

## CHIDLEY POINT AND ADJACENT BUSHLAND, MOSMAN PARK

**Boundary Definition:** protected area/bushland taken to cadastre boundary (Areas of bushland/native vegetation within the boundaries of the Site are not accurately mapped; Boundary adjusted from that in draft *Perth's Bushplan*.)

### SECTION 1: LOCATION INFORMATION

**Bush Forever Site no.** 334

**Area (ha):** bushland 3.2

**Map no.** 51, 52

**Map sheet series ref. no.** 2033-I NW

**Other Names:** not known

**Local Authorities (Suburb):** Town of Mosman Park (Mosman Park)

**System 6 (1983):** M56 part System area bushland and part scattered native plants (canopy), all vegetation described

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

**Spearwood Dunes**

Tamala Limestone (Qtl: LS1)

#### VEGETATION AND FLORA

**Vegetation Complex**

**Spearwood Dunes**

Cottesloe Complex — Central and South

**Floristic Community Types**

**Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes**

24 Northern Spearwood shrublands and woodlands

#### WETLANDS

**Wetland Types:** estuary (waterbody)

**Natural Wetland Groups**

**Estuaries**

Swan River (E.2)

**Wetland Management Objectives:** Conservation (0.3ha)

**Swan Coastal Plain Lakes EPP:** none identified

#### THREATENED ECOLOGICAL COMMUNITIES

Not assessed

### SECTION 3: SPECIFIC SITE DETAIL

**Landscape Features:** estuary — limestone cliff, vegetated wetland, vegetated uplands

**Vegetation and Flora:** limited survey (Gibson *et al.* 1994 (Chidpt 01), detailed survey (Keighery, GJ, and Keighery 1998)

#### Structural Units

Uplands (slopes) — Sands derived from Tamala Limestone: *Eucalyptus gomphocephala* and *Banksia* species  
Open Woodland

Uplands — Tamala Limestone: *Dryandra sessilis* var. *cygnorum* and *Acacia xanthina* Tall Open Scrub

Wetlands (wetflats): *Juncus kraussii* Sedgeland

**Scattered Native Plants:** *Eucalyptus gomphocephala* and *Banksia* species Open Woodland

**Vegetation Condition:** >30% Very Good to Excellent, <70% Degraded to Good, with areas of severe localised disturbance

**Total Flora:** 69 native species (Keighery, GJ, and Keighery 1998, Gibson *et al.* 1994) (estimated >90% of flora)

**Significant Flora:** (Keighery, GJ, and Keighery 1998) taxa of restricted distribution on the Swan Coastal Plain associated with Swan/Canning estuarine bushland remnants — *Acacia truncata*, *A. xanthina*

**Fauna:** not known

**Linkage:** no adjacent bushland; part of Greenway 24 (Tingay, Alan & Associates 1998a); part of a regionally significant contiguous bushland/wetland linkage (Part A, Map 7)

**Other Special Attributes:** National Trust of Australia (WA) Classification; Quaternary Site, as exposures of limestone cliffs (Lemmon *et al.* 1979); one of a very limited number of bushland areas on the Swan Estuary, naturally vegetated areas on the Swan Estuary having particular conservation value in providing habitat for fauna and linkage between areas of bushland; one of the few naturally vegetated areas on the Swan Estuary; open space of regional significance (DCE 1983)

### SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Directory of Important Wetlands in Australia

***SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS***

**Criteria:** Representation of ecological communities, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation, Criteria not relevant to determination of regional significance, but which may be applied when evaluating areas having similar values

**Recommendation:** Site with Some Existing Protection; the existing care, control and management intent of the reserve is endorsed. Long-term security and support for conservation management of the Site to be enhanced by: amending the purpose of the reserve to include conservation; and applying appropriate mechanisms in consultation with the reserve management body (see Table 3, Volume 1).

## CHIDLEY POINT AND ADJACENT BUSHLAND, MOSMAN PARK

**Boundary Definition:** protected area/bushland taken to cadastre boundary (Areas of bushland/native vegetation within the boundaries of the Bushplan Site are not accurately mapped.)

### SECTION 1: CADASTRAL INFORMATION

(Lots, locations and derived information to be updated in the public submission period)

**Bushplan Site no.** 334      **Map no.** 60      **Map sheet series ref. no.** 2033-I NW  
**System 6 (1983):** M56 part System area bushland and part scattered native plants (canopy), all vegetation described

**Other Names:** not known

**Local Authorities (Suburb)**  
 Town of Mosman Park (Mosman Park)

#### Ownership Categories

Private (including commercial organisation), State Government

**Area (ha):** total 17.8; bushland 3.2

#### Zoning

**MRS:** Parks and Recreation, Urban

**TPS:** Landscape

**Lot/Location/Reserve numbers (Purpose),**

#### Street name

13, 20, 78, 81, 82, 102, 602, 608, 611, 9800 Saunders St; 36, 38 The Coombe; 22, 23, 24, 25, 11074 Riverview Pl; 3, 81 Bateman St; 105, 133, 134, 135, 136, 137, 141, 142, 143, 144, 145, 146, 147, 148, 149, 161 Bay View Tce; 12059 Chine Pl  
 Crown Reserve

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

##### Spearwood Dunes

Tamala Limestone (Qtl: LS1)

#### VEGETATION AND FLORA

##### Vegetation Complex

###### Spearwood Dunes

Cottesloe Complex — Central and South

##### Floristic Community Types

###### Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

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#### WETLANDS

**Wetland Types:** estuary (waterbody)

##### Natural Wetland Groups

###### Estuaries

Swan River (E.2)

**Wetland Management Objectives:** Conservation (0.3ha)

**Swan Coastal Plain Lakes EPP:** none identified

#### THREATENED ECOLOGICAL COMMUNITIES

Not assessed

### SECTION 3: SPECIFIC SITE DETAIL

**Landscape Features:** estuary — limestone cliff, vegetated wetland, vegetated uplands

**Vegetation and Flora:** limited survey (Gibson *et al.* 1994 (Chidpt 01), Keighery, GJ, and Keighery 1998)

#### Structural Units

Uplands (slopes) - Sands derived from Tamala Limestone: *Eucalyptus gomphocephala* and *Banksia* species Open Woodland

Uplands - Tamala Limestone: *Dryandra sessilis* var. *cygnorum* and *Acacia xanthina* Tall Open Scrub

Wetlands (wetflats): *Juncus kraussii* Sedgeland

**Scattered Native Plants:** *Eucalyptus gomphocephala* and *Banksia* sp. Open Woodland

**Vegetation Condition:** >30% Very Good to Excellent, >70% Degraded to Good, with areas of severe localised disturbance

**Total Flora:** 69 native species (Keighery, GJ, and Keighery 1998, Gibson *et al.* 1994) (estimated >90% of flora)

**Significant Flora:** Keighery, GJ, and Keighery 1998 (taxa of restricted distribution on the Swan Coastal Plain associated with Swan/Canning estuarine bushland remnants) — *Acacia truncata*, *A. xanthina*

**Fauna:** no known information

**Linkage:** no adjacent bushland; part of proposed Greenway 24 (Tingay, Alan & Associates 1997a); part of a regionally significant contiguous bushland/wetland linkage (Volume 2A, Map 8)



**Other Special Attributes:** National Trust of Australia (WA) Classification; Quaternary Site, as exposures of limestone cliffs (Lemmon *et al.* 1979); naturally vegetated areas on the Swan Estuary have particular conservation value in providing habitat for fauna and linkage between larger more intact areas of bushland; one of the few naturally vegetated areas on the Swan Estuary; open space of regional significance (DCE 1983)

**SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE**

Directory of Important Wetlands in Australia

**SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS**

**Criteria:** Representation of ecological communities, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation, Criteria not relevant to determination of conservation value, but which may be applied when evaluating areas having similar values

