

Part 8 River Settlements

Introduction	1	8-3	
8.1 River Settlement Land8-5			
8.1.1	Desired Future Character	8-5	
8.1.2	Scale	8-6	
8.1.3	Setbacks	8-8	
8.1.4	Landscaping	8-16	
8.1.5	Open Space	8-17	
8.1.6	Sunlight Access	8-17	
8.1.7	Privacy and Views	8-18	
8.1.8	Design Details	8-19	
8.2 River Se	ettlement Uses	8-22	
8.2.1	Boat Sheds	8-22	
8.2.2	Water Recreation Structures	8-23	
8.2.3	Seawalls	8-27	
8.2.4	Tourist and Visitor Accommodation	8-29	
8.3 River Settlement Masterplans8-30			
8.3.1	River Settlement Masterplans - General	8-30	
	wra Waters Masterplan ern side)	8-31	
	wra Waters Masterplan tern side)	8-32	
Kang	aroo Point Masterplan	8-33	
Kang	aroo Point Masterplan	8-35	

Introduction

This Part of the DCP applies to land within the River Settlements of Hornsby Shire as indicated on Figure 8(a). The River Settlements are located along the Hawkesbury River (i.e. Milsons Passage, Dangar Island and parts of Brooklyn) and along Berowra Creek between Marra Marra Creek and Berowra Waters.

The planning controls for the River Settlements are informed by the *Hornsby Shire River Settlements and Foreshores Review (2007).*

Development within the River Settlements will be ecologically sustainable and will protect water quality, significant native flora and fauna, the natural topography and the scenic quality of the area. The disposal of effluent and grey water from buildings will be in a manner acceptable by Council that will not impact on water quality or downstream properties and waterway users (i.e. commercial and recreational fishers, swimmers, boaters).

Housing within the River Settlements will be consistent with the desired character and recognise the access, environmental and infrastructure constraints of the area. The population within the River Settlements will be restricted to levels which will not impact on the natural environment.

Commercial facilities will service the local residential population and the regional population who utilise the area for recreation and will recognise the access, infrastructure, and environmental constraints of the area. Tourism and tourist infrastructure will protect the natural resources that serve to attract tourists and the social environment of the area.

Community services and facilities will be provided in accordance with existing and future population thresholds and community preferences.

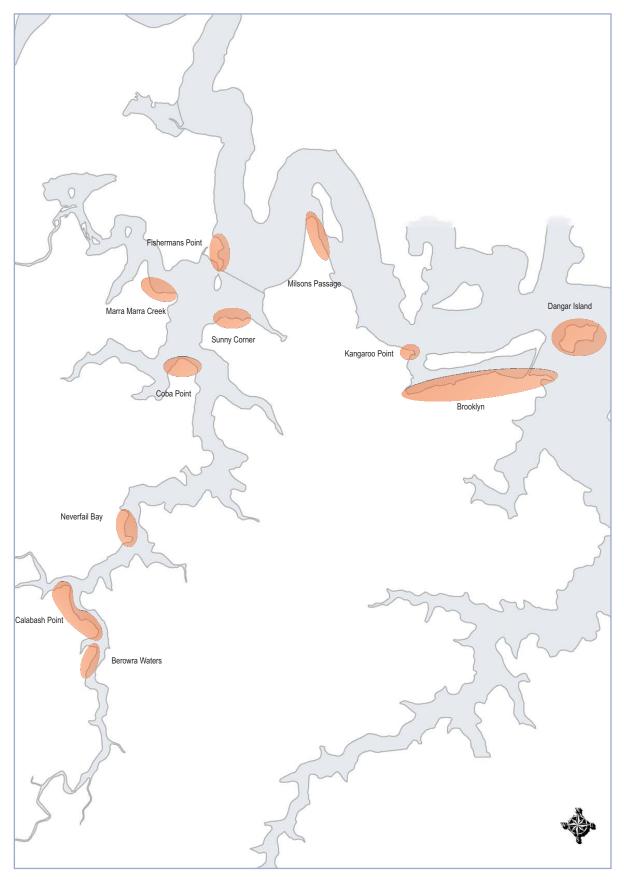


Figure 8(a): River Settlements of Hornsby Shire.(C)

8.1 River Settlement Land

The following section provides controls for the development of land zoned C3 Environmental Management, C4 Environmental Living, IN4 Working Waterfront and SP3 Tourist (Brooklyn).

8.1.1 Desired Future Character

Desired Outcome

a. Development that contributes to the desired future character of the area.

Prescriptive Measures

b. Development applications should demonstrate compatibility with the following statements of desired character:

Berowra Waters

Berowra Waters is dominated by the operations of the ferry crossing, commercial marinas and associated buildings on either side of the river. New development is sympathetic to the existing bushland and landscape setting. Dwellings are a mix of 1 and 2 storeys in height and respond to the natural topography. The scale of new development has a village atmosphere.

Brooklyn

Brooklyn continues to play a vital role in the maritime operations of the river, providing a transport interchange, maritime services facilities, commercial fishing, and a gateway for tourists, visitors and residents of the Hawkesbury River. Redevelopment of the foreshore area prioritises the retention of vegetation such as mangroves. Dwellings are a mix of 1 and 2 storey dwellings, with pole design homes stepping up the hillside on the southern side of Brooklyn Road.

Calabash Point

Calabash Point consists mainly of shallow building platforms terraced along the water's edge at the base of the escarpment. The topography of the area dictates that new houses are sited according to the natural landform, with pole design for steeper sites. New dwellings are generally 2 storeys in height. The water's edge retains the natural landform and limits the inclusion of urban elements, such as seawalls and swimming pools.

Coba Point

Coba Point has a mix of 1 and 2 storey dwellings nestled in the bushland along the foreshore. New dwellings take advantage of the sweeping views available north up the river, while blending in with the surrounding landscape. Roofs are low pitched or flat.

Dangar Island

Dangar Island is a unique bushland island settlement, essentially free of vehicular traffic, predominantly residential in use. Topography divides the island into 2 distinct parts - an open flatter more urban part and a steeply sloping bushland area. Dwellings in the flatter more open part of the site are 1 and 2 storeys in height. Development on the steeper bushland are of pole design with decks and undercrofts clinging to the hillside.

Fishermans Point

Fishermans Point remains an isolated settlement.

Dwellings are set on large lots surrounded by bushland.

Development is setback from the river and not readily viewed from the water.

Marra Marra Creek

Marra Marra Creek is an isolated river settlement set amongst the mangroves. The remoteness of the area reinforces the sparseness of development. New dwellings are single storey of modest design with a fibro or weatherboard appearance and pitched roofs.

Milsons Passage

Milsons Passage continues to be a relatively remote weekender style residential settlement. New dwellings are typically single storey elevated above the river level, with boat sheds, jetties and ramps lining the foreshore. Some new development on steeper land takes the form of pole homes with a fibro or weatherboard appearance and pitched roofs.

Neverfail Bay

Neverfail Bay retains a range of dwelling types. Traditional 1 and 2 storey development of weatherboard and fibro appearance with modest low pitched roofs are built on lower, more level areas. Elevated slopes incorporate pole homes with bushland settings. Native vegetation is retained to assist screen buildings and reduce overall scale.

Sunny Corner

Sunny Corner remains an isolated settlement. Dwellings are single storey either hugging the level river banks or setback in the bushland. Dwellings are screened by indigenous vegetation.

8.1.2 Scale

Desired Outcome

a. Development with a height, bulk and scale that protects and maintains the environmental and scenic qualities of the area.

Prescriptive Measures

Height

a. Sites with the following maximum building heights under Clause 4.3 of the HLEP should comply with the maximum number of storeys in Table 8.1.2(a).

