Urban Design Strategies

Sites in Nambucca Heads

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introduction

Purpose of this plan

This plan details the urban design parameters for three key locations in Nambucca Heads including:

1. The Southern corners of the intersection of Bowra and Ridge Streets,

2. Sites along Liston Street between Ridge Street, Lackey Street, Small Street and Bellenger Street,

3. Sites along Wellington Drive east from Quarry Street.

To achieve a whole of precinct approach the plan provides a framework to inform the design direction for individual sites to assist land holders and the Council in negotiating an outcome.

The design principles embedded in this document have been developed using a place specific and urban design based approach that examines the sites within the context of Nambucca Heads.

The principles have been developed with regard for achieving high quality developments that enhance the quality and attractiveness of Nambucca Heads as a whole.

How to use this plan

This plan is expected to be implemented as part of Nambucca Shire Councils DCP, during pre-DA negotiations and at DA assessment.

All design proposals on private and public sites and public domain or streetscape improvements on public land are to be in accordance with this plan. This document is to be applied by:

- addressing the opportunities and constraints contained within this plan,
- using the design principles to develop design solutions,
- complying with the specified controls.

Guiding principles of this plan

This plan has been developed by taking the following matters into consideration:

a. Understanding the pivotal location and importance of each site on the functionality and identity of Nambucca Heads and its attractiveness as a place to live, work, visit and invest.

b. Recognizing the importance of built form continuity.

c. Recognizing the importance of high quality architectural design and buildings that provide a high level of residential amenity, are of high quality and constructed of durable materials .

d. Protecting amenity on adjoining sites.

e. Encouraging small lot developments and identifying where amalgamations may be required to support redevelopment.

f. Providing a high quality pedestrian environment along streets.

g. Reducing the dominance of vehicle movement areas on the street whilst still allowing car access and movement on sites.

h. Creating high quality buildings that are great to live and work in and enhance Nambucca as a holiday, retirement and working environment.

i. Maximising the development potential on sites to ensure the highest and best use of the land and to encourage redevelopment.

j. Protecting the natural environment and recognising the physical limitations of sites; including soil erosion and slip, potential sea level rise and storm surge.

Preparation of this Plan

This plan has been prepared by Ruker Urban Design for Nambucca Shire Council. Drawings, text, images and photos are copyright to Ruker Urban Design with use rights to Nambucca Shire Council for the purposes of guiding development and public domain improvements exclusively on the masterplan areas subject to this plan.

Aerial photo's from Google and Nambucca Shire Council.

Acknowledgement:

- Nambucca Shire Council's strategic planning unit for guidance and base information.
- Kann Finch Group of Architects for architectural design page 28.

nambucca heads - urban structure

- *Main civic, commercial and connector street - main pedestrian/commercial activity centre for Nambucca Heads*
- *Main connector street within the centre - Secondary pedestrian/ commercial activity area*
- *Main connector street outside of centre - connects to highway*
- *Ridge connector - residential street*
- *Waterfront activity street*
- *Waterfront locations for enjoyment of the foreshore*
- *Important Indigenous vegetation - visually and physically separates parts of the settlement*
- *Primary civic/waterfront park*

Nambucca Heads is located adjacent to the ocean, a river and a creek. Beautiful natural areas surround and penetrate the settlement. Natural islands and sand bars are a key feature of Nambucca's waterways which are visible throughout the settlement.

Due to the steep topography the settlement has spectacular views from both the public and private domains. Views occur from many locations and are a key contributor to the settlements attractiveness and character.

Given the extreme topography of the location, the main urban area is separated from the foreshore edges. Areas within the settlement are also separated to create informal 'precincts' separated by topography, bushland or both.

Connection between the main urban area of the settlement and the foreshore occurs from only a few streets making the settlement separated from the water physically but not visually.

Given the settlements tourism base access to, access along and use of the foreshore in proximity to the settlement's centre is important. This underlies the main opportunities:

- Continue to reinforce the importance of public and pedestrian access along all foreshores and public views from key places along the main streets and Rigde Street.
- Ensure that pedestrian connections from the main street to the foreshores are retained.

The main street connects to Ridge Sreet on an easy grade making all of Ridge street within easy walking to the centre. The opportunity here is to encourage more residential developments along ridge street that are small scale residential flat buildings, sensitively massed and architecturally designed.

Principles

a. Retain pedestrian connections from the main street to the foreshore, through bushland, parks and along streets.

b. Improve the quality of buildings close to the foreshore to ensure they address open spaces and foreshores.

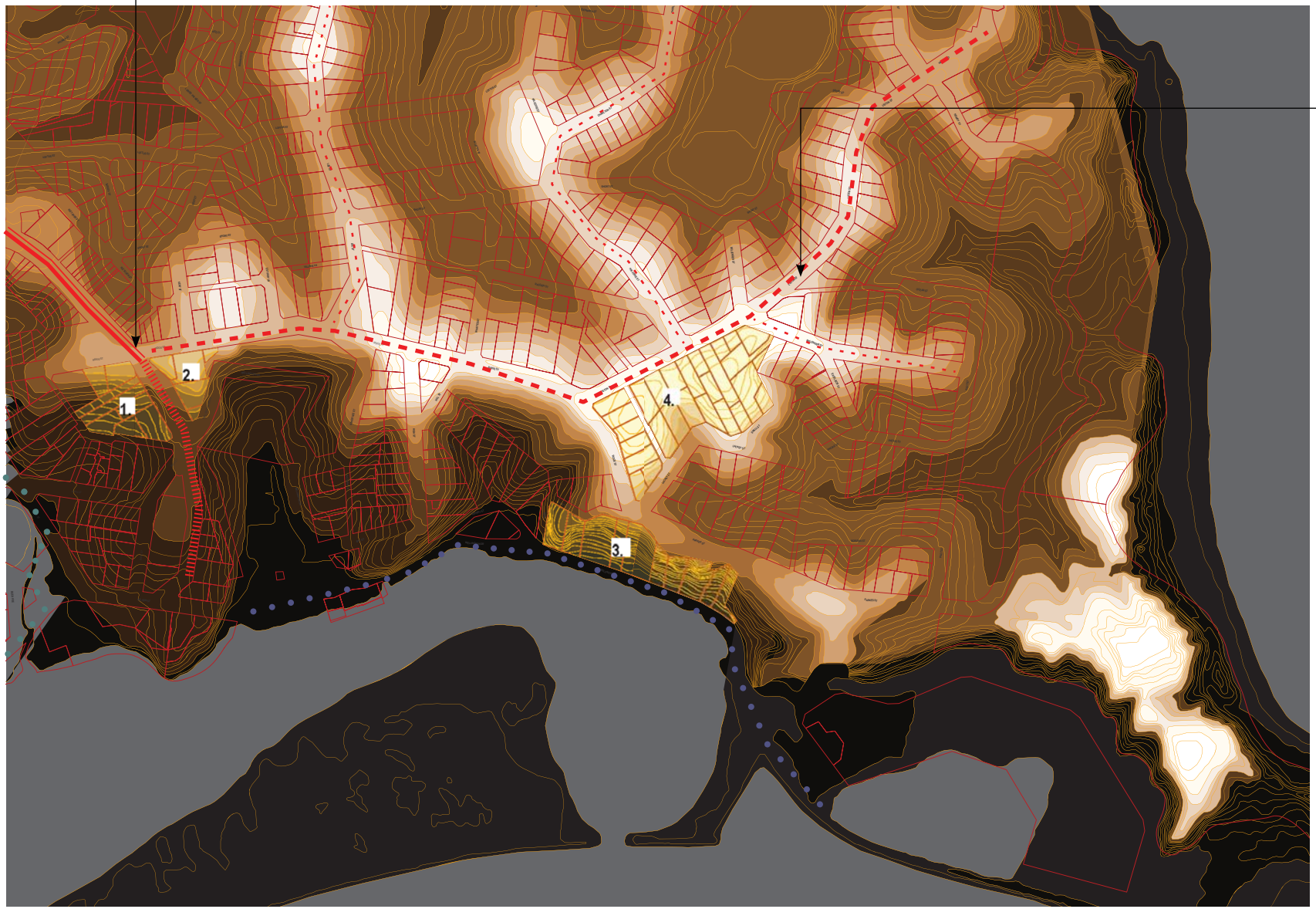
c. Retain pedestrian access to foreshores.

d. To improve and reinforce the centre as a main street environment (ie. to avoid mall type developments).

e. To improve the design and quality of residential flat buildings.

f. To encourage sensitively scaled and well designed flat buildings along Ridge Street.

nambucca heads - topography and landform



The main street is located on the ridge and connects to a waterfront street

Ridge streets shown dashed - having generally even topography along their length

KEY

Study area sites
1. Bowra Street west
2. Bowra Street east
3. Wellington Drive
4. Liston Street

Primary Ridge Streets/ Secondary Ridge Streets

Waterfront Streets

Main Street

Connector (cross topography) streets

High Ground

Low Ground

Foreshore/ Water

Nambucca Heads has striking topography, arguably more than any other settlement on the NSW Coast. Its topography is probably the most important contributor to character and underlies many aspects of design and planning.

It is likely the main street was designed to ensure it was positioned on flat, high ground. Originally it is likely it provided the only link from the ridge top to the water front along Bowra Street and provided the only through connection between the main street, the waterfront and the highway.

The original subdivision and street pattern was designed primarily in response to the topographic conditions to create a viable lot pattern and give precedence to public places.

As is common in early subdivision designs across NSW, streets were given importance over lots. This is evident as streets were located to run parallel along their length and on the flattest ground such as is found generally only on the highest (ridge top) and the lowest (foreshore) locations.

Designing the subdivision pattern in this way has a number of advantages:

- a street frontage for buildings is most easily achieved,

- cut and fill is minimised along the street front,

- changes in topography occur within the lot where they are more easily accommodated,

- buildings can step down the site from front to back rather than from side to side,

- the public domain (streets) are given precedence and greater importance ie. the public life of the settlement over private life.

Short streets link ridge and waterfront streets which run across the contours and provide difficult street to lot relationships but are limited to short runs.

The study area sites are all located on extreme topography and on each of the street types identified; ridge streets, foreshore streets and connector streets.

The Bowra Street sites are located on the corner of a ridge and connector street, the Wellington Drive site is located on a Waterfront Street and the Liston Street street site is located on a ridge street.

Opportunities and Constraints

- The Bowra Street western site (1. Refer to page 6 for location) topography slopes from front to back, stepping down to the rear and to the side of the site making the site challenging for higher densities where sensitive building massing is to be achieved.
- This site is located significantly lower than the street. A steep embankment separated lots from the street resulting in an awkward ground plane and difficulty in achieving amenity for the front of the lot.
- Bowra Street eastern site (2. Refer to page 6 for location) is relatively flat with very steep embankments on its western and southern boundaries. The site is disconnected from its western and southern street frontages but does form a high lookout or knoll that is an appropriate setting for a public building. Attaining any form of access to the rear of the site may be challenging but advantageous as it will allow site access without compromising the street. Attaining higher densities whilst not resulting in buildings over scaled to the street is an issue.
- The Wellington Drive Site (3. Refer to page 6 for location) is located so low as to be no more than 500mm above high tide. This poses significant risks in terms of sea level rise, storm surge and coastal erosion. The rear of the site has a high sheer cliff of unstable soil. This poses a risk in terms of slip.
- The Liston Street site (4. Refer to page 6 for location) is on a knoll and has steep slopes to the street front resulting in lots higher than the street which results in the site being disconnected from the street making achieving a successful street address challenging.

Principles

a. Building massing on steep sites must be sensitively handled to ensure buildings are not unnecessarily raised off the ground, or create large under croft areas.

b. Ensure designs work with the extreme topography to avoid excessive cut and fill.

c. Ameliorate the effects of embankments along streets.

d. Provide additional pedestrian connections between ridge and waterfront streets through private lots where appropriate or desirable.

e. Formalise pedestrian pathways along all streets, particularly ridge, waterfront and major link streets.

f. Ensure all sites have geotechnical advice during pre-DA and geotechnical reports submitted as part of the DA.

g. Ensure designs for sites along Wellington Drive address sea level rise, storm surge, coastal erosion and slip.

h. Challenging site conditions require a greater degree of design skill, testing and exploration of suitable solutions. This requires the design to be undertaken by experienced design professionals; urban designers, architects and engineers.

sites at the corner of bowra street and ridge street - urban structure

Anchor retail outlets create activity and movement in between which produce commercial opportunities

Continuous retail/commercial frontages forms the main street

Opportunity to reinforce the commercial main street with continuous active frontages. Some frontages have a poor relationship to the street particularly along the lower section of Bowra Street and Ridge Street

Residential buildings addressing a residential street

Public sites and prominent location

Post office site to be retained for civic and/or commercial purposes. Good site for a public place given its prominent location

Iconic coastal views from a public place

Iconic coastal views from private lots

Significant vegetation/public reserve

Inaccessible/problematic level changes

Steep level changes

The two sites on the corners of Bowra Street and Ridge Street form the major intersection along the main street and signal the entry to the town centre from the south, west and the east.

The key characteristics of this location which contributes to its urban structure include:

- buildings address streets and are aligned to the street boundaries; the sites are on prominent ridge top locations,
- the two sites are situated in the main commercial centre in Nambucca Heads,
- vegetation and open space occurs to the rear of lots,
- car access to sites is to the rear of lots.