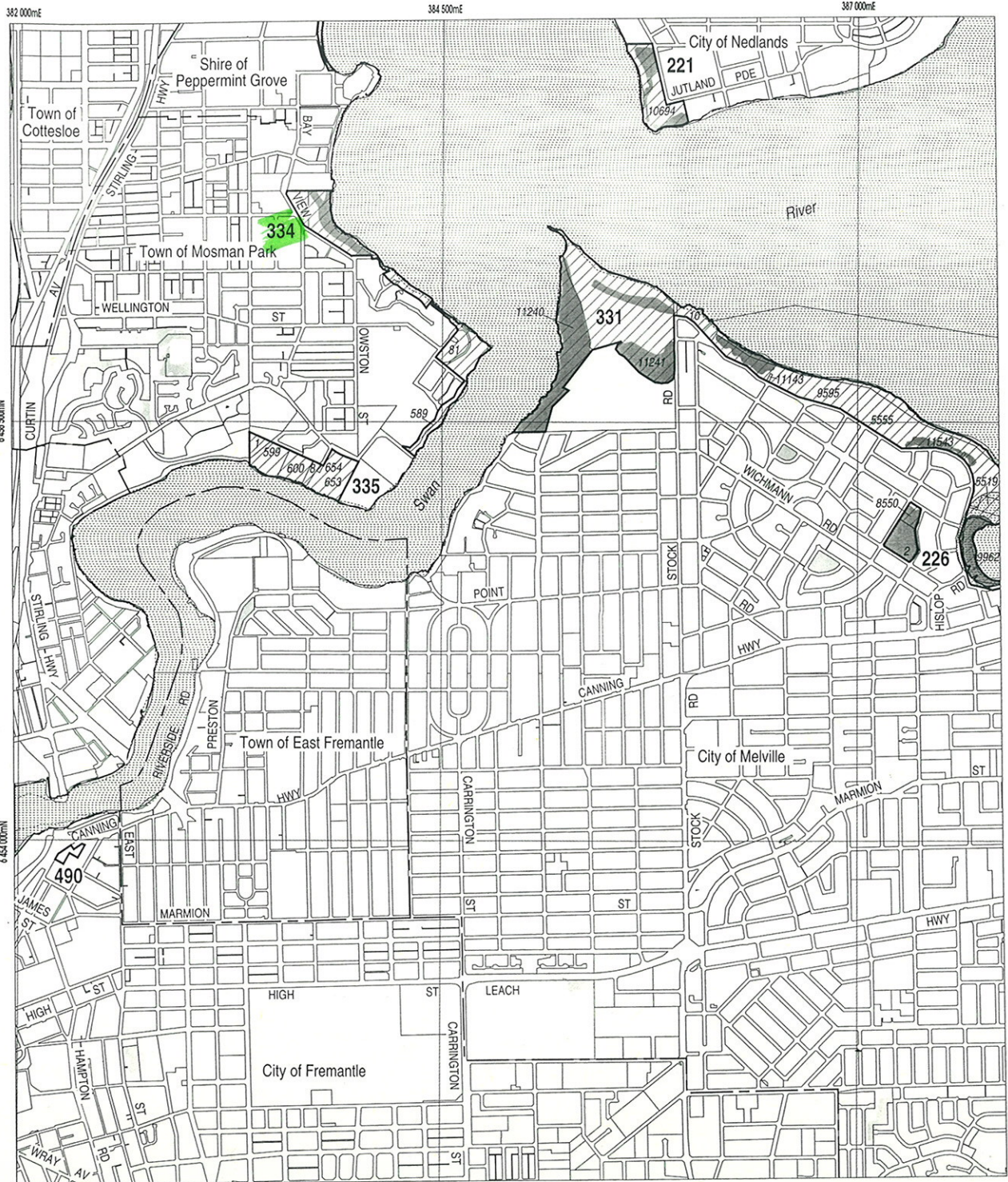
**Opportunities and/or Constraints**

**Opportunities:** Bushplan Site/part Bushplan Site subject to Swan and Canning Rivers EPP; location of conservation category wetlands; under MRS Parks and Recreation Reservation and TPS Landscape Zoning, Crown Reserve

**Constraints:** private land; under MRS Urban Zoning

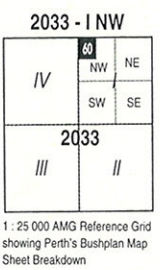
**Recommendation:** The most appropriate mechanism for the protection of this Bushplan Site be considered through the public comment period in consultation with the land owner(s). This may include parts for which — The existing care, control and management intent of the reserve is endorsed. Long-term security and support for conservation management of the Bushplan Site to be enhanced by: amending the purpose of the reserve to include conservation; and applying appropriate mechanisms in consultation with the reserve management body.





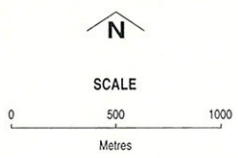
**LEGEND**

- 472 Bushplan Sites With Regionally Significant Bushland
- Other Native Vegetation
- Conservation Category Wetlands
- Bushplan Sites With Some Existing Protection
- 696 Lot Number, Location Number
- Channel Wetlands
- Local Government Boundary

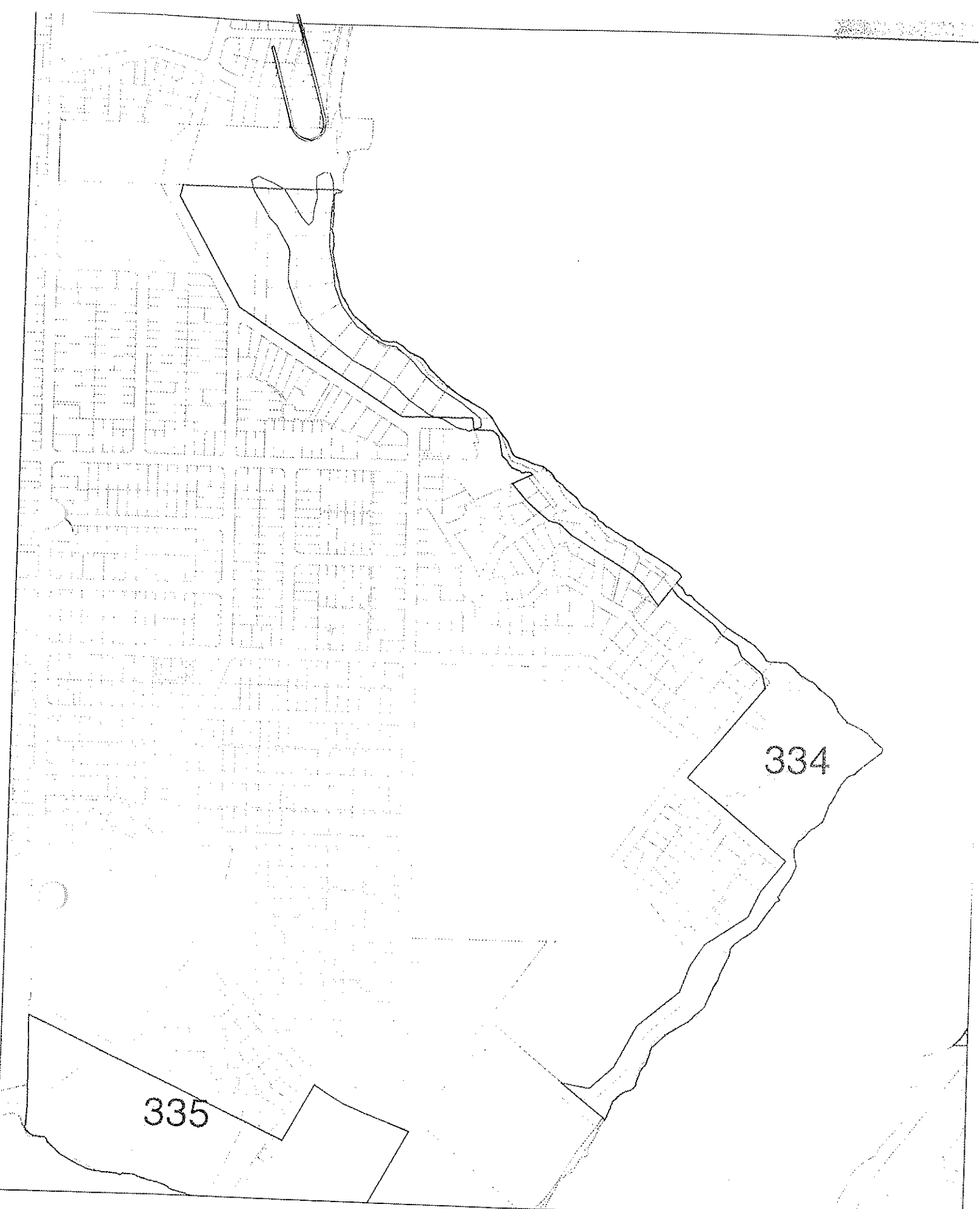


**PERTH'S BUSHPLAN MAP INDEX**

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Produced by Project Mapping Section  
 Land Information Branch, Ministry for  
 Planning, Perth W.A. November 1998  
 ntw-map18/enviro/bushplan/bushv2\_60.dgn  
 Cadastral Data supplied by Department  
 of Land Administration, W.A.  
 Wetlands Data supplied by  
 Water and Rivers Commission  
 Native Vegetation Extent for Study Area  
 supplied by Agriculture Western Australia