Table 8.1.2(a): Translation of Height to Storeys

<i>HLEP</i> Area	Maximum building height (m)	Maximum Storeys
1	8.5m	2 storeys
K	10.5m	2 storeys
K	10.5m	2 storeys

- **b.** Buildings should not protrude above the predominant tree canopy.
- c. Two storey dwellings should:
 - have a maximum floor to floor height of 3.5 metres, and
 - be stepped in design with single storey on the waterfront and the 2 storey component towards the rear.
- d. Any part of a building within 5 metres of the Mean High Water Mark (MHWM) should be single storey.

Notes:

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

Storey means a space within a building that is situated between one floor and the floor level next above, or if no floor above, the ceiling or roof above, but does not include:

(a) a space that contains only a lift shaft, stairway or meter room, or

(b) a mezzanine, or

(c) an attic.

Mean high water mark means the position where the plane of the mean high water level of all ordinary local high tides intersects the foreshore, being 1.44m above the zero of Fort Denison Tide Gauge and 0.515m Australian Height Datum.

Floor Area

e. The maximum floor space ratio shall be in accordance with the HLEP Floor Space Ratio Map as follows:

Table 8.1.2(b): Summary of HLEP FSR Provisions

HLEP Area	Maximum Floor Space Ratio
A2	0.3:1
D	0.5:1

f. In addition to the above, the maximum floor area of buildings should comply with the following:

Table 8.1.2(c): Maximum Floor Area by Location

Location	Maximum Dwelling House Floor Area	
C3 Environmental Management Zone	Lot size 450m² to 599m² 600m² to 899m² 900m² or larger	Maximum floor area 330m² 380m² 430m²
C4 Environmental Living Zone	180m² for dwelling-houses, and 30m² for boat sheds	

Notes:

Floor area of a dwelling house includes carports, garages, balconies, patios, pergolas, terraces or verandahs which are attached to the house and have two enclosing walls of at least 1.4 metres above floor level. The calculation of floor area is the total of both the ground and upper floors (if there is one) not including awnings, eaves, voids, stairways or lift shafts.

As detailed in Clause 4.5 of the HLEP the Floor Space Ratio of buildings on a site is the ratio of the gross floor area of all buildings within the site to the site area. See the HLEP for the definition of Gross Floor Area.

Lot size (or site area) in relation to development, means the area of the lot to which an application for consent to carry out the development relates, excluding:

(a) any land on which the development is not permitted under an environmental planning instrument, and

(b) if a lot is a battle-axe or other lot with an access handle, the minimum lot size excludes the area of the access handle.

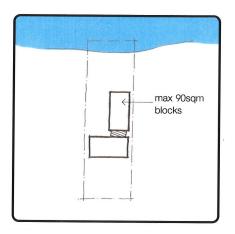
Site Coverage

g. The maximum site coverage of all buildings on a property in the SP3 Zone should comply with Table 8.1.2(d):

Table 8.1.2(d): Maximum Site Coverage - SP3 Zone

Lot size	Maximum site coverage (% of total lot size)
450m² to 899m²	50%
900m² to 1499m²	40%
1500m² or larger	30%

h. Dwellings in the C4 Environmental Living Zone should be broken up into small elements or pavillions with a maximum footprint in any single element of 90m² (see Figure 8.1(a)).



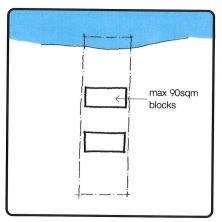


Figure 8.1(a): Buildings in the C4 zone are to be broken up into smaller 'elements' to ensure a more appropriate scale to the built structures along the waterway.(I)

Note:

Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- (a) any basement,
- (b) any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- (c) any eaves,
- (d) unenclosed balconies, decks, pergolas and the like.

8.1.3 Setbacks

Desired Outcomes

- a. Setbacks that are compatible with adjacent development and complement the riverine scenic quality.
- **b.** Setbacks that allow for canopy trees to be retained and planted along the front and rear property boundaries.

Prescriptive Measures

a. The minimum setback of all buildings and structures to the boundaries of the site should comply with Table 8.1.3(a):

Table 8.1.3(a): Minimum Boundary Setbacks

Boundary Setback	Minimum Building Setback
Waterfront Setback	see <i>HLEP</i> Foreshore Building Line Map and Clause 6.1
Primary Road Frontage	Local roads - 6m Dangar Road, Brooklyn - 0m Brooklyn Road, Brooklyn - 3m 43-75 Grantham Crescent, Dangar Island - 3m to road Riverview Ave, Dangar Island - on merit
Secondary Road Boundary	3m
Side Boundary	2m
Rear Boundary	1 storey element = 3m 2 storey element = 8m except if a rear building limit is prescribed in Figures 8.1(b) to 8.1(h).
	III Figures 6.1(b) to 6.1(fi).

- **b.** For the purpose of the setback controls, a 1 storey building or element is not to exceed a building height of 4.5 metres above existing ground level.
- c. For the purpose of the setback controls, the rear building limit means the location beyond which all buildings and structures should not extend, as measured from the site's foreshore boundary (i.e. any building should be located between the foreshore building line and the rear building limit).

Setbacks to Landscape Features

d. The setback of the building and ancillary structures from the property boundary may need to be increased to maintain landscape features, as detailed in Section 8.1.4 of this DCP.

Setback Encroachments

- e. Development may be permitted between the Foreshore Building Line and the Mean High Water Mark (MHWM), where it complies with Clause 6.1 of the HLEP 2013.
- f. Fencing that complies with 8.1.4 of the DCP.
- g. Swimming pools and spas that are above ground or require retaining walls and/or seawalls should not be located between the MHWM and the building.

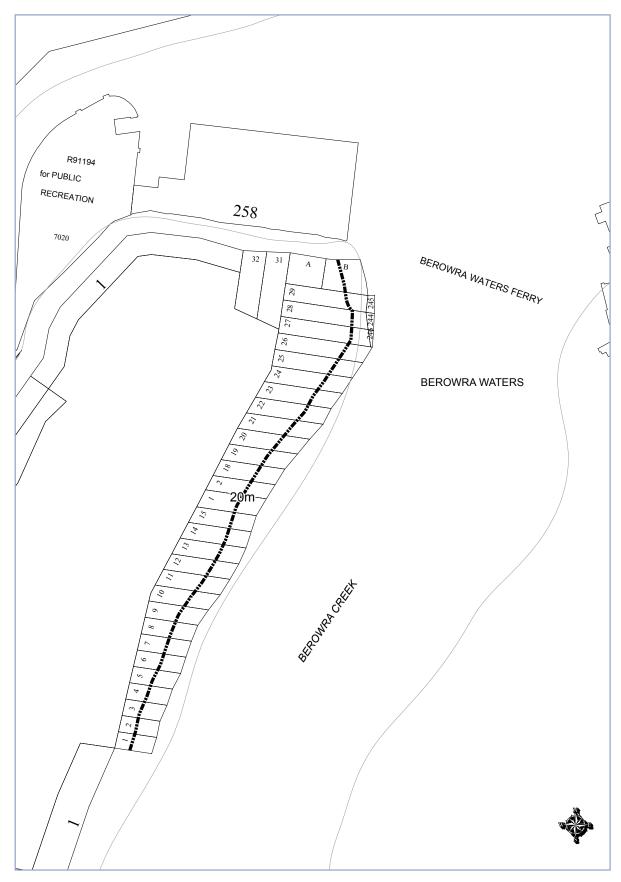


Figure 8.1(b): Rear Building Limit - Berowra Waters.(C)

