



Port of Hastings Development Authority
**Preliminary Review and Analysis of Recreation, Amenity and
Heritage Issues**
Port of Hastings

November 2013

In May 2016 the Special Minister of State asked Infrastructure Victoria to provide advice on the future capacity of Victoria's commercial ports. Specifically, the Minister has asked for advice on when the need for a second container port is likely to arise and which variables may alter this timeline. The Minister has also asked for advice on where a second container port would ideally be located and under what conditions, including the suitability of, and barriers to investing in, sites at the Port of Hastings and the Bay West location.

In undertaking this task, Infrastructure Victoria reviewed work that was completed as part of the Port of Hastings development project before it was cancelled in 2014. This document forms part of the initial work undertaken for the proposed port development at Hastings. Infrastructure Victoria considers that much of the previous Hastings work, although preliminary in nature, is relevant and suitable for informing a strategic assessment. Therefore, Infrastructure Victoria has made the reports previously commissioned for the development project part of the evidence base on which Infrastructure Victoria will use in providing the Minister with advice.

The opinions, conclusions and any recommendations in this document are based on conditions encountered and information reviewed at the date of preparation of the document and for the purposes of the Port of Hastings Development Project.

Infrastructure Victoria and its consultants have used the information contained in these reports as an input but have not wholly relied on all the information presented in these reports.

Table of contents

1.	Introduction	1
1.1	Purpose of this Report	1
1.2	Overview of Port Development Strategy	1
1.3	Study Area	2
1.4	Scope and Limitations.....	4
2.	Amenity	6
2.1	What is Amenity?	6
2.2	Strategic Planning Context	8
2.3	Analysis of Amenity Considerations	15
2.4	General Recommendations	22
2.5	Conclusion	23
3.	Recreation.....	24
3.1	Introduction	24
3.2	Legislation	24
3.3	Planning Policies and Controls	25
3.4	Strategies and Location Specific Plans	27
3.5	Identified Recreational Values	28
3.6	Analysis of Recreational Considerations	33
4.	Cultural Heritage.....	37
4.1	Method	37
4.2	Stakeholders	37
4.3	Aboriginal Cultural Heritage.....	38
4.4	Historic Cultural Heritage	46
4.5	Results	52
4.6	Applicable Statutory Controls	53
4.7	Recommendations.....	55
5.	References.....	56

Table index

Table 1	Registered Aboriginal Cultural Heritage Place within SUZ1	38
Table 2	Registered Aboriginal Cultural Heritage Place in wider study area	40
Table 3	Registered VHR Heritage Places within SUZ1	46
Table 4	Registered Shipwreck	46
Table 5	Registered Historic Cultural Heritage Places within wider study area	48
Table 6	Heritage Overlay Sites within SUZ1	51

Table 7	Statutory obligations within SUZ1	52
Table 8	Potential statutory obligations within wider marine study area	53

Figure index

Figure 1	Special Use Zone Study Area Land Owners	3
Figure 2	Existing Buffers	10
Figure 3	Amenity Analysis Area	21
Figure 4	Recreational activity and infrastructure.....	30
Figure 5	Marine side structures and facilities in Western Port	31
Figure 6	Registered Aboriginal cultural heritage places and historic sites within SUZ1	39
Figure 7	Registered Aboriginal cultural heritage places within the wider study area	42
Figure 8	Registered historic cultural heritage sites within the wider study area	50

Appendices

Appendix A – Amenity Policy Framework

Appendix B – Previous Archaeological Studies

Appendix C – Potential Shipwreck Locations and Detailed Historic Heritage Table

1. Introduction

1.1 Purpose of this Report

The Port of Hastings Development Authority ("the Authority") requires a preliminary assessment of amenity, recreational and cultural heritage issues to identify the key issues and gaps within the project area primarily defined by the Special Use Zone 1 ('SUZ1') and the wider study area associated with the marine corridor (Figure 3). The information will be used to inform a risk assessment scheduled for August 2013. GHD Pty Ltd (GHD) and AECOM Australia Pty Ltd ('AECOM') were engaged to prepare the analysis as part of the ongoing preparation of the Port Development Strategy for the Authority.

The scope of this work was to review existing landscape, visual, recreational, Aboriginal and historic cultural heritage conditions to highlight potential issues likely to result from port development. The report provides guidance on the cultural heritage, amenity and recreational issues requiring further evaluation as the project proceeds. The tasks completed included:

- Investigating the extent, nature and significance of known conditions for amenities; recreational activities; and Aboriginal and historical heritage sites and places within the study area.
- Providing an analysis of relevant studies to inform the preliminary risk assessment process associated with recreation, amenity and cultural heritage.
- Identifying and assessing the relevant legislative and regulatory requirements and guidelines that are currently applicable to cultural heritage, amenity and recreational issues within the the Authority study area.
- Providing background information for participation in the risk assessment scheduled for August 2013.
- Recommending further work to be undertaken as part of full project assessment.

1.2 Overview of Port Development Strategy

The Authority is embarking on the 'Port of Hastings Development Project' which comprises a set of integrated studies inclusive of the following objectives:

- To establish a risk-based project development and decision making framework to enable the Authority to continue project planning and development over coming years.
- To lay the foundations for a robust and defensible environmental impact assessment to inform State and Commonwealth approval processes.
- To complete sufficient concept design options analysis, preliminary impact and risk assessment. As part of these works, AECOM and GHD are currently delivering the Port Development Strategy (PDS). This includes the identification of the need for further data and information in order to develop the concept options, eliminate project risk and support future business case development.

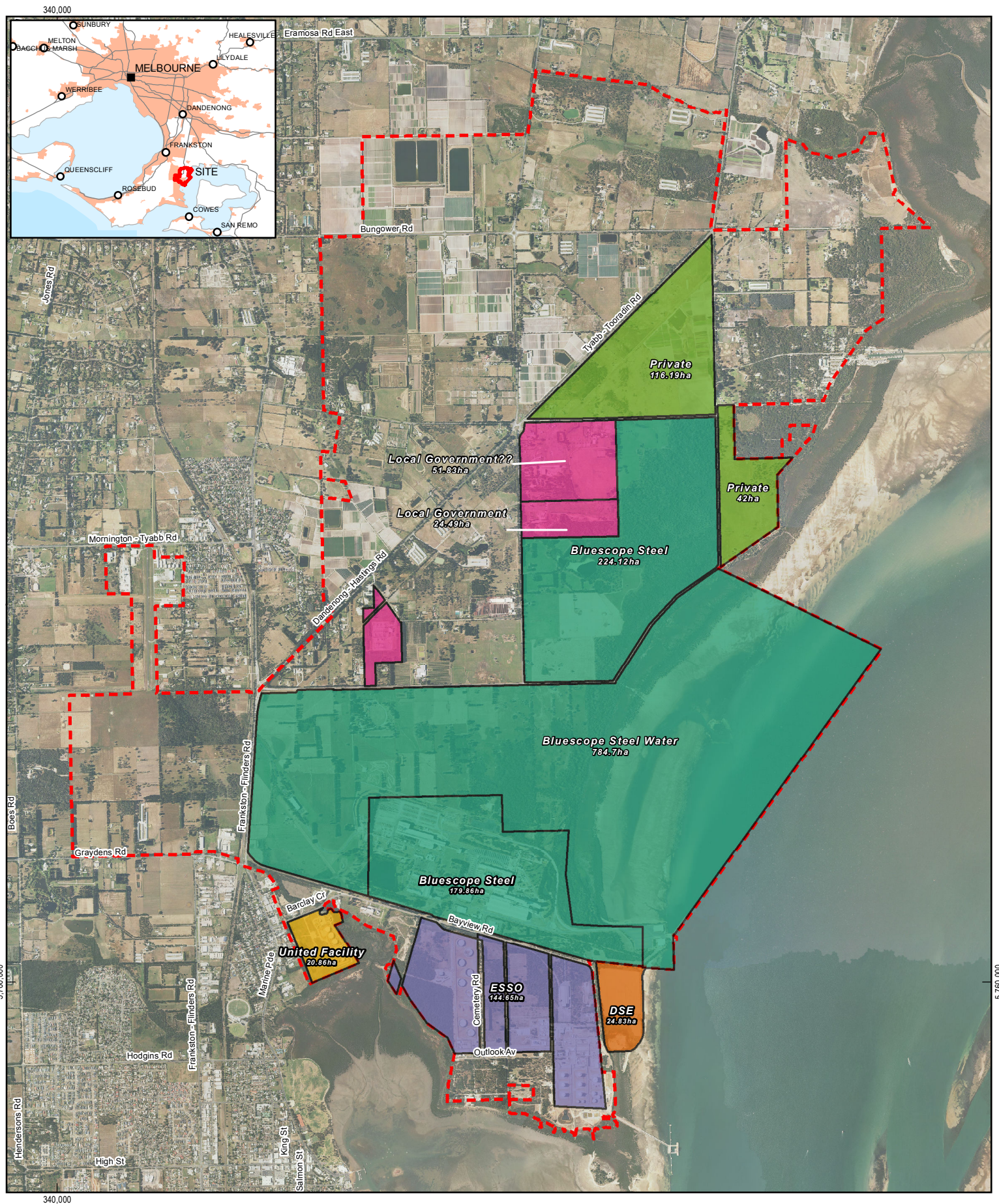
Given the synergies with the environmental and ecological risk evaluation of the Authority development, project management of the recreation, amenity and heritage assessment for the Authority development is to be managed under the existing Ecology Works Package.

1.3 Study Area

The study area for this report is generally defined by:

- The Special Use Zone 1 (red boundary) Figure 1.
- The wider study area (black boundary) associated with the marine corridor west of French Island.

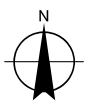
For the purposes of the amenity assessment the study area is generally defined by the SUZ1 boundary. Sensitive receptors outside of this area have been identified as impacts may extend outside of the current zoning boundary. For the purpose of the recreation and cultural heritage assessments SUZ1 is the primary focal point and the wider study is considered for potential impacts to coastal and submerged marine values.



