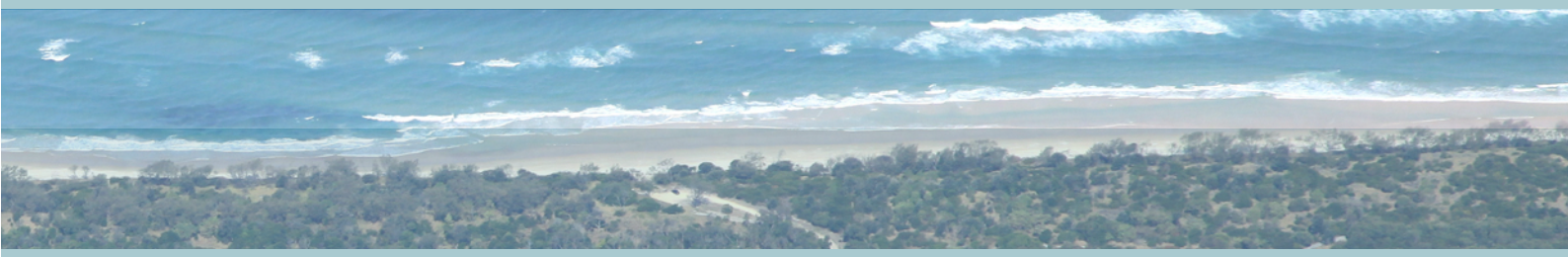
PART 07 DESIGN RESOURCES



7.1 Hastings Point Built Form and Landscape Ideas

The building is broken down into a series of forms.

A composition of materials including timber and weatherboard gives the building a coastal feel and appearance.

The building is clad and it has a variety of domestically scaled windows and doors rather than all the walls being glass.

The garage is not more prominent than the buildings elevations. It has garage doors in line with the buildings elevation.

Landscaping features along the street using local species

Skillion roof with overhangs and feathered edges softens the building against the sky.

The footprint of the top level of the building is only a portion of the level below.

The roof is a defining feature of the upper level and overall building design.

Windows are shaded.

This is just one example of a building that has some of the design attributes appropriate for buildings in Hastings Point.

7.1 Built Form and Landscape Design Ideas

7.1.1 How to Use the Design Resources

This part of the document provides further design information to ensure development complements Hastings Point's desired future character as a small coastal settlement.

Discussion is provided using text, diagrams and a variety of photographic design precedent images designed to illustrate that a particular consideration can be creatively solved in many different architectural styles to allow for architectural variety and innovation.

The part also provides constraints maps and a list of native indigenous species.

7.1.2 Designing Buildings to Suit Hastings Point

The desired future character for Hastings Point is that of a small coastal village. As such buildings, whether single detached houses or multi-dwelling buildings, need to reflect the scale of a smaller settlement rather than a larger urban setting.

This necessarily requires a greater degree of design consideration for breaking down the bulk of the building, carefully detailing the building to give it a residential feel, breaking up the roof form and using lightweight materials.

Responsiveness to the site and the local environment as well as improving internal amenity and livability will also help to further modulate the buildings form and assist in breaking down building bulk.

A key technique is to design a building that has the appearance of a series of interconnected forms (when considered in three dimensions) rather than one large mass. This will result in the building having the massing of a large house or a series of closely spaced large houses rather than a multi-dwelling building suitable for an urban setting.

It is important that buildings have cladding, are well detailed and combine a variety of complementary building materials primarily of lightweight construction. Varying the roofscape and avoiding large areas of flat roof are also important considerations.

This is just one example of a building made up of a series of interconnected forms. The use of solid and openness on each form as well as stepping backwards and forwards and varied heights breaks up the buildings bulk.

A varied roofscape and varied materials help express the different parts of the building.

Landscaping could be more continuous along the street frontage and matched to the height of the building. The driveway also needs to be rationalised to allow for more landscaping and better pedestrian access to the front door.

Undesirable practices

Buildings more suitable to an urban setting may have long unbroken elevations and less variation to the buildings form; its length and height. Designing a building in this way may be appropriate in an urban setting where a block edge form is the preferred character for the street and the area and where creating a strong edge to the street and continuous building frontages are desirable.

The scale of built elements may be large with minimal detailing and large expanses of concrete and glass to further enhance the block edge form. All levels of the building may have a similar plan and a flat roof.

Simple concrete frame buildings without the addition of cladding or detailing, lengths of unbroken concrete walls and large painted surfaces are architectural design solutions more suited to an urban context. Walls visible along the street to hide semi-basement carparking and retaining walls to ramps detract from pedestrian amenity and the residential feel along the street where the desired future character is of a small coastal settlement.

Visually the dominant forms on both these buildings are the horizontal concrete floor plates. (A, B, C)
There are no differences in the elevation treatment along the building nor little definition between different parts.
The three dimensional nature of each building form has not been considered.

7.1.3 Building Form

The concept of designing a building as a series of forms and in three dimensions is a key strategy in creating quality buildings suitable for Hastings Point as a small coastal settlement.

Designing buildings as a series of forms results in less bulky buildings, better articulation, improved internal amenity and site responsiveness. A building designed in three dimensions recognizes that a building has width, depth and height and that these can be manipulated to give a human and domestic scale even to larger buildings such as a multi-dwelling buildings.

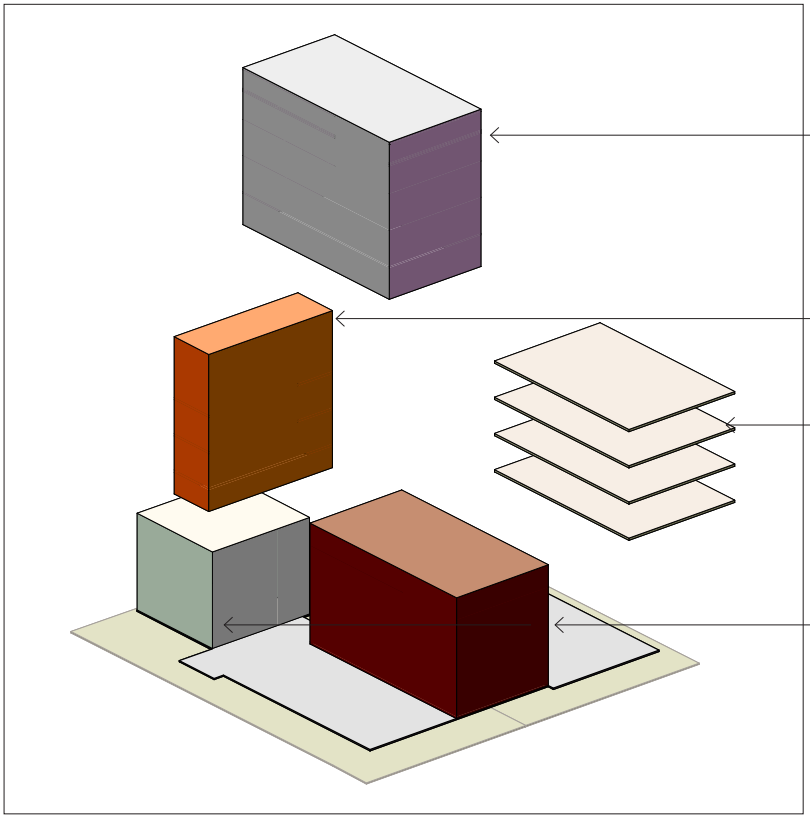
Buildings designed as a series of forms and in three dimensions can play with solid and openness on the elevations. The building can be stepped in and out and up and down to reflect the internal plan configuration and to better regulate the thermal environment within the building.

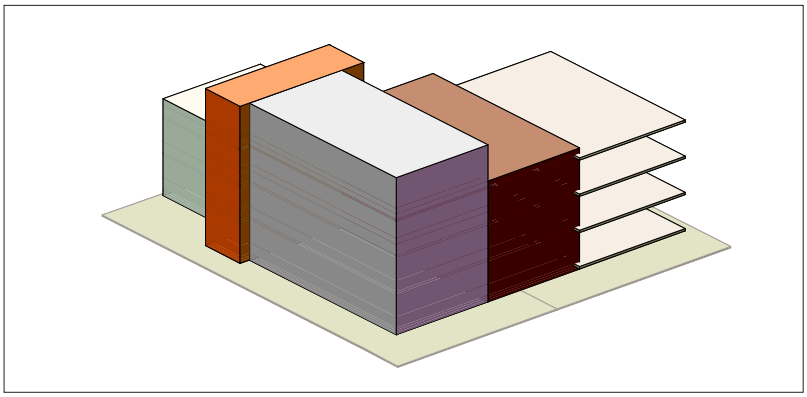
Designing a series of different forms can allow the building to more readily express the varying functions occurring internally and be more responsive to contextual considerations thereby improving building amenity and sit more comfortably alongside neighbouring buildings and within the settlement.

The overall effect is to break up a long building to appear as a series of linked buildings rather than one large form and then employ materials and detailing to articulate and express each different form.

Designing a building in three dimensions results in a different outcome than a building designed in plan, then elevation or designed only as a series of horizontal plates. A building designed as a series of horizontal and identical plates (even if stepped) does not employ width and depth nor solid and void.

If the style of building depicted below (on a corner block) articulated beyond the concrete structural frame it will have the appearance of a commercial building without sufficient detailing to be sympathetic to a residential area and to Hastings Point.





This diagram shows how a building can be conceived as a series of 3 dimensional parts or forms. Here there are 5 different forms of varying heights, setbacks, lengths and levels of openness and enclosure.

The addition of roofs of varying types (flat, pitched and skillion), and materials will further express the difference between each park.

Design ideas

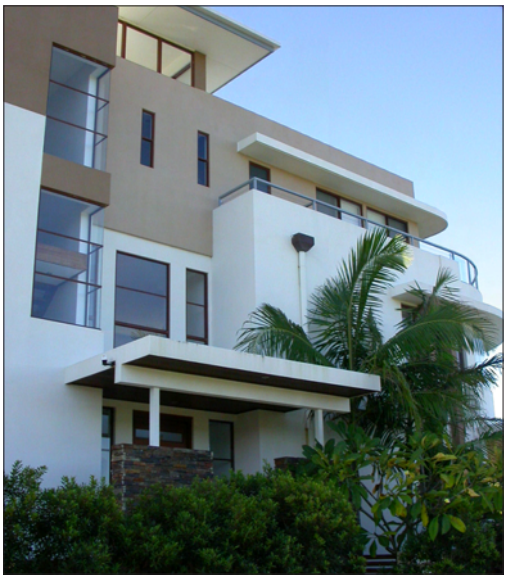
- Use a variety of mainly enclosed or three dimensional forms (eg, walls with windows), combined with some open or planar forms, such as stacked balconies.
- Work to a grid that gives the building a human scale, for example 3, 4 or 5 metres. Different forms can contrast by having varying lengths and heights - tall and skinny next to short and squat.
- Embellish forms by the use of materials and colour and articulate the building to express three dimensional forms.
- Consider closed or three dimensional forms by designing the four sides and the roof together.
- Design a building in three dimensions by considering a level of enclose on the buildings elevations. This ensures that the building is articulated, designed to suit the climate, site conditions and internal amenity.
- Design forms to contrast with one another to create variety, to respond to the internal layout and the external environment; for example contrast can be created in parts of the building by:
  - step up and down,
  - step backwards and forwards,
  - being light and heavy, and
  - being translucent and solid.

Materials are used to define forms, they wrap over and around parts of the building. Enclosed forms contrast with open frames and blade walls.

The use of natural building materials and subdued colours emphasis the 3 dimensional forms of this building. Mature trees are a feature within courtyards, providing a pleasant outlook and shading the building.

The idea of interlocking forms is expressed in this simple two storey building by the use of materials, colour and roofs.

The design of this building has resulted in the appearance of a series of linked pavilions break down the bulk of the building.



Although this building requires a greater amount of lightweight materials to be appropriate for Hastings Point and is larger than buildings will be in Hastings Point it is a good example of where the design has worked hard to break up blank walls and express the different functions and levels of the building.
The variety of windows types, window shading, roof overhangs and enclosed balustrades add to a diverse elevation and break up the buildings bulk and increases internal privacy.

Building forms can be designed to change expression from day to night.

This building has a varied facade with projecting and receding areas, extended by pergolas and stepped with recessed balconies.

Employ the language of designing enclosed three dimensional forms by considering:

- The same material may wrap around all sides and even over the top of the form;
- Solid forms have elements; cut out of it, stuck onto it, colliding with it and piercing through it;
- Punched openings or windows, and
- Detail elements are attached to the outside of the form to contrast in colour, material and proportions to the forms flat surfaces.

Open forms may be either vertical or horizontal or both. They are generally an expression of the bare structure or frame of the building. They are best used where it is desirable for the building to open up to the outside or to express more public areas such as entries.

Open forms can also be used to lighten the top of the building and to separate enclosed forms. In contrast to closed forms the language of designing an open form considers:

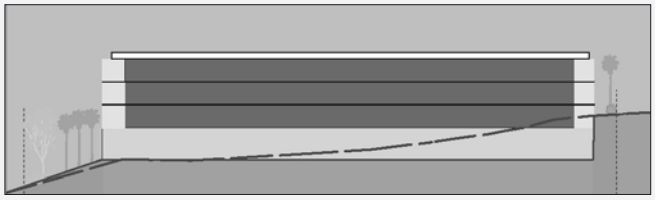
- Clean lines and crisp edges;
- Linearity i.e. thin and long elements;
- Layering of transparent or semi-transparent elements;
- The expression of edges (thick or thin), and
- Operable lightweight elements i.e. sliding screens.

This building appears as two storeys although it is three. The third level is concealed in the roof. Fly roofs taper the building towards the sky reducing the apparent building height.

Undesirable Practice

- The building appears as one long form.
- Amalgamated and large sites have very long building forms along the streets.
- The building is high off the ground on sloping sites.
- Carparking raises the building off the ground.

This building has added another half level making the building appear as nearly four levels.



This building has a continuous height of three storeys and is raised off the ground to the rear where is does not step with the topography.

7.1.4 Building Footprint and Height

Using design devices to reduce building length and height are critical considerations when designing larger houses and multi-dwelling buildings. Buildings that maximise length and height will not be suitable in Hastings Point.

Buildings that feature part storeys and stepped alignments are key features suitable for Hastings Point.

Ensuring buildings have compact footprints maximises the area available for landscaping and water percolation.

Design ideas

- Nest the building into the topography to reduce its height.
- Courtyard layouts can break up the building length and achieve sun penetration where the site is wide enough to accommodate them.
- The ground floor is flush with the ground.
- Carparking is fully underground and neatly within the building footprint
- The buildings height is varied across the site.
- The building is broken into a series of stepped forms that relate to internal amenity, site context conditions and orientation.
- Transparent or open stair cores can serve to visually separate the building form and break long elevations.

A variety of complementary materials are used

Colours are subdued and subtle, almost 'bleached'.

Lightweight materials are used throughout

The natural colour of the material is used

Undesirable Practice

- Large areas of paint in bold, bright colour ie. blue and yellow, is applied to the concrete frame to express one or two primary forms.
- The building has little detailing and no cladding.
- All of the building has a flat roof giving the building a monolithic quality.
- Retaining walls within the front setback reduce the visual qualities of an informal residential garden along the street.
- Building elevations are either all painted concrete and/or floor to ceiling glass.
- One material is used throughout ie. painted concrete.

7.1.5 Materials and Detailing

Although the main structural system of a building may be of concrete or masonry for cost, thermal, structural and acoustic reasons, the appearance of the building will be dictated by what materials are used to clad it, how those materials are articulated.

Buildings in Hastings Point need to employ materials and detailing to give them a coastal village character and residential scale and feel. Unclad buildings; where the whole elevation is painted brick or block work, concrete or glass, will not have the right appearance for Hastings Point.

Design ideas

- Clad building elevations facing public places including roads, streets, parks and foreshores.
- Select mainly lightweight building materials and minimise the use of heavy mass building materials. Including but not limited to; timber, weatherboards, plywood, fibre-cement sheeting, custom orb, and mini orb.
- Building materials are chosen to give a more solid base and a lighter weight upper level to the building.

Battens, screens and louvers can provide part shade and fit with the coastal theme.

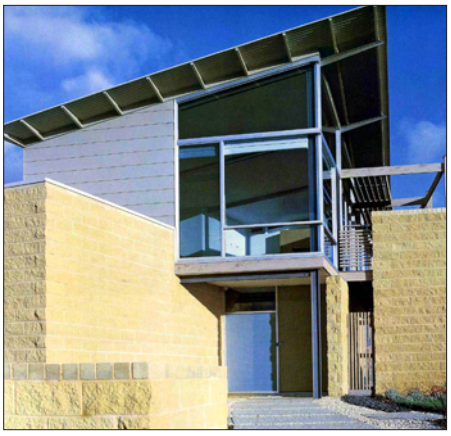
Use a variety of complementary materials.
The natural colour of the material can give a subtle finish.

Using light weight building materials allows manipulation of the elevation which cannot be so readily achieved with solid masonry or concrete walls. In these examples the use of materials, form and space creates indoor and outdoor rooms.

Louvred screens overhangs provide privacy to windows and balconies and visual privacy yet allows some sunlight and sea breezes through.

Screens (particularly to second and third levels) allow views out yet provide privacy to occupants.

- Aluminium fixed or operable louvres provide a low maintenance option.
- Timber batten screens provide a natural building material and colour.
- Screens need not only cover one window, they can be use as a feature that allows a variety of functions to occur behind.
- Strategically placed louvres block views to adjoining properties but are open to the bush views.



The masonry walls on this building create a solid base with a lightweight second floor, successfully breaking down the building's bulk. The overhanging roof and exposed roof structure add detail and tapered edges against the sky.

This building uses a rust finish to delineate the base of the building. It breaks down the buildings bulk and creates an interesting backdrop for landscaping.

Design ideas (Cont.)

- Screening to balconies, doors and windows; include louvres, drop blinds, and fixed battens or louvres, are good ways to add cladding to a building whilst providing operability. Large banks of full glass window, door and balustrades do not give the building cladding.
- The use of painted or bare masonry and concrete should be limited.
- Feature walls of masonry, stone or brick are provided where this adds to detailing and contrast in the buildings elevations.
- Add interest to elevations by providing a mix of solid materials, transparent materials (glass) and voids (balconies or space between building elements).
- A palette of complementary building materials is chosen. A palette of around 4 or 5 building materials can be used.
- The design of building materials can have a logical beginning and end. For example, cladding in a similar way a group of rooms that protrude from the main face of the building and changing to a different material for rooms that recede.
- Link material selection to internal and external building amenity.
- Use materials to define and enclose different functions. For example, private spaces such as bedrooms and service areas can be more enclosed with few small openings to provide privacy for occupant. Less private spaces such as living rooms and balconies can be more open or transparent through the use of louvres or screens.
- Design outdoor living areas not just for views but also for privacy and weather protection.
- Provide flexible sun shading devices, such as pergolas, screens and louvres in order to allow the building environment to be quickly adjusted to suit atmospheric conditions.
- The use of wall to wall, ceiling to floor glass doors and windows for the full length of the building plus full glass balconies without screening devices is avoided.
- Solid materials are used where minimal openings are required in order to match internal amenity and can also be used to provide a feature on the elevation such as:
    - An entry feature of stone or masonry to delineate between private and public spaces by providing a focal point or point of interest to which the visitor is guided.
    - Blade walls between balconies offering acoustic privacy and delineation between adjoining private spaces.
    - A solid base of brick or block work to a building can break up the vertical height of the building and differentiate the ground level.

Finishes and materials should be appropriate to the local climatic conditions, solar orientation and site specific aspect, opportunities and constraints.

Suitable materials include:

- Timber, weatherboards, plywood, fibre cement sheeting, custom orb, mini orb.
- Face brick and rendered concrete block (or foam) is not to be used as the primary material.
- Walls of masonry, stone or brick are permissible where it adds to the detailing of an elevation.


Sparks Architects


Bark Design

Screening to balconies, doors, windows including drop blinds, fixed or moveable louvres and timber battens both assist in passive climatic controls (sun and breeze) as well as add to a building articulation.

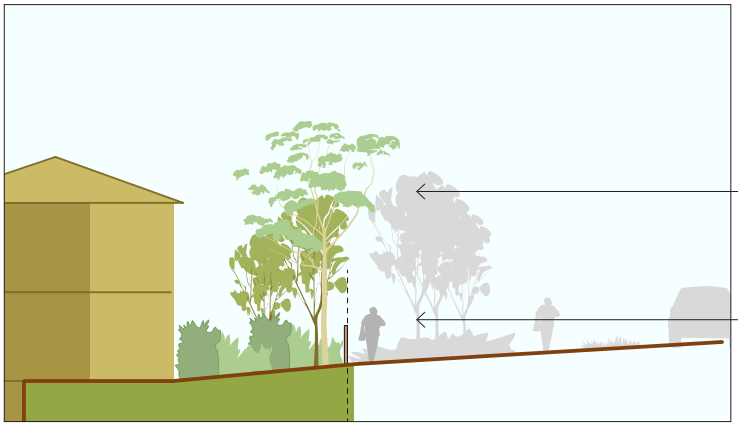
- When designing outdoor living spaces consider:
  - Generous balconies and loggia that have operable enclosure devices create year round amenity and protects from the elements for outdoor living spaces whilst providing occupants with choice in the level of enclosure or openness in response to the time of year, the time of the day and the level of privacy desired.
  - Vary the amount of enclosure depending on the location of the balcony or loggia in the building, the orientation and its planned use
  - Balconies off living spaces may need to be larger, provide a variety of openness and screening in order to allow for use all year round, either fully open or fully closed depending on weather conditions.
  - Balconies off bedrooms can be smaller and more enclosed to provide greater privacy.
- Service balconies which house drying courts or air conditioning units are well screened.
- Pergolas which allow winter sun to penetrate the building can extend private outdoor spaces on the ground and top levels of the building. Pergolas can be operable or fixed at an appropriate angle to allow winter sun penetration into the building and to reflect summer sun.
- Movable or fixed screens or blade walls from the building that project into outdoor spaces can help define and enclose the space.
- Shutters can be located to provide relief from the predominant weather conditions and provide sun protection.
- Louvres can be located in order to capture predominant sea breezes.
- Sun shading devices can be located and designed appropriate to their orientation.

Species include remnant and new native trees and shrubs, intermingled with exotic semi-tropical planting.

Driveway widths are minimised. A permeable material is used or the surface is partly grass, partly a hard surface.

Landscaping occupies all of the space between the boundary and the building and between the driveway and the side boundaries.

Hard areas are finished with permeable materials.



Mature trees that match the height of the building and provide a dense canopy ensure privacy and shade.

Lower level planting is dense and matches the height of a person.

Undesirable practice

- Setbacks are not deep enough for mature trees.
- New trees and shrubs are not local indigenous species.
- Low planting does not providing privacy to ground floor dwellings.
- Tall palm trees do not providing shade or screening for upper level dwellings.
- Pools, parking and large paved areas are located in the front setback leaving no room for vegetation or trees.
- The front boundary has a solid wall up to 1.5m.
- Trees are not retained within front and rear setbacks.
- Shading the building and external spaces has not been considered.
- Basement carparking intrudes beyond the buildings footprint.

Communal spaces within the front setback featuring pools and hard surfaces leave no room for vegetation.

7.1.6 Landscaping

Landscaping is one of the most important considerations for developments in Hastings Point.

Landscaping contributes to the quality of a settlement nestled within a natural landscape both when viewed from a distance and when seen within the settlement from streets, parks and bushland areas.

Currently many lots in Hastings Point have mature vegetation and trees in the front and rear setbacks. Landscaping in the front setback contributes to the natural, coastal and residential feel of streets. In the rear setbacks landscaping on many lots creates a transition to natural areas such as the creeks, dunes or conservation areas.

Front setbacks

Design ideas

- Privacy for dwellings and private open spaces is achieved through the careful selection and placement of vegetation and trees where required.
- Planting is provided at the same height as the building where it is desirable to screen it from the street.
- Species include a majority of remnant and local native indigenous trees and shrubs, intermingled with exotic semi-tropical planting.
- Private landscapes are designed to blend with public landscapes.
- Internal and external micro-climatic conditions are improved by utilizing trees and other vegetation to provide shade and protection from the wind.
- Existing vegetation and trees are retained.
- Pools or other structures are avoided within the front setback.
- Basement car parking is fully under the building.
- Hard surfaces are minimised. For example finishes such as crushed stone are used for walkways inter-spaced with stepping stones, this helps continue the beach side ambience. Grass is used between wheel lines along driveways and timber decks can be used instead of concrete and tile for terraces.
- External areas between the street and ground floor dwellings are used for private gardens rather than as communal spaces to enhance the amenity of ground floor dwellings and provides a more friendly and residential feel to the street.

Existing landscaping along the Tweed Coast Road provides screening and privacy and is important to be retained.

Rear setbacks

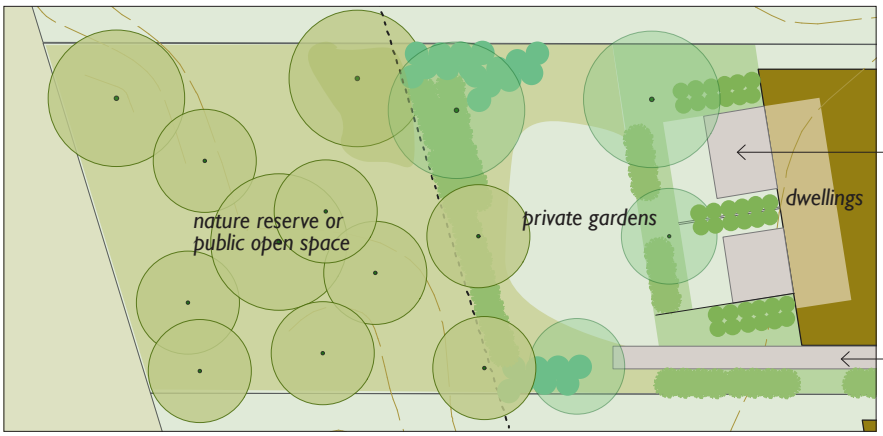
The rear of many lots in Hastings Point are characterised by informal planting and remnant coastal vegetation that is on some lots quite dense.

Vegetation to the rear of lots provides a transition to natural areas as well as providing screening and privacy to dwellings where the lot adjoins a busy public area.

The rear of lots may be extensively used by residents as their main private area for relaxation and entertaining particularly on lots with a busy frontage such as lots along the Tweed Coast Road.

Design ideas

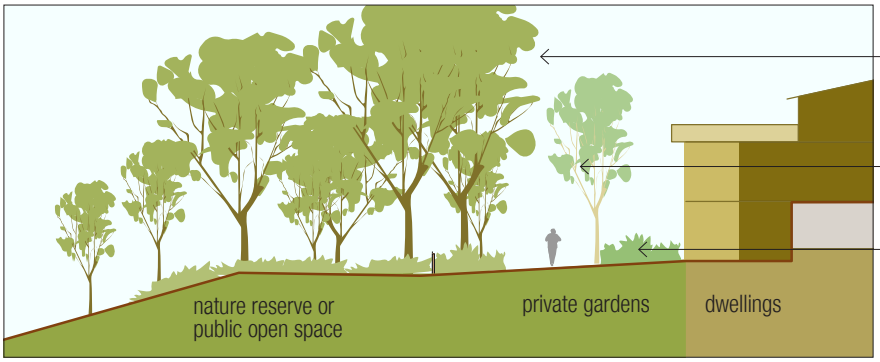
- Species selection includes remnant new native trees and shrubs.
- Private landscapes contribute aesthetically and ecologically to adjacent riparian and coastal landscape areas.
- Shrub and tree planting to provide low level screening and filtered upper level screening or more open planting where views are desirable.
- Trees and/or other vegetation match the height of buildings.
- Contribute to micro-climatic conditions of garden areas and the dwelling by planting trees and shrubs for shade and protection from wind.
- Existing trees are retained.
- New trees are planted to establish a continuous tree canopy.
- Local indigenous native coastal vegetation species are used.
- Hard surfaces are minimised le. Crushed stone walkways interspaced with stepping stones helps continue the beach side amenity and is encouraged, timber decks can be used instead of concrete and tile.



