accessibility of the public open space to the east. A new 'Parklands Drive' north-south link from Hyam Street to Scenic Drive would deliver on this aim and allow new development to address the park, enhancing surveillance and activity.

Development addressing the parklands and the riverfront will be highly visible and shape the future perception of Nowra. Therefore these interfaces in particular will require the highest quality landscape and architectural design.

3-4 Mandalay Avenue



Figure 21 Artist's impression of potential future development



Development with a range of heights from 2 to 4 along the water and up to 7 storeys behind which creates interest and allows view sharing



4 storey development along the waterfront at Rhodes with large elevated terraces providing surveillance of the open space.

3-4 Mandalay Avenue

Desired future urban structure

A new north-south link or 'Parkway Drive' along the western side of the open space (the eastern boundary of the sub-precinct) is highly desirable. This connection would improve public access to the river, and increase the surveillance and usability of the adjoining public open space (Riverfront, Nowra Aquatic Centre and Moorhouse Park). The link may be located partly within this sub-precinct but preferably fully within public land. This link would also provide the opportunity to close a section of Scenic Drive and increase the amount of level open space next to the river. A new mid-block connection for pedestrians increases access from the eastern open space to the hospital and Paringa Park to the west.

Flooding

Compared to the other sub-precincts within the Riverfront Precinct, this area has less potential for flooding, with approximately two-thirds of land located above the flood risk level. Council's flood mapping identifies land close to the open space as 'High Hazard Flood Storage' and land to the east of Mandalay Avenue as 'Low Hazard Flood Storage'. Council's DCP *Chapter G9 Development on Flood Prone Land* provides controls for development on land at risk of flooding.

LEP Recommendations

Land use and FSR

The current land use Zone R3 Medium Density Residential encourages apartments and townhouses which are highly suitable for this location. It is suggested that the zone at the north eastern tip, at the T-intersection of the new road with Scenic Drive (owned by Council), be changed to public open space, e.g. RE1 Public Recreation. This is a very small change and would not reduce the permissible residential density of land and is consistent with the Ministerial direction.

There is currently no maximum FSR for this sub-precinct specified in the SLEP 2014. Initial testing indicates that a suitable FSR for new development in this sub-precinct would be in the range of approximately 1.3:1 to 1.7:1. This includes a bonus height and FSR if the new pedestrian link is provided to the hospital. The FSR's should be reduced if this link is not created. The FSR's are based on the assumption that development will be

able to have a maximum site coverage of approximately 40-50%. (*Note: The FSR estimate is based on the entire sub-precinct area, and the FSR of individual properties may vary depending on location and constraints*).

Maximum height of buildings

It is recommended that the maximum building height in this sub-precinct be increased up to 22m. This allows a range of built form that ranges from six (6) storeys near the hospital and steps down to three (3) storeys towards the river and open space.

DCP Recommendations

Height of buildings

Performance criteria

01 New development responds sensitively to the context and supports the desired future character.

Acceptable solutions

- a) Development is to conform to the maximum building heights as shown in Figure 22.
- b) Development pays particular attention to the building modulation and view sharing, with the built form 'stepping down' in height towards the riverfront.

Street setbacks

Performance criteria

02 Setbacks to public streets contribute to the quality of the public domain, with particular focus on the prominent parklands and riverfront frontages.

Acceptable solutions

- a) Development is to provide street setbacks to all public streets in the sub-precinct as shown in Figure 22.
- b) At least 70% of the Scenic Drive and 'Parkway Drive' street setbacks are required to be deep soil and landscaped with a preference for retaining existing trees, native planting species and incorporation of WSUD measures.

03 AREA SPECIFIC CONTROLS

3-4 Mandalay Avenue

- c) At least 50% of the street setback area to Hyam Street, Mandalay Avenue and Shoalhaven Street are required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures.

- b) Common areas for building users/ residents are encouraged within the front setback, especially facing the open space with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.

Addressing the street

Performance criteria

- 03** Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.

Acceptable solutions

- a) New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
- b) Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
- c) A pedestrian entrance to developments is provided at least every 15m of street frontage length.
- d) Residential uses on the ground floor can be raised to a maximum of 1.2 metres above the footpath level to improve internal privacy. Direct access from the footpath to individual dwellings is encouraged.

Performance criteria

- 04** Surveillance, activity and social interaction along streets is maximised.

Acceptable solutions

- a) Fences to public streets and links are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.

Bulk and scale

Performance criteria

- 05** Development is designed to reduce the visual impact of its bulk and scale

Acceptable solutions

- a) Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 23.
- b) Gaps between buildings are provided to reduce visual bulk and scale. The maximum length of built form is 40m.

Articulation and exteriors

Performance criteria

- 06** Buildings express a high level of interest and facade design quality, in particular where they address/ are visible from the public domain.

Acceptable solutions

- a) The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
- b) The maximum length of a straight wall without articulation is 8m.
- c) Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
- d) There is a focus on vertical facade articulation and 'ins and outs' (recesses and projections) to create shadows.

3-4 Mandalay Avenue

- e) Balconies, ground floor terraces or entrance structures can protrude into the street setbacks by up to 0.6m beyond the front setback (articulation zone).
- f) Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complement the architecture of the building.

Amenity

Performance criteria

- 07** Separation between buildings allows for adequate daylight access, ventilation, view sharing and privacy.

Acceptable solutions

- a) Residential components of development satisfy the requirements of *SEPP 65* and the *Apartment Design Guide*.
- b) Siting and built form configuration optimises solar access within the development and minimises overshadowing.

Floor to ceiling heights

Performance criteria

- 08** Buildings are adaptable to a variety of uses over time.

Acceptable solutions

- a) The following minimum heights apply:

Use	Minimum floor to floor height	Minimum floor to ceiling height
Adaptable	3.7m	3.3m
Community	3.7m	3.3m
Residential	3.1m	2.7m

- b) Residential uses on ground floors are to have an adaptable ceiling height.

Access and parking

Performance criteria

- 09** The prominent frontages to the parklands and the riverfront prioritise pedestrians with little or no interruptions or conflict points.

Acceptable solutions

- a) Vehicular access points and driveways off Scenic Drive and 'Parkway Drive' are avoided and only permissible if it can be demonstrated that access off Mandalay Avenue, Hyam Street or Shoalhaven Street is not possible.
- b) A continuous footpath to Council specifications is provided along all street frontages adjoining the development.

Performance criteria

- 10** Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.

Acceptable solutions

- a) The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are recessed by at least 0.5m behind the building line.
- b) Long driveways over 6m in length have a curved alignment to slow traffic speeds of vehicles entering and exiting. They should be partly screened by low vegetation to further lessen their visual impact when viewed from the street however this should not impact on clear sightlines between vehicles and pedestrians.
- c) The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.

3-4 Mandalay Avenue

<i>Performance criteria</i>	
11	Parking is visually unobtrusive to the street frontages.
<i>Acceptable solutions</i>	
a)	At grade parking, if unavoidable, is screened from public view and not permissible within any of the setback zones.
b)	Outside flood affected areas basement car parking cannot extend more than 1.0m above ground where it faces a public street. It is screened and/ or integrated with the architectural building design and visually recessive.
c)	Within flood affected areas basement/semi basement car parking is screened and/ or integrated with the architectural building design and visually recessive where it faces a public street.
d)	Below-grade parking structures may not protrude into any of the setback and landscaped zones as shown in Figure 23 and Figure 24.

Flood responsive design

<i>Performance criteria</i>	
12	Development does not increase the risk of flooding elsewhere.
<i>Acceptable solutions</i>	
a)	Development retains the current flood storage capacity on site as much as possible.
b)	If the natural ground level is modified, compensatory flood storage in addition to the existing capacity may be required to be provided.
c)	Flood mitigation options off site (e.g. upgrade of the adjacent parklands or in areas further up- or downstream) may be able to be explored and applied to offset the development's impact.

d)	Where development is at risk of flooding, development adheres to requirements as set out in Council's DCP Chapter G9 <i>Development on Flood Prone Land</i> . This includes the use of adequate flood proofing measures, construction methods, selection of materials and evacuation routes/ strategies.
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Landscape quality

<i>Performance criteria</i>	
13	Landscape design complements the proposed development and reduces the impact of its bulk and scale.
<i>Acceptable solutions</i>	
a)	A minimum of 35% of the total site area is to be provided as landscaped area. (<i>Note: the SLEP defines landscaped area as a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.</i>)
b)	At least 50% of the required landscaped area is deep soil with deep soil planting (trees, shrubs).
c)	Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.
d)	New development adjoining the parkland and the riverfront complements the landscape character. At least every 15m, a tree with a mature height of minimum 20m is to be planted along Scenic Drive and 'Parkside Drive' within the front setback.

3-4 Mandalay Avenue

Performance criteria

- 14** Trees and vegetation provide a high degree of amenity and environmental benefit.

Acceptable solutions

- a) The selection and location of vegetation and trees should provide shade in summer and sun access in winter to building facades and public and private open spaces, help reduce glare from hard surfaces and enhance visual privacy where desirable.

Residential uses not covered by ADG

The NSW Apartment Design Guide (ADG) applies to buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development types, such as 2-3 storey terraces, low rise apartments, multiplexes, courtyard houses and the like, the following controls apply.

Performance criteria

- 15** Design quality, performance of and amenity created by new residential development is of a high standard.

Acceptable solutions

- a) The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. via the use of a courtyard design.
- b) Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect. The maximum amount of single aspect dwellings is 15% of all dwellings.
- c) Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.
- d) Master bedrooms have a minimum area of 10m² and other bedrooms 9m².
- e) Building separation is as per the *Apartment Design Guide, Section 3F Visual Privacy*.

Performance criteria

- 16** Private open space is designed to maximise useability, privacy, outlook and solar access.

Acceptable solutions

- a) For dwellings on the ground floor (including terraces), the minimum private open space is:

Dwelling type	Min. private open space
Studio/ 1 bedroom	20m ²
2 bedroom	28m ²
3+ bedroom	35m ²

The minimum dimension is 4.0m x 4.0m.

For dwellings on upper levels (i.e. balconies), the minimum private open space is:

Dwelling type	Min. private open space
Studio/ 1 bedroom	10m ²
2 bedroom	14m ²
3+ bedroom	18m ²

The minimum dimension is 2.0m x 3.0m.

Public art

Performance criteria

- 17** Public art enhances the sense of place and supports the values of the area.

Acceptable solutions

- a) Permanent public art and art on private land visible from the public domain is integrated throughout the sub-precinct and may include sculptural art, lighting, typography, facade treatments and interactive installations.
- b) Development is to allocate funds (to be determined by Council's Contribution Plan) towards public art. This art can either be provided on site (*Note: art must be visible from the public domain*), or paid as contribution to Council.

03 AREA SPECIFIC CONTROLS

3-4 Mandalay Avenue

New links and connections

Performance criteria

18 A new north-south connection 'Parkside Drive' improves public access between Hyam Street and the riverfront.

Acceptable solutions

- The proposed new link has a road reserve of a minimum 16m and prioritises safe pedestrian and cycle access.
- Provision of 90 degree parking adjacent to the park frontage should be explored. This would 'free up' carparking space within the public open space which could be re-purposed as open space and potentially improve flood storage capacity.
- New development to the west clearly addresses 'Parkside Drive', maximising activity and surveillance levels.
- The road reserve may be located partly within the sub-precinct or fully within public land. The developer will be required to contribute to the delivery of this infrastructure (to be determined by Council's Contribution Plan).

Performance criteria

19 Pedestrian and cycle access and permeability is improved.

Acceptable solutions

- A new east-west link which connects Paringa Park and the hospital with the public parklands is a minimum width of 12m and located as shown in Figure 22.
- The link can be in private ownership but is required to allow 24/7 public access and be well lit after hours.
- Development clearly addresses the link with entries, windows and balconies.



3-4 Mandalay Avenue

Key development parameters



- Max. building height 20m (6 storeys)
- Max. building height 17m (5 storeys)
- Max. building height 14m (4 storeys)
- Max. building height 11m (3 storeys)
- Setback to allow for future T-intersection to Scenic Drive
- Landscape to allow for on-site stormwater detention and flood mitigation
- Desired location of built form breaks/ gaps
- Vehicular access (preferred location)
- Desired pedestrian link
- Preferred road alignment
- Potential consolidated lot boundaries

