

Fig. 2.01 - Study Area Location and Context

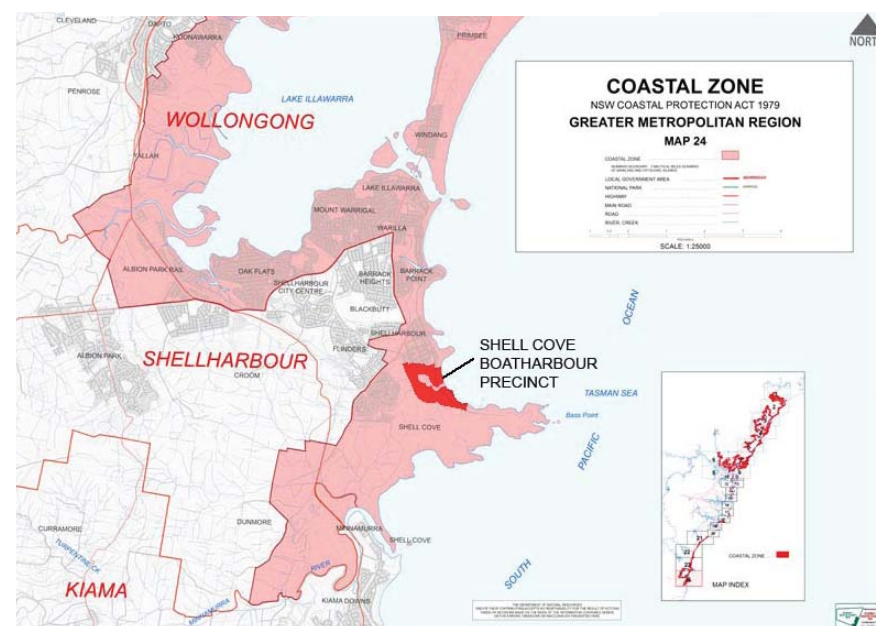


Fig. 2.02 - Coastal Zone Map 24

## Part 2 - The Site

### 2.1 Study Area

The Shell Cove Boat Harbour Precinct is located 17km south of Wollongong within the Illawarra region and immediately south of the existing Shellharbour Village (see Fig. 2.01).

The study area is approximately 100ha. It encompasses the Boat Harbour which has received Ministerial Consent, and is located within the Greater Metropolitan Coastal Zone defined by the Coastal Zone Map 24 (see Fig. 2.02).

The study area includes Shellharbour South Beach and its associated dunal system, remnants of Shellharbour Swamp, degraded farmland and a sector of the now defunct Shellharbour Golf Course. A road traverses the eastern sector of the study area following the line of the beach from Shellharbour Village in the north through to the Bass Point Reserve in the south.

A proposed Harbour Boulevard separates the study area from the balance of the development area to the west which is primarily residential in nature (see Fig. 2.03).