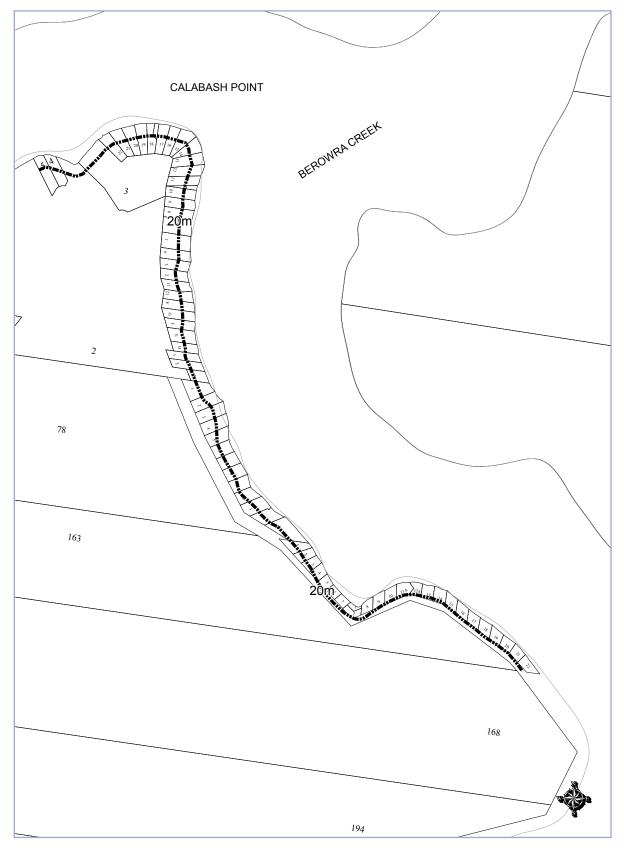


Figure 8.1(c): Rear Building Limit - Calabash Point.(C)

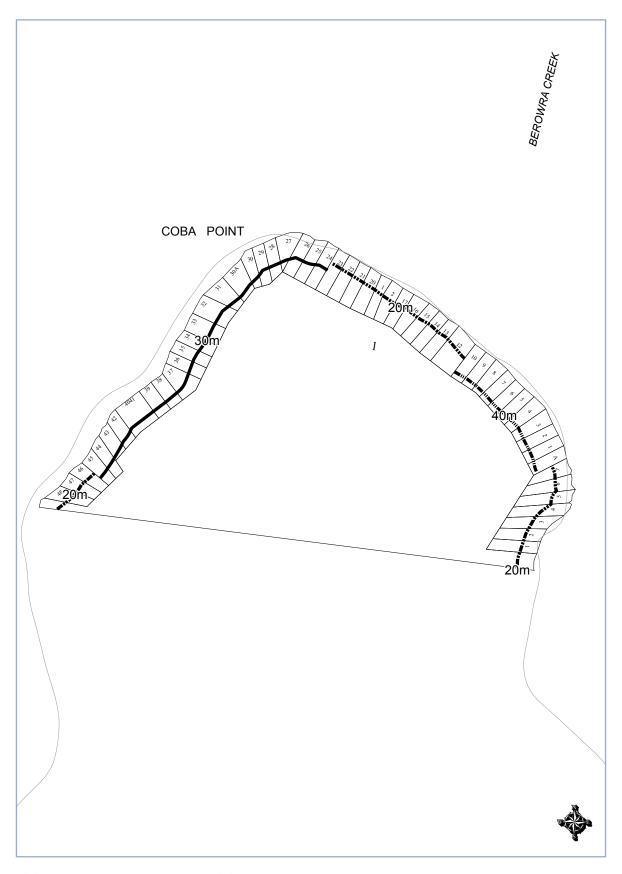


Figure 8.1(d): Rear Building Limit - Coba Point.(C)

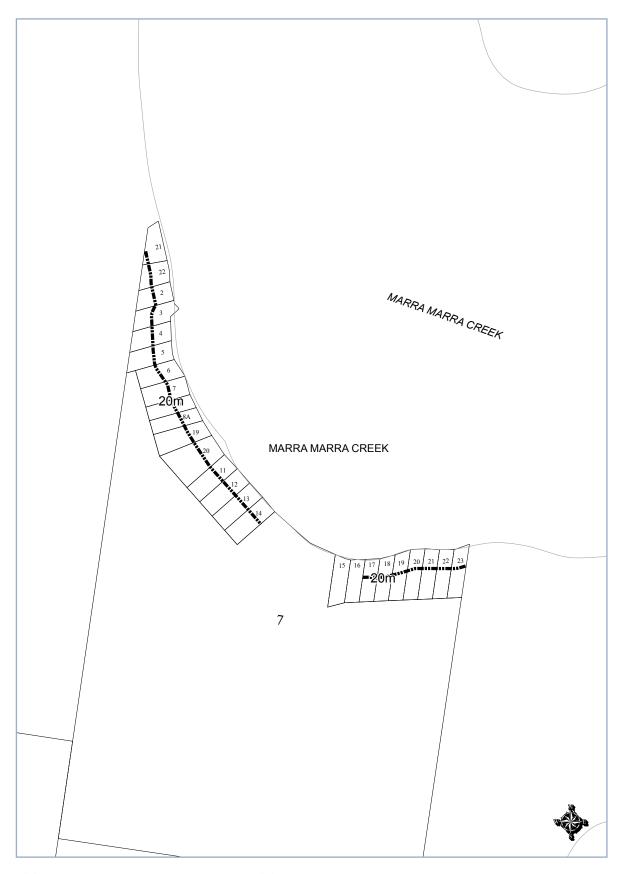


Figure 8.1(e): Rear Building Limit - Marra Marra Creek.(C)

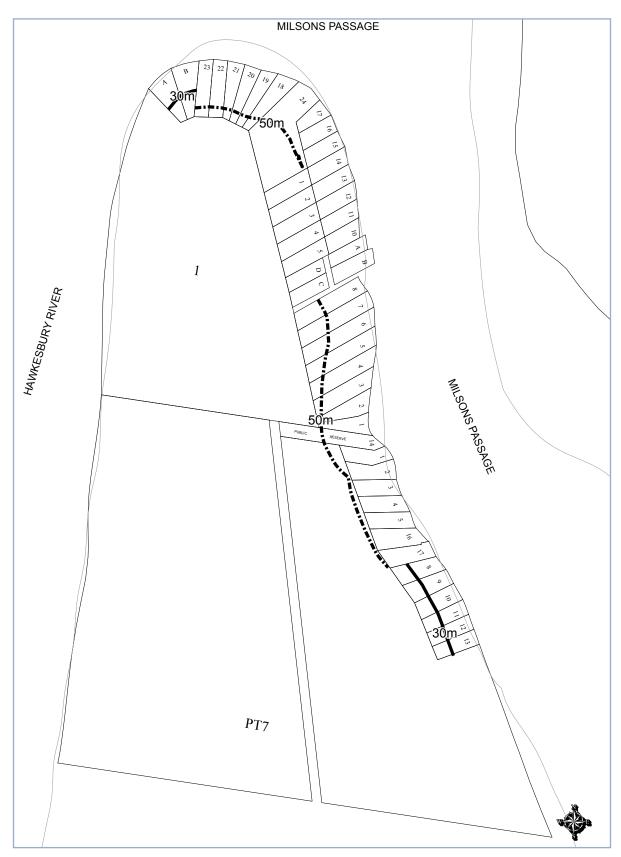


Figure 8.1(f): Rear Building Limit - Milsons Passage.(C)

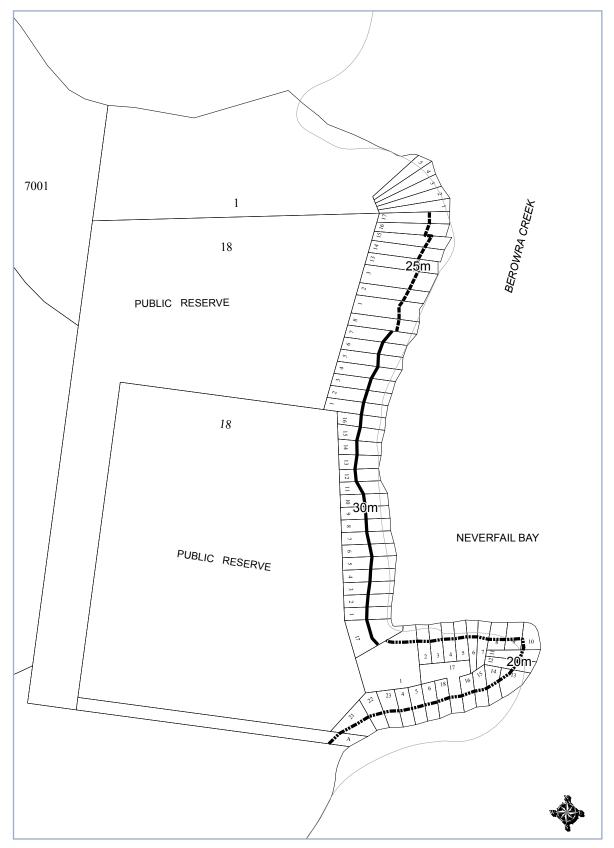


Figure 8.1(g): Rear Building Limit - Neverfail Bay.(C)