- Special Use Zone - Hastings
- Bluescope Steel
- DSE
- ESSO
- Local Government
- Private
- United Facility

Paper Size A3
0 250 500 750 1,000
Metres

Horizontal Datum: GDA 1994
Grid: GCS GDA 1994



**PORT OF
HASTINGS**
DEVELOPMENT AUTHORITY

Port of Hastings Development Authority
Development Strategy

Job Number 31-29829
Revision A
Date 24 Jul 2013

Existing Buffers

Figure 1

1.4 Scope and Limitations

1.4.1 Limitations associated with Amenities Assessment

AECOM as part of a broader assessment of cultural heritage, amenity and recreational issues, was engaged by GHD to prepare an 'Amenity Analysis' as part of this project, which in turn forms part of the ongoing preparation of the Port Development Strategy for the Authority.

The amenity assessment is based on a desktop assessment as well as a visual inspection of the study area. No independent site investigations were undertaken to verify the accuracy of the information contained in third party reports. As such, this analysis of amenity considerations is only intended to 'characterise' the study area based on available information.

If further site specific information becomes available from alternative sources, the findings of the amenity assessment may change.

1.4.2 Limitations associated with Recreation Assessment

The recreation assessment has been completed as a desktop review of existing information supported by observation data at a limited number of locations in the vicinity of the SUZ1 precinct.

The conclusions and any recommendations in this report are based on the above stated information only and should be considered accordingly. If further assessment of specific site information is undertaken or acquired from alternative sources, the findings and conclusions of the recreation assessment may change.

1.4.3 Limitations associated with Cultural Heritage Assessment

This report is a desktop assessment only and does not represent an archaeological report meeting the requirements of a management plan under Victorian Legislation. No on site assessment was undertaken as part of this study. Due to these limitations this document does not provide the legal surety that an approved Cultural Heritage Management Plan (CHMP) or Archaeological Assessment Report affords. Nor does it replace the requirements for mandatory CHMP and Archaeological Impact Assessments in Victoria. Rather this document represents an initial review to guide The Authority and may act as a planning and approvals document if no further formal investigations are required under heritage legislation.

The following limitations should also be noted:

- No consultation has been undertaken with Aboriginal stakeholders or non-statutory interest groups, agencies or individuals (e.g. local historical societies, the National Trust of Australia (Victoria) or local residents.
- No comprehensive field survey, testing or excavation to identify or investigate cultural heritage sites has been undertaken in SUZ1 or the wider study area.
- This study was confined to the impact that the project would have on the cultural heritage values of the activity area, and has not involved any consultation with Aboriginal communities.

1.4.4 Additional Limitations

This report has been prepared by GHD for Port of Hastings Development Authority and may only be used and relied on by Port of Hastings Development Authority for the purpose agreed between GHD and Port of Hastings Development Authority as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Port of Hastings Development Authority arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (Section 1.1). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by the Authority and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Amenity

2.1 What is Amenity?

The concept of amenity is a longstanding and integral component of the Victorian Planning System. The definition of amenity varies as it has both a wide and flexible meaning dependant on the particular facts and circumstances. In essence, amenity implies an effect on the “senses” (perceived or actual), whether it be at an individual or community level.

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Amenity is generally recognised as the overall liveability, pleasantness or desirability of an area. Impacts on amenity can include perceived as well as actual impacts. Quality of life issues such as safety, visual quality and functionality are all key determinants of an area or region's amenity.

Amenity may not only be concerned with physical surroundings. Likewise, amenity may relate to the future as well as the present. “Some aspects of amenity may be practical and tangible such as traffic generation, noise, nuisance, appearance and even the way of life of the neighbourhood.” [Ref: Butterworths, (1984)]

Threats or potential impacts on amenity of an area or region typically include the following:

- Visual intrusion (impact)
- Air and dust emissions
- Noise and vibration
- Vehicular movements
- Light spillage

2.1.1 Amenity and the Planning System

The Victorian Planning System has historically provided “amenity safeguards” via the imposition of planning permit conditions on a use. Planning permits issued by Councils often include conditional requirements that an approved use (occupation) must not adversely affect the amenity of the surrounding area. This may be via:

- The appearance of any building, works or materials used.
- The parking of motor vehicles.
- The transporting of materials or goods to or from the dwelling.
- The hours of operation.
- Electrical interference.
- The storage of chemicals, gasses or other hazardous materials.
- Emissions from the site.

Residual emissions from land uses are often amenity impacting. Residual emissions are essentially discharges emanating to air, land, and water environs. Typical examples of residual emissions include noise, odours, dust, and runoff or seepage of contaminants, resulting from industrial/commercial, domestic and transport related activity. Generally, residual emissions are regarded as having the potential to adversely impact on the conditions of the surrounding environs, whereby the “liveability” or amenity expectations of individuals and communities in proximity to the sources of emissions may be impacted. Uncontrolled, the impacts of residual emissions may contribute to broader and potentially further-reaching environmental degradation issues.

2.1.2 Amenity and Port of Hastings Development

Port environs in many Australian cities can and do present a fertile territory for amenity based conflict due to land use and development incompatibility. Expectations of the community also have the potential to change over time. Amenity impacts, residual emissions and public risk consequences can emerge from a failure to strategically plan and manage land use incompatibility properly.

The proposed development faces significant challenges to ensure potential adverse risk and amenity impacts are contained within land set aside for port or port related uses. Any adverse impacts on the sensitive marine environment of Western Port require appropriate mitigation (Port and Environs Committee, Final Report, 1 November 2010).

As part of the long term strategic planning for the Port of Hastings, it will be important to ensure that reasonable levels of amenity are available to near port commercial and residential properties. At the same time, water, rail and road transport corridors servicing the Port of Hastings, should be reasonably protected as a significant state asset.

2.1.3 Sensitive Land Use

The definition of a ‘sensitive land use’ varies but within the Victorian context, it generally is deemed to include the following types of land uses and controls:

- Accommodation uses including residential, hotel, motel and caravan parks.
- Child care and day-care centres.
- Education facilities including pre-school, primary school uses and other schools and Public Acquisition Overlays for an education centre.
- Hospitals and Public Acquisition Overlays for a hospital.
- Other uses involving the presence of people for an extended period of time except in the course of their employment or for recreation purposes.
- A Residential Zone including the Residential 1 Zone, Residential 2 Zone, Residential 3 Zone, Low Density Residential Zone, Mixed Use Zone and Township Zone and Business 5 Zone.

It is noted that new residential, commercial and industrial zones will be shortly introduced across Victoria.

2.1.4 Concept of Buffers

Buffers are the means through which residual emissions to land, air and water from industry and amenity expectations can be appropriately managed and protected. Buffers are essentially separation distances applied to a defined geographical area through which residual emissions to land, air and water from industry operations and residential amenity impacts can be managed and safeguarded. In planning terms, buffers traditionally imply a spatial or physical form of separation.

A buffer is essentially a planning mechanism designed to neutralise or mitigate negative externalities by controlling the intensity, form and location of competing and often diametrically opposed land uses.

It is considered that a buffer, amongst other things, should seek to:

- Manage the proximity of major risk by protecting people, the environment and property from significant hazards. A major risk is defined as the likelihood of any significant incident that results in adverse consequences to people, the environment and/or property.
- Complement existing statutory mechanisms to control operational and residual emissions from industrial facilities. Emissions can include noise, dust, odour, water quality and residual contamination which can impact on the environment and affect people's health and/or quality of life.
- Protect and, where possible, improve residential amenity and therefore enhance people's overall quality of life and sense of wellbeing.

While maintaining physical buffers between incompatible land uses can minimise the potential impact of residual emissions, the necessary separation may result in a void between incompatible land uses. This void can be utilised by selective or transitional land uses that are compatible with both the emitting industry and the sensitive receptor.

2.2 Strategic Planning Context

This section identifies State and local planning policies as well as planning controls relevant to the future development and operation of the Port of Hastings. These planning policies and controls are contained within the Mornington Peninsula Planning Scheme, which applies to the Port of Hastings.

The Victoria Planning Provisions set out the principles for the planning and development of land in Victoria. Key planning objectives as set out in Section 4(1) of the Planning and Environment Act 1987 include the fair and orderly development of land, a secure, pleasant and safe working, living and recreational environment and the facilitation of development in accordance with planning objectives in the interests of all (present and future) Victorians.

Appendix A documents State Planning Policy Framework and Local Planning Policy Framework.

2.2.1 Special Use Zone 1 – Port Related Uses (Clause 37.01)

Sections of the Port of Hastings future development area, namely land adjacent to Bayview Road, are currently zoned SUZ1 pursuant to the Mornington Peninsula Planning Scheme.

The purpose of the SUZ1 is:

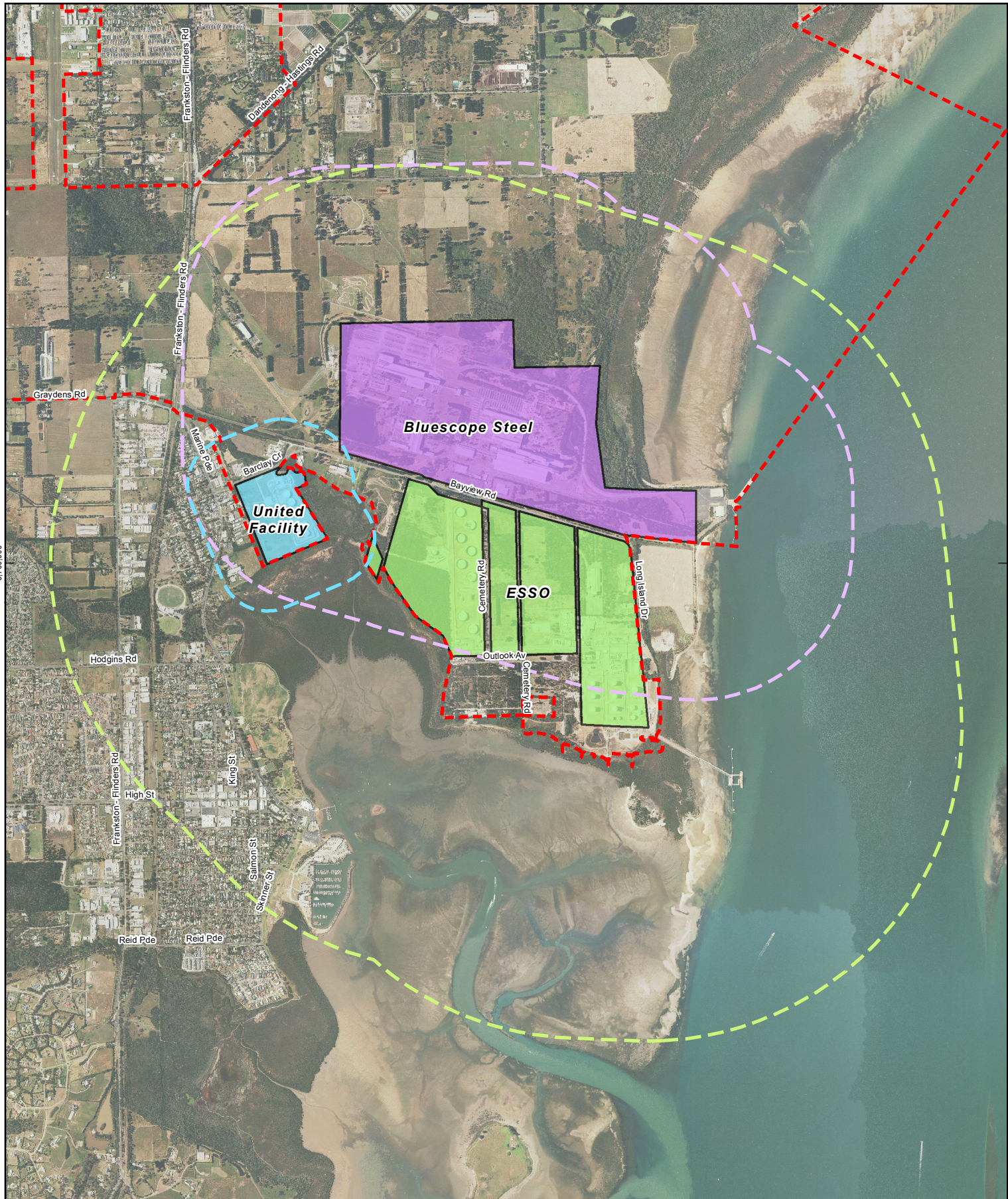
- To provide a location for selected port and industrial uses which depend upon or gain significant economic advantages from the natural deep water channels in Westernport.
- To enable the effective implementation of the Hastings Port Industrial Area Land Use Structure Plan (Department of Planning and Development 1996).
- To protect the environmental values of the waters, coastline and intertidal areas of Westernport and adjoining land.
- To provide for the interim rural use of land to the extent consistent with maintaining land resources for future port and port related development.
- To protect the towns of Tyabb, Hastings, Crib Point and Bittern by ensuring that no port industrial development which may have an adverse effect on the amenity or safety of residents occurs in proximity to residential areas.

The provisions of the SUZ1 apply to a wide geographical area. The SUZ1 includes the entirety of Esso and BlueScope Steel sites, a number of smaller industries and rural uses, some with residential properties. The provisions of the SUZ1 encourage uses that 'create' effective buffers to port related uses.

Additional controls – (Restricted occupation area) Long Island Point

An additional control in the SUZ1 is the Restricted Occupation Area – Long Island Point. The purpose of the control is "to prevent human habitation on the land surrounding the Long Island Fractionation Plant and Crude Oil Storage Tanks. The land south of Bayview Rd and east of Jeremiah Rd, Tyabb (Long Island Point) must not be used for a dwelling other than a Caretakers House. Before deciding on an application for any other use the responsible authority must refer the application to the minister administering the Dangerous Goods Act 1989".

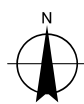
The planning scheme anticipates restricting human habitation (dwellings) at this location. The Esso Fractionation Plant is deemed a hazardous site with buffers in place to control off site land uses which increase potential risk to the ongoing operations of the plant.



- Special Use Zone - Hastings
- Bluescope Steel 1000m Buffer
- Bluescope Steel
- ESSO 2000m Buffer
- ESSO
- United 300m Buffer
- United Facility

Paper Size A3
0 250 500 750 1,000
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55



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Job Number 31-29829
Revision A
Date 24 Jul 2013

Existing Buffers

Figure 2

Buildings and Works - (Setbacks) Buffer Areas

The SUZ1 includes buffer distances for buildings and works related to port related development near a Residential Zone, Green Wedge Zone, Farming Zone or Low Density. The control also requires land within 50 metres of a Residential Zone or Low Density Residential Zone or abutting road must be planted with trees and shrubs.

These requirements do not apply to any of the following buildings or works:

- Existing approved port related developments
- Landscaping
- Pipelines
- Minor farm structures, fences or works related to farming
- Sewerage, drainage, water and gas mains
- Power and telephone lines
- Buildings or works constructed or carried out by the Council or a public authority

It is noted that the SUZ1 has a strong emphasis on 'maintaining' amenity. The proposed Port Zone, to be introduced by the State Government, will provide for uses which derive direct benefit from co-establishing with a port. It is understood that the Port Zone will be more of a facilitator of port uses by broadening out the consideration of amenity as part of the 'Application Requirements' including noise levels, air-borne emissions, light spillage and traffic volumes.

The Port of Hastings study area is affected by the following overlays:

- Land Subject to Inundation Overlay
- Public Acquisition Overlay(s)
- Vegetation Protection Overlay
- Design and Development Overlay
- Bushfire Management Overlay.

As the future options to accommodate container trade at the Port of Hastings are developed, specific overlay requirements within the Mornington Peninsula Planning Scheme will need to be identified and the potential amenity related impacts appraised.

2.2.2 Particular and General Provisions

Refer to Section 2.2.7 for an overview of the Clause 52.10 – Uses with Adverse Amenity Potential.

2.2.3 Other Strategic Documents

Tyabb Township Plan (May 2012)

The Tyabb Township Plan has been adopted by Mornington Peninsula Shire Council. Essentially, the Township Plan seeks to provide greater certainty for residents, businesses, landowners, developers and other stakeholders about the future development of Tyabb over the next 10 – 15 years. Council's vision for Tyabb is that it will remain a small township in a rural setting, with a unique sense of identity, character and heritage, with a diverse balance of living and lifestyle options and with a viable and sustainable community.

Of relevance to this Amenity Analysis, the following are identified as issues from general growth pressures.

- *...future development associated with the Port of Hastings will add to the demand for freight movements and heavy vehicle traffic is already an area of community concern. This is a threat to the township's character and its liveability e.g. in terms of noise pollution and traffic safety (Tyabb Township Plan, May 2012).*
- *Land set aside for development associated with the Port of Hastings (in Special Use Zone 1) borders onto the eastern boundary of Tyabb. Unless carefully managed, future Port-related development could have a major impact on the amenity and rural setting of Tyabb....*
- *Advocate a review of the land use and development controls for the land east of Tyabb (north of the Western Port Highway), currently within the Special Use Zone 1 (Port Related Uses) to ensure this land can provide a rural setting for Tyabb in the long term.*

Hastings Port Industrial Area Land Use Structure Plan (Department of Planning and Development 1996)

The purpose of the Hastings Port Industrial Area Land Use Structure Plan was to identify the potential for port-related industrial development, conform to State and local planning policies, guide development in the area, identify areas to be rezoned, minimise land use conflicts, consideration of amenity and safety of surrounding residential areas and the work-force. The Structure Plan notes that the existing port-related industries make a significant contribution to employment in the surrounding areas and the local economy.

The Structure Plan identifies the hazard risk associated with the petroleum products handled at the Port of Hastings, particularly the Esso/BHP Fractionation Plant. As such, the provision of buffer areas and development controls are required to ensure adequate standards of safety and amenity.

The Structure Plan provides key recommendations for potential development of the port. These recommendations include port facilities, conservation of the environment, transport, land subdivision and tenure, and amendments to planning scheme controls.

2.2.4 Legislative and Regulatory Requirements for Amenity

To help inform the overall Amenity Analysis for the Authority, relevant legislative and regulatory requirements as well as guidelines, policies and strategies have been identified.

Relevant legislative and regulatory requirements include the following:

- Victoria Planning Provisions, Clause 52.10: Uses with Adverse Amenity Potential.
- State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1 (SEPP N-1).
- AS 4284 "Control of the Obtrusive Effects of Outdoor Lighting" (1997).
- State Environment Protection Policy (SEPP), 2002. Prevention and Management of Contamination of Land. Victoria Government Gazette. No. S 95 (Land SEPP) and Ministerial Direction No. 1 – Potentially Contaminated Land.
- State Environment Protection Policy (Air Quality Management) and the recently published Recommended Separation Distances for Industrial Residual Air Emissions (2013).

Specific thresholds or benchmarks applicable to port operations and construction as well as land based transportation have been identified and the spatial implications for future development and operations at the Port of Hastings confirmed in this section.

2.2.5 Victoria Planning Provisions, Clause 52.10: Uses with Adverse Amenity Potential

Clause 52.10 is a Particular Provision not just in the Mornington Peninsula Planning Scheme but all Victorian Planning Schemes. The purpose of this clause is to define those types of industries and warehouses, which if not appropriately designed and located may cause offence or unacceptable risk to the neighbourhood.

The distances in Clause 52.10 are based on air, noise and other potential emissions that may impact on neighbourhood amenity. Clause 52.10 defines 'threshold distance' as:

"The minimum distance from any part of the land of the proposed use or buildings and works to land (not a road) in a residential zone, Business 5 Zone, Capital City Zone or Docklands Zone, land used for a hospital or an education centre or land in a Public Acquisition Overlay to be acquired for a hospital or an education centre".

Clause 52.10 exists to help Responsible Authorities (usually Councils) to determine whether a proposed industrial land use has a designated minimum threshold distance from which it must be set back from a sensitive land use.

2.2.6 State Environment Protection Policy (Noise from Commerce, Industry and Trade)

The EPA's Interim Guidelines for Control of Noise from Industry in Country Victoria – N3/89 applies to noise emissions from industries in Victoria that are outside Metropolitan Melbourne. The Guidelines state that where background sound levels are comparable to Metropolitan Melbourne, noise limits shall be determined using the procedures of the Victorian State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. SEPP N-1.