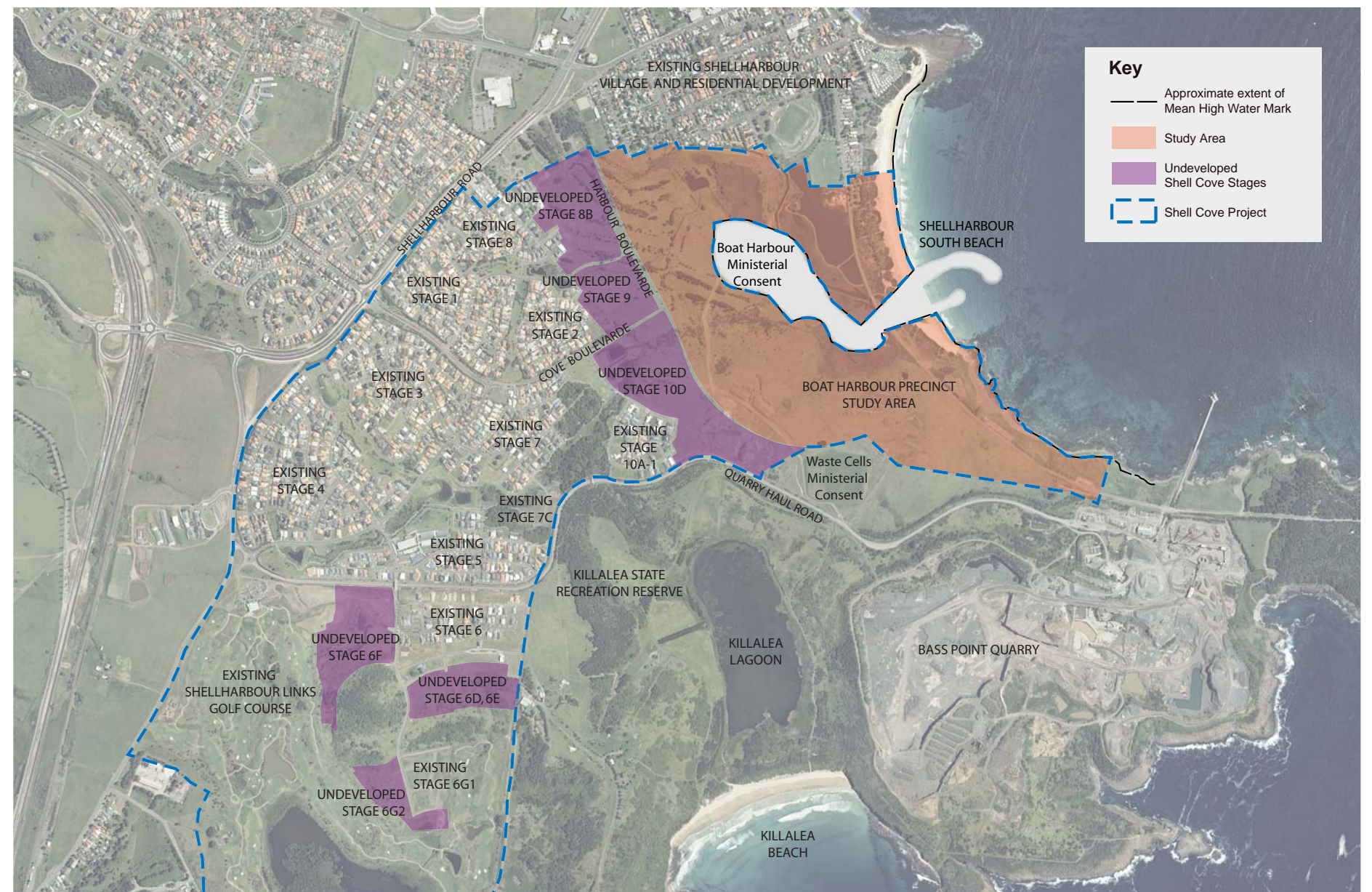


Fig. 2.03 - Study Area



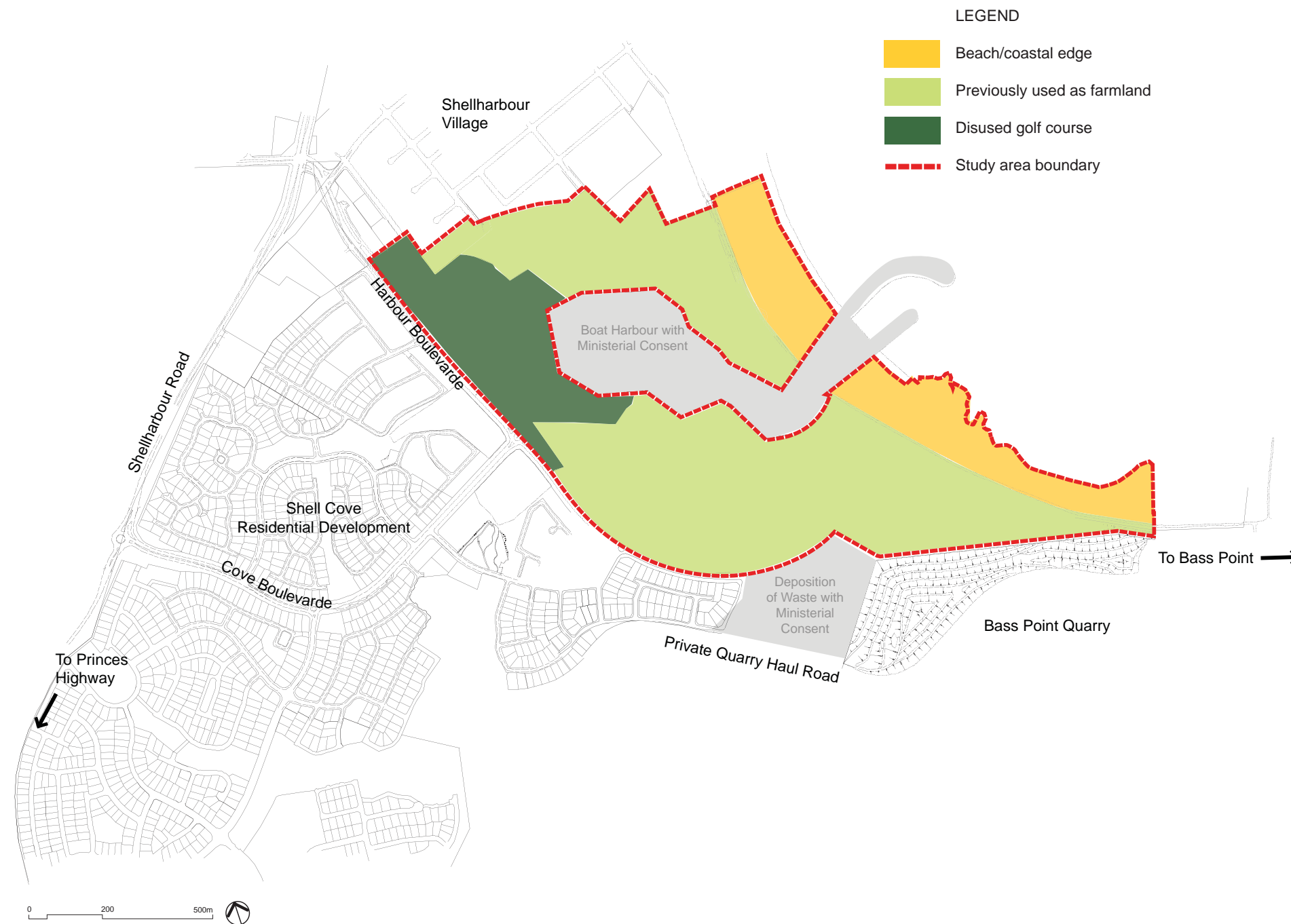


Fig. 2.04 - Existing Land Use

## 2.2 Existing Land Use

Existing land uses within the study area include remnants of Shellharbour Swamp, part of Shellharbour South Beach to the east as well as the gently sloping degraded land of the now defunct golf course.

The surrounding land uses are primarily residential, with the existing Shellharbour Village located immediately to the north of the study area and residential components of Shell Cove located to the west and south west.

Bass Point Quarry is located to the south east.

## 2.3 Built Form

No buildings exist within the study area. The site is contained to the north by the low density residential edge of Shellharbour Village and to the west by the Shell Cove residential development.

The study area abuts residential development of Stages 8, 9 and 10 and an operational quarry to the south, and accordingly part of the southern boundary is affected by the QBZ which prohibits residential use (see Fig. 2.05, pp 14). Recreational and industrial uses are permissible within the QBZ.