**BUSHPLAN SITES CORRECTED**

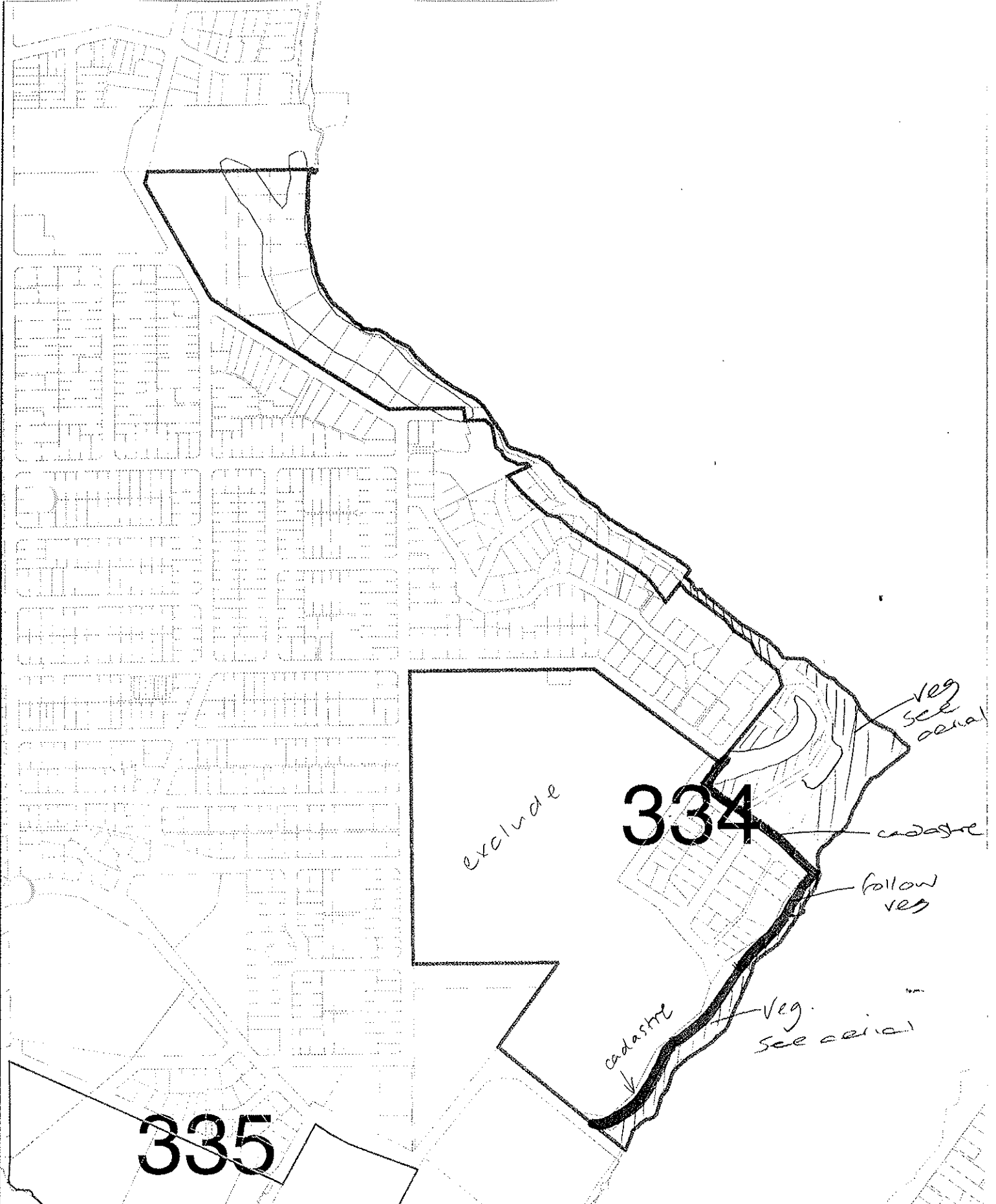


WESTERN  
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PLANNING  
COMMISSION



B 76 28/10/98





**BUSHPLAN SITES CORRECTED**

NT/JA 30/9.

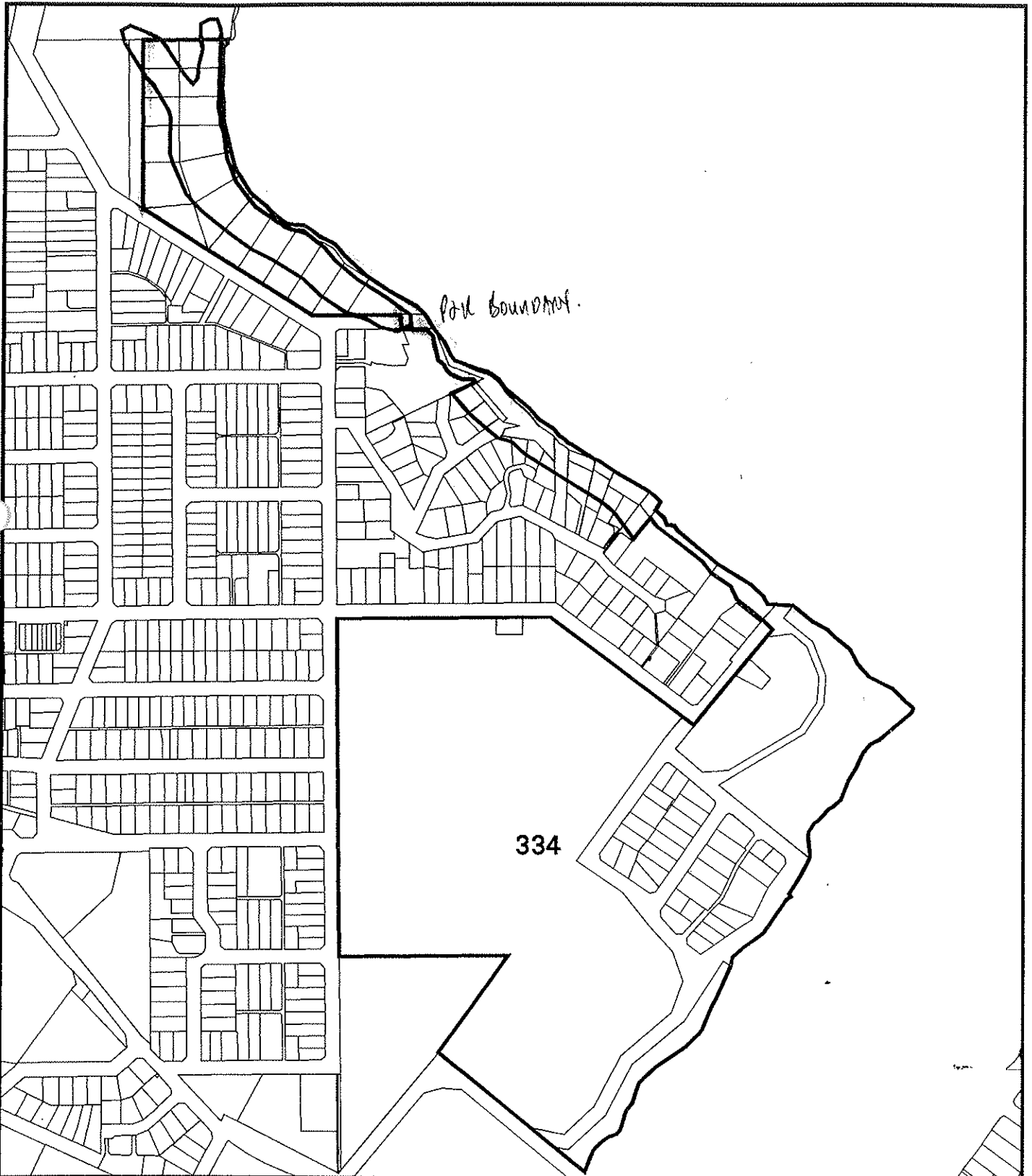


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



CUSTOMER  
FOCUS  
WESTERN AUSTRALIA





**bp site 334**

-  AG VEG 1998 BOUNDARY THEME
-  Cadastre
-  Bushplan sites refno 1-500 SCP BOUNDARY THEME

MFP INTERNAL USE ONLY

Prepared By: Andrea Zappacosta

Prepared For:

Map Ident: plot980529\_1

Date: 29 May 98

Scale 1:7636



M56 Foreshore Reserves, Mosman Park

Friends Advocate Management

Other Names: *Chidley Point, Leighton Peninsula*

Specific Study/studies Miscellaneous studies

Flora

Vegetation Map 1 2 3 *description*

Flora list ① 2 3 4

Significant Taxa done / suitable doubtful

Fauna

Mammals 1 2  
Birds 1 2 RAOU  
Reptiles and Amphibia 1 2  
Invertebrates 1 2

Vegetation Condition Map Sites Comment

Disturbance Factors Comment Management

Swan Coastal Plain Floristic Survey

AHC: National Estate- Listed / Interim / Nominated / Notified NT (WA): Heritage Classification

Notes	<i>D. Vaeshagen</i>
	<i>Leighton Peninsula Regional Park</i>

# M57 Minim Cove Foreshore, Mosman Park

Friends      Advocate      Management

Other Names:

Specific Study/studies      Miscellaneous studies

## Flora

Vegetation Map	1	2	3	
Flora list	<u>1</u>	2	3	4
Significant Taxa		<u>done / suitable</u> / doubtful		

## Fauna

Mammals	1	2	
Birds	1	2	RAOU
Reptiles and Amphibia	1	2	
Invertebrates	1	2	

Vegetation Condition      Map      Sites      Comment

Disturbance Factors      Comment      Management

Swan Coastal Plain Floristic Survey

AHC: National Estate- Listed / Interim / Nominated / Notified      NT (WA): Heritage Classification

Notes

**M56 Foreshore Reserves, Mosman Park**

M56.1 Regional park recommendations be applied to this area.	Unresolved Issues	The Regional Parks Task Force Report proposes that the Swan Estuary be considered analogous to a regional park managed under Swan River Trust legislation. The Swan River Management Strategy (1988) recommends that all the foreshore reserves and waterways of the Swan Canning Rivers be treated as a single entity for the purposes of planning and management. However, areas of high conservation value may be added to CALM's existing Swan Estuary Marine Park estate. The area is also being considered as part of the Leighton Peninsula Regional Park study which is being co-ordinated by DPUD.
M56.2 Vacant Crown land be declared a "C" Class Reserve for Recreation, vested in Town of Mosman Park.	Implemented	Recreation reserve vested in the local authority.
M56.3 Mosman Park Town Council in consultation with EPA prepare a management plan.	Unresolved Issues	The Swan River Trust should be consulted. To date the local authority has not allocated resources for preparing a management plan.