Opportunities and constraints

- The main street is vibrant and well used.
- The main street has continuous active and small lot frontages.
- Long narrow lots may be restricted in terms of redevelopment to medium density building types given the difficulty in achieving separation distances.
- The street to the rear is a residential street, much of which is not formed (ie. a paper road).
- There is around 10-18m fall between the commercial street (Bowra/ Ridge Street intersection) and the residential street (Woods Lane).
- Commercial uses and the design of buildings lack continuity between Ridge Street and Fraser Street.
- On street parking is essential for commercial premises given the difficulty of accessing parking to the rear.
- The position of anchor retail outlets provide opportunities for activation of the street between the two anchors.
- The post office and town hall are on prominent ridge and knoll sites, ideally located to give public buildings prominence within the settlement.
- There are significant opportunities for views from the rear of private lots.

Principles

a. Work with the characteristics and enhance the existing urban structure.

b. Retain the primacy of Bowra Street as the central main street and Ridge Street as the secondary commercial main street.

c. Encourage shopping and commercial spaces along the length of Bowra Street and implement the main street between the two anchors that is between the main street and the RSL club.

d. Reinforce the spatial importance of street intersections.

e. Activate frontages along the main street

f. Encourage small lot redevelopment, where this is not economically viable provide amalgamation opportunities.

g. Reinforce the importance of the spatial qualities of streets.

h. Retain or interpret the small lot subdivision pattern along the main street. Retain and reinforce the street alignment, zero front and side setbacks and narrow lot frontages existing along the main commercial streets.

i. Maximise the potential for private views from the rear of lots.

j. Retain civic uses on the Town Hall Site.

k. Extend the main street from Ridge Street to Fraser Street.

l. Complete Woods Lane.

m. Reinforce Woods Lane as a residential street.

n. Long narrow lots may need to amalgamate.

o. Improve the design of active frontages to create a more attractive and iconic main street particularly between Ridge Street and Fraser Street.

p. Ensure vehicular access to lots only occurs from the rear of lots.

q. Ensure all streets are safe and pleasant places for pedestrians.

Buildings could do more to define the street space and the entry to the town centre

Views currently enjoyed from the public domain over private lots will not remain as sites redevelop.

Unevenly scaled buildings and mismatched facades could be improved with a streetscape plan to guide new developments.

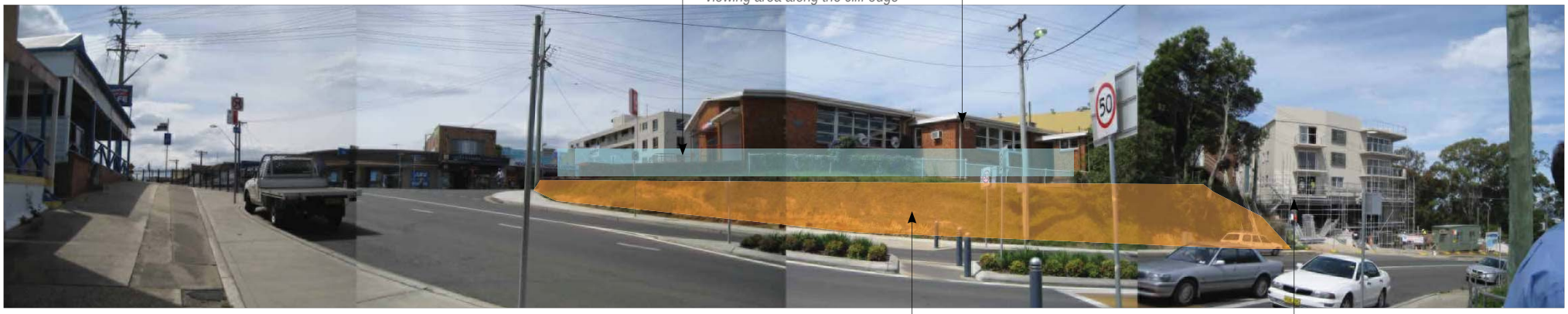
Shopfront windows could have more generous floor to ceiling heights to create a more attractive and usable shopfront

Corner buildings don't define street edges in terms of building height, massing nor facade design

Cars dominate the main street rather than pedestrians

Opportunity for a formalised public viewing area along the cliff edge

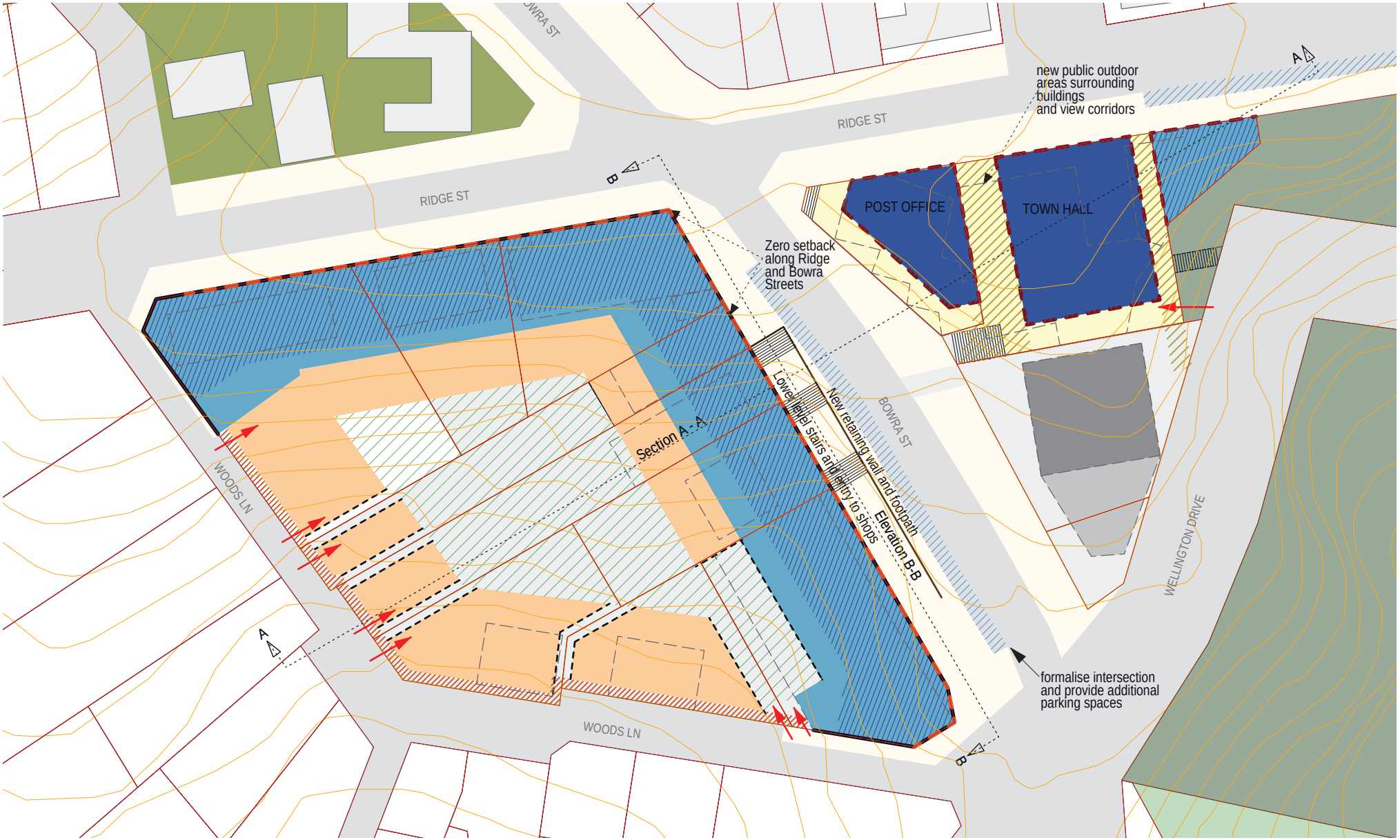
Buildings do not address the street



Unstabilised cuts are likely to erode, don't add to the quality of the main street and preclude active frontages

New buildings do not conform to similar urban design rules as the main street.

sites at the corner of bowra street and ridge street - structure plan controls



KEY

Ground Level

- Existing buildings footprints/to be demolished
- Retail/commercial or residential (above gnd. level only) footprint
- Ground Floor retail built to the front/side setbacks for a min. depth from the street of 15m. No residential or car related uses allowed
- Public building, public uses
- Residential uses
- Glass shopfronts/ max. 15% frontage for residential entries
- Can be either glass shopfronts or public uses with active frontage
- Approximate location of vehicular access Must occur anywhere along this boundary
- New public stairs
- Setbacks to meet separation controls. Location suitable for DSZ
- New retaining wall
- Reconfigured footpaths/formalised parking bays
- New public space/New public view corridor

Building setbacks

- 1-2 m setback along Woods Lane (Deep Soil Zone)
- Zero setback along Ridge and Bowra Streets Zero setbacks along street corners with Woods Lane for a min. of 4m Zero side boundary setbacks allowed. Must have zero setback for a minimum of 10m from the front boundary
- Side boundaries setbacks to achieve BCA and separation controls

The two sites on the eastern and western corners of Bowra and Ridge Streets are considered together for the purposes of this plan.

Combined they create the Bowra and Ridge Street intersection and importantly form the entry to the town centre from the south, east and west.

Given the significant cross slope, buildings on the western site are highly visible from all directions and the potential for significant coastal views from the rear of lots is highly achievable.

Views from the public domain will occur primarily down streets. Any views that are currently available from the private domain across private lots will not be protected.

The key opportunity for these sites is to ensure buildings continue to extend and complete the commercial main street between Ridge and Fraser Streets. As such, buildings must define the street space and the street edge.

Facade design must recognise the public nature of these buildings and conform with general urban design principles common between buildings along the street whilst allowing wide variety of architectural designs.

The commercial component of buildings along the main street takes precedence over residential uses. Designs must result in a robust buildings that provide economically viable commercial spaces for tenants and owners in the immediate and longer term that enliven the commercial, retail, civic, community and recreations uses within the centre.

Civic, community and retail uses will prevail on the Post Office and Town Hall site.

Principles

a. To ensure building form defines the street space.

b. To reinforce the importance of corner locations.

c. To reinforce the importance of streets rather than individual buildings.

d. To protect the integrity and reinforce the continuity of the commercial centre as a main street along Bowra Street and one block down either side of Ridge Street.

e. To provide robust and economically viable commercial spaces.

f. To provide a building form that creates a distinctive and attractive main street as a primary public place.

g. To provide more compact housing in proximity to the centre ie. within walking distance.

h. To create a strong built edge along commercial streets.

i. To define the street space.

j. To define the character of the centre and create a quality coastal town atmosphere.

k. To create physical and visual connection between the footpath/street and the inside of the building at ground level.

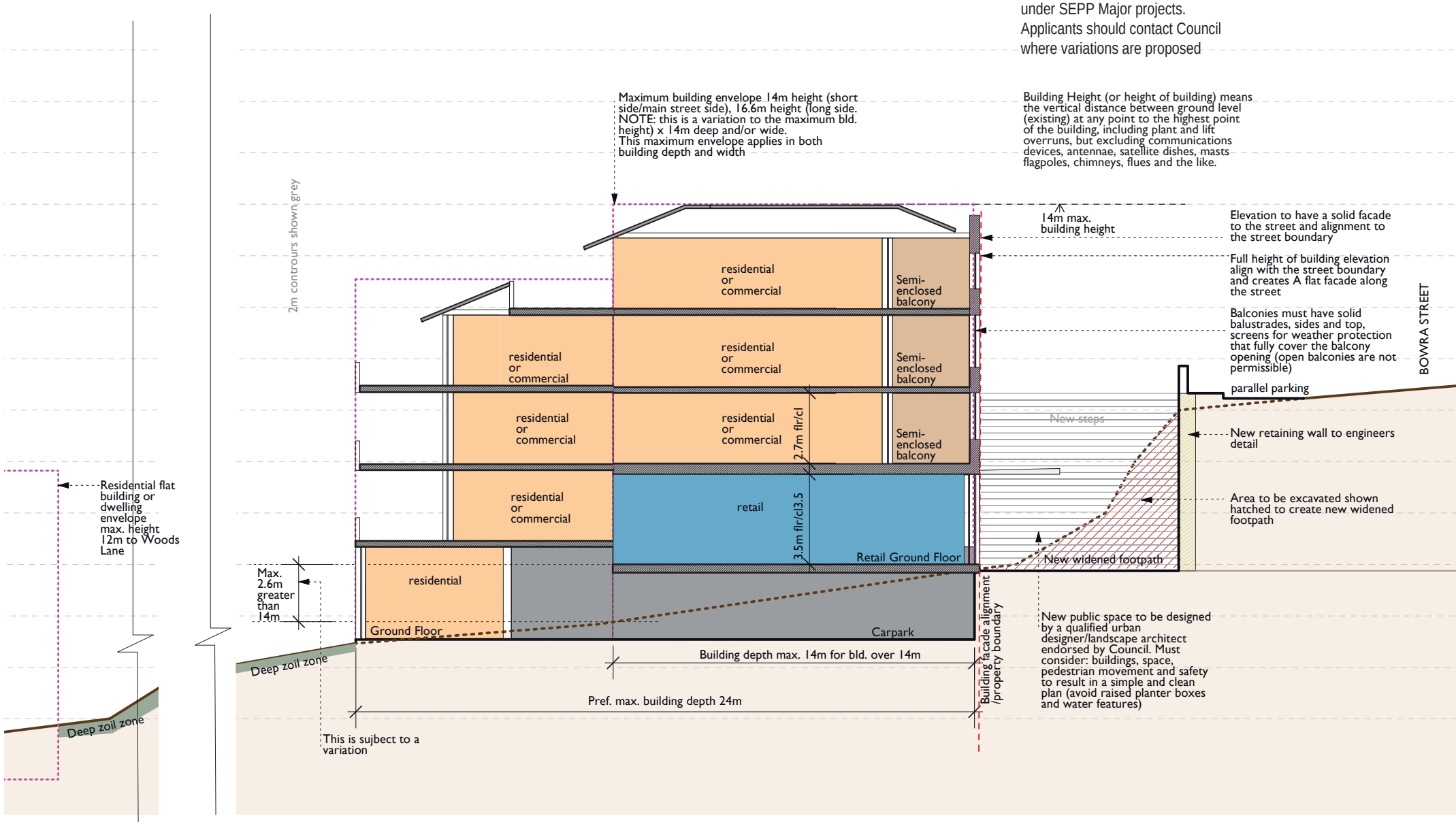
l. To provide a site for public use ie. a Town Hall, an entertainment venue, a gallery, community centre or the like.