SEPP N-1 prescribes the procedures for determining the statutory environmental noise limits, which apply at noise sensitive locations, such as residential areas, with respect to noise due to commercial, industrial and trade operations.

The SEPP N-1 noise limits are dependent on:

- Zoning levels, which are based on the planning scheme zoning types.
- The time of day i.e. different limits apply at different times of the day.
- The background noise level (LA90) in the noise sensitive area, in the absence of noise due to commercial, industrial or trade operations.

2.2.7 AS 4284 "Control of the Obtrusive Effects of Outdoor Lighting" (1997)

The purpose of the Australian Standard AS 4284 "Control of the Obtrusive Effects of Outdoor Lighting" (1997) is to provide a common basis for the assessment of the likely effects of developments that involve the provision of outdoor lighting.

AS4282 states that "with any outdoor lighting it will rarely be possible to contain all light within the boundaries of the property on which the lighting system is installed. Some light will inevitably be spilled outside the property boundaries, either directly or by reflection". The determination of when the light spill becomes obtrusive to others is difficult since both physiological and psychological effects are involved.

Ensuring appropriate separation distances from potentially sensitive land uses and requiring appropriate baffling treatments are the two primary mitigation options for future development at the Port of Hastings pertaining to light spillage. Landscape screening can also have a role to play. The tolerable levels for both parameters are dependent on the time of day and ambient light already active in the area. Therefore, maximum Lighting Technical Parameters (LTPs) have been categorised into two time brackets Pre-curfew and Curfew. Pre-curfew is normally taken as 6 am to 11 pm, Curfew 11 pm until 6 am. Councils may prescribe alternative times, which will take precedent.

The following are recommended maximum values of LTPs for obtrusive light in accordance with AS4282 are:

- Illumination Pre-curfew: 25lux
- Illumination Curfew: 4lux
- Luminous Intensity Pre Curfew: Installation size dependant (2500 – 7500cd)
- Luminous Intensity Curfew: Installation size dependant (2500cd)

2.2.8 State Environment Protection Policy (SEPP), 2002. Prevention and Management of Contamination of Land. Victoria Government Gazette. No. S 95 (Land SEPP) and Ministerial Direction No. 1 – Potentially Contaminated Land

The purpose of the State Environment Protection Policy and Ministerial Direction No. 1 are to identify historical and current land uses which may pose a risk to the environment with regard to contamination of land, groundwater and/or surface waters. The intent of the SEPP and Ministerial Direction is to maintain and enhance the quality of the land environment, and where practical to maximise beneficial uses of the land.

In accordance with Ministerial Direction No. 1, where land has been identified as potentially contaminated and where a planning scheme amendment would allow the land to be used for a sensitive use, then a Certificate of Environmental Audit or Statement of Environmental Audit will need to be issued for the site so to confirm possible land uses.

2.2.9 State Environment Protection Policy (Air Quality Management)

The Air Quality Management SEPP establishes the framework for managing emissions into the air environment in Victoria from all sources of air pollutants, so that the air quality objectives outlined in the Ambient Air Quality SEPP are met and we achieve the cleanest air possible, having regard to the economic and social development of Victoria. The management framework and attainment program for protection of the air environment contained in SEPP (Air Quality Management) address not only ambient (or regional) air quality, but also the management of particular sources (for example, industry, motor vehicles and open burning) and local air quality impacts, including air toxics, odorous pollutants, greenhouse gases and ozone depleting substances.

2.2.10 Recommended Separation Distances for Industrial Residual Air Emissions (Publication Number 1518 March 2013)

This Guideline replaces EPA Publication AQ 2/86, Recommended Buffer Distances for Industrial Residual Air Emissions 1990. This guideline provides recommended minimum separation distances between odour or dust emitting industrial land uses and sensitive land uses.

The Guideline aims to facilitate effective decision making in relation to land uses to:

- Protect human health and well-being, local amenity and aesthetic enjoyment.
- Protect existing industry from encroachment by sensitive land uses.
- Prevent land adjacent to industry from being underutilised.

2.3 Analysis of Amenity Considerations

The purpose of the Amenity Analysis is to bring together the strategic planning context and prepare a series of high level recommendations in relation to amenity considerations for the future MCA and risk assessment processes being undertaken for the Port of Hastings Port Development Strategy.

The following section identifies amenity issues, opportunities and constraints associated with key amenity issues. Adverse amenity effects have the potential to impact on human health. As such, an important element of the strategic planning task for the Port of Hastings is to identify and avoid unacceptable future adverse effects on sensitive land use receptors.

Based on our investigations (desktop only), the primary amenity related matters that need to be considered are detailed below.

2.3.1 Visual Impact

A key amenity related consideration for the future development of the Port of Hastings will be visual impact including the impacts on key features of Western Port and broad community values.

Visual impact or effect is the interaction between a proposal and the existing visual environment. It is often expressed as the level of “visual contrast” of the proposed development against its setting or background in which it is viewed.

Low visual effect occurs when a proposed development blends in with its existing viewed landscape due to a high level of integration of one or several of the following: form, shape, pattern, line, texture or colour. It can also result from the use of effective screening often using a combination of landform and landscaping.

Moderate visual effect occurs where a proposal is visible and contrasts with its viewed landscape however, there has been some degree of compatibility and integration (e.g. good siting principles, retention of significant existing vegetation, provision of screen landscaping, appropriate colour selection and/or suitably scaled development).



Photograph 1 – Existing view from Hastings Jetty

In the context of the Port of Hastings, there are a number of key viewpoints from both land and water perspectives. These include:

- Hastings marina and Hastings jetty – currently have existing views of United's Terminal facility, BlueScope and Esso facilities. To differing degrees these views are filtered by established coastal vegetation.
- Cowes foreshore (distant view lines) – is a significant tourist destination. Prominent views towards the channel and port development area from Thomson Avenue, Cowes Jetty, The Esplanade and the foreshore extending around Erewhon Point, (to the east).
- French Island – views from the western coastline will arise. Small resident population and less tourism numbers relative to Phillip Island.
- Stony Point – will have distant views from the jetty, boat ramp and car park area.
- Users of Western Port – please refer to the following Recreation Analysis.
- Significant industrial facilities and structures, albeit often filtered by vegetation, are visible in the areas within and surrounding the existing SUZ1. Future port related development will represent an increase in the apparent visual 'mass' of the industrial infrastructure already existing adjacent to the port area. Therefore, the presence of the existing industrial complexes and associated vegetative buffers will be factors in determining visual impact.

Visual impacts are expected to be greatest from the water, French Island and foreshore open spaces, where a general lack of intervening land form, vegetation and built form permits open views toward the proposed development site. Visual impacts are expected to diminish with distance.



Photograph 2 – View of Esso Fractionation Plant

A comprehensive Visual Impact Assessment based on the preliminary design will need to be undertaken as part of the planning and environmental approvals processes for the development of the Port of Hastings. The assessment will need to take into account modifications to the landscape as a result of changing land uses within the Study Area.

2.3.2 Potential Noise Effects

Noise can affect general amenity levels for residents, recreational users and surrounding commercial enterprises. The purpose of the EPA Noise Guidelines is to protect people from the adverse effects of noise. The guidelines require proposed industries to be designed so as to not exceed nominated noise limits. The Noise Guidelines are also used as a planning tool to spatially manage land uses and activities.

The EPA Guideline Industry Noise and Statutory Approvals (Publication 1317, December 2009) state that planning scheme amendments that seek to rezone land should “avoid incompatible uses, loss of compliance for industry or unsatisfactory amenity for residents”. The Guideline recommends that a strategic assessment should be undertaken to consider the “noise impacts on sensitive land uses/zones to any impacts that complaints from surrounding land uses may have on the viability of industry operations”.

A range of laws set broad obligations for public bodies to consider rail noise. These include the *Major Transport Projects Facilitation Act 2009*, the *Environment Effects Act 1978*, the *Planning and Environment Act 1987* and the *Transport Integration Act 2010*. The Victorian Government recently introduced the Passenger Rail Infrastructure Noise Policy (April 2013). Transport bodies and planning authorities need not have regard to this policy when exercising powers or performing functions in relation to new freight rail projects.

The proposed port development options are located on the eastern edge of the existing SUZ1 area where there are few noise sensitive land based receptors in proximity to the site. Noise emissions from medium to longer term port and industrial development within the wider SUZ1 area will need to be assessed on a case by case basis for compliance with SEPP N-1.

As a general rule, noise emission impacts on surrounding sensitive receptors will be reduced via the provision of larger separation distances. It is recommended that the Port of Hastings undertake a strategic assessment of background noise to determine baseline existing conditions and how much ‘capacity’ there is to increase noise emissions. This would feed into a strategic review to identify precincts where port compatible industries with a known need for noise emissions could be located to minimise the potential impact on sensitive receptors.

2.3.3 Road Upgrades and Traffic Generation

The Port of Hastings is currently serviced by two highways that provide links to metropolitan Melbourne. The Western Port Highway is the major access to Dandenong which links onto the Monash Freeway to easy access to Melbourne. Peninsula Link provides major road access to Melbourne via Frankston. A number of local arterial roads connect with the Western Port Highway and Peninsula Link freeway. Existing port related traffic servicing BlueScope Steel, Esso and Trafigura uses Barclay Crescent and Bayview Road.

Landside port related development at the Port of Hastings will require extensive modifications and/or upgrades of existing major road transport routes. In conjunction with VicRoads, it will be important for the Port of Hastings Development Authority to comprehensively assess the impacts of road network changes and, where required, mitigate these impacts.

Road upgrades will be assessed against the *Transport Integration Act 2010* and the *Planning and Environment Act 1987* (amongst other Acts) for an evaluation of the social, environmental and economic impacts. Depending on the scale of the road network changes, it may include an appraisal of noise as well as air emissions, together with an evaluation of the direct and indirect impacts on amenity. VicRoads typically evaluates noise impacts and the application of mitigation measures in accordance with the following policies:

- SEPP N-1 (EPA Policy for metro Melbourne) – applicable to trucks within the site
- Traffic Noise Reduction Policy 2005
- A guide to the reduction of traffic noise (2003)
- Bridge Technical Note: Design criteria for noise barriers
- Traffic Noise Measurement Guidelines for Acoustic Consultants

Over time, increased vehicle noise and movements on communities can become problematical. Truck traffic management along Francis Street in Yarraville has been a major ongoing issue for the Port of Melbourne Corporation to manage. Increased vehicle movements in surrounding townships is a foreseeable amenity related issue for the Port of Hastings. In this respect, one of the forward planning issues identified by Council within the Tyabb Township Plan (2012) is the increase in traffic associated with the growth and development of the Port of Hastings. This will require careful planning in the design and development phase.