**M57 Minim Cove Foreshore, Mosman Park**

M57.1 Regional park recommendations be applied to this area.	Unresolved Issues	The Regional Parks Task Force Report proposes that the Swan Estuary be considered analogous to a regional park managed under Swan River Trust legislation. The Swan River Management Strategy (1988) recommends that all the foreshore reserves and waterways of the Swan Canning Rivers be treated as a single entity for the purposes of planning and management. However, areas of high conservation value may be added to CALM's existing Swan Estuary Marine Park estate.
M57.2 Vacant Crown land be declared Class "C" Reserve, vested in Town of Mosman Park.	Implemented	Recreation reserve vested in the local authority.
M57.3 Geological Sites Committee in consultation with EPA prepare a management plan for protection of shell deposits.	Unresolved Issues	The Geological Sites Committee no longer exists. The Swan River Trust should be consulted. To date the local authority has not allocated resources for preparing a management plan.



Area M 57 Name	<u>Minim Cove</u>		
Source	<u>A Flora List of Four Cliff Areas of the Swan River Estuary - G.J. Keighery</u>		
Purpose (why was the study done?)	<u>Flora Survey</u>		
Government	<u>CALM</u>		
Corporate			
Community Group			
Management Plan			
Publication Planned	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Date <u>1995</u>
Planned Location	<u>CALM Woodvale Library</u>		

Soils	
Units	described <input type="radio"/> referenced <input checked="" type="radio"/>

Landscape	
Features	described <input checked="" type="radio"/> referenced <input checked="" type="radio"/>

Flora	
Vegetation Map	<u>general description of vegetation (cliff, cliff top, beach)</u>
Units	Site based (no)
Mapped	
Veg Units	Comparable Heddle <i>et al</i> Compared Heddle <i>et al</i> . <input checked="" type="radio"/> Unit not mapped by Heddle <i>et al</i> .
Flora list	<u>ordered in geomorphic units</u>
Timing	% completion <u>95%</u> Significant Taxa <input checked="" type="radio"/>
2 yrs	<input checked="" type="radio"/> Trees <input checked="" type="radio"/> Shrubs <input checked="" type="radio"/> Herbs <input checked="" type="radio"/> Sedges <input checked="" type="radio"/> Weeds <input type="radio"/> DRF <input type="radio"/> CALM Priority <input type="radio"/> Other

Fauna	<u>N/A</u>
Timing	% completion
	Mammals Birds Significant Taxa
	Reptiles Invertebrates Sched1 Sched2 Other

Vegetation Condition	<u>* only bushland areas considered</u>		
Site based	Mapped	Units	<u>Tredgen</u>

Disturbance Factors	
Phytophthora	observed <input type="radio"/> Other <input checked="" type="radio"/> incidental
	tested <input type="radio"/> itemised

Notes	
	<u>* beach (saltmarsh) = 1</u>
	<u>cliff = 2-3</u>
	<u>cliff top = 3-6</u>



147  
see Fig 147  
271, 403 324, 334 339  
71 (202) 147 146  
✓ ✓ ✓ ✓ ✓  
Floristics of System Six Reserves and Bushland XVI: Point Heathcote Foreshore (M65), Minim Cove (M 57), Mosman Park (M56), Peppermint Grove Foreshore (M 54) and Point Resolution (M59).

G.J.Keighery<sup>1</sup> and B.J. Keighery<sup>2</sup>

1. Department of Conservation and Land Management  
P.O.Box 51  
Wanneroo, Western Australia, 6065

2. Department of Environmental Protection  
GPO Box S1400  
Perth, Western Australia, 6001.

**Abstract**

The terrestrial flora of five small reserves fringing the Swan River Estuary is documented. All the reserves have cliffs extending to or adjacent to the River. All are comparatively species poor: Minim Cove; 141 species (70 weeds), Mosman Park; 128 species (60 weeds), Peppermint Grove 136 species (80 weeds), Point Resolution; 114 species (68 weeds) and Point Heathcote 87 species (36 weeds).

The only record of *Boronia alata* (Rutaceae) on the mainland in the Perth area is found at Minim Cove. The limestone cliffs along the Swan River allow coastal Tamala limestone taxa to penetrate a considerable distance inland beyond the main range of the Spearwood soils. Species which have been observed in this category are *Acacia lasiocarpa* var *lasiocarpa*, *Acacia truncata*, *Acacia xanthina*, *Acanthocarpus preissii*, *Adriana quadripartita*, *Alyxia buxifolia*, *Anthocercis littorea*, *Conostylis candicans*, *Comesperma integerrima*, *Dodonaea aptera*, *Dryandra sessilis* ssp *cygnorum*, *Eucalyptus gomphocephala*, *Grevillea vestita*, *Melaleuca huegelii*, *Pittosporum phillyraeoides* var *phillyraeoides*, *Scaevola nitida*, *Spyridium globulosum* and *Templetonia retusa*.

Naturalised plants are common on all these relatively disturbed reserves. Many of these species have entered the reserves through dumping of garden refuse or deliberate plantings. Four new weed records for Western Australia, *Acacia sophorae* or *A. longiflora* var *sophorae* (Coast Wattle), *Morus alba* (White Mulberry), *Lagunaria patersonii* (Norfolk Island Hibiscus) and *Convolvulus mauritanicus* ssp. *sabatius* (Creeping Morning Glory) were located during the survey.

**INTRODUCTION**

This paper reports on five areas of the Swan Estuary foreshore discussed in the System Six report and not covered in Keighery, 1997. These areas unlike those reported on previously are all areas of the Swan River Estuary where steep limestone cliffs extend to the shore. Such areas, still with natural vegetation are found also at Mount Eliza (Kings Park, Bennet, 1995) and Mount Henry, the furthest inland (Brooker, 1993).

The areas reported on in this paper comprise, 5 recommendations from the System Six Study (Annon, 19XX). These are:

M54 (Peppermint Grove /Claremont Foreshore, Reserves 17113 and 24523, figure 1).

M56 (Foreshore Reserves, Mosman Park, Reserves 8369 and 3346, including the Green Place Reserve, figure 2).

M57 (Minim Cove Foreshore, Mosman Park, Reserves 1630, 31157, 31156, 1631 and 24242, figure 3).



BS 334

22

Our Reference: PC:bd  
Enquiries: Mr Peter Chappell

**C H A P P E L L  
& L A M B E R T**  
T O W N P L A N N I N G  
U R B A N D E S I G N

6 April 1999

PB146

Ministry for Planning  
Albert Facey House  
469-489 Wellington Street  
PERTH WA 6000

**Attention: Mr David Nunn**

Dear Sir

**Re: SUBMISSION ON BUSHPLAN SITE No. 334  
CHIDLEY POINT AND ADJACENT BUSHPLAN, MOSMAN PARK**

This submission is made on behalf of the Landowners of Lots 36 and 38 The Coombe, Mosman Park on the inclusion of their properties within the category "Bushplan Sites With Some Protection".

This area is the subject of the current Metropolitan Region Scheme Omnibus Amendment (Western Suburbs), which rezones a portion of the privately owned Coombe and Saunders Street properties from "Parks and Recreation Reservation" to "Urban".

Lots 36 and 38 have existing residences with Lot 38 shortly to be redeveloped. It is intended to remove and replace some of the vegetation on Lot 38 which is "non-native" being palm trees, olive trees and exotics. Lot 38 is not a cliff side property, being on the flat, ranging in level between 2 and 4 metres.

Whilst it is understood that the "visual" aspect of the clifflands is important, the flat nature of Lot 38 and its "non-native" vegetation clearly support its deletion from Bushplan. Compensation will be sought if any development impediments are placed on this valuable, strategic site.

SUBMISSION NO 439

MINISTRY FOR  
PLANNING  
7 APR 1999  
805-2-1-32 P112  
FILE

LEVEL 2 - 36 ROWLAND STREET SUBIACO WA 6008  
PO BOX 796 SUBIACO WA 6904  
TELEPHONE (08) 9382 1233 FACSIMILE (08) 9382 1127  
EMAIL [chappell@multiline.com.au](mailto:chappell@multiline.com.au)

PRINCIPALS: PETER CHAPPELL A.T.P. M.P.A.P. & TONY LAMBERT A.T.P. M.P.A.P.  
I.L. EVERETT B.A. GRAD. D.I.E. M.R.A.P.I.  
PROPRIETORS: CHAPPELL & LAMBERT PTY LTD. A.C.N. 009 322 632  
AS TRUSTEE FOR THE CHAPPELL & LAMBERT TRUST



It should be noted that the Landowners intend to maintain as much vegetation on site during redevelopment, but clearly wish that they make the decision of what is maintained, allowing for the proposed residence to be built.

In March 1996, Alan Tingay and Associates prepared an environmental report on this area. This is appended to this report as it places the land in an appropriate environmental context.

The Western Suburbs Omnibus Amendment if/when finalised will rezone both Lots 36 and 38 to "Urban" which should see the deletion of Bushplan from these sites. We believe that these sites were included, as they were at the date of preparing Bushplan, reserved for "Parks and Recreation".

Bushplan should therefore be amended to adopt the Metropolitan Region Scheme Amendment, particularly for Lots 36 and 38.

