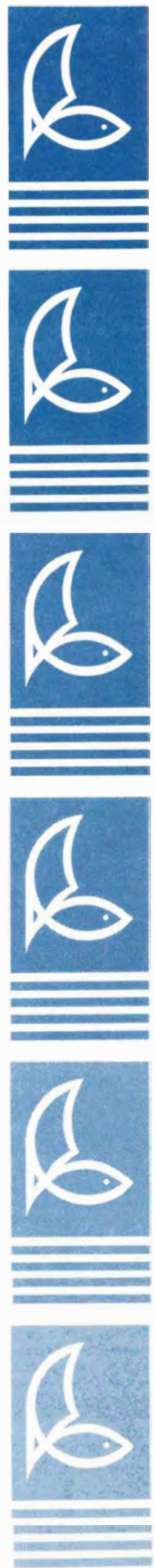


# SWAN RIVER TRUST

## Draft Freshwater Bay Management Plan



Swan River Trust  
Report No 16  
1994

# SWAN RIVER TRUST

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# **DRAFT FRESHWATER BAY MANAGEMENT PLAN**

Report to the Swan River Trust  
and the  
Claremont Heritage Trust Advisory  
Committee  
by **S Chape**

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# FOREWORD

Freshwater Bay is one of the most spectacular areas of the Swan River, including a large area of open water, sand spit, beaches, steep vegetated slopes and cliffs. The area has significant conservation, landscape and heritage values, but is subject to heavy pressure for residential, institutional and recreational use.

Public access around the foreshore is limited by the location of various developments, private property and steep slopes. The natural values are being degraded by the loss of natural vegetation, weed invasion, littering and erosion. In addition the heritage values are not well known to the community and not well appreciated.

This draft management plan outlines a strategy to improve public access, protect and enhance the environment, and interpret heritage values. In addition the draft plan considers the concerns of private property owners and seeks their cooperation in managing the environment.

# TERMS OF REFERENCE

In 1988 the government of Western Australia released the Swan River Management Strategy which was to become its policy for the Swan and Canning Rivers. The Strategy contained a number of recommendations suggesting that detailed management plans be prepared for particular sections of the foreshore, including Freshwater Bay.

The Swan River Trust has been systematically implementing these recommendations since 1989. In December 1992 the Claremont Heritage Trust Advisory Committee sought the Trust's assistance in the preparation of a management plan for the Town of Claremont foreshore, with particular reference to the heritage values of the area

This draft plan is available for public comment but has not been adopted by the Swan River Trust, Town of Claremont or the Claremont Heritage Trust Advisory Committee. After a public comment period a final plan will be prepared for consideration and adoption by these bodies.

# ACKNOWLEDGMENTS

## Contributors

Nicole Siemon, Consultant Biologist, Waterways Commission surveyed the vegetation in the study area and prepared the section on vegetation.

Barry Cribb, Manager-New Title Services, Department of Land Administration, provided the history of Reserve 24523.

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# 1. INTRODUCTION

This draft management plan has been prepared by the Waterways Commission in response to a request from Claremont Town Council to the Chairman of the Swan River Trust in December 1992. The request to assist the Council in preparing a management plan came specifically from its Claremont Heritage Trust Advisory Committee. This request was in turn based on the Committee's proposal in September 1991 to construct a Heritage Trail along the Freshwater Bay foreshore, as the area contains features/sites of major significance to Claremont's post- and pre-European settlement.

Landowners in the subject area (see Map 1) were contacted by the Swan River Trust in early 1992 and advised that preparatory work would be undertaken for the proposed Freshwater Bay Heritage Trail. The Claremont Town Council received a small grant from the Western Australian Heritage Council in May 1992 to assist in the development of the trail.

However, technical problems relating to the Department of Land Administration's re-survey of the foreshore reserve (Reserve 24523 - see Section 6 below) delayed development of the proposed Heritage Trail in 1992. Furthermore, the Minister for Lands also advised in 1992 that a management plan should be prepared for the reserve before work was commenced on the proposed Trail. This requirement was subsequently relayed to the Claremont Town Council, resulting in the Council's request for assistance from the Swan River Trust in the preparation of the plan.

Much of the subject area falls within the Swan River Trust Act management area and, as such, preparation of this management plan is in accordance with Part 3 of the Act. It is also in accordance with the *Swan River Management Strategy* recommendation that "management and development plans for river foreshore areas (be)...prepared in each municipality" (Government of Western Australia, 1988).

Preparation of this plan is also consistent with the Claremont Town Council's ongoing planning and management initiatives for its area of responsibility. For example, this management plan follows a previous report on the Claremont foreshore prepared for the Claremont Heritage Trust Advisory Committee by R. Bodycoat in 1989. It is also consistent with the preparation of the Lake Claremont Management Plan by the Lake Claremont Management Committee in 1992. The plan will be used by the Town of Claremont in conjunction with its Town Planning Scheme and associated policies. The Swan River Trust will use the plan in conjunction with the Management Strategy and policies.

# 2. AIMS AND OBJECTIVES

The aims of this management plan are: to develop a strategy and specific recommendations for the protection and enhancement of the environmental and conservation values of the study area; and to provide an agreed basis for the environmental management and appropriate development of the Town of Claremont foreshore, with the following specific objectives:

1. Protect and enhance the values of the public land contained within the study area.
2. Provide for appropriate levels of public access to and within areas of public land/foreshore consistent with the capability of the resource and the external factors (eg, tenure) affecting given locations within the public land/foreshore.
3. Protect the rights of private landowners adjacent to public land/foreshore.
4. Identify the natural and cultural values of the study area and propose options for the location of a future Heritage Trail.

5. Review the mechanisms currently in place which control the use/development of land affecting the foreshore within the study area and recommend appropriate application of those mechanisms to protect the environmental and cultural values of the study area.
6. Identify the basis for a cooperative community approach to the long term management and enhancement of the values of the Claremont foreshore.

### 3. STUDY AREA

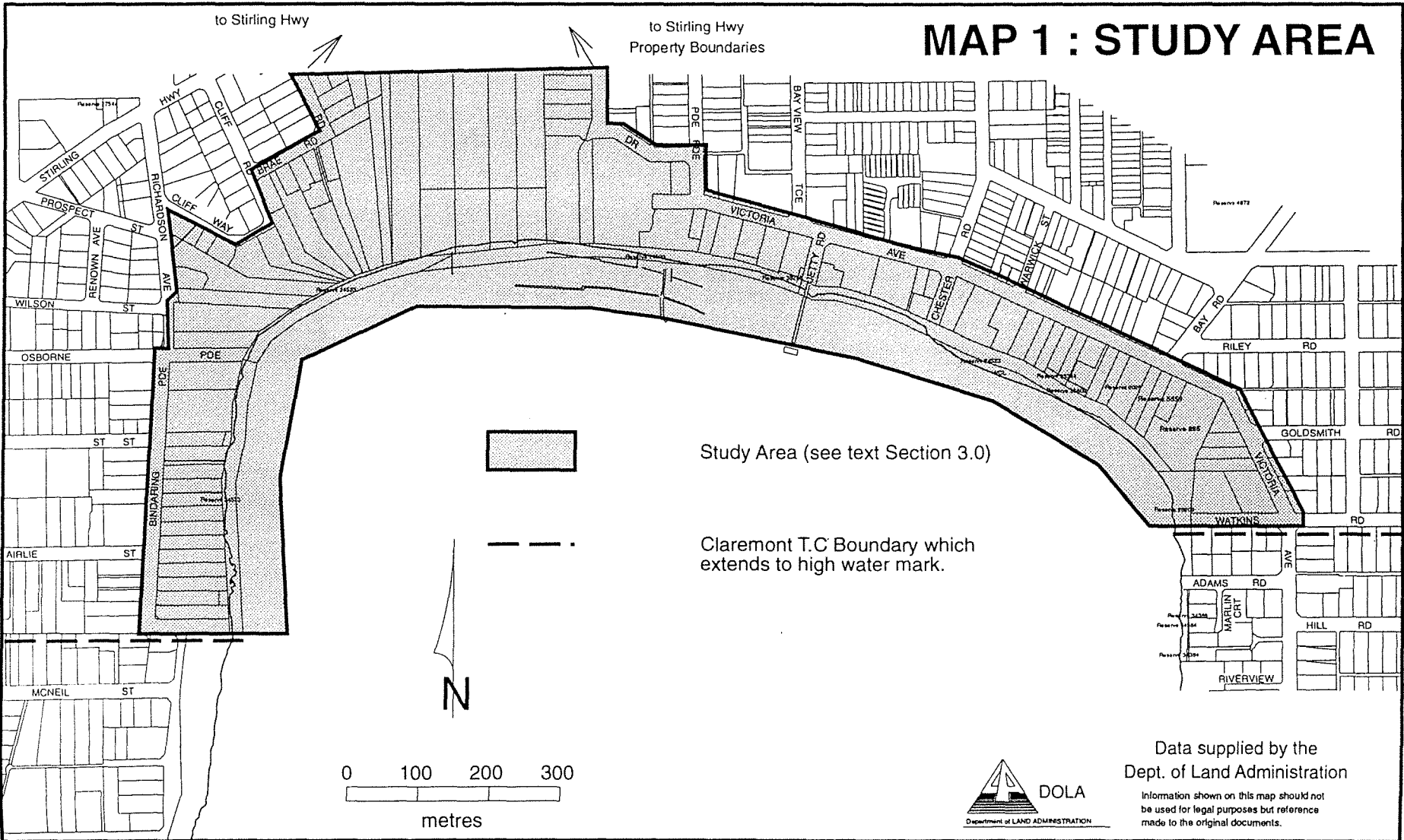
The study area (see Map 1) lies at the northern end of Freshwater Bay within the boundaries of the Town of Claremont, from Watkins Road on the eastern side of the bay (border with the City of Nedlands) to Bindaring Parade on the western side (Shire of Peppermint Grove). The length of the foreshore is approximately 1.7 kilometres. The inland boundaries of the study area are defined by Victoria Avenue, Queenslea Drive, Stirling Highway, Corry Lyn Road, Brae Road, Cliff Road/Way, Richardson Avenue and Bindaring Parade. (Although the focus of the plan is on the foreshore proper, the boundaries of affected properties and reserves is defined by these roads). The intent of the plan is to concentrate on State owned land in the study area. However many of the cliff faces and slopes are in private ownership and it is hoped that agreements can be negotiated to enable the conservation of natural values on private land. Such cooperative agreements can be established in accordance with Section 1-1 of the Swan River Trust Act and do not require the acquisition of private property.

The area contains seven Crown reserves (see Table 1 and Map 3) and 70 freehold lots with mixed residential and institutional uses. In the latter case, a considerable proportion of the study area is comprised of land owned by Christ Church Grammar School, Methodist Ladies College and Bethesda Hospital.

**Table 1: Crown reserves in study area**

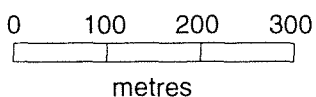
RESERVE (AREA)	DATE	PURPOSE (CLASS)	VESTED
24523 (3.5 Ha.)	1956	Recreation (C)	Claremont T.C..
5659 (139m)	1899	Museum Site & Cultural Centre (B)	Claremont T.C.
885 (7891m)	1899	Picnic Ground (A)	Claremont T.C. (wpl 21 years)
2025 (2974m)	1892	Recreation (A)	Claremont T.C .
35609 (301m)	1978	Public Recreation(C)	Claremont T.C.
25344 (266m)	1959	Recreation (C)	Claremont T.C.
39246 (159m)	1985	Public Recreation(C)	Claremont T.C.

# MAP 1 : STUDY AREA



Study Area (see text Section 3.0)

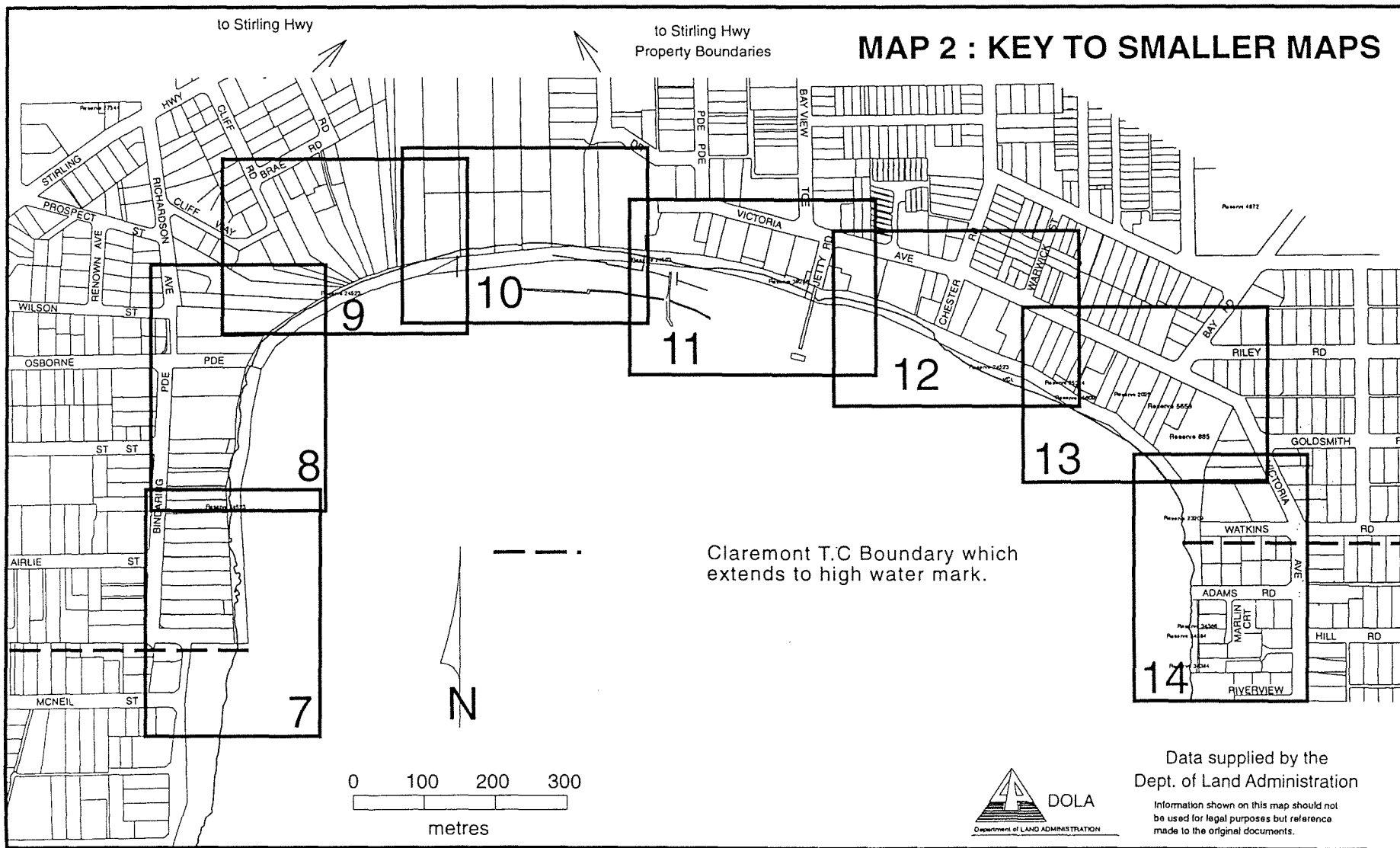
Claremont T.C Boundary which extends to high water mark.



Data supplied by the Dept. of Land Administration

Information shown on this map should not be used for legal purposes but reference made to the original documents.