Figure 22 Key development parameters

3-4 Mandalay Avenue

Interface sections

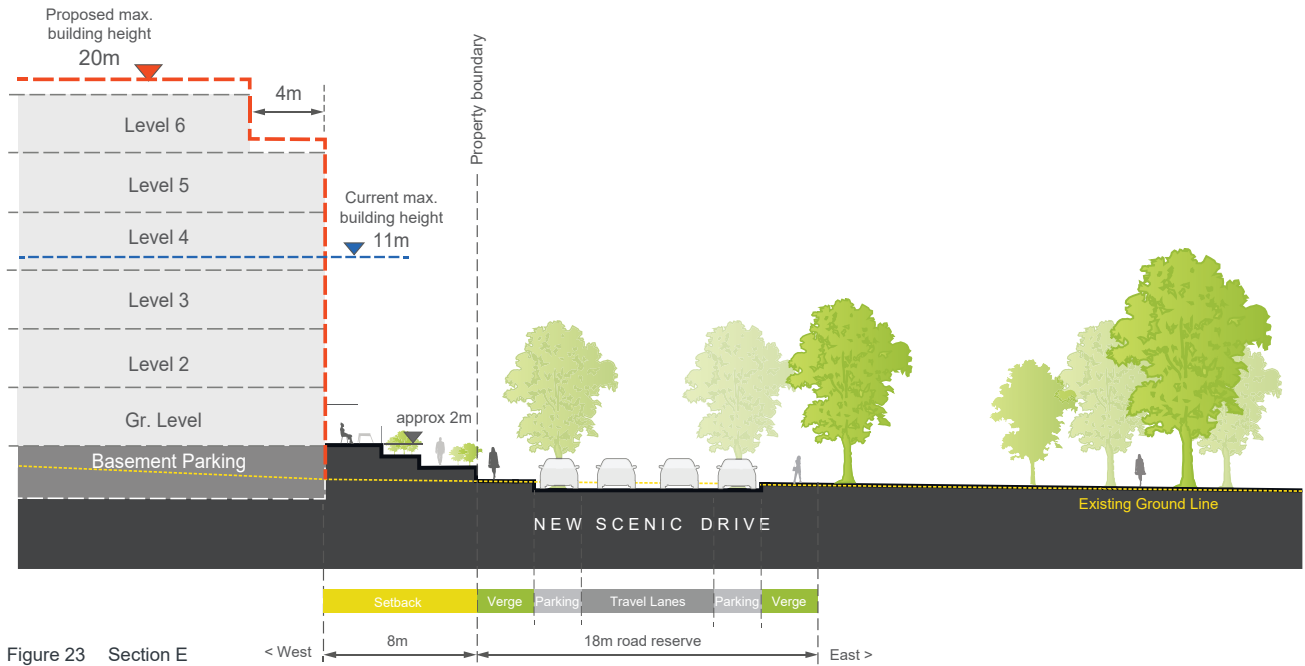


Figure 23 Section E

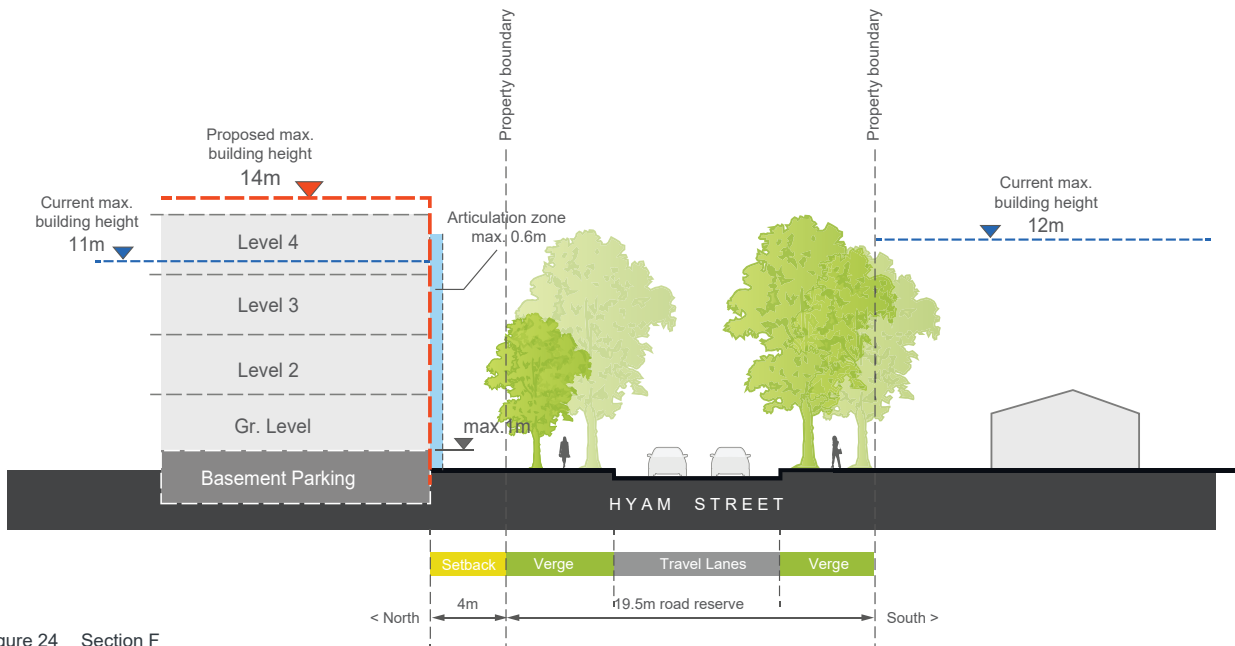


Figure 24 Section F

3-4 Mandalay Avenue

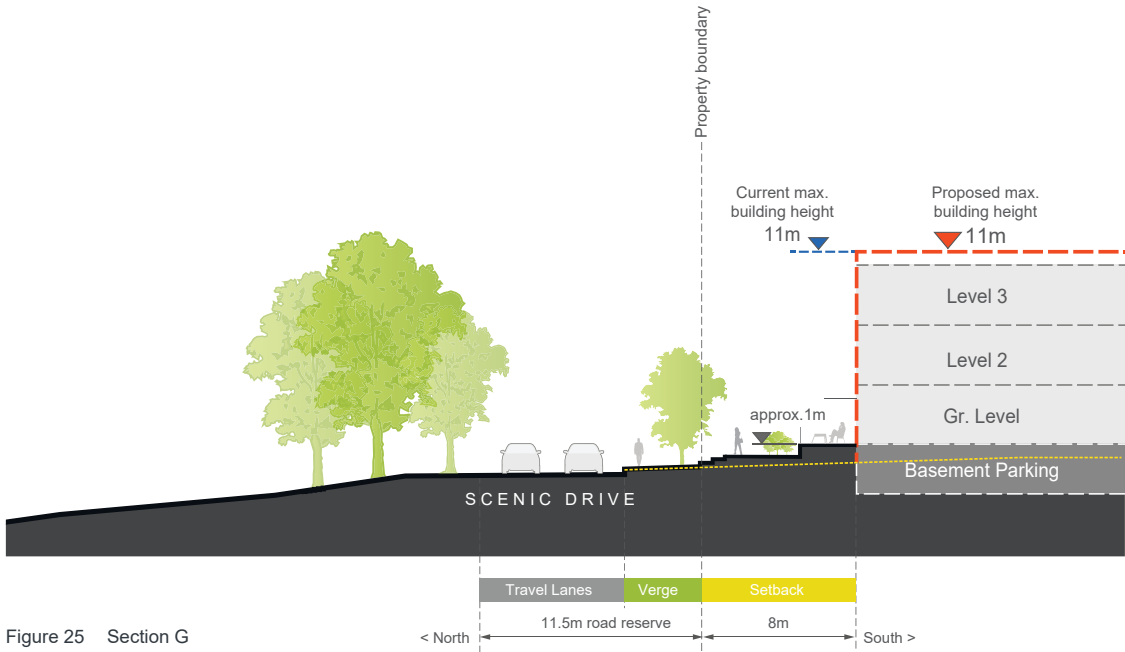


Figure 25 Section G

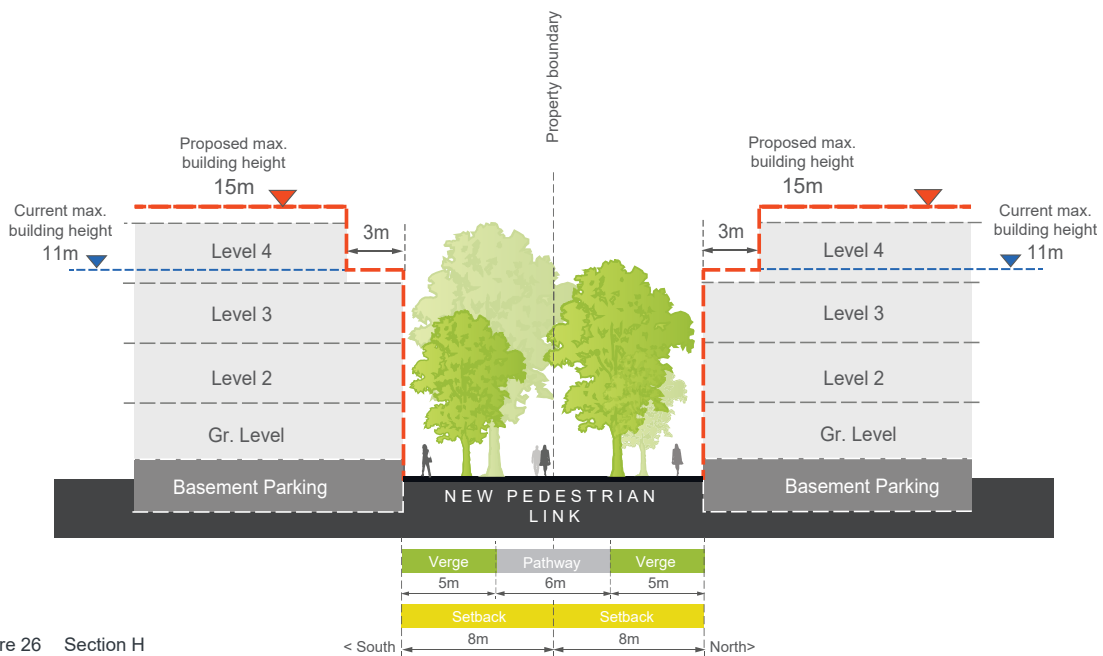
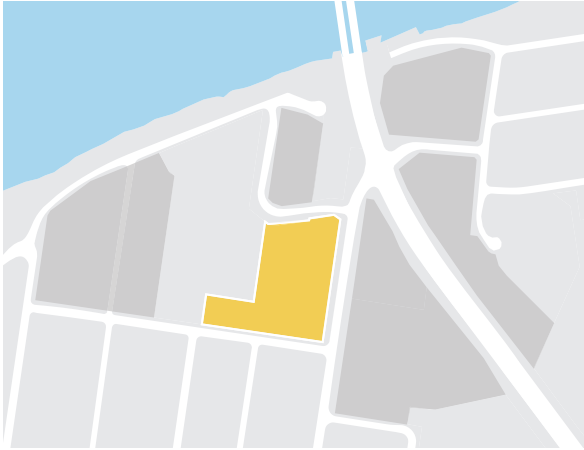


Figure 26 Section H

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3-5 Hyam Street



Objectives

1. Improve the accessibility, attractiveness and usability of existing public open space.
2. Provide direct, safe and convenient pedestrian routes from key destinations to the riverfront.
3. Retain tall trees and indigenous landscape where possible.
4. Retain, respect and integrate heritage items into an area undergoing change.
5. Encourage development along Bridge Road which reflects the prominence and importance of this entry into Nowra.
6. Locate development within a landscaped setting to minimise impact on flood storage and maximise views and outlook.
7. Encourage development on higher land that is not flood prone and/or is less flood prone and is close to the riverfront and benefits from the riverfront amenity.

Desired Future Character

This sub-precinct is defined by Bridge Road to the east, Hyam Street to the south and the start of Scenic Drive to the north. To the east lies the public open space of Moorhouse Park and the Nowra Aquatic Centre.

The uncertainty of the design and impact of the new bridge and highway alignment is a challenge for this sub-precinct.

Current plans indicate that the northern gateway intersection of the highway and Bridge Road will be retained in approximately the same location, but will be reconfigured. For the sub-precinct this means that Bridge Road will continue to be an important entry route into Nowra and future development will be highly prominent, in particular at the corner of Bridge Road and Scenic Drive.

Approximately half of the sub-precinct is at risk of flooding. While a constraint, it is also an opportunity for the sub-precinct to focus development on higher land accessed off Bridge Road and Hyam Street that benefits from views across the (improved) open space to the north-west towards the river. Future built form will be able to offer high amenity, i.e. solar access and view across open space for residents/ building users.

New connections will make the area more accessible and better connected, with a potential north-south street off Hyam Street and an east-west pedestrian and cycle link from the Entertainment Centre and Council Administration Centre to Moorhouse Park. Hyam Street will become more important over time, linking the hospital to these facilities. Ideally, the lowest areas of Hyam Street are regraded to be above flood levels.

Of all sub-precincts in the Riverfront Precinct, this area is the most flexible in terms of future uses. It is suitable for residential apartments and/or terraces, commercial, offices, retail, cultural, community and health/ medical facilities benefiting from the close proximity to the Shoalhaven District Hospital.

3-5 Hyam Street



Figure 27 Artist's impression of potential future development



Development stepping down to follow the slope of 3-4 storeys high with an upper floor setback.



Development in a landscape setting which ranges in height from 3-5 storeys high with the upper floor setback from the street.

3-5 Hyam Street

Desired future urban structure

A new north-south street linking Hyam Street with Scenic Drive is highly desirable. This connection would significantly improve public access to the river, and surveillance and usability of the adjoining public open space. A new mid-block connection for pedestrians and cyclists connect the SEC and Council Chambers to the east with Moorhouse Park to the west is recommended, as is the straightening of Scenic Drive to the north, to improve wayfinding and open up views to the river.

Flooding

The north-western half of the sub-precinct is subject to flooding. Council's flood mapping identifies most of this land as 'High Hazard Flood Storage'. The *Scenic Drive Hydraulic Assessment Stage 1* report (2008) determined that the high hazard storage area in this location is subject to flood inundation of up to 2 metres in depth in a 1 in 100 year event. The assessment also notes that redevelopment has the potential to reduce the overall flood risk in the area by removing existing flood liable buildings and land usage, and replacing these with buildings designed in accordance with current flood planning controls outlined in Council's *DCP Chapter G9 Development on Flood Prone Land*. A detailed flood study may recommend that the amount of open space in this area is increased to compensate for loss of flood storage.

Heritage

Bridge Road is the historic entry route into Nowra and its significance is expressed in its wide road reserve of 30m and mature street trees. There are two heritage-listed items within the sub-precinct. Both properties are next to each other, single storey and address Bridge Road. One is a 'Federation weatherboard residence' while the other is listed as 'late Victorian weatherboard cottage and garden'. Another single storey house just outside the sub-precinct to the south at the corner of Hyam Street and Bridge Road is also heritage listed and is identified as a 'Victorian brick residence'.

LEP Recommendations

Land use and FSR

The current land use Zone B4 Mixed Use offers a high degree of flexibility and allows for a wide range of land uses including commercial, residential, tourist, medical and community uses. It is recommended that this zoning is retained. In terms of suitable density, due to the uncertainty around the issues affecting this sub-precinct (flooding, access, heritage) it has not been possible to determine a likely FSR range for the precinct. Due to the local constraints the FSR and site coverage is expected to be low for the overall sub-precinct.

Subdivision and amalgamation

Given the limited area of land within the sub-precinct that is not vulnerable to flooding it is recommended that changes to the planning controls only occur in conjunction with site amalgamations. This would create larger sites which could concentrate development on higher land within generous landscaped areas on flood prone land. It would also make the new mid-block connection possible.

Maximum height of buildings

It is recommended that the maximum building height in this sub-precinct is set at 18m which would allow for up to 5 storey high development. However, this maximum building height only applies to the southern portion of the site towards the intersection of Bridge Road and Hyam Street, opposite the Entertainment Centre, with building heights stepping down to the heritage buildings and on lower lying land to the north and west.

3-5 Hyam Street

DCP recommendations

<i>Performance criteria</i>	
01	New development responds sensitively to the context and supports the desired future character.
<i>Acceptable solutions</i>	
a)	Development is to conform to the maximum building heights as shown in Figure 28.

Street setbacks

<i>Performance criteria</i>	
02	The treatment and design of setback zones contributes to the streetscape quality of Bridge Road and Scenic Drive.
<i>Acceptable solutions</i>	
a)	Development is to provide street setbacks to all public streets in the sub-precinct as shown in Figure 28.
b)	At least 70% of the Scenic Drive and Bridge Road street setbacks are required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures.
c)	At least 50% of the street setback area to Hyam Street is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures.
d)	If land is required to deliver the potential realignment of Scenic Drive, it will be acquired by Council by agreement.

Side and rear setbacks

<i>Performance criteria</i>	
03	New built form integrates into the context, respects heritage items and provides building separation, amenity, landscape and access.
<i>Acceptable solutions</i>	
a)	Development is to provide side and rear setbacks to existing and proposed new lot boundaries as shown in Figure 28.
b)	The front and side setbacks to new built form on either side of the two heritage-listed houses fronting Bridge Road is compatible with the bulk and scale and setting of these buildings.

Addressing the street

<i>Performance criteria</i>	
04	Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.
<i>Acceptable solutions</i>	
a)	New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
b)	Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
c)	Where ground floor residential is proposed, the floor level can be raised to a maximum of 1 metre above the footpath level. Direct access from the footpath to individual dwellings is encouraged.
d)	Where non-residential uses on the ground floor are proposed, entries and display windows are maximised to provide pedestrian interest and interaction.

3-5 Hyam Street

Performance criteria

05 Surveillance, activity and social interaction along streets is maximised.

Acceptable solutions

- a) Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
- b) Common areas for building users/ residents are encouraged within the setback adjoining open space areas with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.
- c) Fire escapes, service doors, carpark entries and plant and equipment hatches/ grilles that are visible from the street are minimised.

Bulk and scale

Performance criteria

06 Development is designed to reduce the visual impact of its bulk and scale

Acceptable solutions

- a) Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 29 and Figure 30.
- b) Gaps between buildings are provided to reduce visual bulk and scale. The maximum length of built form is 40m.

Articulation and exteriors

Performance criteria

07 Buildings express a high level of interest and facade design quality, in particular where they address/ are visible from the public domain.

Acceptable solutions

- a) The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
- b) The maximum length of a straight wall without articulation is 8m.
- c) Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
- d) There is a focus on vertical facade articulation and 'ins and outs' (recesses and projections) to create shadows.
- e) Balconies, ground floor terraces or entrance structures can protrude into the street setbacks by up to 0.6m beyond the front setback (articulation zone).
- f) Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complementary to the architecture of the building.

Prominent locations

Performance criteria

08 New development at highly visible locations strengthens the arrival experience and positive perception of Nowra.

Acceptable solutions

- a) Built form at highly visible corners near the intersection of Bridge Road and Scenic Drive, and Bridge Road and Hyam Street displays quality architectural design, including corner treatments, well proportioned facades, and quality material and finishes selection.
- b) Development along Bridge Road facing the SEC, Council Chambers and the open space is of high architectural quality and maximises surveillance of the open space.

3-5 Hyam Street

Heritage integration

<i>Performance criteria</i>	
09	New development protects the integrity and visual setting of heritage listed items.
<i>Acceptable solutions</i>	
a)	New development is to provide a setback to the two heritage listed houses along Bridge Road as shown in Figure 28.
b)	The character of heritage listed houses is considered, with new development compatible in terms of setbacks, awnings, parapets, cornice lines, selection of materials and finishes, and façade proportions.

Amenity

<i>Performance criteria</i>	
10	Separation between buildings allows for adequate daylight access, ventilation, view sharing and privacy.
<i>Acceptable solutions</i>	
a)	Residential components of development satisfy the requirements of <i>SEPP 65</i> and the <i>Apartment Design Guide</i> .
b)	Siting and built form configuration optimises solar access within the development and minimises overshadowing.

Floor to ceiling heights

<i>Performance criteria</i>																				
11	Buildings are adaptable to a variety of uses over time.																			
<i>Acceptable solutions</i>																				
a)	The following minimum heights apply:																			
	<table border="1"> <thead> <tr> <th>Use</th> <th>Minimum floor to floor height</th> <th>Minimum floor to ceiling height</th> </tr> </thead> <tbody> <tr> <td>Retail</td> <td>4.4m</td> <td>4.0m</td> </tr> <tr> <td>Commercial</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Adaptable</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Community</td> <td>3.7m</td> <td>3.3m</td> </tr> <tr> <td>Residential</td> <td>3.1m</td> <td>2.7m</td> </tr> </tbody> </table>	Use	Minimum floor to floor height	Minimum floor to ceiling height	Retail	4.4m	4.0m	Commercial	3.7m	3.3m	Adaptable	3.7m	3.3m	Community	3.7m	3.3m	Residential	3.1m	2.7m	
Use	Minimum floor to floor height	Minimum floor to ceiling height																		
Retail	4.4m	4.0m																		
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Adaptable	3.7m	3.3m																		
Community	3.7m	3.3m																		
Residential	3.1m	2.7m																		
b)	Residential uses on ground floors are to have an adaptable ceiling height.																			