Species selection includes remnant and new native trees and shrubs.

Hard surfaces are minimised and relate to the location of indoor living spaces.

Paved surfaces use permeable materials.



Mature trees that match the height of the building and provide a dense canopy ensure privacy and shade.

Vegetation species match those within the reserve and features mature trees and shrubs.

Lower level planting is dense and matches the height of a person.

7.1.7 Roofs

The building can be significantly reduced in height and the overall bulk of the building reduced by using a variety of smaller broken up roof forms.

Varying roof pitches create desirable internal volumes allowing deeper penetration of natural light and assist with cross ventilation as well as contribute to the overall design form of a building.

Deep roof overhangs provide good shading to external living spaces such as decks and verandahs as well as providing depth and articulation to a building elevation.

A series of roof planes and fractured roof forms help to break up the roof and express the different parts of the building. This contributes to breaking down the overall bulk of the building. Roofs are also important in contributing to the image of a small coastal settlement when viewed from street or from within a wider vista where the building is seen as a group with other buildings against a natural setting.

Flat roofs used as additional private open spaces such as deck or terraces are only appropriate where they look onto a public space such as a street or a reserve. Spaces that provide a view into or over private land are not permitted.

Design ideas

- Combining a variety of roof forms ie. Pitched, skillion and flat can break up large areas of roof.
- Tapering the roof eaves for skillion roofs to give a feathered edge to the building.
- Break up large ares of roof by reflecting the internal layout of the building. For example larger volumes can be used over living areas and lower ceilings can be used over service rooms and bedrooms.
- A series of smaller roof planes can make up the overall roof form and relate to the buildings structural grid.
- When designing a roof consider how it will be viewed from along the street and other views and vistas throughout the settlement.
- A corner to a building is an opportunity to reinforce the street corner and provide an interesting design element within the settlement.
- Where a flat roof is incorporated into the design, shading of windows should occur via other shading devices on north, east and west elevations eg. External louvres or small roofs over individual windows which would normally be shaded by the roof's eaves.
- The roof colour can be used to regulate the buildings temperature. For example lighter roof colours reflect heat and light.

7.1.8 Colour

Colour is an important architectural consideration and can affect how the building contributes to the streetscape.

It is desirable in Hastings Point to choose colours that complement the natural environment. This can be achieved by keeping the palette muted, light and subtle and using the natural finish of materials. Metal, timber, rusted steel, face brick and river gravel are material with a natural finish that can be considered.

Bright, bold colour should be used only in small areas such as to highlight a detail or point of interest.

Elements of minor importance such as blank concrete walls, garage doors should blend in with the buildings elevations.

Solid elements or walls can be used to enhance an important part of the building such as the entry to the building. Important features such as the front door may be more visually prominent.

Design ideas

- Choose a palette of subtle and muted complementary colours.
- Use light, neutral colours with very small splashes of rich colour.
- Use shades of same the colour.
- Use the natural colour of materials where possible i.e. timber.
- The use of one main building material and colour can create a monolithic building type and should be avoided.
- A palette of around 2 to 4 colours is often sufficient.
- The design of a building's colour palette should not start and end in random locations disassociated from use and function. They should have a logical beginning and ending, for example, expressing a particular form.

This building uses a splash of very rich colour to contrast with the mainly neutral tones.

7.1.9 Fences and Walls

Fences in Hastings Point need to retain a visual blending of private and public areas along streets whilst also defining the boundary of private land. Fences assist in providing a level of security and privacy but need to be low and open enough not to detract from the quality of the street.

It may be desirable not to have front fences on lots where there is only one dwelling and the boundary line is fairly obvious however where a lot has more than one dwelling fences are likely to be needed to improve privacy and maintenance.

In multi-dwelling buildings clearly defining which area belongs to which dwelling increases the level of ownership over that land thereby assisting in maintenance and enhancing the character of that space. It also improves safety by makes what is public and what is private clear. Spatial definition; by the use of fences, can avoid the area between the building and the street becoming an unloved and unused space.

Design ideas

- Front and return fences can reflect the design character of the dwelling through the use of materials, colour and design.
- Vertical battens in preference to horizontal battens.
- Picket fences can have a hedge or other shrubs planted adjacent to them in order to provide privacy to ground level apartments.
- Fencing is low and open and reflects an open and friendly atmosphere along the street.
- Fences which include a masonry base where there is a change in level can be painted in colours that compliment the building design.
- The use of landscaping is important in achieving the desired levels of privacy required for outdoor living spaces located facing the street.

Balconies, fencing, and landscaping contribute to a village feel.

Undesirable Practice

Blank walls to the street reduce the friendly feeling along the street.

Solid built elements reduce the green qualities of the street.

7.1.10 Ancillary Design Elements

The careful design and location of ancillary detail elements, such as downpipes, window frames, soffits, post boxes and street numbers can add a human and residential scale to a building.

Design Ideas

- Downpipes are to be integrated into the design of building elevations.
- Hide downpipes disposing water from balconies.
- Where downpipes are highly visible from streets or located near the entry, consider making a feature of them.
- The thin vertical lines of downpipes can help break up an elevation when painted in a colour that complements the wall onto which it is located. To make a downpipe blend in with the wall on which it is located it is generally better to paint the downpipe in the same colour as the wall.
- Integrate post boxes into the design of the front setback area.
- Consider the importance of window frames and soffits; in colour and design to give the building visual detail.

Consideration of quality building detailing including junctions of different materials, material and colour of window frames, material of sunshades, and integrating gutters and down pipes into the building design contributes to the overall design value of a building.

Ramps can be concealed within the buildings envelope. This avoids unsightly retaining walls, gives the building a more residential character and improves pedestrian safety and amenity on sites.

7.1.11 Ramps and Driveways

Ramps and driveways can have a significant impact on the street and front setback if not carefully designed. Car manoeuvring areas can take up valuable space needed for landscaping resulting in extensive hard surfaces and little vegetation.

Design ideas

- Minimise the visual impact of ramps and car manoeuvring areas by concealing them as much as possible under the buildings footprint.
- Start ramps at the building line not the boundary line.
- Minimise driveway widths as much as possible.
- Fully conceal ramps within the building and located under the building footprint.
- Consider reducing carparking numbers, locating visitor parking on the street to reduce the size of the basement.
- Drain hard surfaces to lawns and planting areas.
- Consider alternative materials to bitumen and concrete such as permeable pavers.
- Align garage doors with the buildings elevation so as to blend it with the buildings elevation.
- Provide driveway gates to match the boundary fence to break up the large expanse of the driveway.
- Chose different materials and finishes for surfaces in the public domain and private domain.
- On smaller developments consider alternatives to concrete driveways such as timber sleepers, permeable pavers, gravel or wheel lines only.

Other Practice

- The ramp starts at the street boundary.
- Driveway widths are maximised.
- The ramp is visible within front setback.
- Car parking rates are exceeded on site.
- The driveway is all concrete.
- The ramp creates a hole under building and unsightly retaining walls.
- No gates are provided along the fence line.

Buildings that have not concealed car access and movement areas such as ramps and carparks result in large areas of concrete and bitumen dominating the ground plane and detracting from the character of a small coastal settlement.

7.2 Hastings Point Landscape Species List


Cabarita Beach
Round Mountain
Hastings Point
Cudgera Creek
Pottsville
TWEED COAST ROAD
CREEK STREET
PANDANUS AVENUE
POND STREET
WATTLE COURT ROAD
COOLIBAH AVENUE
7 or 11
N
0
200
400 m
1:10,000
Recommended Species for Planting
Refer to appendix for species within each vegetation community
1 Littoral Rainforest +/- Coast Banksia
2 Coastal Sclerophyll with Rainforest Understorey
3a Wallum Banksia Shrubland (horticulturally adaptable species only)
4 Headland Grassland / Herbland / Shrubland
6 Swamp Sclerophyll with Grass / Sedge Understorey
7 Casuarina Glauca Open Forest to Woodland with Saltmarsh Understorey
7 or 11 Casuarina Glauca Open Forest to Woodland with Saltmarsh Understorey Or Saltmarsh
8 Horsetail Sheoak / Coast Banksia Open Forest to Open Woodland
Waterways
Locality Boundaries
Cadastre 18 March, 2010
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7.2 Species List

Landscape planting recommendations

Existing vegetation

The existing native vegetation in the study area has been mapped into eleven vegetation communities. The list of communities and the area of each is set out in the table below.

Small areas of native vegetation in urban parts of the village have not been distinguished and are mapped as part of the cleared area.

Most of the existing native vegetation is on land of various public tenures, with the exception of parts of Lot 156 Creek Street.

Most of the existing native vegetation is in a relatively weed free condition, in part because of weed control works undertaken on public lands, which it is recommended should continue.

Table 7.1 Plant communities by area

Community	Plant community	Area (ha)
1	Littoral rainforest +/- Coast Banksia	9.76
2	Coastal Sclerophyll with rainforest understorey	1.84
3	Wallum Banksia shrubland	5.78
4	Headland grassland / herbland / shrubland	2.17
5	Coastal sclerophyll with heath understorey	2.69
6	Swamp sclerophyll with grass / sedge understorey	0.72
7	Casuarina glauca open forest to woodland with saltmarsh understorey	1.04
8	Horsetail Sheoak / Coast Banksia open forest to open woodland	19.83
9	Foredune community	1.41
10	Mangrove communities	5.55
11	Saltmarsh	3.32
12	Cleared	43.19
	TOTAL	97.30

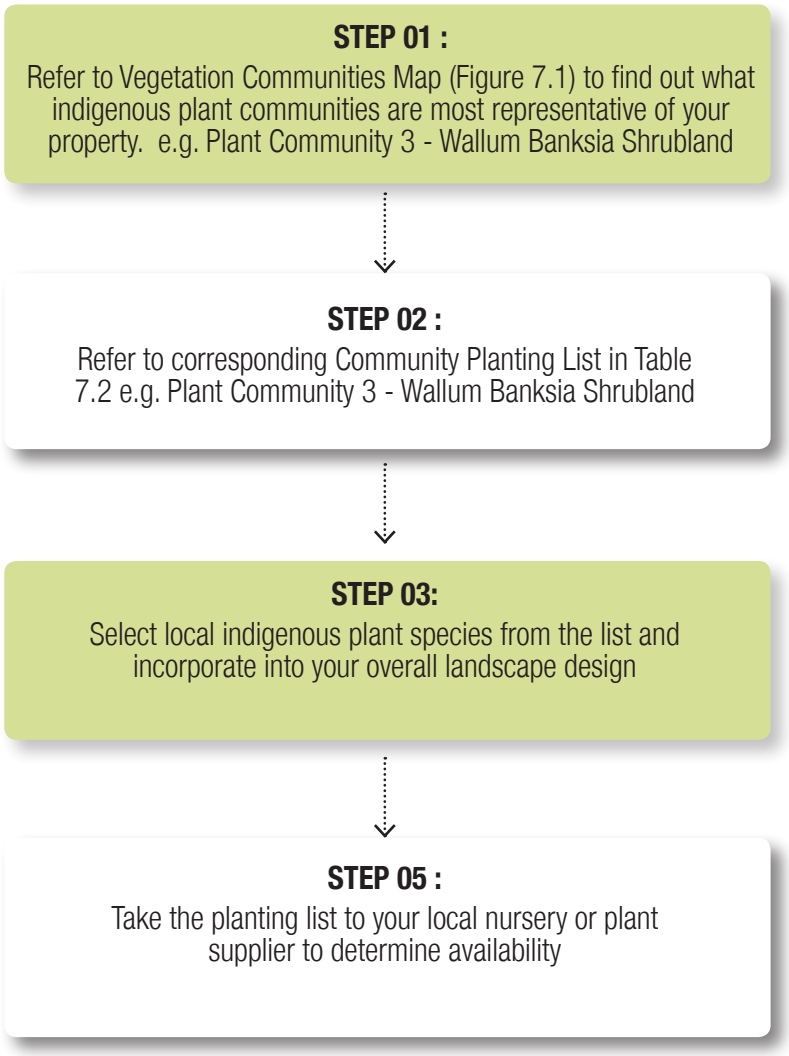

Figure 7.2 Plant Species How to Use Diagram

Landscape Planting and Weed Control Recommendations

Purpose of planting lists

The planting lists presented in this appendix are recommendations of species appropriate for planting in each of the mapped sub-parts of the study area. They are not a recommendation that the plant communities themselves be reconstructed. They may however be used for this purpose where appropriate.

How planting recommendation lists were generated

A comprehensive mapping of plant communities and species on the Tweed Coast was used to generate lists of species occurring in each of the mapped plant communities; accordingly, the lists include not only species that occur in each of the plant communities in the study area, but also in similar communities along the Tweed Coast. A detailed listing of species representative of the 11 vegetation communities in Hastings Point can be found in Table 7.2.

Where do recommendations apply?

Recommendations are made for both the cleared parts of the study area and those with existing native vegetation.

Planting in areas of existing native vegetation

Planting in areas of existing native vegetation is generally not recommended. With the exceptions described below, intervention in these areas should be limited to control of weeds.

Recommendations for planting in cleared areas are generally limited to some of the areas of re-growth plant communities that have been severely disturbed as a result of human activities and are still in a relatively early stage of re-growth. The majority of the area that meets this description is community 8 (Horsetail Sheoak / Coast Banksia open forest to open woodland).

Where plantings are recommended for community 8, they are of two types:

- For the parts of this community that are relatively sheltered from sea winds - plantings from species of community 1 (Littoral rainforest +/- Coast Banksia) are recommended.
- For the parts of this community that are exposed to sea winds - plantings from species generally found within the community 8 itself are recommended, because the plants in this relatively short list are all suited to the exposed conditions.

Plantings are recommended in some relatively small areas of community 2 (Coastal Sclerophyll with rainforest understorey) and community 6 (Swamp sclerophyll with grass / sedge understorey). The plantings recommended are from the lists for the communities currently growing at these locations.

Planting in cleared areas

The existing cleared area has been divided into a number of sub areas for each of which it is recommended that plantings be undertaken from the list of species for one or two of the existing communities.

In a small number of cases, the sub-areas are suitable habitat for only one or two plant communities (and the species that grow in them).

One of these areas is the road and carpark on the Hastings Point headland. This area is suitable habitat only for community 4 (Headland grassland / herbland / shrubland).

Because of its exposure to sea winds, the species list for community 8 (Horsetail Sheoak / Coast Banksia open forest to open woodland) has been used as the basis for recommendations for plantings for land along the creek bank immediately south of the bridge.

The rest of the currently cleared area is suitable habitat for any one of the four following plant communities:

1 - Littoral rainforest +/- Coast Banksia

2 - Coastal Sclerophyll with rainforest understorey

5 - Coastal sclerophyll with heath understorey

6 - Swamp sclerophyll with grass / sedge understorey

This area is also suitable for a number of species from community 3 (Wallum Banksia shrubland) that are adaptable to horticultural purposes in areas of soil that may no longer be Wallum. (This edited list of Wallum species is labeled “3a” in the spreadsheet.)

Communities 5 and 6 do not contribute many species not already in communities 1, 2 and 3 that are useful for landscaping purposes, and so the lists for these communities have not been used to recommend plantings.

Plant communities 1, 2 and 3 have been used as the basis for recommendations for the majority of the cleared area. Species from the edited list for the Wallum community (community 3a in the spreadsheet) are recommended for the southern part of the study area, because it is adjacent to the location of existing Wallum.

The remainder of the cleared area is divided into four parts. Species from the list for community 1 are recommended for two of these areas and species from the list for community 2 for the other two.

Weed control

It is recommended that regular monitoring of the presence of weeds be undertaken in all areas of existing native vegetation (on land of both public and private tenures), and control be undertaken as necessary.

Hastings Point Vegetation Species List - Community 1					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Curracabah	Acacia concurrens	Tree	High	C	
Brush Ironbark Wattle or Southern	Acacia disparrima subsp. disparrima	Tree	High	C	
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	C	
Blackwood or Sallywattle	Acacia melanoxylon	Tree	High	C	
Broad-leaved Lilly Pilly	Acmena hemilampra subsp.	Tree	Medium	C	
Native Ginger	Alpinia caerulea	Herb/Forb		C	
Prickly Alyxia	Alyxia ruscifolia	Shrub	Low	C	
Bird's Nest Fern	Asplenium australasicum	Fern		C	
Breynia or Coffee Bush	Breynia oblongifolia	Shrub	Low	C	
Swamp Oak	Casuarina glauca	Tree	High	C	
Long-leaved Water Vine	Cissus sterculiifolia	Vine		C	
Smooth Clerodendrum	Clerodendrum floribundum var.	Shrub	Low	C	
Native Wandering Jew	Commelina cyanea	Herb/Forb		C	
Brown Kurrajong	Commersonia bartramia	Tree	High	C	
Pink Bloodwood	Corymbia intermedia	Tree	High	C	
Stinking Cryptocarya *	Cryptocarya foetida	Tree	Low	C	v/r/s
A Sedge	Cyperus enervis	Grass/Sedge		C	
Denhamia or Orange Boxwood	Denhamia celastroides	Tree	Low	C	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		C	
Blueberry Ash	Elaeocarpus reticulatus	Tree	Medium	C	
Rose Walnut	Endiandra discolor	Tree	Low	C	
Hard Corkwood	Endiandra sieberi	Tree	Low	C	
Bordered Panic	Entolasia marginata	Grass/Sedge		C	
Whip Vine or Supplejack	Flagellaria indica	Vine		C	
Bennett's Ash	Flindersia bennettiana	Tree	Medium	C	
Guioa	Guioa semiglauca	Tree	Medium	C	
Twining Guinea Flower	Hibbertia scandens	Vine		C	
Blady Grass	Imperata cylindrica	Grass/Sedge		C	
Brown Bolly Gum	Litsea australis	Tree	Low	C	
Spiny-headed Mat-rush	Lomandra longifolia	Herb/Forb		C	
A Mat-rush	Lomandra species	Herb/Forb		C	
Brush Box	Lophostemon confertus	Tree	High	C	
Swamp Turpentine	Lophostemon suaveolens	Tree	High	C	
Macaranga	Macaranga tanarius	Shrub	High	C	
Paperbark	Melaleuca quinquenervia	Tree	High	C	
Prickly Broom Heath	Monotoca elliptica	Shrub	Low	C	
Muttonwood	Myrsine variabilis	Shrub	Low	C	
	Oplismenus aemulus	Grass/Sedge		C	
Screw Pine	Pandanus tectorius	Shrub	Low	C	
A Geebung	Persoonia adenantha	Shrub	Low	C	
A Geebung	Persoonia stradbrokensis	Shrub	Low	C	
Thin-leaved Coondoo	Planchonella chartacea	Tree	Medium	C	s
Elkhorn	Platycerium bifurcatum	Fern		C	
Staghorn	Platycerium superbum	Fern		C	
Hairy Psychotria	Psychotria loniceroides	Shrub	Low	C	
Bracken Fern	Pteridium esculentum	Fern		C	
Rock Felt Fern	Pyrrosia rupestris	Fern		C	
Snake Vine	Stephania japonica var. disclor	Vine		C	
Tree Heath	Trochocarpa laurina	Shrub	Low	C	
Pixie Caps	Acianthus fornicatus	Herb/Forb		D/Co-d	
Lilly Pilly	Acmena smithii	Tree	Medium	D/Co-d	

Hastings Point Vegetation Species List - Community 1					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Beach Acronychia	Acronychia imperforata	Tree	Low	D/Co-d	
Tall Groundberry	Acrotriche aggregata	Shrub	Low	D/Co-d	
Beach Alectryon	Alectryon coriaceus	Tree	Low	D/Co-d	
Red Ash	Alphitonia excelsa	Tree	Medium	D/Co-d	
Bangalow Palm	Archontophoenix cunninghamiana	Tree	Medium	D/Co-d	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	D/Co-d	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	D/Co-d	
Water Vine	Cissus antarctica	Vine		D/Co-d	
Giant or Five-leaved Water Vine	Cissus hypoglauca	Vine		D/Co-d	
Three-veined Cryptocarya	Cryptocarya triplinervis var.triplinervis	Tree	Low	D/Co-d	
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	D/Co-d	
Coast Canthium	Cyclophyllum longipetalum	Tree	Low	D/Co-d	
Blue Flax-lily	Dianella caerulea	Herb/Forb		D/Co-d	
A Blue Flax-lily	Dianella species	Herb/Forb		D/Co-d	
Corkwood	Duboisia myoporoides	Tree	Low	D/Co-d	
Hard Quandong	Elaeocarpus obovatus	Tree	Medium	D/Co-d	
Ribbonwood	Euroschinus falcatus var. falcatus	Tree	Medium	D/Co-d	
Broad-leaved Native Cherry	Exocarpos latifolius	Shrub	Low	D/Co-d	s
Scrambling Lily	Geitonoplesium cymosum	Vine		D/Co-d	
Cheese Tree	Glochidion ferdinandii	Tree	Medium	D/Co-d	
Foambark Tree	Jagera pseudorhus var. pseudorhus	Tree	Low	D/Co-d	
Yellow Pear-fruit	Mischocarpus pyriformis	Tree	Low	D/Co-d	
Large Mock-olive	Notolaea longifolia	Tree	Low	D/Co-d	
	Ottochloa gracillima	Grass/Sedge		D/Co-d	
Wonga Vine	Pandorea pandorana subsp. pandorana	Vine		D/Co-d	
Hairy Pittosporum	Pittosporum revolutum	Shrub	Low	D/Co-d	
Celery Wood or Silver Basswood	Polyscias elegans	Tree	Low	D/Co-d	
Native Guava	Rhodomyrtus psidioides	Tree	Low	D/Co-d	
Austral Sarsaparilla or Barbed-wire Vine	Smilax australis	Vine		D/Co-d	
Blue Lilly Pilly	Syzygium oleosum	Tree	Medium	D/Co-d	
Ivy-leaved Violet	Viola hederacea	Herb/Forb		D/Co-d	
Scented Acronychia	Acronychia littoralis	Tree	Low	Unc	e/r/s
Common Acronychia or Yellow Wood	Acronychia oblongifolia	Tree	Low	Unc	
Silver Aspen	Acronychia wilcoxiana	Tree	Low	Unc	
Black She-oak	Allocasuarina littoralis	Tree	High	Unc	
A Mistletoe	Amyema congener subsp. congener	Shrub	Unknown	Unc	
A Mistletoe	Amylotheca dictyophleba	Shrub	Unknown	Unc	
Hoop Pine	Araucaria cunninghamii	Tree	Medium	Unc	
White Lace Flower	Archidendron hendersonii	Tree	Low	Unc	v/s
Coogera	Arytera divaricata	Tree	Low	Unc	
Wallum Banksia	Banksia aemula	Shrub	Medium	Unc	
Gristle Fern	Blechnum cartilagineum	Fern		Unc	
Swamp Water Fern	Blechnum indicum	Fern		Unc	
Brush Ironbark	Bridelia exaltata	Tree	Medium	Unc	
Caelospermum	Caelospermum paniculatum	Vine		Unc	
Willow Bottlebrush	Callistemon salignus	Tree	High	Unc	
White Cypress Pine	Callitris columellaris	Tree	High	Unc	
Common Ground Fern	Calochlaena dubia	Fern		Unc	
Devil's Twine or Downy Dodder-Laurel	Cassytha pubescens	Vine		Unc	
A Dodder or Devil's Twine	Cassytha species	Vine		Unc	
Horsetail She-oak	Casuarina equisetifolia subsp. incana	Tree	High	Unc	

Hastings Point Vegetation Species List - Community 1					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
A Rush	Caustis recurvata var. recurvata	Grass/Sedge		Unc	
Large-leaved Staff Vine	Celastrus subspicata	Vine		Unc	
Native Celtis	Celtis paniculata	Tree	Low	Unc	
Tooth-leaved Palm Lily	Cordyline congesta	Shrub	Low	Unc	s
Broad-leaved Palm Lily	Cordyline petiolaris	Shrub	Low	Unc	
Red-fruited Palm Lily	Cordyline rubra	Shrub	Low	Unc	
Swamp Lily	Crinum pedunculatum	Herb/Forb		Unc	s
Couch	Cynodon dactylon	Grass/Sedge		Unc	
A Sedge	Cyperus eglobosus	Grass/Sedge		Unc	
A Sedge	Cyperus scaber	Grass/Sedge		Unc	s
A Sedge	Cyperus stradbrokensis	Grass/Sedge		Unc	s
Hare's Foot Fern	Davallia solida var. pyxidata	Fern		Unc	
Shiny-leaved Stinging Tree	Dendrocnide photinophylla	Tree	Low	Unc	
	Desmodium nemorosum	Herb/Forb		Unc	
Small-flowered Finger Grass	Digitaria parviflora	Grass/Sedge		Unc	
Native Yam	Dioscorea transversa	Vine		Unc	
Grey Ebony	Diospyros fasciculosa	Tree	Low	Unc	s
Myrtle Ebony	Diospyros pentamera	Tree	Low	Unc	
Large-leaf Hop-bush	Dodonaea triquetra	Shrub	Medium	Unc	
Prickly Rasp Fern	Doodia aspera	Fern		Unc	
Yellow Tulipwood	Drypetes deplanchei	Tree	Low	Unc	
Rosewood	Dysoxylum fraserianum	Tree	Medium	Unc	
Embelia	Embelia australiana	Vine		Unc	
Wiry Panic	Entolasia stricta	Grass/Sedge		Unc	
Forest Red Gum	Eucalyptus tereticornis	Tree	High	Unc	
Bolwarra	Eupomatia laurina	Shrub	Low	Unc	
Native Cherry or Cherry Ballarat	Exocarpos cupressiformis	Shrub	Low	Unc	
Moreton Bay Fig	Ficus macrophylla	Tree	High	Unc	
Small-leaved Fig	Ficus obliqua	Tree	High	Unc	
Port Jackson Fig or Rusty Fig	Ficus rubiginosa	Tree	High	Unc	
White Fig	Ficus virens	Tree	High	Unc	
Strangling Fig	Ficus watkinsiana	Tree	High	Unc	
Cudgerie or Bumpy Ash	Flindersia schottiana	Tree	High	Unc	
A Sawsedge	Gahnia aspera	Grass/Sedge		Unc	
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		Unc	
Umbrella Cheese Tree	Glochidion sumatranum	Tree	High	Unc	s
White Beech	Gmelina leichhardtii	Tree	Medium	Unc	
Saffron Heart	Halfordia kendak	Tree	Low	Unc	
Swamp Hibiscus	Hibiscus diversifolius	Shrub	Low	Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
Knot Vine	Hippocratea barbata	Vine		Unc	
Native Hoya	Hoya oligotricha subsp. oligotricha	Vine		Unc	s
Harsh Ground Fern	Hypolepis muelleri	Fern		Unc	
Beach Morning Glory	Ipomoea pes-caprae	Vine		Unc	
	Ischaemum australe	Grass/Sedge		Unc	
Stiff Jasmine	Jasminum volubile	Vine		Unc	
Red Coral Pea	Kennedia rubicunda	Vine		Unc	
A Heath Bush	Leucopogon lanceolatus	Shrub	Low	Unc	
A Heath Bush	Leucopogon margarodes	Shrub	Low	Unc	
Forest Lobelia	Lobelia trigonocaulis	Herb/Forb		Unc	
Climbing Maidenhair Fern	Lygodium microphyllum	Fern		Unc	

