



URBIS

MOONEY MOONEY & PEAT ISLAND PLANNING PROPOSAL URBAN DESIGN REPORT

Prepared for Property NSW
September 2016

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INTRODUCTION

PURPOSE OF THIS REPORT

This Urban Design Report has been prepared in support of the Planning Proposal for Peat Island and Mooney Mooney. This report provides an overview of the key findings from the design development process including:

- Summary of site opportunities and constraints;
- Summary of the options process undertaken to inform the concept plan;
- The vision, design principles and layered strategies for the proposed concept plan; and
- The proposed Local Environmental Plan (LEP) mapping for the site including zoning map, building height map and lot size map.

SITE LOCATION

The site is located at Mooney Mooney on the northern banks of the Hawkesbury River at the gateway to the Central Coast (formerly Gosford) Local Government Area within the broader Central Coast Region.

It is located approximately:

- 29 kilometres (km) to the south west of Gosford city centre;
- 55km to the north of Sydney Central Business District (CBD); and
- 24km from the start of the M1 Motorway at Hornsby / Wahroonga.

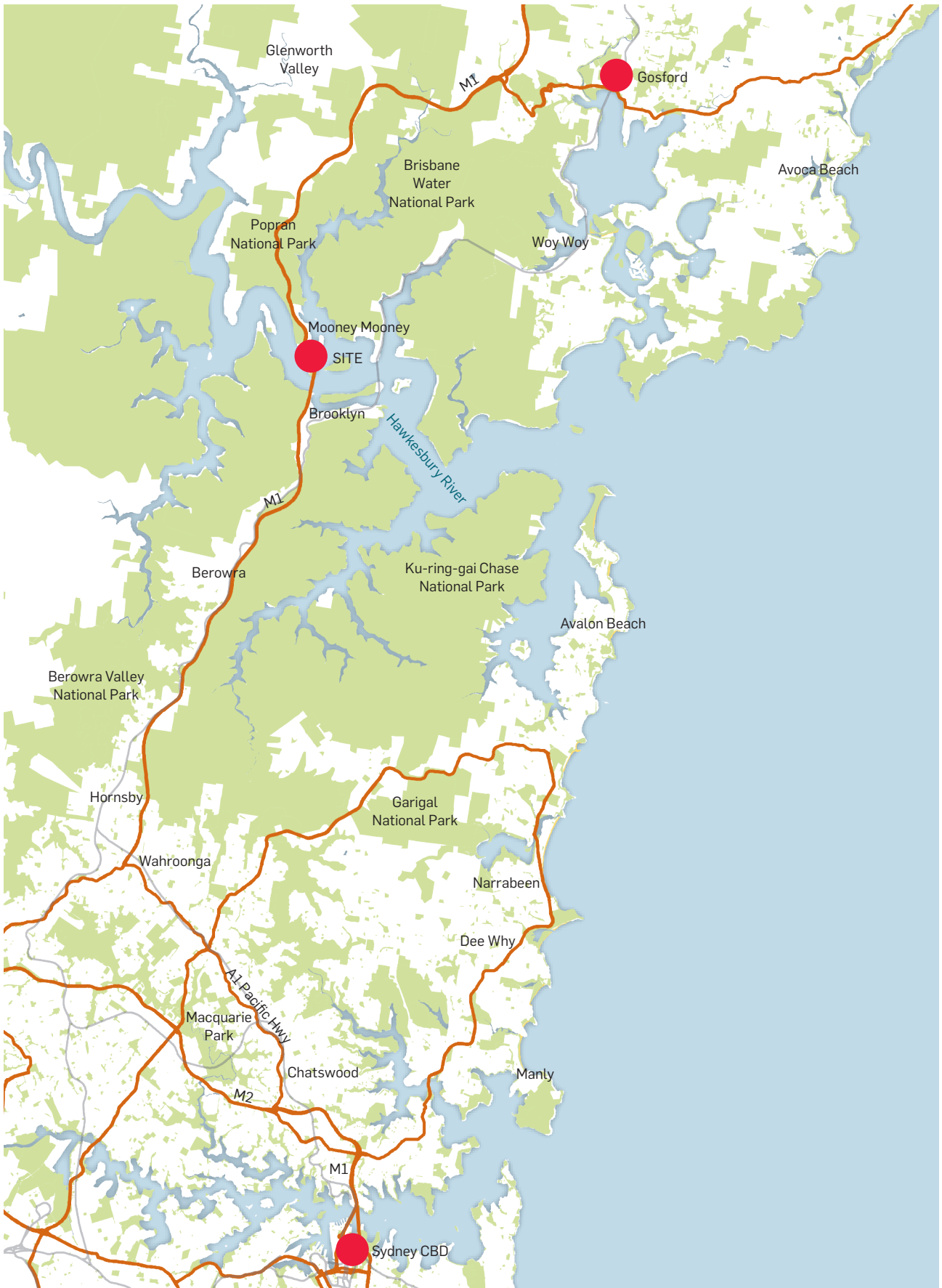


Figure 1 Site Location Plan

NOT TO SCALE 

SITE CONTEXT

The site is bound by:

- The Hawkesbury River surrounding the site on the southern, eastern and western boundaries;
- The Popran National Park to the north of the site on the western side of the M1 Pacific Motorway (M1); and
- The existing residential community of Mooney Mooney to the north of the site on the western side of the M1.