Access and parking

<i>Performance criteria</i>	
12	Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.
<i>Acceptable solutions</i>	
a)	Vehicular access points and driveways off the park edge road are avoided with parking off flood free sections of Hyam Street or Bridge Road.
b)	The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are recessed by at least 0.5m behind the building line.
c)	A continuous footpath to Council specifications is provided along all street frontages adjoining the development.
d)	The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.

3-5 Hyam Street

<i>Performance criteria</i>	
13	Parking is visually unobtrusive to the street frontages.
<i>Acceptable solutions</i>	
a)	At grade parking, if unavoidable, is screened from public view and not permissible within any of the setback zones.
b)	Basement car parking cannot extend more than 1.0m above ground where it faces a public street. It is screened and/ or integrated with the architectural building design and visually recessive.
c)	Below-grade parking structures may not protrude into any of the setback and landscaped zones as shown in Figure 29 and Figure 30.

Flood responsive design

<i>Performance criteria</i>	
14	Development does not increase the risk of flooding elsewhere.
<i>Acceptable solutions</i>	
a)	Development retains the current flood storage capacity on site as much as possible.
b)	If the natural ground level is modified, compensatory flood storage in addition to the existing capacity may be required to be provided.
c)	Flood mitigation options off site (e.g. upgrade of the adjacent parklands or in areas further up- or downstream) may be able to be explored and applied to offset the development's impact.
d)	Where development is at risk of flooding, development adheres to requirements as set out in Council's DCP Chapter G9 <i>Development on Flood Prone Land</i> . This includes the use of adequate flood proofing measures, construction methods, selection of materials and evacuation routes/ strategies.

Landscape quality

<i>Performance criteria</i>	
15	Landscape design complements the proposed development and reduces the impact of its bulk and scale.
<i>Acceptable solutions</i>	
a)	A high proportion of the total site area is to be provided as landscaped area. (<i>Note: the SLEP defines landscaped area as a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area</i>).
b)	At least 50% of the required landscaped area is deep soil with deep soil planting (trees, shrubs).
c)	Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.

Public art

<i>Performance criteria</i>	
16	Public art enhances the sense of place and supports the values of the area.
<i>Acceptable solutions</i>	
a)	Permanent public art and art on private land visible from the public domain is integrated throughout the sub-precinct and may include sculptural art, lighting, typography, facade treatments and interactive installations.
b)	Development is to allocate funds (to be determined by Council's Contribution Plan) towards public art. This art can either be provided on site (<i>Note: art must be visible from the public domain</i>), or paid as contribution to Council.

3-5 Hyam Street

New links and connections

Performance criteria

17 Pedestrian and cycle access and permeability is improved.

Acceptable solutions

- a) A new east-west link which connects the SEC and Council Chambers to the parklands is a minimum width of 12m and located as shown in Figure 28.
- b) The link can be in private ownership but is required to allow 24/7 public access and be well lit after hours.
- c) Development clearly addresses the link with entries, windows and balconies, maximising activity and surveillance levels.

Residential uses not covered by ADG

The NSW Apartment Design Guide (ADG) applies to buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development types, such as 2-3 storey terraces, low rise apartments, multiplexes, courtyard houses and the like, the following controls apply.

Performance criteria

18 Design quality, performance of and amenity created by new residential development is of a high standard.

Acceptable solutions

- a) The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
- b) Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect. The maximum amount of single aspect dwellings is 15% of all dwellings.

- c) Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm in mid winter.

Performance criteria

19 Private open space is designed to maximise useability, privacy, outlook and solar access.

Acceptable solutions

- a) For dwellings on the ground floor (including terraces), the minimum private open space is:

Dwelling type	Min. private open space
Studio/ 1 bedroom	20m ²
2 bedroom	28m ²
3+ bedroom	35m ²

The minimum dimension is 4.0m x 4.0m.

For dwellings on upper levels (i.e. balconies), the minimum private open space is:

Dwelling type	Min. private open space
Studio/ 1 bedroom	10m ²
2 bedroom	14m ²
3+ bedroom	18m ²

The minimum dimension is 2.0m x 3.0m.

3-5 Hyam Street

Key development parameters



- Max. building height 18m (5 storeys)
- Max. building height 15m (4 storeys)
- Max. building height 12m (3 storeys)
- Setback to allow for future road alignment
- Landscape area
- Setback to protect heritage structures
- Development of lot subject to flood study
- Desired location of built form breaks/ gaps
- Desired pedestrian and cycle access route
- Vehicular access (preferred location)
- Preferred road alignment
- RMS indicative future road alignment
- Potential consolidated lot boundaries

Figure 28 Key development parameters

3-5 Hyam Street

Interface sections

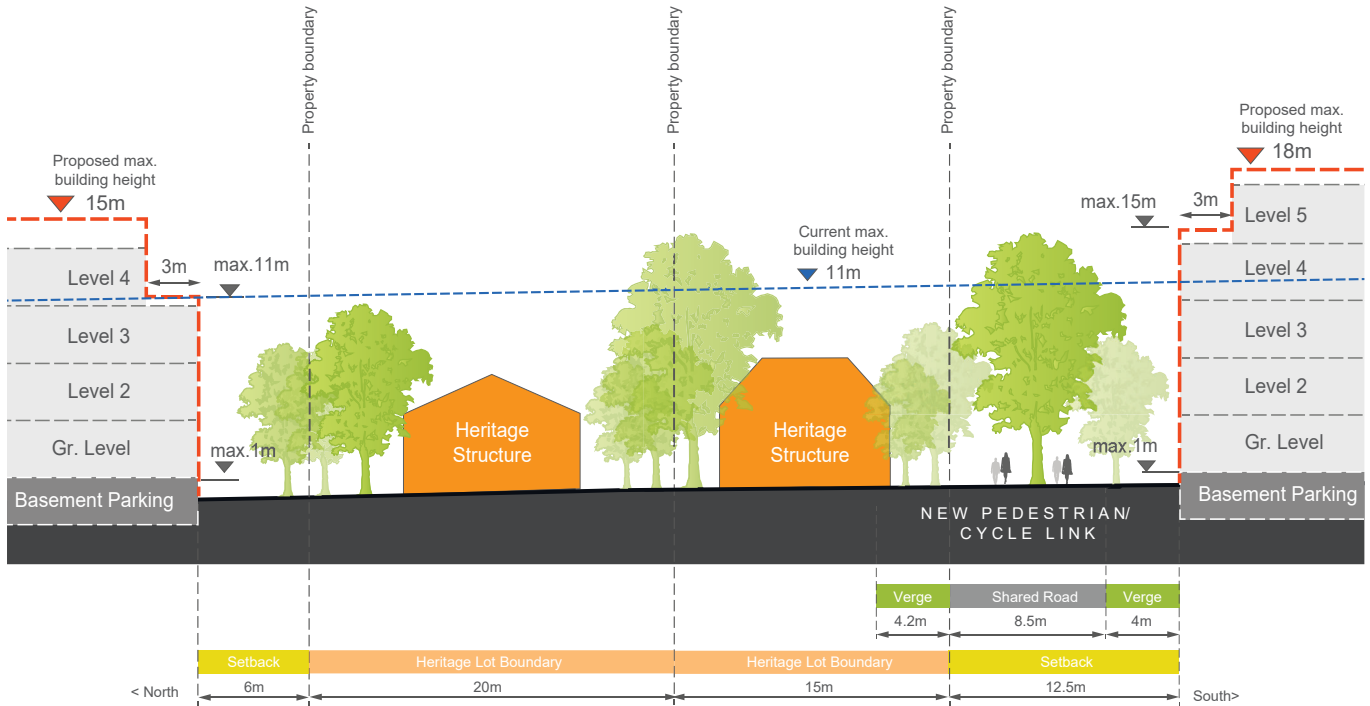


Figure 29 Section L

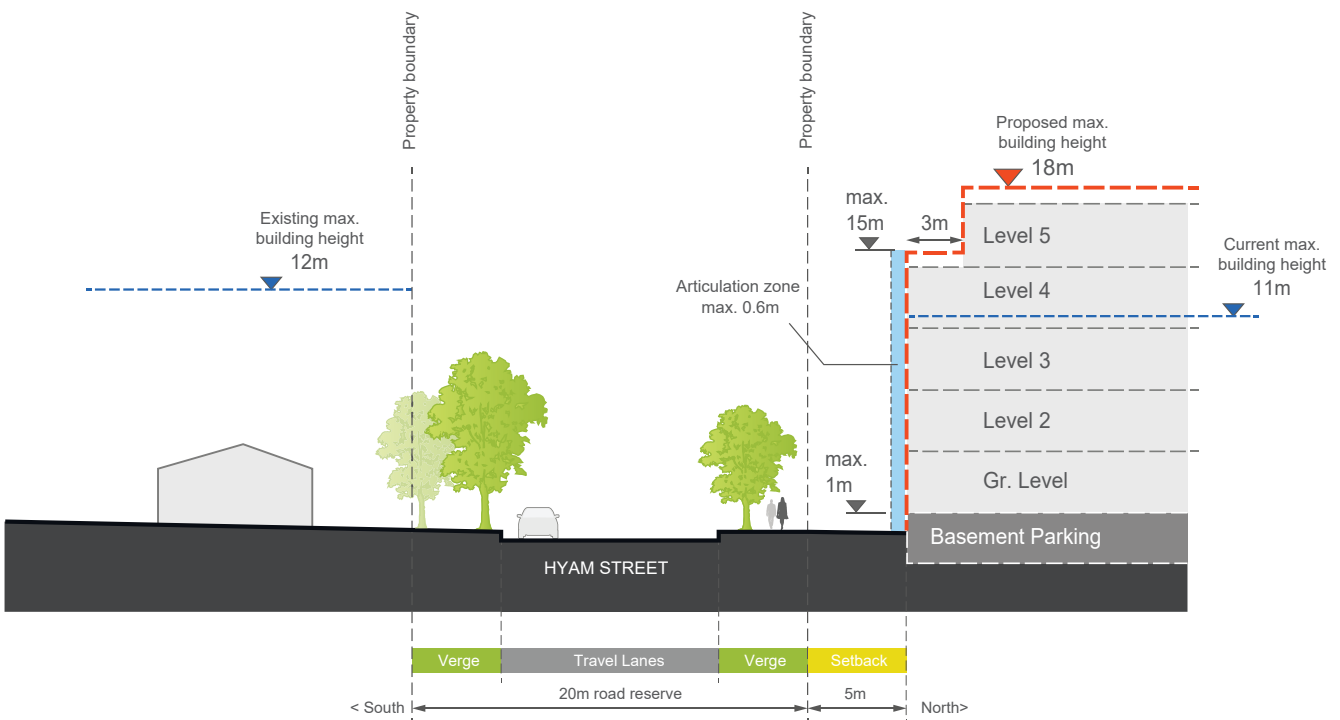


Figure 30 Section M

3-6 Scenic Drive



Objectives

1. Encourage development that will help to form a high quality gateway into Nowra.
2. Maximise the area of level public open space along the riverfront and increase the number of places with views of the river.
3. Reduce number of dwellings that back onto areas of open space. Use land swaps, rezoning and/or developer contributions to improve the quality of the open space.
4. Improve the links from the CBD and Civic Precinct to the river with east-west connections across the highway and improved visual and physical links to the rest of the CBD.
5. Maximise the value and activity created by existing destinations including the pool, hospital, Entertainment Centre and Council Administration Centre.

Desired Future Character

This sub-precinct is in a prominent location directly west of the proposed new bridge. Scenic Drive 'wraps' around the site to the south, east and north. Moorhouse Park lies to the north and east and offers mature trees, playground facilities and the heritage-listed and somewhat hidden Captain Cook Bicentennial Memorial 'Flood Boat' Pavilion. The Nowra Aquatic Centre and carpark is located directly to the west.

This is one of the most constrained sub-precincts and the uncertainty of the design and impacts of the new bridge and highway alignment (i.e noise, vibration, access, interface etc.) creates many challenges. The amount of land that will be required for the construction of the Bridge is becoming clearer but is still being finalised. The proposed controls are based on the current plans that indicate that the northern gateway intersection of the highway and Bridge Road will be retained in approximately the same size and location, although it will be reconfigured.

The other major constraint is the significant risk of flooding as the entire sub-precinct is well below flood levels. In spite of these constraints and planning uncertainties, the sub-precinct is prime waterfront land with high recreational amenity, with views across the river and public open spaces, and easy access to the riverfront promenade and aquatic centre.

The controls are based on the assumption that following a flood study and agreement on land swap/site amalgamation, development may be possible if the building is 'pulled back' from the river and located closer towards the intersection of Bridge Road and Princes Highway. This would increase public open space along the river with small cafe's/ bars located adjoining the open space to help activate the area. The idea is that the Captain Cook Bicentennial Memorial 'Flood Boat' is relocated to a more prominent position. The realignment and partial closure of Scenic Drive would increase the size of waterfront open space and improve the safety and attractiveness of the area.

Suitable uses in this sub-precinct would be tourism accommodation/ conference/ events, residential, commercial uses, small retail, and cafes and restaurants.

3-6 Scenic Drive

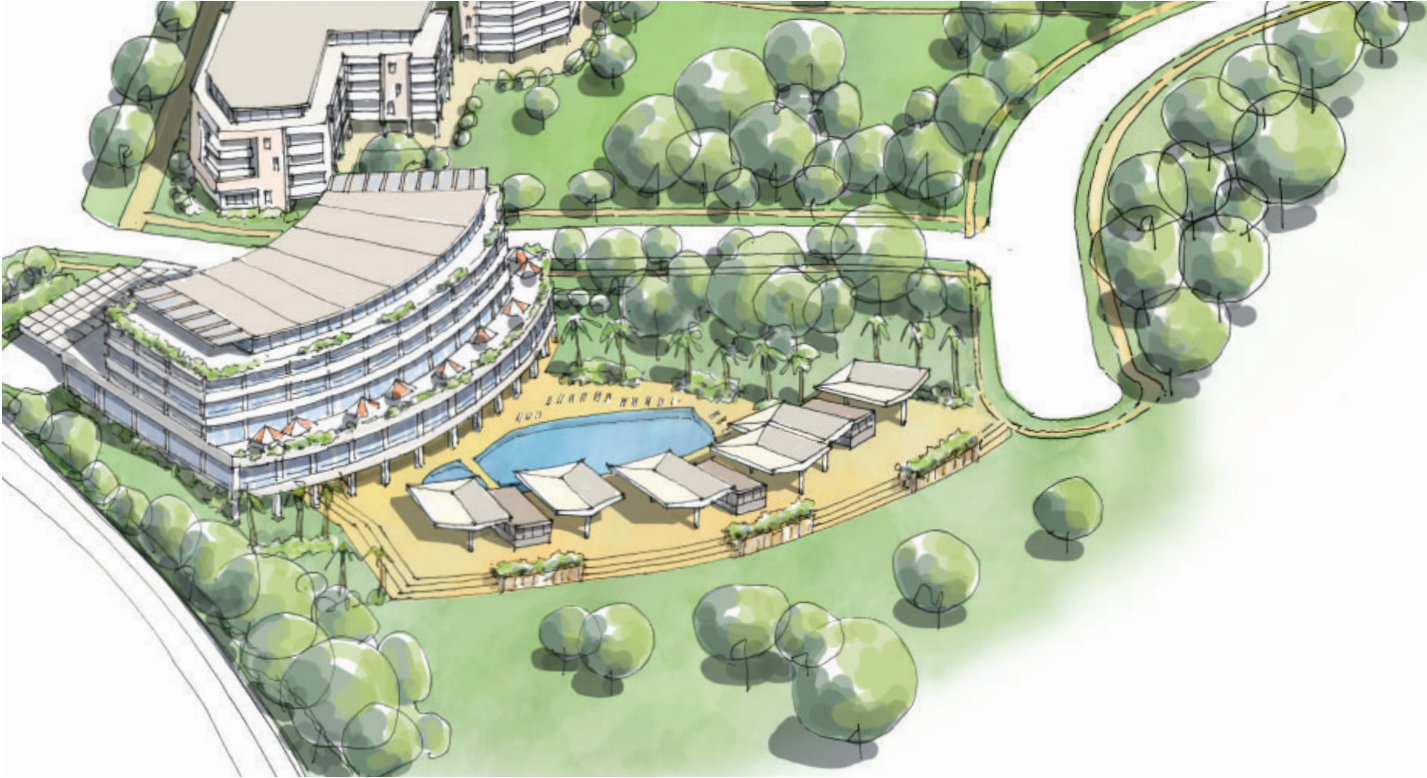


Figure 31 Artist's impression of potential future development

Note: Refer to addendum



Landscaped outdoor facilities such as pools are a possible use for low lying flood prone land



Setting development away from the riverfront creates an opportunity to expand the area of flat riverfront open space

3-6 Scenic Drive

Desired future urban structure

This sub-precinct is likely to be affected by the new bridge and widening of the highway, and potential changes to the design and/or location of the Bridge Road intersection. The current alignment of Scenic Drive off Bridge Road is awkward and offers no view connection to the river. It is proposed to realign and straighten Scenic Drive to improve wayfinding and safety levels. This sub-precinct also plays a critical role in delivering pedestrian and cycle access across and under the Princes Highway.