Controls

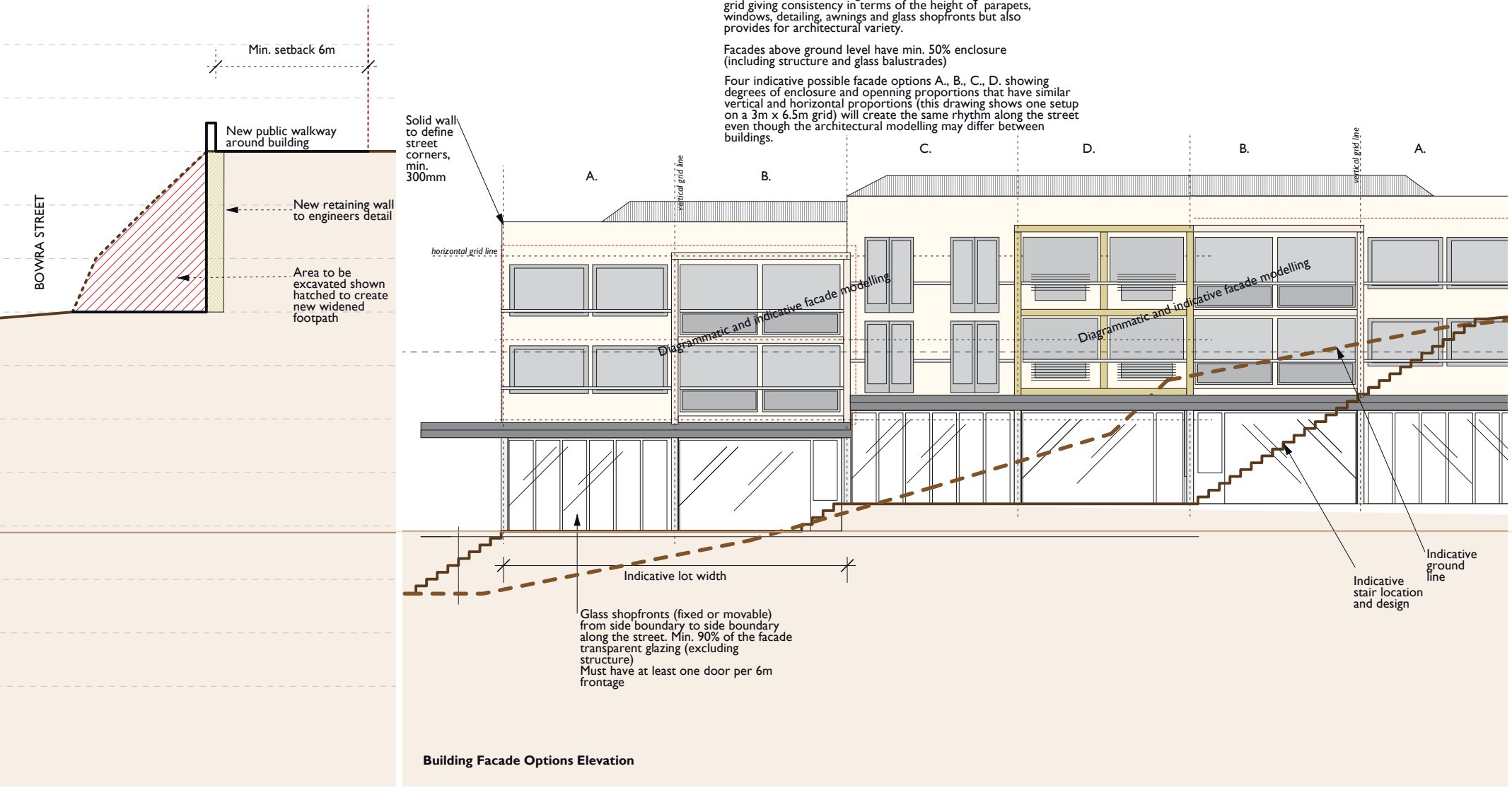
1. The following streets are commercial streets: Bowra Street, Fraser Street, Ridge Street between Bowra Street and Woods Lane, Ridge Street between Bowra Street and Estuary Lane. All other streets are residential streets.
2. All written controls on the Structure Plan Control Drawing, the Control Elevation and Control Section must be achieved.
3. All Site and Building Design Controls must be achieved.
4. The new public space created on the Western side of Bowra Street is to be designed by a qualified urban designer/landscape architect endorsed by Council. This public space is expected to be desigend by Council.
5. Uses on ground level are to be civic/commercial/retail only for a minimum of 15m back from the street and side boundaries along both Bowra Street and Ridge Street. Beyond 15m residential uses are allowed. Elevations to have zero front setbacks Ridge and Bowra Streets.
6. Residential uses are not allowed on grade and within 15m of the main commercial street boundary.
7. Uses on the Post Office and Town Hall site are to be civic/commercial/retail.
8. Commercial, residential or tourist accommodation uses are allowed above and below the main street level on the western sites.
9. Open space on site is to consist of at least 30% of the site being total permeable site area including Deep soil zones. 10% minimum of the site must be deep soil area. A deep soil area must have a minimum dimension of 18% of the length of the site and a minimum depth of 8m. Deep soil areas must form a useable open space and are to be

sites at the corner of bowra street and ridge street - section A-A controls

NOTE: Variations to the maximum building height (ie. the 2.6m) may require approval as major projects under SEPP Major projects. Applicants should contact Council where variations are proposed



sites at the corner of bowra street and ridge street - elevation B-B controls



Building Facade Options Elevation

sites at the corner of bowra street and ridge street - structure plan controls

used for either/or/and communal open space and private open spaces. Except for the Post office and Town Hall sites which must have at least 15% as publicly accessible space but do not require deep soil zones.

10. Pedestrian entries to residential uses can occur along commercial streets but cannot occupy more than 15% of the building frontage along the street and are to align with the street boundary.
11. Elevations are to have zero side setbacks for minimum 5m back from the front boundary. Corner elevations are to be solid on both street frontages for at least 300mm on each street front.
12. Building elevations are to be consistent in terms of: height, vertical proportions, horizontal proportions and in accordance with the Control Section and Elevation.
13. The internal space of the ground level of the building is to be no more than +/- 100mm above finished ground level for at least 70% of the building, for at least 80% along a commercial street front.
14. The main street facade is to be aligned to the front setback and consistent with other buildings in the street.
15. Generally the buildings' residential components are to be oriented to the front and the rear of the lot. The separation distances as set out in the Building and Site Design Controls must be achieved.
16. Maximum building depth from a window to be in accordance with the Residential Flat Building Code.
17. On lots with commercial frontages along Bowra and Ridge with steep topography falling to the rear of the site (greater than 7 degrees), the rear of the building can exceed 14m by a maximum of 2.6m on the low side (the high side must achieve maximum 14m. This can only occur where the ground level of the building on the street side is at street level and where the building footprint is no greater than 14m deep/wide (refer to the Control Section for graphic representation and further explanation). The additional 2.6m must meet the ground plane on the low side must be used for habitable purposes for a depth of at least 5m.
18. Bowra Street east sites: Buildings may be up to 14m maximum.
19. Vehicular access is to be from the rear of lots. No car access or parking is allowed along the front of the lot for a minimum depth of 15m.
20. Carparking must be fully underground along the commercial street front; it cannot raise the building off the ground along commercial street frontages.
21. Carparking at grade can occur to the rear of the site a minimum of 15m from the commercial street boundary. Carparking cannot be closer than 5m from all other streets unless it is fully underground.
22. Buildings are to have solid fixed awnings consistent in height and materials along the commercial street.
23. Commercial street facades and corners are to be solid (not including the ground level) with punched windows or balcony openings. Balconies are to be recessed behind the buildings facade. The facade must be solid for at least 50% of their surface (glass balustrades can be included as solid where in line with the facade. Glass doors or windows cannot be included as solid). Where glass balustrades are used the opening must be able to be closed for the full width and depth of the opening using screens, operable louvres, sun-shades or the like.
24. Facades to commercial streets and corners require horizontal parapet walls to the street, no pitches or parapet modelling is to occur within the parapet wall.
25. Public buildings on the Post Office and Town Hall site may be highly individual in building character but must have active frontages to all street frontages.
26. Pitched roofs to the rear of buildings are preferred. Roofs are to be pitched min. 22.5 degrees.
27. All buildings have a reduced rate from the parking code. Carparking is required at the rate of 1 space per unit below 125m2 (Gross floor Areas); or 1.5 spaces per unit above 125m2 (Gross Floor Area). In addition to the above 1 visitor space per 5 units. Except for visitor spaces and disabled parking, stacked parking is allowed providing it is allocated to the same unit. Where GFA has the same definition as the Standard Instrument Principal Local Environmental Plan.

Left page - Building components to the rear of the site
Top Image: Buildings facing the rear of sites can have pitched roofs and highly modulated facades to reduce bulk and scale, maximise views, provide energy efficiency and achieve separation distances.
Bottom and middle image: The rear of buildings step down the topography providing significant opportunities for spectacular views from private dwellings and shops.
Right page - Building components along the commercial street
Buildings along commercial streets have a strong facade, fixed awnings, active ground level uses, shop fronts and cafes and a high degree of enclosure for dwellings or commercial spaces above ground level. This ensures that noise and activity from the main street can be successfully shielded without compromising the primary function of the main street as a busy, vibrant commercial and civic place and to ensure adequate residential amenity and visual privacy are achieved.

sites at the corner of bowra street and ridge street - precedent images

sites on liston street - urban structure

The highest topographic place in the location, resulting in visual prominence.

High ground/lower ground.

Liston Street is an easy level walk to the town centre, around 5-10mins, however the footpath is only on one side of the street and is of minimal width. The opportunity here is to design a generous, elegant promenade.

Both sides of Liston Street form the streetscape and need to be consistently designed in terms of setbacks, building height, building design.

Lackey and Small Streets are intimate residential streets with a verdant character.

Steep level change of (around 2m) from the street. Embankments cut the street off from lots, are unstable and unsightly.

Buildings don't address the street, detracting from the streetscape quality and amenity.

Buildings oriented to the side of the lot maximise blocked views for neighbouring lots, encroach on separation distances and build into deep soil areas.

Existing flat buildings that are not likely to be redeveloped. Therefore future developments on neighbouring lots will need to consider these buildings.

Villas which may or may not redevelop. Therefore future developments on neighbouring lots will need to consider these buildings.

Vegetation 'encases' the area and contains pockets of development into discrete precincts.

The study area includes all of the lots between Liston, Ridge, Lackey, Small and Bellinger Streets.

This location has steep topography that differs by up to 12m over the depth of the block (approx. 80m) and the location of one of the highest ridges in Nambucca Heads.

The area is characterized most strongly by its built form which features 8 storey buildings; much higher than any other buildings within Nambucca Heads (by 4-6 storeys).

The design of these large structures has not resulted in buildings that related well to the topography. The building's forms, massing and materials do not contribute to defining the place as a coastal location.

Their appearance from the street is of a large striated bulky forms raised off the ground by carpark. Car access to the building features along the streetscape rather than gardens, front doors and entries.

The area is zoned for flat buildings and the height recommended in the recent DCP 3 review by Sutherland Koshy is 20m on Liston Street and 12m elsewhere. Therefore the future character of the masterplan area will change.

At present large buildings are scattered over the block. In the future the whole street will be of this scale as a result of infill development. In order to conceal existing large buildings, improving the quality of building design and ensuring a better relationship to the street is essential.

The key characteristics of this location which contributes to its urban structure include:

- being located on one of the (if not the) highest topographic locations within Nambucca Heads,
- steep topography to the rear and front of sites,
- vegetation 'encases' the block separating it from neighbouring urban lots and creating a distinct precinct,
- from Liston Street and lots along this street an easy grade walk into the town centre,
- free standing large building forms between which infill sites will redevelop to the same capacity and scale,
- lots were originally designed for a single dwelling situated on the front of the lot and oriented to the front and rear of the lot and,
- steep topography.

Opportunities and constraints

- To maximise significant and iconic coastal views that occur from private allotments.
- To reinforce all streets as residential streets.
- To deal with the rise and fall of the land on sites.
- To improve building design.
- To recognise the importance of streets.
- To provide better amenity for pedestrians.
- To provide more housing in proximity to the centre.
- To ensure building forms are coordinated across the block and along streets.

Principles

a. Ensure all streets retain and enhance their residential character, attractiveness, amenity and safety.

b. Ensure active residential frontages along all streets.

c. Avoid the dominance of car access areas along streets.

d. Reinforce the spatial importance of street intersections.

e. Provide active residential frontages along all streets.

f. Encourage design excellence in site and building design.

g. Provide higher density housing types in proximity to the centre.

h. Provide footpaths on both sides of the street.

i. Provide space for vegetation, mature trees and deep soil zones to the front and rear of lots.

j. Maximise the potential for private views from lots.

k. Improve the design of building massing, material and elevation design to create a more attractive and iconic streetscape along Liston Street, Ridge Street

l. Ensure vehicular access only occurs from the rear of lots where laneway access is available.

m. Provide high quality and environmentally sustainable apartment building design.

n. Ensure all streets are safe and pleasant places for pedestrians

o. Improve the scale, massing and appearance of buildings.

p. Provide a human scale along streets and laneways.