In addition to this, the site is also divided by the M1 which is a dominant feature of the surrounding area. The M1 has three travelling lanes in each direction at Mooney Mooney. In this context the site exists as two distinct precincts bisected by the M1 and includes Peat Island as depicted in "*Figure 2 Site Context Plan*" and described below:

- Precinct 1: East Mooney Mooney; and
- Precinct 2: West Mooney Mooney.

The Old Pacific Highway also passes through Mooney Mooney connecting it to the township of Brooklyn on the southern banks of the Hawkesbury and Cheero Point in the north on the eastern side of the M1. The closest railway station is the Hawkesbury River Station situated at Brooklyn, approximately 5km to the south east. The 592 bus service connects the Hawkesbury River Station to Mooney Mooney and to Hornsby in the south.

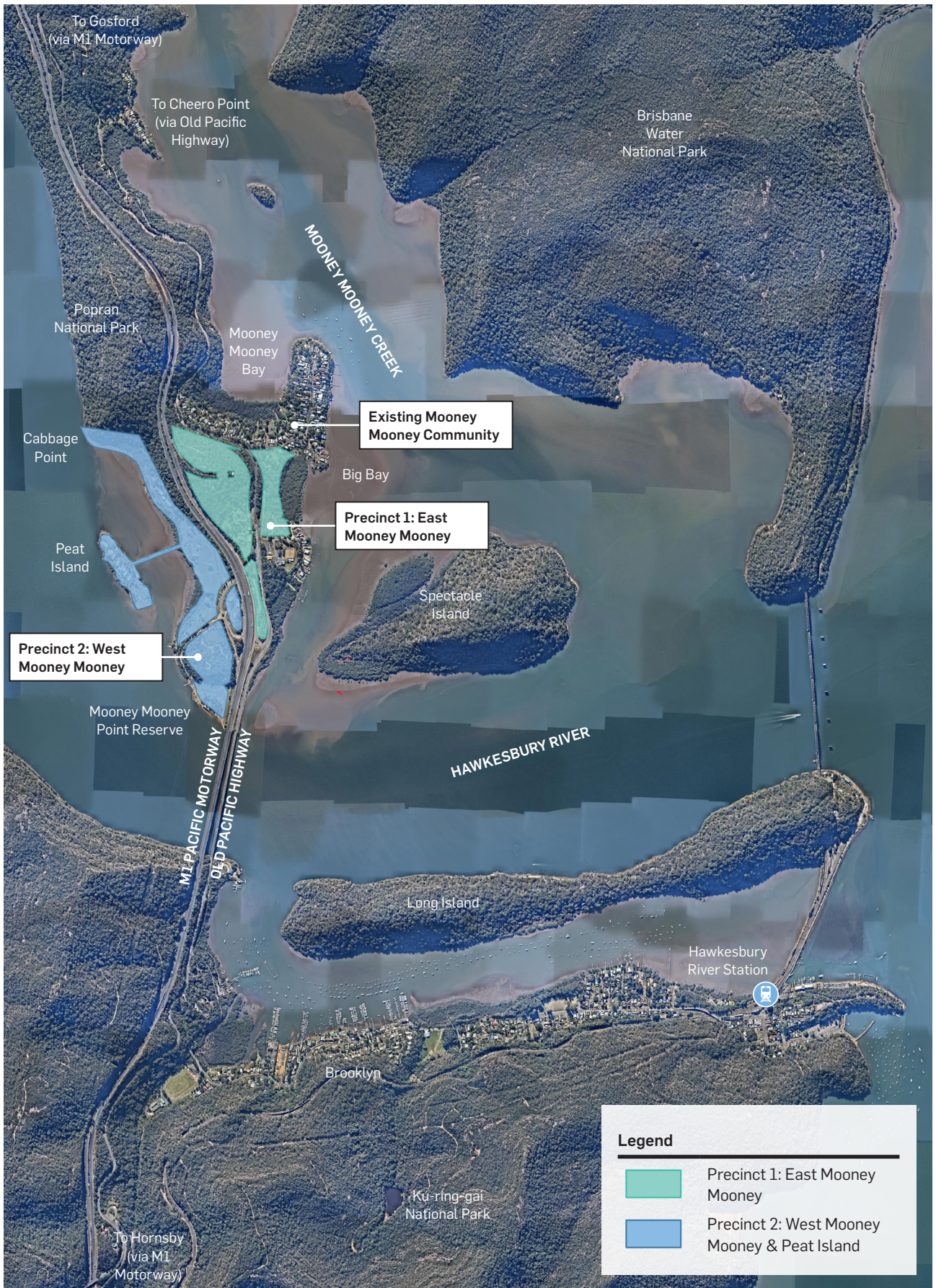


Figure 2 Site Context Plan

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SITE DESCRIPTION

The subject site comprises 38 hectares of Government owned land on the Mooney Mooney Peninsula, including Peat Island, which has been identified as surplus to current needs. The site consists of 17 lots described in the *Table 1* below.