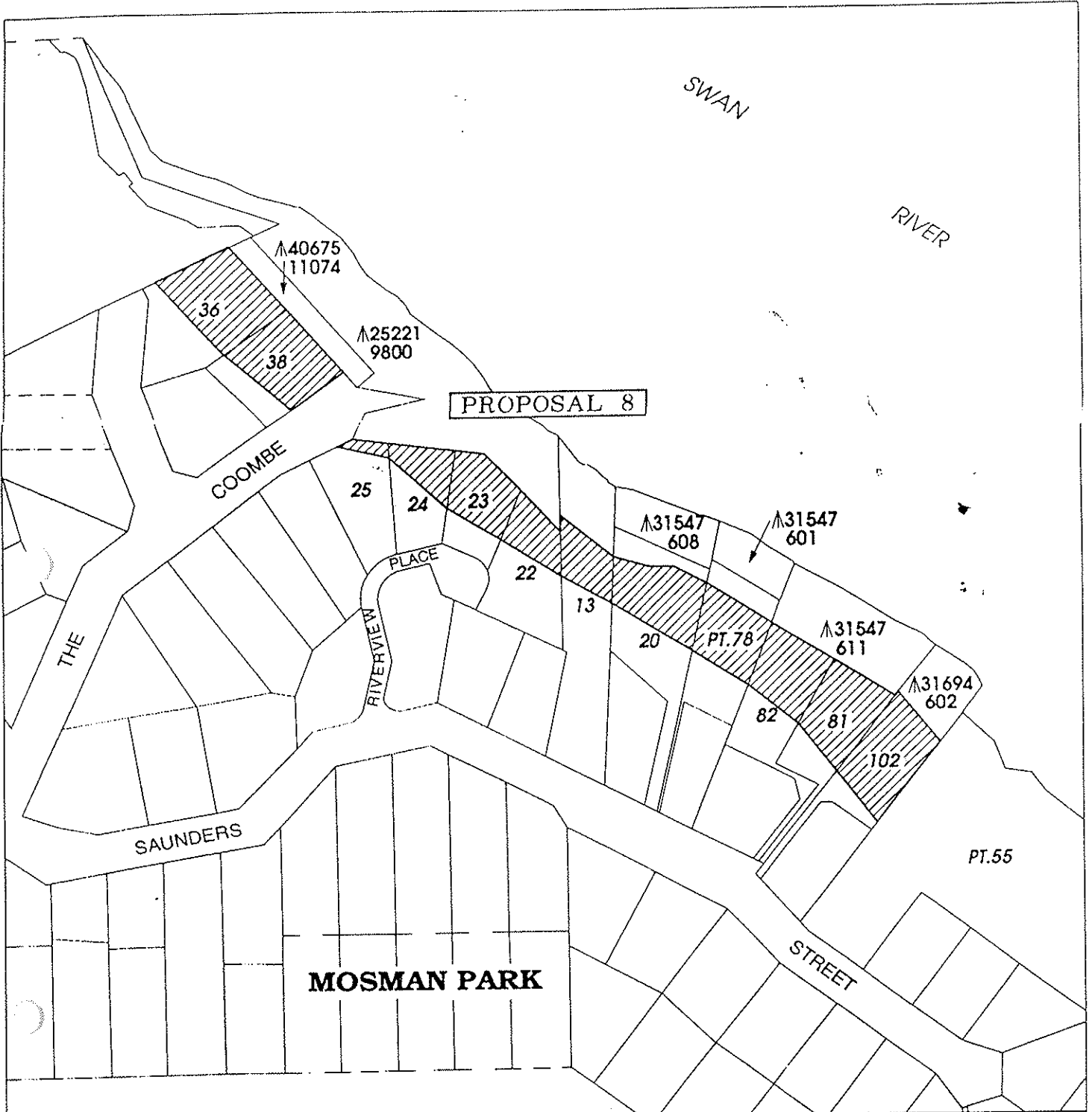
Yours faithfully

*Chappell & Lambert*

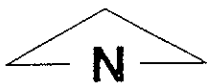
**CHAPPELL AND LAMBERT**

encs

cc Mr B Peters



**WESTERN SUBURBS  
PROPOSED OMNIBUS AMENDMENT (No.2)  
AS ADVERTISED**



SCALE 1:2000



10th MARCH 1998

FIGURE 8

LEGEND

PROPOSED URBAN ZONE



WESTERN  
AUSTRALIAN  
PLANNING  
COMMISSION



CUSTOMER  
FOCUS  
SERVING THE COMMUNITY

It is appropriate for the land to be reserved for Public Purposes (WSD) to reflect the current land use and ownership by the Water Corporation.

#### **PROPOSAL 6 (Figure 6)**

**To transfer Lot 1 Kalinda Drive, City Beach from the Parks and Recreation reservation to the Public Purposes (WSD) reservation. (Town of Cambridge)**

The Water Corporation owns the subject land which is developed for the Bold Park Reservoir.

It is appropriate for the land to be reserved for Public Purposes (WSD) to reflect the current land use and ownership by the Water Corporation

#### **PROPOSAL 7 (Figure 7)**

**To transfer Crown Reserve 43161 Lemnos Street, Shenton Park from the Urban zone to the Parks and Recreation reservation. (City of Nedlands)**

The land is classified as an 'A' Class Crown Reserve and is vested in the City of Nedlands for recreation and conservation purposes.

The land was originally transferred from the Public Purposes reservation to the Urban zone in 1993 when the land became surplus to government requirements. The land was also re-zoned to Industrial in the City of Nedlands town planning scheme at that time. Following community interest in the site as a conservation reserve the State Government subsequently determined that the land is of regional significance and should remain as urban bushland. Development of the site for industrial purposes did not proceed.

It is now appropriate that the land be transferred to the Parks and Recreation reservation to ensure its long term future as a recreation and conservation reserve.

#### **PROPOSAL 8 (Figure 8)**

**To transfer portions of Lots 102, 81, 82, Pt 78, 20, and 13 Saunders Street, portions of Lots 22, 23, 24, and 25, Riverview Place and portions of Lots 36 and 38 The Coombe from the Parks and Recreation reservation to the Urban zone. (Town of Mosman Park)**

The Parks and Recreation reservation along this section of the Mosman Park foreshore was set in 1963 when the Metropolitan Region Scheme was gazetted. Amendments to the Metropolitan Region Scheme were undertaken to Greenplace Reserve in 1982 and to Lot 55 Saunders Street in 1992. However, this portion of foreshore has not been the subject of a detailed study to determine the most appropriate Parks and Recreation reservation boundary.

The existing Crown Reserve adjacent to Lots 36 and 38 is considered sufficient to allow public access. The lots to the south-east of The Coombe are characterised by a steep vertical limestone escarpment with large single dwellings situated at the top of the escarpment. Most of the lot boundaries extend into the escarpment, however, all of the lots except Lots 13 and 55 Saunders Street have Crown Reserves separating them from the river. Lots 13 and 55 have land titles

which extend to high water mark. A number of dwellings have decking which cantilevers over the escarpment and there are other developments located on the land reserved for Parks and Recreation. The existing Parks and Recreation reservation boundary traverses through most of the existing residences and is considered to be in excess of requirements.

Access along the foreshore is gained from a public car park and picnic area at the end of The Coombe and from a car park at Chidley Point. Public access between these two areas, especially along the eastern portion of the foreshore is difficult because of the steep limestone cliff and rocky character of the immediate river edge. There is a well used informal track along the lower portion of the foreshore. The Swan River Management Strategy Report 1988 suggests that public access should eventually be provided along the foreshore between Mosman Bay, Greenplace Reserve and Chidley Point.

The intent of the Parks and Recreation reservation in this locality is primarily to protect the landscape values of the escarpment which is well vegetated and to provide, at some future time, for better public access along the immediate foreshore.

A reduction in the Parks and Recreation reservation boundary along the top of the limestone cliff will not affect the existing level of public access. The limestone cliff face itself will still remain within the Parks and Recreation reservation. The reduction in the reservation boundary will reflect existing development, be more consistent between properties and result in a more manageable Parks and Recreation reservation.

Accordingly, it is considered appropriate to reduce the current Parks and Recreation reservation to exclude most of the affected private property. However, it is necessary to retain the Parks and Recreation reservation on the lower immediate river edge of Lots 13, 20 and Pt 78 to include the limestone cliff face and to provide for public access.

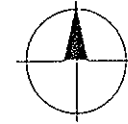
## REGIONAL ROAD RESERVATIONS CLASSIFICATION

The Metropolitan Region Scheme (MRS) contains three categories of road reservations which classify land for regional road purposes. These road reservations are currently the subject of a proposed amendment which, if approved, will replace the three tier system with a two tier system.

The proposed amendment number 998/33 known as the *Road Classification Review*, will delete the 'Controlled Access Highways' (CAH), 'Other Major Highways' (OMH) and 'Important Regional Roads' (IRR) reservation classifications from the MRS, and replace them with 'Primary Regional Roads' and 'Other Regional Roads'.

Generally 'Primary Regional Roads' would comprise the existing CAH and OMH road reservations. 'Other Regional Roads' would generally comprise the existing IRR road reservation. There are some exceptions to this generality and you are referred to the *Amendment Report* for Amendment number 998/33 for more information.