New buildings can help create a strong definition of Liston Street as a primary urban street.
New buildings can ameliorate the effects of poorly designed buildings.

Transition from the building to the street requires improving to ensure visual surveillance and to contribute to a quality streetscape and a pedestrian friendly street.

Unevenly scaled buildings do not contribute to the the quality of the location.
There is little consistency in terms of building massing and design.

Building massing and form is very basic. Future buildings require greater design development; architectural and urban design guidance and design.

The street requires generous public footpaths on both sides of the street with increasing densities on Liston Street.
The existing footpath could be significantly widened.

The corner of Liston Street and Ridge Street is very prominent and therefore requires significant design development to achieve a high quality building. Building facades should define the street corner and recognise the public nature of this facade.

The future building on the corner will be important in ameliorating and masking existing large buildings.

Front setback vegetation and grass provide a leafy and green quality to Ridge Street.

Mature vegetation in the 'gullies' characterizes Lackey and Small streets.

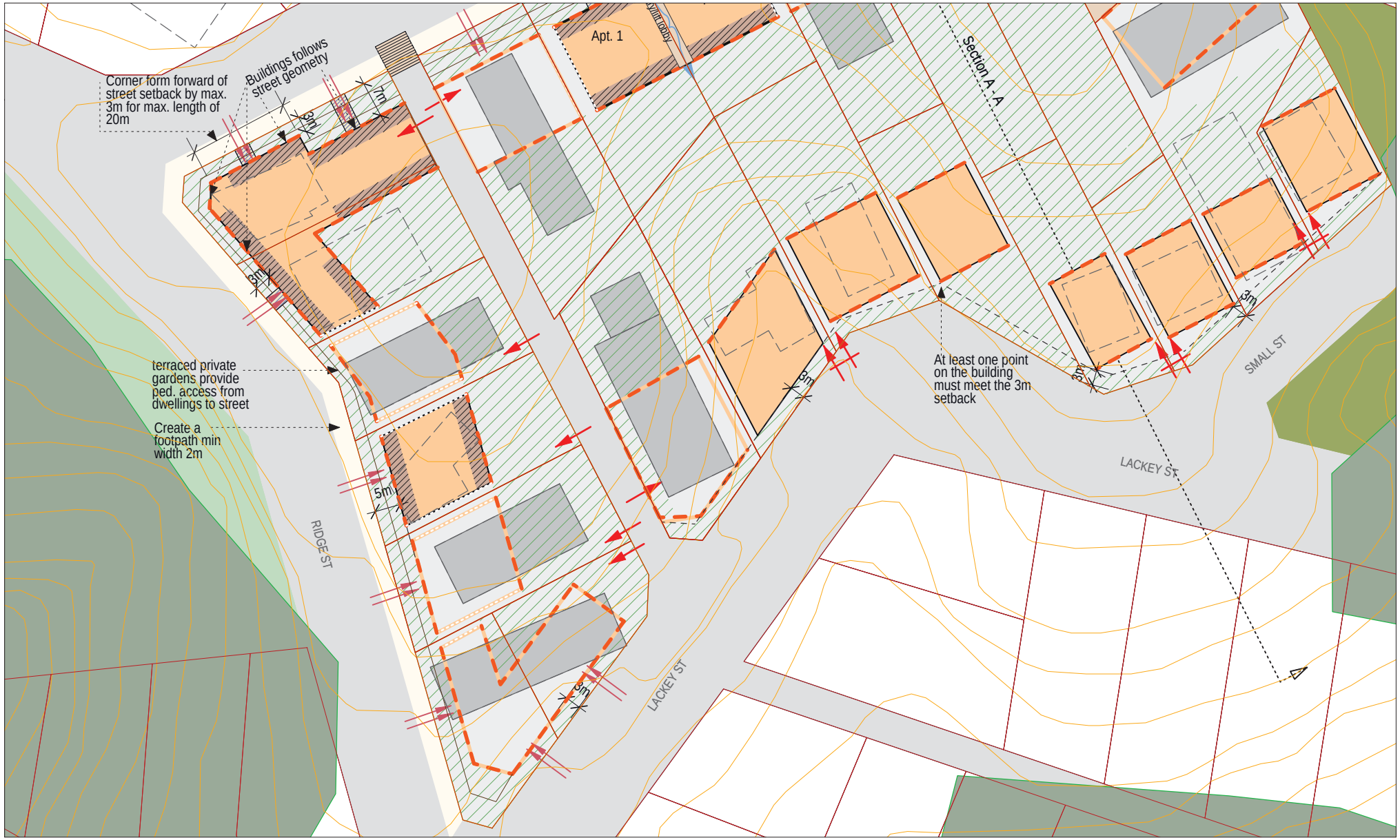
Modest building forms (two storeys) step down the topography in contrast to the much higher buildings behind.

The laneway is used to provide the address to a number of dwellings. This principle can be extended along the length of the laneway.

The taller buildings on Liston Street do not over bear the much smaller buildings on Lackey street, due to the depth of the lots and the topography.

Mature vegetation in the 'gullies' characterizes Lackey and small streets.

sites on liston street - structure plan controls



ruker | urban design NOVEMBER 2008

KEY

Ground Level

- Existing buildings footprints likely to be demolished/redeveloped
- Existing strata building unlikely to be redeveloped
- Residential flat building indicative footprint
- Possible indicative new residential flat building footprint
- Area within which town houses are allowed max two storeys/separation distances must be met
- Public laneway to be formalised
- Indicative location for main pedestrian entries/must occur along this boundary
- Indicative location for pedestrian entries to ground floor dwellings/must occur along this boundary
- Orientation of primary windows
- Approximate location of vehicular access Must occur anywhere along this boundary
- Shared ramps and driveways are encouraged
- Indicative area for deep soil zones. To occur within the front setback and to the rear of the site
- New retaining walls max. height 600m
- Side boundary setbacks are to be minimised whilst achieving BCA and minimum separation distances
- Balconies and external living areas generally facing the front and the rear of the lot

Given this blocks significant cross slope and the possibility for taller buildings on Liston Street new buildings may result in being far higher than any other building in the surrounding areas. This is to be addressed with careful massing, high quality elevation design that defines a 4 storey 'base' to the building and the recommendation that the height of buildings on the other side of Liston Street may be re- examined in a future study, to create a consistent streetscape.

The key issue for Liston Street is to ensure building design is of the highest quality. This enhances the public domain and provides pedestrian amenity.

Facade design must recognise the public nature of these buildings and conform with general urban design principles common between buildings along the street. There should not be the expression of each building as a separate object.

Buildings must create a quality streetscape that has a human scale, avoids high walls along the street, avoids car parking entries along the street, achieves separation distances and importantly orients the building towards the street and to the rear of the lot not the side boundaries.

Principles

a. To ensure building form defines the streetscape.

b. To reinforce the importance of corner locations.

c. To reinforce the importance of streets rather than individual buildings.

d. To achieve residential and streetscape amenity.

e. To employ environmentally sustainable building design.

f. To provide a building form that creates a distinctive and attractive street.

g. To provide more compact housing within walking distance.

h. To create a strong built edge along liston street.

i. To define the residential character of streets and create a quality coastal town atmosphere.

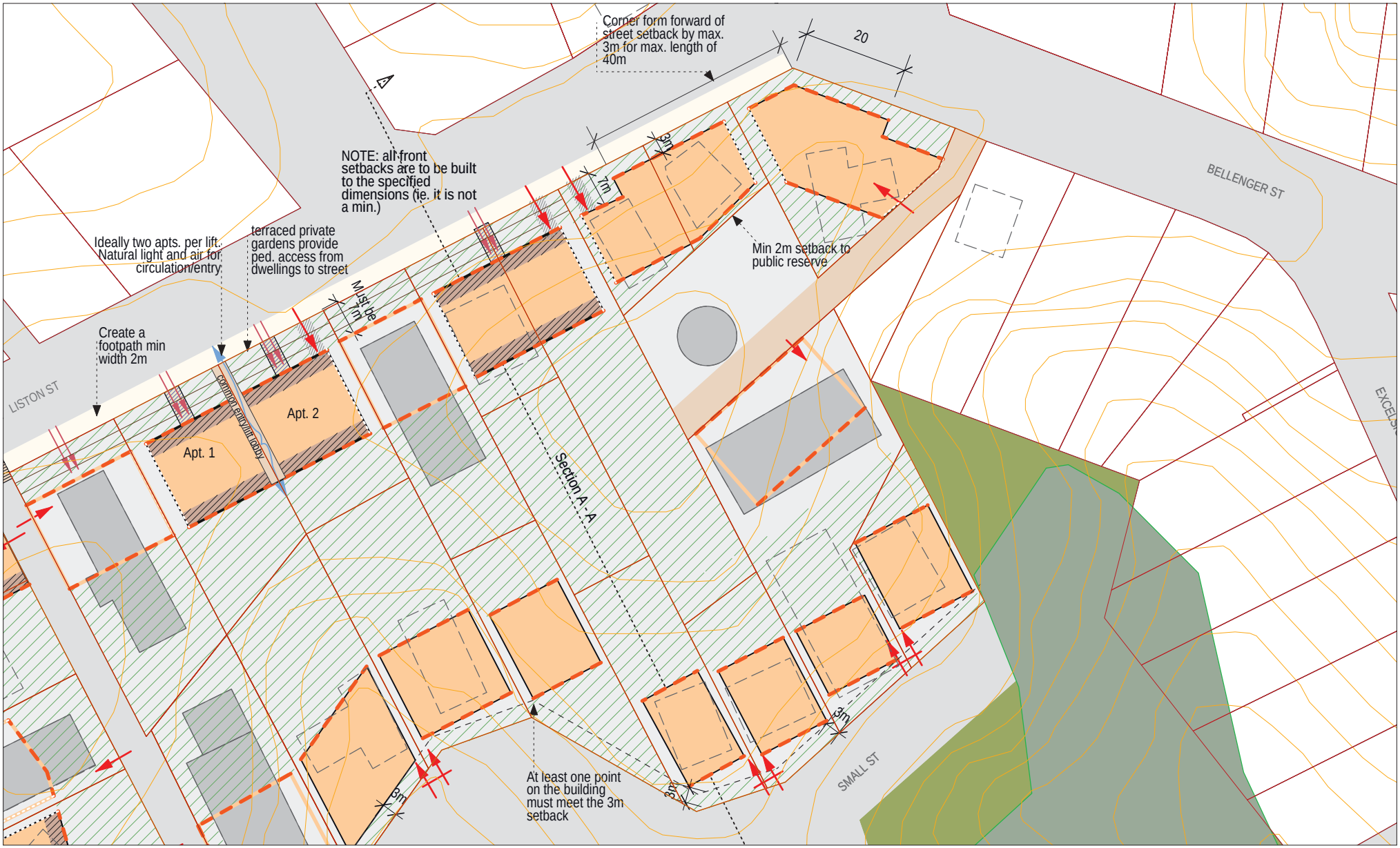
j. To create physical and visual connection between the footpath/street and the inside of the building at ground level.

k. To provide direct pedestrian access from the street to dwellings.

Controls

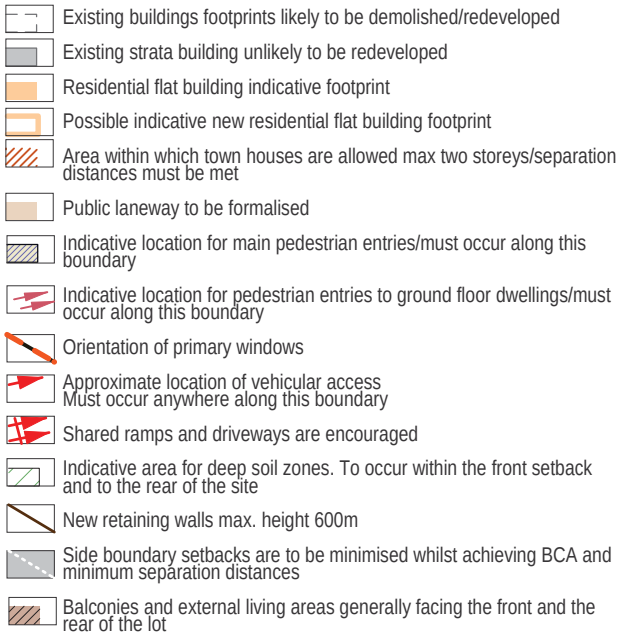
1. The following streets are residential streets: Liston Street, Bellingen Street, Lackey Street, Ridge Street, the laneways.
2. All written controls on the Structure Plan Control Drawing, the Control Elevation and Control Section must be achieved.
3. All Site and Building Design Controls must be achieved.
4. Uses on ground level are to be habitable residential for at least a 5m depth. Carparking on ground is not permitted.
5. Open space on site is to consist of at least 30% of the site being total permeable site area including Deep soil zones which must be at least 10% (refer to Site and Building Design Controls for definitions). Open space on sites to the north of the water tower (on the corner of Bellingen and Liston Streets are to be at least 20% of the site with10% minimum of the site must be deep soil area.
6. A deep soil area must have a minimum dimension of 18% of the length of the site and a minimum depth of 8m. Deep soil areas must form a useable open space and are to be used for either/or/and communal open space and private open spaces.
7. Setbacks are as follows: Buildings must meet the following setback lines. 7m setback along Liston Street (corner elements are to be 3m for a 20m length measured from the corner); Bellenger Street 5m (3m from the corner of Liston Street for 40m); Ridge Street, 3m for the first two lots from Liston Street, all other lots 5m; Lackey and Small Streets 3m; Laneways 0m.
8. Corner elements on Liston Street are to be solid on both street frontages for at least 300mm on each street front.
9. Building elevations along Liston Street and on corners for 10m back from Liston Street are to be consistent in terms of; height, vertical proportions, horizontal proportions and in accordance with the Control Section. Street elevations are to express a 4 storey base. The top level must be setback by at least 2.5m from the 4 storey base. Building materials must reflect this horizontal massing with a solid base and a lightweight top.
10. The base component (4 storeys) of building elevations along Liston Street, Bellingen and Ridge Streets are to be solid with punched window or balcony openings. Balconies are to be recessed behind the buildings facade. The facade must be solid for at least 50% of their surface (glass balustrades can be included as solid where in line with the facade). Glass doors or windows cannot be included as solid) . Where glass balustrades are used the opening must be able to be fully enclosed for the full width and depth of the opening using screens, operable louvres, sun-shades or the like.