## MAP 2 : KEY TO SMALLER MAPS



## 4. NATURAL ENVIRONMENT

### 4.1 Geomorphology and soils

Topographically, the study area ranges from relatively gently sloping terrain in the eastern portion of the bay (where contours rise to 5-10 metres from high water mark [HWM]) to the steeper terrain west and south of the Claremont Yacht Club. In this cliffed, steep section the foreshore rises up to 45 m before levelling out. With one exception (Lot 98) the escarpment defines the edge of major residential and institutional structural development. However, between HWM and the 5-10m contour lines immediately west of the Claremont Yacht Club, the slopes are quite moderate, before rising steeply to the cliff top. It is possible that the 'levelling out' has been artificially created by quarrying in the mid-1800s. A work program for convict labour in the 1850s refers to quarrying of the Freshwater Bay cliffs to obtain limestone for road construction (S. Hasluck, Claremont Museum, pers. comm.).

With respect to geology, the study area falls within the Pleistocene Coastal Limestone Formation, which is "...predominantly a cemented dune sand (aeolianite) consisting of calcareous shell fragments and quartz grains cemented in calcium carbonate..." (Seddon, 1971). Overlying this formation are the Cottesloe and Karrakatta Soil Formations, shallow and deep yellow-brown sands respectively. The former occur (approximately) in the study area south of the Cliff Way/Richardson Avenue intersection and the latter to the east. Steep limestone cliffs dominate the landscape in the western sector of the study area, adjacent to Richardson Road/Bindaring Parade. Periodically sections of the cliff face collapse as a consequence of natural erosion processes. These processes have added debris to the rocky shoreline in this area, increasing the difficulty for (or adding interest to) traversing the public foreshore.

A notable feature of the foreshore in the study area, at least historically, was the existence of freshwater springs at the base of the cliffs. The 'Swan River Chart' prepared by the *HMS Beagle* in 1841 (Battye Ref. 766c) refers to "freshwater oozing through the sand" in this area (See Map 3). Photographs taken early this century show a number of wind pumps along the shoreline on the western side of the bay, presumably to exploit the freshwater resource. The springs are now less apparent, probably due to the intensive and extensive exploitation of groundwater resources over the past decades.

### 4.2 Vegetation

The foreshore vegetation in the eastern sector of the study area, from the Museum to the Claremont Yacht Club, consists almost entirely of introduced grasses as ground cover, except for occasional patches of rushes on the shoreline. Other than exotic palms which have been planted on the foreshore, landscape tree planting consists of Western Australian peppermints (*Agonis flexuosa*) on the Council reserves between the foreshore and Victoria Avenue.

The steep limestone and sandy slopes on the western side of Freshwater Bay are visually dominated by native vegetation. However, there is a high proportion of introduced species. Some species present are common garden plants, which have probably extended their distribution through disposal of cuttings over the cliff and/or have been planted by local landowners.

Generally the vegetation in this area has been significantly disturbed by development and cultivation activities. A review of historic photographs of the study area indicates a significant decline not only in the original, endemic vegetation but also in the gardens established by the early European landowners as part of their property development. These were, in a landscape sense, far superior to the currently existing gardens and derelict, exotic dominated sections of foreshore.

### 4.2.1 Fringing vegetation

Occasional trees are present on the shoreline. There is a single dense stand dominated by saltwater sheoak (*Allocasuarina obesa*) and Rottneest Cypress (*Callitris preissii*) with both of these species more frequently occurring as isolated individuals. Flooded gum (*Eucalyptus rudis*) and marri (*E. calophylla*) are present in varying densities along the foreshore. Occasional basket bush (*Spyridium globulosum*) and Western Australian peppermint (*Agonis flexuosa*) are present along the foreshore. There is a high proportion of introduced tree and shrub species including Japanese pepper (*Schinus terebinthifolius*), poplars (*Populus* sp.), plane trees (*Planatus ericifolia*) and castor oil trees (*Ricinus communis*).

The understorey vegetation is restricted to a narrow fringe. Shore-rush (*Juncus kraussii*) occurs occasionally on the narrow sandy and rocky shoreline. The native thistle (*Chenopodium glaucum*) and creeping brookwood (*Samolus repens*) co-occur, usually in a matrix of salt water couch (*Paspalum distichum*) and buffalo grass (*Stenostaphrum secundatum*). Knotted club rush (*Isolepis nodosa*) occurs intermittently.

Among the more obvious components of the vegetation is bamboo (*Bambusa* sp.). Bamboo occurs in several dense homogeneous stands along the foreshore, with areas dominated by this species extending up to 100 m. False caper (*Euphorbia terracina*) is present in low numbers. Bridal creeper (*Myrsiphyllum asparagoides*) is widely distributed. Other prevalent weeds lining the foreshore include clovers (*Trifolium* sp.), common sow thistle (*Sonchus oleraceus*) with wild oats (*Avena barbata* and *A. fatua*) and cat's tails (*Rostraria cristata*) present above the high water mark. A variety of members of the Asteraceae (daisy family) are common close to HWM.

### 4.2.2 Sandy rise vegetation

The sandy rise landform supports a matrix of open-closed woodlands, dense scrub and open grasslands.

The dominant overstorey species in the woodlands include tuart, marri and flooded gum, and Rottneest Cypress. There is considerable variation in the relative and total densities of these species. There are two areas planted with pines (*Pinus* sp.).

Common native shrub species include Cockie's tongue (*Templetonia retusa*), parrot bush (*Dryandra sessilis*), basket bush (*Spyridium globulosum*), wattles, including red-eyed (*Acacia cyclops*), summer-scented (*A. rostellifera*) and golden-wreath wattle (*A. saligna*), and the wattle-related albizia (*Paraserianthes lophanta*). These species generally occur either in dense stands or as isolated individuals. The native shrub *Alyxia buxifolia* is prevalent throughout the sandy rises. Other native species present in low numbers are berry goat bush (*Rhagodia baccata*), blackboys (*Xanthorrhoea preissii*) and chenille honey myrtle (*Melaleuca huegleyi*).

Geraldton wax (*Chamelaucium uncinatum*), a species not endemic to the Perth region, is prolific in a restricted area. There is a large African boxthorn (*Lycium ferocissimum*) close to the Devil's Elbow.

Few native understorey species are present. The coastal sword sedge (*Lepidosperma gladiatum*) is prevalent in some areas, and patchy in others. A variety of grasses forms a matrix with the coastal sword sedge in some areas. The native creeper *Hovea* sp. occurs intermittently. Kangaroo sedge (*Themeda triandra*) is also present although it has a restricted distribution. *Zamia* palms (*Macrozamia riedlei*) occur on slight gradients.

Common weed species within this vegetation type include clovers, *Watsonia* sp., perennial veldt grass (*Erharta calycina*), African lovegrass (*Eragrostis curvula*), haretail grass (*Lagurus ovatus*), and wild oats. Bridle creeper is prevalent. Broad leaf dock (*Rumex obtusifolius*) is scattered throughout.

The bulbous species known as African cornflag (*Chasmante aethiopica*) is prolific in the vicinity of Lot 10 and adjacent to the school. Nasturtiums (*Tropaeolum majus*) are present near the patches of bamboo. The succulent *Agave* sp. is widely distributed in the vicinity of the MLC boat shed, and it is rapidly extending west.



### **4.2.3 Limestone cliff vegetation**

The limestone slopes support stands of Rottnest Cypress, with occasional tuart present on deeper soils, with marri, flooded gum and saltwater sheoak more common closer to the river.

Higher areas of this limestone ridge support a dense heath of parrot bush, a variety of *Melaleuca* spp., cockie's tongues, *Alyxia buxifolia* and basket bush. The lower, protected areas of deep soil have more luxuriant growth of the same species. Occasional *Acacia* including red-eyed and summer-scented wattles are present.

Where the cliffs are close to the water, there are occasional castor oil trees and Japanese pepper. A small group of domestic fig trees (*Ficus* sp) occurs on the rocky shoreline near the southern boundary of the study area.

The understorey is dominated by a matrix of introduced monocot species, with interspersed bulbous herbs and small shrubs. Buffalo grass, clovers, dandelions (*Taraxacum officinale*), common sow thistle and some kikuyu occur along these slopes and cliffs. Areas with dense shrub cover support few, if any, understorey species.

Nasturtiums become increasingly prevalent towards the top of the steep slopes.

### **4.2.4 Common weeds**

A number of grass species, creepers, shrub and tree species occur consistently throughout the study area, whilst others grow in restricted areas.

## 5. HISTORY AND HERITAGE

Prior to, and during the early years of, European occupation of Western Australia the Freshwater Bay area was inhabited by Aboriginal people. Unfortunately, very little remains of their presence and even place names have been replaced by European nomenclature. Only *Karrakatta*, the name for the sand bar in Freshwater Bay, has been adopted for use, although not for its original location. Other site names which have been recorded include: *Curveergaroup*, the cliffed area surrounding the northwestern corner of the bay; and *Minderup*, the bay itself (S. Hasluck, pers. comm.). The vicinity of the old Osborne Steps was known as *Karbomunup*, referred to by Daisy Bates as a site for corroborees (artefacts have been found there), and the rocky shore a place of legends (Friends of the Claremont Museum, 1988). The extent of the historic Aboriginal presence is indicated in the recollections of Jess Hammond in 1934 (Battye Ref. 002 8003/7-23) when he refers to 10 Aboriginal people for every European in the 1860s. Before development of the proposed Heritage Trail is finalised research should be undertaken to obtain as much relevant information as possible on the Aboriginal occupation and use of the study area, which in turn can be incorporated into interpretative material and sites prepared for the trail.

Considerable information is available on the European historic values and sites of the study area, much of it due to the efforts of the Claremont Museum and its supporters. It is not intended to reproduce this information here, although major sites and features are indicated on Table 2 and Map 2. It is important to recognise that the foreshore and adjacent areas have high historic conservation value in terms of the development of Claremont (Perth's first suburb) in the 1860s and Perth itself. Many of these values (either physical structures or sites) are accessible or visible from the foreshore, justifying the proposal to establish a Heritage Trail and highlighting the value of the public reserves - in particular Reserve 24523. Furthermore, in many respects the foreshore appears to have been better managed and developed in 'historic' times (up until the early decades of this century). Although it is not desirable, let alone economically feasible, to recreate the number of jetties and other structures which once dominated the bay; other features, such as the European gardens associated with historic homes/sites, native vegetation and the Osborne Steps should be considered for restoration as part of ongoing foreshore management and development of the proposed Heritage Trail.

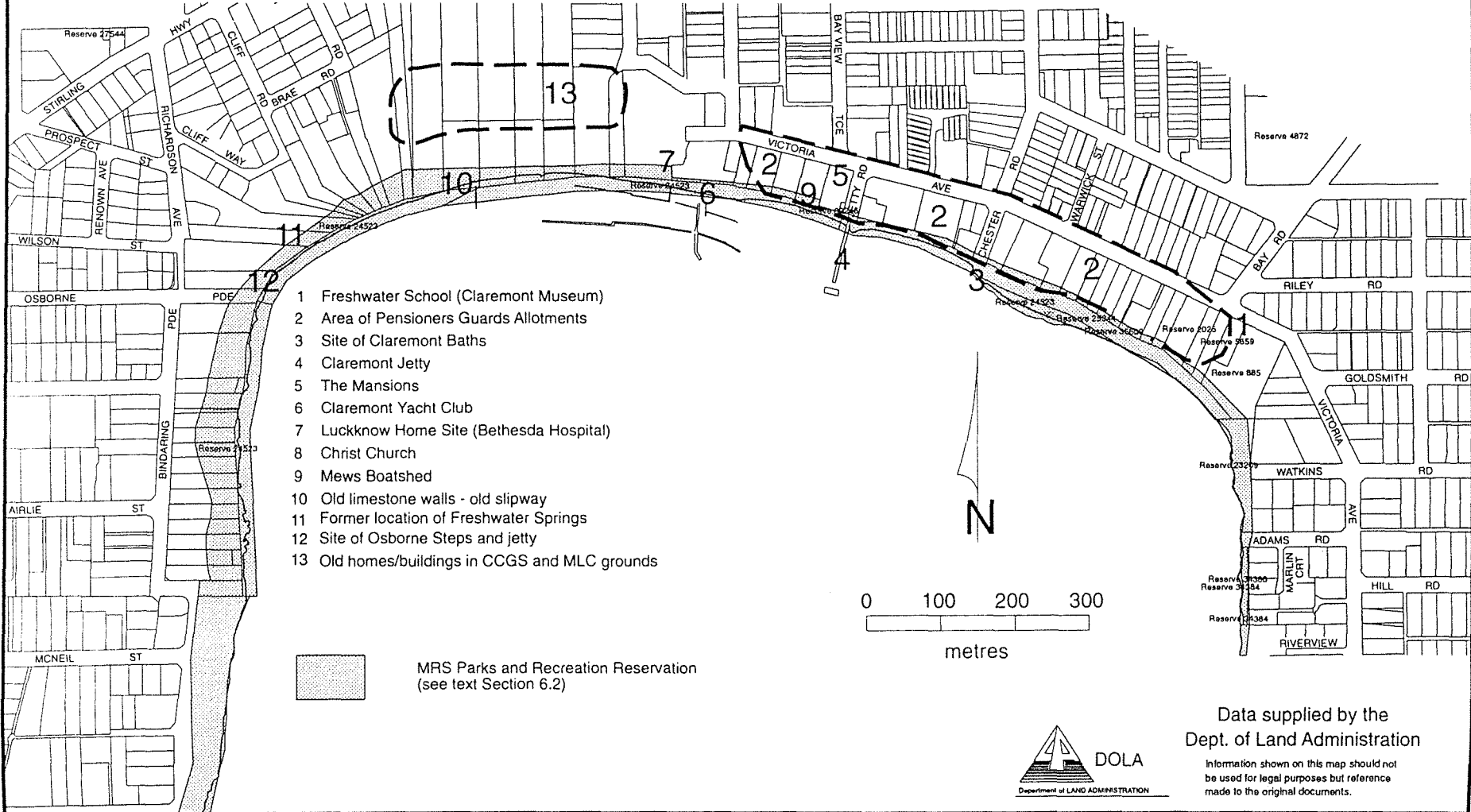
**Table 2: European historic sites/features**

SITE	ORIGINAL PURPOSE
Claremont Museum	Freshwater Bay School 1862
Residential Lots, Victoria Avenue	Site of homes of 'pensioner guards' 1850s
End of Chester Road	Site of Claremont Baths
Bayview Mansions, Victoria Avenue	"The Mansions' 1898
Claremont Jetty	Claremont Jetty 1898
Mews Boatshed, foreshore near CYC	Mews Boatshed
Claremont Yacht Club	Claremont Yacht Club 1905
Bethesda Hospital	'Lucknow'-home of Colonial Secretary 1883
Christ Church	Christ Church 1893
Christ Church Grammar School and MLC	Old homes/buildings c.1908-20s
MLC foreshore, limestone walls	Old slipway c.1900-30s
Osborne Parade	Steps, jetty, changing rooms c.1898-1930s

# MAP 3 : EUROPEAN HISTORIC SITES

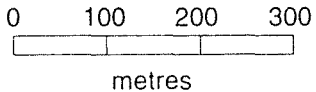
8

6



- 1 Freshwater School (Claremont Museum)
- 2 Area of Pensioners Guards Allotments
- 3 Site of Claremont Baths
- 4 Claremont Jetty
- 5 The Mansions
- 6 Claremont Yacht Club
- 7 Luckknow Home Site (Bethesda Hospital)
- 8 Christ Church
- 9 Mews Boatshed
- 10 Old limestone walls - old slipway
- 11 Former location of Freshwater Springs
- 12 Site of Osborne Steps and jetty
- 13 Old homes/buildings in CCGS and MLC grounds

MRS Parks and Recreation Reservation (see text Section 6.2)



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be used for legal purposes but reference  
made to the original documents.