That proposed amendment will not result in any change to the extent of the existing regional road network, or to the land requirement details of the existing MRS reservations for each road.



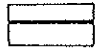
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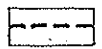
AREA TO BE EXCLUDED  
FROM BUSH PLAN

LEGEND

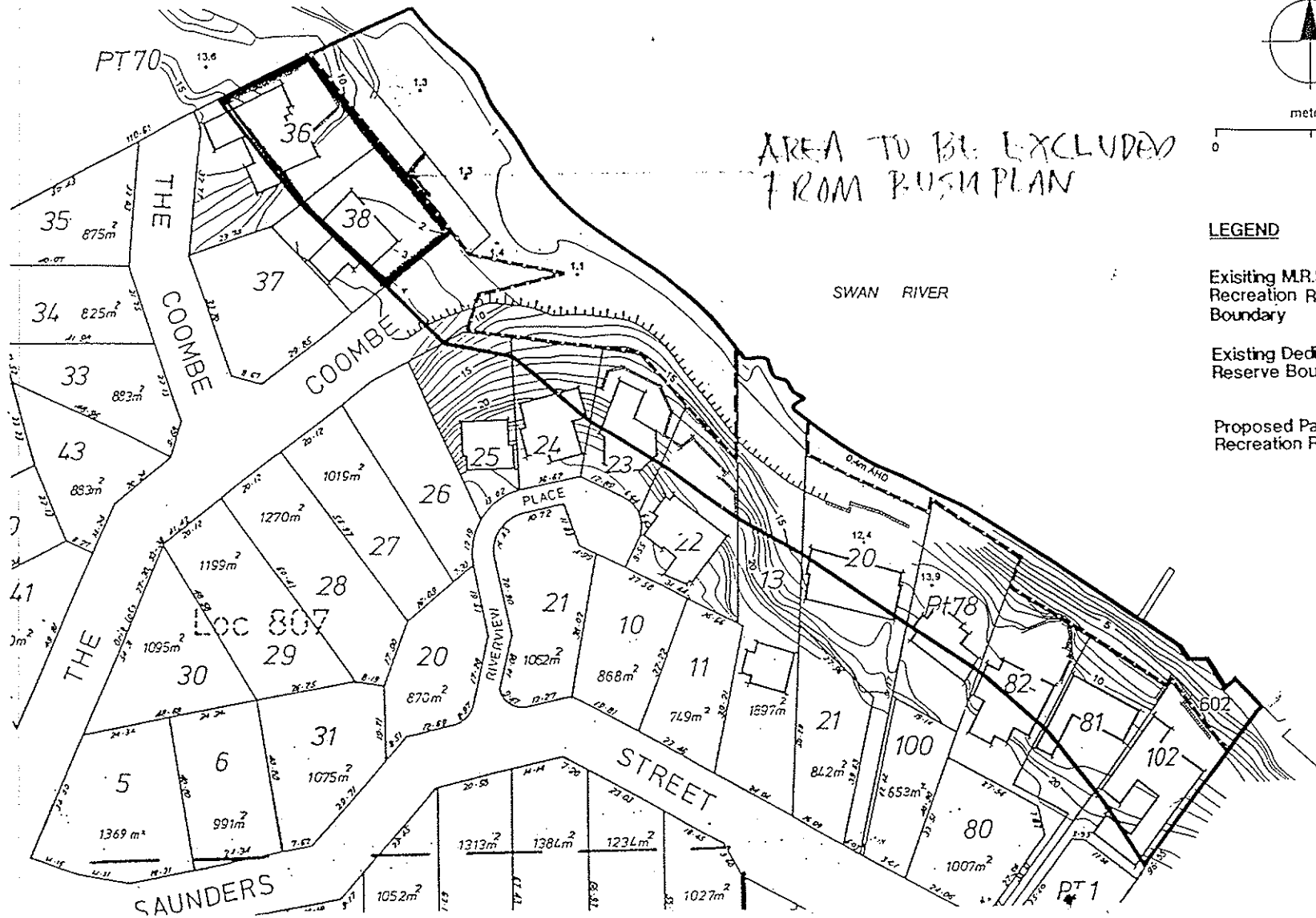
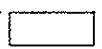
Existing M.R.S. Parks and  
Recreation Reservation  
Boundary



Existing Dedicated Foreshore  
Reserve Boundary



Proposed Parks and  
Recreation Reservation



63  
CHAPPELL & LAMBERT

THE COOMBE/SAUNDER STREET PRECINCT,  
MOSMAN PARK  
FORESHORE ENVIRONMENTAL ASSESSMENT

ALAN TINGAY & ASSOCIATES

MARCH 1996

REPORT NO: 96/19

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## 1. INTRODUCTION

### 1.1 Background

This report provides an environmental appraisal of the river foreshore surrounding The Coombe, Mosman Park. The study area is defined by the Metropolitan Region Scheme (MRS) Parks and Recreation Reservation where it affects Lots 102, 81, 82, 20, 13 and Pt Lot 78 Saunders Street, Lots 36 and 38 The Coombe, Lots 22, 23, 24 and 25 Riverview Place, and Reserves 31694, 31547, 25221 and 40675 Mosman Park (Figures 1 and 2).

Chappell & Lambert Planning and Design Consultants, has requested Alan Tingay & Associates to prepare an environmental assessment of the site as a component of a Parks and Recreation Reservation rationalisation proposal.

### 1.2 Land Use

The study area is a mix of recreational and residential land uses. Reserves 31694, 31547 and 25221 facilitate public access along the foreshore between High Water Mark and the limestone cliffs. Coombe Reserve at the termination of The Coombe forms a recreational node on the foreshore which satisfies the immediate foreshore's parking requirements and appears to provide for activities such as dog exercising and picnicking.

Reserve 25221 forms a component of the Mosman Park Heritage Trail and contains interpretative material at points of historical interest along the foreshore.

The existing foreshore reserves also provide an ecological function and contribute toward the complete river landscape. The biological and visual environment is discussed further in Sections 4 and 5. The remainder of the land zoned for Parks and Recreation Reservation under the MRS is used for residential purposes such as housing, private recreation and gardens.

### 1.3 System 6

The study area is contained within System 6 Area "M56 Foreshore Reserves, Mosman Park" of the Environmental Protection Authority (EPA). The EPA states that management considerations for the area should include encouraging the growth and regeneration of local indigenous species, constructing suitable footpaths, which would serve as firebreaks, preventing other pedestrian access in order to reduce erosion and burning off as little as possible with at least five years between burns and preventing unauthorised fires.

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#### 1.4 Swan River Management Strategy

The Swan River Trust has adopted a Swan River Management Strategy. Recommendation A19 of the strategy applies to the study area and states:

"Provide public access along the river foreshore between Mosman Bay and Green Place Reserves at Chidley Point. Options include construction of a boardwalk or reclamation along the foreshore."

#### 1.5 Access

Public access along the river bank is available for the entire study area. Access across Lot 13 Saunders Street is possible, although the foreshore is not in public ownership. However, it is clear that public access to the cliff areas and steep slopes dominated by the residential development should be restricted to prevent erosion, minimise maintenance costs and reduce public risk.

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## 2. PHYSICAL TOPOGRAPHY

### 2.1 Topography

The study area rises from High Water Mark at approximately 0.4m AHD to 33.6m AHD. Reserves 31694, 31547, 25221 and 40675 are principally restricted to the lower areas between the Swan River and 5m AHD, where the limestone cliffs rise above the waterway (Figure 3).

The relief rises rapidly inland for the remainder of the Parks and Recreation Reservation. Aside from the areas of sheer cliff, the reserve has a gradient of about 1:2, forming a particularly steep slope.

Coombe Reserve is a relatively flat expanse where the foreshore encroaches inland as an expression of a gully entrance. The gully floor is defined by the Coombe road reserve. Again the Public Open Space (POS) is surrounded by the steep slopes of the river valley.

### 2.2 Soil

The study area is comprised of the yellow-brown sands of the Cottesloe and Karrakatta Soil Formations. The soils overlay the Pleistocene Coastal Limestone Formation. The limestone is exposed in sediments and forms rocky outcrops and the distinctive limestone cliffs.

### 2.3 Enhanced Greenhouse Effect

There is continuing scientific discussion concerning the implications of long term climate change and the Enhanced Greenhouse Effect on sea levels and there is no general consensus on the possible rates of sea level rise. However, precautionary scenarios have been developed by the Institution of Engineers Australia for coastal structures.

The low, medium and high scenarios for 2030AD predict a 0.1m, 0.2m and 0.32m rise respectively. These scenarios are within the ranges predicted in a report by CSIRO for the State Government.

Nevertheless, the general circulation models are relatively crude and simplistic. Cloud formation and cloud radiative properties depend on microphysical parameters which cannot be explicitly determined in large scale models. This therefore constitutes a large source of uncertainty. Furthermore, most models use a fixed depth, well mixed surface layer to represent the ocean. Accordingly, heat transport by the oceans is usually fixed or ignored which is a major inadequacy in the predictive capacity of the model.

In respect to the Coombe/Saunders Street Precinct foreshore specifically, the relationship of the 'Enhanced Greenhouse Effect' to estuarine systems remains ambiguous. Any predictions of estuarine mean level rises would require

location-specific research and would need to consider the impact of storm surges, wave energy and direction as well as estuarine run-off and drainage.