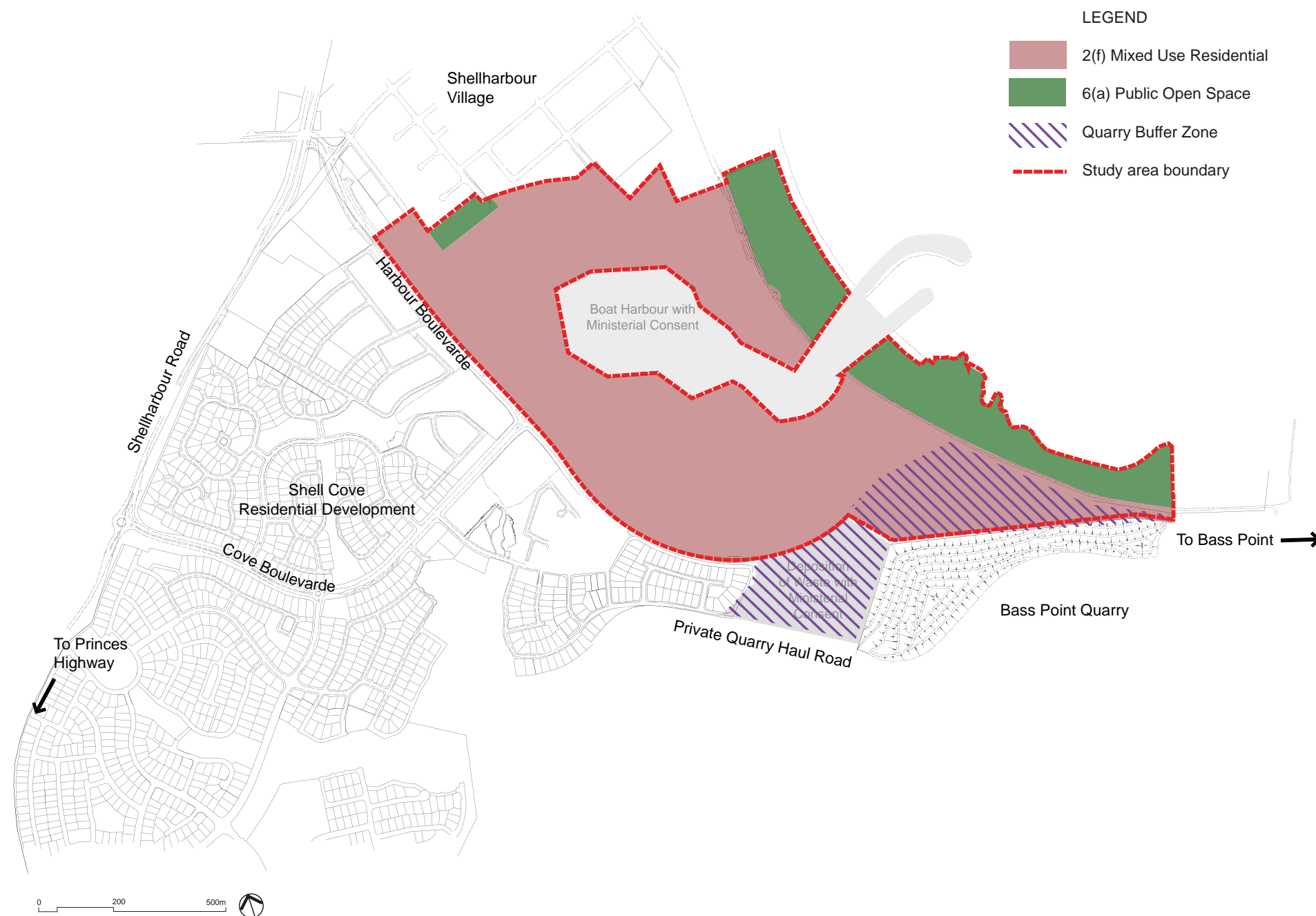


Fig. 2.05 - Current Zoning

## 2.4 Current Zoning

The SLEP identifies land use zones in the study area as :

- Residential 2(f) Mixed Use

Objectives of the zone

- (a) To allow for mixed use residential neighbourhoods to be developed providing for a range of household preferences and needs.
- (b) To enable the development of a regional boat harbour facility and associated commercial and recreational activities.

- Public Open Space 6(a)

Objectives of the zone

- (a) To identify areas where recreational opportunities for the general use of the community are provided.
- (b) To enable development that will enhance the public enjoyment of areas referred to in sub clause (a).

The QBZ under the SLEP applies to part of the Residential 2(f) Mixed Use Zone within the study area. s.26 Development within the quarry buffer area in Zone 2(f), outlines the restrictions imposed upon land within the QBZ. Permissible land uses include, 'light industries and industries associated with and including boat manufacture and repair; open space; recreation areas; roads; shops and commercial premises in accordance with Schedule 4; utility installations...and warehouses.'

## 2.5 Title Details and Ownership

The DPs that apply to the Boat Harbour Precinct include:

Lot	DP	Ownership
8032	1072187	Shellharbour City Council
8100	1082981	Shellharbour City Council
206	857030	Shellharbour City Council
9004	1117743	Shellharbour City Council
30	229374	Shellharbour City Council

The existing Boollwarroo Parade/Bass Point Tourist Road also forms part of the study area and is owned by Shellharbour City Council.