## 6. RESOURCE USE

### 6.1 History of Reserve 24523

Perth is fortunate in having extensive areas of the Swan-Canning Rivers foreshore in public ownership/reservation. However, in many locations the proximity of freehold title prevents or makes public access difficult and the foreshore continues to be a desirable commodity for competing recreation demands, and residential and commercial development. Although a Parks and Recreation Reservation under the Metropolitan Region Scheme is in place throughout the metropolitan region, its presence does not guarantee access for the public where the reserved land is still in private ownership. Fortunately this is not the situation in the present study area.

Fundamental to any management planning of the Freshwater Bay study area is an understanding of the importance and history of Reserve 24523 (Recreation) - the 'foreshore' reserve. Although the other reserves in the study area (see Map 3 and Table 1) play a very important role in providing for public access and recreation at specific locations, it is Reserve 24523 which can potentially provide for lateral access along almost the entire length of the Claremont foreshore. However, despite the opportunities provided by the existence of the reserve, its surveyed location along the HWM presents some difficulties in planning for the long term use and management of the foreshore.

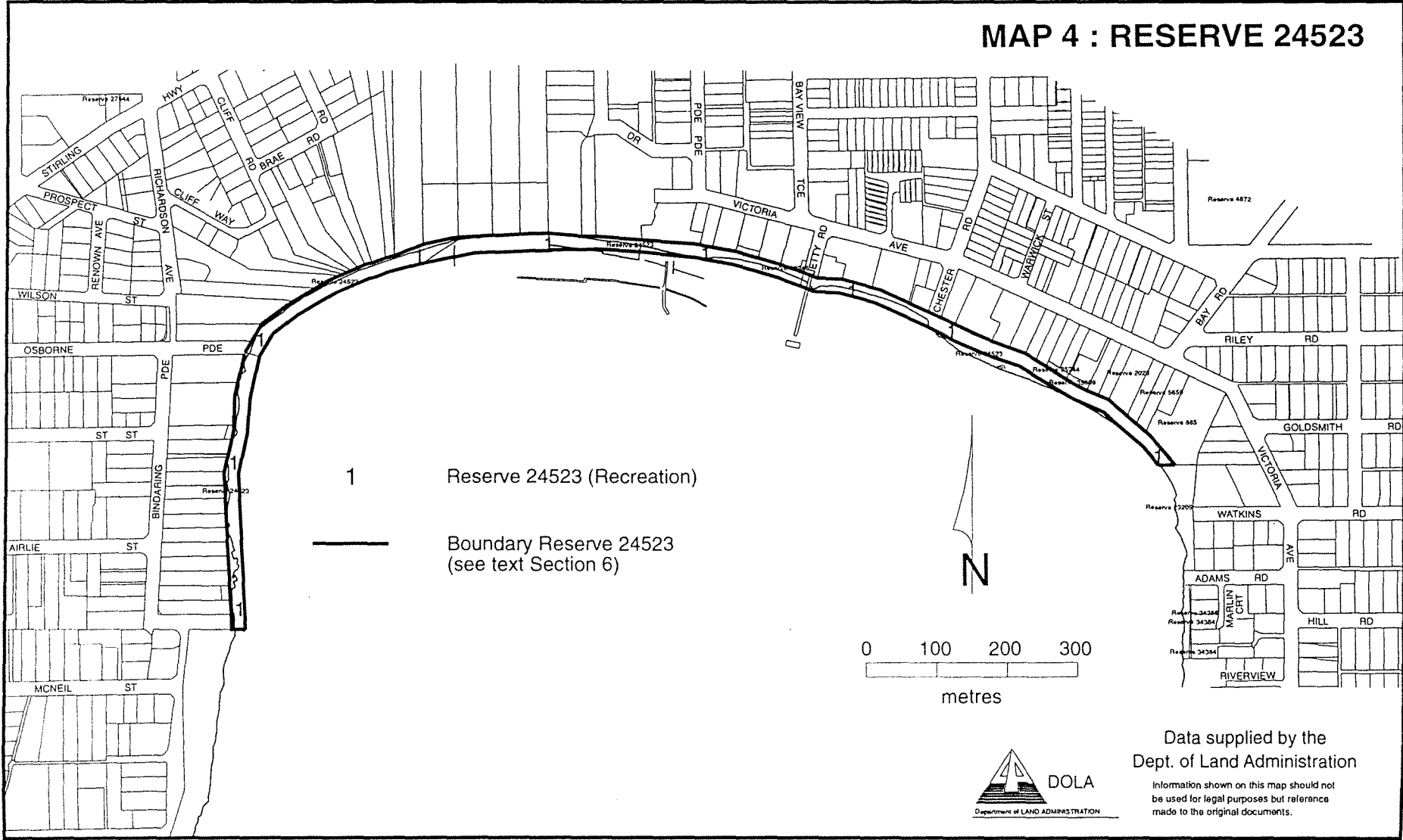
The location of the current reserve is a consequence of its original purpose. In 1912 the *Melville Water and Freshwater Bay Road Act (No. 62)* was promulgated to "authorise the construction of a road on the shore of Melville Water and Freshwater Bay". It was proposed to construct a road one chain wide and "for such purpose to reclaim the land below high water mark, and, so far as may be necessary, to remove all jetties and other structures there-from". Section 4 of the Act stated that: "No compensation shall be payable to any person in respect of any injury sustained, or right lost or prejudiced, through the operation of this Act or the exercise of any power thereby conferred".

Although the 'land' was vested in the Crown in 1912, the survey that fixed the major part of the landward boundary as required under that Act was not effected until 1952. This followed a series of requests from the (then) Municipality of Claremont for more effective control of the foreshore. To achieve that control, that portion of the 'road' within the Town of Claremont was declared as Reserve 24523 - with the required legal links to the Act No. 62 of 1912. The reserve was gazetted in 1956 as Class 'C' for the purpose of 'Recreation', until the land was required for the purpose of a road in accordance with Act No. 62.

However, history has subsequently determined that the road was not required and Act No. 62 of 1912 was repealed in 1966 by the Swan River Conservation Act. It should be noted that all action carried out lawfully prior to its repeal remains in force, including the establishment of Reserve 24523. Due to uncertainties regarding the location of the 1952 survey landward boundary of the reserve, the Department of Land Administration has recently carried out a re-survey to provide for clear surveyed definition, and planning and management of the reserve. The original titles of properties along this section of the river indicate show the boundaries as being the river edge. That is, fixed to the movement of the shoreline. However, this was changed when the 1952 survey was undertaken - even though it was not amended on the original titles. DLA has recently written to landowners whose properties abut the reserve advising them that the resurvey would be undertaken and titles amended to reflect the existence of the reserve. (K. McCrackan, DLA, pers. comm.).

Since the original intention of the 1912 Act was to reclaim below HWM to construct the road (similar to Mounts Bay Road), much of the reserve west of Chester Road lies below HWM. While this may have been acceptable in the context of the original purpose for reservation, it presents some problems with respect to public access in the context of the reserve's current designation of 'Recreation'. This is most apparent in those sections of the reserve where access across public 'land' is only possible during low tide. In order to provide for reasonable public use of the reserve alternative options will have to be examined, in conjunction with the implications of the MRS Parks and Recreation Reservation.

# MAP 4 : RESERVE 24523



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be used for legal purposes but reference  
made to the original documents.

## 6.2 MRS Parks and Recreation Reservation

The Parks and Recreation (P & R) Reservation (see Map 3) has been one of the key components of the Metropolitan Region Scheme (MRS) since the Scheme's inception in 1963, which in turn was based on the *Stephenson-Hepburn Plan* of 1955. Although the MRS was reviewed in 1987 and 1990 the objectives of the P & R Reservation have been maintained and implemented. Since 1963 approximately 14,000 hectares of land have been publicly acquired for the region. The Government's most recent review of the MRS, *Metroplan - A Planning Strategy for the Perth Metropolitan Region* (Department of Planning and Urban Development, 1990), reinforces the value of not only implementing the Region Open Space system based on the P & R Reservation proposed in the 1963 MRS but also using other non-acquisitive mechanisms for protecting important natural conservation and landscape resources. The strategy recognises that land acquisition is costly and funds are limited.

In presenting a Region Open Space Concept Plan, *Metroplan* identifies three principles:

- "the enlargement, consolidation and development of Parks and Recreation reservations into a series of Regional Parks of structural, recreational and environmental importance
- the interlinking of Regional Parks by other public and private open space as well as footpaths, bridle paths and water courses, to provide for public access and passive recreation;
- the protection of regional landscapes and important environmental areas, which are not included in Regional Parks and where full public access is not required, by appropriate zoning controls." (p.82)

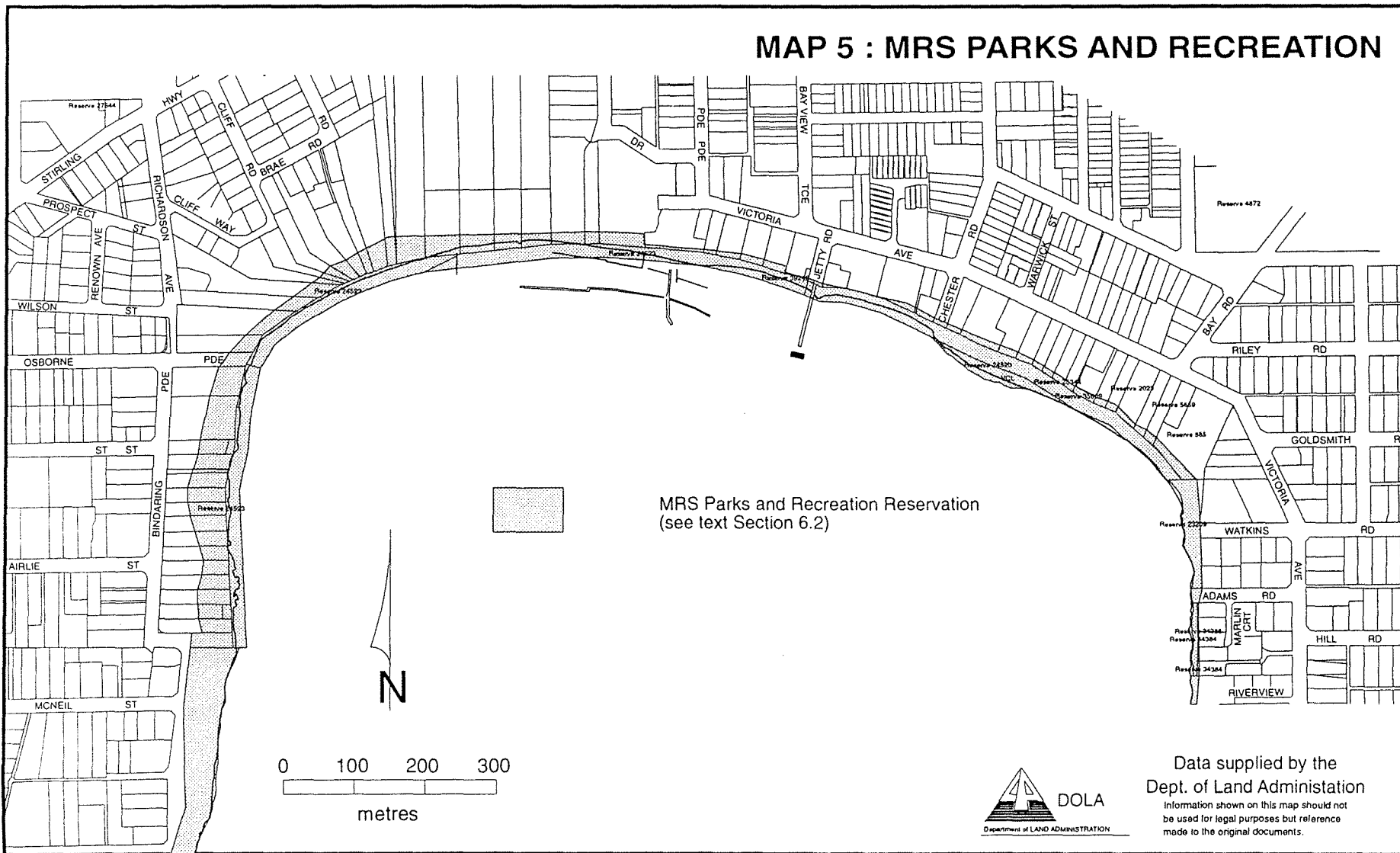
The bold text indicates the aspects of these principles which have direct relevance to planning for the use and management of the study area, in particular the role of non-public resources in the provision of public access and landscape protection. *Metroplan* also states that "the Swan River Trust Management Area performs the function of a Regional Park for both the Swan and Canning foreshores" (p.83). This highlights the need for an integrated approach to management planning, and identification of suitable mechanisms to provide for appropriate levels of public use and access which are consistent and applicable throughout the region.

Within the study area the landward boundary of the P & R Reservation varies considerably, from 10 metres in the vicinity of Jetty Road to a maximum of approximately 60 metres adjacent to Bindaring Parade. It is clear that the reservation boundary is in an inappropriate location, for different reasons, in many parts of the study area. For example, in some locations the boundary passes through existing developments while in other areas the reservation fails to include features which would be appropriate, in particular all of the vegetated steep slopes (that is, up to the ridge crest) adjacent to the Richardson Avenue/Brae Road sector.

As part of a review of the Swan River Trust Management Area (which includes the P & R Reservation) the Swan River Trust is currently examining the appropriateness of the existing reservation boundary within, and adjacent to, the study area. The focus is on effective long term management planning, taking into account existing development, protecting vegetation and public access. The outcome of this review is likely to be a recommendation to the State Planning Commission to amend the MRS P & R Reservation boundary, in the areas being examined, to better reflect both the realities of existing development and to achieve the objectives of the reservation (public recreation/access, landscape protection, environmental conservation and management).

One of the issues that will be included in the current review (which is taking place concurrent with the preparation of this management plan) is the question of acquisition of the P & R Reservation. The original intent of the reservation was to acquire the designated land for public benefit through: negotiated purchase from the landowner; cession under Section 20A of the *Town Planning and Development Act (1928)* as a condition of subdivision; or resumption. While acquisition is still a preferable mechanism for protecting and managing reserved land in many locations throughout the metropolitan area, in the case of the extensive foreshore P & R Reservation along the Swan River the economic reality is such that acquisition through purchase is unlikely in the foreseeable future. However, this does not mean that the reservation should be devalued in terms of its objectives and opportunities.

# MAP 5 : MRS PARKS AND RECREATION



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Data supplied by the  
 Dept. of Land Administration  
 Information shown on this map should not  
 be used for legal purposes but reference  
 made to the original documents.



Rather it highlights the need to explore other mechanisms for protection and control, in conjunction with the existing statutory controls provided by Clause 30A of the *Metropolitan Region Town Planning Scheme Act (1959)* and Part 5 of the *Swan River Trust Act (1988)*. Such mechanisms include ceding of affected land by landowners to the SPC/SRT and leasing back on a 'peppercorn' rental arrangement.

### **6.3 Swan River Trust - agreements with private landowners**

Section 7 of the *Swan River Trust Act (1988)* empowers the Trust, with the approval of the Minister, to:

- "enter into and give effect to an agreement with the owner, lessee or licensee of any land -
- for the control or management of that land as if it were part of the management area; and
- for the purpose of obtaining rights of access and other rights necessary for the protection and public use of land and waters in the management area".

