

Part 3 - The Project

The Shell Cove Boat Harbour Precinct project comprises the following development precincts:

- Commercial mixed use cores including a landmark hotel.
- Business park precinct (QBZ Precinct).
- Residential development of some 1,238 dwellings (comprising standard, medium density and apartments).
- Boat storage.
- A comprehensive network of open space and wetlands.

Table 3.01 gives the indicative areas of the above development precincts within the Boat Harbour Precinct and Fig. 3.01 illustrates these as part of the overall Concept Plan.

Commercial Precincts	8ha
Residential Precincts	37ha
QBZ Precinct	10ha
Boat Storage & Boat Ramp	2ha
Public Open Space	43ha
Total	100ha

Table 3.01 - Indicative Areas of Boat Harbour Precinct Development Components

The planning options that have evolved since 1996 are described below. This is followed by the guiding principles of the project, the resulting masterplan, and details of each identified development precinct.



Fig. 3.01 - Boat Harbour Precinct Concept Plan

3.1 Planning Options

A series of planning studies, workshops and reviews have been carried out since the Development Consent for the Boat Harbour was granted in 1996. The initial studies focussed on the overall structure plan while the later studies focussed on the Boat Harbour Precinct.

1996 A planning and urban design workshop was facilitated by Prof. Hans Westerman.

The purpose was to explore the elements of the overall Shell Cove structure plan and to test the linkages and impacts between Shell Cove and the existing community of Shellharbour.

2000 In March 2000 an extensive structure plan review was undertaken involving the following consultants:

- LFA (Pacific) Pty Ltd (Planning/Urban Design)
- GHD Pty Ltd (Stormwater/hydraulics)
- Kevin Mills & Associates (Ecological)
- Leyshon Consulting (Retail/Commercial)
- SMEC Australia (Traffic/Transportation)
- Acoustic Logic (Acoustic)

While the review generally excluded the Boat Harbour water elements and adjacent land platforms on the basis that the clear intent for those areas had been set out in the material prepared and presented to the Commission of Inquiry in 1995, a number of the findings clearly impacted on the Boat Harbour project.

The key issues stemming from the structure plan review included:

- Detailed policies relating to stormwater treatment and Boat Harbour water quality.
- Definition of open space corridors.
- Introduction of a golf course adjacent to Dunmore wetland.
- Water quality control structures together with wildlife habitat measures.
- Identification of preferred retail centre of around 9,000m² located adjacent to the Boat Harbour.
- A review of acoustic impacts associated with development along the Quarry Haul Road.
- Definition of key road networks.
- Provision of social infrastructure.