Flooding

Council's DCP *Chapter G9 Development on Flood Prone Land* provides controls for development on land at risk of flooding. Council's flood mapping identifies this sub-precinct as 'High Hazard Flood Storage' which is the second highest risk category. The DCP limits intensification of development of land that falls into this category.

However, due to the prominence and value of this sub-precinct there may be an economic and/ or social justification to allow tourist related development. It is recommended that a detailed flood risk assessment and a feasibility study is undertaken to determine to what extent, if at all, development will be possible in this location. As a minimum, any proposed development would have to respond to the significant flood risk and bear the associated cost such as increased structural strength, 'sacrificial' levels and other flood resistant/ responsive methods.

LEP Recommendations

Land use and FSR

The current land use zoning B4 Mixed Use, allows for a wide range of land uses including commercial, residential, tourist, medical and community however it is located in an area that is highly vulnerable to flooding. It is recommended that this zoning is modified to SP3 Tourism to encourage activation and tourist related uses along the waterfront.

This recommendation is in line with the Illawara - Shoalhaven Regional Plan to boost tourism accommodation. A detailed flood study would need to be undertaken to determine if the proposed changes to land use, height and FSR are possible.

Due to the uncertainty around the issues affecting this sub-precinct (site amalgamation, flooding, access, heritage) it has not been possible to determine a likely FSR range for the precinct. The FSR and site coverage is expected to be low for the overall sub-precinct.

Heritage

The sub-precinct adjoins the heritage listed Captain Cook Bicentennial Memorial 'Flood Boat' Pavilion. The flood boat and the pavilion (if this is possible) would need to be relocated so that development could occur.

Subdivision and amalgamation

Given the lack of land within the sub-precinct that is not vulnerable to flooding it is recommended that changes to the planning controls only occur in conjunction with site amalgamations. This would create larger sites which could concentrate development on higher land with increased areas of public open space and landscaped areas on flood prone land.

Maximum height of buildings

It is recommended that the maximum building height in this sub-precinct is set at 18m which would allow for up to 5 storey high development. However, this maximum building height only applies to the southern portion of the site towards the intersection of Bridge Road and Scenic Drive, with a recommendation that lower lying land adjoining the riverfront has a maximum building height of 4m (1 storey) and small building footprints.

DCP Recommendations

Height of buildings

<i>Performance criteria</i>	
01	New development responds sensitively to the context and supports the desired future character.
<i>Acceptable solutions</i>	
a)	Development is to conform to the maximum building heights as shown in Figure 32.
b)	The existing heritage item is relocated to a more prominent location (<i>Note: a Heritage Impact Assessment will need to be submitted to Council</i>)

3-6 Scenic Drive

Scenic Drive frontage

<i>Performance criteria</i>	
02	Development enables Scenic Drive to be realigned to create a larger and higher quality public space along the riverfront with a slow speed, shared access road.
<i>Acceptable solutions</i>	
a)	Development is to provide a setback to Scenic Drive as shown in Figure 32 (<i>Note: a variation to these setbacks may be required in response to flood studies etc.</i>)
b)	Due to uncertainties regarding flooding and the future design of Bridge Road, vehicular access to the development (carpark entry/ loading) is to be elevated and occur off Scenic Drive as close as possible to Bridge Road (<i>Note: vehicular access off Bridge Road may be possible/ considered once road alignment and intersection design is known.</i>)

<i>Performance criteria</i>	
03	The setback creates a high quality public domain with attractive outdoor dining areas.
<i>Acceptable solutions</i>	
a)	Small scale development at the raised ground floor fronting the river is to provide active uses that activate the area and provide surveillance of the adjoining public open space.
b)	Development has a small building footprint and can be closed up to minimise damage during flood events.
c)	New development along the riverfront : <ul style="list-style-type: none"> • maximises entries to shops and/or food and drink premises and activities which provide pedestrian interest and interaction. • provides a high standard of finish for shopfronts and is designed to discourage graffiti.
d)	Street frontages are activated through retail shop fronts, cafés or restaurants.

Bridge Road and Princes Highway frontage

<i>Performance criteria</i>	
04	Development embraces its gateway location and allows for roads to be realigned and/or a reconfigured intersection.
<i>Acceptable solutions</i>	
a)	New development is to provide a front setback to Bridge Road and Princes Highway as shown in Figure 32. (<i>Note: a variation to this front setback may be required to retain significant trees and/or enable proposed road alignment and intersection modification once the design is finalised.</i>)
b)	If land is required for infrastructure upgrades within this setback, it will be acquired by Council/ RMS by agreement.
c)	At least 50% of the setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures. At least three (3) trees with a mature height of at least 20m are required along the street edge.
d)	Signage and landscaping is to be of a quality that reflects the gateway role of the development.
e)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.

3-6 Scenic Drive

Gateway function

<i>Performance criteria</i>	
05	New development in this prominent and highly visible gateway location strengthens the arrival experience to Nowra.
<i>Acceptable solutions</i>	
a)	While development is to 'face' the river, an articulated facade and corner treatment towards the highway is also desired. Development should be sensitively integrated into the context and landscape and not display 'look-at-me' architecture. This includes using non glaring or non reflecting materials, neutral colours, signage that is integrated into the facade and minimal obtrusive light spilling beyond the development's boundary, e.g. through large glazed areas of the facade.
b)	Built form towards the intersection of Princes Highway and Bridge Road displays quality architectural design, including corner treatments, well proportioned facades, and quality material and finishes selection.

Bulk and scale

<i>Performance criteria</i>	
06	Development is designed to reduce the perceived visual impact of its bulk and scale.
<i>Acceptable solutions</i>	
a)	Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 36.
b)	The bulk, scale and height of new development sensitively transitions towards the open space and the river.
c)	A large floorplate ground floor is assumed, to accommodate hotel facilities such as conference facilities.

Articulation and exteriors

<i>Performance criteria</i>	
07	Building articulation and exteriors positively contribute to the desired future character of the area and streetscape.
<i>Acceptable solutions</i>	
a)	The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
b)	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are of high design quality.
c)	Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complement the architecture of the building.

Addressing the street

<i>Performance criteria</i>	
08	Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.
<i>Acceptable solutions</i>	
a)	New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
b)	Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
c)	Habitable uses on the 'ground floor' are to be raised above the flood level. Direct access from the footpath along Bridge Road and Princes Highway is encouraged.

3-6 Scenic Drive

Amenity

Performance criteria

09 Buildings allows for adequate daylight access, ventilation, view sharing and privacy.

Acceptable solutions

- a) Siting and built form configuration optimises solar access within the development and minimises overshadowing of adjoining properties.

Performance criteria

10 Building users are protected from negative impacts (noise, air quality, vibration) from Princes Highway.

Acceptable solutions

- a) Windows located along the western facade fronting Princes Highway are double-glazed (or use laminated glazing) and have acoustic seals.
- b) Noise sensitive areas (hotel bedrooms) are located away from the highway where possible. Also see *Development near rail corridors and busy roads - Interim Guideline NSW 2008*.

Floor to ceiling heights

Performance criteria

11 Buildings are adaptable to a variety of uses over time.

Acceptable solutions

- a) The following minimum heights apply:

Use	Minimum floor to floor height	Minimum floor to ceiling height
Retail	4.4m	4.0m
Commercial	3.7m	3.3m
Adaptable	3.7m	3.3m
Community	3.7m	3.3m



3-6 Scenic Drive

Access and parking

<i>Performance criteria</i>	
12	Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.
<i>Acceptable solutions</i>	
a)	The width and height of vehicular entries is kept to a minimum. Gates should be integrated with the architectural design of the development and consider flood impacts. Vehicular entry/ exit points are recessed by at least 0.5m behind the building line.
b)	Driveways should be partly screened by low vegetation where possible to lessen their visual impact when viewed from the street however this should not impact on clear sightlines between vehicles and pedestrians.
c)	The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.
d)	A continuous footpath to Council specifications is provided along all street frontages adjoining the development.

<i>Performance criteria</i>	
13	Parking is visually unobtrusive.
<i>Acceptable solutions</i>	
a)	At grade parking, if unavoidable, is screened from public view and not permissible within any of the setback zones.
b)	Basement car parking cannot extend more than 1.0m above ground where it faces a public street. It is screened and/ or integrated with the architectural building design and visually recessive.
c)	Below-grade parking structures may not protrude into any of the setback and landscaped zones as shown in Figure 35.

Flood responsive design

<i>Performance criteria</i>	
14	Development does not increase the risk of flooding elsewhere.
<i>Acceptable solutions</i>	
a)	Development retains the current flood storage capacity on site as much as possible. <i>(Note: A detailed flood study/ assessment is required to determine if any development is possible and if so, to what extent and any required specifications. One on-site design solution to help meet this performance criteria may be to provide a 'sacrificial' ground floor level and/ or basement levels which would be able to be flooded).</i>
b)	The impact of any proposed modifications to natural ground level, new structures and other obstructions would need to be assessed, including the impact on flood behaviour, conveyance, storage capacity, surrounding properties and the environment.
c)	Flood mitigation options off site (further up- or downstream) may be able to be explored and applied to offset the development's impact.

<i>Performance criteria</i>	
15	Development is designed to allow for safe movement of people in or out of the area in the case of a flooding event.
<i>Acceptable solutions</i>	
a)	Development adheres to requirements as set out in Council's DCP Chapter G9 <i>Development on Flood Prone Land</i> . This includes the use of adequate flood proofing measures, construction methods and selection of materials.
b)	Reliable access must be provided from the building, commencing at a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF.

03 AREA SPECIFIC CONTROLS

3-6 Scenic Drive

- c) Emergency evacuation strategies and procedures are in place such as regular drills with building users/ occupants/ hospitality staff on what to do in a flooding event.
- d) Adequate flood warning systems, signage and exits must be available to allow safe and orderly evacuation, and, given the proposed tourism use, be designed with short-term visitors new to the area in mind.

Performance criteria

- 16** Development is designed so that damage to property is minimised and recovery is speedy and inexpensive.

Acceptable solutions

- a) Suitable pumps are provided on all levels at risk of flooding and natural ventilation is maximised.
- b) Motor vehicles are able to be relocated, undamaged, to an area with substantially less risk from flooding, within effective warning time. A secondary alternate entry/ exit to the carpark may be required.



3-6 Scenic Drive

Interface sections

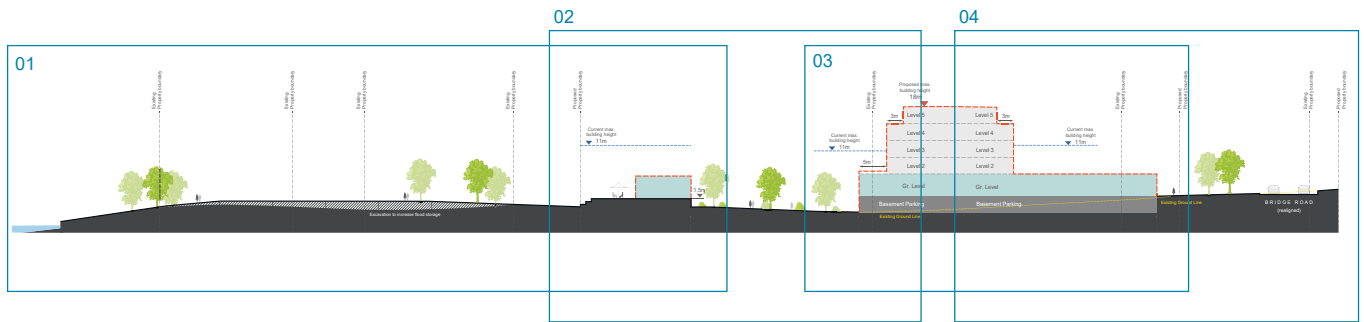


Figure 33 Section N - Overview

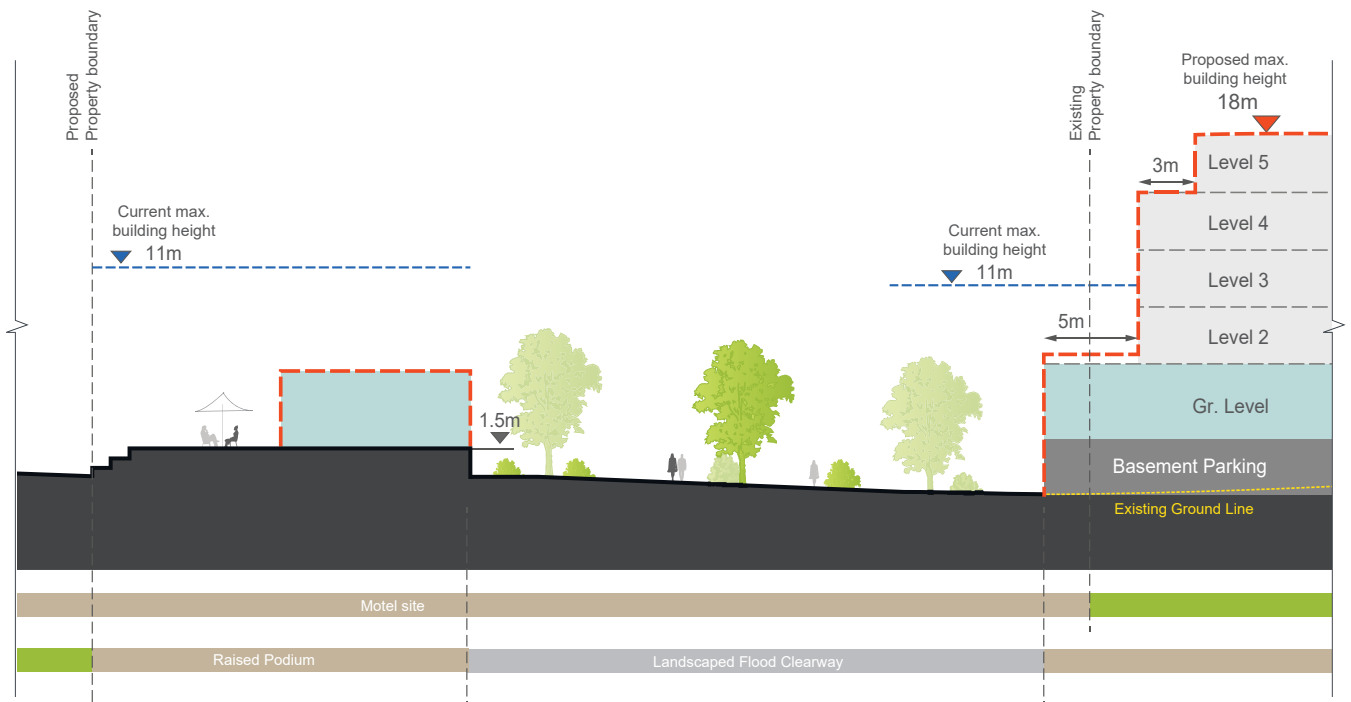
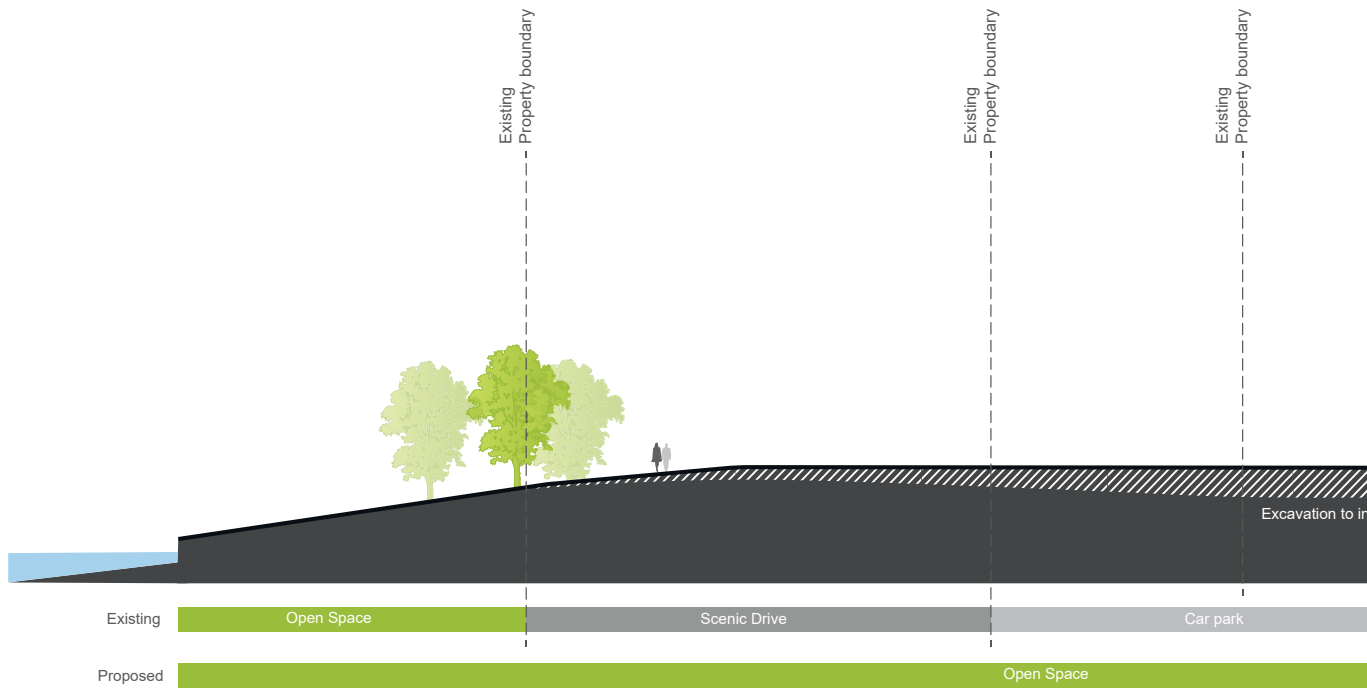
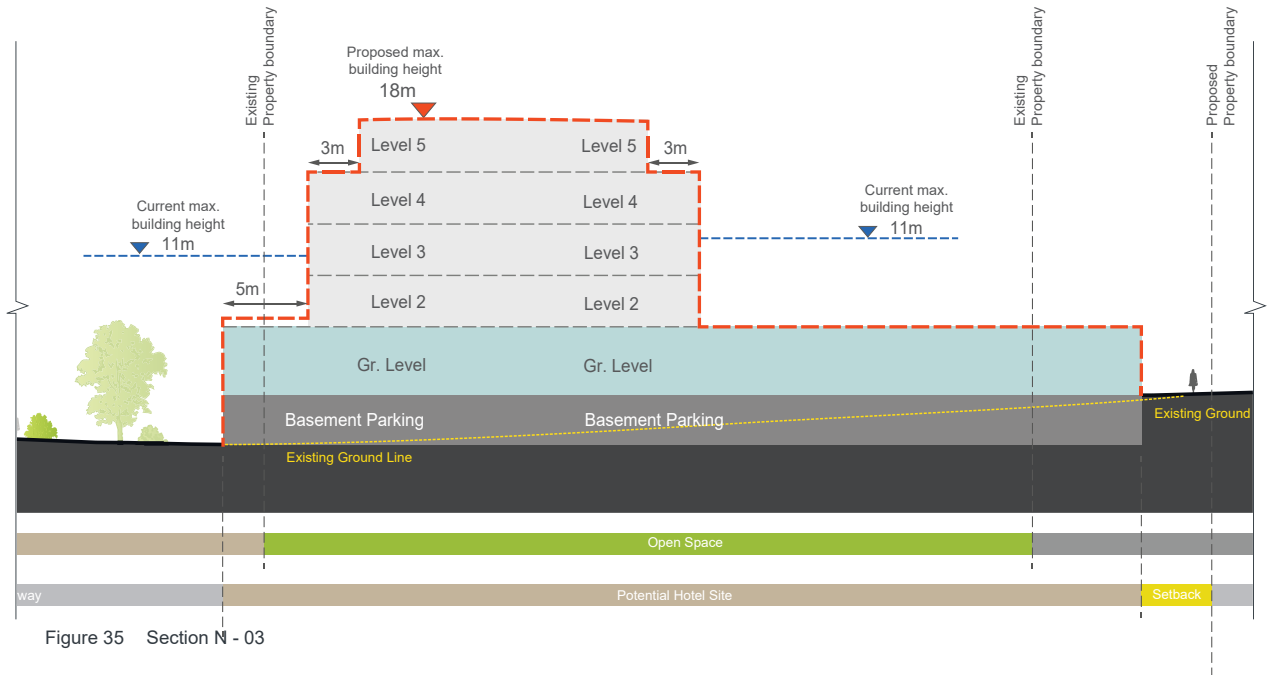