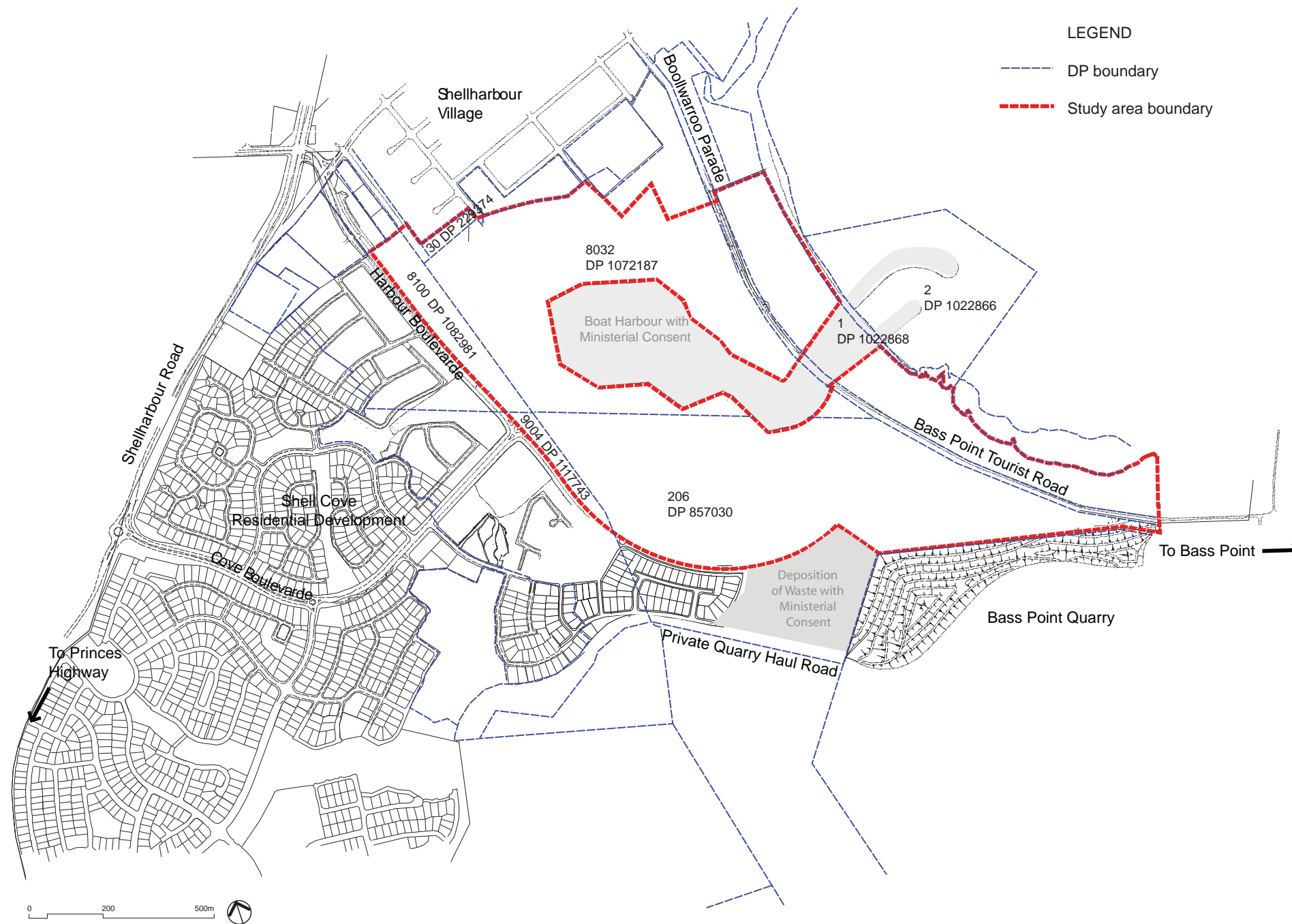


Fig. 2.06 - Ownership and Lot Boundaries



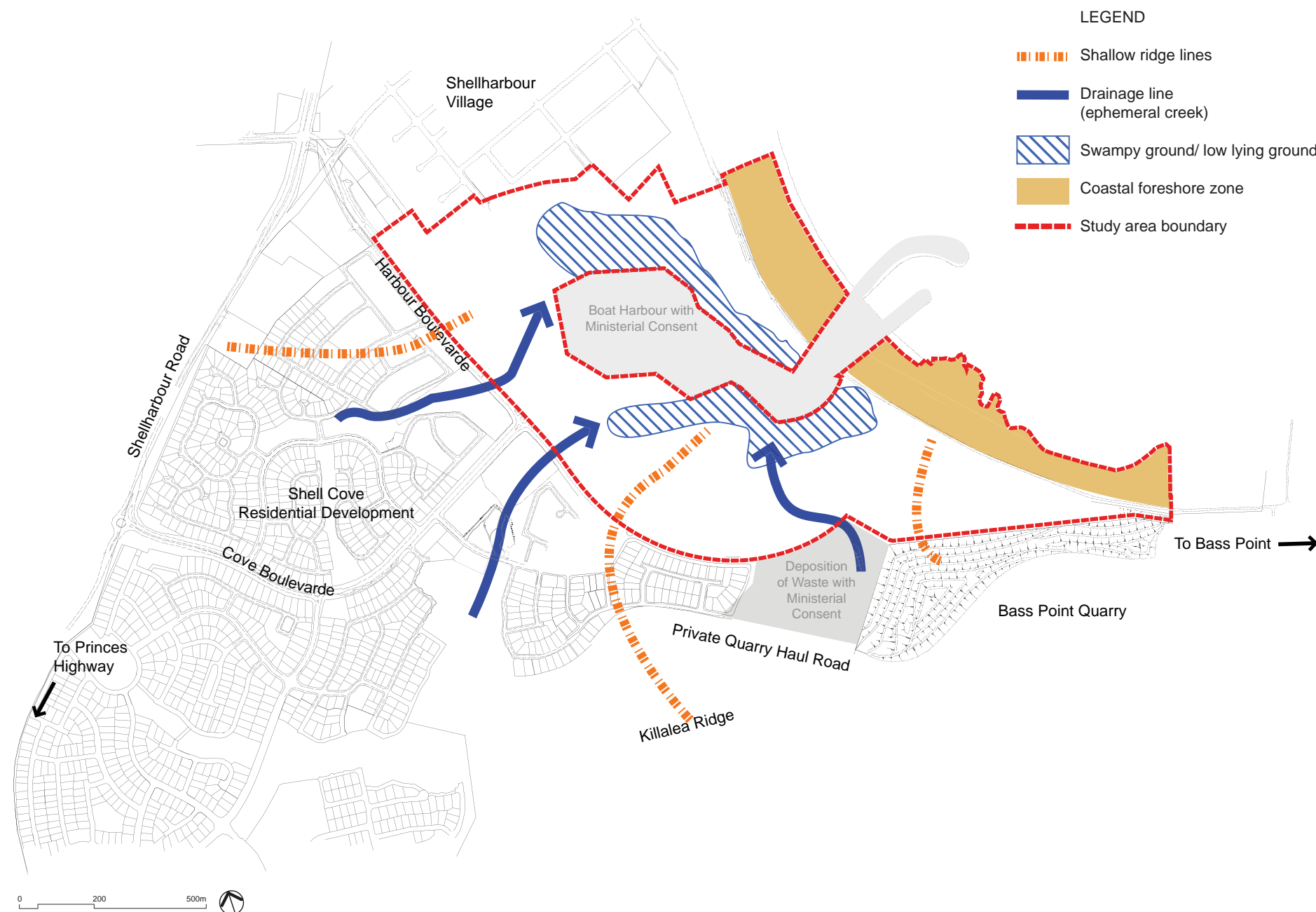


Fig. 2.07 - Topography, Hydrology and Drainage

## 2.6 Topography

The land is generally low lying and partly swampy and sits behind a coastal dune system which runs parallel to the ocean frontage. The majority of the land is below RL5.0 AHD. In the south the land rises to a maximum RL28.0 AHD. The land slopes gently towards the approved Boat Harbour and Marina which has an elevation close to sea level. The dune system, with an elevation rising to RL4.0 AHD, separates the remnant swampland areas from the sea.

## 2.7 Hydrology and Drainage

The catchment area extends to Quarry Haul Road and the Killalea ridge in the south, to Shellharbour Road in the west and Shellharbour Village to the north. The catchment contains three drainage lines which flow into the approved Boat Harbour zone. There are a number of existing dams and channels associated with the now defunct golf course.

The approved Boat Harbour at Shell Cove generally occupies the area of the existing Shellharbour Swamp.