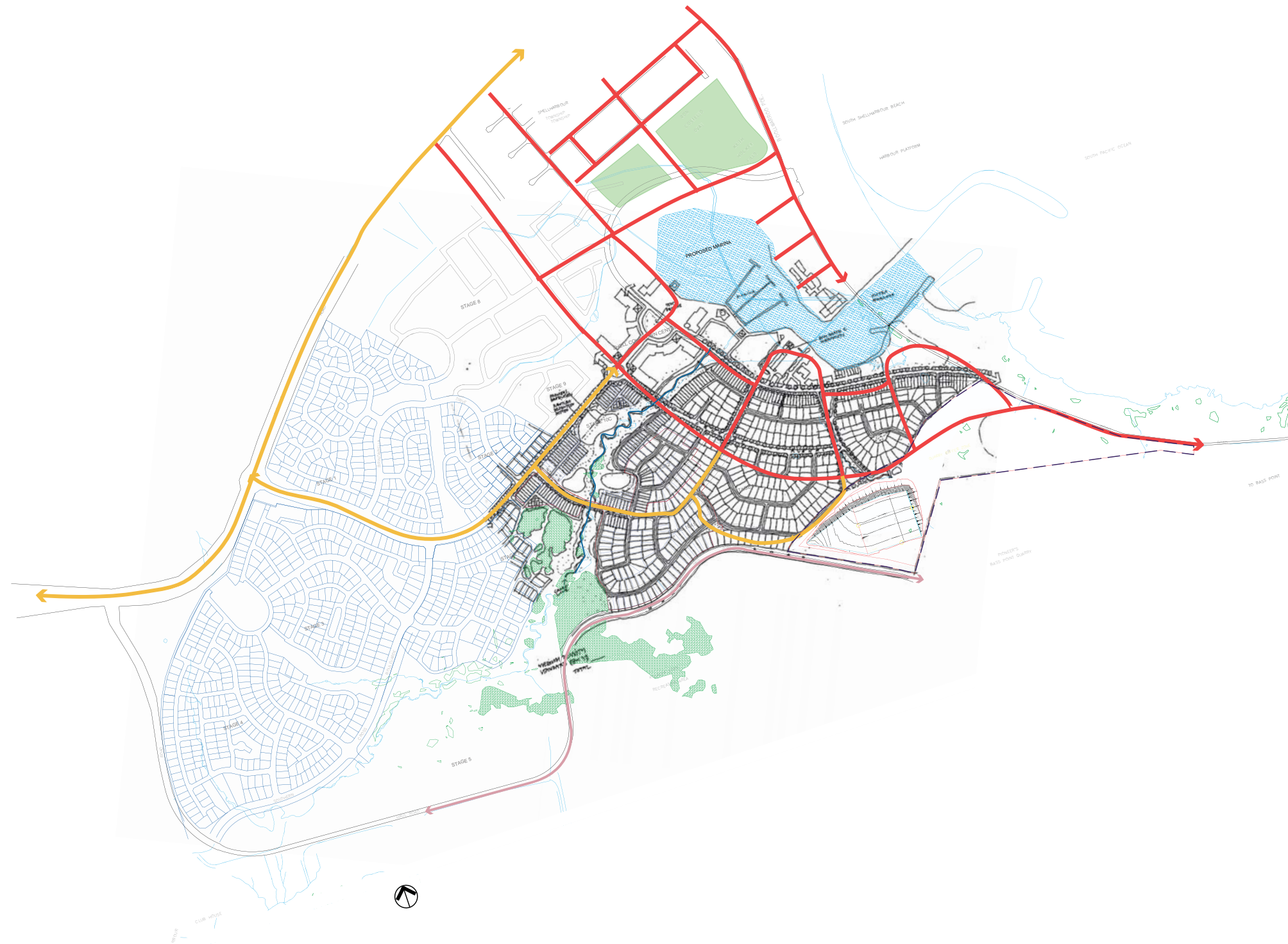


Fig. 3.02 - 2003 Workshop, Option 4

2003 In 2003 a planning workshop was held to explore the potential of the Boat Harbour Precinct as well as the preferred relationships between the Boat Harbour and the existing community of Shellharbour.

The workshop drew upon the skills of the following organisations:

- Australand
- LFA (Pacific) Pty Ltd
- Roberts Day Planning
- Clouston Associates
- Cox Richardson
- FL Wilkinson & Associates
- Shellharbour City Council
- Patterson Britton & Partners

The key issues examined as part of the workshop included:

- The land use components.
- The mix and scale of residential product.
- A potential rotation of the Boat Harbour by some 15% to minimise acid sulphate and rock excavation impacts.
- The form and nature of public accessibility to the harbour edge.
- The preferred road network pattern.
- The array of commercial uses and their disposition.
- Location of retail centre.
- Integration with Shellharbour community.
- Modification of the Boat Harbour Precinct as a sense of place with radial road links to the Boat Harbour Precinct from the principal north-south road.
- Effective long term use of the QBZ area.

2005 The Issues raised in the 2003 structure plan review were refined and developed and resulted in the preparation of a Section 96 submission to the Department of Planning in December 2005.

The key issues that were explored involved the following:

- Effect of boat harbour rotation on availability and location of land.
- Resulting strategic adjustments to water quality.
- Opportunity for enhancement of open space.
- Traffic and pedestrian requirements.
- Topographic opportunities and views to the harbour.
- Commercial zone area requirements.
- Form and make-up of commercial development.
- Residential density and distribution.
- Character of the harbour edge.
- Boating facilities.
- Relationship to Shellharbour Village.

The preferred options resulted in some significant adjustments to the earlier Masterplan (Review Structure Plan, March 2000) including:

- Deflection westward of the north west link road (Harbour Boulevard) through to Bass Point.
- Reduction of harbour zone through traffic by deleting the inner ring road in favour of a more radial road network focusing on the harbour.
- Rationalisation of the water quality system with a single major inflow at the 'upstream' (west) end of the harbour.
- Incorporating preliminary findings of a flood study of the Shellharbour Village catchment. (The study pointed to the need for a system of cross contour bio-retention basins between Shellharbour and the Boat Harbour).
- Consolidation of the commercial zone on the western side of the harbour including a proposed hotel.