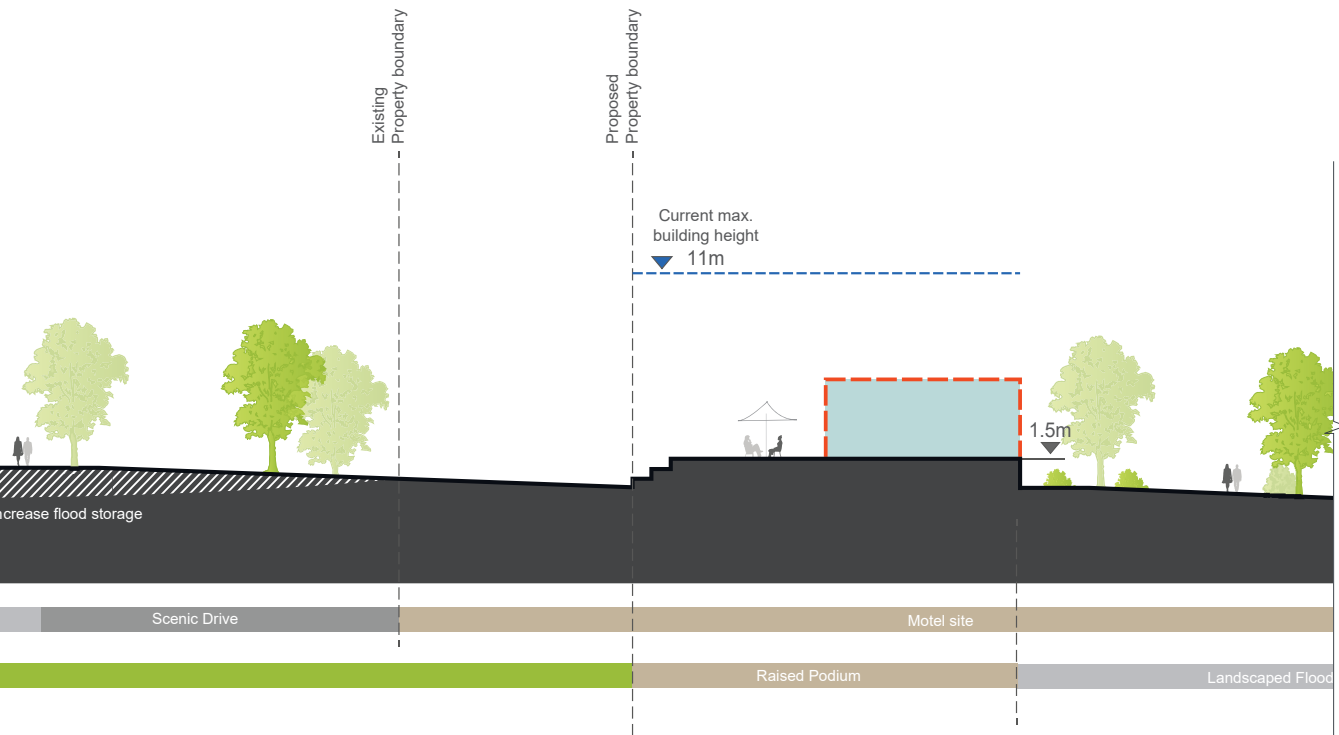
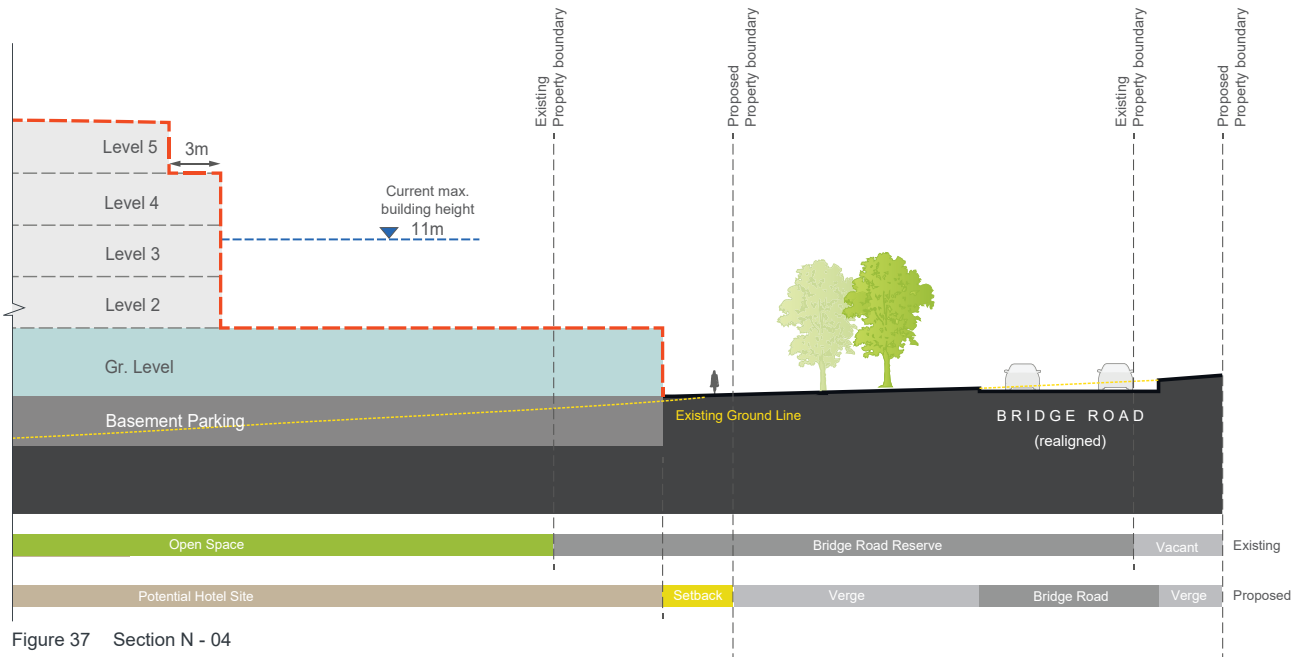
Figure 34 Section N - 02

3-6 Scenic Drive

Interface sections



3-6 Scenic Drive



3-7 Bridge Road



Objectives

1. Encourage development that will help to form a high quality gateway into Nowra.
2. Maximise the value and activity created by existing destinations including the pool, hospital, Entertainment Centre and Council Administration Centre.
3. Locate development that helps to activate the Entertainment Centre and will contribute to its long term success.
4. Improve the links from the CBD and Civic Precinct to the river with east-west connections across the highway and improved visual and physical links to the rest of the CBD
5. Encourage development on higher land that is not flood prone and/or is less flood prone and is close to the riverfront and benefits from the riverfront amenity.

Desired Future Character

This sub-precinct is located to the west of the Princes Highway and south and east of Bridge Road. It is the highest and most visually prominent area within the Riverfront Precinct when arriving from the north as it is next to the highway, at an intersection and a local high point. Development on this site will be highly prominent and significantly contribute to defining the 'character' of the Riverfront Precinct and to providing an attractive gateway into Nowra.

The sub-precinct is likely to increase in visual prominence following construction of the new bridge and realignment of the highway to the west, although there is still uncertainty around the size, location and design of the intersection with the highway.

This area benefits from the activity generated by the Entertainment Centre and the Council Administration Centre to the south and currently provides additional parking for these facilities but it is disconnected from the commercial core of Nowra making commercial uses less desirable.

A key advantage of this sub-precinct is that the large site is in single ownership which provides increased flexibility and the opportunity for new higher density development that benefits from proximity to the Entertainment Centre and the Council Administration Centre as well as the riverfront, hospital and town centre facilities. The sub-precinct could be attractive for entertainment and tourist related facilities, serviced apartments and a wide variety of residential uses including seniors living.

3-7 Bridge Road

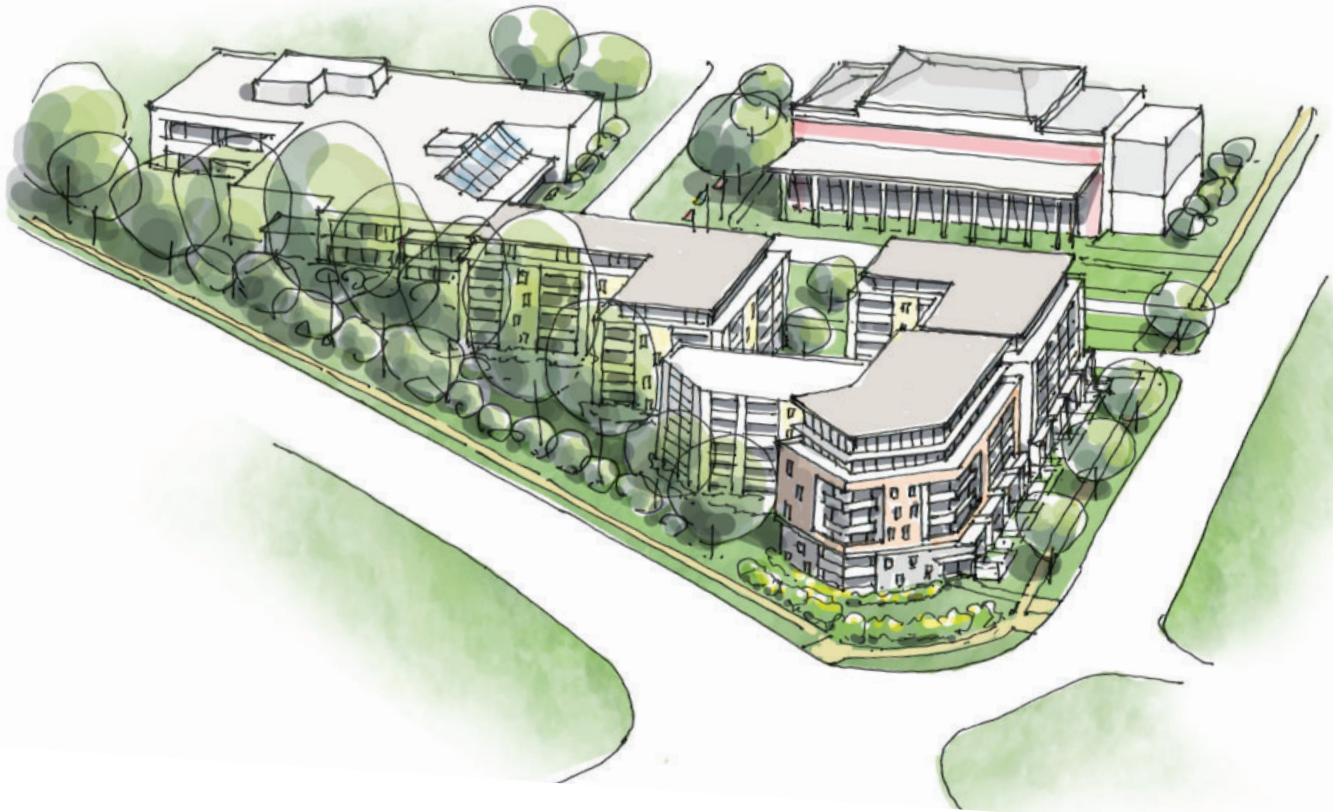


Figure 38 Artist's impression of potential future development

Note: Refer to addendum



Active frontages would reinforce and activate the 'Civic Square' in front of the Entertainment Centre



Development in this highly visible location will require well composed facades in all directions

3-7 Bridge Road

Desired future urban structure

This sub-precinct will be affected by the new highway widening and changes to the design and location of the intersection of the highway with Bridge Road. It is proposed that development is set back from the northern 'tip' to allow for the planned infrastructure changes and road widening.

Flooding

This is the only sub-precinct within the Riverfront Precinct that is not affected by flooding.

Heritage

Bridge Road is the historic entry road into Nowra and its significance is expressed in its wide road reserve of 30m and mature street trees. Opposite the sub-precinct there are two heritage listed items, both weatherboard residences. The interface of any new built form to Bridge Road will need to take the above into consideration.

LEP Recommendations

Land Use and FSR

The current land use Zone B4 Mixed Use offers a high degree of flexibility and allows for a wide range of land uses including commercial, residential, tourist, medical and community uses. It is recommended that the existing zoning is retained.

Initial testing of buildings with generous ground floor retail and a landscaped setback to the intersection and Princes Highway has found that the approximate FSR of development in this sub-precinct would be 1.7:1 with a maximum site coverage of approximately 40%. However, this may change following detailed design of the highway widening and intersection with Bridge Road. *(Note: the FSR estimate is based on the entire sub-precinct area, and the FSR of individual properties may vary depending on location and constraints).*

Maximum height of buildings

There is currently a site specific DCP for this sub-precinct (DCP No. 119 Nowra Hotel Site and Civic Precinct, prepared in 2007) which indicates development of between 3 to 9 storeys high.

As the realignment/ widening of the highway would increase the visibility of this site and it is a local high point it is recommended that the heights are amended to range from 4 to 7 storeys with development stepping down to minimise overshadowing of the open space ('Civic Square') to the south.