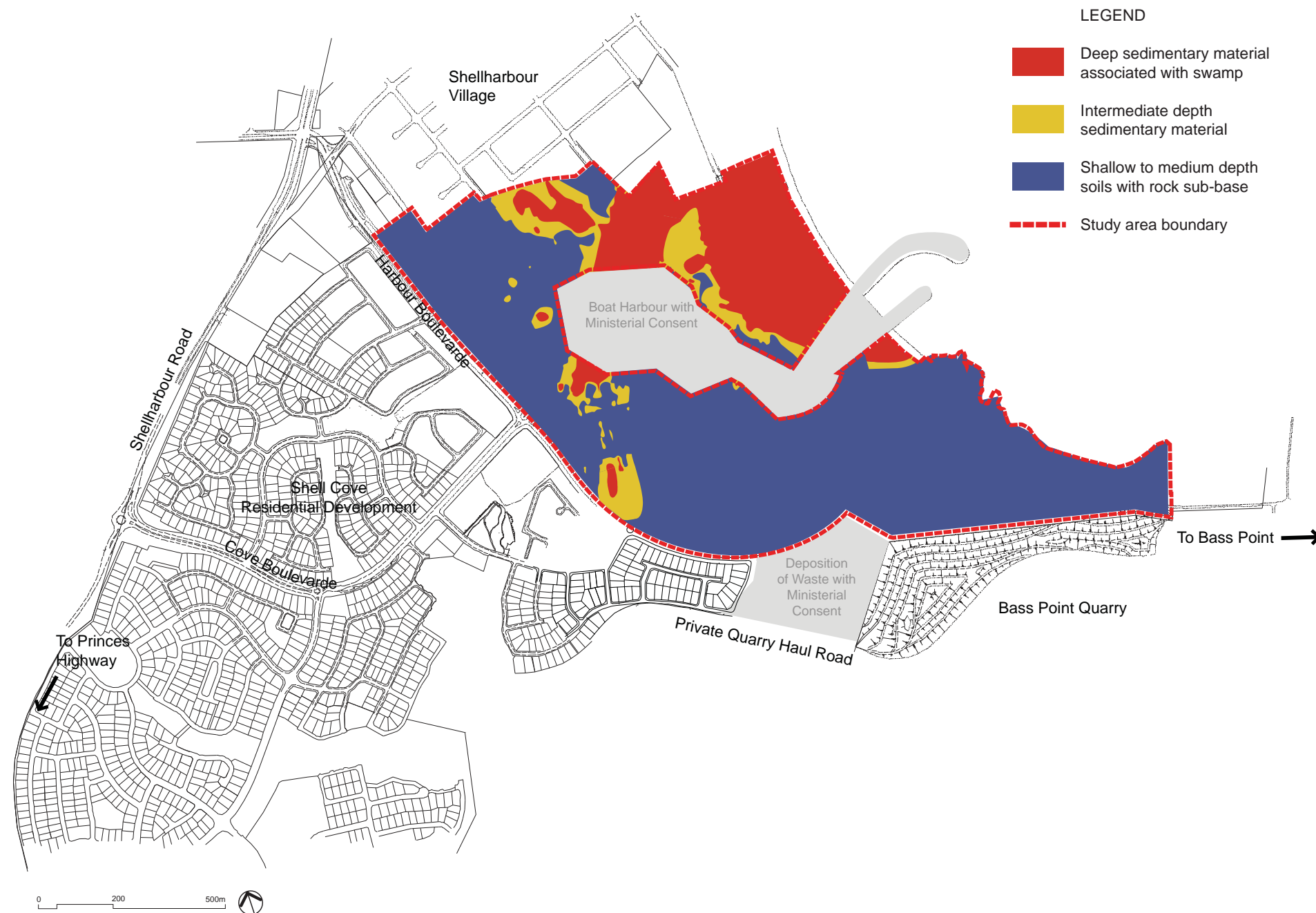


Fig. 2.08 - Soil and Ground Conditions

## 2.8 Geology and Soils

The geology of the study area is composed of unconsolidated Quaternary sediments overlaying Bumbo Latite which is a basalt-like rock, and formed from lava flows which extend onto the southern beach area.

The Quaternary sediments include beach and dune sand and the silts and sediments of the swamp area extending to sandy clay alluvium in the low lying areas.

The study area contains potential acid sulfate soils and has been the subject of extensive geotechnical studies both prior to the initial Ministerial Consent for the Boat Harbour and as part of subsequent s.96 submissions.