sites on liston street - structure plan controls



KEY

Ground Level

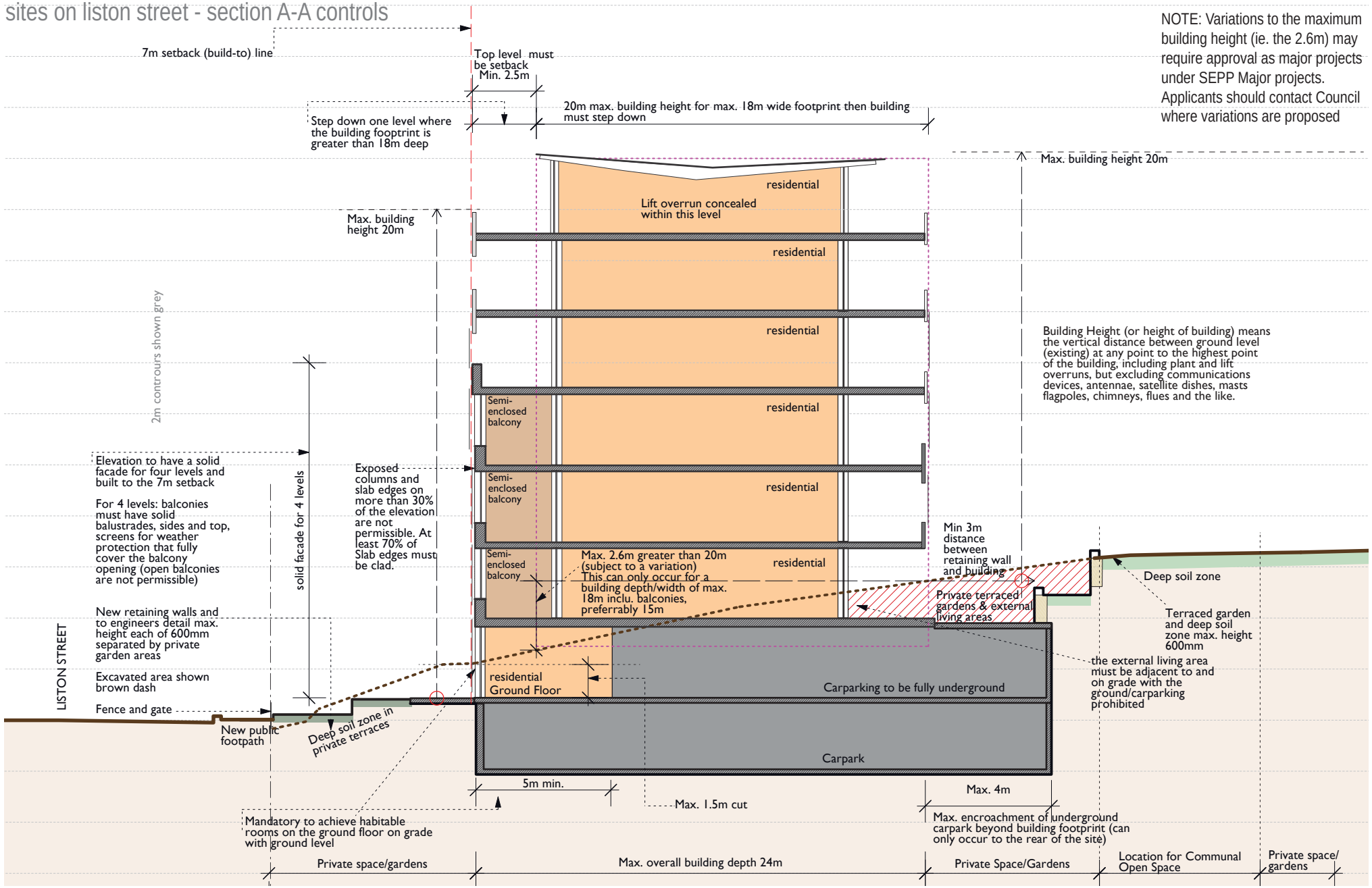


11. Buildings must be built to minimum side boundaries necessary to achieve separation distances. Were there are no existing building windows requiring separation then new buildings must have the minimum side boundary setbacks (1.5m) for at least 3m back from the front setback line.
12. The internal space of the ground floor of dwellings or balcony/terrace edges is to be no more than +/- 100mm off the external finished ground level to ensure there is an easy pedestrian transition from the inside of the building to outdoor areas and gardens.
13. Building depth is to be in accordance with the NSW Residential Flat Building Code.
14. The primary windows of habitable rooms are to be oriented to the front (street) and the rear of the lot and to achieve the separation distances as set out in the Building and Site Design Controls.
15. Communal, shared or common space cannot occur between the building and the street except for circulation spaces. Communal areas are to be located to the rear of the lot.
16. Maximum building height is 20m (refer definition in Site and Building Design Controls). With the top level of the building having a maximum footprint of 70% of the building below with its glass line no further forward than the line of glass on the level below.
17. On sloping sites (more than 7 degrees) an additional 2.6m height for a maximum footprint of 18m x 18m are permissible. The building can exceed 20m by a max. of 2.6m on the low side (the high side must achieve 20m maximum (refer to the Section A-A for graphic representation and further explanation). The additional 2.6m height must meet the ground plane on the low side and must be used for habitable purposes for a depth of at least 5m.
18. On flat sites (less than 7 degrees) Control 17 does not apply.
19. For a building that is longer than 24m, building massing must achieve a 4m break on the top two levels of the building eg. for a building that is 44m long the building massing could be 20m w by 20m h, then 4m w at 18m h, then 20m w by 20m h.
20. Vehicular access is to be from the rear of lots where a laneways is available. Minimise driveway width (preferred 4m).
21. Carparking must be fully underground along streets and laneways. Carparking can protrude 600mm above ground to the rear of the lot up to 900mm on the sides of the site.
22. Pitched, skillon or butterfly roofs to the rear of buildings are preferred and along Lackey, Small Bellingen and Ridge Streets Roofs.
23. Exposed slab edges and columns are not permissible to more than 30% of the buildings street or laneway elevations.
24. Retaining walls cannot be greater than 600mm to the front and the rear of the lot, to the sides of the lot 900mm where they do not create privacy issues on neighbouring lots. Retaining walls on the front and rear of the lot can be no closer to the building than 3m. Retaining walls within deep soil areas are to form landscaped terraces.
25. Buildings along Liston Street, Ridge and Bellingen Street must create a new public footpath at street level of minimum width 2.5m within the street reserve (detail to be determined by Council).
26. The front setback is to be used for private gardens accessible to the ground floor dwellings. These are to have low and open fences along the street plus gates for entry to dwellings.
27. The external ground level around the building must be used for private gardens attached to ground level apartments for at least 4m to the front and the rear of the site (excepting pedestrian and vehicular entries).
28. All ground level dwellings facing the street must have direct pedestrian access to the street.
29. All buildings must have a main or common ground level pedestrian entry from the street directly to the building.
30. Driveways and ramps into basement carparks from streets must have a shutter door with an enclosure ratio of 80%. It must be located in line with the main facade of the buildings 'base' and be the same colour as the base.
31. All buildings have a reduced rate from the parking code. Carparking is required at the rate of 1 space per unit below 125m2 (Gross floor Areas); or 1.5 spaces per unit above 125m2 (Gross Floor Area). In addition to the above 1 visitor space per 5 units. Except for visitor spaces and disabled parking, stacked parking is allowed providing it is allocated to the same unit. Where GFA has the same definition as the Standard Instrument Principal Local Environmental Plan.

Preferred Layout Guidelines

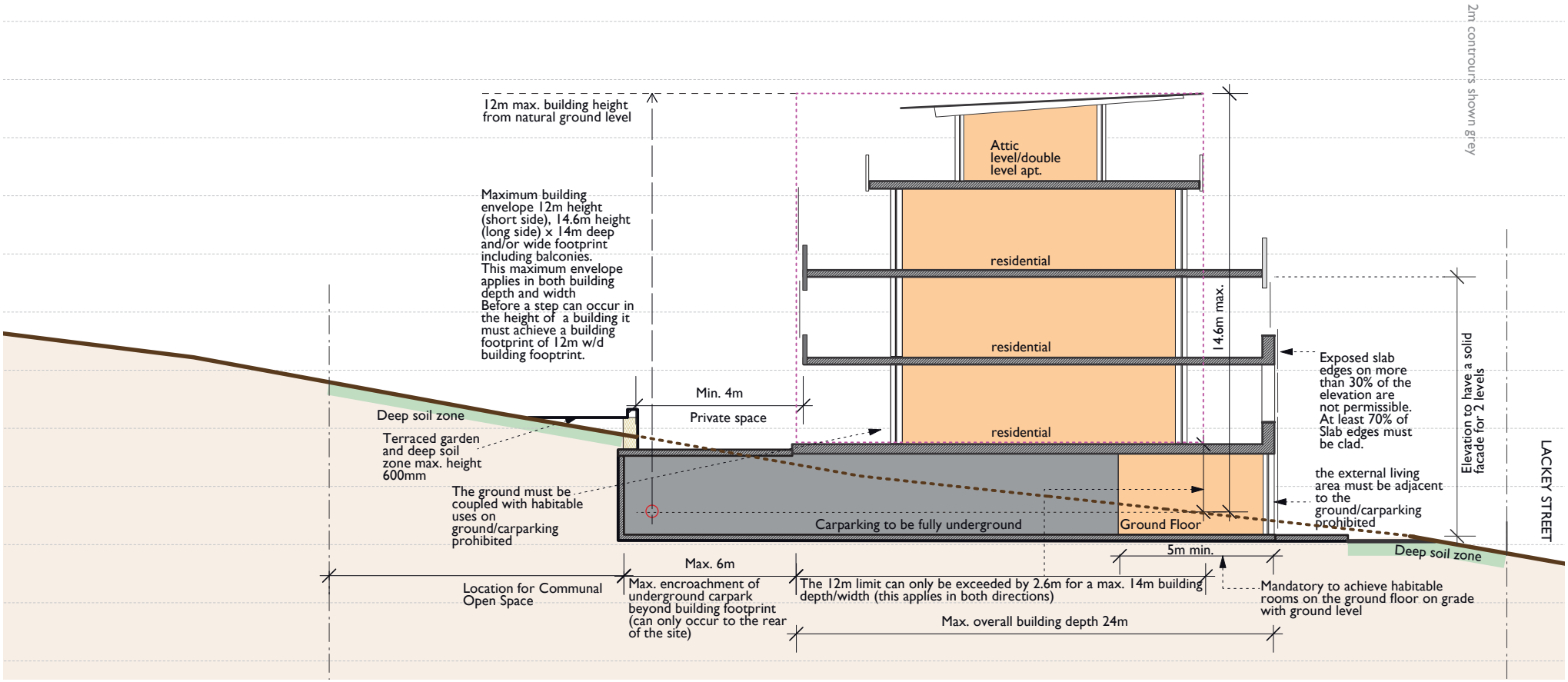
1. 2 apartments per lift per floor with two or three external walls to achieve natural light and ventilation to all rooms.
2. Driveways 4m max. width. Shared driveways/ramps are encouraged.
3. Straight passage/main pedestrian entry from the street to the rear of the lot (to the communal space where this is provided) in order to achieve natural lighting and ventilation in circulation spaces.
4. Building footprint depth 15m from glass line to glass line to encourage cross ventilation and natural lighting.

sites on liston street - section A-A controls

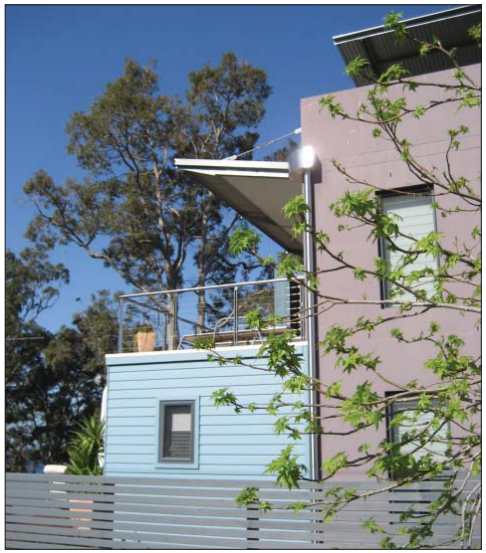


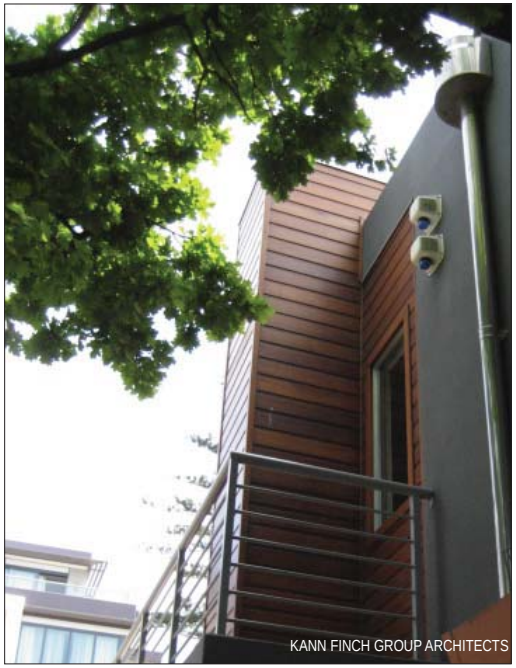
NOTE: Variations to the maximum building height (ie. the 2.6m) may require approval as major projects under SEPP Major projects. Applicants should contact Council where variations are proposed

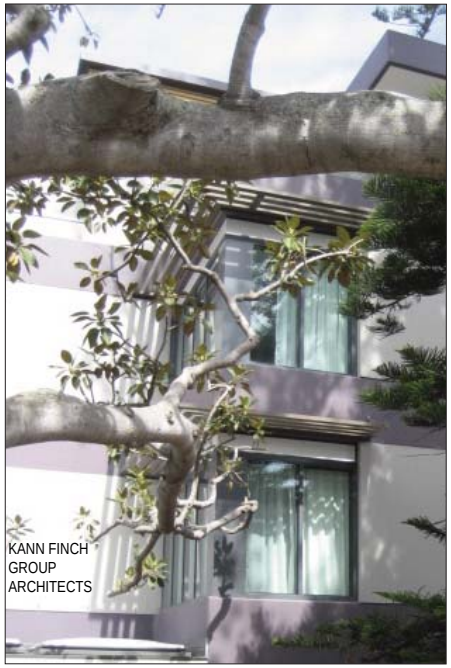
sites on liston street - section A-A controls



sites on liston street - precedent images; to the street







Left page - Building components along Liston Street and the corners of Liston Street with Bellingen and Ridge Streets.