DCP Recommendations

Performance criteria

01 New development responds sensitively to the context and supports the desired future character.

Acceptable solutions

- a) Development is to conform to the maximum building heights as shown in Figure 39.
- b) Development minimises overshadowing, with built form 'stepping down' in height towards the 'Civic Square' to the south.

Setback to Princes Highway

Performance criteria

02 Development allows sufficient space for the widening of the highway and a reconfigured intersection with Bridge Road.

Acceptable solutions

- a) Development is to provide a setback to the highway and to the intersection to the north as shown in Figure 39. *(Note: a variation to these setbacks may be required to retain significant trees and/or enable proposed road alignment and intersection modification once the design is known).*
- b) If land is required for infrastructure upgrades within this setback, it will be acquired by Council/ RMS by agreement. *(Note: land is currently owned by Council).*

3-7 Bridge Road

<i>Performance criteria</i>	
03	Development is screened from Princes Highway by dense, mature vegetation.
<i>Acceptable solutions</i>	
a)	70% of the setback is deep soil to retain existing and allow for more mature vegetation with a preference for native planting species, creating an effective buffer to the highway.

Setback to Bridge Road

<i>Performance criteria</i>	
04	The setback treatment responds to the significance of Bridge Road as the historic entry route into town.
<i>Acceptable solutions</i>	
a)	Development is to provide street setbacks to Bridge Road as shown in Figure 39.
b)	At least 70% of the setback is required to be deep soil and landscaped with a preference for native planting species and incorporation of WSUD measures. At least five (5) trees with a mature height of at least 25m are required along the street edge.
c)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.

Addressing the street

<i>Performance criteria</i>	
05	Buildings are designed to contribute to the streetscape character and add visual richness, complexity and interest.
<i>Acceptable solutions</i>	
a)	New development addresses and defines the public domain through entrances, lobbies, windows, balconies and thoughtful facade design.
b)	Facades that address the street have no more than 5 metres of ground floor wall length without a door or window.
c)	Where ground floor residential is proposed, the floor level can be raised to a maximum of 1.0 metres above the footpath level. Direct access from the footpath to individual dwellings is encouraged.
d)	Where non-residential uses on the ground floor are proposed, entries and display windows are maximised to provide pedestrian interest and interaction.

<i>Performance criteria</i>	
06	Surveillance, activity and social interaction along Bridge Road is maximised.
<i>Acceptable solutions</i>	
a)	Fences are a maximum height of 1.2m and at least 50% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
b)	Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.
c)	Fire escapes, service doors, carpark entries and plant and equipment hatches/ grilles that are visible from the street are minimised.

3-7 Bridge Road

'Civic Square' interface

<i>Performance criteria</i>	
07	The activity and safety of 'Civic Square' is supported and improved.
<i>Acceptable solutions</i>	
a)	Development is to provide a setback to 'Civic Square' as shown in Figure 39 & Figure 41.
b)	No fences, walls or other structures such as plant equipment and the like are permitted within this setback. Soft landscaping and non-permanent planter boxes are encouraged. Outdoor tables, chairs and umbrellas are permitted.
c)	The setback area is well lit after hours and publicly accessible 24/7.
d)	Development is to provide active uses at ground level (such as retail, shopfronts, cafes, restaurants, entries and lobbies) to 'Civic Square' and at the corner of Bridge Road as shown in Figure 39.
e)	Active frontages have transparent glazing to allow unobstructed views to at least a depth of 15m within the building.
f)	Windows and balconies on upper levels look out onto the square and provide surveillance.

Bulk and scale

<i>Performance criteria</i>	
08	New built form integrates into the context and provides building separation, amenity, landscape and access.
<i>Acceptable solutions</i>	
a)	Development is to provide side and rear setbacks to existing and proposed new lot boundaries as shown in Figure 39.
b)	The bulk, scale and height of new development sensitively transitions towards the Entertainment Centre and lower development to the west of Bridge Road.
c)	Development above the street wall height applies the upper level setbacks (as a minimum) as shown in Figure 40 and Figure 41 .

Gateway function

<i>Performance criteria</i>	
09	New development in this prominent and highly visible gateway location strengthens the arrival experience to Nowra.
<i>Acceptable solutions</i>	
a)	Built form towards the intersection of Princes Highway and Bridge Road displays quality architectural design, including corner treatments, well proportioned facades, and quality material and finishes selection.
b)	Development should be sensitively integrated into the context and landscape and not display 'look-at-me' architecture. This includes using non glaring or non reflecting materials, neutral colours, signage that is integrated into the facade and minimal obtrusive light spilling beyond the development's boundary, e.g. through large glazed areas of the facade.

3-7 Bridge Road

Amenity

Performance criteria

10 Separation between buildings allows for adequate daylight access, ventilation, view sharing and privacy.

Acceptable solutions

- a) Residential components of development satisfy the requirements of *SEPP 65* and the *Apartment Design Guide*.
- b) Siting and built form configuration optimises solar access within the development and minimises overshadowing.

Performance criteria

11 Building users are protected from negative impacts (noise, air quality, vibration) from Princes Highway.

Acceptable solutions

- a) Windows located along the eastern facade fronting Princes Highway are double-glazed (or use laminated glazing) and have acoustic seals.
- b) Noise sensitive areas (bedrooms, living rooms) are located away from the highway where possible. Also see *Development near rail corridors and busy roads - Interim Guideline NSW 2008*.

Floor to ceiling heights

Performance criteria

12 Buildings are adaptable to a variety of uses over time.

Acceptable solutions

a) The following minimum heights apply:

Use	Minimum floor to floor height	Minimum floor to ceiling height
Retail	4.4m	4.0m
Commercial	3.7m	3.3m
Adaptable	3.7m	3.3m
Community	3.7m	3.3m
Residential	3.1m	2.7m

b) Ground levels of buildings fronting Bridge Road and 'Civic Square' have a minimum 4.0m floor to ceiling height.

3-7 Bridge Road

Articulation and exteriors

<i>Performance criteria</i>	
13	Building articulation and exteriors positively contribute to the desired future character of the area and streetscape.
<i>Acceptable solutions</i>	
a)	The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
b)	The maximum length of a straight wall without articulation is 8m with the exception of the highway frontage which may be up to 12m without articulation.
c)	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are of high design quality.
d)	There is a focus on vertical facade articulation and 'ins and outs' (recesses and projections) to create shadows.
e)	Balconies on the upper levels can protrude into the setback by up to 0.6m (articulation zone).
f)	Roof plant, lift overruns, utilities, vents and other service related elements are integrated into the built form and complement the architecture of the building.
g)	Facades and building elements along Bridge Road respond to heritage items opposite in terms of rhythm, proportions and materials.

Access and parking

<i>Performance criteria</i>	
14	Vehicular access points minimise visual intrusion and disruption of the streetscape and maximise pedestrian safety.
<i>Acceptable solutions</i>	
a)	The width and height of vehicular entries is kept to a minimum. Gates should be integrated with the architectural design of the development. Vehicular entry points are recessed by at least 0.5m behind the building line.
b)	Driveways should be partly screened by low vegetation where possible to lessen their visual impact when viewed from the street however this should not impact on clear sightlines between vehicles and pedestrians.
c)	The public footpath is continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.
d)	A continuous footpath to Council specifications is provided along Bridge Road and along 'Civic Square' to the south.

<i>Performance criteria</i>	
15	Parking is visually unobtrusive.
<i>Acceptable solutions</i>	
a)	At grade parking is fully integrated into the built form and screened from public view.
b)	At grade and any potential basement parking levels cannot extend into any of the setback zones.

3-7 Bridge Road

Landscape quality

Performance criteria

16 Landscape design complements the proposed development and reduces the impact of its bulk and scale.

Acceptable solutions

- a) A minimum of 35% of the total site area is to be provided as landscaped area. *(Note: the SLEP defines landscaped area as a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area).*
- b) At least 50% of the required landscaped area is deep soil with deep soil planting (trees, shrubs).
- c) Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.

Public art

Performance criteria

17 Public art enhances the sense of place and supports the values of the area.

Acceptable solutions

- a) Permanent public art and art on private land visible from the public domain is integrated throughout the Sub-precinct and may include sculptural art, lighting, typography, facade treatments and interactive installations.
- b) Development is to allocate funds (to be determined by Council's Contribution Plan) towards public art. This art can either be provided on site *(Note: art must be visible from the public domain)*, or paid as contribution to Council.

3-7 Bridge Road

Key development parameters



- | | |
|---|---|
| Max. building height 23m (7 storeys) | Desired location of built form breaks/ gaps |
| Max. building height 18m (5 storeys) | Vehicular access (preferred location) |
| Max. building height 15m (4 storeys) | Preferred road alignment |
| Active frontage desired | RMS indicative future road alignment |
| Setback to allow for future highway alignment | RMS indicative future road cut |
| Landscape area | RMS project boundary |
| | Potential consolidated lot boundaries |

Figure 39 Key development parameters

3-7 Bridge Road

Interface sections

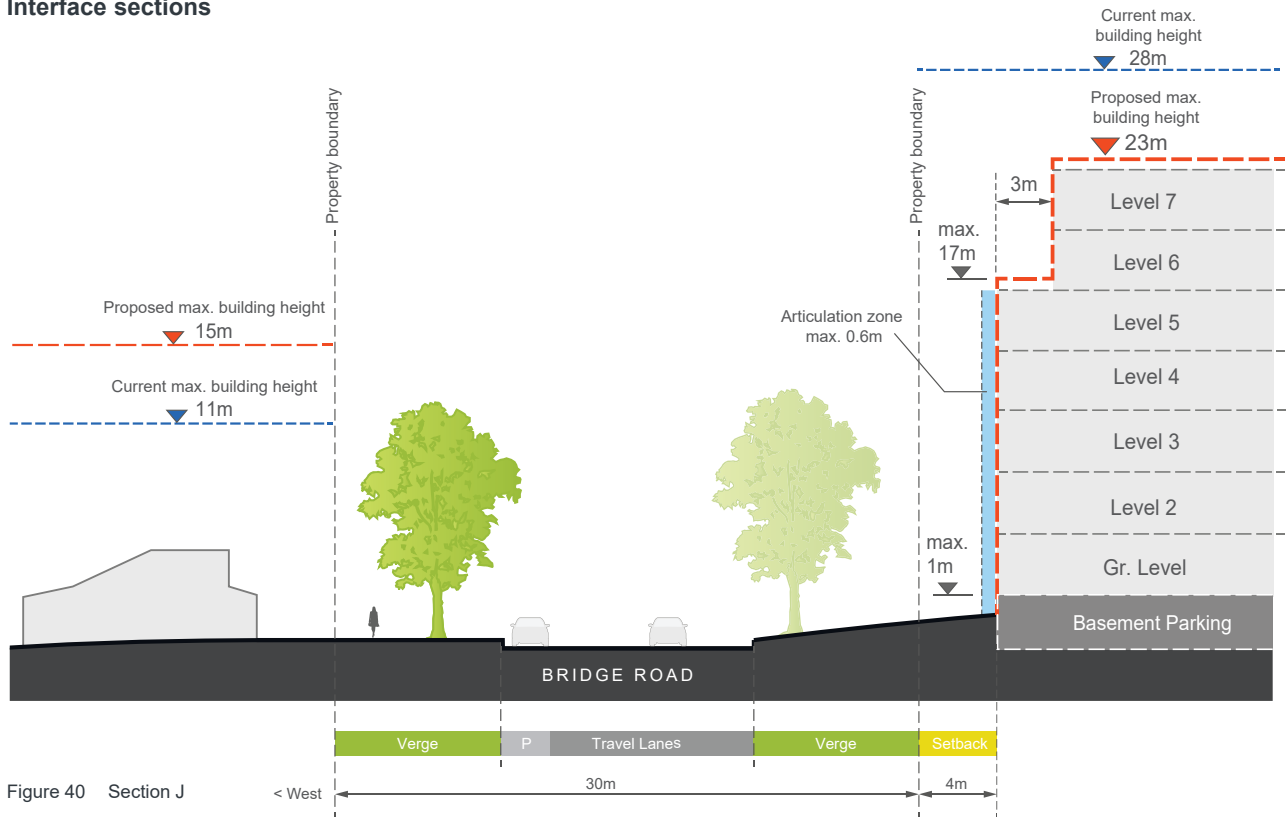


Figure 40 Section J



Figure 41 Section K



CHAPTER 4 CONCLUSION

4-1 Staging and next steps



Figure 42 Sub-precincts categorised to reflect various levels of constraints

This document has outlined development controls required to achieve the vision for the Riverfront Precinct as outlined in the Strategic Direction report. This report has also broken the Riverfront Precinct into a number of sub-precincts with different characteristics which face different challenges and uncertainties.

This process has identified that some of the sub-precincts are less constrained than others and in order to encourage development and start work towards unlocking the value and opportunities presented by this precinct, it is recommended that development starts with the areas that are least constrained. To help understand the amount of constraint, each sub-precinct has been categorised into one of four levels.

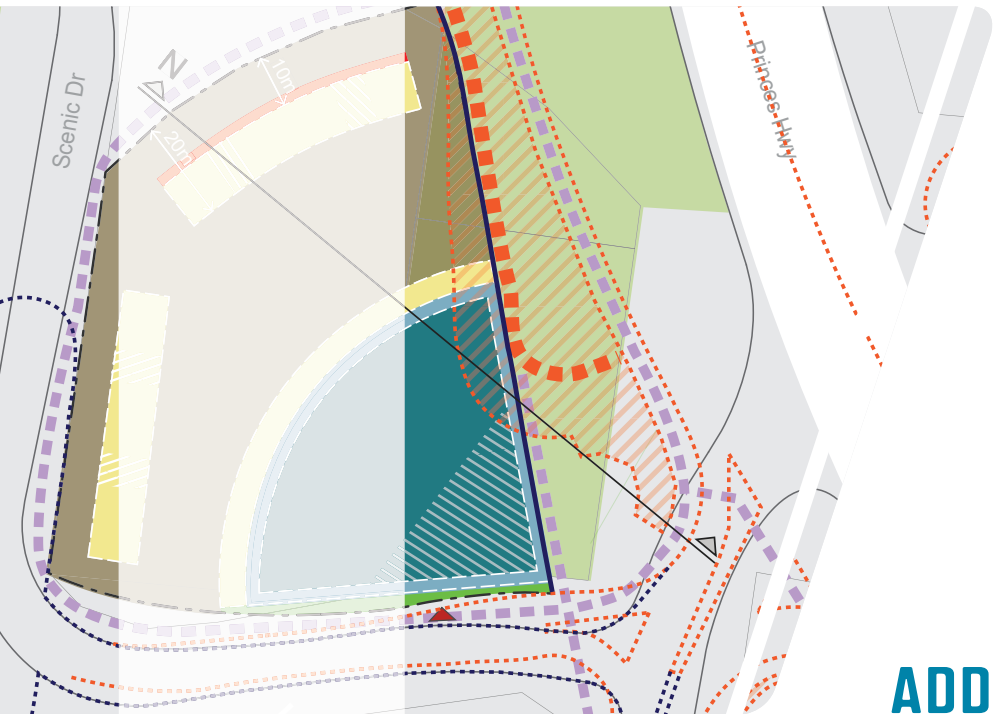
A sub-precinct categorised as *Level 1* is generally unconstrained. There are no uncertainties created by the realignment of the highway and the flood impacts are known and appear to be relatively manageable.

A sub-precinct categorised as *Level 2* has some uncertainties remaining due to the ongoing development of the design of the realignment of the highway but the flood impacts are known and appear to be relatively manageable.

A sub-precinct categorised as *Level 3* has either a high level of uncertainty around flooding with any future development subject to detailed flood studies, or a high level of uncertainty around the final impact of the realignment of the highway, or a combination of both.

A sub-precinct categorised as *Level 4* has the highest level of uncertainty due to the lack of finalised detail regarding the realignment of the highway, desirable amalgamation/ land swaps and the need for detailed flood studies.

Future development of sub-precincts identified as Levels 2, 3 and 4 will be subject to additional investigation once the detailed design of the Nowra Bridge project is finalised by RMS.



ADDENDUM

In 2018, Roads and Maritime Services (RMS) released plans of a new bridge on the A1 Princes Highway over the Shoalhaven River at Nowra. Some of the key features of the RMS proposal include:

- Construction of a new bridge to the west (upstream) of the existing bridge crossings over the Shoalhaven River to include:
 - Four northbound lanes including a dedicated left turn only lane from Bridge Road to Illaroo Road
 - A 3.5 metre wide shared use path on the western side of the bridge connecting the Illaroo Road intersection to the Bridge Road intersection
- Upgrading of the Princes Highway and Bridge Road intersection to provide:
 - Two southbound right turn lanes from the Princes Highway into Bridge Road
 - One left turn lane from Bridge Road to the Princes Highway
- Local road adjustments including:
 - Closing the access between Pleasant Way and Princes Highway
 - Restricting turning movements at the intersection of Bridge Road and Scenic Drive
 - Construction of a new local road connecting Lyrebird Drive to the Princes Highway approximately 300 metres south of the existing Pleasant Way intersection
- Provision of pedestrian facilities at all intersections
- Dedicated off road shared, cycle and pedestrian paths along the length of the proposal.