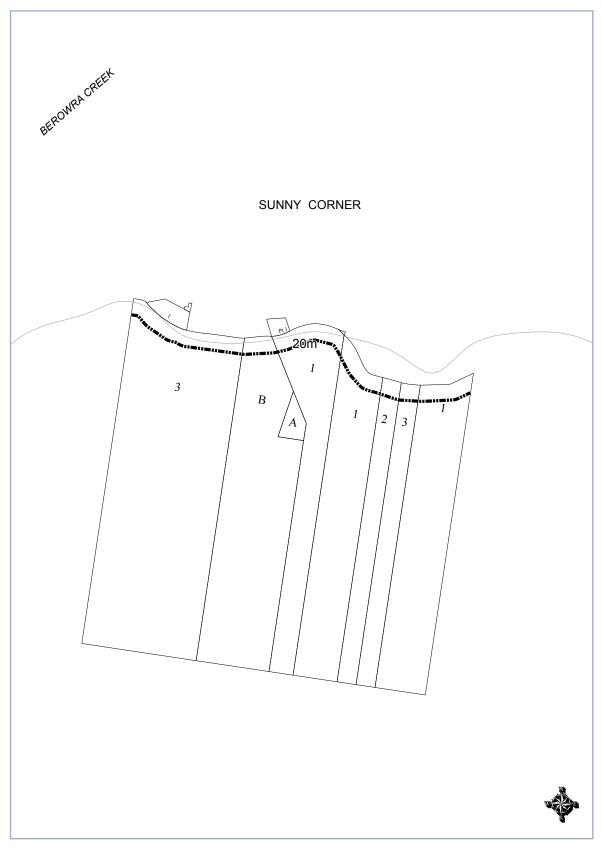


Figure 8.1(h): Rear Building Limit - Sunny Corner.(C)

8.1.4 Landscaping

Desired Outcomes

- a. Landscaping which screens building undercroft areas.
- **b.** Landscaping that retains the natural landscape features of the riverine scenic areas.

Prescriptive Measures

General

- a. Setback areas should be landscaped and designed to:
 - retain indigenous bushland and landscape features as prescribed in Part 1 of this DCP,
 - retain indigenous trees and comply with AS 4970,
 - incorporate the planting of indigenous species rather than lawns, and
 - not be terraced or contain retaining walls unless it is demonstrated necessary to achieve a high quality built outcome or to reduce erosion. Where retaining walls or terracing is proposed, rough stone, natural timber or other natural materials which blend with the landscape should be used. Such work should not disturb remnant bushland, particularly on the foreshore.

Fencing

- b. To maintain the riverine scenic quality of the area and facilitate the sharing of views, fences should not be constructed between the building and the water. Visual separation between dwellings should be achieved through landscape planting.
- **c.** Fencing is discouraged along Riverview Avenue, to maintain the Island's bushland character.
- **d.** Where required, fences should be constructed from lightweight materials and dark neutral tones. Colorbond fencing is discouraged.

Note:

Applicants are encouraged to incorporate species from Council's publication *Indigenous Plants for the Bushland Shire* available at Council's website hornsby.nsw.gov.au as part of the development.

Stairs and Inclinators

- e. Stairs and inclinators should:
 - on steep sites be constructed to sit above the natural ground line and not be formed by terracing the natural topography (see Figure 8.1(i)),
 - be constructed from lightweight elements such as timber or steel with no solid masonry or concrete (see Figure 8.1(j), and
 - be painted in dark neutral tones.
- f. Inclinators should also:
 - be kept to a minimum length and the inclinator rail should be kept as close as possible to the natural ground level,
 - avoid being adjacent to the windows and private outdoor areas of buildings on adjoining properties,
 - avoid a motor that is audible from within the nearest habitable room of any adjacent premises (windows open), and
 - avoid glare and light spill.

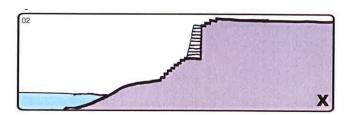


Figure 8.1(i): New access stairways should not cut into the landform. This approach disrupts indigenous vegetation and watercourses and increases the risk of soil erosion.(I)

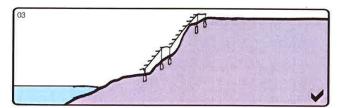


Figure 8.1(j): New access stairways should have minimal disruption to the landform. They should be lightweight and constructed from steel or timber.(I)

8.1.5 Open Space

Desired Outcomes

a. Private open space that functions as an extension to the dwelling house.

Prescriptive Measures

Principal Private Open Space

a. A dwelling house should be provided with private open space that incorporates a principal private open space area in accordance with Table 8.1.5(a).

Table 8.1.5(a): Minimum Private Open Space

Lot width at Building Line	Minimum Principal Private Open Space Area	Minimum Dimension
6-9m	16m²	3m
10m or larger	24m²	3m

- b. The principal private open space area should be:
 - sited behind the front building line,
 - directly accessible from the living area of the dwelling, and
 - generally level and comprise verandahs, balconies or elevated decks on steep or sloping sites rather than lawned areas.
- **c.** Private open space should be located to respect the natural topography of the land and should not be formed from cut and fill.

Clothes Drying Area

d. Each dwelling house should have access to an external air clothes drying area, in addition to the minimum principal private open space area. This is to be screened from public areas.

8.1.6 Sunlight Access

Desired Outcomes

 a. Development designed to provide solar access to open space areas.

Prescriptive Measures

- a. On 22 June, public open space areas, plaza areas and footpaths should receive 2 hours of sunlight between 9am and 3pm.
- **b.** On 22 June, 50 percent of the principal private open space area should receive 3 hours of unobstructed solar access between 9am and 3pm.
- c. On 22 June, 50 percent of the principal private open space on any adjoining property should receive 3 hours of unobstructed solar access between 9am and 3pm.

Note:

SEPP - BASIX 2004 requires a BASIX certificate for new dwellings to facilitate energy efficient housing.

8.1.7 Privacy and Views

Desired Outcomes

- a. Development designed to provide privacy to adjacent residential properties.
- **b.** Development designed to ensure that views of the waterways are shared.

Prescriptive Measures

General

- a. Development should allow for the reasonable sharing of significant views, including water views and iconic views, in particular:
 - views that have not already been obscured,
 - views from front and rear boundaries whilst in a standing position, and
 - views from living and entertainment areas (including kitchens).
- **b.** Development should allow for the reasonable sharing of significant views by:
 - appropriately siting the building,
 - appropriately designing the bulk of the building,
 - using open materials for balustrades on balconies and decks
 - new landscaping comprising a light open foliage, and
 - incorporating the design details in Section 8.1.8.

Note:

View Sharing - Consistent with Planning Principles endorsed by the Land and Environment Court, where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable. Whereas, with a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable. For planning principles on view sharing refer to case *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 available on the NSW Land and Environment Court website at www.lawlink.nsw.gov.au.