In view of the current freehold status of the P & R Reservation in the study area and access difficulties associated with the location of Reserve 24523, the Trust's ability to enter into agreements with private landowners is a valid option for ensuring appropriate public access within the foreshore. However, such agreements (which must be in writing) depend entirely on the goodwill and cooperation of the landowners in recognising the validity of public interests.

### **6.4 Existing and proposed developments**

As Perth's oldest suburb development in Claremont is well established. However, high land values in the study area associated with the river front location have resulted in continuing residential redevelopment of the area in recent years, including multiple occupancy and subdivision of old, large blocks. Most of this development west of the schools is confined to the ridge top above the steep cliffs. Two properties, Lot 2 Brae Road and Lot 3 Bindaring Parade, have constructed boat sheds on the foreshore adjacent to the boundary of Reserve 24523. On the less steep section of the study area east of Claremont Yacht Club, residential development comes to within a few metres of the shoreline and some of the properties have boat sheds/shelters with access across the reserve.

Institutional (re)development has also continued. Bethesda Hospital, which has 65 metres of foreshore frontage immediately west of the Claremont Yacht Club, has undergone substantial redevelopment in recent years. The hospital is currently planning to landscape the slopes between its new buildings and the foreshore, with the aim of recreating the terraced gardens which existed at the time of the historic 'Lucknow' home. The Hospital administration wishes to provide pleasant landscaped grounds for the use of its patients and staff (B. Thompson, Administrator, pers. comm.). For some years the Claremont Yacht Club (CYC) leased a small area next to its existing carpark from the Hospital, to provide for additional parking and storage space. Although the lease has expired CYC wishes to continue using the area, and to expand the site to include a more effective overflow carpark and barbecue area. The Hospital has expressed some concern regarding the use and management of the current area, but it is considering the proposal - under strict management conditions. If the development proceeds it will have implications for public access along this section of foreshore, access which is already compromised by the CYC carpark and slipway. CYC is currently proposing to dredge its inner moorings, which are too shallow.

The other major institutional landowners are the Christ Church Grammar School (CCGS) and Methodist Ladies College (MLC), which together own approximately 320 metres of foreshore frontage. CCGS is considering the construction of a new boat shed, possibly in conjunction with MLC (V. Evans, Bursar, pers. comm.). CCGS already has a large boat shed and pontoon



on the foreshore. MLC is preparing to undertake redevelopment of its property including the foreshore, where it would like to focus on environmental and heritage values (A. Willis, Business Administrator, pers. comm.). The two schools and the Hospital together own a substantial section of the foreshore in which legal public access is difficult, yet it is this part of the study area foreshore (from CYC to the Peppermint Grove Boundary) which has the potential to provide for an environmental component of the proposed Heritage Trail.

Two important, existing public developments are the Claremont Museum and the Claremont Jetty. Both provide a focus for public use of the study area, one in an historical/educational context and the other recreational. The Museum and the jetty can potentially increase their values to the public with the development of the proposed Heritage Trail.

## 6.5 Recreational use

Recreational activities focussed on the river have been a feature of Freshwater Bay for more than 100 years. In many respects the potential infrastructure for recreational activities is considerably less today than it was in the latter part of the 19th century and the early decades of this century. The northern shoreline of the bay contained a number of private and public jetties and baths (see Figure 1). Even the Osborne Steps connected with a jetty (Figure 2) and, further along the shoreline, the nuns from Loreto Convent had their own change rooms. While the number of jetties was a consequence of the continuing importance of the river for transportation at the time, it is clear that private landowners and the public in general valued the river and its foreshore for recreational pursuits.

The study area has undoubtedly maintained, and perhaps enhanced, its recreational value. However, it is uncertain whether public resources are as accessible as they may have once been. The presence of Reserve 24523 guarantees public access along the foreshore but, legally, access is restricted to low tide conditions where the reserve is below mean HWM. One public jetty exists to provide for recreational fishing, fortunately rebuilt in 1991 following its closure and demolition. Access for the disabled and infirm is not available along the foreshore, or onto the foreshore from Reserves 2025 and 885 on Victoria Avenue, despite the high value of these reserves as recreational and landscape features. The river is probably perceived today as less of a swimming resource than it was in historical times, when public swimming baths were an important feature of the river. The Claremont Yacht Club (established in 1905) is an important recreational feature of the study area, providing its members with sailing, mooring, slipway and social facilities. Yet the club, by its very nature (specific activity and paid membership) is a locationally restricting feature in the sense that it places constraints on public access to, and within the foreshore. For example, the CYC carpark has been allowed to be built on Reserve 24523, constraining (both physically and perceptually) public access along the foreshore. Claremont Town Council occasionally receives complaints from the public about being prevented from accessing the CYC foreshore (R. Brooks, CTC, pers. comm.).

Nevertheless, the study area continues to be an important recreational resource for aquatic and shoreline based activities; including boating, water skiing, fishing, walking and swimming. The importance of walking in today's health conscious society, continuing interest by the public in historical sites, features and issues, and awareness of the needs and rights of the disabled are elements which should be brought together in the development of the proposed Heritage Trail to further improve the recreational use of the study area.

As stated above, private landowners gain boating access to the river directly from their properties along the Victoria Avenue section of the foreshore, while two landowners on the steep western side of the bay have built boat sheds on the foreshore. The parking and launching of boats on the reserve along the Victoria Avenue section is a potential conflict with the construction and use of an effective walking trail along this part of the foreshore. Similarly, members of the public are occasionally launching and retrieving small boats from the end of Chester Road. Swan River Trust Regulation 7 prohibits the launching of boats from trailers into the waters of the river, except at permitted launching places.

Swan River gazetted Water Ski Area 7 is located in the western sector of Freshwater Bay, southwards from Osborne Parade. Users are restricted to gazetted areas on weekends and public holidays, but can use other areas not subject to speed controls at other times.



## 7. ROLE OF RELEVANT AUTHORITIES

The study area is subject to the control of the Claremont Town Council, a large number of Government authorities and organisations, as well as the interest of non-government organisations and public groups. Following is a summary of the roles of those which are most relevant to the management plan:

### 7.1 Claremont Town Council

The Council is responsible for local planning and development control outside the Swan River Trust management area, provision of recreational facilities, and day-to-day maintenance and management of foreshore reserves in the management area. Under the Swan River Trust Act Local Government Authorities (LGAs) have a vital role in the provision of advice to the Trust concerning the preparation of management programs and development proposals, and as partners in any joint agreement. LGAs are entitled to send a representative with voting rights to Trust meetings when it is considering any matter which may affect that LGA.

As a LGA, Claremont Town Council must prepare a detailed town planning scheme consistent with the proposals shown in the Metropolitan Region Scheme. The Claremont Town Planning Scheme (TPS) affects the study area by the application of specific by-laws under the *Local Government Act (1960)*. The first, By-law 132, relates to a building set-back line along the Town foreshore. The by-law, which was gazetted in 1962, stipulates a 30 feet (9.1 metres) building set-back inland from the HWM, and that no building or part of a building will be erected between the building line and the HWM. The TPS further states that:

"council may permit the relevant set-back distance for a building on a lot to be calculated from the boundary of that lot with the foreshore reserve if the Council is satisfied that the development is so designed and sited that:

- ~ public access to the foreshore reserve will not be inhibited; and
- ~ that part of the foreshore reserve abutting on the land to be developed will not have the appearance of being part of that land."(p.38)

Although the set-back line has been gazetted for the entire municipal foreshore, in reality it has most effectively been applied to the developed foreshore fronting Victoria Avenue. That is, from the Claremont Yacht Club to Watkins Road. The physical constraints to building imposed by the steep slopes west of CYC, and the existence of the Club prior to gazettal, mean that the by-law has not yet been applied to that section of foreshore. However, the boat sheds which have been constructed on the foreshore would constitute 'buildings'. Although the gazetted notice refers to HWM, the actual plan (Plan 180) attached as a schedule to the by-law shows the building line abutting Reserve 24523.

The second by-law which affects the study area is By-law 123, which imposes building height restrictions on those properties west of CYC to the Town boundary. The by-law was first gazetted in 1969, then amended in 1975. Plans attached as schedules to the gazettal show the extent of the area affected by the restrictions, and include all of the steeply sloping escarpment between the ridge crest and the shoreline. The by-law states that:

"...the distance from the underside of any part of the footings of a building to the top of the building immediately above such part shall not exceed 2.4 metres and no part of a building shall be more than 1.8 metres above the natural surface of the land immediately beneath such part".

The TPS goes further and specifies that any part of a building should not be more than one metre above ground level. If applied, these controls effectively prevent any substantial construction on the escarpment, maintaining it as a landscape feature. This is in line with the Council's position that the escarpment should be retained in its natural state. An additional mechanism which is applied through the TPS is the designation of specific maximum building heights for the lots along Richardson Avenue/Bindaring Parade. An individual maximum height has been calculated for each lot, expressed in metres above AHD based on the addition of the existing contour levels and allowable building height.

CTC actively manages all the reserves in the study area which require a 'parks and gardens' maintenance program. This includes the foreshore between the Museum and the CYC. Vehicular access is controlled on the foreshore, although residents whose properties front onto the foreshore are provided with keys for the gates which prevent public vehicular access onto the reserve.

As well as planning, regulatory and management roles, the Council plays a very important role in organising and administering community interests in local environmental and heritage matters. For example, through its involvement with the Museum and management of Lake Claremont.

## 7.2 Swan River Trust

Proclamation of the *Swan River Trust Act (1988)* established the Swan River Trust and an associated management area. The Trust is responsible for the planning and management of the management area and provides advice to the Minister for Waterways who is responsible for development control. Under Part V of the Act the Minister has responsibility for the development approval process for proposals which are within the management area. Clause 7 of the Act specifies 10 functions of the Trust, those most relevant to the study area include:

- To manage and protect the management area and to undertake such works and the provision of such facilities as may be required for that purpose.
- To co-ordinate and promote the activities of other bodies that have functions in relation to the management area.
- To provide advice and assistance to planning authorities so that, in relation to the management area, proper provision is made in planning schemes for: reservation of river foreshores; and protection and public use of land and waters.
- To provide advice to the State Planning Commission on statements of planning policy and model planning scheme provisions relating to any matter within its functions; and to publish other statements of policy relating to any other matter within its functions.
- To provide advice and promote public education on any matter within its function.
- To join with any other person or body in doing anything that is within its functions.

Before proclamation of the *Swan River Trust Act* the river was managed in accordance with the *Waterways Conservation Act (1976)*, and administered by the Swan River Management Authority and the Waterways Commission (WWC). However, provisions of Schedule 3 of the *Swan River Trust Act* repealed the Waterways Conservation Act as it applied to the management area and dissolved the Authority. Clause 29 of the *Acts Amendment (Swan River Trust) Act (1988)*, requires the WWC to provide the services of its staff. That is, the WWC is the operational arm of the Trust.

## 7.3 State Planning Commission and Department of Planning and Urban Development

The State Planning Commission (SPC) is the regional planning authority for all areas in the State outside the Trust management area. There are three major Acts controlling planning in the State:

- *State Planning Commission Act (1985)*
- *Town Planning and Development Act (1928)*
- *Metropolitan Region Town Planning Scheme Act (1959)*

In 1989 the Government created the Department of Planning and Urban Development (DPUD) in order to "streamline and advance planning in Western Australia" (DPUD, 1991). Although the SPC retains the decision making authority vested in it under the *State Planning Commission Act (1985)*, DPUD now provides planning advice to the SPC and the Minister. Under delegated power from the SPC, DPUD's responsibilities include: broad scale planning for the

State, Perth Metropolitan Region and country regions; town planning schemes and amendments; and subdivision and development control. With reference to the Swan River management area, including the study area, the role of SPC/DPUD is to:

- Control the subdivision and development of adjoining land.
- Promote and provide for the appropriate use and zoning of adjoining land.
- Acquire land for, and create, the Parks and Recreation Reservation which forms part of the management area.
- provide advice to the Trust and Minister for Waterways concerning development proposals in the management area.
- Determine development proposals which cross the boundary of the management area or abut it.

## **7.4 Environmental Protection Authority**

The EPA was established under the *Environmental Protection Act (1986)* for: the prevention, control and abatement of environmental pollution; and the conservation, preservation, protection, enhancement and management of the environment. The EPA's major objective in its protection of the river environment is to ensure that its existing environmental value is maintained and enhanced.

The EPA has accepted that some of its activities in regard to environmental protection of the river should be undertaken by other agencies and has delegated certain pollution control powers and duties to the Swan River Trust and Water Authority of W.A. In this respect Clause 7 of the *Swan River Trust Act* lists the functions of the Trust. Section 7(c) states that the Trust shall perform such functions under Part V of the *Environmental Protection Act* (which relates to pollution control) as are delegated to it under Section 20 of that Act. The Department of Environmental Planning provides technical and professional services to the EPA.

## **7.5 Department of Land Administration**

The *Land Act (1933)* allows the Department of Land Administration (DLA) to reserve lands above low water mark on the banks of tidal rivers for whatever purpose is deemed fit in the public interest. The Act also provides that the Minister for Lands may require an authority to submit management plans for any reserve which is vested in that authority. Clause 8 of the *Acts Amendment (Swan River Trust) Act (1988)* requires the Minister to consult with the Trust before reserving any land in the management area, before cancelling or amending any reserve or altering a boundary of any reserve within the management area.

## **7.6 Department of Transport**

The Department of Transport (DOT) (previously the Department of Marine and Harbours) has certain statutory responsibilities in marine and related matters, and it these responsibilities which form the basis of DOT's involvement in river matters. The primary objective of DOT is to provide for the advancement of efficient and safe shipping and effective boating and port administration through the provision of facilities and services. Legislation administered by DOT relates either to navigable waters or to ports. This includes the Port of Perth, which comprises the waters between the Causeway, Canning Bridge and the Fremantle Port Authority area.

Through the Minister for Transport, DOT controls the river bed within the Port of Perth for the purposes of port activities and leasing to groups for specific purposes. The *Acts Amendment (Swan River Trust) Act* requires DOT to obtain approval from the Trust before issuing jetty licences, and requires DOT to issue a jetty licence if the trust issues planning approval.

DOT may also construct, provide and maintain facilities and services, both on land and water, to meet the needs of recreational and commercial shipping and boating (including jetties, moorings, launching ramps, navigation aids and marine craft) with the approval of the Minister

for Waterways. Within the study area DOT is responsible, among other things, for registration and control of pleasure craft (including the water ski area) and maintenance of Claremont jetty.

## **7.7 Other authorities**

A number of other agencies play a major role in the overall Swan River Trust management area, but with less specific relevance to the study area for the purposes of this management plan. These include: Water Authority of Western Australia (drainage); Department of Conservation and Land Management (nature conservation, management of reserves); Department of Fisheries (management of fish resources); and Department of Health (water quality - human use)

## **8. PUBLIC INVOLVEMENT AND CONSULTATION**

### **8.1 Need for involvement and consultation**

Although the foreshore area subject to this management plan is small in extent, it is an area of intense interest and concern to a broad cross-section of the community. The overall public resources and issues (such as access) being considered directly affect, and perhaps conflict, with those of the private landowners who reside, or have interests, in the study area. If management and use of public resources is to be effective then the development and implementation of the management plan must be based on a thorough public consultation process with interested parties.

Public participation in the development of management programs is a requirement of the *Swan River Trust Act* and one of the primary objectives of the *Swan River Management Strategy*, which states that the public should be encouraged to participate "in planning and management of the river environment". However, as the authority responsible for the management of the study area, and being the elected representatives of the affected community, the Claremont Town Council is the most appropriate body to co-ordinate consultative and implementation processes.