The 2018 RMS Concept Design plans have helped reduce uncertainty around the strategic direction and potential development controls for sites adjoining the Princes Highway which had been provided in the initial Proposed Planning Controls Report. The planned roadworks outlined in the RMS Concept Designs predominantly impact upon the Scenic Drive and Bridge Road sub-precincts which are located on the western side of the highway. The potential impact of the concept design plans on these two subprecincts have been outlined in this addendum.

The closing of Pleasant Way from the highway does not have a major impact on the development controls initially proposed for the Wharf Road or Pleasant Way/ Graham Lodge sub-precincts as the planned roadworks are contained within the identified landscaped setbacks.

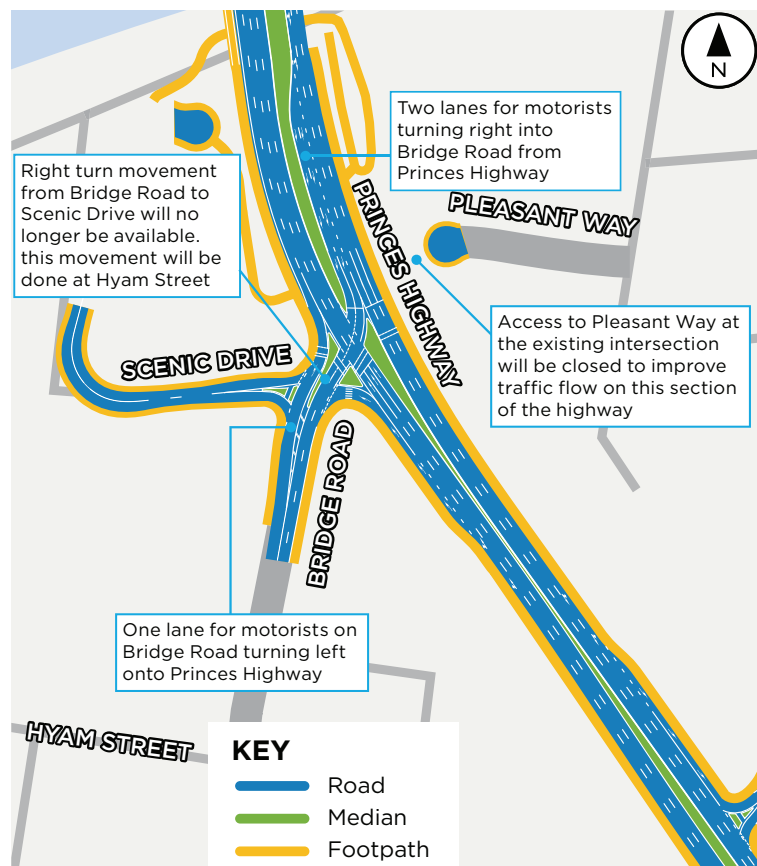


Figure 43 Nowra Bridge Project – Princes Highway Upgrade, (source: RMS, 2018)

A-1 Scenic Drive

Desired future urban structure

This sub-precinct is in a prominent location directly west of the proposed new bridge. Scenic Drive 'wraps' around the site to the south, east and north. Moorhouse Park lies to the north and east and provides mature trees and playground facilities in a riverfront location. The Nowra Aquatic Centre and carpark is located directly to the west.

The desired future urban structure for this precinct has included exploring the opportunity for Council to undertake a land swap with the adjoining landowner to consolidate the area of riverfront open space whilst also consolidating land suitable for re-development, and removing the small area of open space next to the highway. This was combined with the principle of concentrating development away from the riverfront and next to the highway, to increase visibility.

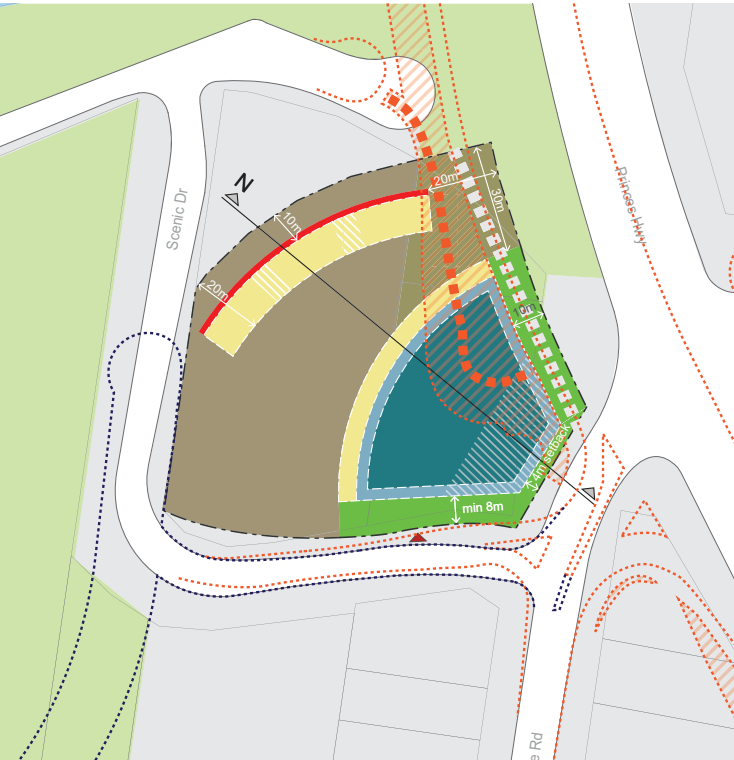
Prioritising pedestrian and bicycle access along the waterfront, activation of waterfront open spaces and limiting vehicular access along the waterfront were also key principles as was the need to improve links from the waterfront back to Bridge Road and the rest of Nowra.

Impact on precinct of the RMS Concept Design
1. The design retains the existing shared path along the riverfront, and links and connects it and Scenic Drive to a shared bike/pedestrian path along Princes Highway.
2. The area of land required for the road, embankments and shared pathway down to the riverfront is greater than previously assumed, substantially reducing the area of land identified as desirable for the concentration of future development as set out in the proposed planning controls.
3. Access into Scenic Drive becomes more limited (left in, left out only).
4. Pedestrian access across Scenic Drive at the intersection with Bridge Road is reduced due to the widened and redesigned road layout.
5. The current design prioritises retaining/ reinstating the existing landscape open space next to the Highway.



Figure 44 Section 5 through the Princes Highway beside Scenic Drive sub-precinct (source: Urban Design Report and Landscape Character and Visual Impact Assessment, 2018)

A-1 Scenic Drive



- Max. building height 18m (5 storeys)
- Max. building height 15m (4 storeys)
- Max. building height 7m (1 storeys)
- Active frontage required
- Landscape area
- Desired pedestrian and cycle access route
- Development of lot subject to flood study
- Desired location of built form breaks/ gaps
- Vehicular access (preferred location)
- Preferred road alignment
- RMS indicative future road alignment
- RMS indicative future road embankment
- RMS indicative future pedestrian connection
- Potential consolidated lot boundaries



Figure 45 Initial proposed key development control parameters (SGL, 2018)

Suggested Response

To maximise the area of concentrated development it is recommended that the new boundary of the site is located at the edge of the proposed pedestrian connection with a retaining wall on the boundary.

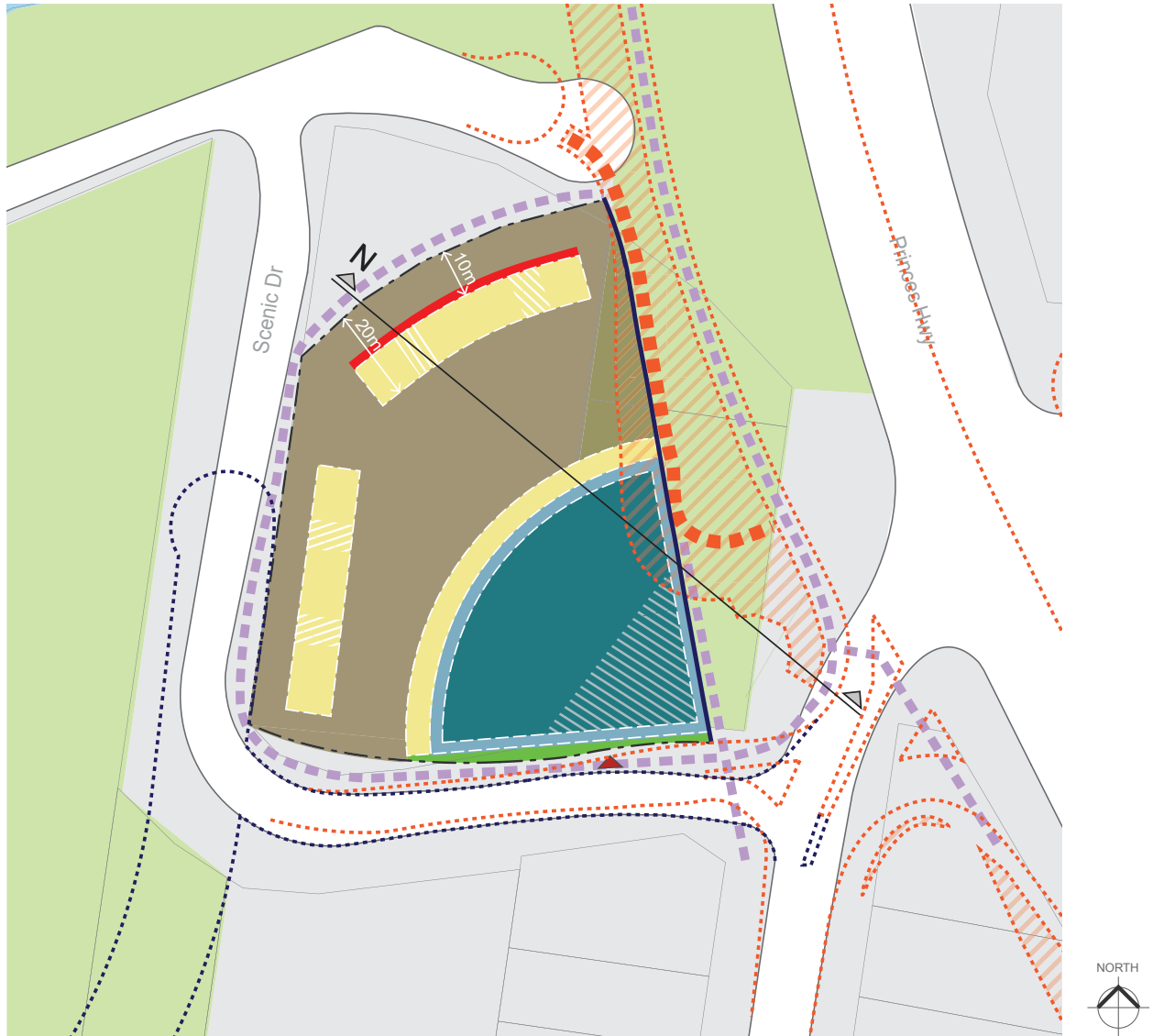
To provide a reasonable area of concentrated development the revised key development control parameters plan (Figure 46) locate development on the eastern and southern boundary and extended further west into the flood liable land. The opportunity for additional single storey development has been proposed fronting along Scenic Drive to compensate for the reduction in built form that is a consequence of the road widening. All development within this sub-precinct is still subject to the recommendations of a flood study analysis.

In addition, to improve pedestrian access in this area it is recommended that Scenic Drive is not widened and that direct pedestrian access is provided from Scenic Drive to the new pathway down to the riverfront.



A-1 Scenic Drive

Revised key development parameters



- Max. building height 18m (5 storeys)
- Max. building height 15m (4 storeys)
- Max. building height 7m (1 storeys)
- Active frontage required
- Landscape area
- Desired pedestrian and cycle access route
- Development of lot subject to flood study
- Desired location of built form breaks/ gaps
- Vehicular access (preferred location)
- Preferred alignment for Scenic Drive
- RMS indicative future road alignment
- RMS indicative future road embankment
- RMS indicative future pedestrian connection
- Potential consolidated lot boundaries
- Retaining wall

Figure 46 Revised key development control parameters

A-1 Scenic Drive

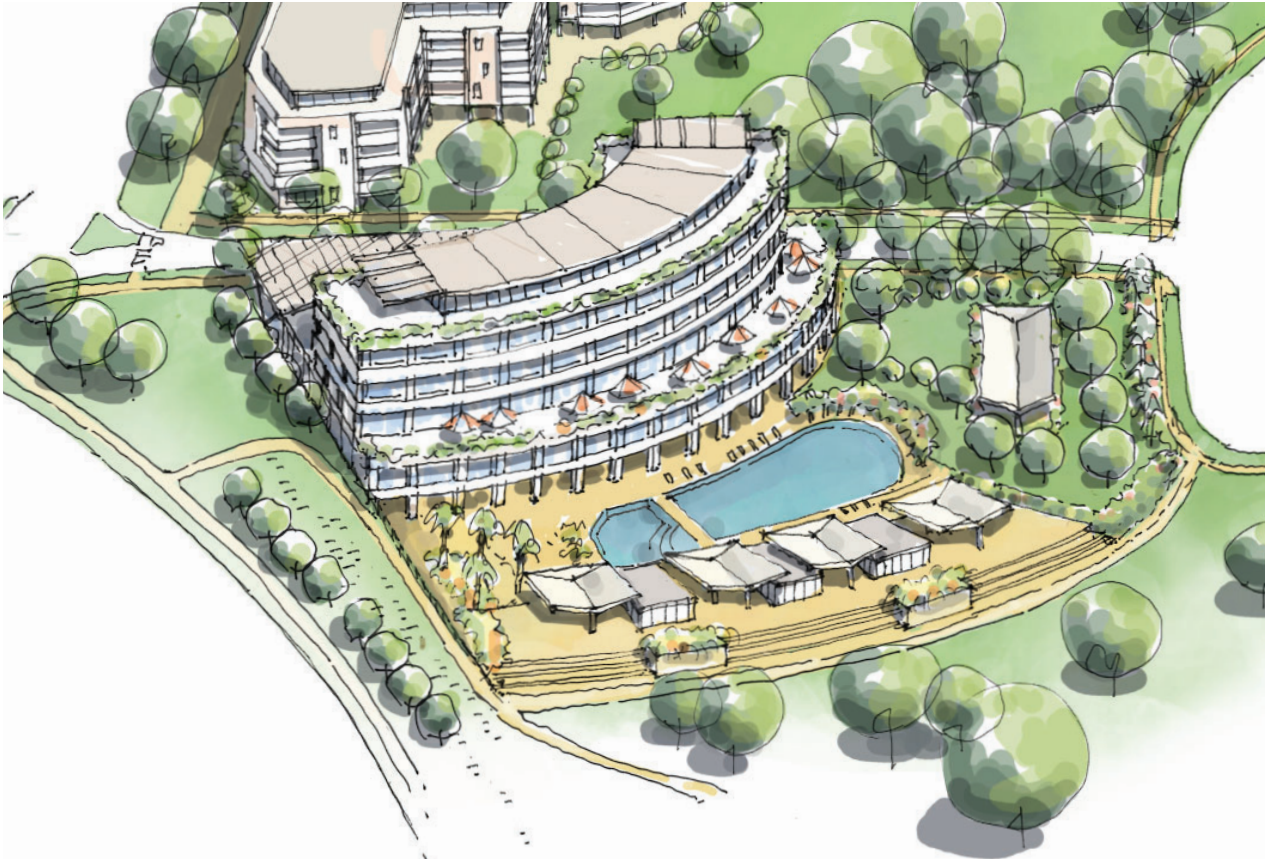


Figure 47 Revised artist's impression of potential future development



Landscaped outdoor facilities such as pools are a possible use for low lying flood prone land



Setting development away from the riverfront creates an opportunity to expand the area of flat riverfront open space