Hastings Point Vegetation Species List - Community 1					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Cockspur Thorn	Maclura cochinchinensis	Vine		Unc	
White Kamala	Mallotus discolor	Tree	Medium	Unc	
Red Kamala	Mallotus philippensis	Tree	Low	Unc	
Common Milk Vine	Marsdenia rostrata	Vine		Unc	
Pink-flowered Doughwood	Melicope elleryana	Tree	Medium	Unc	s
Southern Melodinus	Melodinus australis	Vine		Unc	
Kangaroo Fern	Microsorum diversifolium	Fern		Unc	
Morinda	Morinda jasminoides	Vine		Unc	
Burny Bean	Mucuna gigantea subsp. gigantea	Vine		Unc	s
Brush Muttonwood	Myrsine howittiana	Tree	Low	Unc	
Golden Mistletoe	Notothixos subaurea	Vine		Unc	
Native Olive	Olea paniculata	Tree	Medium	Unc	
	Oplismenus undulatifolius var. mollis	Grass/Sedge		Unc	
An Oxalis	Oxalis species	Herb/Forb		Unc	
Common Silkpod	Parsonsia straminea	Vine		Unc	
	Paspalidium distans	Grass/Sedge		Unc	
Dwarf Sickle Fern	Pellaea nana	Fern		Unc	
Bastard Crow's Ash	Pentaceras australis	Tree	Medium	Unc	s
Satinwood	Phebalium squameum	Shrub	Low	Unc	
Plum Myrtle	Pilidiostigma glabrum	Shrub	Low	Unc	
Tall Rice Flower	Pimelea ligustrina subsp. ligustrina	Shrub	Low	Unc	
Sweet Pittosporum	Pittosporum undulatum	Shrub	Medium	Unc	
	Platysace ericoides	Herb/Forb		Unc	
Polyalthia	Polyalthia nitidissima	Tree	Low	Unc	s
	Pomax umbellata	Herb/Forb		Unc	
Whiteroot	Pratia purpurascens	Herb/Forb		Unc	
Large-leaved Canthium	Psydrax lamprophylla	Tree	Low	Unc	
Horshshoe Felt Fern	Pyrrosia confluens	Fern		Unc	
Indian Cupscale Grass	Sacciolepis indica	Grass/Sedge		Unc	
Steelwood	Sarcopteryx stipata	Tree	Low	Unc	
Flannel Weed	Sida cordifolia	Herb/Forb		Unc	s
Sweet Sarsaparilla	Smilax glyciphylla	Vine		Unc	s
Red-fruited Kurrajong or Peanut Tree	Sterculia quadrifida	Tree	Medium	Unc	
Buff Hazelwood	Symplocos thwaitesii	Tree	Low	Unc	
Riberry	Syzygium luehmannii	Tree	Medium	Unc	
Kangaroo Grass	Themeda australis	Grass/Sedge		Unc	
Native or Poison Peach	Trema tomentosa var. viridis	Shrub	Medium	Unc	
Water Gum	Tristaniopsis laurina	Tree	Medium	Unc	
Burny Vine	Trophis scandens subsp. scandens	Vine		Unc	
Tiebush	Wikstroemia indica	Herb/Forb		Unc	
Veiny Wilkiea	Wilkiea huegeliana	Shrub	Low	Unc	
An Orchid	Zeuxine oblonga	Herb/Forb		Unc	s
NOTE:					
1: The **common names** used are generally those published on the PlantNET website (http://plantnet.rbgsyd.nsw.gov.au).					
2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.					
3: v/r/s referes to whether the species is vulnerable (v), endangered (e), ROTAP listed (r), or a significant plant (s) on one of a number of pieces of legislation.					
4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon					

Hastings Point Vegetation Species List - Community 2					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
Curracabah	Acacia concurrens	Tree	High	C	
Blackwood or Sallywattle	Acacia melanoxylon	Tree	High	C	
Lilly Pilly	Acmena smithii	Tree	Medium	C	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	C	
Breynia or Coffee Bush	Breynia oblongifolia	Shrub	Low	C	
Willow Bottlebrush	Callistemon salignus	Tree	High	C	
Giant or Five-leaved Water Vine	Cissus hypoglauca	Vine		C	
Coast Canthium	Cyclophyllum longipetalum	Tree	Low	C	
A Blue Flax-lily	Dianella species	Herb/Forb		C	
Corkwood	Duboisia myoporoides	Tree	Low	C	
Rose Walnut	Endiandra discolor	Tree	Low	C	
Hard Corkwood	Endiandra sieberi	Tree	Low	C	
Swamp Mahogany	Eucalyptus robusta	Tree	High	C	
Ribbonwood	Euroschinus falcatus var. falcatus	Tree	Medium	C	
Small-leaved Fig	Ficus obliqua	Tree	High	C	
Strangling Fig	Ficus watkinsiana	Tree	High	C	
Whip Vine or Supplejack	Flagellaria indica	Vine		C	
Bennett's Ash	Flindersia bennettiana	Tree	Medium	C	s
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		C	
Scrambling Lily	Geitonoplesium cymosum	Vine		C	
Umbrella Cheese Tree	Glochidion sumatranum	Tree	High	C	s
Guioa	Guioa semiglauca	Tree	Medium	C	
Twining Guinea Flower	Hibbertia scandens	Vine		C	
Blady Grass	Imperata cylindrica	Grass/Sedge		C	
	Ischaemum australe	Grass/Sedge		C	
Foambark Tree	Jagera pseudorhus var. pseudorhus	Tree	Low	C	
Red Coral Pea	Kennedia rubicunda	Vine		C	
A Heath Bush	Leucopogon lanceolatus	Shrub	Low	C	
Spiny-headed Mat-rush	Lomandra longifolia	Herb/Forb		C	
Brush Box	Lophostemon confertus	Tree	High	C	
Macaranga	Macaranga tanarius	Shrub	High	C	
Cockspur Thorn	Maclura cochinchinensis	Vine		C	
Pink-flowered Doughwood	Melicope elleryana	Tree	Medium	C	s
Prickly Broom Heath	Monotoca elliptica	Shrub	Low	C	
Muttonwood	Myrsine variabilis	Shrub	Low	C	
Large Mock-olive	Notolaea longifolia	Tree	Low	C	
A Geebung	Persoonia adenantha	Shrub	Low	C	
Bracken Fern	Pteridium esculentum	Fern		C	
Native Guava	Rhodomyrtus psidioides	Tree	Low	C	
Austral Sarsaparilla or Barbed-wire Vine	Smilax australis	Vine		C	
Kangaroo Grass	Themeda australis	Grass/Sedge		C	
Tree Heath	Trochocarpa laurina	Shrub	Low	C	
Beach Acronychia	Acronychia imperforata	Tree	Low	D/Co-d	
Black She-oak	Allocasuarina littoralis	Tree	High	D/Co-d	
Red Ash	Alphitonia excelsa	Tree	Medium	D/Co-d	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	D/Co-d	
Swamp Oak	Casuarina glauca	Tree	High	D/Co-d	
Pink Bloodwood	Corymbia intermedia	Tree	High	D/Co-d	
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	D/Co-d	
Hard Quandong	Elaeocarpus obovatus	Tree	Medium	D/Co-d	
Blueberry Ash	Elaeocarpus reticulatus	Tree	Medium	D/Co-d	
Cheese Tree	Glochidion ferdinandii	Tree	Medium	D/Co-d	
Swamp Turpentine	Lophostemon suaveolens	Tree	High	D/Co-d	
Paperbark	Melaleuca quinquenervia	Tree	High	D/Co-d	
Blue Lilly Pilly	Syzygium oleosum	Tree	Medium	D/Co-d	
Brush Ironbark Wattle or Southern Salwood	Acacia disparrima subsp. disparrima	Tree	High	Unc	
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	Unc	
Pixie Caps	Acianthus fornicatus	Herb/Forb		Unc	
Broad-leaved Lilly Pilly	Acmena hemilampra subsp. hemilampra	Tree	Medium	Unc	
Scented Acronychia	Acronychia littoralis	Tree	Low	Unc	e/r/s
Tall Groundberry	Acrotriche aggregata	Shrub	Low	Unc	
Rough Maidenhair	Adiantum hispidulum	Fern		Unc	
Beach Alectryon	Alectryon coriaceus	Tree	Low	Unc	

Hastings Point Vegetation Species List - Community 2					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
A Native Ginger	Alpinia arundelliana	Herb/Forb		Unc	
Native Ginger	Alpinia caerulea	Herb/Forb		Unc	
Prickly Alyxia	Alyxia ruscifolia	Shrub	Low	Unc	
Hoop Pine	Araucaria cunninghamii	Tree	Medium	Unc	
Bangalow Palm	Archontophoenix cunninghamiana	Tree	Medium	Unc	
Bird's Nest Fern	Asplenium australasicum	Fern		Unc	
A Star-hair	Astrotricha floccosa	Shrub	Low	Unc	
Bare Twigrush	Baumea juncea	Grass/Sedge		Unc	
Soft Twigrush	Baumea rubiginosa	Grass/Sedge		Unc	
A Twigrush	Baumea teretifolia	Grass/Sedge		Unc	
	Blechnum camfieldii	Fern		Unc	
Gristle Fern	Blechnum cartilagineum	Fern		Unc	
Swamp Water Fern	Blechnum indicum	Fern		Unc	
Caelospermum	Caelospermum paniculatum	Vine		Unc	s
White Cypress Pine	Callitris columellaris	Tree	High	Unc	
Common Ground Fern	Calochlaena dubia	Fern		Unc	
Devil's Twine or Downy Dodder-Laurel	Cassytha pubescens	Vine		Unc	
Slender Grape	Cayratia clematidea	Vine		Unc	
Native Celtis	Celtis paniculata	Tree	Low	Unc	
Water Vine	Cissus antarctica	Vine		Unc	
Smooth Clerodendrum	Clerodendrum floribundum var. floribundum	Shrub	Low	Unc	
Native Wandering Jew	Commelina cyanea	Herb/Forb		Unc	
Brown Kurrajong	Commersonia bartramia	Tree	High	Unc	
Tooth-leaved Palm Lily	Cordyline congesta	Shrub	Low	Unc	r/s
Red-fruited Palm Lily	Cordyline rubra	Shrub	Low	Unc	
Swamp Lily	Crinum pedunculatum	Herb/Forb		Unc	
Stinking Cryptocarya	Cryptocarya foetida	Tree	Low	Unc	v/r/s
Pepperberry Tree	Cryptocarya obovata	Tree	Medium	Unc	
Three-veined Cryptocarya	Cryptocarya triplinervis var.triplinervis	Tree	Low	Unc	
Snake Orchid	Cymbidium suave	Herb/Forb		Unc	
Barbed Wire Grass	Cymbopogon refractus	Grass/Sedge		Unc	
A Sedge	Cyperus enervis	Grass/Sedge		Unc	
A Sedge	Cyperus polystachyos	Grass/Sedge		Unc	
A Sedge	Cyperus stradbrokensis	Grass/Sedge		Unc	s
Denhamia or Orange Boxwood	Denhamia celastroides	Tree	Low	Unc	
Native Derris	Derris involuta	Vine		Unc	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		Unc	
Small-flowered Finger Grass	Digitaria parviflora	Grass/Sedge		Unc	
Grey Ebony	Diospyros fasciculosa	Tree	Low	Unc	s
Myrtle Ebony	Diospyros pentamera	Tree	Low	Unc	
Large-leaf Hop-bush	Dodonaea triquetra	Shrub	Medium	Unc	
Yellow Tulipwood	Drypetes deplanchei	Tree	Low	Unc	
Red Bean	Dysoxylum mollissimum	Tree	High	Unc	
Red Olive Plum	Elaeodendron australe var. australe	Tree	Low	Unc	
Embelia	Embelia australiana	Vine		Unc	
Bordered Panic	Entolasia marginata	Grass/Sedge		Unc	
Wiry Panic	Entolasia stricta	Grass/Sedge		Unc	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		Unc	
A Lovegrass	Eragrostis species	Grass/Sedge		Unc	
Spring Grass	Eriochloa procera	Grass/Sedge		Unc	s
Native Cherry or Cherry Ballarat	Exocarpos cupressiformis	Shrub	Low	Unc	
Broad-leaved Native Cherry	Exocarpos latifolius	Shrub	Low	Unc	s
Creek Sandpaper Fig	Ficus coronata	Tree	Low	Unc	
Common Fringerush	Fimbristylis dichotoma	Grass/Sedge		Unc	
A Sawsedge	Gahnia aspera	Grass/Sedge		Unc	
Redfruited Sawsedge	Gahnia sieberiana	Grass/Sedge		Unc	
A Guinea Flower	Hibbertia aspera	Shrub	Low	Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
Bat's Wing Fern	Histiopteris incisa	Fern		Unc	
Pointed-leaved Hovea	Hovea acutifolia	Shrub	Low	Unc	
A Pennywort	Hydrocotyle peduncularis	Herb/Forb		Unc	
Small St. John's Wort	Hypericum japonicum	Herb/Forb		Unc	
Harsh Ground Fern	Hypolepis muelleri	Fern		Unc	
Stiff Jasmine	Jasminum volubile	Vine		Unc	
Sour Currant Bush	Leptomeria acida	Shrub	Low	Unc	

Hastings Point Vegetation Species List - Community 2					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
A Teatree	Leptospermum polygalifolium subsp. polygalifolium	Shrub	Medium	Unc	
A Heath Bush	Leucopogon margarodes	Shrub	Low	Unc	
Brown Bolly Gum	Litsea australis	Tree	Low	Unc	
Cabbage or Fan Palm	Livistona australis	Tree	Medium	Unc	
Climbing Maidenhair Fern	Lygodium microphyllum	Fern		Unc	
Pineapple Zamia	Macrozamia lucida	Herb/Forb		Unc	s
White Kamala	Mallotus discolor	Tree	Medium	Unc	
Common Milk Vine	Marsdenia rostrata	Vine		Unc	
Blue Tongue	Melastoma affine	Shrub	Low	Unc	
Southern Melodinus	Melodinus australis	Vine		Unc	
Yellow Pear-fruit	Mischocarpus pyriformis	Tree	Low	Unc	
Morinda	Morinda jasminoides	Vine		Unc	
Burny Bean	Mucuna gigantea subsp. gigantea	Vine		Unc	s
Brush Muttonwood	Myrsine howittiana	Tree	Low	Unc	
Bleeding Heart or Native Poplar	Omalanthus nutans	Shrub	Medium	Unc	
	Oplismenus aemulus	Grass/Sedge		Unc	
	Ottochloa gracillima	Grass/Sedge		Unc	
Screw Pine	Pandanus tectorius	Shrub	Low	Unc	
Bower Vine	Pandorea jasminoides	Vine		Unc	
Wonga Vine	Pandorea pandorana subsp. pandorana	Vine		Unc	
Two Colour Panic	Panicum simile	Grass/Sedge		Unc	
Common Silkpod	Parsonsia straminea	Vine		Unc	
	Paspalidium distans	Grass/Sedge		Unc	
	Paspalidium gausum	Grass/Sedge		Unc	s
Ditch Millet	Paspalum orbiculare	Grass/Sedge		Unc	
A Smartweed	Persicaria strigosa	Herb/Forb		Unc	
Plum Myrtle	Pilidiostigma glabrum	Shrub	Low	Unc	
Orange Thorn	Pittosporum multiflorum	Shrub	Low	Unc	
Hairy Pittosporum	Pittosporum revolutum	Shrub	Low	Unc	
Thin-leaved Coondoo	Planchonella chartacea	Tree	Medium	Unc	s
Elkhorn	Platycerium bifurcatum	Fern		Unc	
Staghorn	Platycerium superbum	Fern		Unc	
Polyalthia	Polyalthia nitidissima	Tree	Low	Unc	s
Celery Wood or Silver Basswood	Polyscias elegans	Tree	Low	Unc	
	Pomax umbellata	Herb/Forb		Unc	
Whiteroot	Pratia purpurascens	Herb/Forb		Unc	
Hairy Psychotria	Psychotria loniceroides	Shrub	Low	Unc	
Large-leaved Canthium	Psydrax lamprophylla	Tree	Low	Unc	
Hairy Bush Pea	Pultenaea villosa	Shrub	Low	Unc	
Rock Felt Fern	Pyrrosia rupestris	Fern		Unc	
White Supplejack	Ripogonum album	Vine		Unc	
Big Yellow Wood or Yellow Aspen	Sarcomelicope simplicifolia subsp. simplicifolia	Tree	Low	Unc	
Steelwood	Sarcopteryx stipata	Tree	Low	Unc	
A Rush	Schoenus brevifolius	Grass/Sedge		Unc	
Sweet Sarsaparilla	Smilax glyciphylla	Vine		Unc	
Prickly Snake Vine	Stephania aculeata	Vine		Unc	
Snake Vine	Stephania japonica var. disclor	Vine		Unc	
White Hazelwood	Symplocos stawellii	Tree	Low	Unc	
Buff Hazelwood	Symplocos thwaitesii	Tree	Low	Unc	
Scentless Rosewood	Synoum glandulosum	Tree	Medium	Unc	
Riberry	Syzygium luehmannii	Tree	Medium	Unc	
Banana Bush	Tabernaemontana pandacaqui	Shrub	Low	Unc	
King Fern	Todea barbara	Fern		Unc	
	Trachymene incisa	Herb/Forb		Unc	
Water Gum	Tristaniopsis laurina	Tree	Medium	Unc	
Burny Vine	Trophis scandens subsp. scandens	Vine		Unc	
Ivy-leaved Violet	Viola hederacea	Herb/Forb		Unc	
Veiny Wilkiea	Wilkiea huegeliana	Shrub	Low	Unc	
A Grasstree	Xanthorrhoea species	Herb/Forb		Unc	
	Zieria sp. K	Shrub	Low	Unc	s
NOTE:					
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2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.					
3: v/r/s referes to whether the species is vulnerable (v), endangered (e), ROTAP listed (r), or a significant plant (s) on one of a number of pieces of legislation.					
4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon					

Hastings Point Vegetation Species List - Community 3					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	C	
Sweet Wattle	Acacia suaveolens	Shrub	Low	C	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	C	
Devil's Rice or Variable Smoke-bush	Conospermum taxifolium	Herb/Forb		C	
Swamp Mahogany	Eucalyptus robusta	Tree	High	C	
Scribbly Gum	Eucalyptus signata	Tree	High	C	
Leafy Wedge Pea	Gompholobium virgatum var. virgatum	Shrub	Low	C	
A Guinea Flower	Hibbertia fasciculata	Shrub	Low	C	
	Homoranthus virgatus	Shrub	Low	C	s
Blady Grass	Imperata cylindrica	Grass/Sedge		C	
A Rush	Leptocarpus tenax	Grass/Sedge		C	
A Teatree	Leptospermum liversidgei	Shrub	Low	C	
A Teatree	Leptospermum semibaccatum	Shrub	Low	C	
A Teatree	Leptospermum trinervium	Shrub	Medium	C	
A Heath Bush	Leucopogon ericoides	Shrub	Low	C	
A Heath Bush	Leucopogon lanceolatus	Shrub	Low	C	
A Heath Bush	Leucopogon leptospermoides	Shrub	Low	C	
Coastal Bearded-heath	Leucopogon parviflorus	Shrub	Low	C	
A Mat-rush	Lomandra elongata	Herb/Forb		C	
Brush Box	Lophostemon confertus	Tree	High	C	
Swamp Turpentine	Lophostemon suaveolens	Tree	High	C	
Prickly Broom Heath	Monotoca elliptica	Shrub	Low	C	
Straggly Baekea	Ochrosperma lineare	Shrub	Low	C	s
	Patersonia sericea	Herb/Forb		C	
A Geebung	Persoonia virgata	Shrub	Low	C	
Slender or Flaxleaf Riceflower	Pimelea linifolia	Herb/Forb		C	
	Platysace ericoides	Herb/Forb		C	
Bracken Fern	Pteridium esculentum	Fern		C	
	Restio tetraphyllus	Grass/Sedge		C	
Wedding Bush	Ricinocarpus pinifolius	Shrub	Low	C	
A Rush	Schoenus brevifolius	Grass/Sedge		C	
	Strangea linearis	Tree	Low	C	s
Black-eyed Susan	Tetratheca thymifolia	Herb/Forb		C	
Kangaroo Grass	Themeda australis	Grass/Sedge		C	
Swamp Grasstree	Xanthorrhoea fulva	Herb/Forb		C	
Forest Grasstree	Xanthorrhoea johnsonii	Herb/Forb		C	
A Grasstree	Xanthorrhoea macronema	Herb/Forb		C	
	Zieria laxiflora	Shrub	Low	C	
Prickly Moses	Acacia ulicifolia	Shrub	Low	D/Co-d	
Black She-oak	Allocasuarina littoralis	Tree	High	D/Co-d	
	Aotus ericoides	Shrub	Low	D/Co-d	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	D/Co-d	
Weeping Baekea	Baeckea frutescens	Shrub	Low	D/Co-d	
Wallum Banksia	Banksia aemula	Shrub	Medium	D/Co-d	
Dwarf or Fern-leaved Banksia	Banksia oblongifolia	Shrub	Low	D/Co-d	
A Rush	Caustis recurvata var. recurvata	Grass/Sedge		D/Co-d	
Pink Bloodwood	Corymbia intermedia	Tree	High	D/Co-d	
Parrot Pea	Dillwynia retorta	Shrub	Low	D/Co-d	
A Teatree	Leptospermum polygalifolium subsp. polygalifolium	Shrub	Medium	D/Co-d	
A Teatree	Leptospermum whitei	Tree	Medium	D/Co-d	
Spiny-headed Mat-rush	Lomandra longifolia	Herb/Forb		D/Co-d	
Paperbark	Melaleuca quinquenervia	Tree	High	D/Co-d	
Tiny Wattle	Acacia baueri subsp. baueri	Shrub	Low	Unc	r
Curracabah	Acacia concurrens	Tree	High	Unc	
	Aotus lanigera	Shrub	Low	Unc	s
A Wire or Speargrass	Aristida acuta	Grass/Sedge		Unc	s
Heath-leaved Banksia	Banksia ericifolia subsp. macrantha	Shrub	Medium	Unc	
Broad-leaved or Swamp Banksia	Banksia robur	Shrub	Medium	Unc	s
Bare Twigrush	Baumea juncea	Grass/Sedge		Unc	
Wallum Boronia	Boronia falcifolia	Shrub	Low	Unc	
Forest Boronia	Boronia rosmarinifolia	Shrub	Low	Unc	s
Sword Bossiaea	Bossiaea ensata	Shrub	Low	Unc	
Variable Bossiaea	Bossiaea heterophylla	Shrub	Low	Unc	
Daphne Heath	Brachyloma daphnoides subsp. daphnoides	Shrub	Low	Unc	

Hastings Point Vegetation Species List - Community 3					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
Wallum Bottlebrush	Callistemon pachyphyllus	Shrub	Low	Unc	
Common Fringe-myrtle	Calytrix tetragona	Shrub	Low	Unc	
False Dodder or Love Vine	Cassytha filiformis	Vine		Unc	
Slender Devil's Twine	Cassytha glabella f. glabella	Vine		Unc	
Devil's Twine or Downy Dodder-Laurel	Cassytha pubescens	Vine		Unc	
Swamp Oak	Casuarina glauca	Tree	High	Unc	
A Rush	Coleocarya gracilis	Grass/Sedge		Unc	s
	Comesperma defoliatum	Herb/Forb		Unc	
	Comesperma ericinum	Herb/Forb		Unc	
Barbed Wire Grass	Cymbopogon refractus	Grass/Sedge		Unc	
	Dampiera stricta	Herb/Forb		Unc	
Blue Flax-lily	Dianella caerulea	Herb/Forb		Unc	
Hairy Parrot Pea	Dillwynia phylicoides	Shrub	Low	Unc	
Large-leaf Hop-bush	Dodonaea triquetra	Shrub	Medium	Unc	
A Sundew	Drosera auriculata	Herb/Forb		Unc	
A Sundew	Drosera peltata	Herb/Forb		Unc	
Blueberry Ash	Elaeocarpus reticulatus	Tree	Medium	Unc	
A Rush	Empodisma minus	Grass/Sedge		Unc	
Wiry Panic	Entolasia stricta	Grass/Sedge		Unc	
Common Heath	Epacris obtusifolia	Shrub	Low	Unc	
Wallum Heath	Epacris pulchella	Shrub	Low	Unc	
Speading Nut-heads	Epaltes australis	Herb/Forb		Unc	
Clustered Lovegrass	Eragrostis elongata	Grass/Sedge		Unc	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		Unc	
A Lovegrass	Eragrostis spartinoides	Grass/Sedge		Unc	
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		Unc	
Redfruited Sawsedge	Gahnia sieberiana	Grass/Sedge		Unc	
Red Midge Orchid	Genoplesium rufum	Herb/Forb		Unc	s
	Gonocarpus micranthus subsp.ramosissimus	Herb/Forb		Unc	
	Goodenia stelligera	Herb/Forb		Unc	
Matgrass	Hemarthria uncinata	Grass/Sedge		Unc	
A Guinea Flower	Hibbertia aspera	Shrub	Low	Unc	
A Guinea Flower	Hibbertia linearis	Shrub	Low	Unc	
A Guinea Flower	Hibbertia riparia	Shrub	Low	Unc	
A Guinea Flower	Hibbertia rufum	Shrub	Low	Unc	s
Twining Guinea Flower	Hibbertia scandens	Vine		Unc	
	Ischaemum australe	Grass/Sedge		Unc	
	Laxmannia compacta	Herb/Forb		Unc	
	Laxmannia gracilis	Herb/Forb		Unc	
Pithy Swordsedge	Lepidosperma longitudinale	Grass/Sedge		Unc	
Sour Currant Bush	Leptomeria acida	Shrub	Low	Unc	
A Rush	Lepyrodia interrupta	Grass/Sedge		Unc	
A Heath Bush	Leucopogon deformis	Shrub	Low	Unc	
A Heath Bush	Leucopogon margarodes	Shrub	Low	Unc	
A Heath Bush	Leucopogon virgatus	Shrub	Low	Unc	
A Heath Bush	Lissanthe sp.A	Shrub	Low	Unc	
	Macarthuria neocambrica	Herb/Forb		Unc	
	Mitrasacme polymorpha	Herb/Forb		Unc	
	Olax retusa	Shrub	Low	Unc	s
	Olax stricta	Shrub	Low	Unc	
Two Colour Panic	Panicum simile	Grass/Sedge		Unc	
	Paspalidium distans	Grass/Sedge		Unc	
Ditch Millet	Paspalum orbiculare	Grass/Sedge		Unc	
A Geebung	Persoonia adenantha	Shrub	Low	Unc	
Narrow-leaved Geebung	Persoonia linearis	Shrub	Low	Unc	
A Geebung	Persoonia stradbrokensis	Shrub	Low	Unc	
Satinwood	Phebalium squameum	Shrub	Low	Unc	
Heath Phyllota	Phyllota phylicoides	Shrub	Low	Unc	
	Pomax umbellata	Herb/Forb		Unc	
	Pseudanthus orientalis	Herb/Forb		Unc	s
Hairy Bush Pea	Pultenaea villosa	Shrub	Low	Unc	
A Rush	Restio pallens	Grass/Sedge		Unc	
A Rush	Restio tenuiculmis	Grass/Sedge		Unc	
Branched Comb Fern	Schizaea dichotoma	Fern		Unc	
A Rush	Schoenus ericetorum	Grass/Sedge		Unc	

Hastings Point Vegetation Species List - Community 3					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
A Rush	Schoenus lepidosperma subsp. pachylepis	Grass/Sedge		Unc	s
A Heath Bush	Sprengelia sprengelioides	Shrub	Low	Unc	
	Stackhousia nuda	Herb/Forb		Unc	
A Heath Bush	Styphelia viridis subsp. breviflora	Shrub	Low	Unc	
	Trachymene incisa	Herb/Forb		Unc	
Yellow Autumn-lily or Rush-lily	Tricoryne elatior	Herb/Forb		Unc	
	Xyris complanata	Herb/Forb		Unc	
NOTE:					
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4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon					