2.3.4 Light Spillage

As previously identified, the proposed port development area is located on the eastern edge of the SUZ1 area where there are few sensitive receptors in proximity to the site. By comparison, the remaining SUZ1 area and interfacing land has been developed for a range of sensitive land uses (primarily dwellings associated with farms and rural lifestyle properties within the SUZ1 and standard suburban residential properties outside of the SUZ1). There are also residential dwellings located along the Western Port foreshore with concentrations at Warneet Foreshore to the north-east and on French Island to the east.

Light emissions from the future port development and each new industry (and alternations to existing industry) within the wider SUZ1 area will need to be assessed on a case by case basis for consistency with the AS-4282.

Light emissions from future port development and the impact on sensitive receptors will be reduced by the available separation distance and buffer landscape treatments. However, as development gets closer to sensitive receptors there is the potential for more significant light emission impacts.

The relevant lighting standard, AS4282, divides land uses into commercial and residential, where a commercial land use is any urban use that is not residential. The standard states that new external lighting for commercial uses should be in compliance with the guidelines so as to avoid impacts to the amenity of existing residential uses or known future residential uses. External lighting, particularly at the periphery of the SUZ1, will need to be designed, baffled and located to prevent any adverse effect(s) on adjoining landholdings.

As an industry standard, AS4282 does not restrict the location of sensitive land uses in close proximity to external lighting sources that may create a nuisance.

2.3.5 Air and Dust

The port development options currently being prepared are located on the eastern edge of the SUZ1 area where there are few sensitive non-environmental receptors. By comparison, the SUZ1 area to the north of Denhams Road and interfacing land incorporates a range of sensitive land uses, primarily dwellings associated with small scale farms and rural lifestyle properties. Conventional residential properties are located outside but in close proximity to the SUZ1 area (i.e. on the outskirts of Tyabb and Hastings).

Air and dust emissions from future port operations and new industry (and alternations to existing industry) within the wider SUZ1 area will need to be assessed on a case by case basis for consistency with the SEPP Ambient Air Quality 1999, SEPP Air Quality Management 2001, EPA Publication 1518 Recommended Buffer Distances for Industrial Residual Air Emissions.

Air and dust emissions from future port operations upon potentially sensitive receptors will be reduced by enacting appropriate separation distances. The prevailing existing vegetation and topographical form may also influence emissions. However, as peripheral development gets closer to sensitive receptors and where existing vegetation is removed the impacts of air and dust emissions from existing and proposed industry will increase. It is recommended that the Port of Hastings undertake a strategic review to identify precincts where port compatible industries with a known need for air and dust emissions could be located to ensure the opportunity for these industries exists for the long term growth of Port of Hastings, whilst simultaneously minimising the potential impact on sensitive receptors.

2.3.6 Interface with Existing Settlements

Port environs can present opportunities for conflict due to land use and development incompatibility. There are two distinct communities located in relatively close proximity to future port operations at the Port of Hastings. Tyabb comprising a population of 3,306 is located to the north-west of the SUZ1 and Hastings with a population of 8,685 is situated to the south-west. Tyabb is the closest settlement to the bulk of future development at the Port of Hastings. Other communities within the surrounding area but not directly interfacing are Somerville, Bittern, Crib Point, Warneet, French Island.

The growth of these communities is in part controlled by Melbourne's Urban Growth Boundary ('UGB'), which can only be changed via an Act of the Parliament of Victoria. The UGB follows the boundary of the SUZ1 and envelopes Tyabb, Hastings and Somerville as three distinct communities whose growth is currently constrained within the tightly held boundaries.

The Tyabb Township Plan (May 2012) prepared by Mornington Peninsula Shire Council identifies a number of strategic planning issues relating to interface management associated with the Port of Hastings. Council expresses concern in the Plan that future port-related development may have a major impact on the amenity and rural setting of Tyabb. Whilst it is likely that (in our opinion) the role and function of Tyabb will change over time as a result of the Port's development, Council through the Tyabb Township Plan is seeking to maintain the "rural setting" of Tyabb in the long term.

The Tyabb Township Plan supports the application of the Low Density Residential Zone (LDRZ) and the proposed Padua College (a catholic secondary campus for Years 7 - 10 that is expected to open in 2014) in the southern area of Tyabb where it interfaces with the SUZ1, but has directed the majority of 'suburban residential growth' to the north of Tyabb. Council is seeking a strategic commitment to retain rural land uses in the northern section of the SUZ1 (approximately north of Denham Road, McKirdys Road and Pikes Road).

At this point, Council through the Tyabb Township Plan are seeking to essentially maintain the "rural setting" of Tyabb in the long term.

Unless carefully managed, future Port-related development could have a major impact on the amenity and rural setting of Tyabb in the long term (Source: Tyabb Township Plan 2012).

In our view, the development within the LDRZ area and the establishment of Padua College (as sensitive land uses) in the area envisaged will be potential buffer constraints on the future development of the port and require further consideration to be translated into the Mornington Peninsula Planning Scheme.

Any planning policy response, amongst other requirements, should seek to:

- Ensure that development proposals on land adjacent to the township boundaries provide interface treatments to adjoining SUZ1 / rural land. These treatments should contribute to an enhancement of Tyabb's township character and assist in securing these boundaries for the long term.
- Ensure that development proposals must provide "buffer treatments" (including setbacks, landscaping, noise abatement measures).
- Ensure appropriate separation distances at the port interface in accordance with Clause 52.10 to protect the long term sustainable development and operation of the Port of Hastings.

There are no publicly available strategic plans for Hastings, Somerville, Bittern and Crib Point.

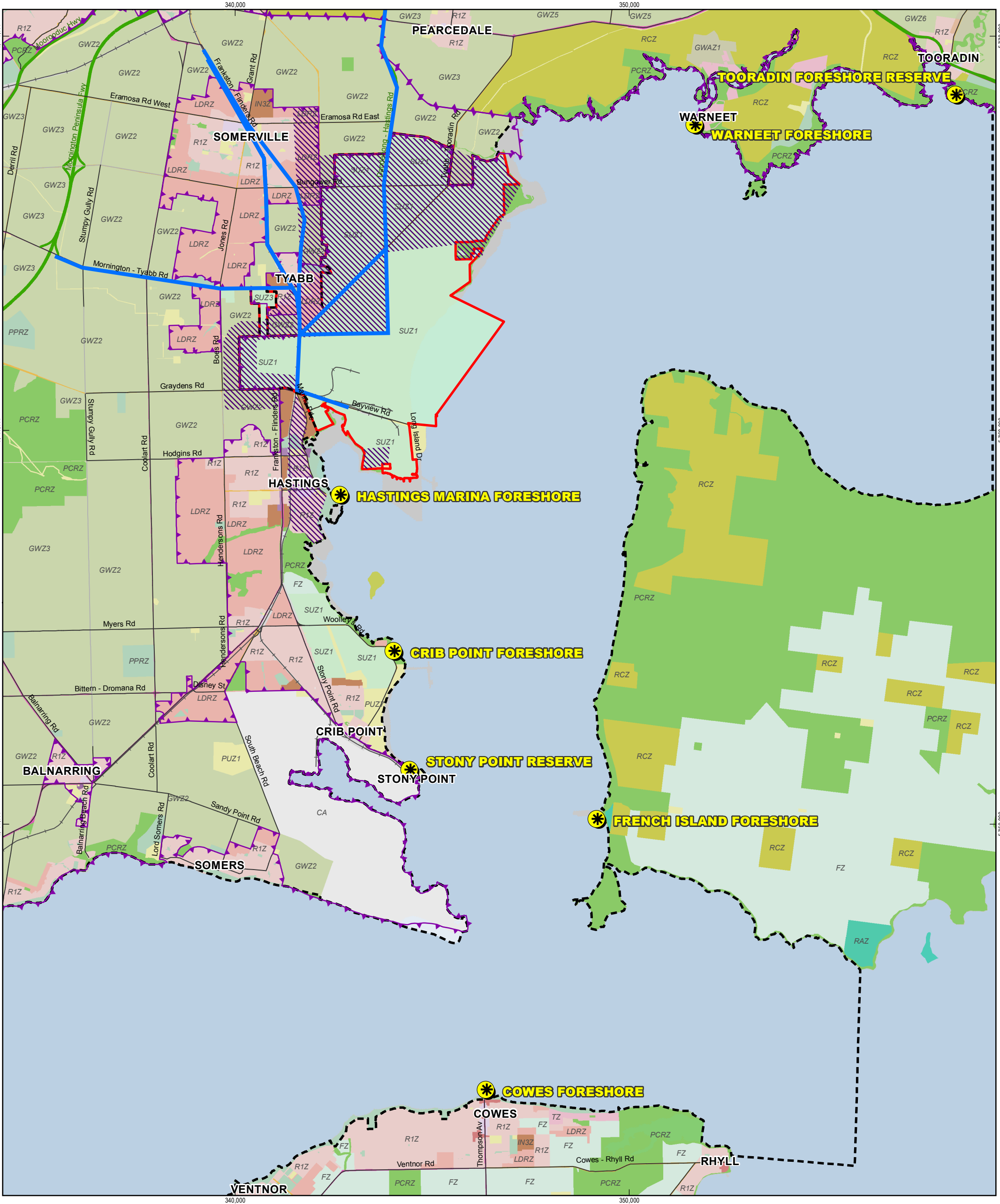
2.3.7 Summary of Amenity Considerations

Based on the foregoing amenity assessment, areas with a degree of sensitivity have been identified and are shown on Figure 4. These include:

- Key visual receptors such as Stony Point Reserve and Cowes Foreshore.
- Key transport interfaces along designated main roads.
- Key interfaces with settlements such as Tyabb, Somerville and Hastings.