Residential

- **c.** Living and entertaining areas of dwelling houses should be orientated towards the river and/or private open space of the dwelling-house and not side boundaries.
- **d.** A proposed window in a dwelling house should have a privacy screen if:
 - it is a window to a habitable room, other than a bedroom, that has a floor level of more than 1 metre above existing ground level,
 - the window is setback less than 3 metres from a side or rear boundary, and
 - the window has a sill height of less than 1.5 metres.
- e. Decks and the like that need to be located more than 600 millimetres above existing ground level should not face a window of another habitable room, balcony or private open space of another dwelling located within 9 metres of the proposed deck unless appropriately screened.

Commercial

f. For development at the interface of a commercial area and a residential area, development should encourage views from the commercial area to the horizon rather than downward onto residential areas.

Note:

Views from private dwellings considered in development assessment are those available to an observer standing 1 metre from a window or balcony edge (less if the balcony is 1 metre or less in depth).

8.1.8 Design Details

Desired Outcomes

- **a.** Building design that complements the desired character of the River Settlements.
- b. Building design that is sympathetic to the topography of the site and limits large substructure areas that are visible from the waterway and public areas.
- **c.** Development that incorporates environmentally sustainable design and construction.

Prescriptive Measures

General

- a. Development should be designed to:
 - be consistent with the desired character of the area and dominant design themes within the immediate area, including roof pitch, materials, colours, textures and window placement,
 - address all river and street frontages,
 - have a maximum cut and fill of 1 metre from existing ground level,
 - retain public access to the foreshore,
 - maintain existing commuter berthing facilities, and
 - ensure minimum impact on the waterways water quality and downstream users.
- b. Dwelling houses should be designed to:
 - incorporate pole or pier construction methods on steeply sloping sites,
 - limit the visual impact of large undercrofts that are visible from the waterway and public areas,
 - be sited on the lower foot slopes of allotments in the River Settlements rather than on ridge lines, and
 - reduce the perceived building bulk by avoiding large unbroken roof planes, and incorporate lightweight features to articulate the facade, such as verandahs, decks, awnings and screens.

- c. Commercial buildings should be designed to:
 - provide active commercial ground-floor uses that are at the same general level as the public footpath and are accessible directly from the public domain,
 - provide frontages on upper levels that facilitate passive surveillance of the street,
 - distinguish between the commercial and any residential component of the development in terms of building entries and private, communal and public open space,
 - identify a safe, clear and direct pedestrian entrance to the building from the primary street frontage,
 - incorporate awnings that relate to the architecture of the facade and provide for continuous shelter for pedestrians, and
 - embody active living principles.

Materials and Colours (C3 and C4 Zones)

- d. Buildings should be of lightweight timber and steel construction with a weatherboard and fibro cement appearance and corrugated iron roofing.
- **e.** Solid masonry, brick or stone buildings and terracotta or slate roofing is discouraged.
- f. Louvred windows are encouraged.
- **g.** Buildings should be painted in dark, neutral tones. Primary colours should not be used.
- h. Bright or light colours (excluding white) should only be used in small areas of buildings as highlights.

Notes:

Building design should have regard to the scenic quality requirements of Sydney Regional Environmental Plan No. 20 which encourages small unobtrusive buildings and landscaping to screen and break up building appearance. It also precludes seawalls and the construction of fences to the waterfront.

To achieve active living principles development should have regard to NSW Health's *Healthy Urban Development Checklist* and the National Heart Foundation's *Blueprint for an Active Australia*.

Roof Forms (C3 and C4 Zones)

- i. Roofs should have a maximum pitch of 30 degrees and should not be curved as illustrated in Figure 8.1(k).
- j. Roofs should have a maximum single roof plane of 90m² in plan area as illustrated in Figure 8.1(I).
- **k.** Roofs should be constructed of lightweight materials such as metal deck roofing rather than roof tiles as illustrated in Figure 8.1(m).
- I. Habitable roof spaces are discouraged and dormer windows should not be incorporated into roofs as illustrated in Figure 8.1(n).





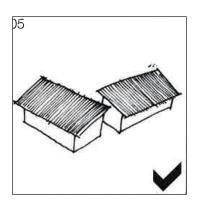


Figure 8.1(k): Metal roofs with a pitch equal to or less than 30 degrees are encouraged.(I)

Figure 8.1(I) Roofs should be 'broken' up into smaller areas.(I)

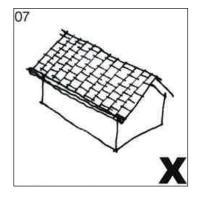






Figure 8.1(m) Tiled roof forms are strongly discouraged.(I)

Figure 8.1(n) Dormer windows should not be incorporated into roofs.(I)

Undercrofts

- m. Undercroft spaces with a vertical height at any point of more than 1.5 metres above existing ground level should not be enclosed.
- n. Any undercrofts below a height of 1.5 metres which are enclosed should be constructed of timber battens with a minimum 50 percent openings as illustrated in Figure 8.1(o)
- Undercrofts, including any plumbing or rainwater tanks located within, should be painted in dark recessive colours.
- p. Supports to habitable platforms above undercrofts should be setback a minimum of 2 metres from the leading platform edge to reduce the overall bulk and scale of the undercroft area as illustrated in Figure 8.1(p).

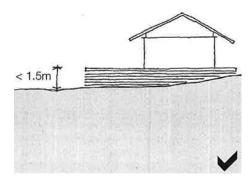


Figure 8.1(o)
Enclosed undercrofts below a height of 1.5 metres.(I)

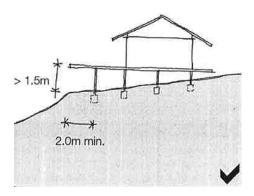


Figure 8.1(p) Location of supports to habitable platforms above undercrofts.(I)

8.2 River Settlement Uses

The following section provides controls for ancillary uses and works in the River Settlements.

8.2.1 Boat Sheds

Desired Outcomes

a. Boat sheds which are modest in scale and only used for the storage and routine maintenance of boats and other maritime goods.

Prescriptive Measures

General

- a. Boat sheds should be designed and located to:
 - be sited above the MHWM,
 - be single storey with a maximum height of 3.6 metres to the ridgeline,
 - have a maximum floor area of 30m2, and
 - the frontage of the boat shed (facing the water) should not be more than half the depth of the shed (see Figure 8.2(a)).
- b. Boat sheds should not contain any services not associated with maritime activities, including kitchens, living areas, bedrooms or any other living facilities.



Figure 8.2(a) Boat shed design.(C)

Building Facades and Roof Forms

- c. Boat sheds should be constructed of lightweight materials, preferably of timber and weatherboard appearance in nautical colours (whites, creams, greys and blues). Solid masonry or stone boat sheds are discouraged.
- d. Boat sheds should have a maximum glazed component of 30 percent in the facade adjacent to the waterway.
- e. Openings onto the waterway should be large enough to facilitate the movement of boats but not consist of sliding glass doors or bi-folding doors.
- f. Boat shed roofs should be gabled with a roof pitch of approximately 30 degrees.

Notes:

Boat shed means a building or other structure used for the storage and routine maintenance of a boat or boats and that is associated with a private dwelling or non-profit organisation, and includes any skid used in connection with the building or other structure.

Boat shed design should incorporate best management practices and accommodate materials for the containment, collection and off site disposal of products associated with boat maintenance.

For further information on management practices for boat shed operators refer to the Department of Environment and Climate Change (DECC) *Environmental action for marinas, boat sheds and slipways* (June 2007) guide on the Office of Environment and Heritage website at www.environment.nsw.gov.au.

8.2.2 Water Recreation Structures

Desired Outcomes

- a. Piers, wharves, jetties and boat launching ramps that are compatible with the built and natural elements of the area.
- **b.** Piers, wharves, jetties and boat launching ramps that maintain water flow and navigation channels.
- **c.** Piers, wharves, jetties and boat launching ramps that are located to provide safe, convenient and equitable access to the waterway.