Hastings Point Vegetation Species List - Community 4					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/S**
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	C	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	C	
Bare Twigrush	Baumea juncea	Grass/Sedge		C	
Horsetail She-oak	Casuarina equisetifolia subsp. incana	Tree	High	C	
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	C	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		C	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		C	
Beach Morning Glory	Ipomoea pes-caprae	Vine		C	
	Ischaemum triticeum	Grass/Sedge		C	
Knobby Clubrush	Isolepis nodosa	Grass/Sedge		C	
A Daisy	Melanthera biflora	Herb/Forb		C	
A Boobialla	Myoporum boninense subsp. australe	Vine		C	s
Sand Couch	Sporobolus virginicus	Grass/Sedge		C	s
Prickly Couch	Zoysia macrantha	Grass/Sedge		C	
Screw Pine	Pandanus tectorius	Shrub	Low	D/Co-d	
Kangaroo Grass	Themeda australis	Grass/Sedge		D/Co-d	
Sea Celery	Apium prostratum subsp. prostratum var. filiforme	Herb/Forb		Unc	
	Asplenium difforme	Fern		Unc	
Bacopa	Bacopa monnieri	Herb/Forb		Unc	
Coastal Jack Bean	Canavalia rosea	Vine		Unc	
Pigface	Carpobrotus glaucescens	Herb/Forb		Unc	
A Dodder or Devil's Twine	Cassytha species	Vine		Unc	
Native Wandering Jew	Commelina cyanea	Herb/Forb		Unc	
Barbed Wire Grass	Cymbopogon refractus	Grass/Sedge		Unc	
Coastal Cynanchum	Cynanchum carnosum	Vine		Unc	
A Sedge	Cyperus polystachyos	Grass/Sedge		Unc	
	Desmodium rhytidophyllum	Vine		Unc	
Blue Flax-lily	Dianella caerulea	Herb/Forb		Unc	
A Blue Flax-lily	Dianella congesta	Herb/Forb		Unc	s
A Blue Flax-lily	Dianella species	Herb/Forb		Unc	
Shorthair Plumegrass	Dichelachne micrantha	Grass/Sedge		Unc	
Fishweed	Einadia stellulata	Herb/Forb		Unc	
Emilia	Emilia sonchifolia	Herb/Forb		Unc	s
Common Fringerush	Fimbristylis dichotoma	Grass/Sedge		Unc	
A Rush	Fuirena ciliaris	Grass/Sedge		Unc	s
	Galactia tenuiflora var. villosa	Vine		Unc	s
Woolly Glycine	Glycine tomentella	Vine		Unc	s
Twining Guinea Flower	Hibbertia scandens	Vine		Unc	
Spade Flower	Hybanthus stellarioides	Herb/Forb		Unc	
A Pennywort	Hydrocotyle peduncularis	Herb/Forb		Unc	
Blady Grass	Imperata cylindrica	Grass/Sedge		Unc	
	Ischaemum australe	Grass/Sedge		Unc	
Coastal Bearded-heath	Leucopogon parviflorus	Shrub	Low	Unc	
Angled Lobelia	Lobelia alata	Herb/Forb		Unc	
A Mat-rush	Lomandra species	Herb/Forb		Unc	
An Oxalis	Oxalis exilis	Herb/Forb		Unc	
Slender or Flaxleaf Riceflower	Pimelea linifolia	Herb/Forb		Unc	
Plantain	Plantago hispida	Herb/Forb		Unc	
	Plectranthus cremnus	Herb/Forb		Unc	r
Pigweed or Purslane	Portulaca oleracea	Herb/Forb		Unc	
Pastel Flower	Pseuderanthemum variabile	Herb/Forb		Unc	
Coastal Bush-pea	Pultenaea maritima	Shrub	Low	Unc	v
Native Raspberry	Rubus parvifolius	Vine		Unc	
Dune fan Flower	Scaevola calendulacea	Herb/Forb		Unc	
A Rush	Schoenus brevifolius	Grass/Sedge		Unc	
Variable Groudsel	Senecio lautus subsp. maritimus	Herb/Forb		Unc	
Sea Purslane	Sesuvium portulacastrum	Herb/Forb		Unc	
New Zealand Spinach	Tetragonia tetragonioides	Herb/Forb		Unc	
	Velleia spathulata	Herb/Forb		Unc	
Dune Bean	Vigna marina	Vine		Unc	s
Ivy-leaved Violet	Viola hederacea	Herb/Forb		Unc	
Golden Everlasting	Xerochrysum bracteatum	Herb/Forb		Unc	
Zornia	Zornia dyctiocarpa var. dyctiocarpa	Herb/Forb		Unc	

NOTE:

1: The **common names** used are generally those published on the PlantNET website (http://plantnet.rbgsyd.nsw.gov.au).

2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.

3: v/r/s referes to whether the species is vulnerable (v), endangered (e), ROTAP listed (r), or a significant plant (s) on one of a number of pieces of legislation.

4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon

Hastings Point Vegetation Species List - Community 5

Common Name	Scientific Name	Life Form	Vigour	Occurrence	V/R/S
	Aotus ericoides	Shrub	Low	C	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	C	
Broad-leaved or Swamp Banksia	Banksia robur	Shrub	Medium	C	s
Swamp Water Fern	Blechnum indicum	Fern		C	
Willow Bottlebrush	Callistemon salignus	Tree	High	C	
Common Ground Fern	Calochlaena dubia	Fern		C	
Blueberry Ash	Elaeocarpus reticulatus	Tree	Medium	C	
Hard Corkwood	Endiandra sieberi	Tree	Low	C	
Wiry Panic	Entolasia stricta	Grass/Sedge		C	
A Lovegrass	Eragrostis species	Grass/Sedge		C	
Twining Guinea Flower	Hibbertia scandens	Vine		C	
Pointed-leaved Hovea	Hovea acutifolia	Shrub	Low	C	
Blady Grass	Imperata cylindrica	Grass/Sedge		C	
A Teatree	Leptospermum whitei	Tree	Medium	C	
A Heath Bush	Leucopogon lanceolatus	Shrub	Low	C	
Climbing Maidenhair Fern	Lygodium microphyllum	Fern		C	
Tree Shaggy Pea	Oxylobium robustum	Shrub	Low	C	
A Rush	Restio pallens	Grass/Sedge		C	
Swamp Grasstree	Xanthorrhoea fulva	Herb/Forb		C	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	D/Co-d	
Pink Bloodwood	Corymbia intermedia	Tree	High	D/Co-d	
Swamp Mahogany	Eucalyptus robusta	Tree	High	D/Co-d	
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		D/Co-d	
	Ischaemum australe	Grass/Sedge		D/Co-d	
A Teatree	Leptospermum polygalifolium subsp. polygalifolium	Shrub	Medium	D/Co-d	
Spiny-headed Mat-rush	Lomandra longifolia	Herb/Forb		D/Co-d	
Brush Box	Lophostemon confertus	Tree	High	D/Co-d	
Swamp Turpentine	Lophostemon suaveolens	Tree	High	D/Co-d	
Paperbark	Melaleuca quinquenervia	Tree	High	D/Co-d	
Blue Tongue	Melastoma affine	Shrub	Low	D/Co-d	
A Geebung	Persoonia adenantha	Shrub	Low	D/Co-d	
Bracken Fern	Pteridium esculentum	Fern		D/Co-d	
Hairy Bush Pea	Pultenaea villosa	Shrub	Low	D/Co-d	
A Rush	Restio tetraphyllus	Grass/Sedge		D/Co-d	
A Rush	Schoenus brevifolius	Grass/Sedge		D/Co-d	
Curracabah	Acacia concurrens	Tree	High	Unc	
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	Unc	
Blackwood or Sallywattle	Acacia melanoxylon	Tree	High	Unc	
Sweet Wattle	Acacia suaveolens	Shrub	Low	Unc	
Prickly Moses	Acacia ulicifolia	Shrub	Low	Unc	
Lilly Pilly	Acmena smithii	Tree	Medium	Unc	
Tall Groundberry	Acrotriche aggregata	Shrub	Low	Unc	
Black She-oak	Allocasuarina littoralis	Tree	High	Unc	
Red Ash	Alphitonia excelsa	Tree	Medium	Unc	
Weeping Baekea	Baeckea frutescens	Shrub	Low	Unc	
Wallum Banksia	Banksia aemula	Shrub	Medium	Unc	
Dwarf or Fern-leaved Banksia	Banksia oblongifolia	Shrub	Low	Unc	
Bare Twigrush	Baumea juncea	Grass/Sedge		Unc	
Soft Twigrush	Baumea rubiginosa	Grass/Sedge		Unc	
Daphne Heath	Brachyloma daphnoides subsp. daphnoides	Shrub	Low	Unc	
Breynia or Coffee Bush	Breynia oblongifolia	Shrub	Low	Unc	
Wallum Bottlebrush	Callistemon pachyphyllus	Shrub	Low	Unc	
A Dodder or Devil's Twine	Cassytha species	Vine		Unc	
Swamp Oak	Casuarina glauca	Tree	High	Unc	
A Rush	Caustis recurvata var. recurvata	Grass/Sedge		Unc	
A Rush	Chorizandra cymbaria	Grass/Sedge		Unc	
Brown Kurrajong	Commersonia bartramia	Tree	High	Unc	
Devil's Rice or Variable Smoke-bush	Conospermum taxifolium	Herb/Forb		Unc	
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	Unc	
A Sedge	Cyperus polystachyos	Grass/Sedge		Unc	
	Dampiera stricta	Herb/Forb		Unc	
A Blue Flax-lily	Dianella species	Herb/Forb		Unc	
Parrot Pea	Dillwynia retorta	Shrub	Low	Unc	
Large-leaf Hop-bush	Dodonaea triquetra	Shrub	Medium	Unc	

Hastings Point Vegetation Species List - Community 5

Common Name	Scientific Name	Life Form	Vigour	Occurrence	V/R/S
Corkwood	Duboisia myoporoides	Tree	Low	Unc	
A Rush	Empodisma minus	Grass/Sedge		Unc	
Bordered Panic	Entolasia marginata	Grass/Sedge		Unc	
Coral Heath	Epacris microphylla var. microphylla	Shrub	Low	Unc	
Speading Nut-heads	Epaltes australis	Herb/Forb		Unc	
Spring Grass	Eriochloa procera	Grass/Sedge		Unc	s
Tallowwood	Eucalyptus microcorys	Tree	High	Unc	
Blackbutt	Eucalyptus pilularis	Tree	High	Unc	
Forest Red Gum	Eucalyptus tereticornis	Tree	High	Unc	
Redfruited Sawsedge	Gahnia sieberiana	Grass/Sedge		Unc	
Scrambling Lily	Geitonoplesium cymosum	Vine		Unc	
Pouched Coral Fern	Gleichenia dicarpa	Fern		Unc	
Cheese Tree	Glochidion ferdinandii	Tree	Medium	Unc	
Umbrella Cheese Tree	Glochidion sumatranum	Tree	High	Unc	s
	Gonocarpus micranthus subsp.ramosissimus	Herb/Forb		Unc	
	Gonocarpus teucrioides	Herb/Forb		Unc	
Matgrass	Hemarthria uncinata	Grass/Sedge		Unc	
	Hibiscus splendens	Shrub	Medium	Unc	
Bat's Wing Fern	Histiopteris incisa	Fern		Unc	
	Homoranthus virgatus	Shrub	Low	Unc	s
A Pennywort	Hydrocotyle peduncularis	Herb/Forb		Unc	
Small St. John's Wort	Hypericum japonicum	Herb/Forb		Unc	
Harsh Ground Fern	Hypolepis muelleri	Fern		Unc	
Red Coral Pea	Kennedia rubicunda	Vine		Unc	
A Rush	Leptocarpus tenax	Grass/Sedge		Unc	
Sour Currant Bush	Leptomeria acida	Shrub	Low	Unc	
A Teatree	Leptospermum juniperinum	Shrub	Low	Unc	
A Teatree	Leptospermum semibaccatum	Shrub	Low	Unc	
A Heath Bush	Leucopogon ericoides	Shrub	Low	Unc	
A Heath Bush	Leucopogon leptospermoides	Shrub	Low	Unc	
A Heath Bush	Leucopogon margarodes	Shrub	Low	Unc	
A Heath Bush	Leucopogon virgatus	Shrub	Low	Unc	
A Mat-rush	Lomandra elongata	Herb/Forb		Unc	
Thyme Honeymyrtle	Melaleuca thymifolia	Shrub	Low	Unc	
Pink-flowered Doughwood	Melicope elleryana	Tree	Medium	Unc	s
Prickly Broom Heath	Monotoca elliptica	Shrub	Low	Unc	
Prickly Broom Heath	Monotoca scoparia	Shrub	Low	Unc	
Large Mock-olive	Notolaea longifolia	Tree	Low	Unc	
Straggly Baekea	Ochrosperma lineare	Shrub	Low	Unc	s
Dwarf Panic	Panicum pygmaeum	Grass/Sedge		Unc	
Two Colour Panic	Panicum simile	Grass/Sedge		Unc	
Common Silkpod	Parsonsia straminea	Vine		Unc	
	Paspalidium distans	Grass/Sedge		Unc	
Ditch Millet	Paspalum orbiculare	Grass/Sedge		Unc	
A Geebung	Persoonia stradbrokensis	Shrub	Low	Unc	
A Geebung	Persoonia virgata	Shrub	Low	Unc	
Plum Myrtle	Pilidiostigma glabrum	Shrub	Low	Unc	
Slender or Flaxleaf Riceflower	Pimelea linifolia	Herb/Forb		Unc	
Hairy Pittosporum	Pittosporum revolutum	Shrub	Low	Unc	
	Platysace ericoides	Herb/Forb		Unc	
	Pomax umbellata	Herb/Forb		Unc	
Whiteroot	Pratia purpurascens	Herb/Forb		Unc	
	Pultenaea retusa	Shrub	Low	Unc	
A Rush	Restio tenuiculmis	Grass/Sedge		Unc	
Wedding Bush	Ricinocarpus pinifolius	Shrub	Low	Unc	
Forked Comb Fern	Schizaea bifida	Fern		Unc	
Branched Comb Fern	Schizaea dichotoma	Fern		Unc	
Austral Sarsaparilla or Barbed-wire Vine	Smilax australis	Vine		Unc	
Sweet Sarsaparilla	Smilax glyciphylla	Vine		Unc	
Snake Vine	Stephania japonica var. disclor	Vine		Unc	
Umbrella Fern	Sticherus flabellatus	Fern		Unc	
Spreading Shield Fern	Sticherus lobatus	Fern		Unc	
	Strangea linearis	Tree	Low	Unc	s
Blue Lilly Pilly	Syzygium oleosum	Tree	Medium	Unc	

Hastings Point Vegetation Species List - Community 5

Common Name	Scientific Name	Life Form	Vigour	Occurrence	V/R/S
Kangaroo Grass	Themeda australis	Grass/Sedge		Unc	
Tree Heath	Trochocarpa laurina	Shrub	Low	Unc	
Ivy-leaved Violet	Viola hederacea	Herb/Forb		Unc	
Forest Grasstree	Xanthorrhoea johnsonii	Herb/Forb		Unc	
	Xyris gracilis subsp. gracilis	Herb/Forb		Unc	s

NOTE:
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2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.
3: v/r/s referes to whether the species is vulnerable (v), endangered (e), ROTAP listed (r), or a significant plant (s) on one of a number of pieces of legislation.
4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon

Hastings Point Vegetation Species List - Community 6					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	C	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	C	
Bare Twigrush	Baumea juncea	Grass/Sedge		C	
Soft Twigrush	Baumea rubiginosa	Grass/Sedge		C	
Swamp Water Fern	Blechnum indicum	Fern		C	
Willow Bottlebrush	Callistemon salignus	Tree	High	C	
Common Ground Fern	Calochlaena dubia	Fern		C	
Swamp Oak	Casuarina glauca	Tree	High	C	
Pink Bloodwood	Corymbia intermedia	Tree	High	C	
Large-leaf Hop-bush	Dodonaea triquetra	Shrub	Medium	C	
Blueberry Ash	Elaeocarpus reticulatus	Tree	Medium	C	
Wiry Panic	Entolasia stricta	Grass/Sedge		C	
A Lovegrass	Eragrostis species	Grass/Sedge		C	
Redfruited Sawsedge	Gahnia sieberiana	Grass/Sedge		C	
Matgrass	Hemarthria uncinata	Grass/Sedge		C	
A Teatree	Leptospermum polygalifolium subsp. polygalifolium	Shrub	Medium	C	
Spiny-headed Mat-rush	Lomandra longifolia	Herb/Forb		C	
Blue Tongue	Melastoma affine	Shrub	Low	C	
Two Colour Panic	Panicum simile	Grass/Sedge		C	
A Geebung	Persoonia adenantha	Shrub	Low	C	
Common Reed	Phragmites australis	Grass/Sedge		C	
Bracken Fern	Pteridium esculentum	Fern		C	
A Rush	Restio tetraphyllus	Grass/Sedge		C	
Kangaroo Grass	Themeda australis	Grass/Sedge		C	
Ivy-leaved Violet	Viola hederacea	Herb/Forb		C	
Swamp Mahogany	Eucalyptus robusta	Tree	High	D/Co-d	
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		D/Co-d	
Blady Grass	Imperata cylindrica	Grass/Sedge		D/Co-d	
	Ischaemum australe	Grass/Sedge		D/Co-d	
Swamp Turpentine	Lophostemon suaveolens	Tree	High	D/Co-d	
Paperbark	Melaleuca quinquenervia	Tree	High	D/Co-d	
A Rush	Schoenus brevifolius	Grass/Sedge		D/Co-d	
Curracabah	Acacia concurrens	Tree	High	Unc	
Rush-leaved Wattle	Acacia juncifolia subsp. juncifolia	Shrub	Low	Unc	
Long-leaf Wattle	Acacia longissima	Shrub	Low	Unc	
Blackwood or Sallywattle	Acacia melanoxylon	Tree	High	Unc	
Sweet Wattle	Acacia suaveolens	Shrub	Low	Unc	
Prickly Moses	Acacia ulicifolia	Shrub	Low	Unc	
Lilly Pilly	Acmena smithii	Tree	Medium	Unc	
Beach Acronychia	Acronychia imperforata	Tree	Low	Unc	
Tall Groundberry	Acrotriche aggregata	Shrub	Low	Unc	
	Adrastaea salicifolia	Vine		Unc	
Black She-oak	Allocasuarina littoralis	Tree	High	Unc	
Red Ash	Alphitonia excelsa	Tree	Medium	Unc	
	Aotus ericoides	Shrub	Low	Unc	
A Wire or Speargrass	Aristida acuta	Grass/Sedge		Unc	s
Weeping Baekea	Baeckea frutescens	Shrub	Low	Unc	
Wallum Banksia	Banksia aemula	Shrub	Medium	Unc	
Heath-leaved Banksia	Banksia ericifolia subsp. macrantha	Shrub	Medium	Unc	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	Unc	
Dwarf or Fern-leaved Banksia	Banksia oblongifolia	Shrub	Low	Unc	
Broad-leaved or Swamp Banksia	Banksia robur	Shrub	Medium	Unc	s
Jointed Twigrush	Baumea articulata	Grass/Sedge		Unc	s
Daphne Heath	Brachyloma daphnoides subsp. daphnoides	Shrub	Low	Unc	
Breynia or Coffee Bush	Breynia oblongifolia	Shrub	Low	Unc	
Wallum Bottlebrush	Callistemon pachyphyllus	Shrub	Low	Unc	
Scented-top Grass	Capillipedium spicigerum	Grass/Sedge		Unc	
A Sedge	Carex maculata	Grass/Sedge		Unc	s
A Dodder or Devil's Twine	Cassytha species	Vine		Unc	
A Rush	Caustis recurvata var. recurvata	Grass/Sedge		Unc	
Slender Grape	Cayratia clematidea	Vine		Unc	
Indian Pennywort or Gotu Cola	Centella asiatica	Herb/Forb		Unc	
A Rush	Chorizandra cymbaria	Grass/Sedge		Unc	
Leafy Twigrush	Cladium procerum	Grass/Sedge		Unc	s

Hastings Point Vegetation Species List - Community 6					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Native Wandering Jew	Commelina cyanea	Herb/Forb		Unc	
Brown Kurrajong	Commersonia bartramia	Tree	High	Unc	
Devil's Rice or Variable Smoke-bush	Conospermum taxifolium	Herb/Forb		Unc	
Swamp Lily	Crinum pedunculatum	Herb/Forb		Unc	s
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	Unc	
	Cyclosorus interruptus	Fern		Unc	
Barbed Wire Grass	Cymbopogon refractus	Grass/Sedge		Unc	
Couch	Cynodon dactylon	Grass/Sedge		Unc	
A Sedge	Cyperus haspan subsp. juncoides	Grass/Sedge		Unc	
A Sedge	Cyperus polystachyos	Grass/Sedge		Unc	
A Sedge	Cyperus trinervis	Grass/Sedge		Unc	
	Dampiera stricta	Herb/Forb		Unc	
A Blue Flax-lily	Dianella species	Herb/Forb		Unc	
Kidney Weed	Dichondra repens	Herb/Forb		Unc	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		Unc	
Small-flowered Finger Grass	Digitaria parviflora	Grass/Sedge		Unc	
Corkwood	Duboisia myoporoides	Tree	Low	Unc	
Hard Corkwood	Endiandra sieberi	Tree	Low	Unc	
Bordered Panic	Entolasia marginata	Grass/Sedge		Unc	
Speading Nut-heads	Epaltes australis	Herb/Forb		Unc	
Spring Grass	Eriochloa procera	Grass/Sedge		Unc	s
A Forest Red Gum Swamp Mahogany hyrbid	Eucalyptus patentinervis	Tree	High	Unc	
Grey Ironbark	Eucalyptus siderophloia	Tree	High	Unc	
Forest Red Gum	Eucalyptus tereticornis	Tree	High	Unc	
Common Fringerush	Fimbristylis dichotoma	Grass/Sedge		Unc	
A Fringerush	Fimbristylis ferruginea	Grass/Sedge		Unc	
A Fringerush	Fimbristylis nutans	Grass/Sedge		Unc	
Scrambling Lily	Geitonoplesium cymosum	Vine		Unc	
Pouched Coral Fern	Gleichenia dicarpa	Fern		Unc	
Cheese Tree	Glochidion ferdinandii	Tree	Medium	Unc	
Umbrella Cheese Tree	Glochidion sumatranum	Tree	High	Unc	s
	Gonocarpus micranthus subsp.ramosissimus	Herb/Forb		Unc	
	Gonocarpus teucrioides	Herb/Forb		Unc	
False Sarsaparilla	Hardenbergia violacea	Vine		Unc	
	Hedyotis galioides	Herb/Forb		Unc	e
Twining Guinea Flower	Hibbertia scandens	Vine		Unc	
	Hibiscus splendens	Shrub	Medium	Unc	
Bat's Wing Fern	Histiopteris incisa	Fern		Unc	
	Homoranthus virgatus	Shrub	Low	Unc	s
Pointed-leaved Hovea	Hovea acutifolia	Shrub	Low	Unc	
Pennywort	Hydrocotyle pedicillosa	Herb/Forb		Unc	
A Pennywort	Hydrocotyle peduncularis	Herb/Forb		Unc	
Small St. John's Wort	Hypericum japonicum	Herb/Forb		Unc	
Harsh Ground Fern	Hypolepis muelleri	Fern		Unc	
Dogwood	Jacksonia scoparia	Shrub	Low	Unc	
A Rush	Juncus cognatus	Grass/Sedge		Unc	
A Rush	Juncus continuus	Grass/Sedge		Unc	
A Rush	Juncus polyanthemos	Grass/Sedge		Unc	
Red Coral Pea	Kennedia rubicunda	Vine		Unc	
	Laxmannia compacta	Herb/Forb		Unc	
Variable Swordsedge	Lepidosperma laterale	Grass/Sedge		Unc	
Pithy Swordsedge	Lepidosperma longitudinale	Grass/Sedge		Unc	
A Rush	Lepironia articulata	Grass/Sedge		Unc	
A Rush	Leptocarpus tenax	Grass/Sedge		Unc	
Sour Currant Bush	Leptomeria acida	Shrub	Low	Unc	
A Teatree	Leptospermum juniperinum	Shrub	Low	Unc	
A Teatree	Leptospermum liversidgei	Shrub	Low	Unc	
A Teatree	Leptospermum semibaccatum	Shrub	Low	Unc	
A Teatree	Leptospermum trinervium	Shrub	Medium	Unc	
A Teatree	Leptospermum whitei	Tree	Medium	Unc	
A Rush	Lepyrodia interrupta	Grass/Sedge		Unc	
A Heath Bush	Leucopogon ericoides	Shrub	Low	Unc	
A Heath Bush	Leucopogon lanceolatus	Shrub	Low	Unc	
A Heath Bush	Leucopogon leptospermoides	Shrub	Low	Unc	

Hastings Point Vegetation Species List - Community 6					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
A Heath Bush	Leucopogon margarodes	Shrub	Low	Unc	
Cabbage or Fan Palm	Livistona australis	Tree	Medium	Unc	
Angled Lobelia	Lobelia alata	Herb/Forb		Unc	
A Mat-rush	Lomandra elongata	Herb/Forb		Unc	
A Mat-rush	Lomandra laxa	Herb/Forb		Unc	
Many-flowered Mat-rush	Lomandra multiflora subsp. multiflora	Herb/Forb		Unc	
Brush Box	Lophostemon confertus	Tree	High	Unc	
Climbing Maidenhair Fern	Lygodium microphyllum	Fern		Unc	
Macaranga	Macaranga tanarius	Shrub	High	Unc	
Corky Milk Vine	Marsdenia lloydii	Vine		Unc	
Common Milk Vine	Marsdenia rostrata	Vine		Unc	
Thyme Honeymyrtle	Melaleuca thymifolia	Shrub	Low	Unc	
Pink-flowered Doughwood	Melicope elleryana	Tree	Medium	Unc	s
	Mitrasacme polymorpha	Herb/Forb		Unc	
Prickly Broom Heath	Monotoca elliptica	Shrub	Low	Unc	
Prickly Broom Heath	Monotoca scoparia	Shrub	Low	Unc	
Large Mock-olive	Notolaea longifolia	Tree	Low	Unc	
Straggly Baekea	Ochrosperma lineare	Shrub	Low	Unc	s
	Olax retusa	Shrub	Low	Unc	s
	Oplismenus aemulus	Grass/Sedge		Unc	
Tree Shaggy Pea	Oxylobium robustum	Shrub	Low	Unc	
Common Silkpod	Parsonsia straminea	Vine		Unc	
	Paspalidium distans	Grass/Sedge		Unc	
Ditch Millet	Paspalum orbiculare	Grass/Sedge		Unc	
Swamp Iris	Patersonia fragilis	Herb/Forb		Unc	s
	Patersonia sericea	Herb/Forb		Unc	
Narrow-leaved Geebung	Persoonia linearis	Shrub	Low	Unc	
A Geebung	Persoonia stradbrokensis	Shrub	Low	Unc	
A Geebung	Persoonia virgata	Shrub	Low	Unc	
Heath Phyllota	Phyllota phylicoides	Shrub	Low	Unc	
Slender or Flaxleaf Riceflower	Pimelea linifolia	Herb/Forb		Unc	
Staghorn	Platycerium superbum	Fern		Unc	
	Platysace ericoides	Herb/Forb		Unc	
	Polymeria calycina	Vine		Unc	
	Pomax umbellata	Herb/Forb		Unc	
Whiteroot	Pratia purpurascens	Herb/Forb		Unc	
	Pseudanthus orientalis	Herb/Forb		Unc	s
	Pultenaea retusa	Shrub	Low	Unc	
Hairy Bush Pea	Pultenaea villosa	Shrub	Low	Unc	
A Rush	Restio pallens	Grass/Sedge		Unc	
A Rush	Restio tenuiculmis	Grass/Sedge		Unc	
Wedding Bush	Ricinocarpus pinifolius	Shrub	Low	Unc	
Molucca Bramble	Rubus moluccanus var. trilobus	Vine		Unc	
Rose-leaved Bramble	Rubus rosifolius	Vine		Unc	
Indian Cupscale Grass	Sacciolepis indica	Grass/Sedge		Unc	
Forked Comb Fern	Schizaea bifida	Fern		Unc	
Branched Comb Fern	Schizaea dichotoma	Fern		Unc	
Fluke Bogrush	Schoenus apogon	Grass/Sedge		Unc	
Swamp Selaginella	Selaginella uliginosa	Fern		Unc	
Austral Sarsaparilla or Barbed-wire Vine	Smilax australis	Vine		Unc	
Sweet Sarsaparilla	Smilax glyciphylla	Vine		Unc	
Sphagnum Moss	Sphagnum secundatum	Herb/Forb		Unc	
Snake Vine	Stephania japonica var. disclor	Vine		Unc	
Umbrella Fern	Sticherus flabellatus	Fern		Unc	
Spreading Shield Fern	Sticherus lobatus	Fern		Unc	
Native or Poison Peach	Trema tomentosa var. viridis	Shrub	Medium	Unc	
Yellow Autumn-lily or Rush-lily	Tricoryne elatior	Herb/Forb		Unc	
Tree Heath	Trochocarpa laurina	Shrub	Low	Unc	
A Grasstree	Xanthorrhoea species	Herb/Forb		Unc	
	Xyris complanata	Herb/Forb		Unc	
	Xyris gracilis subsp. gracilis	Herb/Forb		Unc	s
	Zieria laxiflora	Shrub	Low	Unc	