Top left: Buildings facing the front require enclosure to define the street, modulate the massing and create a 'base' form along the street. Although the building in the image is only three storeys it does provide an indication of the types of facade modelling possible where a level of enclosure and openness is required.

Top right: Mature trees within the private space close to the building, fly roofs, balcony shading and timber decks help with improving the micro-climatic conditions of the site and the building. They provide additional privacy, weather protection and importantly provide a human scale to the building and adding the level of detail necessary to read the building, the street and the precinct as residential.

Bottom left: This building has been designed in three dimensions, as a series of interlocking forms rather than only being designed in plan view. This results more successful massing and form, illuminates the visual prominence of corner elements and therefore their importance and allows for the expression of contrasting materials and finishes.

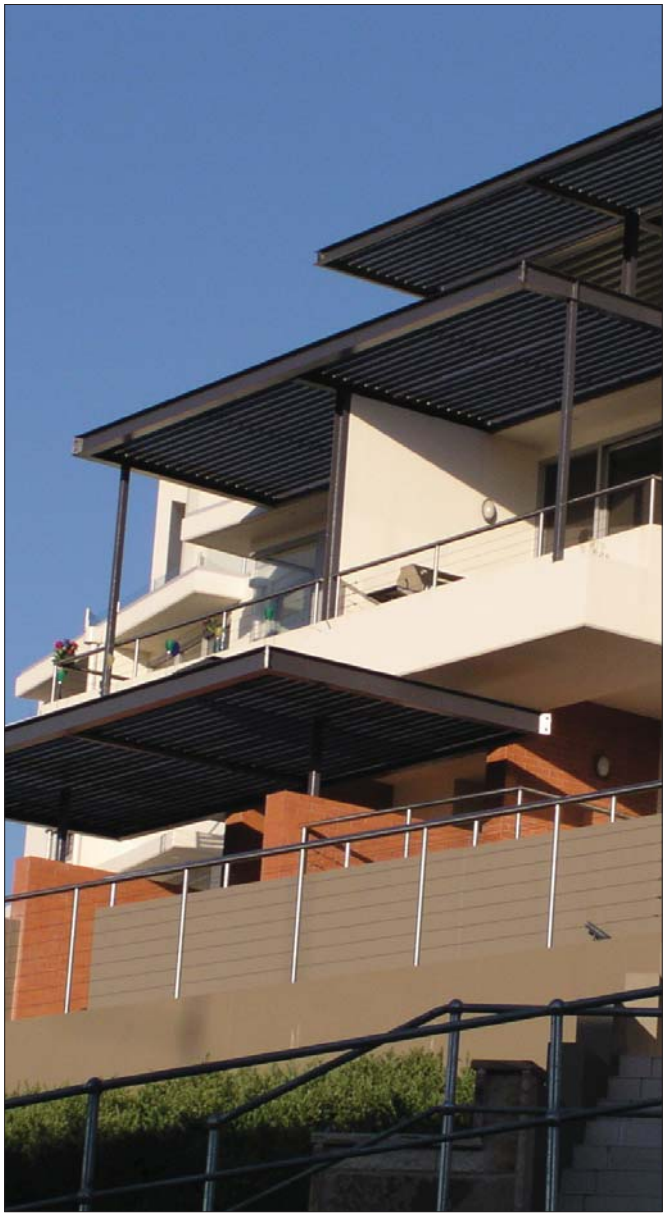
Bottom middle and bottom right: Coastal style can be interpreted in many ways. This building has used part timber cladding and part rendered block work set against detailing of down pipes and open balustrades.

sites on liston street - precedent images; to the rear of the site

Right page - Building component to the rear of the building

Top left and top right: Buildings with deep balconies, operable louvers or screens and partly enclosed sections of the balcony can provide good thermal regulation, generous outdoor living spaces and privacy.

Bottom left: The rear of the building can be more open that the street frontage of the building as less privacy is required and defining the street edge is not necessary.



sites on wellington drive - urban structure

Important public thoroughfare and main foreshore street important to enhance.

Area is encased in vegetation creating a separate precinct.

Extreme topography, up to 45 degree slope

Narrow distance between foreshore and buildings creates an intimate space.

Mangrove and walkway are an important public asset.

Pristine waterways are a key feature of the area but flooding and sea level rise are a concern.

Public and private views important.

Iconic coastal walk, important to retain and enhance.

Street frontage but no access to lots

This masterplan area is a distinct precinct within Nambucca Heads.

It has an extreme natural setting as it is wedged between earth and sea both of which in this location are unstable natural systems; the earth is subject to land slip and the water is subject to storm surge, foreshore recession/addition and sea level rise.

Additionally the section upon which these natural systems occur is in some places around only 60m in width. This gives the precinct an intimate scale and a vertical proportion which apears taller than it is wide.

Building lots and the public road are wedged between the two natural systems.

As such this precinct is unique and provides a heightened experience on entering and moving through the space. This needs to be recognised and also requires particular design care and specialist engineering input when designing new structures and undertaking public domain improvements.

Opportunities and constraints

- To recognise the precinct as a desirable public place.
- To recognise and work with the spatial qualities of the place.
- To balance the areas needs foremost as pedestrian space but also as an important throughfare.
- To manage a mix of land uses, both commercial and residential.
- To improve the design quality of buildings.
- To maximise significant and iconic coastal views that occur from the public and private realms.
- To deal with the rise and fall of the land on sites.
- To recognise the importance of the street as a public place.
- To provide amenity for pedestrians.
- To provide apartment accommodation.
- To ensure building forms are coordinated across the block and along streets.

Principles

a. Before developments are developed the capacity of the land must be established by ensuring that structural, coastal geomorphology and geotechnical engineering advice underpins any developments

b. Maximise access to and along the foreshore.

c. Encourage cars to slow down when entering the precinct by narrowing driving lanes, providing a footpath on the northern side of the road, providing pedestrian crossings, implementing a 20k/h speed limit.

d. Ensure all streets retain and enhance their character, attractiveness, amenity and safety.

e. Ensure active residential frontages or commercial along the street.

f. Avoid the dominance of car access areas along streets.

g. Reinforce the spatial importance of street intersections.

h. Encourage design excellence in site and building design.

i. Provide higher density housing types.

j. Provide footpaths on both sides of the street.

k. Protect all vegetation on the embankment.

l. Maximise the potential for public and then private views.

m. Improve the design of building massing, material and elevation design to create a more attractive and iconic streetscape.

n. Provide high quality and environmentally sustainable apartment building design.

o. Ensure all streets are safe and pleasant places for pedestrians.

p. Improve the scale, massing and appearance of buildings.

q. Provide a human scale along the street.

This precinct is very much enclosed by natural bush.

The public viewing platform on Parkes Street is an important public place and must be retained. Buildings must not encroach into this view.

Building massing and form is very basic. Future buildings require greater design development; architectural and urban design guidance and design.

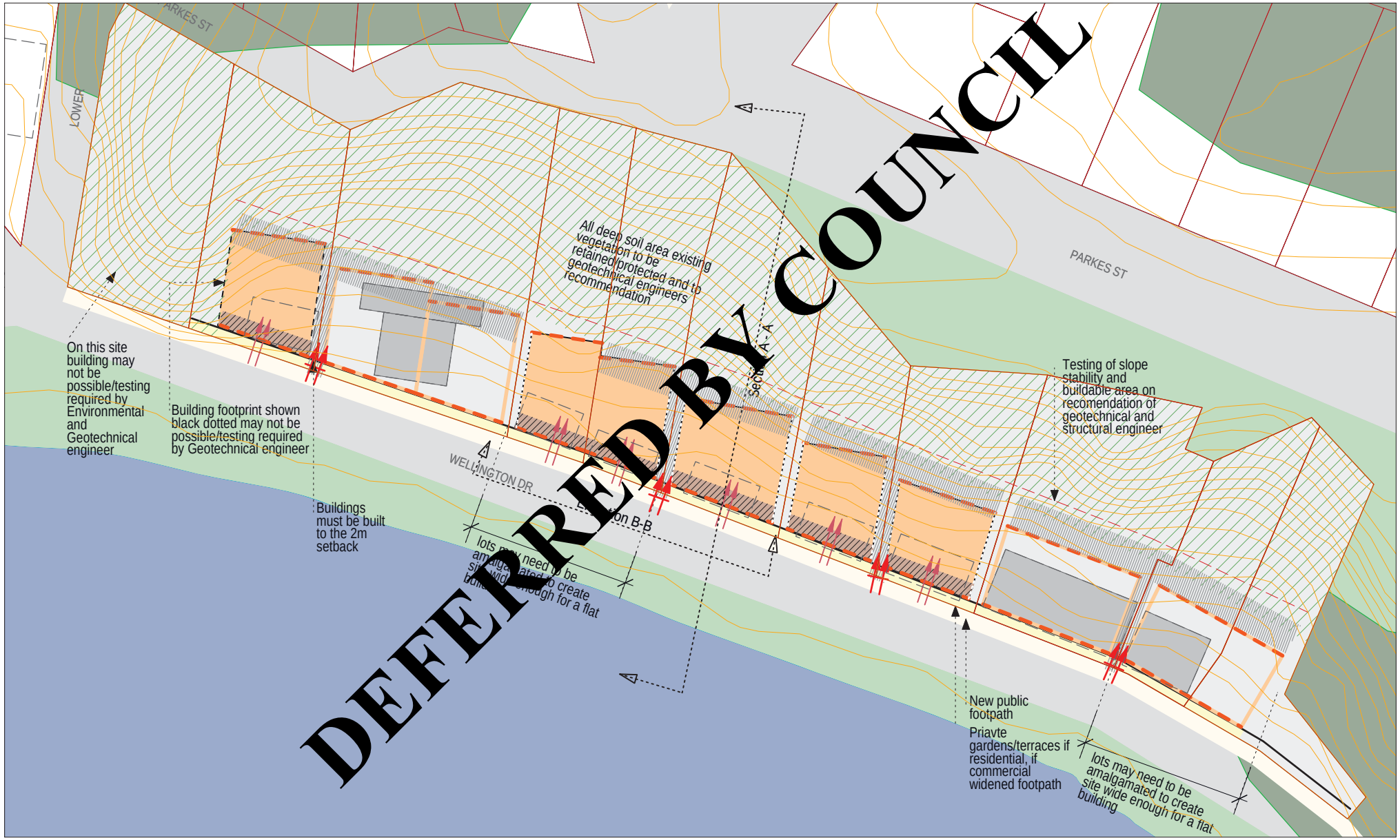
The street requires the addition of a generous public footpath on the northern side of the street.

This street section is iconic coastal street with excellent public access to an along the foreshore, this must be protected.

Bush needs to be retained on the cliff to retain the visual qualities of the location and to help with slope stabilization.

The image indicates how low lying sites are just above the high tide level.

sites on wellington drive - structure plan controls



KEY

Ground Level

- Existing buildings footprints likely to be demolished/redeveloped
- Existing strata building unlikely to be redeveloped
- Residential flat building indicative footprint (extend to be recommended by geotechnical engineer)
- Possible indicative new residential flat building footprint
- Either private gardens/terraces if residential or a widened footpath if commercial
- Shared car access and driveways
- Indicative location for main pedestrian entries/must occur along this boundary
  Indicative location for pedestrian entries to ground floor dwellings/must occur along this boundary
- Orientation of primary windows
- 2m Building setback for at least 80% of the elevation
- Car access to lots
  Shared ramps and driveways are encouraged
- Indicative area for deep soil zones. To occur within the front setback and to the rear of the site
- Side boundary setbacks are to be minimised whilst achieving BCA and minimum separation distances
- Balconies and external living areas generally facing the front of the lot

The study area includes all buildings east of Lower Parkes Street along Wellington Drive.

The sites have extreme difference in topography; the bottom third of sites is flat and just above sea level, the top two thirds of sites is at around a 45 degree slope with heavy vegetation.