The sensitivity interface refers to directly adjoining land outside the designated port area (SUZ1).

The hashed area shown on Figure 3 represents the primary port interface or port environs outside of the dedicated port land. Amenity impacts within the port interface will require careful appraisal as part of the impact assessment process for the future development of Port of Hastings. Port related activity will likely be visible from Cowes, but this will be determined by a visual impact assessment.



Study Area

Sensitive Interfaces

Urban Growth Boundary

Land and Marine-side Study Area

Key Visual Receptors

Key Transport Interfaces

Highway

Arterial

Local

Unsealed road

Track and bike path

Planning zone

Business 1

Business 4

Business 5

Commonwealth Land

Farming

Green Wedge A

Green Wedge

Industrial 1

Industrial 3

Low Density Residential

Mixed Use

Public Conservation & Resource

Public Park and Recreation

Public Use

Public use - Transport

Residential 1

Rural Activity

Rural Conservation

Road - Category 1

Road - Category 2

Special Use

Township

2.4 General Recommendations

In the future it will be important to ensure that the Port of Hastings and its' surrounding area are well integrated, particularly in terms of the management of potential impacts. As part of the future environmental and planning approvals process, a range of specialist assessments will need to be undertaken to appraise the specific impacts and benefits of future port development.

General planning principles and design response measures that should be considered to address amenity matters in the development and refinement of potential port development options for the Port of Hastings include:

- Ensure separation of potentially conflicting industry types, in particular industries with air emissions that may affect the amenity and/or the production processes of goods for human consumption.
- Encourage the co-location of amenity affecting land uses that require substantial threshold distances in a central area away from the periphery of the existing SUZ1 boundary. Depending on the size of the precinct more than one area may be required. These land uses should, in the longer term, be surrounded by concentric rings of land uses that have fewer land use buffer constraints.
- The port development area must be capable of containing all buffer or separation threshold distances within defined boundaries and not spill into sensitive/incompatible land use areas. Although not envisaged initially, industry that may cause intra-industry conflicts should be located in precincts that are large enough to contain the buffer or separation threshold distance without spilling into neighbouring (non-port) sites.
- Locate low impact land uses on the periphery of the port area.
- Building heights should generally be in keeping with the scale and land use type of adjoining land, taking into account the proximity of the structure to roads, conservation areas and adjoining sensitive land uses.
- Provide publicly accessible areas, where appropriate, at the Port of Hastings that balances functionality, aesthetics, amenity and, importantly, safety.
- Avoid severance issues by ensuring access to properties and community facilities, and minimising impacts on road, public transport, walking and cycling networks. Access restoration to ensure multi-modal connectivity and linkages for local communities will be important.
- Plan and protect the long-term development of both road and rail transport modes including the grade separation of rail from other transportation modes.
- Identify and protect areas of significant environmental, cultural and amenity value within and surrounding the Port of Hastings.
- Ensure that adequate area is available to accommodate landscaping, open space for employees and screening of loading and storage areas.
- Traffic generation and distribution of the development during construction and operational phases - demonstrate how the development traffic will be catered for so as to minimise the impact on the external road network.

2.5 Conclusion

In light of the strategic importance of the Port of Hastings to Victoria and south-eastern Australia it is essential that the future impacts of port operations on surrounding communities (i.e. Tyabb and Hastings in particular) and vice versa are properly determined and understood.

This Amenity Analysis, as an initial desktop, has identified a range of potential amenity issues such as noise, light spillage and visual impact that will influence and impact upon the future development of the Port of Hastings.

Amenity impacts need to be addressed to ensure that:

- Port operations are not unduly restricted and that operations are not subject to additional controls that will effectively reduce port efficiency and/or competitiveness.
- Long term growth at the Port of Hastings is permitted to continue to its optimal sustainable capacity limit.
- The safety and amenity of surrounding land uses and townships is reasonably maintained.
- The interests of existing landowners surrounding the port area are recognised and appropriately addressed.
- A more detailed analysis of amenity related matters will be required as part of detailed impact assessment phase for the future development of the Port of Hastings.

3. Recreation

3.1 Introduction

For the purpose of this report recreation has been defined as the participation in leisure activities or experiences which afford enjoyment or satisfaction to the participants.

Much of the recreational and tourism values of Western Port and particularly Hastings are associated with the coastal and marine environment. Additionally there are a number of specific land based recreation areas identified in the vicinity of Hastings.

The capability of the land to accommodate the recreational uses relates to the primary intent/purpose of the zoning and reservation (land use) as it relates to the allowable and promoted uses, the quality of the natural environment and whether the site is suitable for the use or development and the compatibility with adjoining land uses.

Three fundamental attributes that are key to the uses and values of recreational activity are therefore:

- The intended activity is permissible at a location.
- The location is accessible – with suitable infrastructure if required.
- The location is of suitable quality to support the desired activity.

The ability to undertake and participate in recreation is a key determinant of an area's or region's amenity. *The Amenities analysis section of this report (Section 2) provides a detailed assessment of the Strategic Planning Context, Special Use Zone 1 – Port Related Uses, Legislative and Regulatory Requirements for Amenity and other Strategic Documents relating to amenities, of which recreation is a key factor.*

This desktop assessment considers the potential effects of activities associated with the Port of Hastings development and specifically the development of the SUZ1 precinct for the area north of Long Island Point specifically on the recreational values and activities associated with the Port of Hastings development as described above.

3.2 Legislation

The two primary legislations for the management of recreational values are the:

Coastal Management Act 1995 - Coastal Action Plans and management plans which identify strategic directions and objectives to facilitate recreational use and tourism, and provide for the protection and enhancement of significant features of the region's coast are prepared under the Act.

Planning and Environment Act 1987 - Of the key objectives as set out in the *Planning and Environment Act 1987* (see Section 2) one relates specifically to recreation- "To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria".

A summary of the relevant legislative framework is provided in Appendix A.

3.3 Planning Policies and Controls

State and local planning policies and planning controls relevant to recreation activities, as they related to the future development and operation of the Port of Hastings, are detailed below.

3.3.1 Sustainable Recreation and Tourism on Victoria's Public Land Policy

Sustainable Recreation and Tourism on Victoria's Public Land Policy (2002) provides strategic policy direction to the Government and public land management agencies on managing recreation and tourism activities on public land and waters. Public land includes our national parks estate, State forests, Crown land reserves and unreserved Crown land used for recreation and tourism activities. The Policy provides the state-wide policy setting for tourism on public land but is focused more on licensed tourism operators rather than nature based and informal tourism.

Nonetheless the Policy identifies a number of principles associated with equitable access, provision and maintenance of appropriate services and facilities on public land which are applicable to the development of the SUZ1 precinct. The Policy provides guidance to the tourism industry, recreation organisations and the community as to how access to public land and waters for recreation and tourism activities will be facilitated in a way that protects the values of public land for the future and within an Ecologically Sustainable Development framework.

3.3.2 State Planning Policy Framework

The following clauses of the State Planning Policy Framework are considered relevant to this recreation analysis.

Clause 11.03-1 Open space planning

The objective is to assist creation of a diverse and integrated network of public open space commensurate with the needs of the community, and plan for regional and local open space networks for both recreation and conservation of natural and cultural environments. One of the strategies is to ensure that public accessibility on public land is maintained immediately adjoining waterways and coasts.

Clause 11.03-2 Open space management

The objective is to provide for the long term management of public open space. Strategies to support this include to ensure public access is not prevented by developments along stream banks and foreshores and ensure public land immediately adjoining waterways and coastlines remains in public ownership.

Clause 11.05-4 Regional planning strategies and principles

The Environmental health and productivity section has the objective to maintain and provide for the enhancement of environmental health and productivity of rural and hinterland landscapes by among other strategies avoiding development impacts on land that contains recreation values, assets and recognised uses.

Clause 12.02-1 Protection of coastal areas

The objective is to recognise and enhance the value of the coastal areas to the community and ensure sustainable use of natural coastal resources through strategies including coordinated land use and planning with the requirements of the Coastal Management Act 1995 to provide clear direction for the future sustainable use of the coast, including the marine environment, for recreation, conservation, tourism, commerce and similar uses in appropriate areas.

Clause 12.02-5 Bays

The objective is to improve the environmental health of the bays and their catchments. Strategies in support of this objective include reducing major environmental pressures associated with urban growth and development within catchments of Port Phillip Bay and Western Port by: protect coastal and foreshore environments and improve public access and recreation; facilities around Port Phillip Bay and Western Port by Requiring coastal planning and management to be consistent with the Victorian Coastal Strategy 2008; and managing privately owned foreshore consistently with the adjoining public land.

Clause 12.04-1 Environmentally Sensitive Areas

The objective is to protect and conserve environmentally sensitive areas. Strategies include to protect environmentally sensitive areas with significant recreational value such as Western Port and Port Phillip Bays and their foreshores and coastal areas from development which would diminish their environmental conservation or recreation values.

Clause 17.03-3 Maritime Precincts

The objective is to develop a network of maritime precincts around Port Phillip and Western Port that serve both local communities and visitors. Strategies include to maintain and expand boating and recreational infrastructure around the bays in maritime precincts including Hastings, provide public access to recreational facilities and activities on land and water and support maritime and related industries in appropriate locations.

3.3.3 Mornington Peninsula Planning Scheme

The Mornington Peninsula Planning Scheme sets out policies and controls for the use, development and protection of land in the Mornington Peninsula and contains specific clauses that relate to recreational values and activities.

Clause 21.09-3 Maintaining and Enhancing Landscape, Cultural and Recreational Values

Management of tourism and recreation activities is integrated for Victoria's public land estate. The Mornington Peninsula is the most popular area in Victoria for informal recreation, with the focus on outdoor and unstructured recreation. The Peninsula's regional tourism role is likely to increase over time, placing pressure on the natural environment and rural and coastal landscapes that support this role

The objective is to maintain the recreational role of the Peninsula by protecting the qualities of its landscapes, natural environment and cultural heritage. Strategies in support of this objective maintain permanent non-urban areas of high landscape value and natural interest, which include: support a variety of recreational activities and experiences and contribute to the liveability of the Melbourne and Western Port regions; give emphasis to outdoor and unstructured recreation, especially recreational activities that promote understanding of, cultivate interest in, or are directly associated with rural pursuits, the land or coastal environments in their natural state; promote appropriate recreational activities in non-urban areas particularly activities that are linked with the existing historic, agricultural, environmental and landscape features of the Peninsula; and protect the landscapes, seascapes, coastlines and waterways of the Peninsula.