Table 1 Lot Description and Ownership

Lot	DP	Ownership	Description
Western Precinct			
2	239249	Property NSW	North west along foreshore
7	1180499		Residual lot fronting causeway
12	1158746		Main lot of western precinct
10	1157280		Peat Island and Causeway
11	1157280		Western foreshore adjacent to main lot 12 of western precinct
8	1180499		Western foreshore strip west of main lot 12.
9	1180499		Western foreshore strip west of lot 2, south of lot 8.
2	431999		West of Peats Ferry Road south of lot 12, east of lot 9.
South West Precinct			
7302	1151629	Roads and Maritime Services (RMS)	Deerubbin Reserve - main lot
9	863305		Deerubbin Reserve - small lot
10	863305	Mooney Mooney Reserve Trust	Mooney Mooney Point Reserve - Main lot
11	863305		Mooney Mooney Point Reserve - small lot
Central Northern Precinct			
7011	1057994	Property NSW	Northern central lot, unchanged
14	1158746		Main central lot between motorway and highway.
1	597504		Water tower
12	863305		Southernmost central lot by off ramps
13	1158746		Former service station and open space
1	107391		90 Old Pacific Hwy - infrastructure site
Central Southern Precinct			
-	-	RMS land - not on individual title	Existing road reserve - existing Ambulance Facility
-	-		Existing road reserve -rest stop in southbound direction
Eastern Precinct			
1	945014	Property NSW	North east lot of former Mooney Mooney Public School
2	1205588		North west lot of former Mooney Mooney Public School
1	431780		Main lot of former Mooney Mooney Public School
21	836628	Property NSW	Main eastern lot

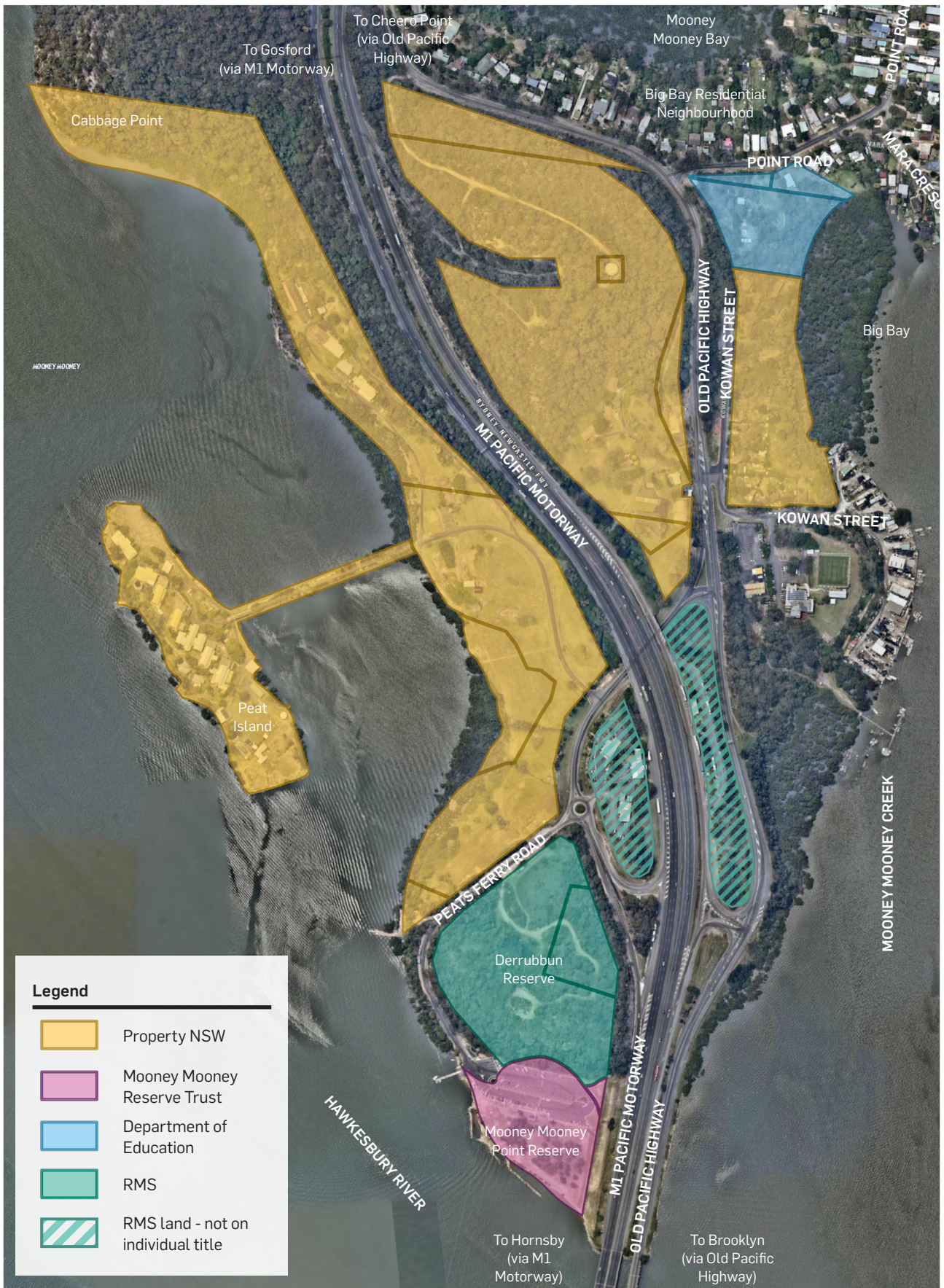


Figure 3 Site Ownership Plan



EXISTING SITE CONDITIONS



PRECINCT 1: EAST MOONEY MOONEY

Precinct 1: East Mooney Mooney is located to the east of the M1 Motorway. It is bound by the existing low density residential community of Mooney Mooney in the north, the Mooney Mooney Club and existing residential properties in the south and riparian vegetation (mangroves) and Mooney Mooney Creek to the east. Surrounding residential land is zoned R2 Low Density Residential under Gosford Local Environmental Plan (GLEP) 2014. The Old Pacific Highway runs through the centre of this precinct connecting it to Brooklyn and Cheero Point.