The complete report, included at Appendix D, provides further details regarding geology and soils.

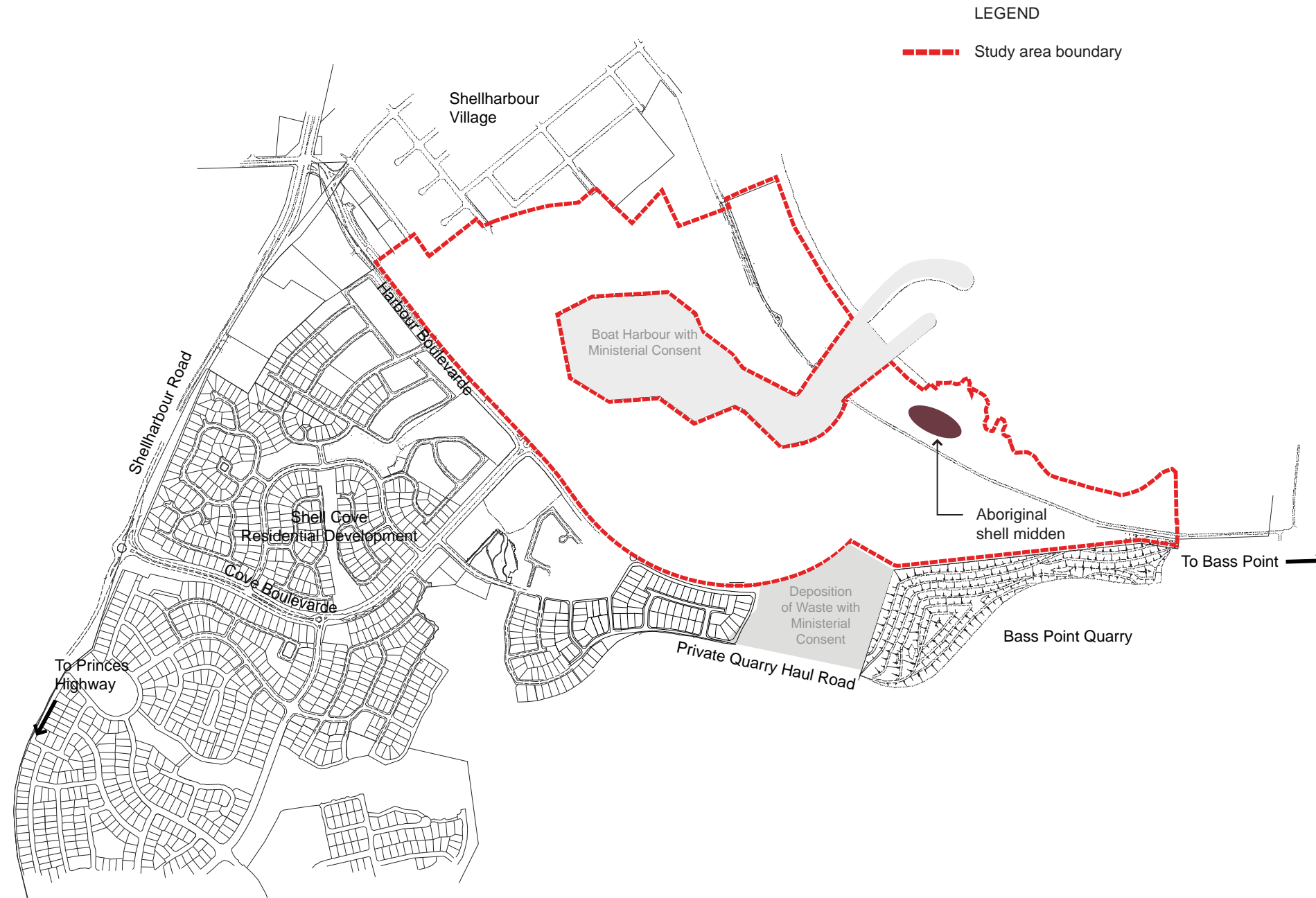


Fig. 2.09 - Archeology and Heritage

## 2.9 Archaeology and Heritage

A midden site with 'relatively high' archaeological value is located in the study area, south of the mouth of the Boat Harbour. Consent under ss87/90 of the National Parks and Wildlife Act 1974 (NP&W Act) was obtained from the Department of Environment and Conservation in September 2006.<sup>1</sup> The Consent covers the entire study area for Aboriginal archaeology including middens and artefact scatters which DECC identified as having low or no archaeological significance. The midden will be retained and protected from disturbance.