NOTE:

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Hastings Point Vegetation Species List - Community 7					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Mangrove Fern	Acrostichum speciosum	Fern		C	s
River Mangrove	Aegiceras corniculatum	Tree	Low	C	
Sea Celery	Apium prostratum subsp. prostratum var. prostratum	Herb/Forb		C	
Grey Mangrove	Avicennia marina subsp. australasica	Tree	Medium	C	
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	C	
Spring Grass	Eriochloa procera	Grass/Sedge		C	s
A Fringerush	Fimbristylis ferruginea	Grass/Sedge		C	
Common Reed	Phragmites australis	Grass/Sedge		C	
A Seablite	Suaeda australis	Herb/Forb		C	
Prickly Couch	Zoysia macrantha	Grass/Sedge		C	
Bare Twigrush	Baumea juncea	Grass/Sedge		D/Co-d	
Swamp Oak	Casuarina glauca	Tree	High	D/Co-d	
Coastal Cynanchum	Cynanchum carnosum	Vine		D/Co-d	
Sea Rush	Juncus kraussii	Grass/Sedge		D/Co-d	
Paperbark	Melaleuca quinquenervia	Tree	High	D/Co-d	
Sand Couch	Sporobolus virginicus	Grass/Sedge		D/Co-d	s
Beach Acronychia	Acronychia imperforata	Tree	Low	Unc	
Red Ash	Alphitonia excelsa	Tree	Medium	Unc	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	Unc	
Bacopa	Bacopa monnieri	Herb/Forb		Unc	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	Unc	
Black Mangrove	Bruguiera gymnorrhiza	Tree	Low	Unc	s
Willow Bottlebrush	Callistemon salignus	Tree	High	Unc	
Common Cotula or Carrot Weed	Cotula australis	Herb/Forb		Unc	
Swamp Lily	Crinum pedunculatum	Herb/Forb		Unc	s
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		Unc	
Corkwood	Duboisia myoporoides	Tree	Low	Unc	
Bordered Panic	Entolasia marginata	Grass/Sedge		Unc	
A Daisy	Enydra fluitans	Herb/Forb		Unc	
Forest Red Gum	Eucalyptus tereticornis	Tree	High	Unc	
Tall Sawsedge	Gahnia clarkei	Grass/Sedge		Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
	Ischaemum australe	Grass/Sedge		Unc	
	Ischaemum triticeum	Grass/Sedge		Unc	
Foambark Tree	Jagera pseudorhus var. pseudorhus	Tree	Low	Unc	
Angled Lobelia	Lobelia alata	Herb/Forb		Unc	
Mangrove Boobialla	Myoporum acuminatum	Shrub	Medium	Unc	
Common Silkpod	Parsonsia straminea	Vine		Unc	
Thin-leaved Coondoo	Planchonella chartacea	Tree	Medium	Unc	s
Spider Mangrove	Rhizophora stylosa	Shrub	Low	Unc	s
Creeping Brookweed	Samolus repens	Herb/Forb		Unc	
Samphire	Sarcocornia quinqueflora subsp. quinqueflora	Herb/Forb		Unc	
A Rush	Schoenus brevifolius	Grass/Sedge		Unc	
Sea Purslane	Sesuvium portulacastrum	Herb/Forb		Unc	
New Zealand Spinach	Tetragonia tetragonioides	Herb/Forb		Unc	
Streaked Arrowgrass	Triglochin striata	Herb/Forb		Unc	
Ivy-leaved Violet	Viola hederacea	Herb/Forb		Unc	
NOTE:					
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Hastings Point Vegetation Species List - Community 8					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	C	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		C	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		C	
Twining Guinea Flower	Hibbertia scandens	Vine		C	
Beach Morning Glory	Ipomoea pes-caprae	Vine		C	
Knobby Clubrush	Isolepis nodosa	Grass/Sedge		C	
Screw Pine	Pandanus tectorius	Shrub	Low	C	
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	D/Co-d	
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	D/Co-d	
Horsetail She-oak	Casuarina equisetifolia subsp. incana	Tree	High	D/Co-d	
Prickly Couch	Zoysia macrantha	Grass/Sedge		D/Co-d	
Beach Acronychia	Acronychia imperforata	Tree	Low	Unc	
Black She-oak	Allocasuarina littoralis	Tree	High	Unc	
Red Ash	Alphitonia excelsa	Tree	Medium	Unc	
Midgen Berry	Austromyrtus dulcis	Shrub	Low	Unc	
Breynia or Coffee Bush	Breynia oblongifolia	Shrub	Low	Unc	
A Rush	Bulbostylis barbata	Grass/Sedge		Unc	s
Coastal Jack Bean	Canavalia rosea	Vine		Unc	
Pigface	Carpobrotus glaucescens	Herb/Forb		Unc	
Swamp Oak	Casuarina glauca	Tree	High	Unc	
Native Wandering Jew	Commelina cyanea	Herb/Forb		Unc	
Swamp Lily	Crinum pedunculatum	Herb/Forb		Unc	s
A Sedge	Cyperus enervis	Grass/Sedge		Unc	
A Sedge	Cyperus polystachyos	Grass/Sedge		Unc	
A Sedge	Cyperus stradbrokensis	Grass/Sedge		Unc	s
A Sedge	Cyperus trinervis	Grass/Sedge		Unc	
A Blue Flax-lily	Dianella species	Herb/Forb		Unc	
Corkwood	Duboisia myoporoides	Tree	Low	Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
Blady Grass	Imperata cylindrica	Grass/Sedge		Unc	
A Mat-rush	Lomandra species	Herb/Forb		Unc	
Macaranga	Macaranga tanarius	Shrub	High	Unc	
A Daisy	Melanthera biflora	Herb/Forb		Unc	
An Oxalis	Oxalis species	Herb/Forb		Unc	
A Geebung	Persoonia adenantha	Shrub	Low	Unc	
A Geebung	Persoonia stradbrokensis	Shrub	Low	Unc	
Native Raspberry	Rubus parvifolius	Vine		Unc	
Variable Groudsel	Senecio lautus subsp. maritimus	Herb/Forb		Unc	
Sea Purslane	Sesuvium portulacastrum	Herb/Forb		Unc	
	Sophora tomentosa subsp. australis	Shrub	Low	Unc	e
Snake Vine	Stephania japonica var. disclor	Vine		Unc	
Blue Lilly Pilly	Syzygium oleosum	Tree	Medium	Unc	
Dune Bean	Vigna marina	Vine		Unc	s
NOTE:					
1: The **common names** used are generally those published on the PlantNET website (http://plantnet.rbgsyd.nsw.gov.au).					
2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.					
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Hastings Point Vegetation Species List - Community 9					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Coast Banksia	Banksia integrifolia subsp.integrifolia	Tree	Medium	C	
Horsetail She-oak	Casuarina equisetifolia subsp. incana	Tree	High	C	
Beach Morning Glory	Ipomoea pes-caprae	Vine		C	
Coastal Wattle	Acacia longifolia subsp. sophorae	Shrub	Medium	D/C0-d	
Hairy Spinifex	Spinifex sericeus	Grass/Sedge		D/C0-d	
Coastal Jack Bean	Canavalia rosea	Vine		Unc	
Strand Sedge	Carex pumila	Grass/Sedge		Unc	
Pigface	Carpobrotus glaucescens	Herb/Forb		Unc	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		Unc	
	Ischaemum triticeum	Grass/Sedge		Unc	
Knobby Clubrush	Isolepis nodosa	Grass/Sedge		Unc	
Sea Purslane	Sesuvium portulacastrum	Herb/Forb		Unc	
Dune Bean	Vigna marina	Vine		Unc	s
Prickly Couch	Zoysia macrantha	Grass/Sedge		Unc	
NOTE:					
1: The **common names** used are generally those published on the PlantNET website (http://plantnet.rbgsyd.nsw.gov.au).					
2: Vigor refers to the speed with which a plant provides cover; therefore,smaller trees and shrubs have a lower classification.					
3: v/r/s referes to whether the species is vulnerable (v), endangered (e), ROTAP listed (r), or a significant plant (s) on one of a number of pieces of legislation.					
4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon					

Hastings Point Vegetation Species List - Community 10					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Mangrove Fern	Acrostichum speciosum	Fern		C	s
Black Mangrove	Bruguiera gymnorrhiza	Tree	Low	C	s
Sea Rush	Juncus kraussii	Grass/Sedge		C	
Sand Couch	Sporobolus virginicus	Grass/Sedge		C	s
River Mangrove	Aegiceras corniculatum	Tree	Low	D/Co-d	
Grey Mangrove	Avicennia marina subsp. australasica	Tree	Medium	D/Co-d	
Bare Twigrush	Baumea juncea	Grass/Sedge		Unc	
Swamp Oak	Casuarina glauca	Tree	High	Unc	
Scrambling Clerodendrum	Clerodendrum inerme	Shrub	Medium	Unc	s
Milky Mangrove	Excoecaria agallocha	Tree	Low	Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
Common Reed	Phragmites australis	Grass/Sedge		Unc	
Spider Mangrove	Rhizophora stylosa	Shrub	Low	Unc	s
Samphire	Sarcocornia quinqueflora subsp. quinqueflora	Herb/Forb		Unc	
A Rush	Schoenoplectus litoralis	Grass/Sedge		Unc	
A Seablite	Suaeda australis	Herb/Forb		Unc	
NOTE:					
1: The **common names** used are generally those published on the PlantNET website (http://plantnet.rbgsyd.nsw.gov.au).					
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4: Occurrence: C = Common; D/Co-d = Dominant/Co-dominant; Unc = Uncommon					

Hastings Point Vegetation Species List - Community 11					
Common Name	**Scientific Name**	**Life Form**	**Vigour**	**Occurrence**	**V/R/S**
Mangrove Fern	Acrostichum speciosum	Fern		C	s
River Mangrove	Aegiceras corniculatum	Tree	Low	C	
Grey Mangrove	Avicennia marina subsp. australasica	Tree	Medium	C	
Swamp Oak	Casuarina glauca	Tree	High	C	
Coastal Cynanchum	Cynanchum carnosum	Vine		C	
Paperbark	Melaleuca quinquenervia	Tree	High	C	
Samphire	Sarcocornia quinqueflora subsp. quinqueflora	Herb/Forb		C	
A Seablite	Suaeda australis	Herb/Forb		C	
Prickly Couch	Zoysia macrantha	Grass/Sedge		C	
Bare Twigrush	Baumea juncea	Grass/Sedge		D/Co-d	
Sea Rush	Juncus kraussii	Grass/Sedge		D/Co-d	
Common Reed	Phragmites australis	Grass/Sedge		D/Co-d	
Sand Couch	Sporobolus virginicus	Grass/Sedge		D/Co-d	s
Sea Celery	Apium prostratum subsp. prostratum var. prostratum	Herb/Forb		Unc	
Bacopa	Bacopa monnieri	Herb/Forb		Unc	
Black Mangrove	Bruguiera gymnorrhiza	Tree	Low	Unc	s
Tuckeroo	Cupaniopsis anacardioides	Tree	Low	Unc	
A Sedge	Cyperus laevigatus	Grass/Sedge		Unc	
Queensland Blue Couch	Digitaria didactyla	Grass/Sedge		Unc	
A Lovegrass	Eragrostis interrupta	Grass/Sedge		Unc	
Spring Grass	Eriochloa procera	Grass/Sedge		Unc	s
A Fringerush	Fimbristylis ferruginea	Grass/Sedge		Unc	
Cottonwood Hibiscus	Hibiscus tiliaceus	Tree	High	Unc	
	Ischaemum australe	Grass/Sedge		Unc	
	Ischaemum triticeum	Grass/Sedge		Unc	
Swamp Clubrush	Isolepis inundata	Grass/Sedge		Unc	
Knobby Clubrush	Isolepis nodosa	Grass/Sedge		Unc	
Salt-water Couch	Paspalum vaginatum	Grass/Sedge		Unc	
Spider Mangrove	Rhizophora stylosa	Shrub	Low	Unc	s
Creeping Brookweed	Samolus repens	Herb/Forb		Unc	
A Rush	Schoenoplectus litoralis	Grass/Sedge		Unc	
Sea Purslane	Sesuvium portulacastrum	Herb/Forb		Unc	
New Zealand Spinach	Tetragonia tetragonioides	Herb/Forb		Unc	
Water Ribbons	Triglochin procera	Herb/Forb		Unc	
Streaked Arrowgrass	Triglochin striata	Herb/Forb		Unc	
NOTE:					
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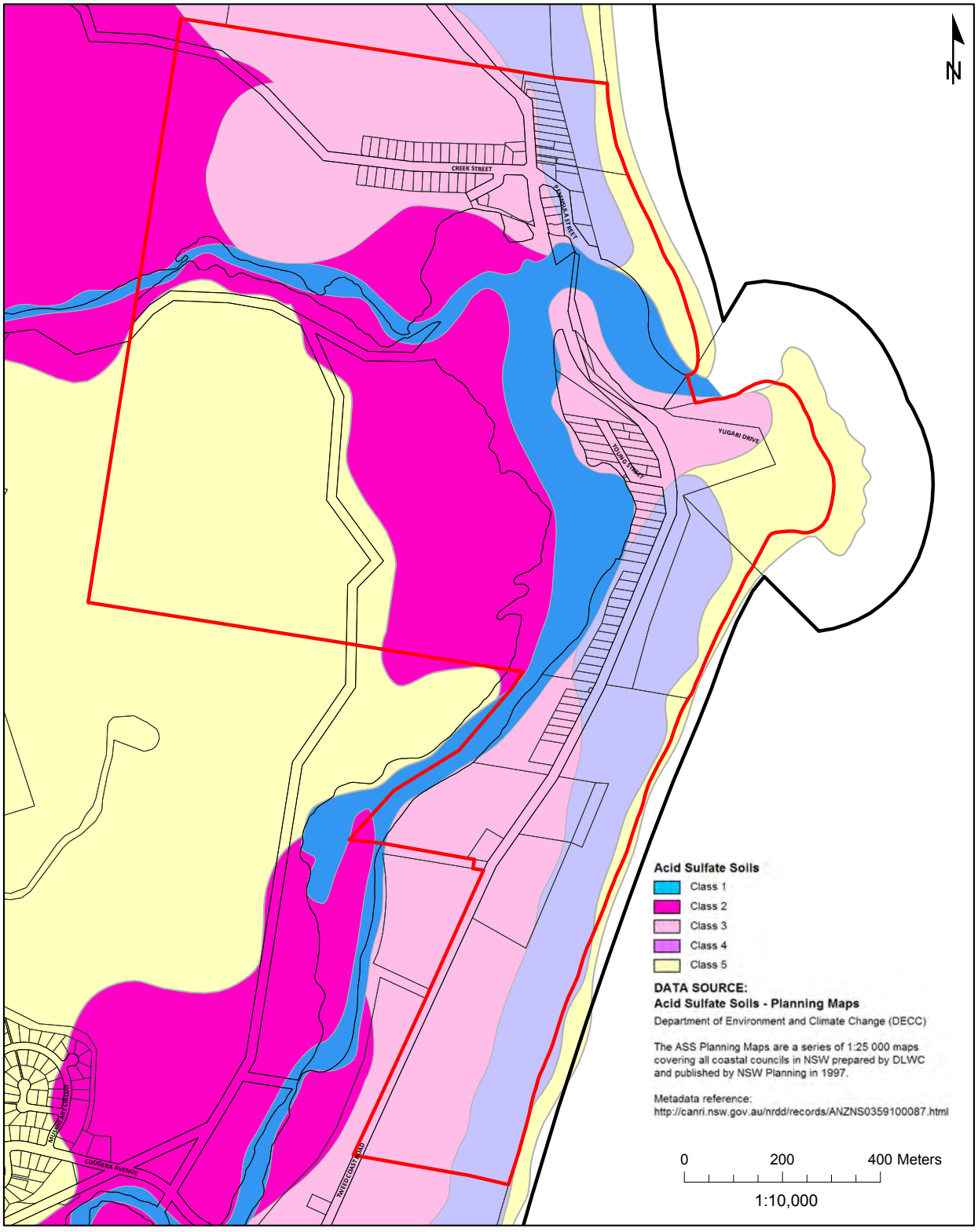
7.3 Hastings Point Constraints Mapping



HASTINGS POINT LOCALITY PLAN

Locality Plan Boundary

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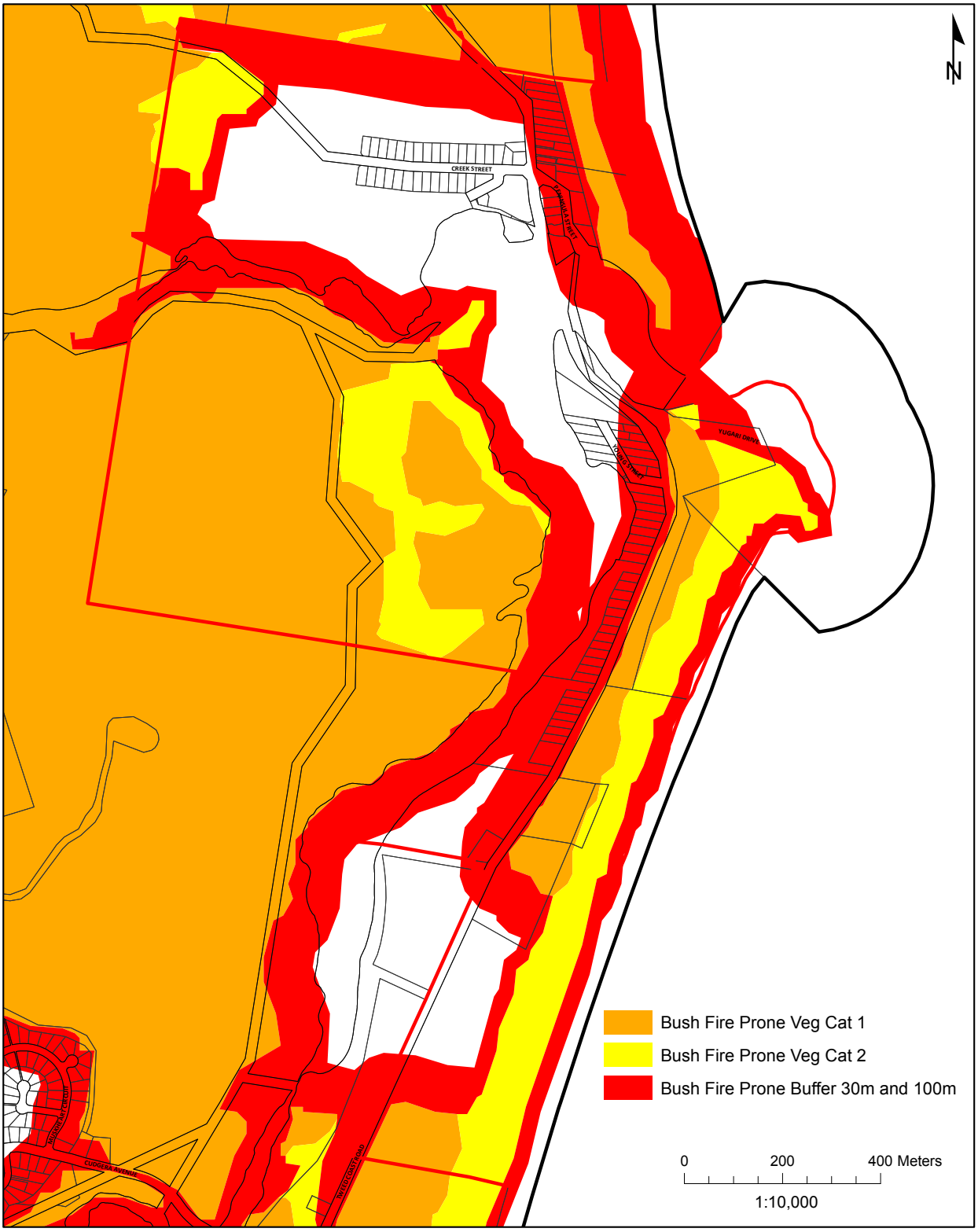

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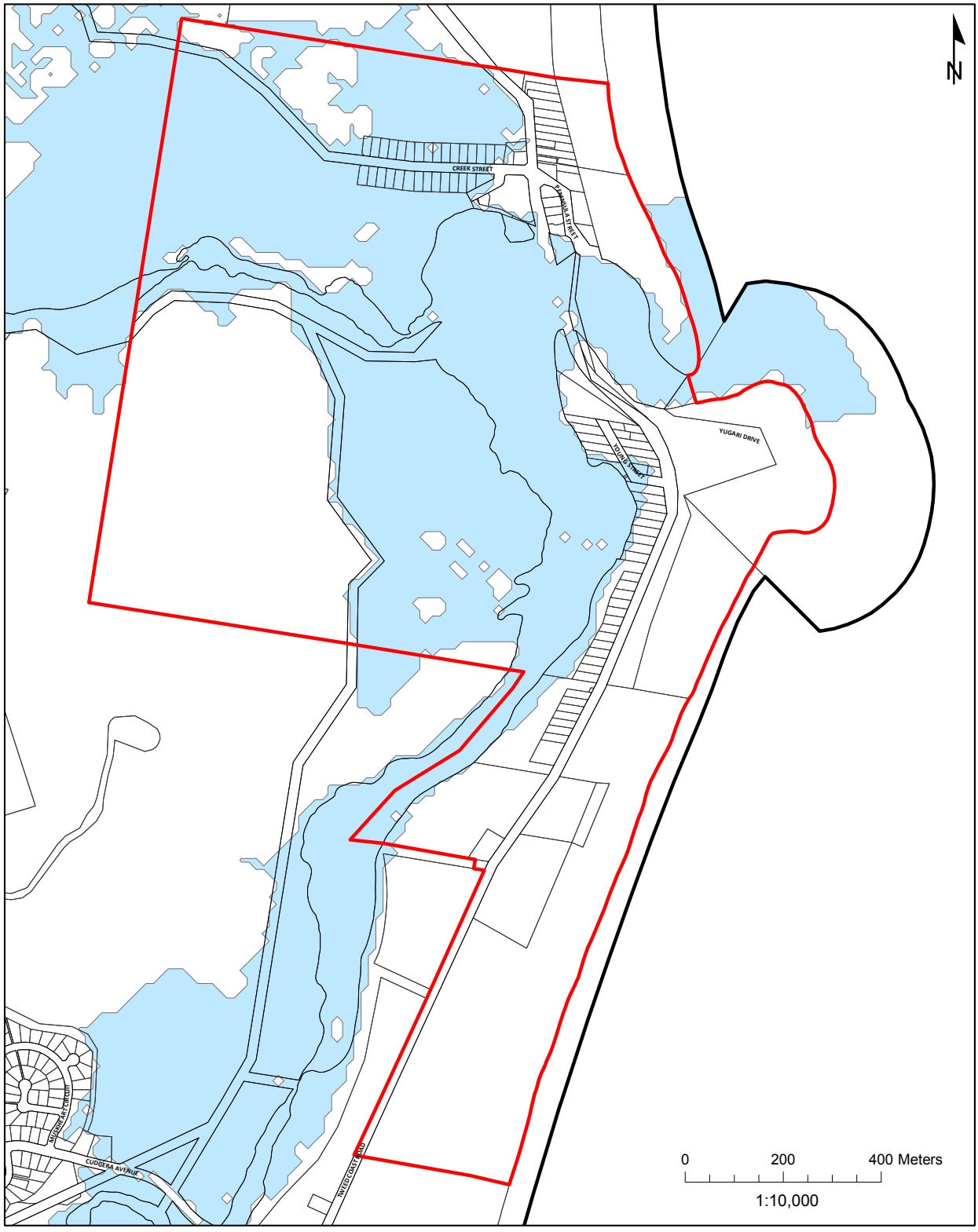

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Flood Planning Area

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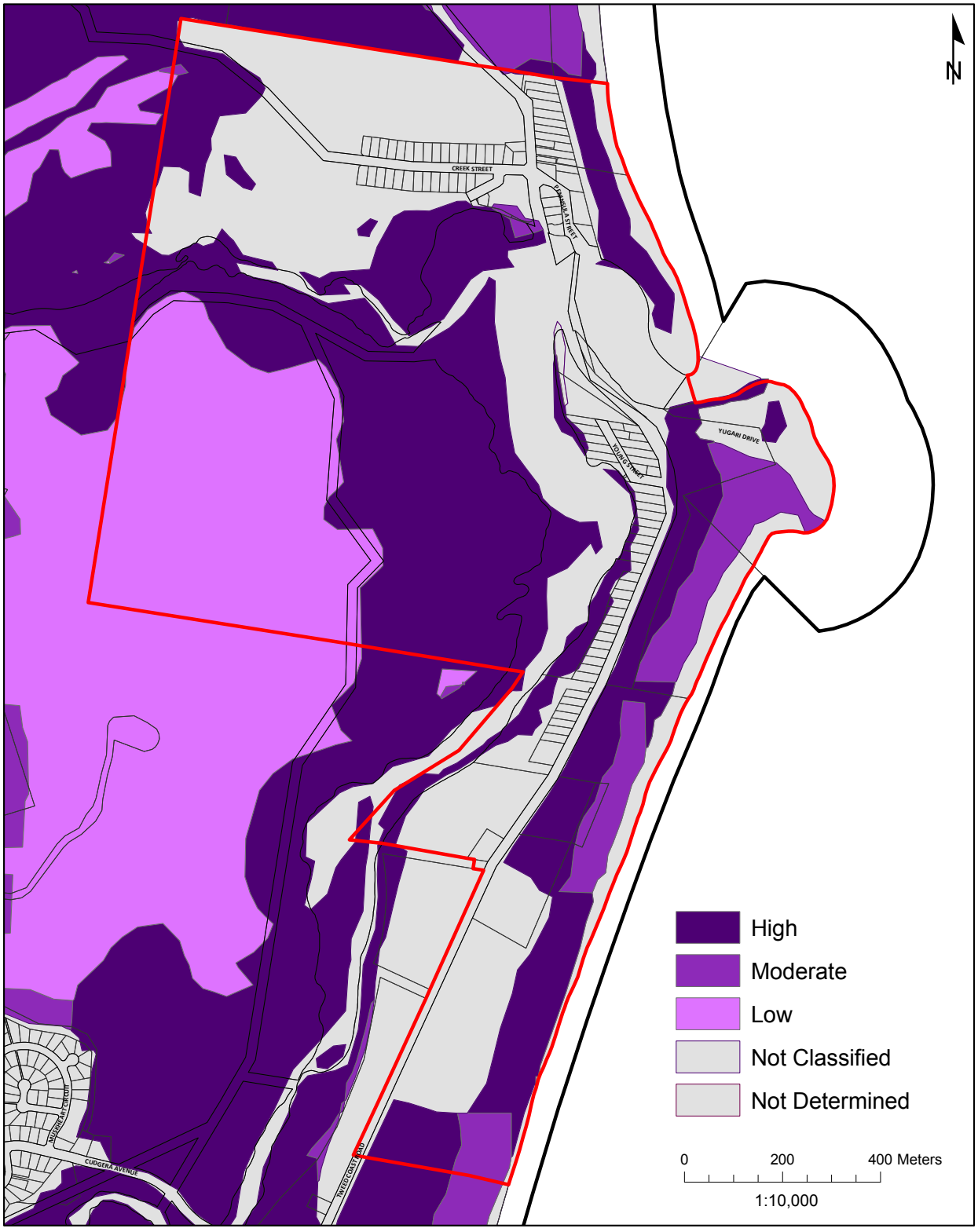