2007 In 2007 a series of workshops were held to investigate the principles and design elements associated with the Town Centre Precinct within the wider Boat Harbour framework. The studies led to a refined Masterplan for the Town Centre Precinct.

The workshop participants included:

- LFA (Pacific) Pty Ltd
- BN Group Pty Ltd
- Cox Richardson
- BHI Architects
- Australand
- Shellharbour Council

Further detailed Town Centre design work and resolution of principles was carried out by LFA (Pacific) and BN Group (see Fig. 3.08, pp 31, 3.09, pp 32 and 3.10, pp 33).

3.2 Landscape/Open Space Principles

The principles governing the organisation of public open space within the study area are:

- Existing Watercourse No. 1 and associated stormwater quality management incorporating detention (bio-retention) facilities and constructed wetlands within surrounding open space.
- Stormwater interception/detention facilities adjacent to Shellharbour Village and associated shallow floodways linked to the harbour.
- Relationship to Shellharbour Village and Shellharbour South Beach.
- Existing playing fields north of the site (Ron Costello Oval and Keith Hockey Field) as well as a proposed playing field in the QBZ.
- Public (pedestrian) accessibility to the entire harbour foreshore.
- Maximising view potential for streets which focus on the harbour.

These principles are expanded below:

- Watercourse No. 1
Watercourse No. 1 and associated stormwater management requirements form the basis of the major open space (and pedestrian movement system) within the preceding (completed) stages of the Shell Cove development. The proposals contained in this report extend the system through to the harbour edge. A description of the hydrological functioning of the system is contained in Part 4.4, pp 70 of this report. The stormwater quality management system incorporates wetlands with broad areas of landscaped open space which contains pedestrian and bicycle pathways and facilities for passive recreation, and addresses and provides access to, adjacent residential development. Enabling public safety will be a priority.

- Detention/Floodways Adjacent to Shellharbour Village
These spaces adjoin public streets and will primarily function as very wide verge spaces with public access for recreation purposes. In the case of the two floodways, radially positioned on the harbour, these will also provide an active edge to address adjacent residential development. The floodways are shallow and will contain no standing water or wetlands.
- Shellharbour and South Beach
Proposed development within the study area is separated from the beach by the existing alignment of Boolwarroo Parade. This alignment remains for access to parking facilities for users of the public beach reserve. The beach reserve area is presently being rehabilitated and this will continue, as will enhancement of pedestrian access to it.
- Playing Fields
The existing Ron Costello Oval and Keith Hockey Field, both of which are located immediately north of the Boat Harbour Precinct, will remain as public sports fields for residents of Shellharbour Village. Additional sporting facilities in the form of a multi-use field providing accommodation for two soccer/league fields or one cricket oval, and associated change rooms and parking will be situated on the southern edge of the harbour zone on the top of the approved waste cell in the QBZ.

3.3 Pedestrian and Bicycle Network

The pedestrian movement network is linked to the pattern of open space.

Bicycle paths are positioned to connect into existing major networks and at the same time to take advantage of convenient open space links.

A bicycle path will run from Bass Point along the proposed Harbour Boulevard through to Shellharbour Road and also link back to South Shellharbour Beach.

- Harbour Foreshore**
 The entire foreshore zone will be publicly accessible. It is proposed that a variety of linked spaces from boardwalks to broad parkland areas will follow the perimeter of the harbour through boating facilities, commercial precincts and residential address zones. A number of these spaces have been notionally explored and several concept drawings have been produced (see Fig. 4.03, pp 51 and Figs. 4.08, 4.09 and 4.10, pp 56). Provision of safety and public surveillance measures will again constitute a design priority.
- Streets to the Harbour**
 One of the objectives of the planning approach is to maximise the view potential of radially positioned streets relative to the harbour. Extension of the existing Cove Boulevard though to the harbour edge is an obvious example. Extension of Sophia Street road reserve from Shellharbour Village will provide a pedestrian connection. A number of other proposed radial streets offer the advantage of slightly higher ground together with the need for additional stormwater quality treatment measures. These streets will be developed as wide boulevards for visual corridors as well as important open space links. A notional cross section has been produced (see Fig. 4.04, pp 51).