There are no significant European heritage sites or items identified within the study area.

The complete report, included at Appendix G, provides further details regarding archaeology and heritage.

<sup>1</sup> In April 2007 the NSW Department of Environment and Conservation changed its name to the Department of Environment and Climate Change (DECC). Accordingly, reference is now made to DECC



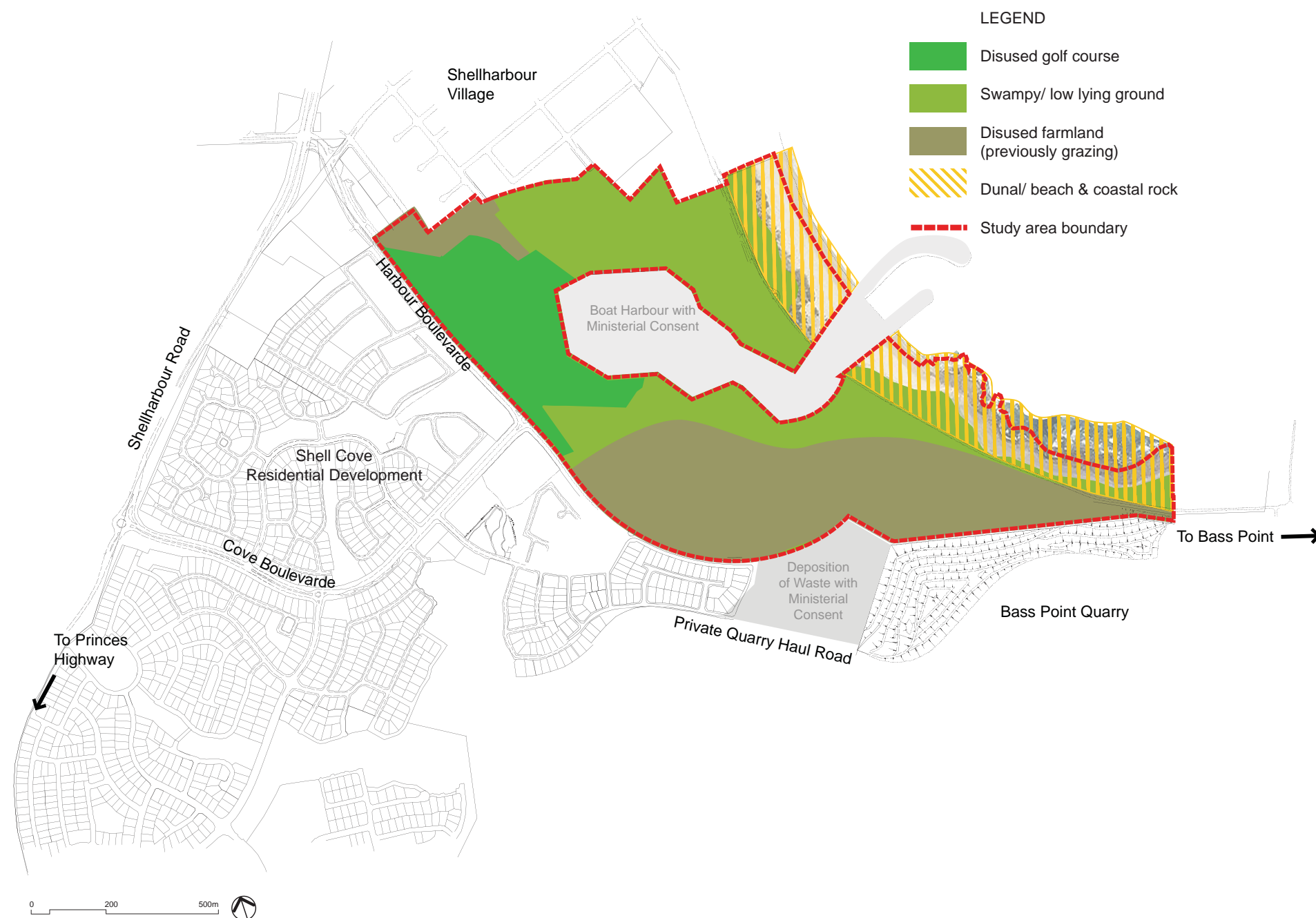


Fig. 2.10 - Flora and Fauna

## 2.10 Flora and Fauna

### Flora

The site and its surroundings has long been cleared of its original forest cover, resulting in an open landscape of grazing pasture which has been farmed over the past century. External to the study area are small patches of subtropical rainforest on the rocky areas to the north west of Killalea Lagoon and along isolated creek lines.

### Fauna

Of the fauna found in the study area most of the species observed are 'terrestrial vertebrate' fauna, particularly birds. Few other species have been found during fauna surveys on the site.

The studies carried out have not identified any rare or threatened species in the study area.

The complete report, included at Appendix H, provides further details regarding flora and fauna.

## 2.11 Access

Access to the study area is gained primarily via the existing Cove Boulevard which intersects with Shellharbour Road. Harbour Boulevard will augment the access network serving the Boat Harbour Precinct. Access to the north east sector will also be provided via Boolwarroo Parade.