### **8.2 Community involvement**

Environment and heritage issues and concerns are becoming increasingly prominent in the community. This is evident from the number of community interest groups which have formed in recent years, such as the Friends of the Claremont Museum and the Lake Claremont Management Committee. While it is the Council which initiated, and administers, these bodies, the fact is that they could not be maintained without community representation and support. The concern in the establishment of interest groups and committees as various needs/issues arise is the difficulty, from a local authority perspective, in focussing limited financial and administrative resources to support them.

At the present time the Claremont Heritage Trust Advisory Committee is the body which is overseeing the preparation of the management plan and has proposed the development of the Heritage Trail. The Committee was established by the Council in 1989 and its membership is comprised predominantly of people from the community. The Committee deals with a number of issues and the concept of a 'Friends of Freshwater Bay' community group has been suggested as a mechanism for developing community participation on foreshore related issues. Such groups, for areas where 'on-ground' environmental management is required (for example, building trails, weeding, replanting), has proven successful in other locations.

For example: a community group called Bayswater Greenwork 'adopted' the foreshore reserve south of Garret Road Bridge, concentrating on removal of noxious species and revegetation; the Armadale Settlers Common adopted another System 6 area along the Darling Scarp (EPA, 1992); and a number of community groups have been established which receive funding support from State and Commonwealth bodies, such as Greening Australia. D.Kaesehagen (1991) surveyed local authorities along the Swan and Canning Rivers and discovered that 80% of the local authorities had community groups involved at various levels of environmental/landscape management and development. He is a member of the North Fremantle Community Association, which has been involved with the redevelopment of the North Fremantle area, particularly with regard to protection of the river environment. The Association successfully completed a major project to construct the Rocky Bay Heritage Trail, involving trail construction, removal of noxious plants, growing and replanting of native species, and preparing a brochure and signs. The Association was highly successful in securing funding and technical assistance, and large scale support from the local community. There are obvious parallels, and potential lessons to be learned, from the operation of this community group in implementing a project which is similar in purpose and scope to what is required for Freshwater Bay.

Since there are obvious benefits in concentrating available resources, especially human resources within the community, the Council must decide the most appropriate organisational structure to deal with the growing number of heritage and environment issues (and opportunities) which are emerging. The most appropriate structure may be an overall community association guiding area or issue specific sub-groups.

Another community resource which could potentially be involved in the management of the study area are local schools. The East Claremont Primary School, for example, will be undertaking a foreshore clean-up this year (V. McAuslane, pers. comm.). The presence of the large private schools, MLC and CCGS, as landowners in the management area could provide an opportunity for their participation in its management and development.

### **8.3 Community consultation**

The Swan River Trust wrote to landowners in 1992 advising of the proposal to construct a Heritage Trail along the Freshwater Bay foreshore. A limited number of responses were received and some people expressed concern about intrusion into private property. Earlier in 1993 the Claremont Heritage Trust Advisory Committee held a public meeting to discuss the proposed trail. However, the response was again poor. Nevertheless, media coverage of the proposed trail has already generated various concerns within the community, particularly with regard to property values and the rights of landowners if public access is provided through areas which currently have limited accessibility.

Following the review and acceptance of the preliminary draft management plan by the Claremont Town Council and Swan River Trust, a final draft should be made available to the public. Its recommendations, and the basis for those recommendations, should be widely circulated. Options for development of the Heritage Trail (see below) include the use of freehold land subject to the MRS P & R Reservation through agreements with the Swan River Trust. Therefore, close consultation must occur with affected landowners. Direct contact should be made with these landowners on the finalisation of the draft plan. Preliminary discussions have already been held with the institutional landowners in the study area (schools, hospital and CYC) during development of the management plan.

If the Council is to establish an effective public interest group which will be involved in the long term management and development of the foreshore, then promotion of the management plan and involvement of the public needs to be effective. This will require such mechanisms as articles in local newspapers and public meetings to explain the objectives and recommendations of the management plan, the roles of the Council and the Trust, and the need for community involvement.



## 9. ISSUES AND GENERAL RECOMMENDATIONS

In reviewing the various physical, historical, regulatory, and recreational attributes of the study area a number of issues emerge which need to be addressed by the management plan. These issues can be categorised according to the relevant objectives set out in Section 2.

### 9.1 Protect and enhance values of the public land and identify natural/cultural values

The public foreshore resources in the study area, and the freehold land under P & R Reservation, have a number of identifiable values:

1. Remnant native vegetation of conservation value.
2. Shoreline and aquatic recreation opportunities.
3. Combined environmental and social values as part of the Swan and Canning River System.
4. Sites and features of educational and historical significance.

#### 9.1.1 Issues and recommendations

Issues and recommendations associated with the protection and enhancement of these values are:

- Issue 1: The quality of native vegetation is declining, and under threat from spreading weed species, fires and physical disturbance. Most of the vegetation in need of rehabilitation is on freehold land within the P & R Reservation.
- Recommendation: Instigate a rehabilitation programme to ensure continued survival of indigenous species.
- Issue 2: The Trust encourages the retention of the natural environment and in undeveloped areas endemic plant species should be used wherever possible for revegetation and landscaping.
- Recommendation: Encourage the use of endemic plant species or introduced species already growing in that area. Collect seed stock from native plant species *in situ*, and also areas outside the immediate study area boundaries.
- Issue 3: Some areas of the foreshore, especially in locations over-grown with noxious species, contain remnants of vegetation of historic value.
- Recommendation: Identify vegetation (individual plants and groups) of historic value and to investigate the design and planting of historic gardens to provide a basis for (re)development of the school and hospital sites.
- Issue 4: There is a litter problem along the shoreline, apparently water-borne, along the western section of the bay.
- Recommendation: Maintain the shoreline in a clean condition and inform the boating community about the need to avoid littering on the river.
- Issue 5: Although major European historic sites and features are identified in Claremont Museum literature, 'on-site' interpretative facilities (except at the Museum itself), such as explanatory signs, could be installed to improve public awareness and appreciation of the historic values of the area.
- Recommendation: Develop and implement an interpretative program in association with the proposed Heritage Trail.

Issue 6: Before European settlement the Freshwater Bay area was used by Aboriginal people, but little is known of the aboriginal heritage of the area.

Recommendation: Undertake research and provide appropriate information on Aboriginal heritage issues for the proposed Heritage Trail interpretative program.

## 9.2 Provide for appropriate levels of public access

Provision of appropriate levels of public access to, and along, the foreshore is one of the key policies of the Swan River Trust. As stated in the *Swan River Management Strategy*: "one of the reasons for achieving reservation over all...river foreshores is to secure for all members of the public the right of access to and along the foreshore" (p.23).

### 9.2.1 Issues and recommendations

There are a number of issues associated with public access in the study area:

Issue 7: Public use of the foreshore could be substantially enhanced by the development of a Heritage Trail.

Recommendation: Investigate sources of funding and infrastructure, and community support to develop the trail.

Issue 8: Freehold land abuts Reserve 24523, which in turn often coincides with HWM west of the CYC. This only allows legal 'dry' access at low tide. In other locations where the reserve boundary is above HWM the terrain is steep and rocky, and difficult to negotiate.

Recommendation: Provide better access along the foreshore, possibly through the application of agreements under Section 7 of the *Swan River Trust Act* (see Issue 16).

Issue 9: The location of Reserve 243523 along the Bindaring Parade sector of the study area can potentially provide for public access above HWM. However, due to the steep and rocky terrain establishment of a legally located trail will be difficult, and accurately locating the reserve boundary will need careful reference to the recently plotted Department of Land Administration reserve survey.

Recommendation: The route of the proposed Heritage Trail needs to be carefully surveyed along the western sector using the DLA survey boundaries as reference points.

Issue 10: There is no adequate access for the physically disabled onto, and along, the developed foreshore reserve east of CYC.

Recommendation: Provide access for disabled people to Australian Standards Association requirements as part of the development of the Heritage Trail, east of Chester Road.

Issue 11: The location of CYC on the foreshore is a physical and perceptual impediment to public use of Reserve 24523. Additionally, the operation of the boat slipway is a potential hazard to people crossing the foreshore at this point.

Recommendation: Delineate a safe public 'right-of-way' between the Claremont Yacht Club and the River.

Issue 12: The P & R Reservation exists to provide, among other things, for public access. However, the land under reservation has not been acquired and reserve boundaries are not consistent.

Recommendation: Rationalise the P & R boundary and determine appropriate mechanisms for enabling more effective public access.

- Issue 13: Some areas of the foreshore are comprised of steep slopes with thin soils susceptible to erosion. Areas of remnant vegetation could be degraded if uncontrolled access occurs.
- Recommendation: Provide access to avoid susceptible areas or be constructed in a manner which prevents erosion. Locate the trail to avoid erosion prone areas and areas of remnant vegetation which would be damaged by pedestrians.

### **9.3 Rights of private landowners**

The constraints placed upon public use of, and access to, the foreshore have been highlighted in this management plan. However, it is recognised that the private landowners in the study area have right to the quiet use of their property. Additionally, uncertainties concerning title boundaries need to be resolved. Specifically:

#### **9.3.1 Issues and recommendations**

- Issue 14: Original titles for private land west of CYC show the edge of the Swan River as the property boundaries. However, the creation of Reserve 24523 in 1912 and the subsequent survey in 1952 legally relocated these old title boundaries to the inland boundary of the reserve.
- Recommendation: Advise landowners of title amendments based on the recent Department of Land Administration survey of Reserve 24523. Steps should be taken to delineate the boundary of public-private land.
- Issue 15: Related to Issue 11, the inconsistent location of the P & R boundary potentially presents landowners with legal/development problems in the development and use of their land, and planning and development control agencies with difficulties in resolving those problems.
- Recommendation: Rationalise the P & R reservation boundaries.
- Issue 16: As with Issue 8. Even with the formalising of title boundaries to abut Reserve 24523, lengthy sections of the reserve west of CYC remain legally accessible to the public only at low tide. Also, steep rocky sections of the foreshore along Bindaring Parade will increase the cost of a trail (boardwalks, retaining walls, etc).
- Recommendation: Consult with landowners to discuss the possibility of entering agreements under Section 11 of the Swan River Trust Act to enable the conservation of natural values on private property adjoining Reserve 24523 entering into agreements under Section 7 of the Act to facilitate construction of a public access path/trail.
- Issue 17: A legitimate concern of private landowners is the question of their liability if they make an agreement to permit public access across their land. They have also expressed concern about security issues if better public access is provided to the rear of their properties.
- Recommendation: The Trust will consult with the Crown Law Department seeking advice to determine the public liability or landowners entering into agreements under Section 11.

### **9.4 Application of regulatory and planning mechanisms to protect environmental and cultural values**

The Claremont Town Council, Swan River Trust and State Planning Commission/Department of Planning and Urban Development play a major role in the study area in terms of administering a range of regulatory and planning mechanisms, with the support of legislation, which can be applied to the management of the area. However, the following issue needs to be addressed:

### **9.4.1 Issues and recommendations**

Issue 18: The P & R Reservation, which defines the area DPUD proposed to acquire for public use, contains a valuable environmental and recreational asset. Yet the limited availability of funds for purchase predicate against it being secured for the community in the near future. The inconsistent boundaries make it difficult for the responsible planning agencies to have a coherent approach to dealing with development proposals which affect the reservation (as evidenced by existing developments which are partly within the P & R area). The concept of using non-acquisitive mechanisms has been proposed by DPUD and the WWC, but the options which are available appear to be limited to voluntary agreements and ceding of land as a condition of development approval. Until such times as formal agreements have been reached, effective management of foreshore resources (such as control of exotic species and revegetation) will depend on the cooperation and goodwill of the landowners.

Recommendation: Prepare and implement, in the short term, a rationalisation process for the P & R, and to develop suitable procedures/mechanisms for the protecting the environmental and other values of the reservation.

## **9.5 The community and the long term management of the foreshore**

Section 8 highlighted the value of community involvement in the long term management of the Freshwater Bay foreshore. However, for this to be successful the following issue needs to be resolved:

### **9.5.1 Issues and recommendations**

Issue 19: Community involvement in the study area is needed in both the short term implementation of works and in long term management. This will require a commitment not only from the community but also the CTC and the Trust in providing funding (directly and by tapping into other sources), administrative and technical support. However, there are a number of emerging and current environment and heritage issues in Claremont which are capturing public interest. A process for effectively focussing and maintaining community interest and support for both short term and long term issues needs to be developed.

Recommendation: An appropriate procedure/mechanism needs to be developed as a matter of priority. Establish a community group to coordinate the management of the foreshore area in cooperation with the Town of Claremont, Swan River Trust and Department of Planning and Urban Development

## **10. MANAGEMENT RECOMMENDATIONS**

### **10.1 Landowner agreements**

From a use and management perspective the Claremont foreshore can be broadly divided into the section from the Museum to CYC where the reserve is substantially above HWM and public access is relatively easy, and the section from the Club to Bindaring Parade where the reserve boundaries constrain public use and access due to the proximity of freehold land. In the former case resolution of use and management issues is straightforward. However, in the section west of CYC the level of development and use which can occur is dependent, in the foreseeable future, upon the Trust and the Council reaching an agreement with the landowners if the full potential of an effective Heritage Trail and associated management programs is to be realised. This is qualified by the fact that Reserve 24523 does include 'dry' areas along the Bindaring Parade sector, where construction of small boardwalks and/or retaining walls would enable public access. Additionally, the Osborne Parade road reserve can enable access to the foreshore if facilities are constructed. But even in these areas implementation of programs such as vegetation management will have limited value if the programs are not extended onto the adjacent freehold land which contain most of the cliff faces and slopes, in the case of noxious species, the problem exists.

Therefore, a major recommendation of this management plan is that the Trust and the Council jointly seek the cooperation of private landowners in the study area. This may be facilitated by:

- Involving landowners in the development and implementation of the management plan as members of the community group interested in the long term well-being of the foreshore, and encouraging them to enter into agreements under Section 7 of the Act. This approach may be effective with the institutional landowners (schools and hospital) whose objectives of education and health are 'community orientated' and therefore closely aligned to those of the Trust and Council in terms of maintaining and enhancing environmental quality, protecting and promoting heritage values and providing educational opportunities. There is sufficient physical space along the CCGS/MLC foreshore to provide for the construction of a low key trail for public access which would not intrude greatly onto the school property but provide for access above HWM.
- A flexible approach could be taken by the regulatory agencies to assessing development proposals by landowners which overall do not conflict with the objectives of the Town Planning Scheme and Trust policy (such as boatsheds, slipways, steps). Limited public use of the foreshore need not be inconsistent with these uses.
- The proposed review and proposed adjustment of MRS P & R boundaries could provide scope for negotiating with landowners on the issue of foreshore use where the boundary is clearly in an inappropriate location with respect to existing development and/or constrains an owners development options.