The northern parcel of land to the west of the Pacific Highway comprises land associated with the former Peat Island psychiatric facility and is characterised by two distinct areas being cleared and uncleared land.

1 Uncleared Land

The northern portion of the site comprises steeply sloping land that is heavily vegetated which rises to a height of RL80 metres from a low point of RL8 metres and is highly visible from surrounding areas. There is a water tower that sits outside the site boundary on the highest point which is accessed via an unsealed road from the north. Alongside the M1 there is also an emergency breaking ramp.

Cleared Land

The southern portion of the site has been cleared and is occupied by:

- 2 **Detached residential dwellings** within the ownership of NSW Government Property. These are nestled into the base of the vegetated escarpment.
- 3 **An existing chapel** which is surrounded by existing vegetation including a number of Norfolk Pines.

- 4 **Institutional buildings and facilities** associated with the former mental institution on Peat Island. This includes dormitory buildings (disused and heavily dilapidated) and former tennis courts.

- 5 **A pad site** previously occupied by a service station is situated immediately to the west of the Old Pacific Highway. The site has been cleared of buildings and structures. Remediation will be required (removal of underground storage tanks) prior to any future development on this part of the site.

6 RMS Land

There is a thin parcel of land situated between the M1 Motorway and Old Pacific Highway in the ownership of RMS. This site is currently used for a rest stop in the southbound direction.

7 Residential Community

To the east of the Old Pacific Highway, the site comprises predominantly low density residential development (single and two storey detached dwellings on deep blocks) with surrounding vegetation.

8 Former Mooney Mooney Public School

The former Mooney Mooney Public School site includes cleared land and former school buildings and facilities addressing Point Road.

9 Rural Fire Service (RFS)

The shed for the Mooney Mooney RFS is also located in this part of the site on the corner of the Old Pacific Highway and Point Road.