Prescriptive Measures

General

- a. Waterway structures should be constructed using floating pontoons or pier construction methods to maximise the free flow of water beneath recreation structures. Wharves and jetties should not be constructed of solid fill.
- b. Elevated platforms or boardwalks are discouraged. Where required, platforms or boardwalks should not extend beyond the MHWM.
- c. To ensure safe charter, a detailed hydrographic survey should be submitted to demonstrate a minimum water depth of 600 millimetres at Indian Spring Low Water tide between the head of the waterway structure and recognised navigation channels.
- d. Waterway structures should be located in areas away from aquatic plants including seagrass beds and saltmarshes and retain mangroves.
- e. Where it is demonstrated that aquatic plants cannot be avoided, mitigation measures should be employed. For example, wharves and jetties should incorporate translucent or mesh walkways and pontoons to allow sunlight penetration.
- f. The location and length of waterway structures should be restricted to the limits illustrated in Figures 8.2(b) to 8.2(d) where appropriate to:
 - conserve public access to recreational assets, such as beaches,
 - maintain safe navigable channels,
 - maintain the visual amenity of the waterway, and
 - minimise impacts on the foreshore, aquatic and sensitive natural environments.

g. Where more than 2 permanent berths for boats of 8 metres length or greater are proposed, boat pumpout facilities should be provided.

Berthing Facilities for Dwelling-Houses

- h. The principal landing area of berthing facilities should not exceed 12m².
- i. The length of a waterway structure should not exceed the distance required to reach minimum navigable water depth (i.e. 600 millimetres at Indian Spring Low Water tide).
- j. Despite the above, a waterway structure may be constructed to a length that does not exceed the length of any existing waterway structure on the adjoining property.
- k. The length of a waterway structure should not adversely impact on aquatic and visual environments and/or obstruct navigation and commercial fisheries operational areas.
- I. Berthing facilities such as pontoons and wharves should be shared where possible by 2, or more, adjoining properties, with legal shared access rights.
- m. Where a berthing facility cannot be built at a property,1 off-shore residential mooring will be permitted.

Note:

Water recreation structure means a structure used primarily for recreational purposes that has a direct structural connection between the shore and the waterway, and may include a pier, wharf, jetty or boat launching ramp.

For further information on protecting aquatic habitats refer to the Fish Habitat Protection Plans on the NSW Department of Primary Industries website at www.dpi.nsw.gov.au.

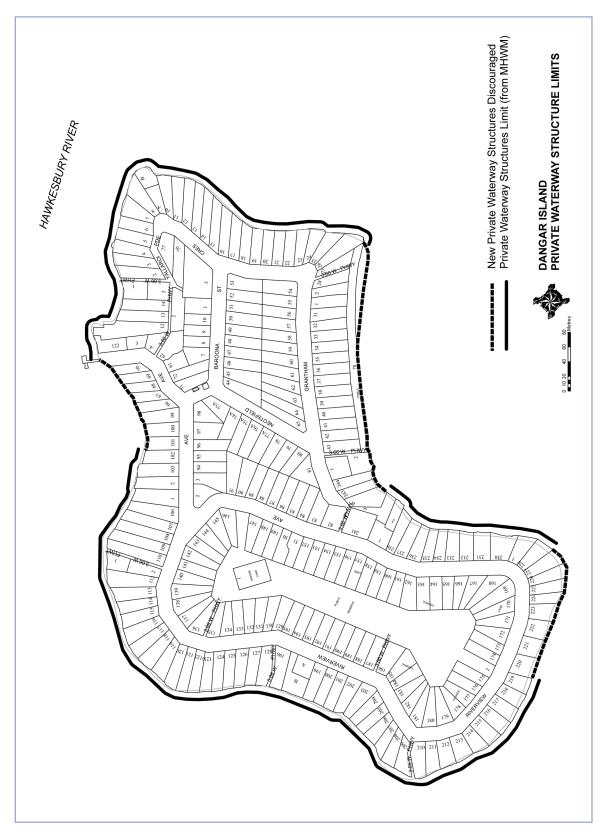


Figure 8.2(b) Dangar Island - Private Waterway Structure Limits (C)

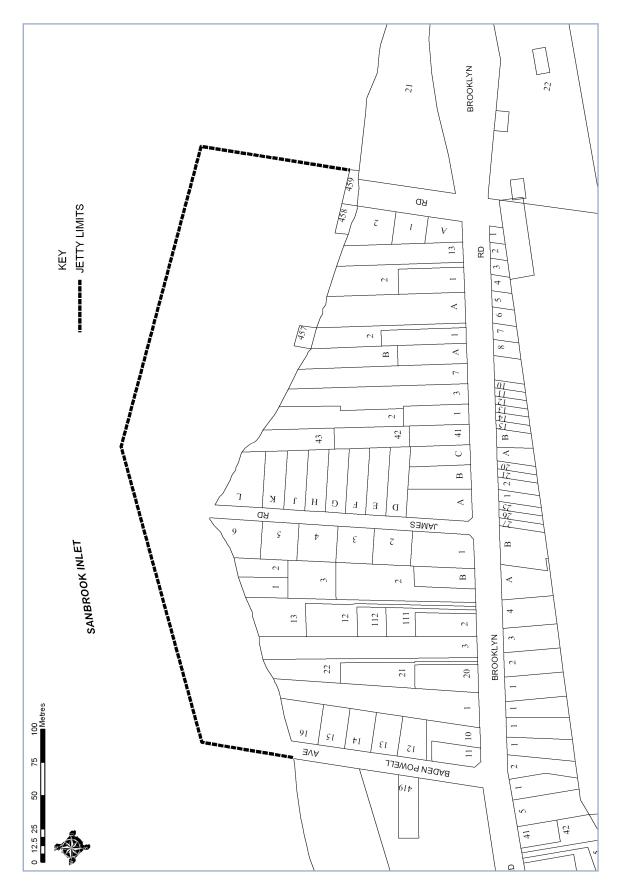


Figure 8.2(c) Brooklyn - Jetty Limits (C)

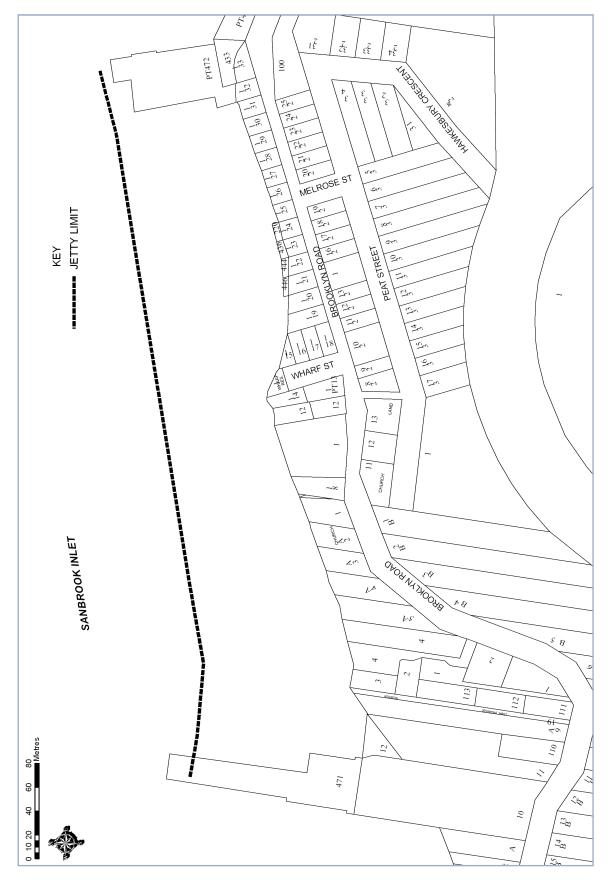


Figure 8.2(d) Brooklyn - Jetty Limits (C)

8.2.3 Seawalls

Desired Outcomes

- **a.** Seawalls constructed only in circumstances where it is necessary to protect improvements on properties.
- Seawalls that provide habitats for marine flora and fauna
- c. Seawalls that complement the landscape features of the natural riverine scenic area.