These strategies will be implemented by the application of zones and overlays:

- Using the Comprehensive Development Zone to incorporate integrated tourist developments, where there is an overriding recreation or tourist need of State significance.
- Applying the Significant Landscape Overlay to identify areas of particular landscape sensitivity and to require landscape impact assessment as part of development applications.
- Using the Public Park and Recreation Zone to manage recreation areas capable of supporting greater numbers of visitors and providing facilities for active sport and recreational uses.
- Including consideration of the impact of development on private land on the recreational and conservation values of adjoining reserves.
- Encouraging the preparation of management plans for major reserves including the management of the interface with adjoining land in private ownership.

3.3.4 Special Use Zones

A detailed discussion of the purpose of SUZ1 is provided in Section 2.2.1 of the report, which is applicable to the overall management of recreational values associated with the Port development.

3.4 Strategies and Location Specific Plans

3.4.1 The Victorian Coastal Strategy 2008

This is the policy commitment for coastal, estuarine and marine environments in Victoria that details the policies and actions required for the management of coastal, estuarine and marine environments in Victoria. The Strategy is referenced in the State Planning Policy Framework of all Victorian planning schemes and integrates state, national and international principles and policies for the coast. The Strategy is being redrafted in the second half of 2013.

Coastal Action Plans (CAPs), enable the broad principles and priorities identified in the Strategy to be further developed and applied at a sub-regional or issue based level, and they provide strategic direction for the future management of an area of coast by identifying necessary priorities, actions and outcomes.

3.4.2 Coastal Action Plans

Coastal Action Plans are developed in accordance with the Coastal Management Act 1995 and provide a key mechanism for the implementation of the Victorian Coastal Strategy. Coastal Action Plans enable the broad principles and priorities identified in the Strategy to be further developed and applied at a sub-regional or issue based level. They provide strategic direction for the future management of an area of coast by identifying necessary priorities, actions and outcomes. Currently the preparation of the Western Port CAP is on hold (Coastlink Victoria 2012).

3.4.3 Coastal Management Plans

Coastal Management Plans provide direction for day to day management of an area of coast by appointed managers, this includes a business plan which outlines management requirements, proposed works, are developed by coastal managers in accordance with the Coastal Management Act 1995, must be consistent with the VCS, CAPs and relevant legislation, and are approved by the Minister for Environment. A Hastings Foreshore Management Plan has not been completed.

3.4.4 Port Phillip and Western Port Fishery Management Plan

The Port Phillip and Western Port Fishery Management Plan only applies to all lakes, rivers and estuaries in the Werribee, Maribymong, Yarra, Dandenong and Western Port catchments, excluding marine waters and waters on private property.

3.5 Identified Recreational Values

The identified recreational values have been categorised according to the environmental sector they are associated with (i.e. land, coastal or marine), in the case of boating by the type of craft used (i.e. non-power or motorised) and recreational fishing is considered separately (although it may otherwise be associated with one, or several, of the other categories) due to the perceived high value of this activity in and around Hastings and Western Port more broadly.

The identified recreational values and activities are:

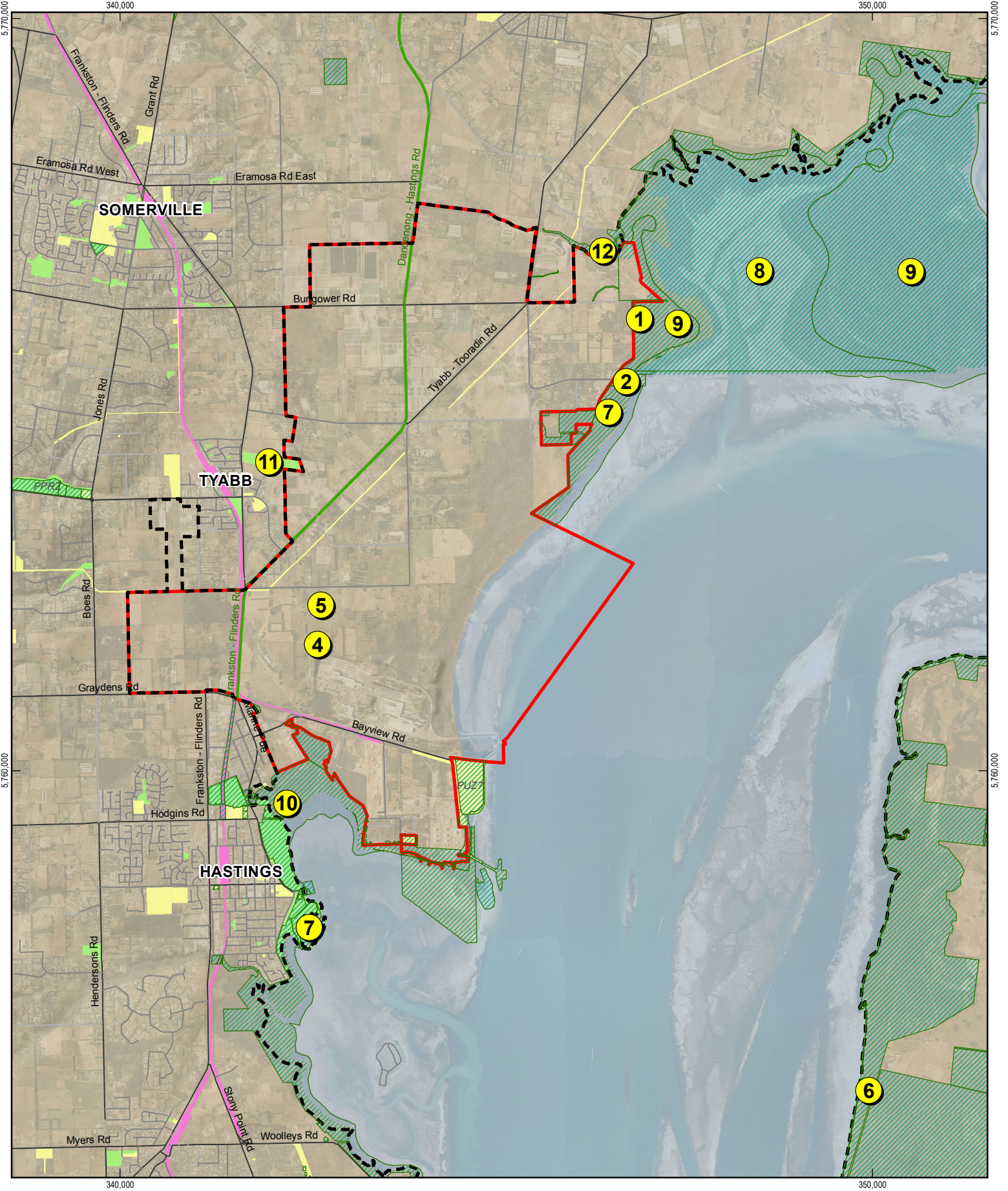
- Land (crown land and reserves)
 - sporting ovals and recreational facilities (e.g. toilets)
- Coastal (crown land, reserves and foreshores)
 - boat ramps, jetties, parks, horse riding, walking and bird watching
- Marine (marine national parks, non-port waters)
 - sailing, boating, kite boards, kayaks and canoes, recreational fishing

Specific areas, identified from reports, plans and publically available information, as being used for recreational purposes that are within or directly adjacent to the SUZ1 precinct boundary are presented in Figure 4, these being:

1. Willow Lodge Riding Ranch
2. Yaringa Marina
3. Western Port Marina
4. Hastings Bluelight Motorcycle Club
5. Recreation/cricket oval (Tyabb)
6. Fairhaven campsite (French Island)
7. Coastal access area - Yaringa Rd and Iluka Rd area
8. Yaringa Marine National Park
9. North Western Port Nature Conservation Reserve – south of Yaringa
10. Hastings Foreshore Reserve
11. Bunguyan Reserve
12. Watson Creek

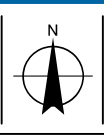
The locations of designated shore and structure based fishing sites for Western Port are shown in Figure 5, these being:

1. Flinders Jetty
2. Merricks Beach
3. Stony Point Pier
4. Hastings Jetty
5. Tooradin Inlet
6. Corinella Pier
7. San Remo Jetty
8. Rhyll Jetty
9. Cowes Jetty



- | | | |
|------------|----------------------------|---------------------|
| Study Area | Public Park and Recreation | Highway |
| SUZ1 | Public Use | Arterial |
| | Public use - Transport | Local |
| | Public Land | Unsealed road |
| | | Track and bike path |

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0 0.5 1 2
Kilometers
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