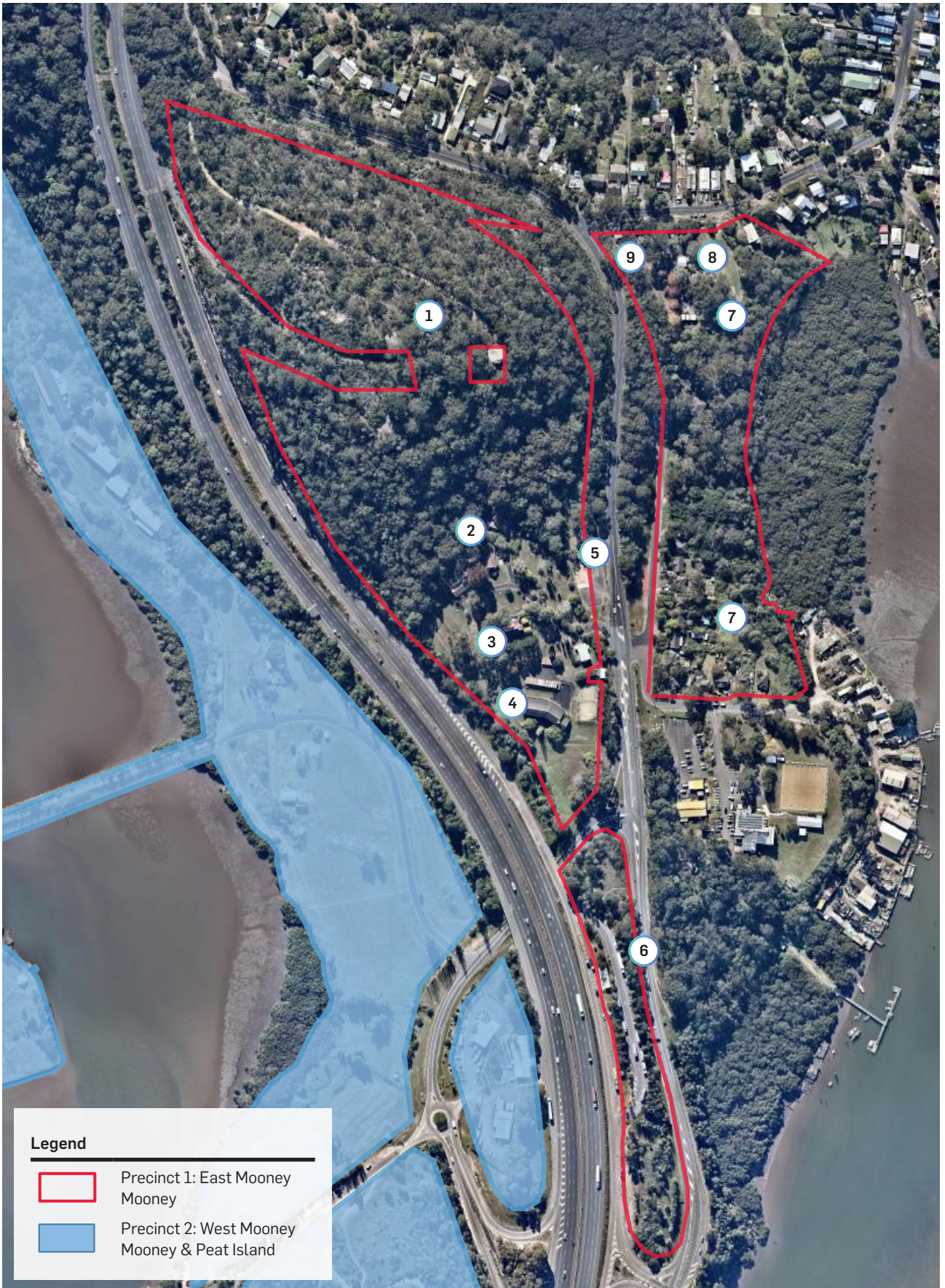


Figure 4 Precinct 1: East Mooney Mooney

NOT TO SCALE



Figure 5 Precinct 1: East Mooney Mooney Key Plan



Former School Site

1



Old Pacific Highway

2



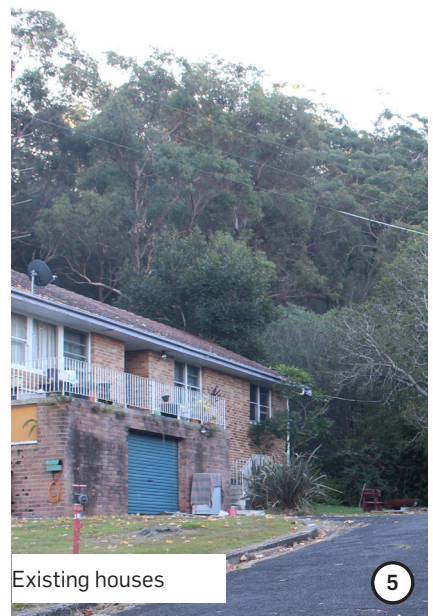
Dirt track to water tower

3



Existing Chapel

4



Existing houses

5



Kowan Street

6



Pedestrian underpass entrance

7

Figure 6 Precinct 1: East Mooney Mooney Existing Site Photos



PRECINCT 2: WEST MOONEY MOONEY & PEAT ISLAND

Precinct 2: West Mooney Mooney is located on the western side of the M1 Motorway and is bound by the Hawkesbury River to the west and south, Popran National Park (zoned E1 National Parks and Nature Reserves) to the north and the M1 to the east. A large proportion of Precinct 1 (including Peat Island) is secured and is not accessible to the general public.

1 Peat Island

Peat Island is a key feature of land on the western side of the M1 Motorway. The former Peat Island psychiatric facility closed in 2010 and buildings associated with this use are predominately vacant. The island is occupied by an ad-hoc collection of buildings, car parking, open space, in-ground pool, gardens and pathways associated with its former use. The buildings on the island vary in age, style and condition. Many of the site's buildings are extremely dilapidated.

The northern and southern ends of the island are low and consist of flat reclaimed land (2 metres AHD) while the centre of the original island is higher at 4 metres AHD. Vegetation on the island includes lawns and mature trees.

The 3 hectare island is connected to the mainland by a 250 metre man-made causeway, which provides shared vehicle (single lane) and pedestrian access to the island.

2 Mainland areas associated with former Peat Island psychiatric facility

The most northern tip of the precinct adjoins the Popran Reserve and is heavily vegetated. Land south of Popran Reserve has been cleared and is occupied by a number of institutional style buildings associated with the former psychiatric facility.

Land immediately to the east of Peat Island is also cleared and comprises the former dairy farming land associated with the psychiatric facility. This area is also occupied by a car park and buildings associated with the former dairy farm and psychiatric facility. Mangroves and sandstone rocks are located along some parts of the foreshore of the Hawkesbury River.

3 Derrubbun Reserve

The southern portion of the precinct includes Derrubbun Reserve, which generally consists of steeply sloping, heavily vegetated land. The northern part of the site is partly cleared and includes unsealed tracks to the highest point. This land is owned by the RMS.

Mooney Mooney Point Reserve

4 The most southern portion of the precinct comprises Mooney Mooney Point Reserve, which provides public recreation facilities including public car and trailer parking and public wharf and jetties. The car parking area within the Reserve has recently been upgraded. Mooney Mooney Point Reserve is Crown land. No changes are proposed to the zoning of the Reserve (the RE1 zoning will be retained) but the land has been included within the planning for the proposal to ensure that its uses are fully recognised and integrated into the future planning of the wider area.

5 Additional RMS Land

Immediately adjoining the M1 and surrounded by the on and off ramps to the M1 is an additional piece of land owned by the RMS. This land is currently occupied by buildings associated with ambulance operations and RMS highway services and is included within the road allocation for the M1. This lot is not identifiable as a separate title.

Connections between the East and West Precincts.

There are two existing connections between the east and west precincts being:

- 6 An existing pedestrian underpass providing a connection between the east and west precincts under the M1. This pedestrian underpass is a legacy of the former psychiatric facility.
- 7 An existing road connection that connects the M1 off ramp in the northbound direction in the western precinct with the Old Pacific Motorway and the eastern precinct. A pedestrian connection is also possible at this location although this is not formalised.



Figure 7 Precinct 2: West Mooney Mooney & Peat Island

NOT TO SCALE



Figure 8 Precinct 2: West Mooney Mooney & Peat Island Key Plan



Cleared Land looking to Hawkesbury River

1



View back to site from Peat Island

2



Cleared land looking north to vegetated slopes

5



Pedestrian underpass entrance

3



M1 Underpass

4



Existing causeway to Peat Island

6



Mooney Mooney Point reserve

7

Figure 9 Precinct 2: West Mooney Mooney & Peat Island Existing Site Photos

DESIGN DEVELOPMENT PROCESS

The design development process undertaken to prepare the concept plan is outlined in "Figure 10 Concept Plan Design Development Process Diagram" on the opposite page. A summary of the findings of this process is outlined on the following pages and includes:

- **Consolidated Constraints Map:** A summary of the findings and key constraints identified by the technical investigations. *(For more detailed information of these investigations please refer to the technical investigations reports.)*
- **Identification of Development Footprint:** This plan synthesises the constraints mapping to identify those areas of the site most suitable for development.
- **Summary of Options Investigations and Identification of Key Outcomes:** The options investigations was an iterative process that included a whole of project team working session to provide input, review and refine the potential development options for the site. This summary provides an overview of the options considered for development of the site and the preferred outcome identified through this process.