The recommended future height of 20m (in the DCP 3 review by Sutherland Koshy) will change the character of the precinct as most buildings are currently at 2 storeys with some at four storeys.

The key environmental issues are to ensure that:

- structural and geotechnical advice guides the capability of the land,

- part of the ground floor of the building is raised off the ground enough to protect from storm surge.

Principles

a. To ensure building form defines the streetscape.

b. To reinforce the importance of corner locations.

c. To reinforce the importance of streets rather than individual buildings.

d. To achieve residential and streetscape amenity.

e. To protect and improve the integrity of foreshore access.

f. To employ environmentally sustainable building design and economically viable commercial spaces.

g. To provide a building form that creates a distinctive and attractive street with a 6 storey form with a four storey base element and two levels set back.

h. To create a strong built edge along the street.

i. To create a quality coastal town atmosphere.

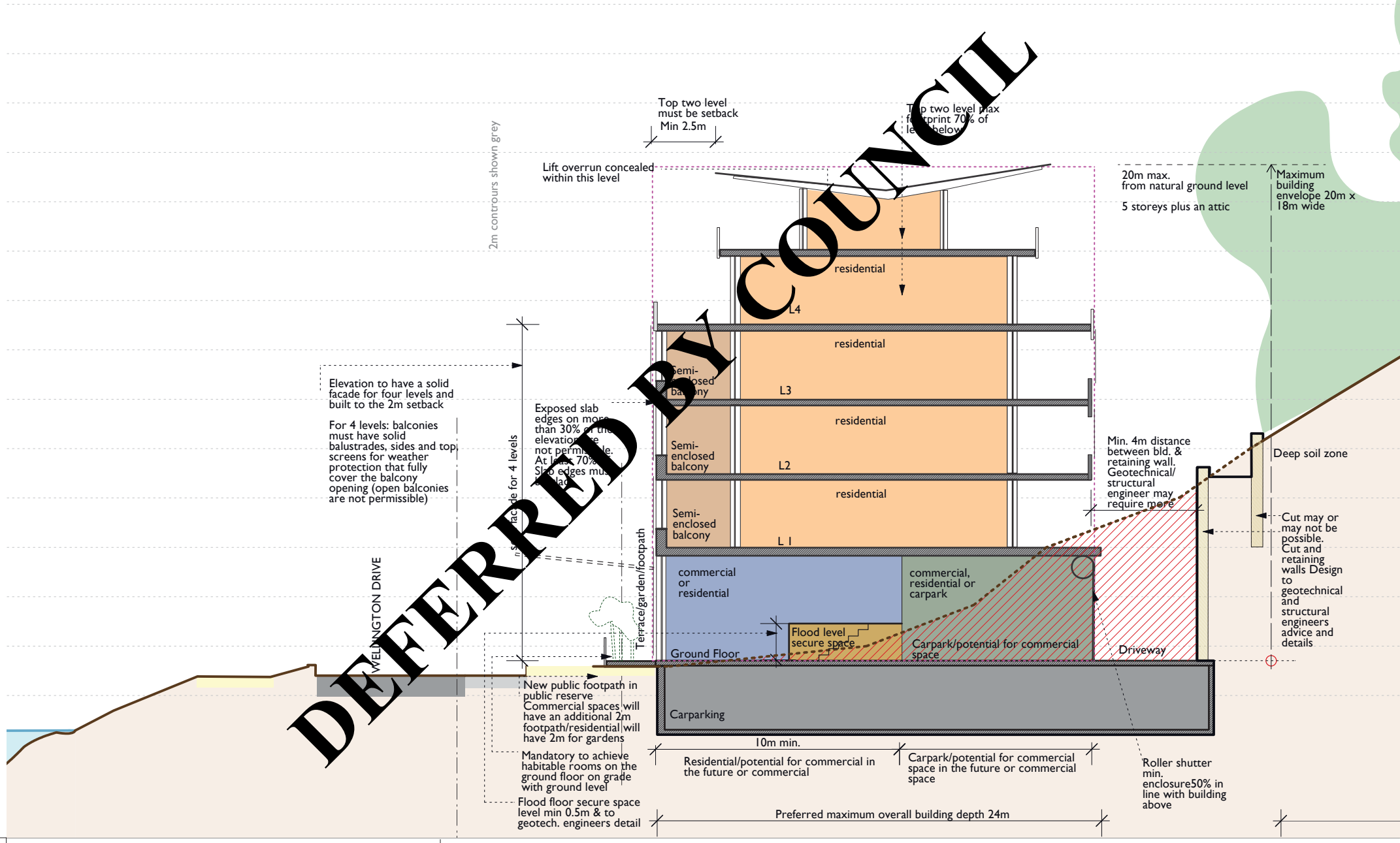
j. To create physical and visual connection between the footpath/street and the inside of the building at ground level.

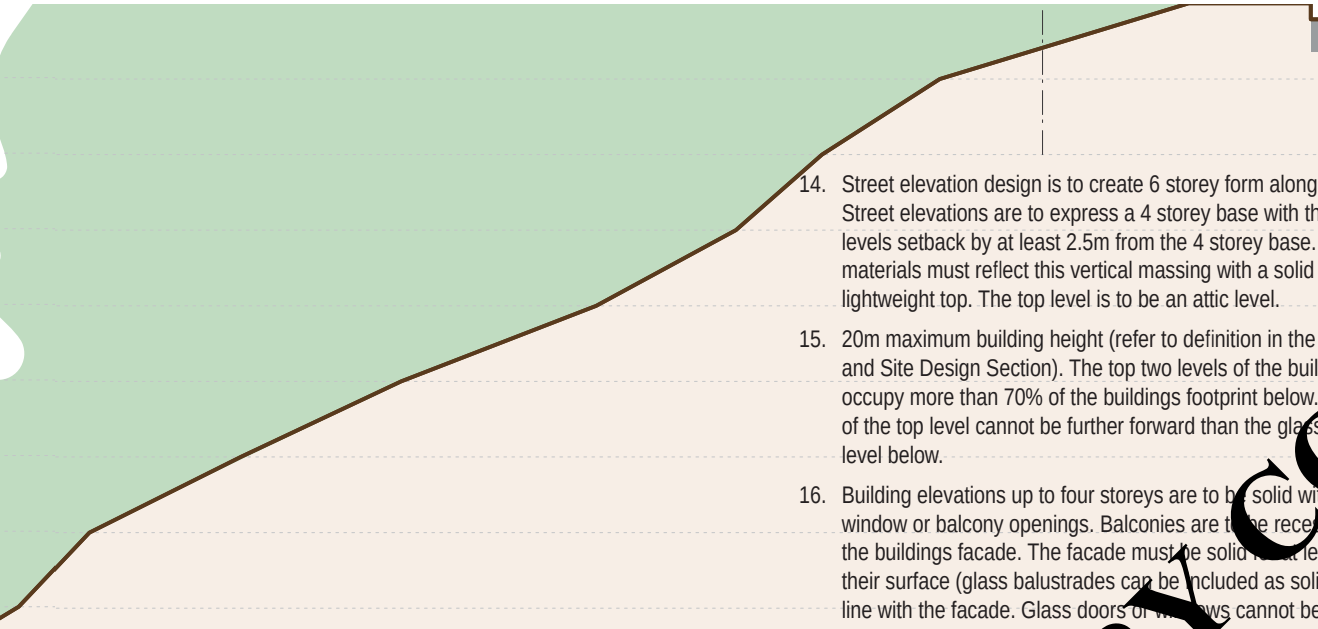
k. To provide direct pedestrian access from the street to ground level dwellings.

Controls

1. All written controls on the Structure Plan Control Drawing, the Control Elevation and Control Section must be achieved.
2. All Site and Building Design Controls must be achieved.
3. All proposals must be supported by environmental advice as to the suitability of the site for the scale of development proposed. Environmental issues to be addressed include: soil erosion, slope stability and flooding.
4. At least 30% minimum of the site must be deep soil area. A deep soil area must have a minimum dimension of 18% of the length of the site and a minimum depth of 8m.
5. Existing Vegetation on the embankment must be retained and enhanced.
6. Communal, shared or common space cannot occur between the building and the street expect for circulation spaces. Communal areas are to be located to the rear of the lot.
7. The front setback is to be used for private gardens/terraces. These are to have fences along the street for residential and a widened footpath for commercial. External ground level is to be accessible to the ground floor dwellings.
8. All ground level dwellings facing the street must have direct pedestrian access to the street.
9. Building are to be setback along Wellington Drive by 2m for at least 80% of the elevation.
10. Corner elements are to be solid on both street frontages for at least 300mm on each side.
11. Uses on the ground level for 10m back from the street setback are to be either residential or commercial.
12. The use on the ground level of the building to the rear can be carparking, commercial or residential.
13. All buildings have a reduced rate from the parking code. Carparking is required at the rate of 1 space per unit below 125m2 (Gross floor Areas); or 1.5 spaces per unit above 125m2 (Gross Floor Area). In addition to the above 1 visitor space per 5 units. Except for visitor spaces and disabled parking, stacked parking is allowed providing it is allocated to the same unit. Where GFA has the same definition as the Standard Instrument Principal Local Environmental Plan.

sites on wellington drive - section A-A controls





14. Street elevation design is to create 6 storey form along the street. Street elevations are to express a 4 storey base with the top two levels setback by at least 2.5m from the 4 storey base. Building materials must reflect this vertical massing with a solid base and a lightweight top. The top level is to be an attic level.
15. 20m maximum building height (refer to definition in the Building and Site Design Section). The top two levels of the building cannot occupy more than 70% of the buildings footprint below. The glass line of the top level cannot be further forward than the glass line of the level below.
16. Building elevations up to four storeys are to be solid with punched window or balcony openings. Balconies are to be recessed behind the buildings facade. The facade must be solid for at least 50% of their surface (glass balustrades can be included as solid where in line with the facade. Glass doors or windows cannot be included as solid). Where glass balustrades are used the opening must be able to be full enclosed for the full width and depth of the opening using screens, operable louvres, sunshades or the like.
17. Buildings must be built to minimum side boundaries necessary to achieve separation distances. Where there are no existing neighbouring building windows requiring separation the minimum separation distance (1.5m) must be met for at least 4m depth. Except for the top two levels which may be setback to a greater distance.
18. The internal space of the ground floor or balcony/terrace edges where the outside and inside of the building connect) there is to be no more than +/- 100mm off the finished ground level to ensure there is an easy transition from the inside to the outside of the building.
19. Building depth is to be in accordance with the NSW Residential Flat Building Code.
20. The primary windows of habitable rooms are to be oriented to the front (street) and the rear of the lot and to achieve the separation distances as set out in the Building and Site Design Controls.
21. All buildings must have a main or common ground level pedestrian entry from the street directly to the building either for individual dwellings or for the buildings.
22. For a building that is longer than 18m its massing must achieve a 4m break in the top two levels of the building between forms greater than 18m long eg. for a building that is 40m long the building massing could be 18m w by 20m h, then 4m w at 14m h, then 18m w by 20m h.
23. Vehicular access is to be perpendicular to the street. Driveways must minimise driveway widths as far as possible (preferred 4m).
24. Carparking must be fully underground along streets. Carparking can be above ground to the rear of the site not visible from the street.
25. Exposed slab edges are not permissible to more than 30% of the buildings street elevations and cannot occur on the first four levels.
26. Buildings must create a new public footpath at street level of minimum width 2.5m within the street reserve.
27. The lift overrun must be concealed with the attic level and under the roof.
28. Driveways and ramps into basement carparks visible from the street must have a shutter door with an enclosure ratio of 80%. It must be located in line with the main facade of the buildings 'base'.

Preferred Layout Guidelines

1. 2 apartments per lift per floor with two or three external walls to achieve natural light and ventilation to all rooms.
2. Driveways 4m maximum width.
3. Straight passage/main pedestrian entry from the street to the rear of the lot (to the communal space where this is provided) in order to achieve natural lighting and ventilation in circulation spaces.
4. Shared driveways and ramps are encouraged.
5. Building footprint depth 15m from glass line to glass line.
6. All garages on grade to have roller shutter in line with the building above.