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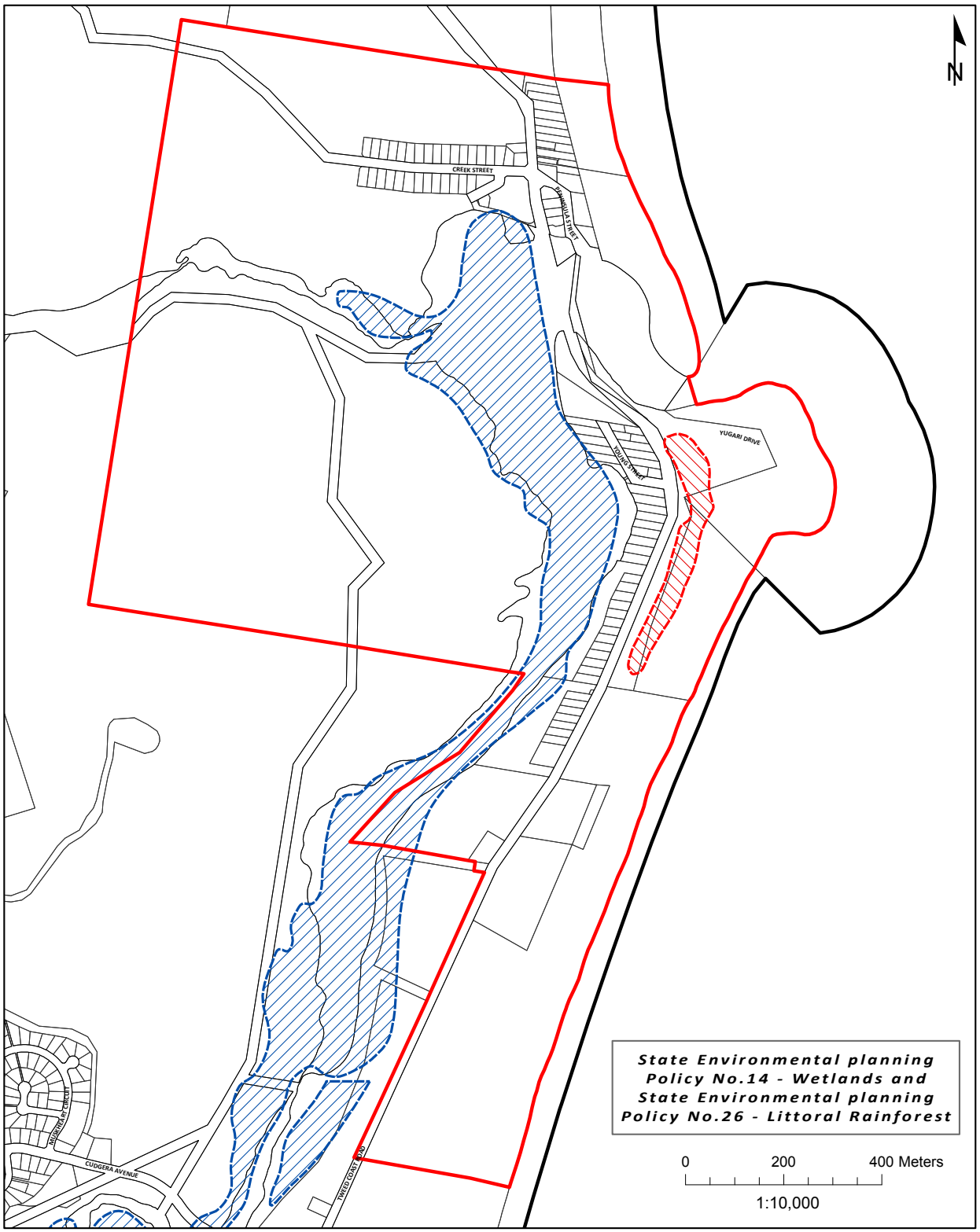

HASTINGS POINT LOCALITY PLAN

HastingsPoint_LocalityBDY | SEPP 14 - Wetlands | SEPP 26 - Littoral Rainforest | Locality Plan Boundary

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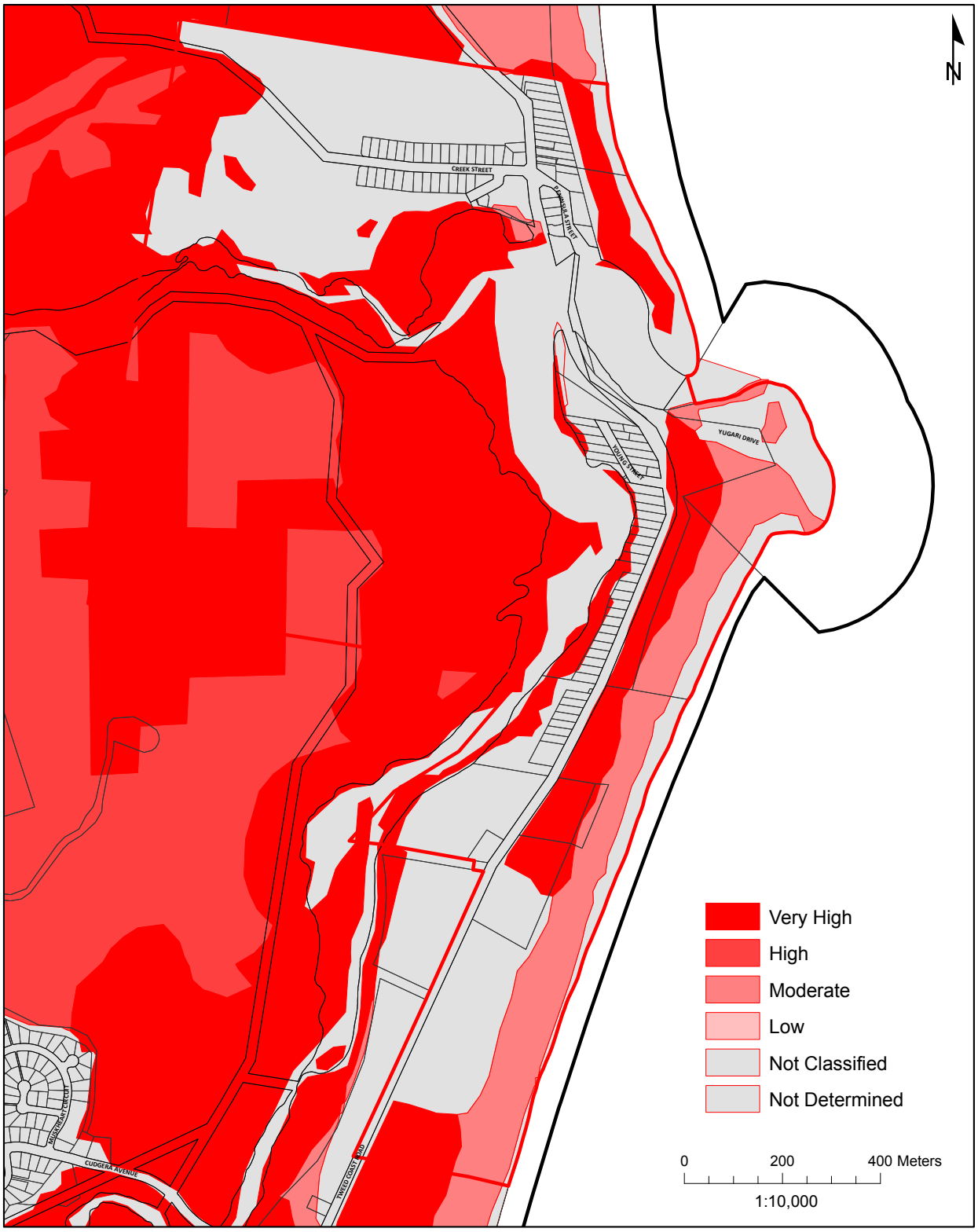

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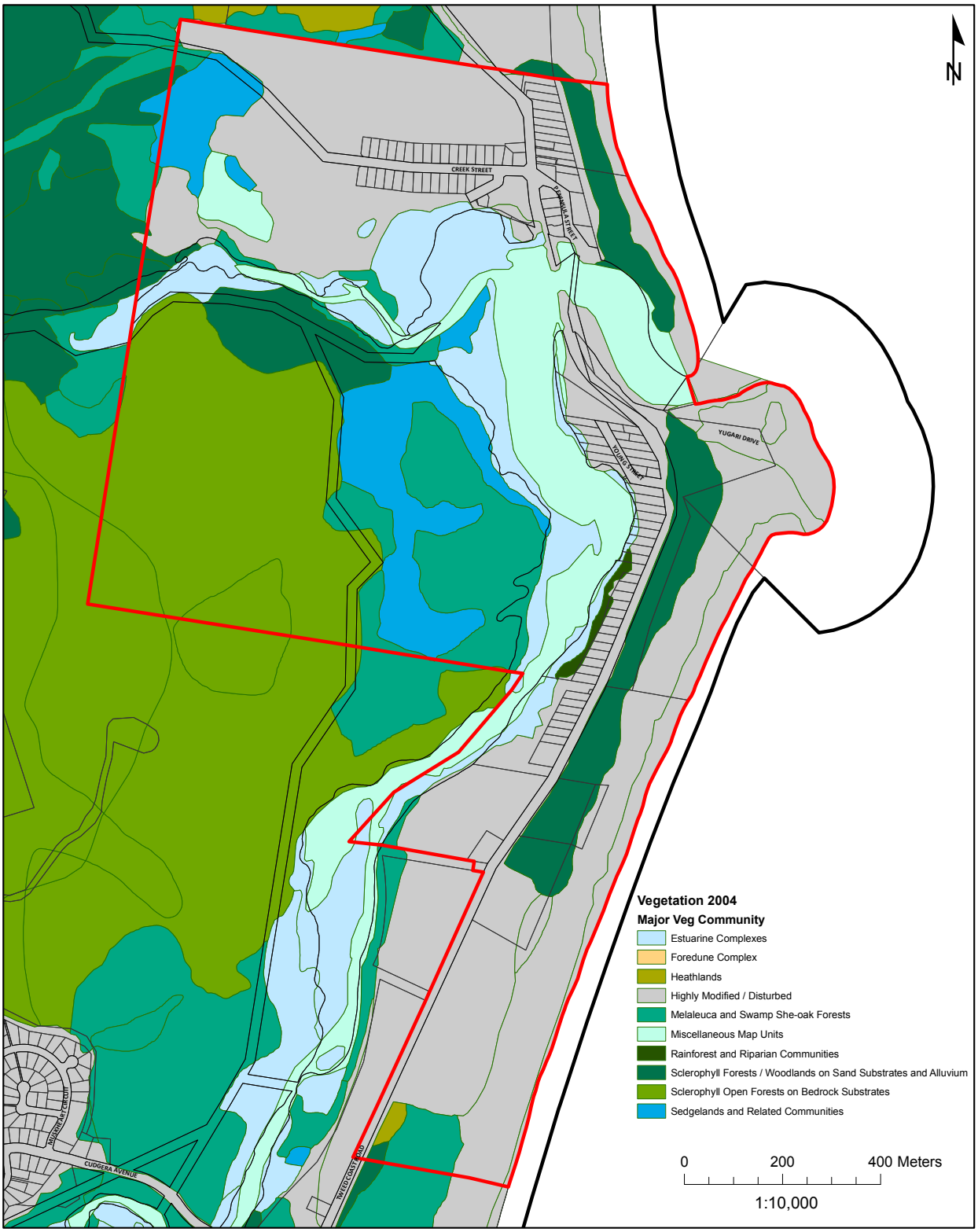

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TWEED SHIRE COUNCIL

7.4 Community Consultation - Sample Responses and Summary of Submissions

Questionnaire and public exhibition responses

The Draft Code was placed on public exhibition during the period 28 April 2010 to 2 July 2010, and concluded with 113 submissions received. During the exhibition period a further workshop was held for local landowners on 25 May 2010.

Submissions received during the public exhibition period covered a broad range of issues including:

- Acid Sulfate Soils
- Building height
- Deep soil zones
- Building Type
- Building Materials
- Camping
- Beach and Dunal System
- Buffers
- Character
- Cudgera Creek bridge
- Car parking
- Cudgera Creek
- Cycle and foot paths
- Caravan Park
- Christies Creek
- Development Approvals
- Drainage
- Eastern foreshore
- Design Controls
- Education Signage
- Fill
- Estuary
- Foreshore
- Flooding
- FSR
- Floodwater
- Compliance
- Property Value
- Headland
- Park facilities
- Landscape
- Littoral Rainforest
- Precincts
- Northern dunes
- Sea level rise
- The Point
- Residential Flat Buildings
- Setback
- Visual Setting
- Retail
- Southern Planting
- Service Station
- Signage
- Sewerage system
- Traffic
- Tree canopy height
- Tidal wetlands
- Wildlife Corridor
- Vegetative Escarpment
- Views
- Water Quality

Tabulation, collation and discussion of actions proposed as a result of the public consultation is provided as a table in Table 1 - Hastings Point Locality Based Development Code – Summary of submissions and response.

Post exhibition amendments

The final draft document was received from the consultant on 30 September 2010 and is currently being reviewed by PRU officers to ensure that amendments are made, text, cross-referencing, graphics and labelling are consistent with organisational standards and that the document is ‘user friendly’.

A sample of responses received in response to the questionnaire to all landowners are summarised below:

1. The overwhelming majority of respondents believe that a locality plan is needed.

2. Hastings Point is:
- A refuge with a small environmentally aware community,
- A small town that you can know your neighbours and is safe for children,
- A place where people are hospitable and many are aged and have lived there for many years,
- A seaside village, beach, creek, bushland, headland, variety of housing types and sizes,
- An old style fishing village,
- An investment for me from the year 2000,
- Close to, but not the Gold Coast.

3. The most significant features or important qualities of Hastings Point include:
- Close knit / Family centred community,
- A small local village / contained settlement surrounded by Crown Land,
- Low impact density development / non-commercial,
- One of the few areas left where no buildings can be seen from the beach,
- Relaxed, old fashioned beachside village / Still like a 60's village,
- The pristine nature of the headland and coastline,
- Relaxed camping atmosphere and peaceful lifestyle, where you know your neighbours.

4. Specific elements or features which are believed to contribute to the character of Hastings Point include:
- Community spirit / Community atmosphere / Village atmosphere,
- The village-feel of Hastings Point good old small community where you feel you belong - people care,
- No licensed venues to attract large crowds and associated anti-social behaviour,
- Old beach homes / Old style housing,
- Council caravan park and adjacent tent camping facility,
- That day trippers and holiday makers visit for passive and generally non-commercial activities - camping, fishing, picnics, whale watching etc.

5. Specific elements or features believed to detract from the character of Hastings Point include:
- 3 storey and large scale buildings/development,
- Gold Coast style development,
- Lack of quality tourist accommodation e.g. 2 and 3 bedroom units with good parking facilities,

- Poor drainage along roadways - Creek Street and Tweed Coast, road south of bridge,
- Tent village at Easter is overpopulated and nasty,
- Dilapidated houses - especially on Coast Road, not much space between houses and footpaths,
- Building taking up all the block(s) with very little or no deep soil zone.

6. Visions of Hastings Point 20 years from now include:
- An innovative coastal community that has protected the coastal beauty of its town, thereby creating a prestigious and innovative town,
- To remain as a hamlet / small village instilled in community values,
- A ban on 3 storey,
- A mix of more modern buildings will evolve slowly over time, or addition to the central commercial shop be expanded to include more casual dining options, alfresco style, greater number of retirees as residence and improved open space amenities for casual visitors,
- Not overdeveloped, No shops, no restaurants, retail etc.,
- A creek that runs deep, free of pollution from run off and sewerage.

7. To achieve this vision the following would be needed:
- Allow development to proceed under current guidelines, there is only 100 or so lots in the village,
- Domestic housing up to two stories,
- No oversize large buildings or 3 storey dense apartment blocks with not enough landscaping or green space,
- A new sewerage facility to be built at Pottsville to keep any storm water and drainage coming down to Hastings Point,
- A Council who recognises good planning and doesn't knock all developments. Listens to all landowners not just vocal few,
- A plan for the area that allows for the progress but not overdevelopment and over crowding.

8. The greatest concerns for the future of Hastings Point include:
- Another Surfers Paradise,
- Over development of large buildings destroying character and environment,
- That I will not be able to re-develop my property should I choose, into modern units and will therefore not realise my investment,
- Building densities and current height limits remain,
- Failure to address the degradation of the estuary caused by construction and positioning of the present bridge which seriously alters and impedes water natural flows,
- Changes being influenced by people that don't live or own property in the area.

9. Buildings and development considered to be appropriate for Hastings Point include:
- "Humble" as in low level beach style homes,
- 2 storey, sustainable density, no more than 2-3 (max) dwellings per quarter acre,
- 3 levels north of river, mixed accommodation of houses, villas, units, aged care, tourist park,
- All types of units, villas, houses, flats, tourist accommodation buildings that match existing character of the surrounding area. These areas are well established i.e. the north precinct has been units and flats for 40 years or more. In these areas buildings of 4 storeys are appropriate,
- Articulated buildings that have limited mass in appearance, lot coverage and particularly roof profile,
- Queenslanders up off the ground.

10. Improvements to Hastings Point could include:
- 2 storey villas and town houses if separated,
- Complete redevelopment of the shop precinct and the caravan park - perhaps even relocate the park to an area south of the Point,
- Encourage people to redevelop their old dilapidated homes,
- Improve Cudgera Creek to pre 1963 conditions. Prior to erection of bridge the creek was a breeding area for fish and was approximately 3 to 4 metres deep east of existing bridge. The main channel south of bridge was also 2 - 3 metres deep,
- Rezone lot 156 to protect locals and environment from flooding,
- All services underground, and
- Children's playground area needs a revamp, BBQ area also.

11. Perceived differences between the north and south of Cudgera Creek included:
- All of Hastings Point should be treated the same as it all make up the beauty of it,
- Existing building on north side should come under south side restriction for future development,
- Creek Street, Young Street and South Tweed Coast Road. are more like a village,
- Development has for decades affected the different physical aspects of the village. The approach adopted before the interim controls was appropriate,
- Buildings on the north side with beach frontage are of a different design and character to those of the south. They were obviously built under specific zonings with the specific purpose of maximising views north and south, and
- Generally speaking, homes on north side are better maintained and care has been taken with gardens etc.

12. Parts of a building or site considered to be important to the character of Hastings Point included:
- Architectural designed buildings of earthy tones to replace eyesore buildings which now exist,

- Blend in with natural surroundings,
- Buildings that blend in with the existing buildings in terms of height and size are important to the character of Hastings Point,
- Most of the early buildings were weatherboard walls and galvanised iron roofs. Clay brick and plastered concrete blocks have been used over the past 30 years. A blend of all these materials is now the character of Hastings Point,
- Low scale / height / site coverage / density, and
- Development consistent with holiday village atmosphere.

13. Building examples or locations (both within and outside Hastings Point) which it is believed may be appropriate for future development within Hastings Point include:
- Limited use of concrete, brick materials, roof tiles creating buildings which are compatible with the locality,
- A village shopping precinct e.g. Saltbar and shops,
- Medium density to three/four storeys in defined areas; this is appropriate on the land north of creek adjacent to the beach i.e. already nearly fully developed but could have more building stock added,
- Most 1 or 2 storey houses in Hastings Point / with lots of landscaping,
- Casuarina Beach style architecture and low density, and
- Koala Beach homes are individual, interesting in design, and show pride on the part of the members on the local community.

14. In terms of building design, what does 'coastal style' is interpreted to mean:
- 1950's and 60's timber single pitch/low pitched roofs, broad overhangs, single storey, generous front and back verandas,
- A mixture of timber and soft coloured brick with open balconies patios and an atrium, plenty of glass and curves,
- Apartments holidaying,
- Beach house style - fibro, timber, weatherboard, corrugated iron, nothing over 2 storeys,
- Generally a low profile metal roof, sand bagged neutral coloured walls with decks, annexes and shutters to add variation on materials, colour and shadow lines,
- Like many of the buildings at Casuarina, Not like Salt, and
- Low key, low impact e.g. Hastings Cove.

15. Expectations of property owners who are considering redeveloping included:
- A beautiful designed home,
- 6 units - to be able to develop at least to the existing LEP/DCP which includes 3 storey and floor space ratios of 1.2 to 1 i.e. LEP/DCP (That exists prior to Council interim controls),
- We would expect that we would be able to redevelop the site reflecting a development yield that was possible before the introduction of the interim control plan. We would expect that any plan that is developed would provide some flexibility for key sites over say 2,000 m^2 to achieve the same development potential available prior to the interim controls. This could be largely based upon architectural merit,

- I would like to not be surrounded by three storey units, and
- My land was purchased under planning laws which allowed 3 storey buildings way back in the 1980's. It is my wish that these planning zones be retained.

16. Favorite places and 'things to do' in Hastings Point included:

- Beach: Ban 4-wheel drives; Bins at end of tracks; Clean up after storms; Development guidelines that prohibit buildings that can be seen from the beach Left as is; More rangers present during holiday season.
- Surrounding environment: Improve quality of water; Leave it alone; Removal of effluent dispersal area in sand dunes and re-vegetation; Stop motorcycle use in park; Stop rubbish dumping in bushland,
- Creeks: By not pumping sewerage; Clearing the mouth; Control development; Dredge under bridge; no underground car parks; Removal of what must have been an illegal weir in Christies Creek,
- Park: More rubbish bins; Additional toilets in park near boat ramp; Better picnic tables and other seating; Catering for infants and toddlers - not just older age group; No improvement needed,
- Estuary: Buffer zones need to be retained; Dredge of estuary; Improve stormwater pollution from upstream developments; Sewerage pollution; Wider open under road both sides of bridge,
- Footpath/Cycleway: Continue missing link on bike way from Casuarina to Kingscliff; More signs telling people to ring their bell when approaching walkers. Separate walking/cycling - speeding controls,
- Headland: Better management of human traffic; More bins to reduce litter; Fine as is. Improve roadway, car parking; Lookout with constructed seating; More BBQ facilities; Stop removal of shell fish, and
- Other areas included: My home; River mouth; Streets; Views and Vistas; Littoral Rainforest / Dunes; Walking tracks along coast; and Tidal rock pools / the point.

17. Use of these places change during the seasonal tourism period accordingly:

- Cycle slower and more cautiously,
- I only go up to the headland during the week or early in the morning, late afternoon for my walks because it’s so busy,
- Access to headland and parking at shop causes problems in busy tourist season,
- Increase population, over fishing, crabbing, collecting bait, plastic bags, fishing line, broken bottles, rubbish, overflowing sewerage system, boating, trampling over seagrass beds, BBQ area, parking, traffic problems, damage to vegetation,
- Our family frequent all the above places less in holiday season, but realise tourism is a major point to Hastings, and
- Don't like the crowds, especially Christmas and Easter so I just modify my hours.