Interface sections

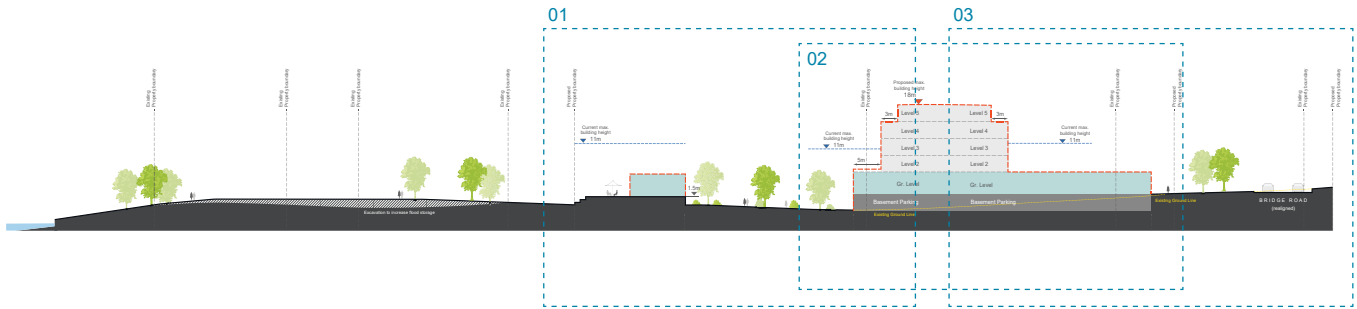


Figure 48 Revised Section N - Overview

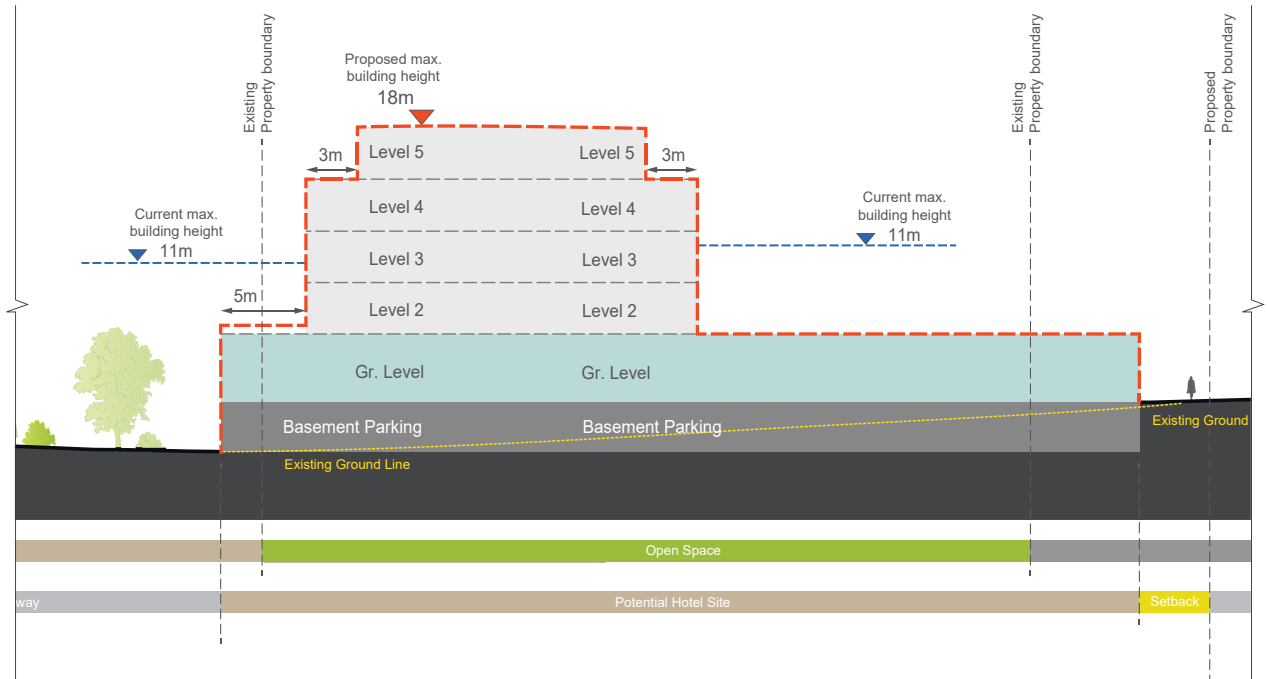


Figure 49 Section N - 02

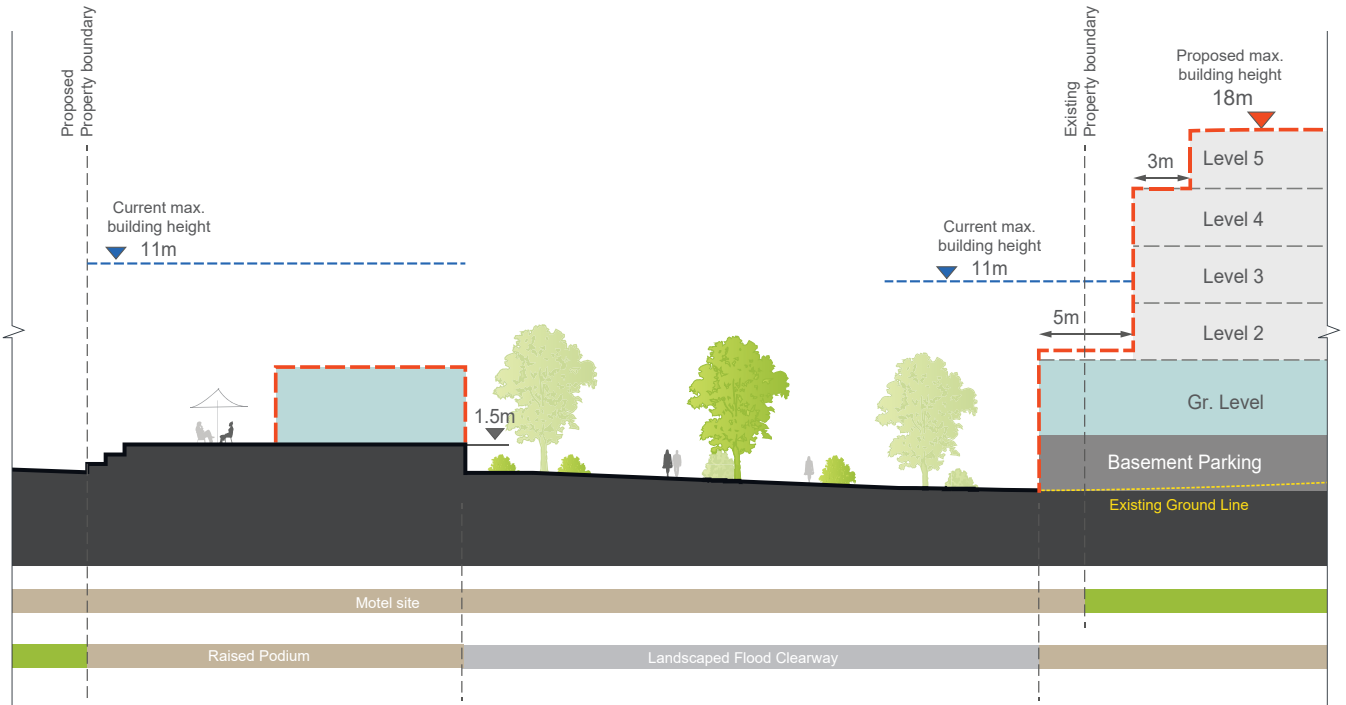


Figure 50 Revised Section N - 01

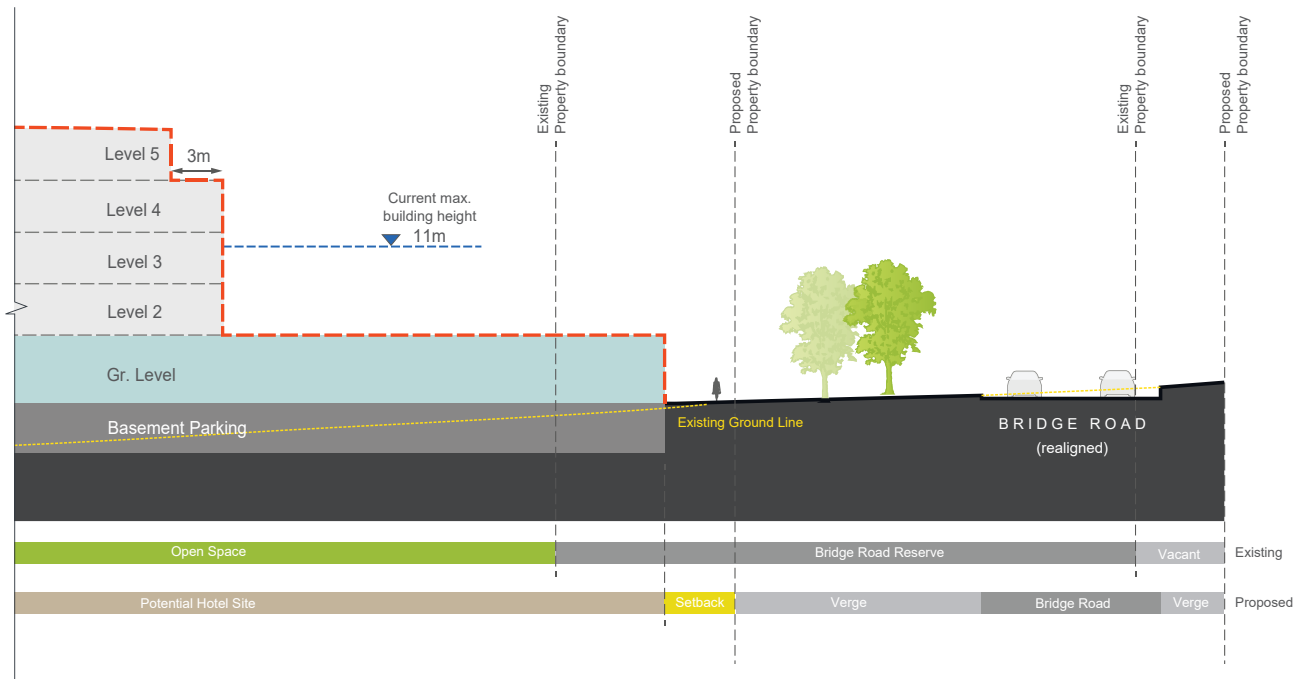


Figure 51 Section N - 03

A-2 Bridge Road

Desired future urban structure

This sub-precinct is located to the west of the Princes Highway on the eastern side of Bridge Road. It is the highest and most visually prominent location within the Riverfront Precinct when arriving from the north as it is next to the highway, at a local high point and next to a large intersection. Development on this site will be highly prominent and contribute significantly to defining the 'character' of the Riverfront Precinct and to providing an attractive gateway into Nowra. The sub-precinct is likely to increase in visual prominence following construction of the new bridge and realignment of the highway further to the west.

The desired future urban structure for this precinct includes providing new development to the north of the Entertainment Centre and the Council Administration Centre to reinforce the activity generated by these facilities and locating a larger building on the prominent corner site to provide a visual marker at this entry into the Nowra CBD.

Impact on precinct of the RMS Concept Design

1. The widening of the Princes Highway and increased size of the intersection at Bridge Road, Scenic Drive and Princes Highway has reduced the size of a potential built footprint at the northern tip of the site.
2. The widening of the Princes Highway has reduced the width of the potential building site along the western side of the highway.
3. The proposed RMS project boundary is located to the north of the Entertainment Centre and the Council Administration Centre and includes areas currently used for parking.
4. The RMS landscape concept design plan proposes a landscape gateway feature at the intersection of Bridge Road and Princes Highway, with formal entry planting and signage. The remaining area within the project boundary is also landscaped. This would make development of this sub-precinct very difficult.



Figure 52 Looking south from the Princes Highway towards Bridge Road Intersection at road opening and approx 10-15 years after (source: Urban Design Report and Landscape Character and Visual Impact Assessment, 2018)

A-2 Bridge Road



- Max. building height 23m (7 storeys)
- Max. building height 18m (5 storeys)
- Max. building height 15m (4 storeys)
- Active frontage desired
- Setback to allow for future highway alignment
- Landscape area
- Desired location of built form breaks/ gaps
- Vehicular access (preferred location)
- Preferred road alignment
- RMS indicative future road alignment
- RMS indicative future road cut
- RMS project boundary
- Potential consolidated lot boundaries



Figure 53 Initial proposed key development control parameters (SGL, 2018)

Suggested Response

To maximise the area of development it is recommended that the new boundary of the site is located as far to the east as possible. This may mean some of the proposed RMS embankment to the Princes Highway is located within the site.

To maximise the area available for a 'gateway' development at the intersection with Bridge Road and the Princes Highway it is recommended that the new landscape gateway feature with formal entry planting and signage is limited to no more than 20m deep. The entry feature could be within the adjoining lot or remain publicly owned land. As the area of the sub-precinct has been reduced the shape of building envelopes in the key development control parameters plan (Figure 55) has been revised to reflect the new shape and the smaller site area.

To provide a reasonable area for development of this sub-precinct it is recommended that the area between the landscape gateway feature and the RMS project boundary is not landscaped.



Figure 54 Bridge Rd urban and landscape concept design plan (source: Urban Design Report and Landscape Character and Visual Impact Assessment, 2018)

A-2 Bridge Road

Revised key development parameters



- | | |
|---|---------------------------------------|
| Max. building height 23m (7 storeys) | Vehicular access (preferred location) |
| Max. building height 18m (5 storeys) | Preferred road alignment |
| Max. building height 15m (4 storeys) | RMS indicative future road alignment |
| Active frontage desired | RMS indicative future road cut |
| Setback to allow for future highway alignment | RMS project boundary |
| Landscape area | Potential consolidated lot boundaries |
| Desired location of built form breaks/ gaps | |

Figure 55 Revised key development control parameters

A-2 Bridge Road

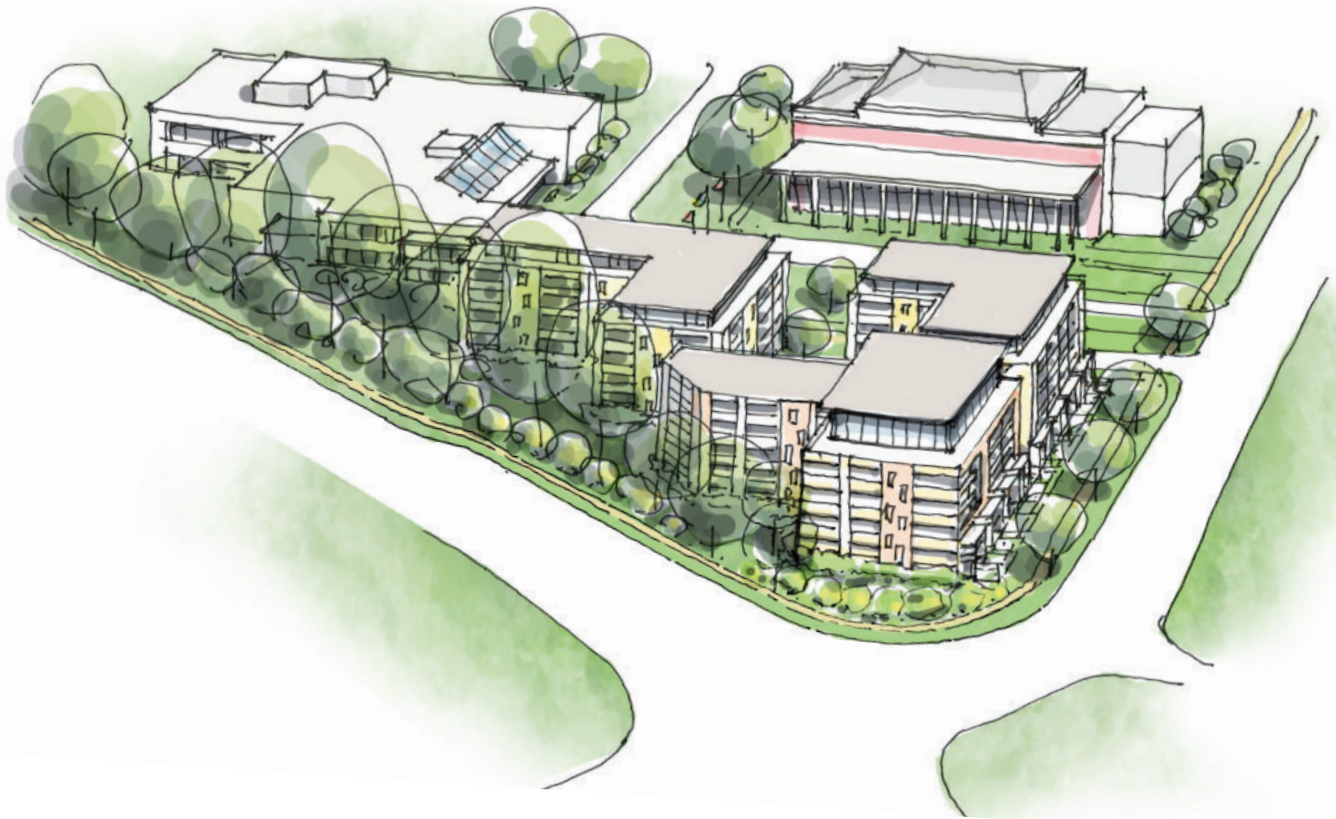


Figure 56 Revised artist's impression of potential future development



Active frontages would reinforce and activate the 'Civic Square' in front of the Entertainment Centre



Development in this highly visible location will require well composed facades in all directions