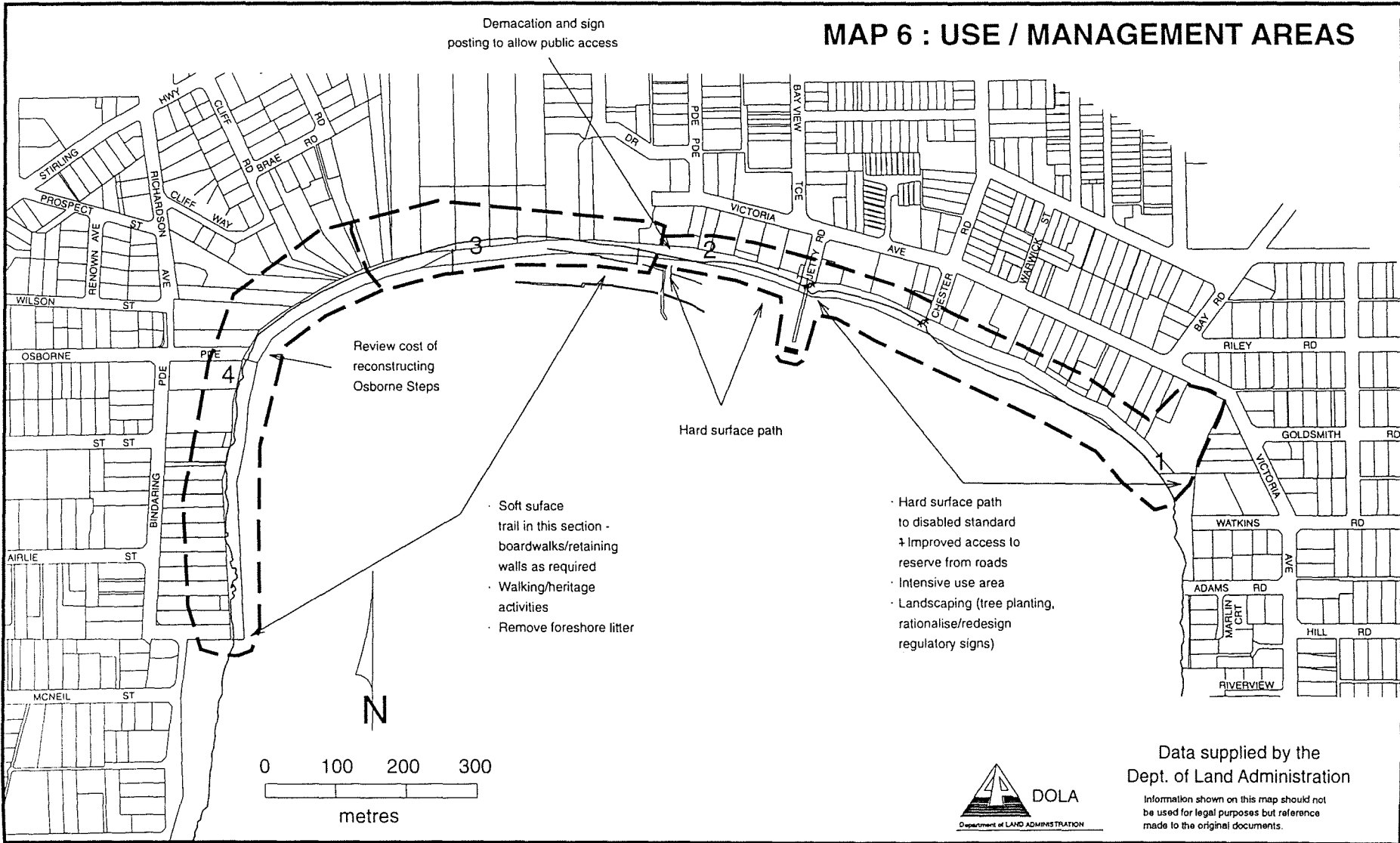
The uncertainties associated with freehold/public land means that, for the area west of CYC, two use and management options have to be examined. The first would require extensive agreement by owners of adjoining freehold land while the second could be implemented with such agreement.

### **10.2 Use and access**

The study area can be divided into four broad use and management areas (see Map 4). With respect to access it is recommended that on the basis of safety for pedestrians and the short length of the paths, and the topographic constraints of the western sector, that cycling is not permitted on the path/trail. The word path is used to describe proposed hard surface access ways between the Museum and CYC, and trail for the proposed access west of CYC. The combined path/trail system should be developed as the Freshwater Bay Heritage Trail, with interpretative signs installed and brochures produced to locate and explain heritage sites and features.

# MAP 6 : USE / MANAGEMENT AREAS

Demarcation and sign posting to allow public access

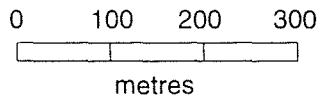


Review cost of reconstructing Osborne Steps

Hard surface path

- Soft surface trail in this section - boardwalks/retaining walls as required
- Walking/heritage activities
- Remove foreshore litter

- Hard surface path to disabled standard
- Improved access to reserve from roads
- Intensive use area
- Landscaping (tree planting, rationalise/redesign regulatory signs)



Data supplied by the Dept. of Land Administration

Information shown on this map should not be used for legal purposes but reference made to the original documents.

### **10.2.1 Area 1: Museum to Claremont Jetty**

- To continue as a high use, intensively managed area.
- A hard surfaced pathway which is suitable for use by disabled people, should be constructed along the foreshore between Reserve 885 and the jetty. It will be necessary to provide for proper access onto Chester and Jetty Roads at the junction with the proposed path. In the latter case it will be necessary to construct a 'bridge' across the concrete drain to facilitate access for the disabled. Similarly, the drain at the foreshore end of Reserve 2025 needs to be bridged when the path is constructed.
- In order to protect the path it will have to be constructed away from the active zone of the river's edge, on the inland side of the reserve.
- The Council should examine the feasibility of providing access to disabled standard to the proposed lateral foreshore path from Reserve 885 and/or Reserve 2025.

### **10.2.2 Area 2: Claremont Jetty to Claremont Yacht Club**

- The narrow width of the foreshore reserve in this section effectively restricts its use to access only. A 1.5 metres wide path should be constructed to non-disabled standard, at least in the short term, since access is difficult onto and across CYC.
- The CYC carpark should be sign-posted to advise that public access is permitted, and a route across the carpark delineated by ground marking and/or additional signs. The path should pass behind the slipway.

### **10.2.3 Area 3: Bethesda Hospital to MLC**

- Use of the foreshore west of CYC should be restricted to walking and heritage based activities by the public. Existing river-dependent uses by the private landowners should continue (boatsheds and access to river).

- Public Access Option 1:

If institutional landowners will allow public access across their land, the preferred option is to construct a soft surface trail 1.3 metres wide inland from the vegetation line to allow public access under all prevailing tidal conditions. The route of the trail between CYC and Bethesda Hospital needs to be determined in conjunction with the proposed joint development of carpark/barbecue facilities by the hospital and Club, as well as the proposed landscaping of the foreshore by the hospital. Similarly, the trail route needs to be designed in collaboration with CCGS and MLC.

- Public Access Option 2:

If private property owners do not agree to the use of their land public access will be confined to the beach below HWM for much of foreshore, allowing 'dry' access when the tide is not high, since the inland boundary of the reserve tends to coincide with HWM along this section. Where the reserve is marginally above HWM it will be inadvisable to remove shoreline vegetation to construct a trail, to avoid destabilising the shoreline. Construction of a boardwalk may be possible, but its potential impact on vegetation and shoreline stability would need to be investigated.

### **10.2.3 Area 4: MLC to Bindaring Parade**

- Public use of this section will be a continuation of the preceding section.
- Claremont Town Council could obtain cost estimates for reconstruction of the Osborne Steps, to provide access to the foreshore from Osborne Parade. If financially feasible consideration should be given to reconstructing the steps which would provide a valuable access point and recreation feature. This proposal should be the subject of widespread public debate should it reach the detailed planning phase.

- **Public Access Option 1**

Where agreement can be reached with private landowners in sections where current legal access is difficult and cost of alternatives is high (acquisition or construction work) the trail should be constructed within the P & R Reservation. The trail should be 'soft surface' (crushed limestone/gravel), with cut and fill and timber steps as required.

- **Public Access Option 2**

If no agreement can be made with landowners, the trail through this section must be located by accurate survey in relation to the reserve boundary and freehold land and involve the construction of boardwalks and/or limestone retaining walls. It is important that any construction work undertaken blends into the surrounding environment to protect foreshore landscape values.

- At the boundary with the Shire of Peppermint Grove the Heritage Trail should link up with the foreshore path system already established by the Shire. This will require the construction of steps.

## **10.3 Cultural and environmental interpretation**

### **10.3.1 Aboriginal heritage**

The Claremont Town Council and Swan River Trust should consult closely with relevant Aboriginal people and the WA Museum Aboriginal Sites Department concerning the location and sensitivity of Aboriginal cultural sites and features in the study area. In particular, the cultural sensitivity of any sites of aboriginal heritage needs to be assessed and approvals obtained before any sites are promoted and interpreted in the context of the Heritage Trail. Once the necessary approvals and information have been obtained, Aboriginal heritage sites (as well as sites relevant to historic Aboriginal-European interaction) should to be highlighted into the overall interpretation program.

### **10.3.2 European heritage**

The Claremont Museum should be requested to develop an *in situ* interpretative program for the European historic sites and features in the study area. That is, to prepare information which can be transposed to signs and displays at, or in the vicinity of, structures and sites of significance along the proposed Heritage Trail. The effectiveness of the trail will be enhanced if users are able to recognise features along the trail through the use of signs, markers and displays - making the trail as self-explanatory as possible. However, this approach should still be supplemented by the availability of brochures, and other displays at the Museum.

### **10.3.3 Environmental interpretation**

A similar program, using signs displays and literature, should be developed for the environmental features of the area, including information on local geology and geomorphology (such as formation of the embayment, limestone cliffs and fossils, groundwater and springs), vegetation and wildlife. The level of information required, while needing to be accurate, could be collated by 'non-experts' from the substantial existing information which is available. This could in turn be supplemented by simple survey work, in the case of birds for example, carried out by local conservation groups and interested individuals in the community. It also provides an ideal opportunity to link foreshore conservation and management objectives with the educational programs of the schools within and adjacent to the study area. The schools, particularly CCGS and MLC, may be interested in undertaking wildlife/vegetation surveys and contributing to revegetation programs (for example, by collecting and germinating seeds, planting seedlings, learning about ecology and microhabitats, etc) and other activities relevant to their curricula.



## 10.4 Environmental and landscape management

### 10.4.1 Vegetation

The following recommendations for managing the vegetation of the study area apply to both public and freehold areas of the study area.

#### Eradication of noxious species

A number of conspicuous vegetation elements which require urgent action are:

- ~ Tree species: castor oil trees\*, Japanese pepper\*;
- ~ Grasses: bamboo\*;
- ~ Cactus: *Agave*\*;
- ~ Creepers: Bridal creeper\*\*\*, Nasturtiums\*\*\*;
- ~ Bulbs: *Watsonia*\*, African cornflag\*;
- ~ Monocots\*\*: various grasses

\* These species can be controlled and eradicated by physically removing the majority of the above ground plant material either by burning or cutting off, and immediately painting a translocated herbicide such as *Glyphosate* (360 g/L at 1:100) on the exposed stem or trunk. This will have little or no impact on surrounding vegetation, and will not result in soil destabilisation through root removal. The physical removal of the timber is the most effective means of control if this is practical

Large, very woody castor oil and Japanese pepper trees and cacti may be more effectively killed by drilling a hole and putting the herbicide directly into the trunk.

\*\* Buffalo grass fringing the shoreline can be eradicated through use of Fusillade used in accordance with Swan River Trust Report No 12.

\*\*\* Spraying with *Glyphosate* (360 g/L at 1 : 100) is generally the most effective means of eradication.

It should be noted that grasses help to stabilise the steep sandy slopes, and therefore play an important role in the hill slope dynamics. To reduce the extent of these species, it will be necessary to establish a dense shrub layer, and reinforce existing trees. This will decrease light availability for grasses, and reduce their growth. Re-establishment of native grasses, sedges and rushes, such as coastal sword sedge, knotted club rush and kangaroo grass will enhance the stability of the slopes.

#### Replanting

Seed for revegetation should be collected from the area to be revegetated. This helps to preserve the genetic diversity of the vegetation within the area. Plants grown from seed collected from the area to be revegetated tend to be more successful than using plants germinated from seed collected in other areas.

Seed from the majority of species do not require any form of treatment for successful germination. However, seed from species such as parrot bush, wattles and blackboys may require heat treatment. *Zamia* palm seeds must be exposed to acid and have their surfaces etched lightly for successful germination.

Two methods of establishing seedlings are common:

Direct seeding, where the principle requirements are:

- ~ the soil is aerated, and furrowed to prevent seed from being washed away,
- ~ the area should be cleared of grasses and other weeds, and

- ~ the use of mulches may also be beneficial.

This method is best achieved by the use of labour, physically turning the soil over and removing rhizomes and plant root material already present.

### **Planting seedlings**

The planting program should ensure that seedlings are maintained throughout their first year, through provision of water once a month, and frequent removal of grasses from their immediate surrounds. After this period occasional weeding may be necessary.

If this method is used, it is important that the soils and fertiliser used are sterile.

### **10.4.2 Landscaping**

This management plan concurs with a number of recommendations made by R. Bodycoat in his 1989 report to the Claremont Heritage Trust Advisory Committee, with particular reference to the foreshore between the Museum and CYC. Specifically:

- ~ Existing fences and old structures on freehold lots abutting Reserve 24523 should be upgraded.
- ~ Supplementary planting of suitably located, appropriate tree species should be undertaken by CTC to provide shade and a transition between private and public land.
- ~ The number of regulatory signs along the foreshore should be reviewed, with the aim of reducing their overall number (in locations where a number of individual signs apply to the one area) with single display, aesthetic signs similar to those used by the Department of Conservation and Land Management.

### **10.4.3 Rubbish disposal/litter**

Litter is a significant problem west of CYC. Swan River Trust has difficulty cleaning this area because of the limited access.

The Trust will maintain this area more regularly when access is improved thereby enabling regular collection of the litter which accumulates along the shoreline. The proximity of the rubbish to CYC and the jetty may or may not indicate the source of the rubbish. its accumulation in this section of the bay may be a function of wind and wave action across Freshwater Bay and Melville Water. However, it is clear that most, if not all, of the rubbish is water-borne and the Trust should approach the boating community with a view to producing a pamphlet, or some other communicative mechanism, to request the assistance of boat owners in controlling the amount of litter which is deposited into the river. Similarly, CTC should carry out an education program, in conjunction with the application of relevant by-laws, to inform users of the foreshore and the jetty of the environmental hazards and aesthetic problems associated with litter (such as plastic bait bags).

## 11. IMPLEMENTATION

This draft plan will be available for public comment until the end of June 1994. During this period the Swan River Trust will liaise with the community through a public meeting process. Trust staff will then prepare a summary of public submissions and liaise with Council before preparing a management plan to present for endorsement by Council and the Trust.

With respect to implementation of the plan's recommendations, the following procedure should be followed:

### Priority 1

1. The Council, in conjunction with the Museum and community groups, should commence work on development of the Heritage Trail/foreshore access path from the Museum to the Claremont Yacht Club. The foreshore reserve in this sector is accessible and heavily used. Works to be undertaken are:
  - ~ construction of the access path to disabled standard between the jetty and Museum, including improvement of access from Jetty and Chester Roads;
  - ~ installation of informative and interpretive heritage signs/displays;
  - ~ development and implementation of a landscape plan for the foreshore;
  - ~ implementation of an anti-litter campaign.
2. Consultation with landowners west of CYC to the Town boundary on agreements and other methods to assist in public use of the foreshore and management and enhancement of its resources. Review of P & R boundaries with relevant agencies and landowners. Investigation of other issues such as public liability.
3. Formation of a community interest group to assist in the development and management of the foreshore.
4. Commence management of natural vegetation (replanting, weed eradication) on the public foreshore.

### Priority 2

Construction of a path between the jetty and CYC, with provision of signs advising the public of their right of access across the foreshore and delineation of a safe access route.