## 4. BIOLOGICAL ENVIRONMENT

### 4.1 Vegetation and Flora

The study area consists principally of cultivated lawns and gardens. A proportion of the residential lots abutting the foreshore reserves contain landscaped cultivated gardens which extend into the POS to High Water Mark.

The Coombe Reserve (25221) is comprised of a grassed park with childrens' play equipment and scattered trees, including a number of *Casuarina obesa*. The cultivated lawn extends from the vertical limestone cliff face (boundary of Reserve 25221 with Lots 24 and 25) to the river and north-west of The Coombe in front of Lots 36 and 38. Limited carparking is available.

The remainder of the Parks and Recreation Reservation supports a variety of introduced trees including mature olive trees, Fiddlewoods and introduced *Eucalyptus*. Exotic shrubs have been planted along the steep embankments and have assisted in reducing erosion. Bamboo was observed on the foreshore abutting Lot 22 and on Lot 13. No sedges grow along the water edge in the study area.

### 4.2 Vegetation Condition

The majority of the native remnant vegetation of the study area has been eliminated and replaced by introduced plant species. Some endemic species occur but are restricted to the top of the limestone cliffs in front of Lots 24 and 25 and down the limestone embankment of Lots 13 and 22. Tuart trees (*Eucalyptus gomphocephala*) and Rottnest Cypress (*Callitris preissii*) exist on the escarpment of Lots 13 and 22. Cocky's Tongue (*Templetonia retusa*) and Wattle (*Acacia xanthia*) are common shrubs growing on the shallow soils in many of the gardens.

Native species one would expect in the area include *Acacia xanthina*, *Acacia cyclops*, *Acanthocarpus preissii*, *Agonis flexuosa*, *Callitris preissii*, *Casuarina obesa*, *Eremophila glabra*, *Eucalyptus gomphocephala* (Tuart), *Grevillea thelemanniana*, *Hardenbergia comptoniana*, *Melaleuca huegellii*, *Spyridium globulosum* and *Templetonia retusa*.

The vegetation in front of a few homes has been trimmed and in some cases removed to facilitate unimpeded views across the river.

### 4.3 Fauna

The river shoreline at The Coombe is shallow and rocky allowing native wading birds to feed in the shallows but because there are no reeds and sedges along the river edge, native water birds do not use this region for breeding though they may nest in private gardens. The vegetation on the cliff edge and

adjacent gardens offer a habitat for local birds including the Singing Honeyeater (*Meliphaga virescens*) which was seen in the area.

## 5. ARCHAEOLOGICAL AND ETHNOGRAPHIC SITES

An inspection of the Site Register of the Aboriginal Affairs Department revealed that there are no recorded archaeological or ethnographic sites contained within the study area.

The closest recorded site to the subject foreshore is located north of the study area and is referred to as the Freshwater Bay Site (S2414). However, it possesses historical interest rather than any archaeological or ethnographic value. Site S2414 is recorded as being the approximate location where Willem de Vlamingh's expedition observed Aboriginal camp fires on the shore of Freshwater Bay in 1697.

## 6. LANDSCAPE AESTHETICS

The Swan River Trust's "Landscape Assessment" (in prep) describes the subject Mosman Bay precinct as having an attractive form as the hooked shape curve from Chidley Point out to Keanes Point is echoed in Freshwater Bay. The Point Walter Spit provides a visual boundary between Mosman and the northern section of Freshwater Bay and helps to create Mosman Bay as a visually separate entity.

The assessment states that the subject area is characterised by the cliff embankments, and the large residences which stand out from the topography. The houses are comparatively distinctive with their large reflective windows which draw the viewers attention to the angular bold designs.

Inspection of the study area revealed that the attractiveness of the landscape is derived from the contrast of the steep embankments above the sheltered waters of Mosman Bay. This is further enhanced by the limestone outcrops and cliff faces which provide points of visual interest in the landscape. The covering vegetation serves to soften the more severe aspects of the cliff face and adds a human scale to the environment.

The natural environment is largely complemented by the residences of the study area which provide additional features of interest but do not dominate the landscape to the extent of the dwellings constructed on Pt Lot 70 The Coombe and Pt Lot 55 Saunders Street.

## 7. CONCLUSION

The study area is a highly modified environment dominated by introduced trees and shrubs. The land contained within the subject Parks and Recreation Reservation has effectively been altered over time to create the cultivated gardens which now complement the surrounding residential land use.

The environmental value of the area is derived from its attractive form. The exposed limestone cliffs, steep embankments, vegetation and interspersed houses overlook the waters of Mosman Bay and combine to produce a visually aesthetic landscape.

Public access across the foreshore is practical for the entire study area. However, introduced weed species such as the Bamboo in front of Lot 22 and on Lot 13 will need to be monitored and controlled to prevent any impediment to public access. Alternatively, public access to the steeper slopes could be deterred to prevent erosion, minimise maintenance costs and to reduce public risk.

Management of the foreshore environment would be further improved through the physical delineation of the POS. At present there is no demarcation between private and public property. The existing arrangement creates difficulties in respect to foreshore maintenance activities, public access and weed control. A suitable unobtrusive form of foreshore delineation would define property management responsibilities and facilitate public access at appropriate points. It would also minimise the security risk to abutting dwellings created through uncontrolled public access and in turn reduce the residents' exposure to litigation.

In conclusion, the environmental significance of the study area is reflected in its considerable landscape value. This can be protected and enhanced through the appropriate delineation of existing adequate reserves and through the establishment of landscape controls which are most effectively implemented by Local Government.

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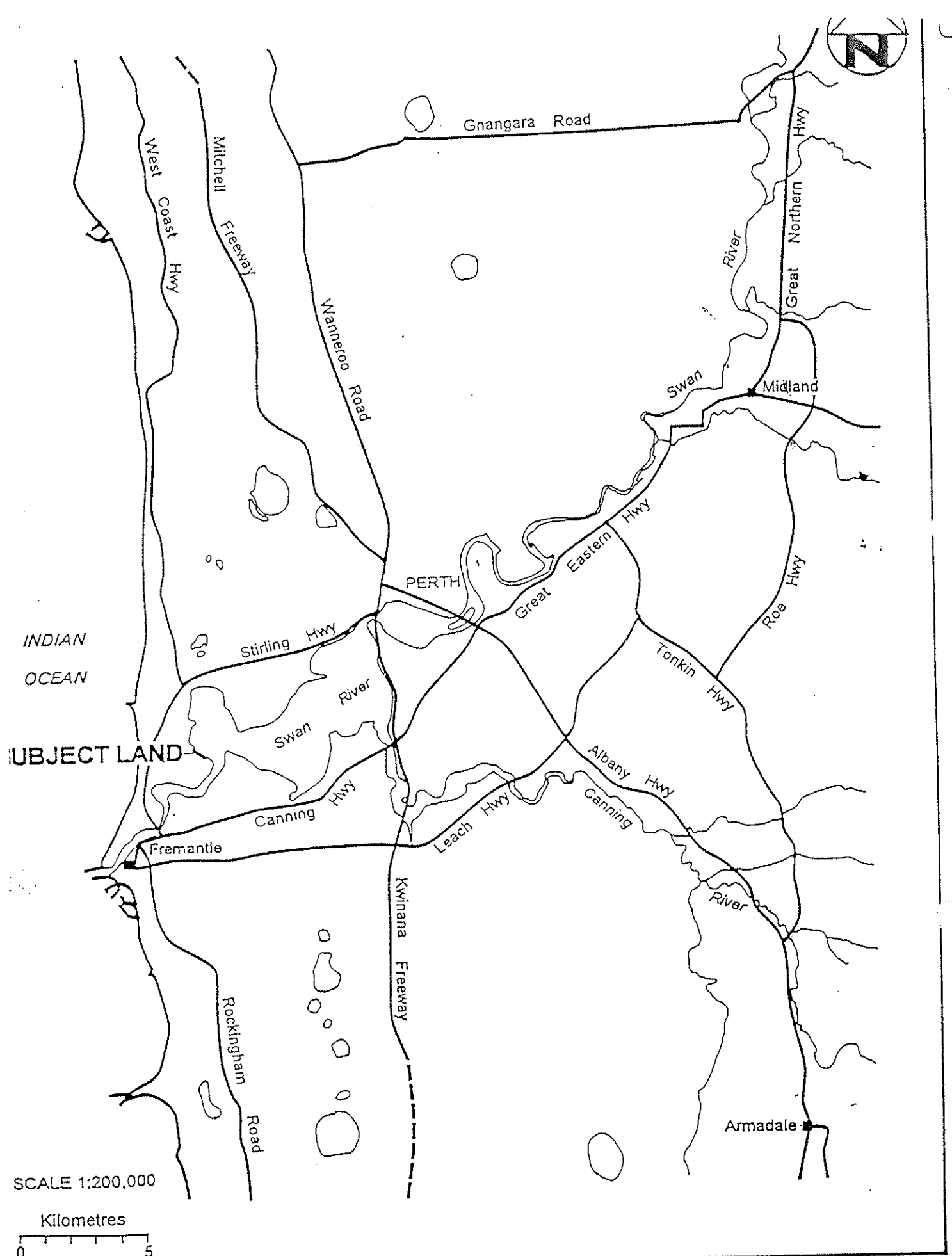
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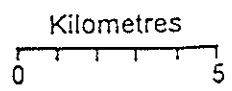
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FIGURES