## 2.12 Social and Economic Assessment

### *Demographic and Socioeconomic*

Data drawn from the 2006 Census statistics, Illawarra (Statistical Region), Shellharbour (Local Government Area) and Shell Cove (State Suburb), and the Shellharbour City Council Community Profile indicates the following:

- The population of Shellharbour was 59,633 (15.1% of the Illawarra regional area).
- Between 2001 and 2006 Shellharbour's population grew by 4.5% compared to Shell Cove's which more than doubled, growing by 117.2%.
- In both Shellharbour and Shell Cove the age bracket 25-54 years was the most common, representing 40.8% and 44.7% of the population respectively.
- 54% of people aged 15+ in Shellharbour were married compared to 72.5% of people in Shell Cove.
- Shellharbour and Shell Cove had almost equal percentages of people aged 15+ in the labour force, with 44.8% and 43.2% respectively.
- The most common occupation for employed persons in the Illawarra region and Shell Cove was Professionals (18.9% and 17.1% respectively) and in Shellharbour, Technicians and Trades Workers (18%).
- The most common industry of employment in the Illawarra region was School Education (5.5%) and in Shellharbour and Shell Cove, Basic Ferrous Metal Manufacturing (6.9% and 8.7% respectively).
- The highest median individual income was recorded in Shell Cove with people aged 15+ earning \$563 per week or \$97 more per week than the median individual income in Australia. In the Illawarra region this was \$388 per week or \$78 less than the median individual income in Australia.
- 26.6% of people aged 15+ in Shell Cove earned a high income and 37.7% earned a low income, compared to 15.5% and 47.3% respectively in Shellharbour.

## 2.13 Opportunities and Constraints

The opportunities and constraints relevant to the site are:

- Stormwater control and water quality measures which offer opportunities to connect open space, pedestrian and bicycle links and landscape elements.
- Existing and planned major roads which provide opportunities for developing the planning and landscape framework, and minor roads which provide permeability.
- Coincidence of traffic buffer and stormwater management adjacent to Shellharbour Village which facilitates both stormwater and low key traffic routes.
- Noise/vibration from quarrying which results in the need for buffer zones and acoustic walls.
- Higher ground in the southern and QBZ sectors which affords excellent views to the north.
- Proposed district retail centre at the junction of Cove Boulevard and the proposed Harbour Boulevard.
- Encompasses approved Boat Harbour.

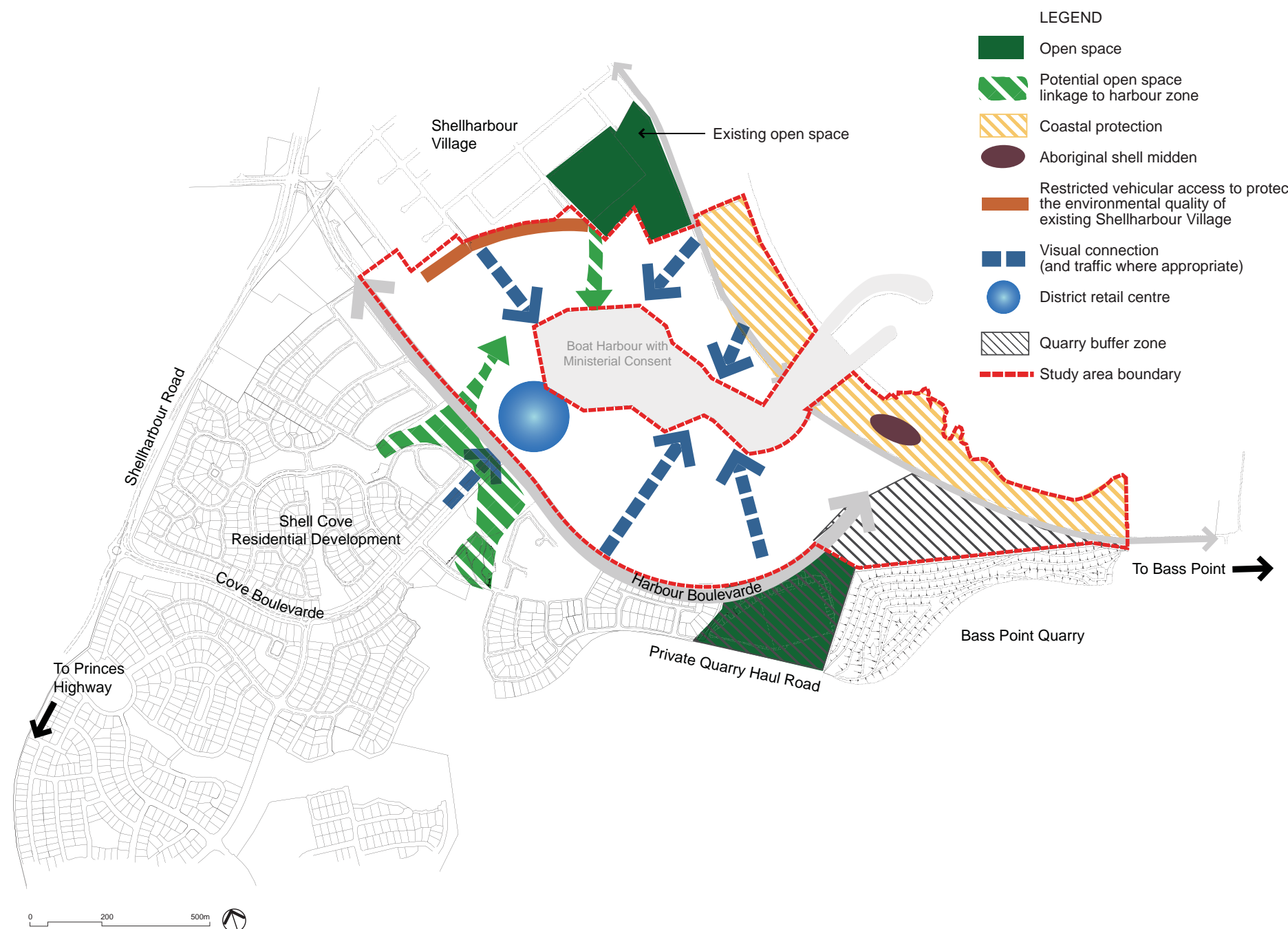


Fig. 2.11 - Opportunities and Constraints