### Priority 3

Investigation and survey of a suitable route for the Heritage Trail between CYC and the Peppermint Grove Shire boundary - pending the outcome of discussions with landowners on the public use/cession of land currently in freehold.

### Priority 4

Construction of the Heritage Trail, with supporting interpretative program, west of CYC.

The plan should be reviewed periodically, at least every three years, to assess the implementation and relevance of its recommendations.



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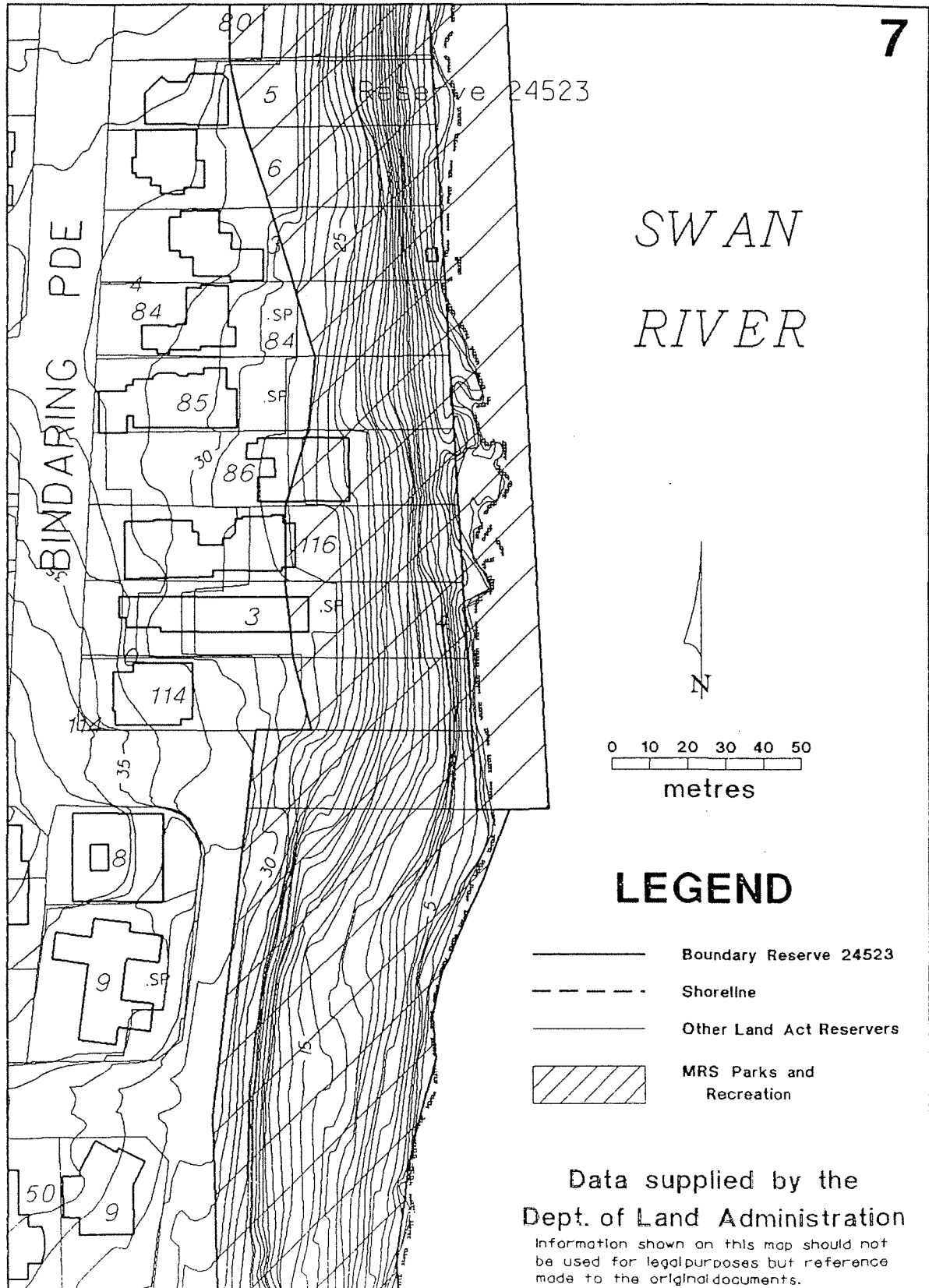
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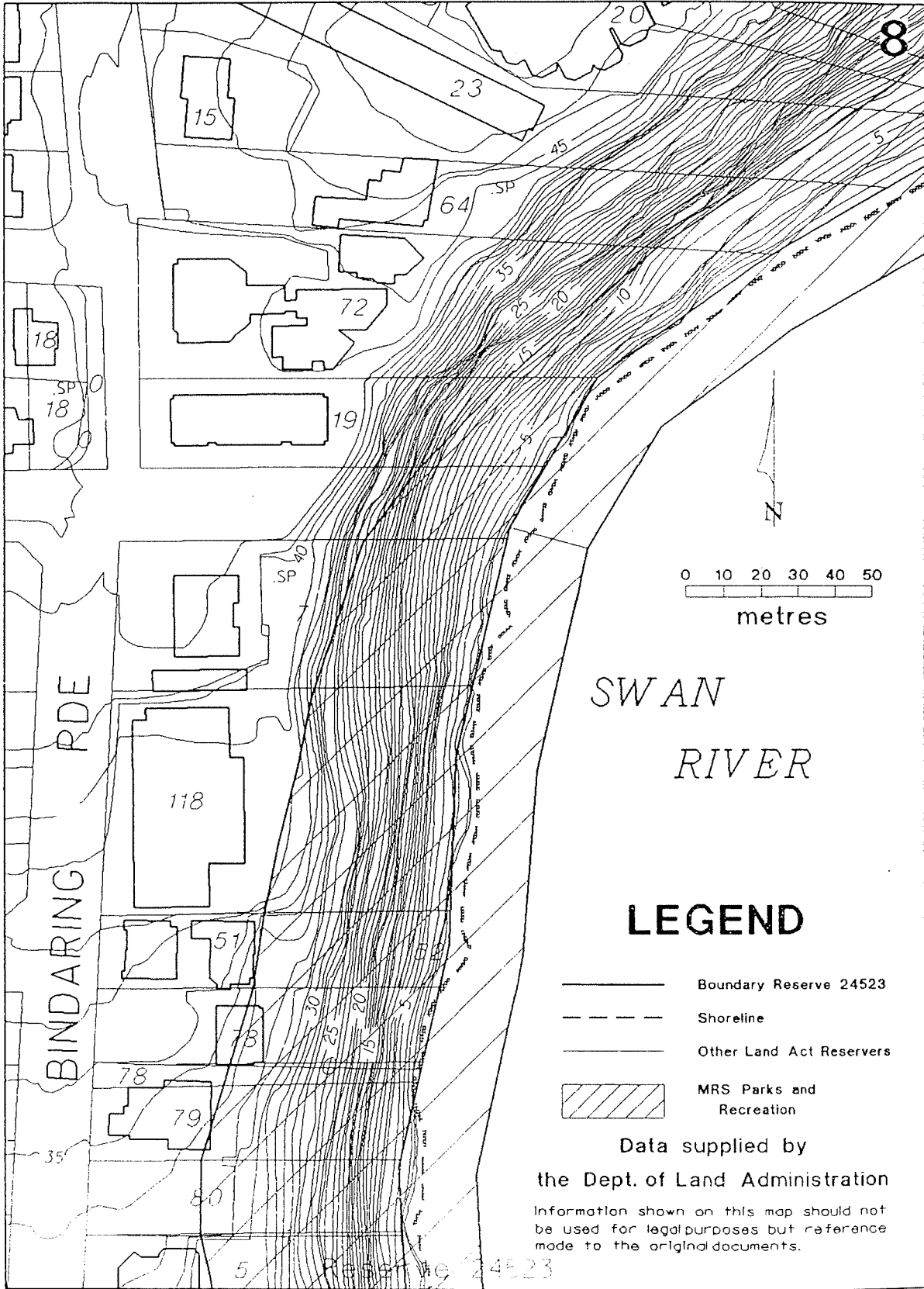
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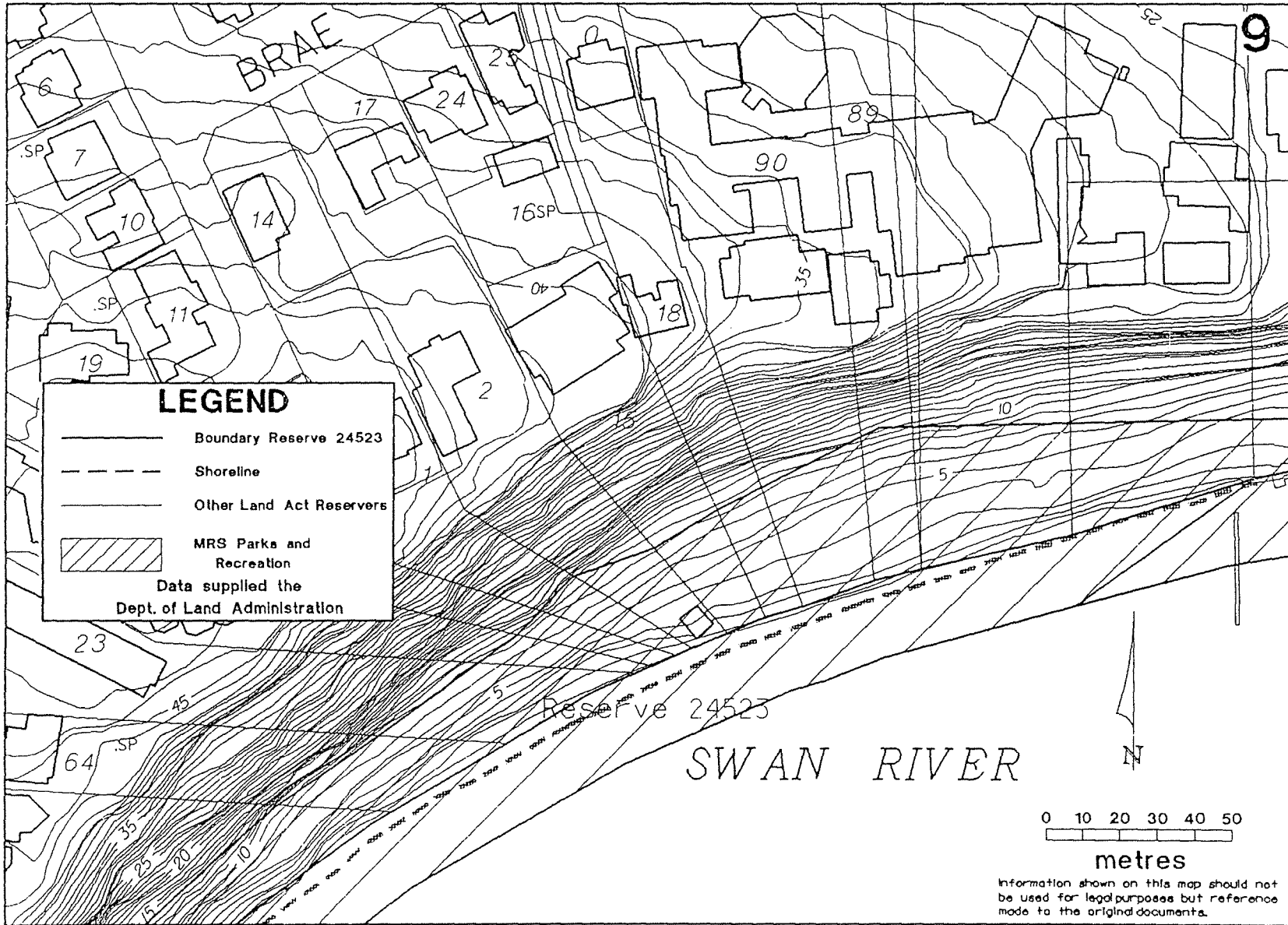
# MAPS 7 -14 : LARGE SCALE STUDY AREA MAPS