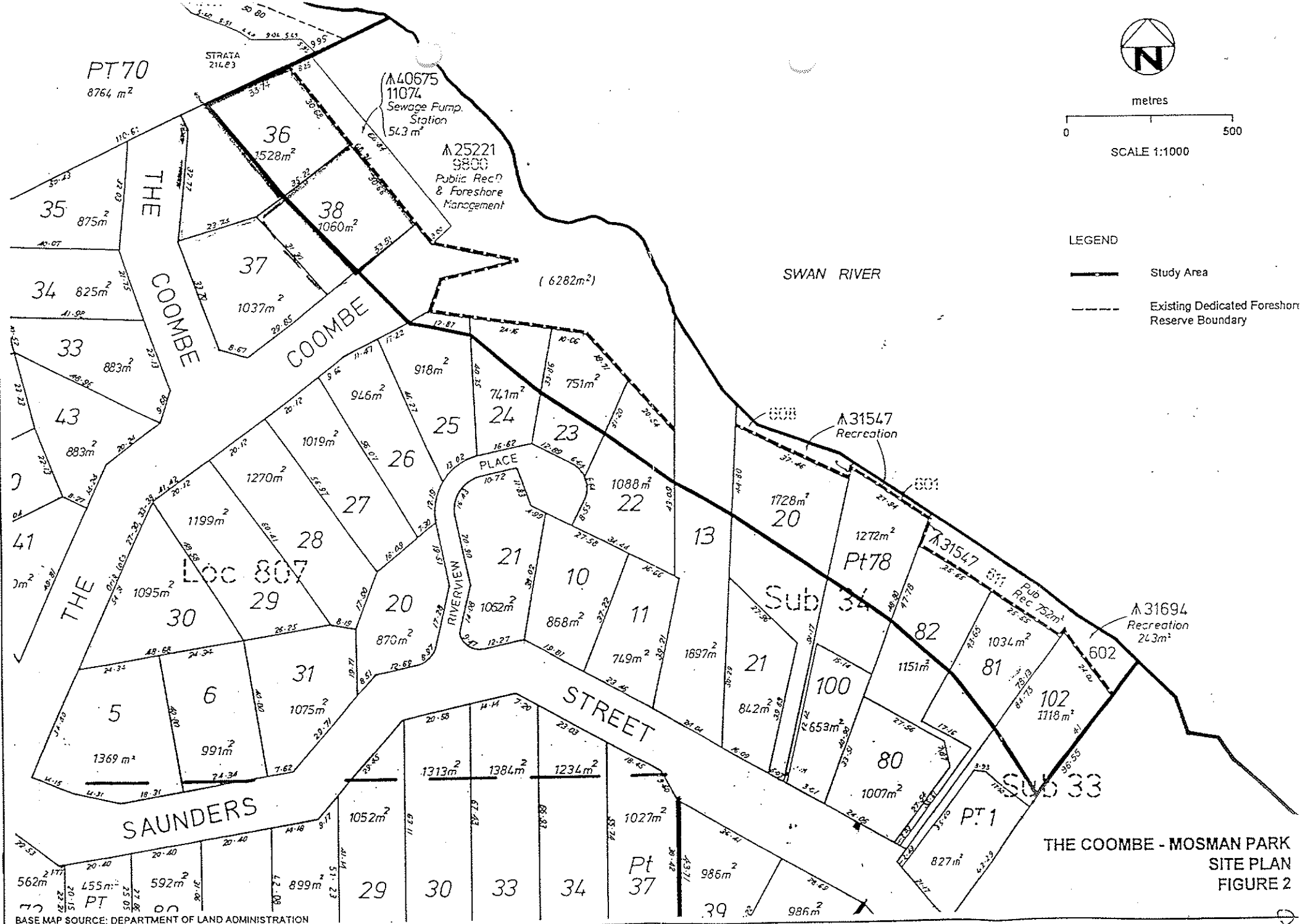
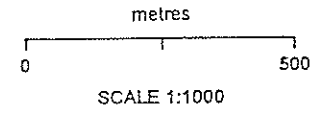


SCALE 1:200,000



LAN TINGAY & ASSOCIATES

THE COOMBE - MOSMAN PARK  
LOCATION PLAN  
FIGURE 1



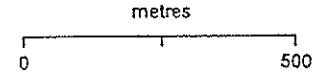
LEGEND

———— Study Area

----- Existing Dedicated Foreshore Reserve Boundary

THE COOMBE - MOSMAN PARK  
SITE PLAN  
FIGURE 2

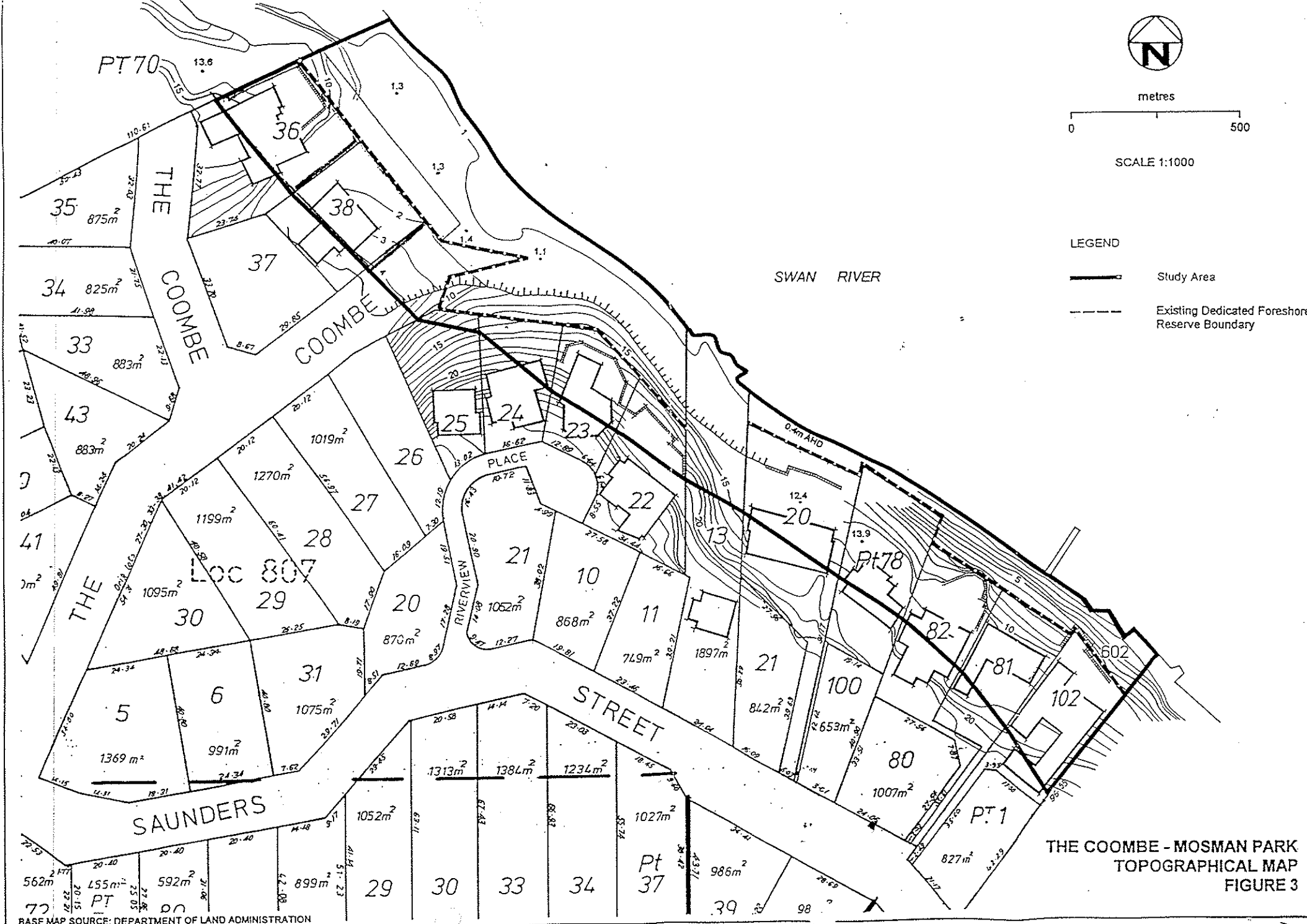
BASE MAP SOURCE: DEPARTMENT OF LAND ADMINISTRATION



SCALE 1:1000

LEGEND

- Study Area
- Existing Dedicated Foreshore Reserve Boundary



THE COOMBE - MOSMAN PARK  
TOPOGRAPHICAL MAP  
FIGURE 3

BASE MAP SOURCE: DEPARTMENT OF LAND ADMINISTRATION

ALAN TINGAY & ASSOCIATES

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IMPORTANT GEOLOGICAL SITES IN THE PERTH  
AND SOUTHWESTERN AREA OF WESTERN AUSTRALIA  
A Report on their Scientific Significance  
and Future Protection.

by T. C. Lemmon  
R. D. Gee  
W. R. Morgan  
C. R. Elkington

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on request**



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October, 1979

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