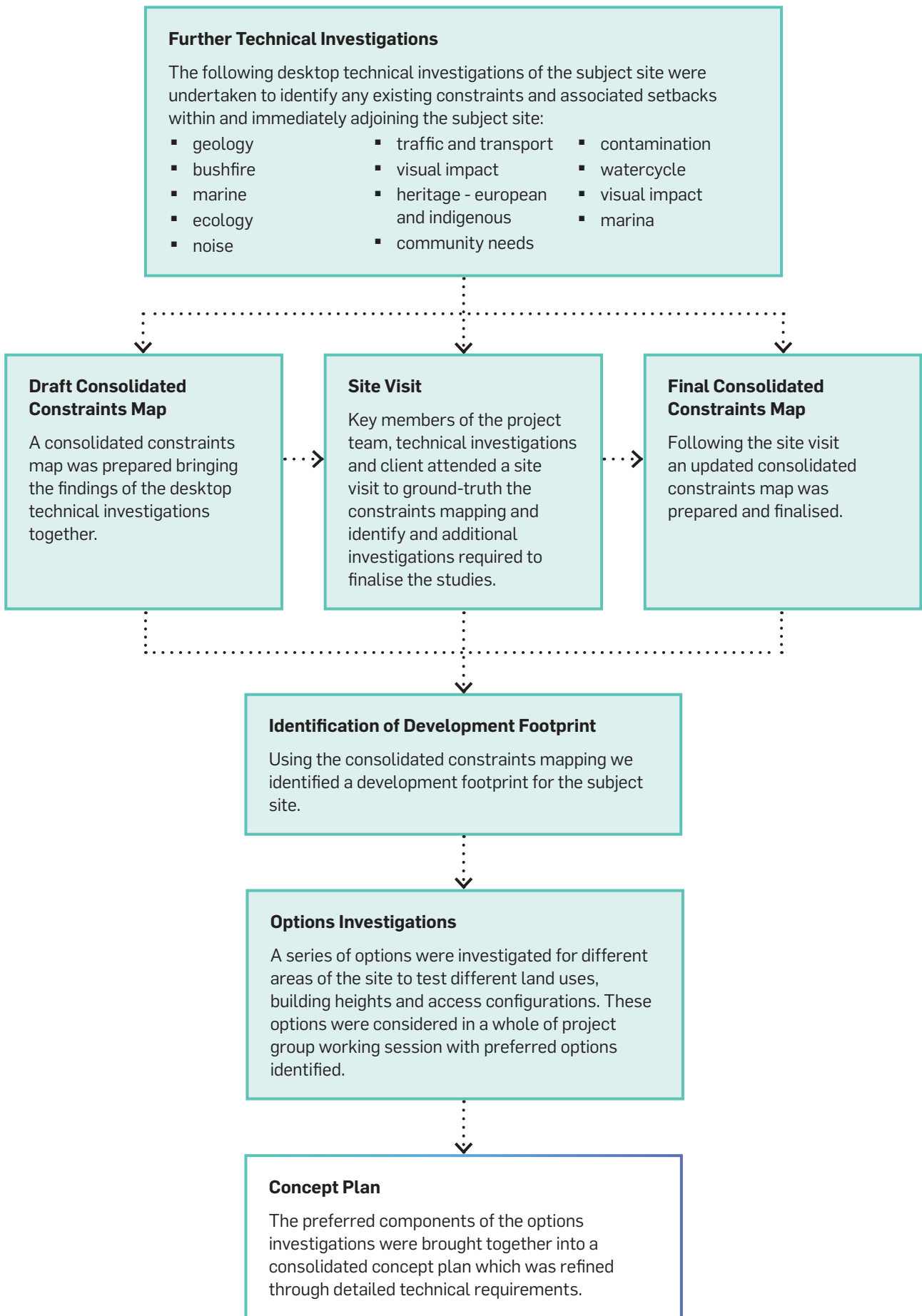


Figure 10 Concept Plan Design Development Process Diagram

CONSOLIDATED OPPORTUNITIES & CONSTRAINTS MAP

The process for each of the technical investigations was to identify any constraints and classify them as either:

- **Constrained - Not developable:** Any areas of high constraints or the most sensitive locations were identified as not suitable for development.
- **Constrained with development potential:** Areas with medium to low level constraints which can be mitigated through development proposals.
- **Developable - no constraints:** Areas of the site which have no constraints and are suitable for development.

These individual constraints were then collated and overlaid upon one another to prepare a consolidated constraints map as provided in "Figure 11 Consolidated Constraints Map". This identified non developable land and then overlaid individual constraints as outlined below.

Legend Constraint & Description



Subject Site



Constrained Land - Not Developable:

All areas identified as high constraints within each of the individual technical studies were considered not developable and were overlaid. This included all Heritage buildings identified as being of exceptional value.

Land identified as having development potential with some constraints including:



European Heritage Significance - High / Moderate:

Existing heritage buildings that were identified as of high or moderate heritage significance were also identified for consideration.