Prescriptive Measures

General

- a. To maintain the riverine scenic quality of the area, seawalls are discouraged where alternative options such as bank stabilisation with vegetation is available.
- b. Seawalls should not be used as part of any reclamation of the foreshore area. Material should not be dredged from the estuary for the purpose of providing material to backfill a seawall.

Location

- c. Seawalls should be located entirely within private property boundaries. Seawalls (including the 'toe') should not extend below the MHWM without written authority from the relevant Crown authority.
- d. Seawalls should not impede any public right of access.
- **e.** Seawalls should not affect the tidal flushing patterns of the estuary.

Note:

Development applications for seawalls should be accompanied by a report by an appropriately qualified person that addresses existing tidal patterns.

Consideration should be given to the Environmentally friendly seawall guidelines by the Department of Environment and Climate Change NSW.

Design

- f. Seawalls should reflect a slope that is commensurate with the surrounding natural landscape and should minimise wave reflection to prevent the transfer of bed and bank instability onto adjacent properties. Vertical walls have the greatest reflectance and should not be built (see Figure 8.2(e)).
- g. New seawalls should take account of the levels and layout of adjoining sites and achieve integration between adjoining sites (see Figure 8.2(f)).
- h. Seawalls should be no higher than is necessary to protect against:
 - Variations in tidal waters, and
 - Wave action caused by water craft.
- i. Seawalls should be designed to maximise habitat for marine flora and fauna through the provision of small horizontal shelves, pools, crevices and the like.

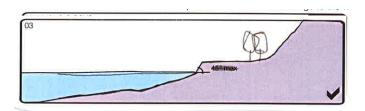


Figure 8.2(e) Vertical seawalls provide an intrusive built edge to the waterway. Seawalls should have a slope commensurate with the surrounding natural landscape.(I)

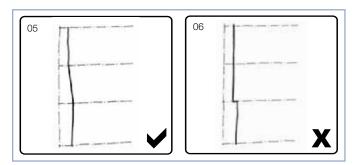


Figure 8.2(f) Seawalls should mediate in plan between adjoining conditions. At no point should a seawall create a physical step in plan.(I)

Materials and Landscaping

- j. Seawalls should be constructed of permeable materials such as sandstone and not mortar, solid masonry or poured in-situ concrete. Mortar should only be used for the addition of ecological features (such as ecological pools and horizontal shelves) (see Figure 8.2(g)).
- k. Seawalls should not restrict planting of riparian vegetation or impede the potential for estuarine vegetation to recolonise. Incorporation of estuarine vegetation, such as seagrasses, mangroves and saltmarshes into seawall design is encouraged.

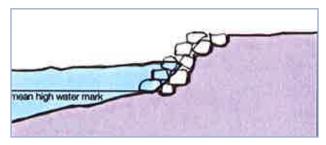


Figure 8.2(g) Seawalls should be constructed from rough sandstone blocks. The nature of the material reduces the wash, provides a habitat for marine flora and fauna while presenting a more natural shoreline.(I)

8.2.4 Tourist and Visitor Accommodation

These controls apply to Bed and Breakfast Accommodation and Short-Term Rental Accommodation (comprising short-term holiday letting of dwelling-houses).

Desired Outcome

- **a.** Tourist and visitor accommodation that is compatible in scale and character with development in the locality.
- b. Tourist and visitor accommodation that provides adequate facilities and services for occupants and are located and designed to minimise amenity impacts on the locality.

Prescriptive Measures

General

- **c.** A single sign should be displayed in public view within the property boundaries that:
 - has a maximum area of 0.5m2,
 - includes details of the land use, name(s) of the owner/establishment and 24 hour contact phone number, and
 - should not be illuminated.
- d. In unsewered areas, it should be demonstrated that the existing sewage management system is adequate for the proposed use or will be upgraded.
- e. Active recreation facilities, such as barbeque areas, should be located away from the bedroom areas of adjoining dwellings.
- f. If relevant, a bushfire evacuation plan should be submitted with the development application showing means of evacuation in an emergency. The bushfire evacuation plan should be displayed within the dwelling or sleeping rooms.

Bed and Breakfast Accommodation

- g. Bed and breakfast accommodation should:
 - be undertaken by the permanent residents of the dwelling-house,
 - be on a short-term basis, and
 - comprise a maximum of 3 bedrooms catering for a maximum of 6 guests.

Short-Term Rental Accommodation

- h. Short-term rental accommodation should:
 - be undertaken in a lawful dwelling,
 - be on a short-term basis (less than 90 days), and
 - comprise a maximum of 6 guests.
- i. A Code of Conduct to be signed and adhered to by guests should be prepared and submitted with the development application. The Code of Conduct should, at minimum, address the following responsibilities of guests during their stay:
 - maximum guest numbers,
 - contact number of the property manager including an after hours number,
 - noise and lighting restrictions for activities after 10pm,
 - instructions concerning recycling, garbage services and special requirements relating to the disposal of garbage, and
 - procedures in case of an emergency.

Notes:

The change of use of a dwelling to tourist and visitor accommodation may require a change of classification under the Building Code of Australia (BCA). This may require significant fire upgrading work and disabled access provision to the building.

Bed and breakfast accommodation means an existing dwelling in which temporary or short-term accommodation is provided on a commercial basis by the permanent residents of the dwelling and where:

- (a) meals are provided for guests only, and
- (b) cooking facilities for the preparation of meals are not provided within guests' rooms, and
- (c) dormitory-style accommodation is not provided.

Short-term rental accommodation differs from bed and breakfast accommodation in that visitors of the latter are hosted by the permanent residents of the dwelling where the former has no onsite manager. It is otherwise known as short-term holiday letting.

Proponents of tourist and visitor accommodation should have regard to the *Guidelines for Bed and Breakfast Operations* available on the Local Government and Shires Associations of NSW website at www.lgsa.org.au.

For further information on preparing a Holiday Rental Code of Conduct, refer to the best practice publication *Holiday Rental Code of Conduct - Version 1* (March 2012) available at destinationnsw.com.au.

8.3 River Settlement Masterplans

8.3.1 River Settlement Masterplans - General

Desired Outcome

a. Orderly development that is consistent with the principles in the River Settlement Masterplans.

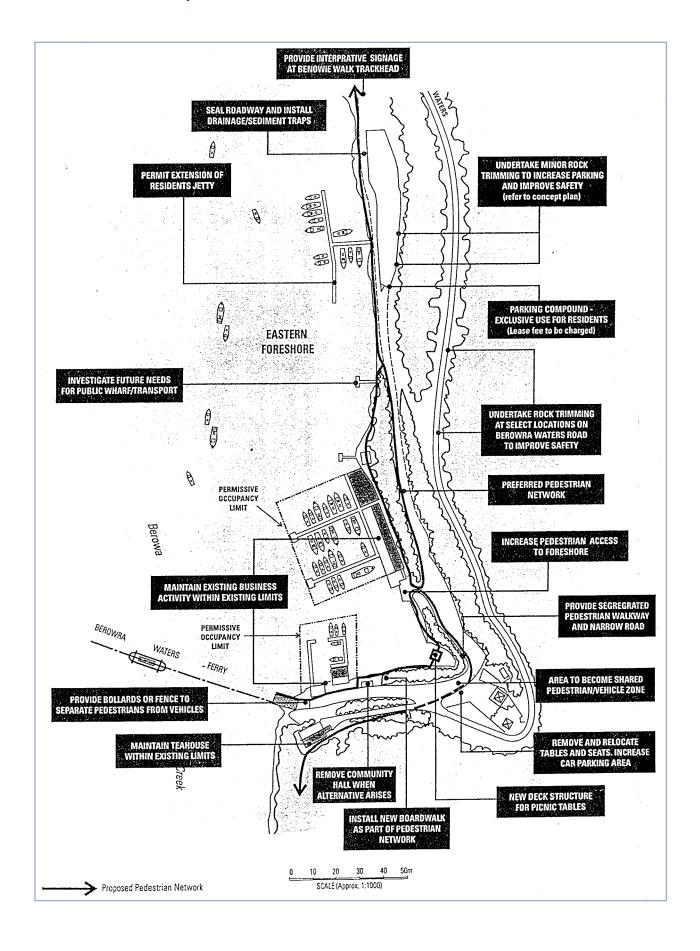
Prescriptive Measures

- **a.** River Settlement Masterplans apply to the following localities:
 - Berowra Waters
 - Kangaroo Point
- **b.** Development should be designed to embody the principles of the relevant River Settlement Masterplans.