Hastings Point Locality Based Development Code – Summary of submissions and response			
Locality Wide			
Issue	**Community Comments received**	**Council Planning Response**	**Consultant Action**
Character	Hastings Point is a small coastal hamlet and it should remain so, its natural landscapes and views need to be maintained by good building designs.	Under the definitions of coastal settlements as documented within NSW North Coast Design Guidelines 2008 and the Coastal Design Guidelines 2003, Hastings Point is a small coastal village. Within a small coastal village both guidelines recommend that residential buildings are typically low rise, one to two storeys in height with opportunity for the village centre (retail hub) to be 3 storey's in height consummate with the limited level of retail, commercial and social infrastructure services. In doing so height limits and building typologies as identified within each of the precincts have been bought into line with the objectives and intent within NSW North Coast Design Guidelines 2008 and the Coastal Design Guidelines 2003.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft code amended accordingly.
	Preserve identity of Hastings Point as a traditional family beach holiday destination Dormitory tourist destination.	Holiday opportunities have been identified within the Code including caravan parks and temporary camping which would remain unchanged.	Consultant agrees with response. (No change to the Code required)
	Sense of Community – ensure identity of HP through open space (separation from Bogangar and Pottsville). Acknowledge links to 'shared' community facilities with other towns (not everything in one town).	The Code makes reference to the contextual relationship HP has with surrounding localities and recognises the green buffers immediately north and south of the settlement. Green buffers between settlements could be reinforced on the environmental protection plan (pg 37).	Consultant agrees with response. Wording added to page 36 and in key on page 37.
Retail	Limit commercial activities to existing shops licences and concessions.	The Code identifies only 2 allotments immediately adjoining existing shops (south and west) for potential commercial / retail expansion.	Consultant agrees with response. (No change to the Code required)
	No temporary sales outlets or market days (except for limited special events).	The Code does not make provision for temporary sales outlets.	Consultant agrees with response. (No change to the Code required)
Precincts	Identify/define residential and tourism precincts.	The Code has been divided into different character precincts each with precinct specific objectives, desired future character and development controls.	Consultant agrees with response. (No change to the Code required)

Locality Wide			
Issue	**Comments received**	**Response**	**Action**
Development Approvals	No amendments ever allowed. Developers get DAs approved and then put in so many amendments which are passed no questions asked. Eliminate loopholes so unacceptable DA's can not get through.	This comment appears to relate more to readvertising requirements under s.96 modifications than to the Code. A key objective of the Code is to identify locality and precinct specific controls which are deemed appropriate to achieving the desired future character of the locality.	Consultant agrees with response. (No change to the Code required)
Plan	I feel the plan does not have enough teeth and falls back onto the TLEP and other DCPs to prevail over the Hastings Point Locality Plan B23.	The specific controls of the Code prevail over the DCP A1 and work within the broader framework of the Shire wide LEP provisions.	Consultant agrees with response. (No change to the Code required)
Design Controls	Considerable focus on design which is subjective and difficult to control – matters in the final chapter are not legally enforceable.	Within the Code, design controls including materiality, colour and form have been included within the building typology development controls and would form part of a merit-based assessment. This is supplemented by Part 6.0 Design Resources. Consider making the 'design considerations" (e.g. pg 135, 4.3.2.5 Point 2) more explicit to show what criteria needs to be adequately addressed.	Consultant agrees with response. Design criteria for potential RFB developments have been included on pg 135 in a series of dot points.
Preliminaries Pg.10	Concern with the statement that "the TLEP shall prevail to the extent of inconsistency." (Pg10) This is a problem in that the TLEP has height and density limits that exceed those that exist in the locality plan.	The LEP will prevail to the extent of any inconsistencies; however, the Code and associated Tweed DCP 2008 provide details as to the controls which apply more specifically to either location or building type. However in the event of an inconsistency the LEP would prevail. This does not mean that the Code would not be enforceable, as it would be a matter for any appeal to demonstrate that Council had applied the controls specified in the Code and DCP consistently.	Consultant agrees with response. (No change to the Code required)
RFB	If there are difficulties proceeding with this type of development (RFB) because of narrowness of the blocks with turning circles for underground car parks, then why have it as an appropriate form?	Document amended to precluded RFB's from South Hastings Point and Centre Precinct, but still permissible within parts of the northern precinct. Further design investigations revealed that the majority of sites within both the South Hastings Point and Centre Precincts would have difficult providing adequate basement car parking and car manoeuvring room within the setback defined building envelope (6m front, 8m rear). This was particularly evident on blocks which had relatively modest lot dimensions typically having a 20m street frontage and for some of the lots as little as 36m deep. Whilst it is conceded that a range of RFB configurations would result in	Further assessment conducted by Council staff after final draft submission made by consultant. Draft code amended accordingly.

		a variety of options and spatial outcomes, it was considered that the cumulative impact of 3 storey building, which in most instances would need to built to the maximum boundary setbacks to fit on blocks, would ultimately undermine the existing built form character and desired future character of the precinct where the predominant building types identified are single dwellings, dual occupancies, town houses and row houses. As such 3 storey RFB developments within these two precincts have been removed.	
	No more unit blocks for Hastings Point. We do not want it to become like Kingscliff along Marine Parade. 3 storey flat buildings should not be allowed at all in Hastings Point. Townhouses are preferable to RFBs. RFBs are an inappropriate building type for HP. Height limit to be no more than 8.0m south of the bridge and no more than 10m in Creek St	Document amended to precluded RFB's from South Hastings Point and Centre Precinct, but still permissible within parts of the northern precinct. Limiting building types to single detached dwellings, townhouses and dual occupancies within these two precincts is more compatible with the existing built form character, desired future character and realistically what can be achieved on the majority of sites.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft code amended accordingly.
RFB	If you allow the RFB with a 2m/1 storey advantage over the desired predominant form, you will not get your desired predominant form. Existing 2b zoning is not justification for 3 storeys RFB. RFBs should only be in places where predominantly RFBs – no south side, not 3 storey/10m – particularly not for central precinct.	Further investigation has identified that single storey and two storey detached dwellings and dual occupancies are the predominant existing building types within the southern precinct and centre precincts. As identified above, further design investigations has revealed that many of the sites south of the bridge are unsuitable for small RFB's due to lot dimensions and areas and inability to adequately provide on-site car parking. This building form would undermine the desired future character of these precincts. 3-storey RFB's are an appropriate form of development within part of the northern precinct.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft code amended accordingly.
	Ensure that multi-unit development is broken up / detached and increased landscaping between. People who own multiple blocks all in a row should not be allowed to build large unbroken buildings continuously across all blocks. They need to appear as separate buildings on each block to maintain a village atmosphere.	The consultant is to consider reviewing controls regarding elevation length to include a maximum street elevation and a maximum lot depth elevation if the intention is to reduce the overall building footprint of RFBs so that RFBs have the appearance of 'large houses' as stated on pg 189 paragraph 4.	Consultant agrees with response with regard to reviewing building design controls regarding maximum RFB elevation length. The RFB Form Control on pg 199 states maximum side boundary elevation is 30m, and the maximum front or rear boundary is 20m long after which a 6m landscaped area is required.

Locality Wide			
Issue	**Comments received**	**Response**	**Action**
Building Type	Beach house single dwelling (low density) Low key beach house Design – Australian coastal architecture – standards for each tourism and residential precinct.	Comments made as part of 'core values table' component of the submission. A mix of housing typologies including single detached, dual occupancies, town houses and residential flat units currently exists within Hastings Point.	Consultant agrees with response. (No change to the Code required)
	10% dwellings as units within the Tweed Urban and Employment Land Strategy have been exceeded. Creek St is the only place with single dwellings for families. Current oversupply of units on the Tweed Coast and Hastings Point.	The removal of RFB's as a building type from both the southern and centre precinct ensures redevelopment of these precincts would provide a better balance of single detached dwellings, attached houses and dual occupancies.	Further assessment conducted by staff after final draft submission made by consultant. Draft Code amended accordingly.
	Who decides the mix of housing?	A range of documents provide guidance on the mix of housing and include locality plans, Council's DCP and LEP and more regional documents such as the Far North Coast Regional Strategy, which nominate a range of housing types / densities which may be suitable to a given zone, site or precinct i.e. single detached dwelling, row and town housing, shop top, and RFB. However the type of development application that is received and the resultant development is predominantly is a combination of these and market aspirations.	Consultant agrees with response. (No change to the Code required)
Height	Reduced height will limit the impact to privacy.	Privacy and overlooking are impacted on by height as well as other contributing factors including building separation, building setback and appropriate screening and landscaping between buildings. The Code includes appropriate front, rear and side setbacks (particularly the upper 3rd storey) which will reduce potential privacy and overlooking impacts.	Consultant agrees with response. (No change to the Code) Privacy and overlooking should be covered in the Building Orientation and separation controls. DCP requires a min. 4m setback for primary windows of habitable rooms from the side boundaries which forces primary windows to be facing the street or rear yard. 2m min. for non habitable rooms.

Locality Wide			
Issue	**Comments received**	**Response**	**Action**
	The height of all buildings should be measured from the existing ground level and not the filled level (finished ground level)	Draft Tweed LEP 2010 requires building heights to be measured from the existing ground level. Consultant to clarify consistency between how building height will be measured within the LP and the building height definition within the TLEP.	Building height measurement defers to building height definition within the prevailing TLEP.
FSR	There is no need for reduced FSR (i.e. 0.8:1 proposed and 1.2:1 elsewhere in the Shire) for residential flat buildings as an FSR of 1.2:1 is inconsistent with other similar areas and with the zone objectives.	Floor Space Ratio (FSR) has been calibrated for the locality of Hastings Point along with a range of other locality specific controls which vary from the broader more generic Shire wide controls. This has been the result of community consultation urban design and desired future character processes.	Consultant agrees with response. (No change to the Code required).
Signage	Design specific to Hastings point, not generic shire wide.	Consultant to consider including a signage control as part of 5.5 Shop Top Housing if desired outcome is different from what is already controlled by A1. Refer to Signage Controls in DCP A1.	Revert to signage controls in DCP A1.
Traffic	Road access to headland needs to accommodate pedestrian and cycle access.	The consultant to consider if there is a need provide separate pedestrian and cycle access? No pathway extensions have been proposed on the public improvements plan between the shop and headland. Currently, cyclists use the road and pedestrians walk along the grassed verge. The consultant to consider the need to formalise a path to the beach on the southern side of the Hastings Point Headland. The current series of paths is scouring and eroding parts of the headland, including some trampling of native grasses.	The detailed design of any pathways would form part of a more detailed public domain improvements master plan which would be exhibited for comment. 'The Headland' Strategy diagram (Fig 4.17) updated by Council staff to include formalised beach access track.
	Improve road verges and bridge amenity.	The consultant to consider potential landscape / public domain suggestions to refurbish the bridge, or make improvements to verges.	Improvements to verges and footpaths have been included to date. The Code identifies the upgrade to pedestrian amenity when bridge is upgraded in future within public domain improvements section of the centre precinct.

Locality Wide			
Issue	**Comments received**	**Response**	**Action**
Traffic	Village of Hastings Point could not cope with proposed increase of traffic flow. The present road structure and layout of Hastings point will not sustain major developments in the suburb.	A detailed investigation into the impact of a development on local traffic would be undertaken at DA stage. Any required road engineering works would also be identified and conditioned appropriately at that stage to ensure that impact was within the design capacity of the road network.	Consultant agrees with response. (No change to the Code required)
Pedestrian Crossing	Please provide safer pedestrian crossing of Tweed Coast Rd, particularly given the percentage of population of our aged and disabled (blind) residents.	The consultant to consider any potential pedestrian crossing locations and identify on illustrative master plan. One suitable location could be near the existing corner store.	Discussions to date with Tweed Council Traffic Dept note that it would be very difficult to achieve a zebra crossing on this road. There is also a formal process for getting this. The Code identifies the preference for zebra crossing subject to RTA liaison within the public domain section of the Centre Precinct.
Fill	No fill allowed anywhere in Hastings Point.	No fill is an unrealistic expectation – most new building projects have an element of cut and fill. Cut and fill controlled is controlled within DCP A1.	Consultant agrees with response. (No change to the Code required)
Building Materials	DCP should not try to formulate acceptable building design character by setting limits on the use of building materials and colours. Whereas building form requirements such as smaller forms, varied roofscape, and varied height should be retained in the DCP, the requirements for 4 complimentary building materials should be deleted.	The consultant to consider a control which highlights that variation to building material requirements will be considered where it can be demonstrated the development / building achieves the design objectives within Part 6.0.	Consultant agrees with response and has included a sentence to Materials and Detailing Control C, pg 192, 203, 212 which permits a variation to the 50% lightweight building material requirement based on architectural merit.
	Building form and not choice of building materials determines good building design. Many recent award winning residential buildings have been constructed from off-form concrete and glass with no other embellishments. Clause b will prohibit use of off-form concrete, glass and glass	See Above	Consultant agrees with response and has included a sentence to Materials and Detailing Control C, pg 192, 203, 212 which permits a variation to the 50% lightweight building material requirement based on architectural merit.

	balustrades. 50% cladding on side house elevations is excessive, expensive and probably impractical.		
	Some of the examples of houses illustrated in "5.2 Concept – Designing to Suit Hastings Point" would not satisfy "the palette of at least 4 complimentary building materials" requirement.	See above	Consultant agrees with response and has included a sentence to Materials and Detailing Control C, pg 192, 203, 212 which permits a variation to the 50% lightweight building material requirement based on architectural merit.
Building Materials (Cont'd)	The recommendation for construction using lightweight materials and not masonry and concrete is not in accordance with sustainable building practices. Thermal mass (masonry and concrete) has a stabilising effect on internal temperature thereby reducing heating and cooling costs and CO2 emissions. Variation in form/design can achieve a desired light weight character.	The Tweed region falls within Zone 2 Climatic Zone (BCA), experiencing warm humid summers and mild winters. On the coast the diurnal range is low and as such the use of lightweight construction materials is widely accepted as the most appropriate cooling strategy by negating the need for mechanical systems. High mass materials (masonry) are also appropriate but require sound passive design including shading and adequate cross ventilation to avoid overheating in summer. In multi-storey buildings high mass materials should ideally be used on lower levels to stabilise temperatures. Low mass (lightweight) on the upper levels will ensure that, as hot air rises (convective ventilation) it is not stored in upper level mass as it leaves the building.	Consultant agrees with response and has included a sentence to Materials and Detailing Control C, pg 192, 203, 212 which permits a variation to the 50% lightweight building material requirement based on architectural merit. Consultant reiterates that sun shading devices and screens all contribute to the lightweight material calculation.
Drainage	Hastings Point needs a locality wide drainage plan.	The Code should refer to the DCP A3 – Development on Flood Prone Land within both the Context Section and on Page 38 – Flooding.	Reference to DCP A3 is made within Part 3.0 Vision – Flooding pg 38 of the LP.
	Local sewerage system has been over taxed and failed on numerous occasions with large quantities of raw sewerage overflowing into Cudgera Creek but also thousands of litres forced back through our sewerage pipes and spewing over our resort.	This issue is beyond the scope of this Code. The comment has been referred to Council's Planning and Infrastructure Unit.	Consultant agrees with response. (No change to the Code required)
Sewerage system	No underground car parks in Central Precinct, Peninsular St or Creek St Precinct. Underground car parks must not be allowed in any precincts due to environmental restraints such as acid sulphate soils and likely contamination of Cudgera and Christies Cks.	There is already one underground car park in Peninsular St. Merit-based assessment of underground car park in terms of streetscape, overall building design, acid sulphate soils and site management during construction form part of any merits assessment / development approval.	Consultant agrees with response. (No change to the Code required)

Locality Wide			
Issue	**Comments received**	**Response**	**Action**
Car parking	No underground car parks in Central Precinct, Peninsular St or Creek St Precinct. Underground car parks must not be allowed in any precincts due to environmental restraints such as acid sulphate soils and likely contamination of Cudgera and Christies Ck.	There is already one underground car park in Peninsular St. Merit-based assessment of underground car park in terms of streetscape, overall building design, acid sulphate soils and site management during construction form part of any merits assessment / development approval.	Consultant agrees with response. (No change to the Code required)
	Developments must be required to provide more above-ground car parking.	Car parking requirements would be in accordance with the Tweed DCP A2 and typology controls within the Code.	Consultant agrees with response. (No change to the Code required)
Service Station Retail	Reject shop front buildings in front of service stations. Rather should increase landscaping and trees where not driveway hazard.	Is the inclusion of shops in these locations practical and are they able to be adequately serviced or would the concept require a whole of site reconfiguration. Agreed there is scope for additional landscape works to reduce amount of hardstand, however need to acknowledge traffic sightlines and that these sites are private property.	Consultant advises that the only way to fully determine if shops are possible is to do a detailed master plan for this area, which is outside the scope of this project. Consultant recommends leaving the LP as is until more detailed plans become available. However, the scope of landscape improvements proposed should be referred to as works to be undertaken regardless of above.
Views	Contradiction suggesting that the view towards Creek St is more worthy of protection than the view towards the central precinct from the bridge, central bbq area, estuary, boatshed and beach. (Pg 10 of submission)	Each of the identified visual settings has equal weighting. New development proposed within or adjoining a view setting is required to address the objectives and controls as they apply to that view setting. View settings would benefit from a tangible Reduced Level (RL) measurement relating to each precinct, and natural elements (eg canopy height, mid layers etc).	The development of an RL measure was outside the scope of this plan. No change to the Code has been made.
	Estuary view, which you have now disregarded, despite significantly noted in the first Ruker Report – is precious as many locals and tourists use the estuary. The beach and estuary views are very public and need to be protected.	The estuary view (from the estuary) wasn't a defined visual setting within the draft Locality Plan. The view from the bridge looking north, west and south which includes views out and over the estuary have been included. Whilst a view setting from the middle of the estuary hasn't been included it is obviously an important natural feature of the Hastings Point landscape and any potential impact on its visual setting would need to be adequately addressed as part of any development assessment.	Consultant agrees with planning comment. No change required.

Public Domain			
Issue	**Comments received**	**Response**	**Action**
General	Ensure adequate open space for community gatherings and recreation	Comments made as part of the core values table within submission 37. All community land will remain available to the public. Section 3.2.5 Public Open Spaces and Public Facilities discussed key strategies relating to public open space.	Consultant agrees with planning comment. No change required.
Headland	Restrict access to rock platforms and headland by defined walking path, Viewing platforms, Signposting Whale/Dolphin Watching	Comments made as part of core values table within submission 37 - For consideration within the Public Domain within the Centre Precinct.	The aim of the Code has been to retain informal access and use of headland. Do not support blocking access to rock platforms. No change required.
Camping	Retain temporary camping on headland	Seasonal camping would continue. Public domain improvement plan however illustrates planting over camping sites which could reduce number of camping sites available.	Consultant advises that all public domain plans are at this stage only strategic and require more detailed public improvement plans to be developed at a further date which would be exhibited for public comment. No change required.
Education Signage	Page 66 – section 4.1.2.2. Estuary Beach Park. Please include as an additional point g, with reference to park enhancement: Installation of environment educational signage describing the attributes of the coastal environment. Development of educational resources for tourism.	Educational signage would need to be the subject of a detailed Public Domain Master plan. Educational signage was recently removed after community objection when it was being erected on the headland, based on size and materiality of the signage.	Consultant advises that all public domain plans are at this stage only strategic and require more detailed public improvement plans to be developed at a further date which would be exhibited for public comment. No change required.
Park facilities	Improve community picnic facilities. Design specific to Hastings point, not generic shire wide.	Detailed design of the park will occur as part of an overall detailed Public Domain Master plan which would illustrate the desired landscaped and facility embellishments appropriate for the park.	Consultant advises that all public domain plans are at this stage only strategic and require more detailed public improvement plans to be developed at a further date which would be exhibited for public comment. No change required.

Public Domain			
Issue	**Comments received**	**Response**	**Action**
Southern Planting	The southern boundary of Hastings Point ends at the Shell service station, yet suggested planting of trees along the cycleway to the south (to hide the bulk and scale of The Point), are actually within Pottsville.	Landscape screening illustrated is diagrammatic only and included for consideration in any future landscape public works carried out along this stretch of the Tweed Coast Road. Section 5.8 Southern Entry (pg. 172) sets out view field and landscape requirements within this area.	Consultant agrees with response. (No change to the Code required)
Landscape	Landscape design for village tree planting program community ownership	Comment made as part of core values table – no specific comments made. Landscape controls are provided. Some landscaping concepts for roadside and public domain planting are provided throughout the document. A preferred species planting list will be included in the appendices of the finished Code.	Consultant agrees with response. (No change to the Code required) A list of species recommended for planting will be included in appendix to the Code.
Floodwater Cudgera Creek bridge	Additional tunnels under the roadway both on both sides of the road approaches at the Cudgera Ck bridge at Hastings Point are needed to ensure more adequate dispersal of floodwater flowing upstream from the bridge during flood events, allowing quicker dispersal of flood water to the ocean which currently inundates North Star Holiday resort during periods of extreme heavy/flood rains.	This is a matter outside the scope of this Code but will be referred to Council's Planning & Infrastructure Unit.	Consultant agrees with response. (No change to the Code required). Comment referred to Council's Planning & Infrastructure Unit for Information.

Environment			
Issue	**Comments received**	**Response**	**Action**
Eastern foreshore	The undeveloped eastern foreshore should be protected from any development.	No foreshore development is proposed on the (south) eastern foreshore. Development controls (including setbacks) relate to allotments in northern precinct on top of the northern dunes.	Consultant agrees with response. (No change to the Code required)
General	Green zone protection is inadequate.	The majority of vegetation surrounding the locality is held within National Park or reserve and is afforded due protection. Significant tracts of land are protected under Environmental Protection zone of the Tweed Local Environmental Plan.	Section 3.2.1 sets out overall strategy for environmental protection within the strategy. No change required.
Estuary	Protective buffer; Residential buffer along estuary; Protect mangroves; Limit commercial activities on water adjoining areas; Monitor health by working with school groups Marine centre; Protect Littoral rainforest	See above	Consultant agrees with response. (No change to the Code required)
Beach and Dunal System	Limit access points (not multiple accesses) Separate Plan of Management for access Guaranteed managed public access points	Locality Plan identified the need to rationalise the number of existing paths to limit trampling impacts on native vegetation, littering, and reduce the spread of weeds.	Consultant agrees with response. (No change to the Code required)
Littoral Rainforest	Identification and Protection	The Littoral Rainforest areas have been identified and included within the Locality Plans appendices (Part 7.2) and fall within a 7(f) Environmental Protection zoning under the TLEP 2000.	Consultant agrees with response. (No change to the Code required)
Tidal wetlands	Protect through appropriate zoning. Education on the value and health of the estuary and care for it – to be given to locals and tourists.	Significant proportion of Lot 156 has an environmental protection zone under the TLEP. Include constraints overlay illustrating extent of environmental protection zones over Lot 156 within the locality plan constraints maps.	Constraints mapping for lot 156 included as part of overall locality constraints (part 7.3). Building footprints removed from Lot 156 diagram.
Vegetative Escarpment	Appropriately zoned for environmental escarpment protection.	The majority of vegetation surrounding the locality is held within National Park or reserve and is afforded due protection.	Consultant agrees with response. (No change to the Code required)
Buffers	Vegetative buffers from estuary to residents Inadequate buffer zones.	Estuarine buffers are an important component of the character of the locality and should be protected from undue human interference. Need to co-ordinate an appropriate buffer dimension to the mean high water mark in consultation with Council's Natural Resources Unit as part of a merits based development assessment.	Consultant agrees with response. (No change to the Code required)

Environment			
Issue	**Comments received**	**Response**	**Action**
Water Quality	Guaranteed water quality in Christies Creek.	Beyond the scope of this project. The Code does however need to cross reference with the Tweed Coastline and Estuary Management Plan in Part 2.0 Hastings Point in Context.	Consultant agrees with response. Cross-reference with the Tweed Coastline and Estuary Management Plan in Part 2.0 Hastings Point in Context to be added.
Green Buffers	A green buffer is retained between the villages of Hastings Point and Pottsville on the western side of the Tweed Coast Road and the hill on the western side between Hastings point and Koala Beach be permanently protected, in law, from any development.	Green 'zones' separating Tweed coastal settlements is an integral part of the character of the Tweed and should be retained. While outside the scope of this Code, the land is currently zoned open space with an Environmental Conservation zoning beyond. This land falls within the Pottsville Locality where it has also been identified as being an important green buffer area. Green buffers between settlements could be reinforced on the environmental protection plan (pg 37).	Consultant agrees with planning comment. Green buffers between settlements reinforced in the text on page 44, Environmental Protection & Figure 3.2 Environment Portection.
	Definitely no dewatering.	The management of site construction activities is an issue dealt with at Development Application stage and throughout the development and building phases. Dewatering of itself is should not have an adverse impact; it is the manner in which water is treated prior to discharge that is of most concern.	Consultant agrees with response. (No change to the Code required)
Estuary Management Plan	The Tweed Coast Estuary Management Plan 20, 24, 2504-20, 24, 2508. Clearly this document is dated and in need of review. It is the intention of the NRM Unit to commence a review of this strategy in the 20, 24, 2510 calendar year. Can reference to this document include the addition, "or most contemporary /updated version", or words to this effect.	Amendment Required	Consultant agrees with planning comment. Add reference to this document include the addition, "or most contemporary/updated version", or words to this effect.
Landscape	Real concern is the use of vegetation to hide buildings and blend them into the landscape. I feel this is very dangerous in bush fire prone area.	How do the landscape requirements on bush interfaces relate to requirements and guidelines from the Rural Bushfires Service? Application of bushfire standards would be assessed at the development application stage for new dwellings, however, re-establishment of vegetation around existing dwellings should ensure that vegetation will not become a bushfire hazard once established.	Bush fire regulations would need to be applied on a site by site basis. Regulations refer to setback distanced based on vegetation and slope type as well as construction and materials.

Environment			
Issue	**Comments received**	**Response**	**Action**
Eastern foreshore	The undeveloped eastern foreshore should be protected from any development.	No foreshore development is proposed on the (south) eastern foreshore. Development controls (including setbacks) relate to allotments in northern precinct on top of the northern dunes.	Consultant agrees with response. (No change to the Code required)
General	Green zone protection is inadequate.	The majority of vegetation surrounding the locality is held within National Park or reserve and is afforded due protection. Significant tracts of land are protected under Environmental Protection zone of the Tweed Local Environmental Plan.	Section 3.2.1 sets out overall strategy for environmental protection within the strategy. No change required.
Estuary	Protective buffer; Residential buffer along estuary; Protect mangroves; Limit commercial activities on water adjoining areas; Monitor health by working with school groups Marine centre; Protect Littoral rainforest	See above	Consultant agrees with response. (No change to the Code required)
Beach and Dunal System	Limit access points (not multiple accesses) Separate Plan of Management for access Guaranteed managed public access points	Locality Plan identified the need to rationalise the number of existing paths to limit trampling impacts on native vegetation, littering, and reduce the spread of weeds.	Consultant agrees with response. (No change to the Code required)
Littoral Rainforest	Identification and Protection	The Littoral Rainforest areas have been identified and included within the Locality Plans appendices (Part 7.2) and fall within a 7(f) Environmental Protection zoning under the TLEP 2000.	Consultant agrees with response. (No change to the Code required)
Tidal wetlands	Protect through appropriate zoning. Education on the value and health of the estuary and care for it – to be given to locals and tourists.	Significant proportion of Lot 156 has an environmental protection zone under the TLEP. Include constraints overlay illustrating extent of environmental protection zones over Lot 156 within the locality plan constraints maps.	Constraints mapping for lot 156 included as part of overall locality constraints (part 7.3). Building footprints removed from Lot 156 diagram.
Vegetative Escarpment	Appropriately zoned for environmental escarpment protection.	The majority of vegetation surrounding the locality is held within National Park or reserve and is afforded due protection.	Consultant agrees with response. (No change to the Code required)
Buffers	Vegetative buffers from estuary to residents Inadequate buffer zones.	Estuarine buffers are an important component of the character of the locality and should be protected from undue human interference. Need to co-ordinate an appropriate buffer dimension to the mean high water mark in consultation with Council's Natural Resources Unit as part of a merits based development assessment.	Consultant agrees with response. (No change to the Code required)

Environment			
Issue	**Comments received**	**Response**	**Action**
Water Quality	Guaranteed water quality in Christies Creek.	Beyond the scope of this project. The Code does however need to cross reference with the Tweed Coastline and Estuary Management Plan in Part 2.0 Hastings Point in Context.	Consultant agrees with response. Cross-reference with the Tweed Coastline and Estuary Management Plan in Part 2.0 Hastings Point in Context to be added.
Green Buffers	A green buffer is retained between the villages of Hastings Point and Pottsville on the western side of the Tweed Coast Road and the hill on the western side between Hastings point and Koala Beach be permanently protected, in law, from any development.	Green 'zones' separating Tweed coastal settlements is an integral part of the character of the Tweed and should be retained. While outside the scope of this Code, the land is currently zoned open space with an Environmental Conservation zoning beyond. This land falls within the Pottsville Locality where it has also been identified as being an important green buffer area. Green buffers between settlements could be reinforced on the environmental protection plan (pg 37).	Consultant agrees with planning comment. Green buffers between settlements reinforced in the text on page 44, Environmental Protection & Figure 3.2 Environment Portection.
	Definitely no dewatering.	The management of site construction activities is an issue dealt with at Development Application stage and throughout the development and building phases. Dewatering of itself is should not have an adverse impact; it is the manner in which water is treated prior to discharge that is of most concern.	Consultant agrees with response. (No change to the Code required)
Estuary Management Plan	The Tweed Coast Estuary Management Plan 20, 24, 2504-20, 24, 2508. Clearly this document is dated and in need of review. It is the intention of the NRM Unit to commence a review of this strategy in the 20, 24, 2510 calendar year. Can reference to this document include the addition, "or most contemporary /updated version", or words to this effect.	Amendment Required	Consultant agrees with planning comment. Add reference to this document include the addition, "or most contemporary/updated version", or words to this effect.
Landscape	Real concern is the use of vegetation to hide buildings and blend them into the landscape. I feel this is very dangerous in bush fire prone area.	How do the landscape requirements on bush interfaces relate to requirements and guidelines from the Rural Bushfires Service? Application of bushfire standards would be assessed at the development application stage for new dwellings, however, re-establishment of vegetation around existing dwellings should ensure that vegetation will not become a bushfire hazard once established.	Bush fire regulations would need to be applied on a site by site basis. Regulations refer to setback distanced based on vegetation and slope type as well as construction and materials.