Indigenous Heritage Significance - (possible location of sandstone platforms associated with AHIMS site 45-6-0476):

There is an area of potential sandstone platforms along the western precinct foreshore, north and south of the causeway, that has potential indigenous significance. Further investigations will be required at the time of a detailed planning application.

Legend Constraint & Description



Flooding:

The 100 yr ARI line was mapped. It was noted that balance cut and fill of land below the 100yr ARI would be acceptable to retain more constrained areas and release some already cleared areas for development.



Riparian - 40m Riparian Setback:

A 40m riparian setback was identified along the foreshore of the mainland areas of the western precinct. It was noted that Peat Island may require a tailored solution rather than the application of the standard setbacks due to the largely disturbed nature of the foreshore. Additionally, it was identified that the riparian zone in the eastern precinct occurs in the mangroves outside of the site boundary due to the natural 'cliff' in this location.



Ecological Conservation Value - ECV:

Existing areas with medium level ecological conservation value were identified. This included intertidal mudflats between Peat Island and Precinct 1: West Mooney Mooney.



Bushfire:

Areas identified as requiring asset protection zones (APZ) for bushfire protection were identified however it was noted this would not necessarily constrain development in these areas, just require the provision of APZs alongside development.



Services - Easements:

Alignment of existing easements was mapped. It was noted through the technical investigations that the transmission line easements running through the site was not in alignment with the existing location of the transmission lines. In this context, although the existing easement for the transmission line is not necessarily a constraint, it will need to be realigned to the existing location.



Geotechnical - Slope >20%

Areas of slope greater than 20% are costly to develop and often result in significant cut and fill on-site.

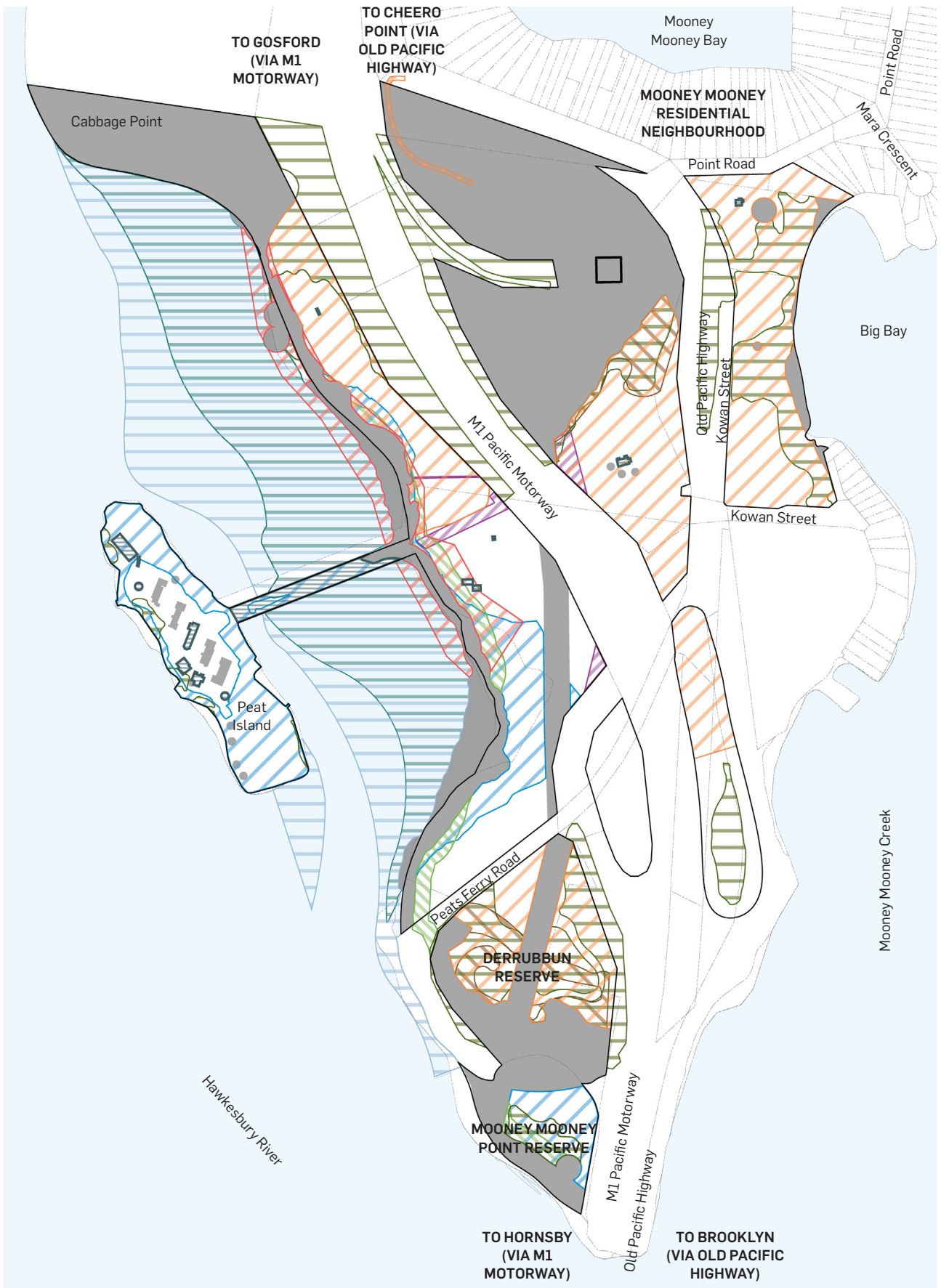


Figure 11 Consolidated Constraints Map



DEVELOPMENT FOOTPRINT MAP

The development footprint map was prepared on the basis of the consolidated constraints map. The map identifies the number of constraints that overlap one another to highlight areas of most development potential.