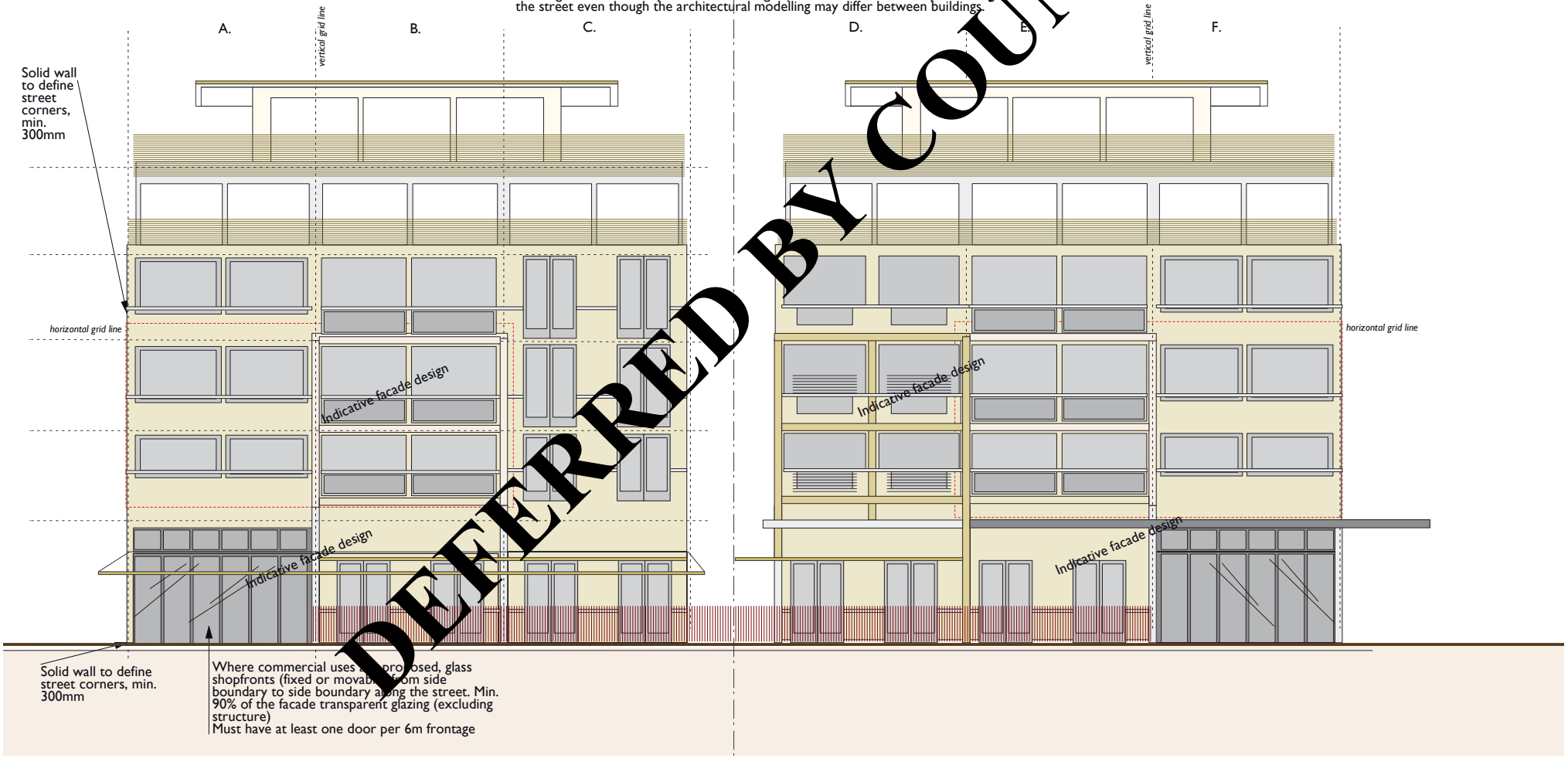
NOTE: Refer to Liston Street precedent images pages for precedents.

sites on wellington drive - structure plan controls

Elevations are designed within the same geometric grid giving consistency in terms of the height of parapets, windows, detailing, awnings and glass shopfronts but also provides for architectural variety.

Facades above ground level have min. 50% enclosure (including structure and glass balustrades)

Four indicative possible facade options A., B., C., D. showing degrees of enclosure and openning proportions that have similar vertical and horizontal proportions (this drawing shows one setup on a 3m x 6.5m grid) will create the same rhythm along the street even though the architectural modelling may differ between buildings.



Building and Site Design Controls - applicable to all sites

The building and site design controls deal with the detailed aspects of designing a commercial or mixed use development residential flat building.

For the most part site and building design controls are contained within other parts of DCP 3. Where conflicts occur between other Parts of the DCP and this Plan, then this Plan takes precedence.

Building Height

'Building Height (or height of building) means the vertical distance between ground level (existing) at any point to the highest point of the building, including plant and lift overruns, but excluding communications devices, antennae, satellite dishes, masts flagpoles, chimneys, flues and the like.'

NOTE: Variations to the maximum building height (ie. the 2.6m) may require approval as major projects under SEPP Major projects. Applicants should contact Council where variations are proposed

Permeable Site Area

The permeable site area is the total area of pervious surfaces within an allotment following completion of the development. Excessive impermeable areas on a lot can increase the volume of stormwater discharged off-site as it reduces the lands capability to infiltrate water in storm events.

Calculation Rules: The impermeable site area is calculated by adding up the area (in square metres) for each different type of ground surface that does not allow natural infiltration of rainwater. As some types of surfaces are only partially impermeable, it is necessary to multiply the area of the surface with an appropriate 'impermeability factor' as indicated.

Controls

1. An allotment's runoff shall be dispersed onto grassed, landscaped or infiltration areas, of the allotment, unless this is inconsistent with the geotechnical stability of the site or adjacent/downstream land.
2. The concentration, collection and piping of runoff to the street gutter or underground stormwater system shall be minimised unless this is inconsistent with the geotechnical stability of the site or adjacent/ downstream land.
3. Rain water shall be collected in tanks and reused.
4. Site surface depressions in landscaping are to be utilised for on-site detention and infiltration unless this is inconsistent with the geotechnical stability of the site or adjacent/downstream land.
5. Runoff is to be minimised, delayed in its passage and where possible accommodated within the landscape of the development site unless this is inconsistent with the geotechnical stability of the site or adjacent/ downstream land.
6. A schedule of the breakdown/calculation of impermeable site area must be submitted with the development application.
7. The maximum areas for pervious surfaces are:

   - 20% of the allotment - On lot sizes under 750m2 inclusive.

   - 30% of the allotment - On lot sizes greater than 750m2.

8. Surface type Material Impermeable factor

   Roof surfaces: Metal, tile, slate and other impermeable material 1.0; "Green roofs"/roof gardens 0.5

   Ground surfaces: Concrete/ paving (non-porous) 1.0; Gravel 0.75; Porous paving 0.5; Grid pavers 0.2; Deep Soil Zones 0.0; Landscaping/vegetation 0.0; Planting on structures 1.0/

   Decks: Concrete/ paving (non-porous) 1.0; Timber (over natural soil) 0.5; Swimming pools All types 0.50

Deep Soil Zones

1. All non mixed use sites are to provide two Deep Soil Zones, one to the rear and one to the front of the property. Mixed use sites only require a deep soil area at the rear of the lot.
2. Open space on site is to consist of: at least 30% of the site being total permeable site area including Deep soil zones. 10% minimum of the site must be deep soil area. A deep soil area must have a minimum dimension of 18% of the length of the site and a minimum depth of 8m. Deep soil areas must form a useable open space and are to be used for either/or/and communal open space and private open spaces.
3. Rear Deep Soil Zones are to have soft landscaping; refer to Landscaping Section.
4. Front Deep Soil Zones are to be the width of the site boundary minus the driveway width and the pathway width by the front setback depth.
5. Front Deep Soil Zone areas are to have soft landscaping, vegetation and trees.
6. Deep Soil Zones cannot be covered by impervious surfaces such as concrete, terraces, outbuildings or other structures.
7. Deep Soil Zones cannot be located on structures such as car parks or in planter boxes.
8. The Deep Soil Zone is included in the permable area calc.

Material, colours and facade treatment

All buildings

1. Walls: plywood; stained or natural finish, weatherboard profiles, bagged or rendered brick or blockwork, corrugated iron, or timber. Face brick not permitted more than max. 20% of the facade.
2. Colours of main walls of building: very light tones, preferred any shade of white or off white. Strong colours not permitted.
3. Detailing, windows and doors: timber or commercial grade aluminium frames, clear glass, aluminium or timber louvres. Contrasting colour to the wall preferred, can use strong colour on small detail elements (not lift shafts or walls).
4. Detailing ie. down pipes, handrails etc.:either the natural colour of the material or strong colour.
5. Parapet wall to conceal pitched roof behind it, from the main street.
6. Roofs: corrugated iron roof sheeting. Roof to be pitched to the rear or side boundaries. Corrugated iron roof sheeting is the preferred roofing material.

Building elevations to the rear of lots

1. Walls: plywood; stained or natural finish, weatherboard profiles, bagged or rendered brick or block work, corrugated iron, or timber. Maximum of 20% of external walls visible from the street can be face brick.
2. Detailing, windows and doors: timber or aluminium frames.
3. Colours: main walls of building to be light, muted and neutral tones.
4. Roofs: Roof to be pitched with pitching points facing the front boundaries. This will minimise bulk of roof being viewed from the street. Corrugated iron roof sheeting is the preferred roofing material.
5. Driveways: minimise driveway widths, single width preferred. Driveways that allow water to be absorbed into the site rather than to runoff into the street drainage will be encouraged. Options include permeable pavers or gravel/crushed rock driveways. If a concrete driveway is desired individual strips of concrete at wheel base is an option. If a full concrete driveway is desired coloured concrete is the preferred material. Stenciled finishes are not encouraged.
6. Articulation to the building facade/roof profile to reduce building bulk and provide for weather protection eg. verandahs, awnings, eaves and overhangs.
7. A mix of articulation, architectural elements and exterior finishes can reduce the scale and bulk of buildings is encouraged. Designs that use a mix of articulation, architectural elements and exterior finishes can reduce the perceived scale and bulk of buildings and are encouraged.

Separation Distances for residential flat buildings

1. Separation between residential and residential windows:

3m min.	between non-habitable room windows (this distance can be measured diagonally)
6m min.	between all other windows except the primary windows of living areas/balconies
9m min.	between primary windows of living areas/external living areas and all other windows except between the primary windows of living areas/ external living areas
12m min.	between primary windows of living areas/external living areas and primary windows of living areas/external living areas for buildings up to and including four storeys
16m	between primary windows of living areas/external living areas and primary windows of living areas/external living areas for buildings over four storeys

Separation between residential and commercial windows:

3m min.	between all other windows except the primary windows of living areas/balconies and non-habitable commercial (service areas)
3m min.	between all other windows except the primary windows of living areas/balconies and commercial (office space)
9m min.	between primary windows of living areas/balconies and commercial (office space) and between service areas
3m min.	between non-habitable room windows (both commercial and residential)

Separation between commercial windows:

6m min.	between commercial (office or retail space)
3m min.	between non-habitable commercial (service areas)

Note: where no neighbouring windows look onto the site or do not encroach into the required separation distances then setback distances are to be provided off the side boundaries. These are to be half the separation distances.

Calculation Rules: Separation

- *Building orientation refers to the direction of the external face of the building that provides the primary source of light, air and outlook both residential uses (living room windows/doors and external living areas) and commercial uses (office or shop windows).*
- *The measurement is to be taken from the windows/doors of the living room that give the rooms its primary source of outlook, light and air. Living areas include living rooms and external living areas such as balconies and terraces. For an external living area the measurement is taken from the outermost point of the balustrade.*
- *Primary windows: For living rooms that have more than one orientation, the orientation that provides the primary source of light, air and outlook is only required to be used and is described in the controls as primary windows.*
- *All other windows: This includes bedroom windows and windows to non-habitable rooms. Living rooms that have a second orientation can also provide outlook, light and air to the room but in the case that greater privacy is required these windows/ doors can be of translucent material, fixed, shuttered, high windows or vertical or horizontal slit windows.*

Ceiling Heights

1. 2.7m min. floor to ceiling for habitable rooms in residential uses - for levels above ground.
2. 3.5m min. floor to ceiling for habitable rooms in commercial uses.
3. Min. floor to ceiling heights must be achieved.

Fences and walls

1. Front and return fences and walls are to be constructed of the same material and design. Fences may have a maximum height of 1.2 metres (ideally 1m) so long as the fence is an open fence with an openness ratio of at least 60%. The fence may have a solid base no higher than 600mm the remainder of the fence must have an openness ratio of 60%.
2. Side boundary fences between the front boundary and the front face of the building (return fences) are to be the same height, materials and design as the front fence.
3. Front and return fences are not to be Colorbond or timber paling.
4. Fencing shall be of open construction so that they do not impede the flow of water where required.

Active frontages for buildings with a ground level commercial use

The design of building frontages along the street is one of the most critical elements in ensuring the centre is an active and vibrant commercial area.

Active frontages are at ground level (the first level building elevations are also desirable) and include internal building spaces that have direct pedestrian access to the street and provide town centre activities. These activities include civic, community or entertainment and include: shops, cafes and entertainment venues such as cinemas. Active frontages do not include residential although foyers or entries to residential buildings can make up a small proportion of active frontages.

Active frontages have a high level of connection both physically and visually between the inside of the building and the street.

1. Locate ground levels on grade with finished footpath levels. On sloping sites the levels are to be on grade at entries but may vary elsewhere by up to +/-100mm.
2. Provide clear glazing to windows and doors from floor to ceiling at ground level. The sill height may not be more that 500mm above the adjacent street paving. Obscured glazing is not permitted.
3. Reinforce corner frontages on primary shopping streets with shop or office front windows. Splayed corners or entries on corners are not permitted.
4. Openable shop fronts for restaurants or cafes and the like are encouraged.
5. Outdoor restaurants, cafes and the like are encouraged.
6. Active ground floor uses provide pedestrian access from footpath level into the building.
7. First level active frontages are encouraged: signage, outdoor dining, openable frontages and retail activities looking onto the street.
8. Acceptable uses for primary shopping frontages include; Retail or the entry area to an entertainment or civic building, the entry area of residential or commercial premises.
9. One door (into entertainment, civic, community, commercial or retail uses) per preferred 6m (max. 10m) length of street frontage must be provided.
10. 95% of the building frontage is to be associated with retail uses; access into the building, display area, café and restaurant areas.
11. 95% of the street frontage is to have clear glass shopfronts including doors (excluding building structure, columns and beams).
12. Not more than 10% of the street frontage on a lot can have blank walls or service areas (excluding building structure, columns and beams).
13. Commercial and residential lobbies if accompanied by an entry and occupying less than 20% of the buildings street frontage can front the street.
14. No less than 90% of the building is to be aligned to the street boundary for ground and first level.

Protection from flooding

Controls

1. Where buildings are required to have their ground floor above ground level to counter flooding this raised floor must occur within the building envelope. Only 60% of the ground floor is required to be raised off ground level.
2. The raised part of the ground floor must be at least 4m distance from the buildings front (street) boundary to avoid blank walls along the street.