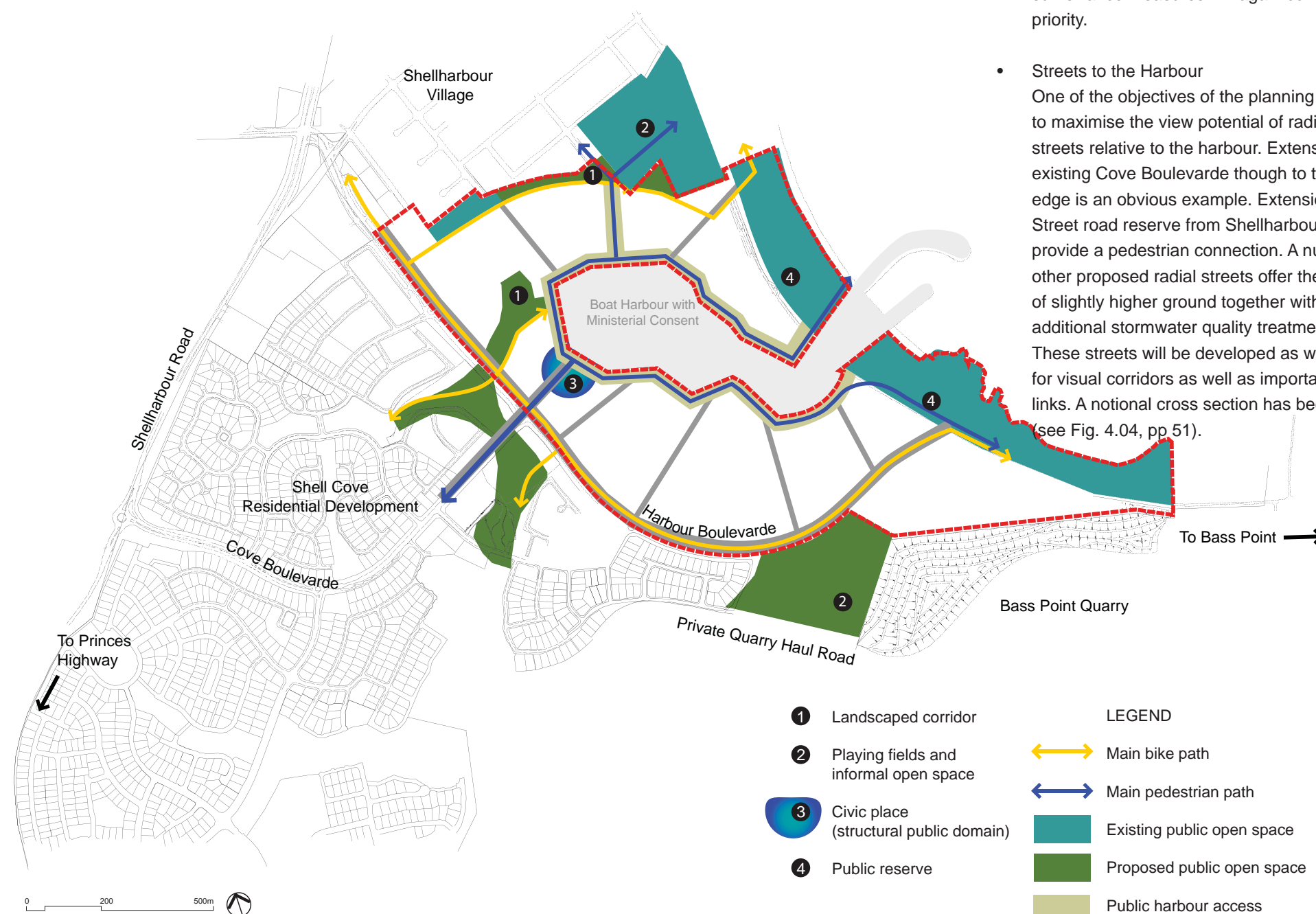


Fig. 3.03 - Open Space, Pedestrian and Bicycle Network

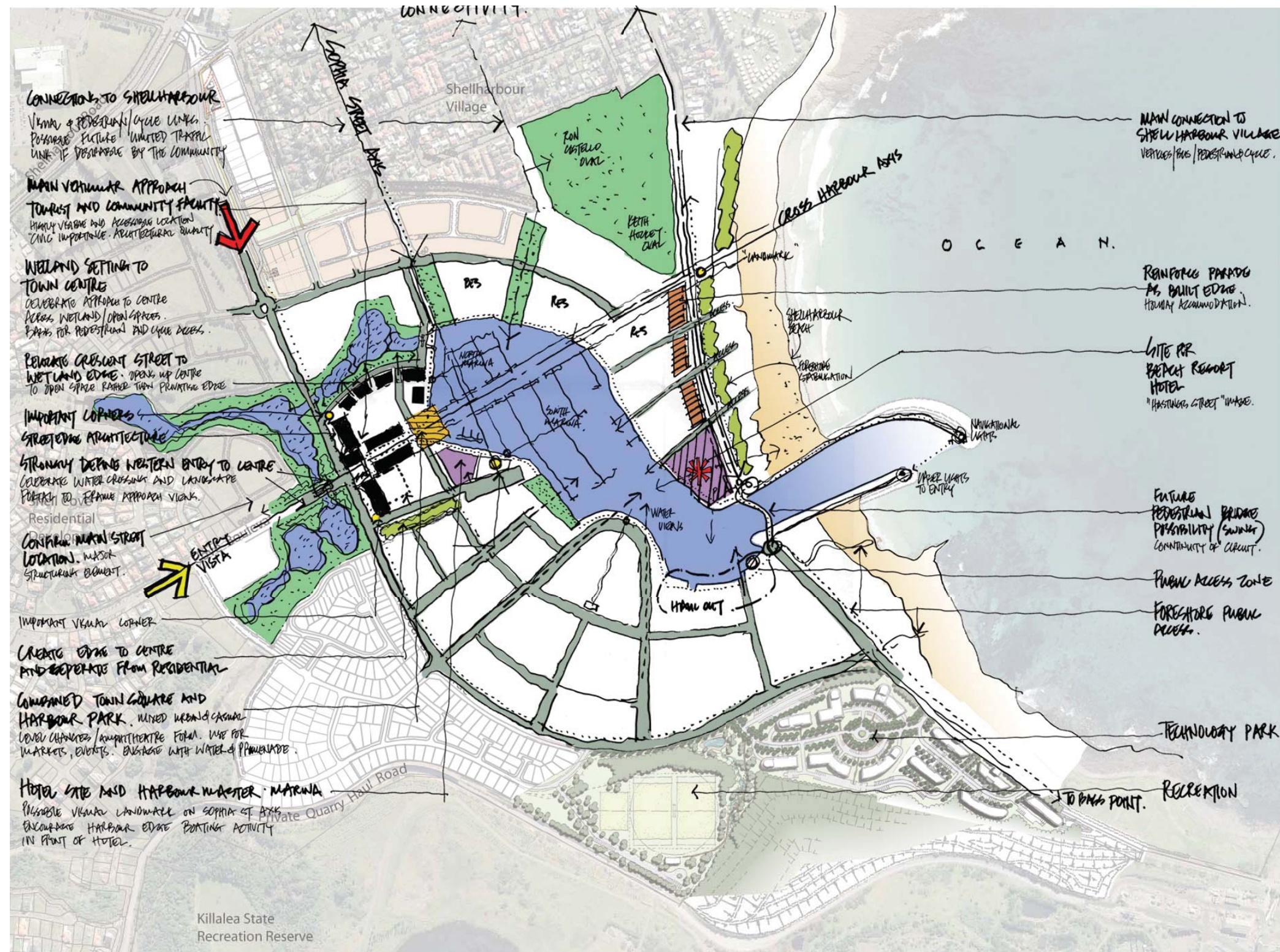


Fig. 3.04 - Masterplan Design Investigation

3.4 Masterplan

The Shell Cove Boat Harbour Precinct masterplan adopts the following design principles:

- Locate the Town Centre at the eastern end of Cove Boulevard to create a prominent junction and entry vista.
- Provide a hotel site within the Town Centre.
- Provide two commercial precincts to accommodate different focuses - a main precinct comprising the Town Centre and a potential secondary precinct closer to the beachfront.
- Maintain view corridors to the ocean from the Town Centre and residential precincts.
- Provide public access to the Boat Harbour perimeter.
- Provide wetlands which take into consideration water movement across the site.
- Provide vehicular entry to the Precinct from nearby Shellharbour via Harbour Boulevard.
- Maintain northern connection to Shellharbour Village.
- Reinforce Boollwarroo Parade as a built edge.
- Restrict land use near to the Bass Point Quarry to non-residential - locate Business Park here.

Fig. 3.04 identifies the design principles in an early iteration of the masterplan.