Environment			
Issue	**Comments received**	**Response**	**Action**
Cudgera Ck	Page 69 – Cudgera Creek foreshore. Second sentence, third paragraph. What is the meaning of the term, 'limiting foreshore retention.' Does this mean foreshore revetment with rocks etc? Under implementation point 1– I am unsure of the intent of the phrase 'subject to a merit based assessment on a case by case basis'. Does this relate to possible enhancement and strengthening of buffers adjacent to freehold land when a DA is lodged? It would be good to state the circumstances which trigger the case by case merit-based assessment.	Remove term 'limiting foreshore retention or provide further explanation. Intertidal interface works would need to be co-ordinated with Council's NRM Unit during a merits based development assessment process.	The term limiting foreshore retention has been removed. The most appropriate treatment of buffers and intertidal interfaces needs to be negotiated in consultation with Council's Natural Resources Management Unit on a merits based assessment process.
Northern dunes and estuary edge	4.2.2.3 Northern dunes and estuary edge. Key strategies described in this section are good, in particular item c. It is not clear however who will undertake this, when it would be commenced or how it will be funded. This comment could apply equally to a number of other valid environmental initiatives nominated in the plan (eg. Implementation point 2 on this same page and elsewhere). How will the expectation that these works will be undertaken by Council be managed, particularly as the issue of encroachment into reserves in the Shire is so widespread?	Whilst these issues have been identified within the locality plan, the on-going management is more appropriate within more specific Coastline and Estuary Management Plan and more specific Dunal Vegetation Management Plan which could be linked to funding opportunities. Appropriate setbacks have also been nominated within the Code controlling development envelopes in relation to natural interfaces.	No change to the code required. Rear setbacks of lots backing onto the northern dunes may need to be revised and co-ordinated with recommendations within the forthcoming coastal hazards DCP.
Christies Ck	Christie's creek foreshore. It's a minor issue – but this paragraph refers to 'natural embankment stabilisation'. Embankment is not a term commonly used to describe creek banks or intertidal areas.	Replace with correct terminology.	Consultant agrees with response. (Embankment is not a term commonly used to describe creek banks or intertidal areas.)
Foreshore	Page 12,370, 24, 25 – 4.4.1 Existing character. This may sound like semantics, but the description of the foreshore refers to 'natural and pristine' qualities. I do not think pristine is an appropriate term – pristine defines an absolute un-impacted, natural state. The catchment of Cudgera creek is highly modified and the creek exhibits problems related to this.	Replace with correct terminology.	Consultant agrees with response. (correct terminology).

Environment			
Issue	**Comments received**	**Response**	**Action**
Constraints	Constraints maps. Maps on pages 227 and 229 are lacking legend information	Constraints map need a title on page 227 and 229	Consultant agrees with response. Titles added within revised plan.
Wildlife Corridor	Clear identification of wildlife corridors Retain Crown land road reserve as wildlife corridor at Creek Exit	A major vegetation community's map is included within the appendices (see Part 7.2). Also see section 3.2 of the Code.	Consultant agrees with response. (No change to the Code required)
Acid Sulphate Soils	The whole area consists of acid sulphate soils overlaid by sand. The sand layer should not be breached by construction or raging floodwaters and care should be taken to maintain this protective layer so that acid soils are not washed into creeks and beaches.	Acid Sulfate Soil management will be required at the DA stage.	Consultant agrees with response. (No change to the Code required)

Central Precinct			
Issue	**Comments received**	**Response**	**Action**
Residential Flat Buildings	RFBs should only be in places where RFBs predominate – not south side, not 3 storeys / 10m – particularly not for the central precinct. The centre precinct and south precinct should be only 2 storeys which is the predominant form in these areas (1 & 2 storey).	Document amended to preclude RFB's as an appropriate building type in both the south and centre precincts. Further design investigation has identified that single storey and two storey detached dwellings and dual occupancies are the predominant existing building types within the southern precinct and centre precincts. In consideration of the character of these precincts RFB's would undermine the desired future character of these precincts. 3-storey RFB's are still identifies as being appropriate within part of the northern precinct.	Further assessment conducted by staff after final draft plan submission made by consultant. Draft code amended accordingly.
Building height	If 3 storeys were to be allowed in the shop area it would dominate the mountain view looking west from a very popular picnic area along the creek.	A visual setting analysis would need to accompany any development application. The visual setting objectives and controls would need to be adequately addressed. Note the key view field in these locations would be over the existing caravan park which are single storey lightweight structures.	Consultant agrees with response. (No change to the Code required)
Building height	Height limit should be restricted to 8-9m ensuring minimal impact within identified view corridor. 10m building height will make buildings too visible and drastically change the villages' aesthetic characteristics. (Lower buildings) will reduce the impact of overshadowing of neighbouring properties.	Document amended to preclude RFB's as an appropriate building type in both the south and centre precincts. Further design investigation has identified that single storey and two storey detached dwellings and dual occupancies are the predominant existing building types within the southern precinct and centre precincts. In consideration of the character of these precincts RFB's would undermine the desired future character of these precincts. 3-storey RFB's are still identifies as being appropriate within part of the northern precinct.	Further assessment conducted by staff after final draft plan submission made by consultant. Draft code amended accordingly.
Building height **9 Young St**	10m height limit on this building will have severe visibility impact on areas such as the picnic areas, Yugari Rd, estuary, caravan park, pedestrian footpaths and north beach peninsula.	A visual setting analysis would need to accompany any development application. The visual setting objectives and controls would need to be adequately addressed. Note the key view field in these locations would be over the existing caravan park which are single storey lightweight structures.	Consultant agrees with response. (No change to the Code required)

Central Precinct			
Issue	**Comments received**	**Response**	**Action**
Tree canopy height	Impact of 10m high commercial blocks sits laterally across vista potential to pierce the tree line.	See above	Consultant agrees with response. (No change to the Code required)
Tree canopy height	Ensure green zone above current building form is protected in central precinct.	See above	Consultant agrees with response. (No change to the Code required)
Retail	Support the inclusion of the two neighbouring blocks (for commercial / retail use)	Noted	Consultant agrees with response. (No change to the Code required)
	The shop, if rebuilt, needs to be setback to include landscaping and improve safety/visibility, and safer entry and exit by parked vehicles. No zero setbacks around central shop precinct area. This will improve pedestrian access and safety.	Consultant to confirm the intent of zero setbacks proposed, and that the Illustrative Plan also nominates need to widen and cover footpath for outdoor dining.	Consultant advises that shopfronts need continuity between buildings and proximity to the street to function effectively as a well scaled pedestrian environment. Widening would occur within street not within private allotment. (No change to the Code)
Cycle and foot paths	Need more room for footpath and cycle path – currently insufficient and dangerous. Footpath at the shop precinct should continue unabated past the shop. Currently weaving past shop front and behind parked cars to access next section of footpath.	Could a bike lane can be incorporated into the road carriageway? – But would need to consider potential safety issues, e.g. reversing cars. Is there enough footpath width for alfresco and cycle path in front of the nose in car spaces?	Consultant advises that Council cycle strategy is for shared path in this area due to busy road with heavy vehicles. The code identifies widening the footpath to 6.0m (see section 4.3.3.5 Control 1).
Traffic	Pedestrian crossing (not refuge island) where needed.	Consider identifying a suitable location for a pedestrian crossing/improve pedestrian refuge as part of the precinct illustrative plan. This would need to be referred to Council's Planning and Infrastructure Unit for consideration.	Discussions to date with Tweed Council Traffic Department very difficult to achieve zebra crossing on this road. There is also a formal process for getting this. Code identifies preference for zebra crossing subject to RTA liaison. Comment referred to Council's Planning & Infrastructure Unit.
Car parking	Considerable issues regarding availability of public car parking space. Inadequate above-ground car parking in central commercial precinct.	Car parking requirements as specified in Tweed DCP A2, with controls identified for each building typology within the Code (Part 5.0).	Consultant agrees with response. (No change to the Code required)
Caravan Park	Should remain a Council low key holiday park.	There is a clear and limited development opportunity proposed within the Council caravan park.	Consultant agrees with response. (No change to the Code required)

Northern Precinct			
Issue	**Comments received**	**Response**	**Action**
	Relating to 20, 24, 25-20, 24, 25a Tweed Coast Rd – The statutory height limit applying to the land pursuant to the TLEP 20, 24, 2500 is 3 storeys. By application of the controls within the definition of a storey, theoretically this would provide for a maximum building height of 15m. Object to the two storey height limit in relation to dual occupancies. Inconsistent with TLEP 20, 24, 2500 Draft TLEP 20, 24, 2510. Numerous 3 storey structures exist. 10m height limit and 50% of floor level below for a three storey structure restriction is inconsistent with the existing and proposed zone objectives.	Height maps are only one factor used in the assessment of applications for development of sites; other maters raised in the LEP and DCP would need to be considered, including the type of building before the ultimate height constraints could be determined. Heights nominated within the TLEP are blanket heights, not calibrated to specific locations. The proposed building heights and setbacks within the Code take into consideration desired future character of each precinct and identified visual settings.	Consultant agrees with response. (No change to the Code required)
Height	50% 3 storeys on Northern Hill should be in the middle of the building within the natural slope of land. It is too high and overly imposing at the front o the building or on the beachfront. The DCP should be modified to only permit 3 storeys above Tweed Coast Road Level. A 10m building on the hill is significantly above the current existing predominant height evidenced by the building at 24 Coast Rd. 3 storey/10m could permit 3rd storey section to be located on the top of the dunes which would then be above the 'mid-layer' (refer view 4.5.2 From Headland).	Design objectives identify that the part 3rd storey (30% of floor plate below) which needs to be setback 10m from the front building line. Consider inclusion of a sectional diagram which illustrates how a building could step down the slope. Clarify potential 3rd storey setback requirements to the beach elevation.	Consultant advises that as a 'principle' such a diagram would be fine however a sectional diagram would be only of limited use as a control diagram as each site is different and would require a different solution and therefore not included in the final draft plan. 3rd storey rear setback (to beach elevation) within the northern precinct requires 5.0m rear elevation setback (refer section 4.1.3.6 control 6).

Northern Precinct			
Issue	**Comments received**	**Response**	**Action**
Setback	Objection to the 10m landscape setback from the eastern frontage and a 10m landscape setback from the western road frontage in that it fails to recognise the significant constraints imposed on the development of the land in terms of bushfire, coastal hazard and often the long narrow shape of these blocks.	Rear setbacks of lots backing onto the northern dunes has been reduced from 10m to 8m which is considered more consistent with the current coastal hazards 100 year line. It is also more consistent with other rear setbacks within the locality that also back onto natural areas.	Rear setback reduction amended by Council staff after final draft submission made by consultant. Note that this rear setback may need to be reviewed and co-ordinated with any relevant adopted outcomes of the Tweed Coastal Hazards Lines DCP which is currently being drafted.
DSZ	Due to the existence of a mid block boundary (at No. 20, 24, 25 Tweed Coast Rd), the deep soil zones at the rear would be excessive and further restrict the developable part of the land. A suggestion to rectify this would be to clarify that DSZ are not required adjacent to a mid block common boundary of a battle axe block arrangement.	Deep Soil Zones are requirements in accordance with Tweed DCP A1. Merit based variations which take into account lot size and shape are considered.	Consultant agrees with response. (No change to the Code required)
Service Station	The principal of additional retail between Service Station and Tweed Coast Rd is not practical. Site not big enough to accommodate new shops and adequate parking. The appearance of the hardscape could be improved by screening with soft landscaping.	Consultant to confirm that inclusion of shops in these locations would practically fit and be able to be adequately serviced or whether the concept requires a whole of site reconfiguration. Agreed there is scope for additional landscape works to reduce amount of hardstand, however need to acknowledge traffic sightlines and that these sites are private property.	Consultant advised that the only way to fully determine if shops are possible is to do a detailed master plan for this area. This is outside the scope of work for the Code. Recommend leaving the Code as is and as more detailed plans become available. Retail opportunity (front of service stations) indentified and retained within the Code.

Creek Street			
Issue	**Comments received**	**Response**	**Action**
Traffic	Unsatisfactory traffic/pedestrian access for Creek St/ Coast Rd intersection.	This is a matter outside the scope of this project, however this comment will be referred to Council's Planning and Infrastructure Unit for consideration. Verge or refuge Island improvements could form part of the public domain improvements plan for this precinct if appropriate.	Consultant agrees with response. Amendment to Code to note this.
	Road base used totally inappropriate – does not filtrate	This is a matter outside the scope of this project, however this comment will be referred to Council's Planning and Infrastructure Unit for consideration.	Consultant agrees with response. (No change to the Code required)
Height	Accept low density, 2 storey, single / dual occupancy size lots for Creek Street Precinct.	Houses and dual occupancies and town houses are the only building type proposed for Creek Street.	Consultant agrees with response. (No change to the Code required)
	The height in Creek St precinct should be measured from existing ground level at 8-8.5m given flood plain.	TSC Flood DCP nominates minimum levels which is the Design Flood Level (DFL 3.0m) + 0.5m = 3.5m	Consultant agrees with response. (No change to the Code required); Refer to Tweed Flooding DCP
Visual Setting	Account for change in road direction in viewing corridors.	The view field which terminates in vegetation at the end of Creek Street has been identified within the visual settings.	Consultant agrees with response. (No change to the Code required)
Flooding	No fill in Creek St Precinct. This will increase flooding in surrounding area and create problems for existing residents. There should be only one option stated in the Locality Plan and that is houses must be elevated on poles etc so flood water will run freely.	Consider elevated/suspended structural systems as a possible design control within this precinct.	Elevated suspended structural systems permissible under the code. The code also encourages lightweight and low impact materials within this precinct. (No change to the Code required)
	Points in the flood section at the front of plan need to be included within the Creek St Precinct controls near the end of the plan.	The code cross references DCP-A3 Development of Flood Liable Land where more specific detail with regard to flood and design levels is nominated.	The plan includes up-to-date flooding mapping and refers to DCP A3 for detailed information on flood and design levels.
	Stormwater (open) drains surrounding the outside perimeter on North Star Holiday Resort are not draining adequately effectively into Cudgera Creek, as they are clogged with weeds and siltation.	This matter is to be referred to Council's Planning and Infrastructure Unit for information.	Consultant agrees with response. (No change to the Code required). Comment referred to Council's Planning and Infrastructure Unit for information.

Creek Street			
Issue	**Comments received**	**Response**	**Action**
Road over 7(a)	Object to fill on Creek St blocks and proposed road / zoning behind creek side houses (south side of Creek St). Should remain 7(a) zoning. Stop mowing. Prevent building form, roads or fences behind houses on southern side of Creek St adjacent to estuary. Construction of a Road would basically forms a levy which will increase the inundation from flood event.	This matter is to be referred to Design and Infrastructure Unit for consideration. The road behind Creek Street houses is part of a major development application currently being considered by the Department of Planning. Council has expressed concerns relating to this application including the development of a road over 7(l) land.	Consultant agrees with response. (No change to the Code required). Comment referred to Council's Planning & Infrastructure Uni for information.
7 (a) Land	The zoning is Environmental Protection 7(a) it is to protect the estuarine habitat. Keep it that way and as such all mowing should cease as it prevents any re-establishment of naturally occurring flora and help establish exotic species.	There are no recommendations to rezone this land within context of the Code.	Consultant agrees with response. (No change to the Code required)
7(l) Environmental Habitat Zone	The end of Creek St should remain zoned habitat and not changed. Recent and previous landholders cleared the vegetation illegally.	There are no recommendations to rezone this land within context of the Code.	Consultant agrees with response. (No change to the Code required)

Lot 156			
Issue	**Comments received**	**Response**	**Action**
No development	Object to 156 development, zoning, impact on the environment, flora and fauna, increased traffic, proposed buffers, flooding, plotting of houses and road. Retain environmental habitat zone behind North Star abutting Lot 156. Object to recent illegal clearing over 7(l) zone Return Lot 156 back to its original state, no	This site is the subject of a Part 3 Application currently being considered by the NSW Department of Planning (DoP). Council is not the consent authority for this development proposal. Any concerns about the development of the site should be referred to the Department of Planning. Council has provided the DoP with comments highlighting outstanding issues regarding ecological matters, geotechnical and earthworks (fill), flooding,	Consultant agrees with response. (No change to the Code required)

	development should be allowed. Illegally altered and currently causes flood hazard to the Creek St Precinct. Lot 156 fill will act as a dam wall	stormwater management, traffic management acid sulphate soils, contaminated land, noise and biting midge and mosquito issues.	
Remediate	Lot 156 should be rezoned environmental protection as there is no technical solution to build without flooding area. Impact to the flood levels and the environment will be massive.	See above	Consultant agrees with response. (No change to the Code required)
Constraints	The property (Lot 156) has many significant environmental and management issues including flooding, conservation and acid sulphate soils which need to be investigated.	See above	Consultant agrees with response. (No change to the Code required)
Fill / Flood	The developers flood models are flawed and should be investigated.	See above	Consultant agrees with response. (No change to the Code required)
	The necessary filling of Lot 156 to allow development would create flooding issues for neighbouring properties in Creek St, North Star Caravan Park, the Forest at Koala Beach, Round Mountain residents and also possibly as far north as Bogangar due to interconnected waterways. Involves massive amounts of fill in the floodplain.	See above	Consultant agrees with response. (No change to the Code required)
	Filling changes the existing quality of the landscape and visual setting of this precinct. Filled road behind estuary blocks creates a loss of privacy. Results in unsightly batters at boundary; Obstructs stormwater and flood flow paths; Filling blocks like this will cause cumulative impacts.	See above	Consultant agrees with response. (No change to the Code required)

Lot 156			
Issue	**Comments received**	**Response**	**Action**
Fill / Flood (Cont'd)	Imagine what would happen should Lot 156 be built up an additional 1.5m. Without sufficient redirection of water flow I can see an "island" effect happening, forcing water to pool on the lower level of the already existing North Star Holiday Resort that is home to some 180 permanent homes. Development (156) will place lives and properties at risk. I fear for my safety life and ability to access safe refuge.	See above	Consultant agrees with response. (No change to the Code required)
	The raising of the development site just east of the junction of the Creeks will impede runoff and direct masses of water along Creek St and adjoining low-lying houses.	See above	Consultant agrees with response. (No change to the Code required)
Height / Fill / Visual Setting	To compound visual interruption of the view corridor the Lot 156 lots, due to sewer drainage invert levels, will be filled to 3.1AHD (approx. 1.5m above natural ground level. If the Lot 156 houses are constructed to maximum permissible height in accordance with the HP DCP they will be 9.5m high above street level with roof tops above the tree line. It is evident that after filling, buildings would be very visible from view corridors including the headland. Fill on lot 156 will cause roofs to project much higher than the 'mid-layer' shown in the photo vista and would therefore not comply with the DCP. Height controls are a concern if dwellings are to be built on 2m of fill.	Under the guidelines set down by the NSW Department of Planning for implementation of the draft Tweed LEP 2010, new buildings are to be measured from existing (natural) ground level. If buildings project into the view field, the objectives and relevant design controls within the Code would need to be considered.	Consultant agrees with response. (No change to the Code required)
7L Environmental Habitat Zone	Until it is clear that this land can be developed, the 7L environmental habitat zoning should remain, roads should not be marked on any plan and houses should not be plotted on this block. Remarks in the locality plan relating to the subdivision should only be made with the qualification – "if such was approved."	Remove specific built form elements from Illustrative Diagram.	Consultant agrees with response. Built form elements removed from Illustrative diagram relating to Creek Street and Lot 156.

Lot 156			
Issue	**Comments received**	**Response**	**Action**
Wildlife Corridor	Retain habitat and wildlife corridor behind and between North Star abutting Lot 156. Lot 156 sits in a wildlife corridor with endangered species that visit and breed in the area including the bush and beach stone curlews, jabirus and others. The extent of development in this area will destroy this habitat.	This site is the subject of a Part 3 Application currently being considered by the NSW Department of Planning (DoP). Council is not the consent authority for this development proposal.	Consultant agrees with response. (No change to the Code required)
Flora and Fauna	Flora and fauna reports are not conducted by qualified experts and are not current and are incorrect.	See above	Consultant agrees with response. (No change to the Code required)
	Destruction of flora and fauna of the wetland designated area of Lot 156 caused by slashing and the introduction of goats was nothing short of disgraceful.	See above	Consultant agrees with response. (No change to the Code required)
Compliance	Acceptance of development on this lot needs to be in accordance with NSW Planning Guidelines and policy.	Under the definitions of coastal settlements as documented within NSW North Coast Design Guidelines 2008 and the Coastal Design Guidelines 2003, Hastings Point is a small coastal village. Within a small coastal village both guidelines recommend that residential buildings are typically low rise, one to two storeys in height with opportunity for the village centre (retail hub) to be 3 storey's in height consummate with the limited level of retail, commercial and social infrastructure services. In doing so height limits and building typologies as identified within each of the precincts have been bought into line with the objectives and intent within NSW North Coast Design Guidelines 2008 and the Coastal Design Guidelines 2003.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft code amended accordingly.

Lot 156			
Issue	**Comments received**	**Response**	**Action**
Buffers	Council's own ecologist's reports have recommended a 50m buffer in respect of the north west portion of the site which would eliminate the back half of the current Lot 156 proposal.	This site is the subject of a Part 3 Application currently being considered by the NSW Department of Planning (DoP). Council is not the consent authority for this development proposal.	
	Locality Plan should reflect the application of these laws and policies (Tweed Coastline and Estuary management Plan, DCP A5 – Subdivision 50m Buffer; NSW Coastal Design guidelines 100m buffer where possible to ecologically sensitive areas, Policy and Guidelines Aquatic Habitat Management and Fish Conservation 1999 50m to 100m buffer; and North Coast Handbook for Avoiding and Reducing Rural Land Use Conflict and Interface Issues 100m buffer between wetland and residential areas, 50m between native vegetation and residential areas)	Estuarine buffers are an important component of the character of the locality and should be protected from undue human interference. Need to co-ordinate an appropriate buffer dimension to the mean high water mark in consultation with Council's Natural Resources Unit as part of a merits based development assessment.	Consultant agrees with response. (No change to the Code required)
	A previous argument raised by James Warren and previous planners that the buffer should be reduced because it would encourage midges is legally unsupported.	Impact of Biting Midge and mosquitoes is currently being reviewed by the DoP as part of their assessment of the Major Project application.	Consultant agrees with response. (No change to the Code required)
Buffers (Cont'd)	TSC Planning has also rejected 17 lots on north west corner of block because need 50m buffer from the wetlands i.e. 2E zoned land adjacent to current 7L environmental habitat zone.	This site is the subject of Part 3 Application being assessed by the NSW Department of Planning (DoP). Council has provided the DoP with comments highlighting outstanding issues regarding ecological matters, geotechnical and earthworks (fill), flooding, stormwater management, traffic management acid sulphate soils, contaminated land, noise and biting midge and mosquito issues. Council is not the consent authority for this development proposal. Any concerns about the development of the site should be referred to the Department of Planning.	Consultant agrees with response. (No change to the Code required)
	Riparian buffer zones around the entire Lot 156 property should be identified, zoned and maintained. Maintenance should include revegetation and regeneration and the reduction of impacts from domestic activities such as mowing and weed introduction. Increase riparian buffers 50-100m	Estuarine buffers are an important component of the character of the locality and should be protected from undue human interference. Need to co-ordinate an appropriate buffer dimension to the mean high water mark in consultation with Council's Natural Resources Unit as part of a merits based development assessment.	Consultant agrees with response. (No change to the Code required)

Lot 156			
Issue	**Comments received**	**Response**	**Action**
Boundaries	There are unresolved issues regarding boundaries and the mean high water mark which needs to be resolved.	The question of defining the legal boundary of lot 156 is an issue to be addressed by DoP during their assessment of the Major Development application.	Consultant agrees with response. (No change to the Code required)
Pocket Park	We reject the expression "likely increase in the number of people living in that subdivision" In the sense that it anticipates that this will occur. More appropriate to express:"…if a subdivision was approved in this area it may be desirable to create a small natural pocket park,"	The need for open space requirements over Lot 156 can only be nominated as part of an integrated and more detailed master plan over the site. As the site is heavily constrained and the development potential remains undetermined, the allocation of a pocket park should be withdrawn from the code, pending a more detailed and site specific design.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft Code amended accordingly.
Sea level rise	There is no proper consideration for change, increased rainfall, storms and sea level rise.	Councils Flooding DCP A3 – Development over Flood Liable Land adopts a level incorporating projected sea level rise. Any development application over this site would need to adequately address this policy.	Consultant agrees with response. (No change to the Code required)
Traffic	Significant increased numbers of both vehicles and pedestrians if the proposed development were approved, access and egress to Tweed Coast Rd via Creek St would become impossible to control. The road junction Creek Street and Coast Road will never be adequate to handle the increased traffic flow in either direction. The additional traffic noise would also be unacceptable if housing on Lot 156 was approved.	This site is the subject of a Part 3 Application currently being considered by the NSW Department of Planning (DoP). Council is not the consent authority for this development proposal. Any concerns about the development of the site should be directed to the Department of Planning.	Consultant agrees with response. (No change to the Code required)
View corridor	New Lot 156 lots shown at the end of Creek St (see 3.2 Illustrative Plan) will be fully visible as the street direction changes making the new lot houses the backdrop of the vista.	A landscaped front setback would provide some screening to the front elevation of these houses if development were approved. One of the objectives within this view field is that buildings are not visible.	Consultant agrees with response. (No change to the Code required)
Illustrative Plan	Not appropriate to put any houses on Lot 156 on then locality plan. TSC has rejected development there because of flooding, community retained experts say the same.	Due to the current 3A major project assessment being undertaken by the DoP on this site, remove 156 illustrative plan depicting locations of building envelopes and buffer zones. The site would be subject to the same design controls as apply to the remainder of the Creek Street Precinct.	Consultant agrees with response. (building envelopes removed from illustrative plan as it relates to Lot 156)

Property Value	The development will dramatically decrease value of all North Star residents' properties and escalate our insurance.	This would be very difficult to conclude without specialist property economic advice which is beyond the scope of this project.	Consultant agrees with response. (No change to the Code required)
Southern Precinct			
Issue	**Comments received**	**Response**	**Action**
Housing Type	Town houses, dual occupancies and single dwellings only on the south-side controls of height, density and size of land for each type as per draft locality plan Object to 3 storey 10m RFBs south side (incl. 3 storey, 10m shopfront buildings).Preventing the southern the RFB/3 storey exception would avoid negative problems and contradictions/inconsistencies. 3 storey opportunity will undermine the predominate form objective for this precinct. Housing choice comment to justify 3 storey RFBs south side is a clear contradiction to the stated objectives and visions in 2.27 and 3.1 of the plan. Restricting southern end to townhouses, dual occupancies and single dwellings provides for real choice- including the possibility for families to live in Hastings Point	Further investigation has identified that single storey and two storey detached dwellings and dual occupancies are the predominant existing building types within the southern precinct and centre precincts. As identified previously above, further design investigations revealed that many of the sites south of the bridge are unsuitable for small RFB's due to lot dimensions and areas and inability to adequately provide adequate on-site car parking and manoeuvring space. This building form would undermine the desired future character of these precincts. 3-storey RFB's are still an appropriate form of development within part of the northern precinct.	Further assessment conducted by Council staff after final draft submission made by consultant. Draft Code amended accordingly.
The Point	The Point should be screened with trees	Development consent has determined the extent of vegetation planting associated with the development. Consider including a landscape screen along southern approach (western side of Tweed Coast Road) to The Point on the urban vegetation diagram (page 47).	Consultant advises that vegetation buffer has already been shown on the plans. This can be expanded to show additional screening.
Tree canopy	Tree canopy along the south remains a dominant natural feature and thus all new buildings remain below the tree line.	Document amended to preclude RFB's as an appropriate building type in both the south and centre precincts. Further design investigation has identified that single storey and two storey detached dwellings and dual occupancies are the predominant existing building types within the southern precinct and centre precincts. In consideration of the character of these precincts RFB's would undermine the desired future character of these precincts. 3-storey RFB's are still identifies as being appropriate within part of the northern precinct.	Further assessment conducted by staff after final draft plan submission made by consultant. Draft code amended accordingly.