The key findings of this process included identifying the following areas as the most sensitive and not suitable for development or for specific outcomes if considered for development:

- 1 **Foreshore areas of Precinct 2: West Mooney Mooney** - the foreshore area of western Mooney Mooney has 2-4 constraints along its length and also includes areas of land identified as not developable. In this context it is suggested to set any development back from the foreshore edge, investigate the opportunity to provide a road or pathway along the land to provide definition and minimise the number of crossovers through this land.
- 2 **Additional land in Derrubbun Reserve:** the northern slopes of the reserve along with land to the east of the transmission lines have significant amounts of existing vegetation, is steep and would require bushfire APZ's on land less than 20% slope. In this context these additional areas were identified as suitable for only minimal development fronting Peats Ferry Road only.
- 3 **Southern slopes of Water Tower escarpment in Precinct 2: East Mooney Mooney** - Additional areas of existing vegetation and steep land adjoining the non-developable land in this location were not considered suitable for development.
- 4 **Foreshore edge of residential area in Precinct 1: East Mooney Mooney** - the opportunity to retain existing vegetation in this location was identified for investigation in the options process.

The areas of one constraint only as well as more isolated areas of 2 constraints were considered as areas with greater development potential.



Figure 12 Development Footprint Map

OPTIONS INVESTIGATIONS

The table below and corresponding plan outlines the options investigations considered and the preferred outcome identified for the concept plan for areas of the subject site identified with greatest development potential (as per Figure 12 on page 23).

Table 2 Options Investigation Summary and Preferred Outcomes

Location / Item	Options Investigations	Preferred Outcome
1 Peat Island	<ul style="list-style-type: none"> Residential lots. Residential apartments. Tourism and accommodation. Restaurants and cafes. Parkland. 	<ul style="list-style-type: none"> Tourism and accommodation uses with supporting restaurants and cafes. Public access provided to the island however this may be time managed to ensure safety and security.
2 Northern Foreshore	<ul style="list-style-type: none"> Apartments. Townhouses. Detached lots. Open space. 	<ul style="list-style-type: none"> Detached residential lots with foreshore road. Provision of local parkland.
3 Waterfront Village	<ul style="list-style-type: none"> Residential lots. Residential apartments. Tourism and accommodation. Restaurants and cafes. Parkland. 	<p>A mixture of residential including:</p> <ul style="list-style-type: none"> Provision of residential lots of a slightly wider frontage (12m) than in the East Precinct due to more visible location. Contained location of apartments buildings to the area close to Peat Island and in proximity to the marina and boat storage facility. Provision of a number of small pocket parks to provide visual breaks, local amenity and improve safety. Provision of additional public parking areas close to both the marina and Peat Island.
4 Marina and Boat Storage	<ul style="list-style-type: none"> The provision of a marina, boat storage or both. Location of marina and or boat storage to the north or south of the causeway. Configuration and size of marina and boat storage options. 	<ul style="list-style-type: none"> Provision of a Marina and a Boat Storage facility to the south of the causeway as potentially less visible when viewed from the water. The marina size was contained to the enclosed water area as bound by Peat Island and the Boat Storage building located away from the entrance to Peat Island.
5 Southern Foreshore	<ul style="list-style-type: none"> Residential lots. Townhouse / small lots. Residential apartments. 	<p>A mixture of residential including:</p> <ul style="list-style-type: none"> Low rise apartments. Townhouses off Peats Ferry Road. Detached housing on waterfront.
6 Waterfront Parkland and Foreshore Access	<ul style="list-style-type: none"> Creation of continuous waterfront park with road and foreshore pathway providing definition between lots and public access foreshore. Road aligned alongside the M1 motorway with lots backing onto the waterfront. 	<ul style="list-style-type: none"> Creation of continuous waterfront park with road and foreshore pathway providing definition between lots and public access foreshore. Creation of publicly accessible foreshore access around Peat Island. Pedestrian network connecting into public parking areas and existing pedestrian underpass under the M1.
6 Neighbourhood Centre	<ul style="list-style-type: none"> Options considered the size and arrangement of a service station and associated retail, cafe and or restaurant uses. 	<ul style="list-style-type: none"> Provision of a car based service station with the opportunity to provide local shop and restaurants.
7 Mooney Mooney Village	<ul style="list-style-type: none"> Residential lots. Townhouse / small lots. Residential apartments. Access considerations including through road or maintaining existing cul-de-sac arrangement. 	<p>A mixture of residential including:</p> <ul style="list-style-type: none"> Residential lots for most of the area to retain existing natural vegetation. Extension of existing road Kowan Street through to Point Road. Townhouse development opposite the Mooney Mooney Club and backing onto the Old Pacific Highway.
8 Community Facilities and Chapel	<ul style="list-style-type: none"> Retention or not of existing chapel. Relocation of RFS facility - multiple locations. Options regarding housing mix. 	<ul style="list-style-type: none"> Retain existing Chapel including some of the existing vegetation around the building. Provide the RFS facility in the West Precinct to the east of the Old Pacific Highway with good access to the regional road network. Include mix of housing with apartments at southern end, townhouses adjoining these and detached housing at northern end. Provision of local park connecting to existing pedestrian underpass.