3.5 Development Precincts

Within the overall masterplan, a number of development precincts have been identified. Each precinct has undergone detailed design and planning investigations which are described and illustrated below. All illustrations are indicative only and the built form will be considered in further detail prior to submission of subsequent Project Applications.

The characteristics of each development precinct - land use, indicative height, number of dwellings and floor space area - are illustrated in Figs. 3.05, 3.06 and 3.07.



Fig. 3.05 - Landuse Per Precinct

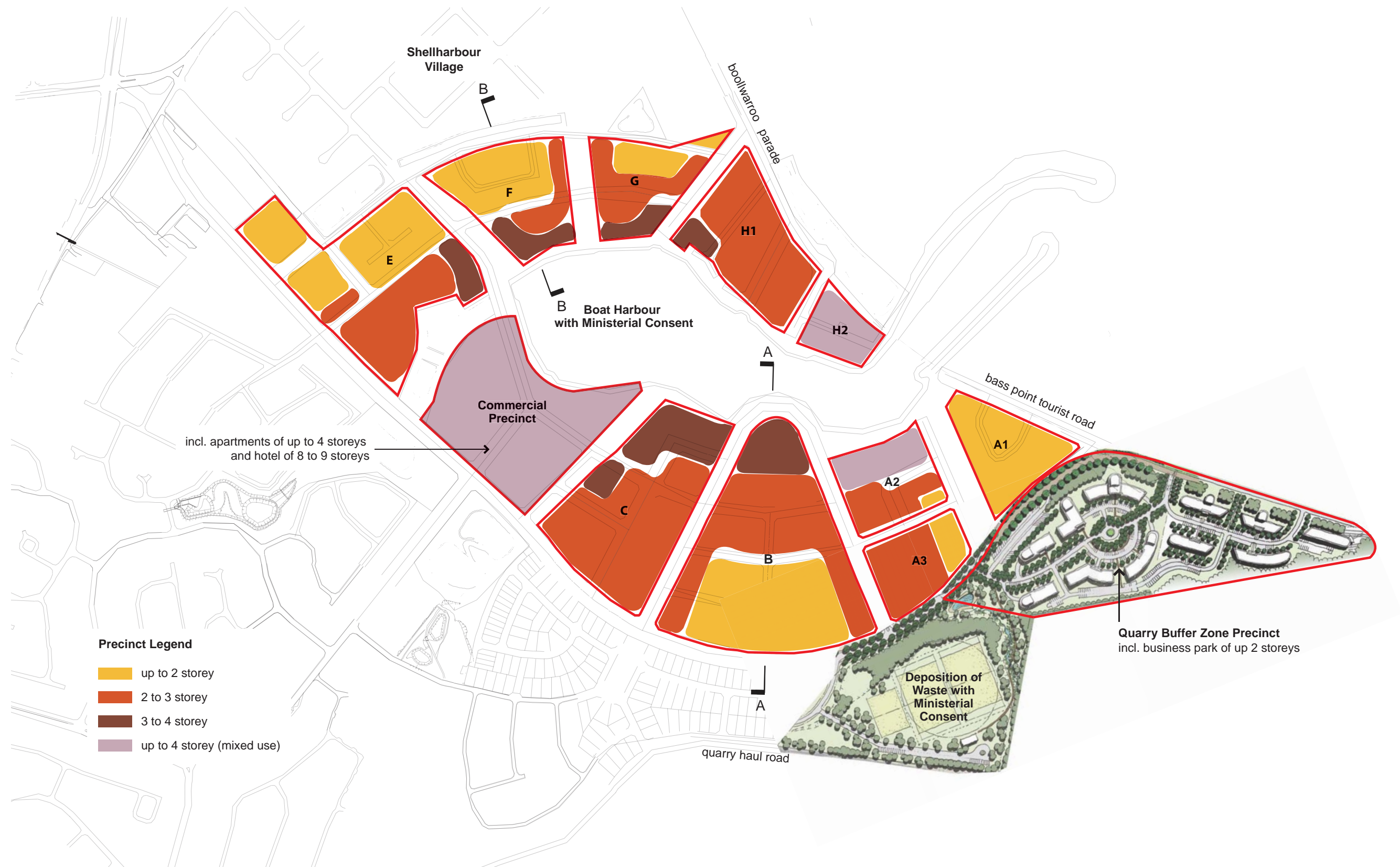


Fig. 3.06 - Indicative Height Per Precinct



Fig. 3.07 - Indicative Dwelling Nos. and Floor Space Area Per Precinct