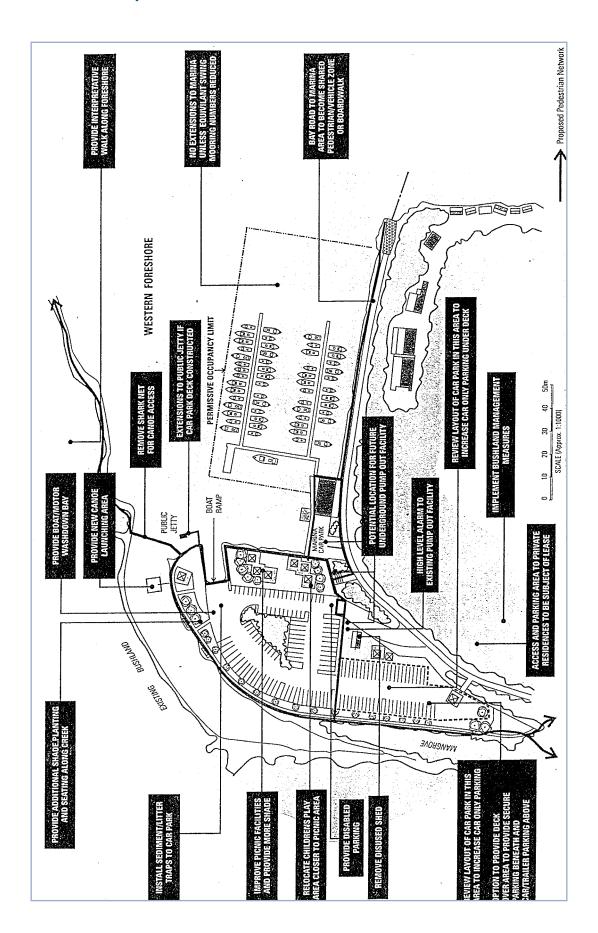
Note:

The Masterplan diagrams are indicative only and are not to scale.

Berowra Waters Masterplan (eastern side)



Berowra Waters Masterplan (western side)



Kangaroo Point Masterplan

a. Development should be consistent with the urban design guidelines provided in the Masterplan diagram and incorporate the following elements:

Former Restaurant Building

- b. Any new building or adaptation of the existing building should be constructed on the footprint of the existing former restaurant building. The building should be a maximum of two storeys in height and vehicular access should be provided to both upper and lower levels.
- c. The building should include public toilets and other use/s that are compatible with and encourage visitation for recreation, such as:
 - Commercially operated café / restaurant;
 - Council managed heritage interpretation facility;
 - Take-away food facility;
 - Community lecture rooms;
 - Public barbeque facilities with shade and shelter;
 - Caretaker's residence up to a maximum of 100m2 floor space and external curtilage up to a maximum of 50m2 and/or
 - Storage for management of the reserve.
- d. The building should be constructed with a structural system that will be appropriate in providing flexibility for future uses, such as a columned frame. Building materials should be natural materials such as timber and low-reflective metal cladding to ensure the building is not visually intrusive. Pitched roofs should be articulated into a number of planes to visually fragment the bulk of the building. Wide eaves are desirable to ensure walls are shaded. This should ensure visual recessiveness and energy efficiency in the building.

Disused Sheds

- e. The disused sheds and carport on the southern side of the road leading to the public wharf should be removed to open up views of the mangrove area.
- f. The disused sheds on the land spit may be used for the provision of office and storage space for recreation based activities.

Interpretation

g. Signage boards should be provided for school and educational groups and for visitors wanting an introduction to the site. Interpretation sites should be provided on main walking paths to provide recreational users with an understanding of the site through more abstract signage and sculpture.

Existing Stone Walling and Edges

h. Existing stone walls and edges should be retained and restored as significant remnants of early European development of the area.

Paths

i. An accessible walking circuit should be provided that extends to all site features, including the mangrove area, stone walls, main building, public wharf, picnic areas, playground, car parks and foreshore. This should provide easy access to all facilities on-site.

Picnic Areas

- j. Grass picnic areas should be provided on upper and lower terraces in areas of existing shade where views to waterway are prominent. Grass species should be used which minimise weed invasion into natural areas.
- k. Furniture should be of robust materials such as steel and concrete on bins and barbeques and warm materials such as timber on seats.
- Electric barbeques should be sited near or, if the use of the building for commercial purposes is demonstrated to be unviable, in the former restaurant building.
- m. Seating and benches should be dispersed to all picnic areas.
- n. Garbage bins should be centrally located. This should minimise waste and centralise rubbish collection activities.

Playground

o. Playground equipment should be provided for children.

Roads

p. Existing roads should be reused as vehicular access. In some instances they can be narrowed. One way roads should be sealed 4 metres wide. Two way roads should be 7 metres wide. Road edges should be soft landscape. Bollard and wire rope should be used to prevent errant vehicle parking. Road edges should be cambered into natural swales to filter roadway contaminants and sediment from entering waterway.

Coach Parking

- **q.** Parallel coach parking should be provided on the upper level.
- r. A lease should be issued over the coach parking bays to a co-operative of commercial charter boat operators. The use of the coach parking bays between public and private interests should be balanced.

Car Parking

s. Car parking should be provided at both upper and lower levels and formalised by line marking. Three car parking spaces should be designed for use by disabled persons.

Lighting and Signage

- t. Lighting should be sufficient for night time use of paths that link car park areas to wharfs. Suitably designed pole top lights should be provided on 6 metre poles to minimise spread.
- u. Signage should be minimised and low-key.
 No advertising on the site should be permitted.

Vegetation

- v. Mixed species in existing vegetation is significant to the heritage of the place. Existing vegetation should be conserved to maintain shade opportunities.
- w. New shade planting should be provided to enhance the opportunities for shade on the site. Tree species should include endemic tree species and understorey planting should include native grasses. Native screen planting should be provided to screen unsightly activities such as Telstra building and the Freeway. Mangrove areas should be reinstated.

Caretaker's Residence

x. The caretaker's residence on the lower level of the former restaurant building should be retained for use by a person undertaking the role of a caretaker of Kangaroo Point.

Commercial Houseboat Marina

y. The existing houseboat berths and associated offices within the "Luxury Afloat" marina should be reconfigured to be contained within the boundaries of the commercial licence issued by the Land and Property Management Authority (LPMA).

Commuter Berthing Facility

- z. To protect seagrass, maintain boat channels and retain views to and from the water, any commuter berthing facility should be:
 - limited to a maximum of 25 boats of up to 6 metres in length; and
 - within the area shown on the Masterplan or an approved licence area.

Public Wharf Upgrade and Use

- **aa.** Public vehicular and pedestrian access to the wharf should be retained.
- ab. Commercial operators should be provided access where development consent for the use has been granted.
- ac. The existing timber framed ferry wharf should be retained. A light weight framed wharf should be provided to provide improved access for potential users (i.e. charter ferries). Any new wharf should conserve built fabric identified as having heritage significance and the scale, materials and colours of any structure should not be visually intrusive.
- ad. Three short term berthing spaces should be included on the pontoon of any proposed upgrade of the public wharf.

Kangaroo Point Masterplan