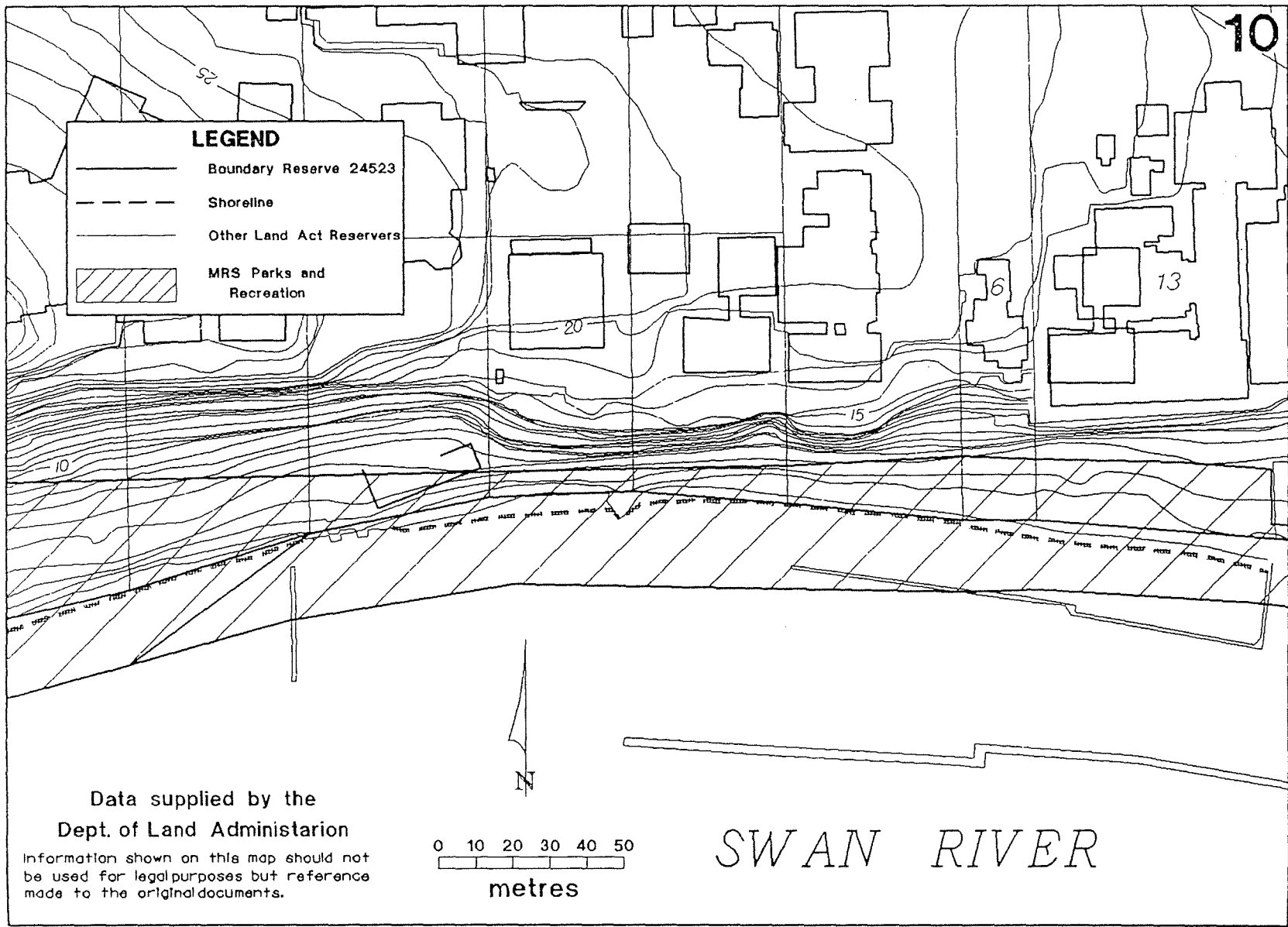
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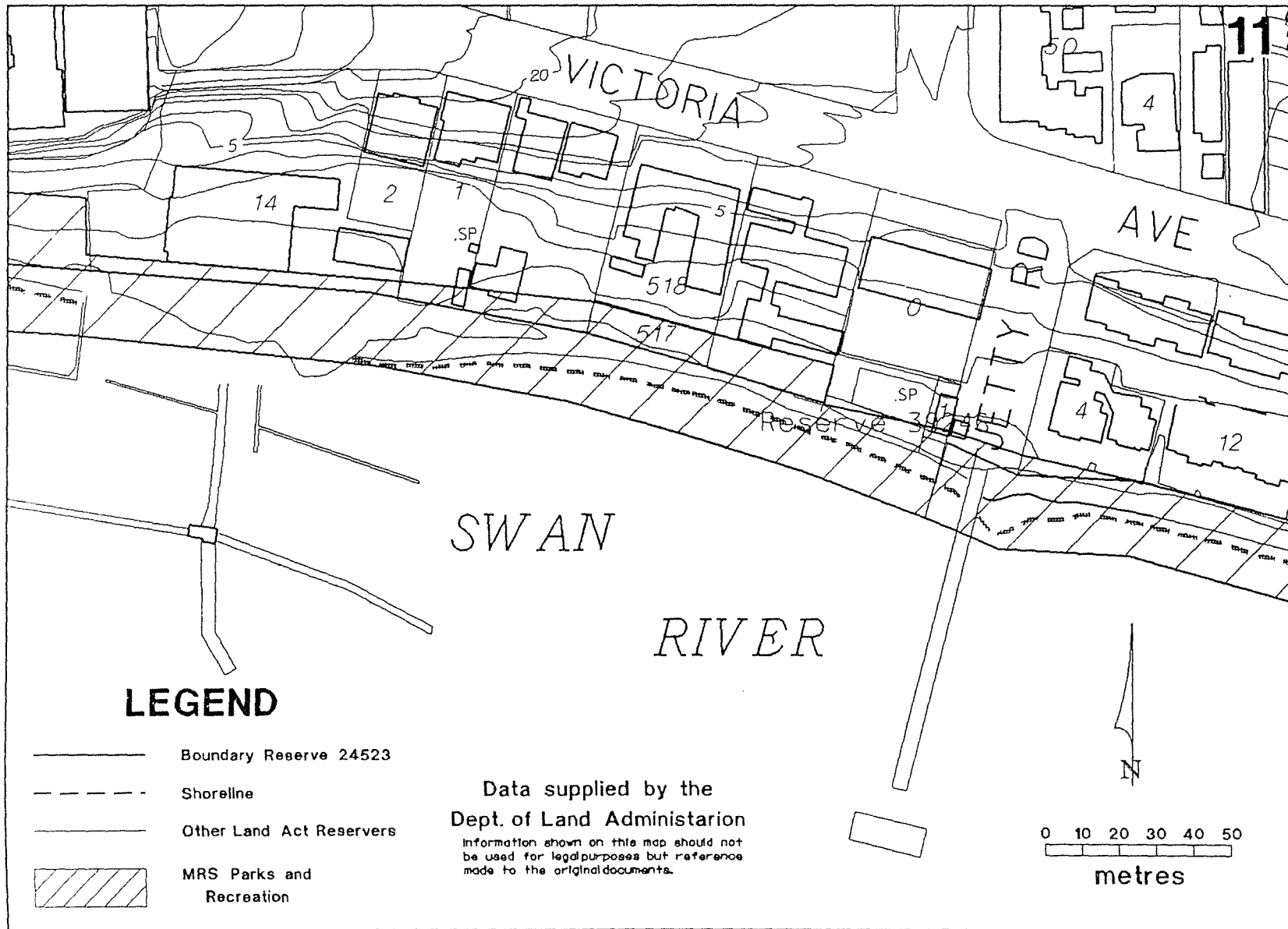








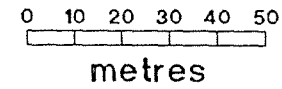


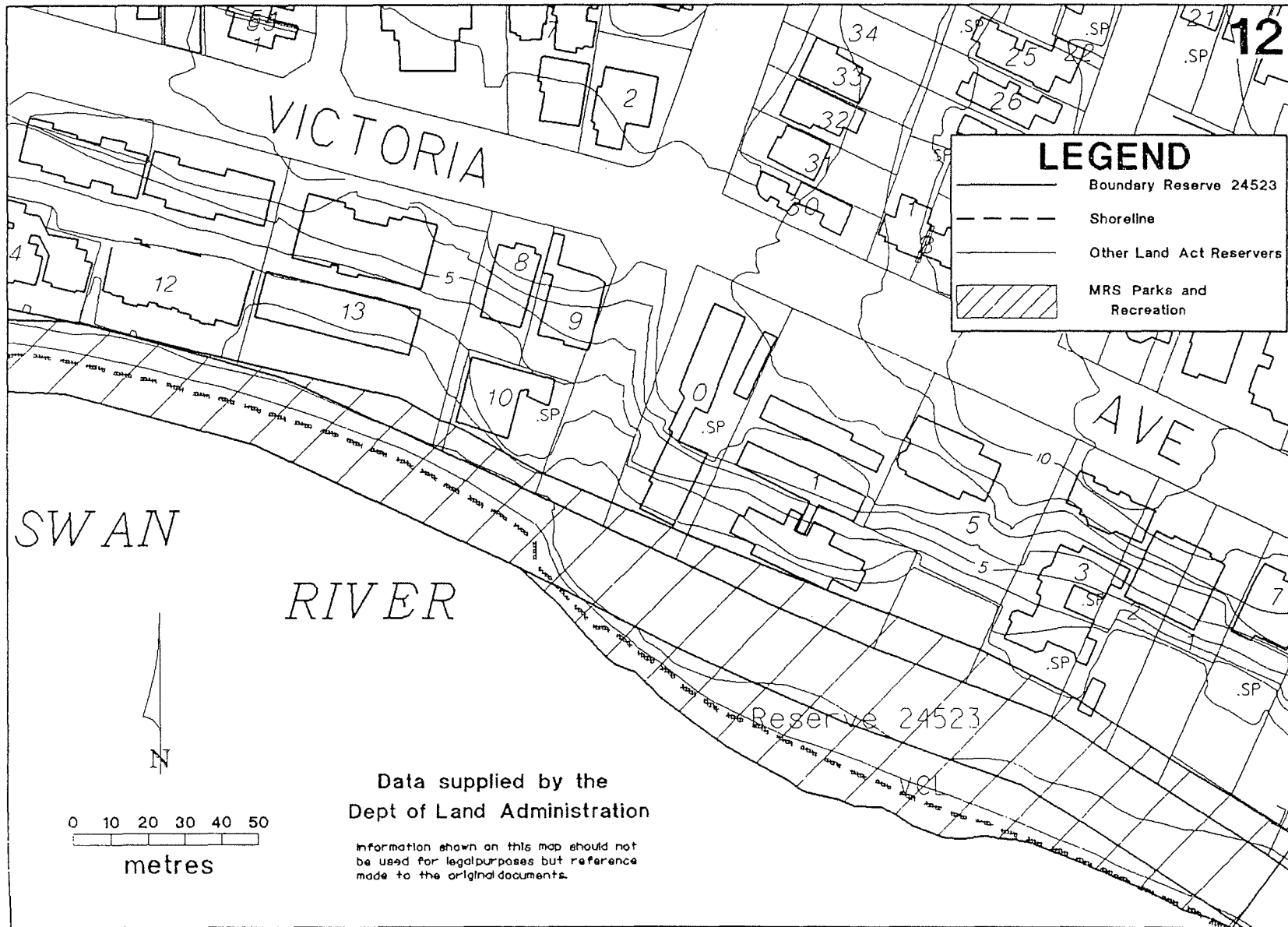


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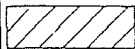
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- Other Land Act Reservers
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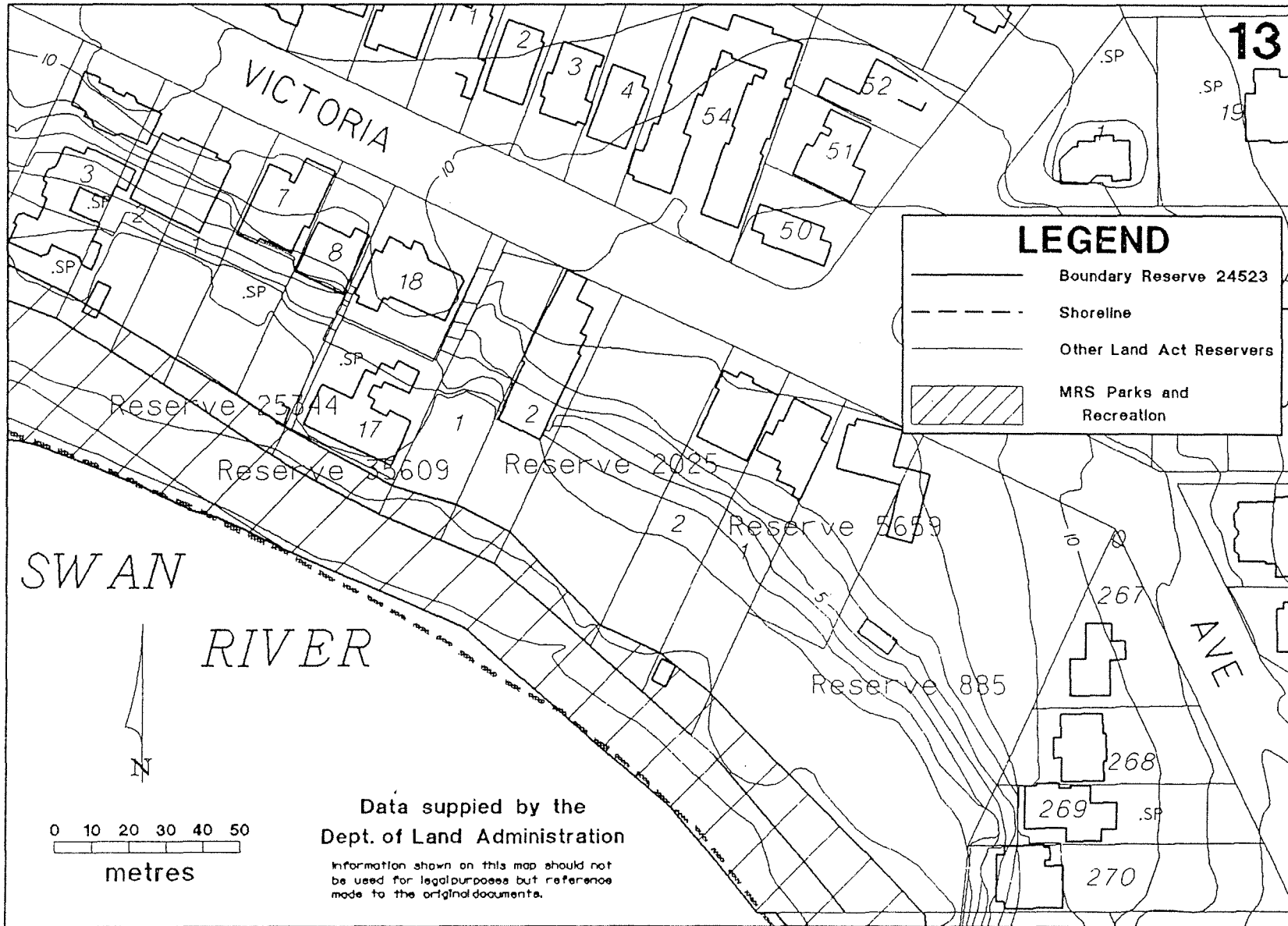
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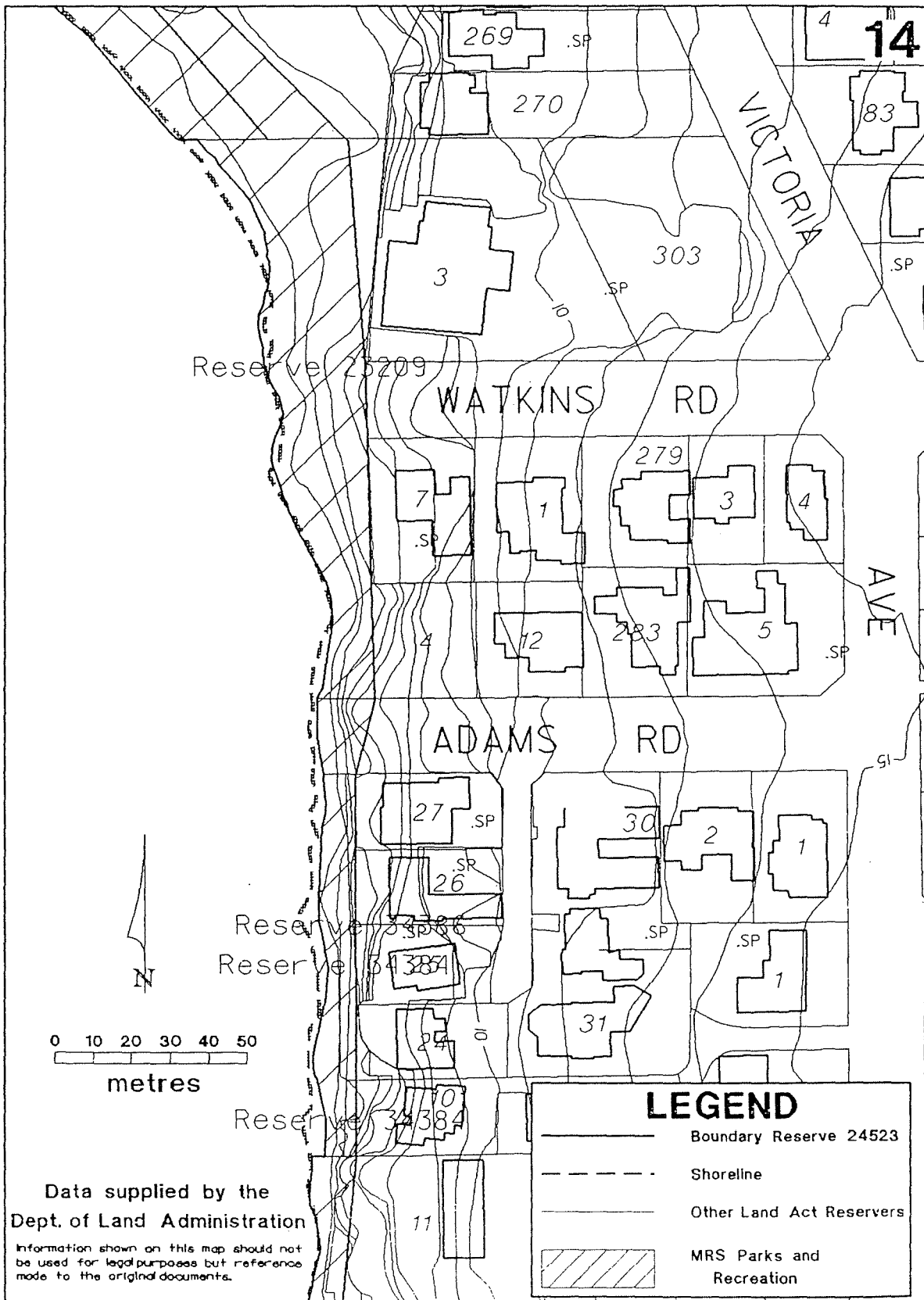
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