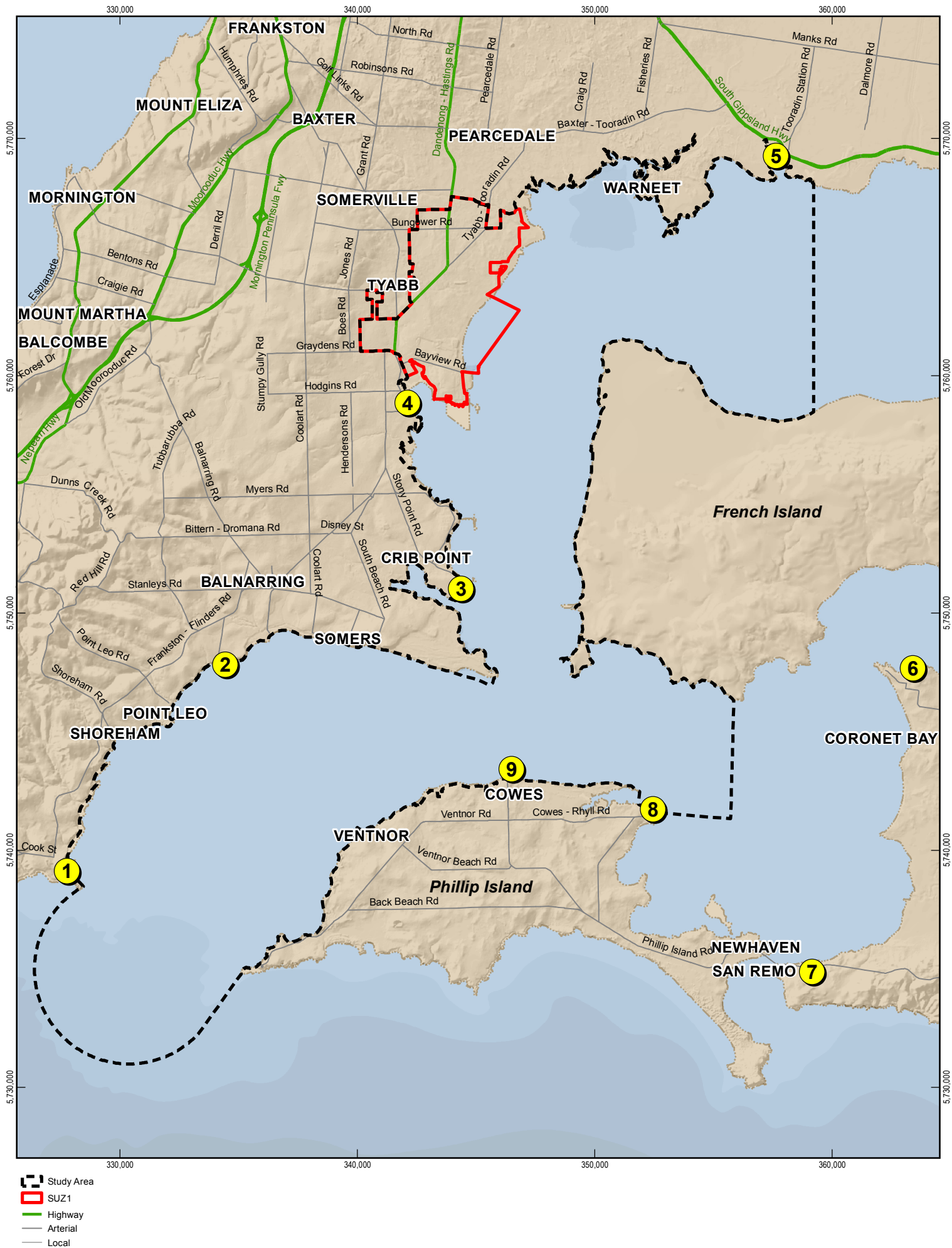


Port of Hastings Development Authority
Development Strategy

Job Number	31-29829
Revision	A
Date	04 Sep 2013

Areas of Recreational Activity and Infrastructure within or in the vicinity of SUZ1

Figure 4



Port of Hastings Development Authority
Development Strategy

Job Number 31-29829
Revision A
Date 24 Jul 2013

Area of Marine-Side Structures and Facilities in Western Port

Figure 5

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Data source: VicMap (Jan 2013), Aboriginal Affairs Victoria (May 2013), PoHDA, Created by:Cliffworth

3.5.1 Land Based Recreation Areas

There are a number of specific locations (nodes) of recreational activity within and adjacent to the SUZ1 development precinct boundary (Figure 4). These include the Willow Lodge Riding Ranch at the northern boundary of the SUZ1 precinct, the Hastings Bluelight Motorcycle Club (BHP Steel Company grounds) and the recreation/cricket oval within BlueScope land. Bunguyan Reserve is also located adjacent to SUZ1 boundary.

3.5.2 Coastal Recreation Areas

There are no known or documented coastal Crown land infrastructure (stairs and boardwalks, boat ramps or piers) that supports access to and recreation to the foreshore and water within the primary port development precinct (SUZ7) or areas adjacent to the SUZ1 precinct boundary.

Identified coastal recreational activities in the area north of Long Island Point have been observed to be primarily walking, although the area is also generally thought to be valued for bird watching.

Coastal reserves and parks within the study area include Watson Creek at the northern Boundary of SUZ1, the North Western Port Nature Conservation Reserve, Hastings Foreshore Reserve and the Fairhaven campsite within the French Island National Park (French Island).

3.5.3 Marine Recreation Areas

Several tourism operators and businesses in Hastings, and Western Port more broadly, promote and offer for hire non-powered vessels such as sail craft, kite boards, kayaks and canoes. No specific locations for participation in these activities could be identified from the reports, plans and publically available information reviewed for this assessment. Nonetheless locations that facilitate public access to Western Port are likely to be focal areas for the use non-powered vessels, such as Western Port Marina and Yaringa Marina and Hastings Jetty/boat ramp.

Several businesses in Hastings, and Western Port more broadly, offer powered water craft for hire. Private and commercial vessels access the marine-side area from Western Port Marina and Yaringa Marina and boat ramps. Much of the direct participation and therefore expenditure in recreational fishing is associated with boat based activities.

3.5.4 Recreational Fishing

It is expected that recreational fishing effort in Western Port will increase with increased participation and new technologies (Ernst and Young 2009). An economic analysis of recreational fishing in the Melbourne/Port Phillip region quantified the Gross Regional Product (GRP) outcomes for 2008-09 were \$228.8 million (Ernst and Young 2009) - the Melbourne/Port Phillip regional includes Westernport Bay and Metropolitan Melbourne. Boat based fishing is very popular in Western Port and fishing is permitted throughout, excluding Marine National Parks and Sanctuaries and Port exclusion zones. Boating in Western Port is supported by two major boat-launching areas - Western Port Marina and Yaringa Marina (see Figure 5).

The known target species for recreational anglers in Western Port include Australian salmon, Elephant Fish, Flathead, Gummy Shark, King George whiting, Leatherjacket, Silver trevally, Snapper, Squid and Yellow-eye mullet, and include various demersal (bottom feeders) and pelagic (surface feeders) species. As such many of these species have preferred breeding and feeding habitats and locations within Western Port ranging from tidal mudflats, seagrass beds, tidal channels and open water. For example the area of Western Port between Hastings and Warneet is known to be a targeted area for Whiting, Gummy Shark and Snapper fishing. This means that recreation fishers may choose to preferentially access a range of locations within Western Port depending of the fish species they are targeting – which in itself is dependent on the status of the fishery (i.e. season).

Fisheries Victoria monitors the performance of the Western Port fishery using catch rate data of key recreational species. Time series of monitoring of snapper, flathead, King George whiting and elephantfish are used as performance indicators of the fishery (*pers. comm.*, S. Conron, DEPI 2013). Catch data shows at present the snapper fishery is in decline. Western Port acts as a spill over fishery from Port Phillip Bay (*pers. comm.*, S. Conron, DEPI 2013). Juvenile fish enter Western Port from Port Phillip Bay by approximately three years old (DEPI 2006). This fishery is naturally variable and dependent on the productivity of the stock (*pers. comm.*, S. Conron, DEPI 2013).

Both flathead and King George whiting fisheries of Western Port are variable, but not in decline (*pers. comm.*, S. Conron, DEPI 2013). Natural variability in flathead catch rates are mostly related to individual recruitment. The sustainability of the King George whiting fishery is dependent on larvae that move in Western Port from spawning that occurs in Bass Strait (*pers. comm.*, S. Conron, DEPI 2013).

Western Port is recognised as the most important nursery area for elephant fish in south-eastern Australia (Braccini *et al.* 2008). The trend over the years shows a decline in the elephantfish fishery in Western Port (*pers. comm.* S. Conron, DEPI 2013). Habitat degradation can impact on recruitment failure and reduction in catch rates of elephantfish due to low biological productivity of the species (Braccini *et al.* 2008). In Western Port habitat degradation has occurred through dredging of channels, high nutrient loading and loss of seagrass beds and mangroves (Braccini *et al.* 2008).

3.6 Analysis of Recreational Considerations

This desktop only assessment of recreation values and activities considers the potential for adverse effects of the Port of Hasting development during construction and operation phases are considered below. The following environment effects have the potential to impact on recreational values and activities in the SUZ1 area, in the vicinity of SUZ1 boundary and within the marine-side area of Hastings and Western Port more broadly.

3.6.1 Planning and Controls

The Strategies and Policies associated with the management of recreational values and activities, especially those associated with nature-based or informal activities, tend to provide only high-end principals and objectives. None of the legislation or planning provisions have specific conditions or controls relating to the management of nature-based and informal recreational activities. The controls (buffers and landuse compatibility) associated with issues of amenity, of which recreation is a key determinant, are otherwise considered in Section 2 of this report.

3.6.2 Compatible Landuse

For public land the use of an area is reliant on the underlying land tenure and what is the primary purpose or intent for reservation. The zoning of public land generally defines the allowable and promoted uses of land or water. Zoning is not generally prescriptive on what activities can occur, but can rather be more so on what can't occur. Depending on the final configuration and staging, full development of the SUZ1 precinct has the potential to affect the compatibility of existing recreational nodes within the precinct boundaries, particularly the Hastings Bluelight Motorcycle Club (BHP Steel Company grounds) and the recreation/cricket oval within BlueScope land. Bunguyan Reserve, Tyabb, although bounded on three sides if the precinct is fully developed will remain outside of the SUZ1 precinct.

The primary purpose of SUZ1, as defined in schedule 1 for this zone, is to provide a location for selected port and industrial uses and enable the effective implementation of the Hastings Port Industrial Area Land Use Structure Plan while providing for the interim rural use of land to the extent consistent with maintaining land resources for future port and port related development. However, the protection of the environmental values of the waters, coastline and intertidal areas of Westernport and adjoining land and protection from adverse effects on the amenity are also defined purposes of SUZ1. Therefore, although current recreational uses and activities within SUZ1 may become incompatible with future port related activities, the primary purpose of the land tenure within SUZ1 is for port related activities.

3.6.3 Access

Although current landuse adjacent to the SUZ1 boundary may not be directly impacted by the Port and precinct development, there may be actual or perceived restriction in access as the SUZ1 precinct become fully developed. Particularly, there may be perceived changes or restrictions in accessibility to coastal and foreshore areas adjacent to SUZ1 boundary (see Figure 5). Coastal areas where perceived restrictions in access may become evident include North Western Port Nature Conservation Reserve – at the northern boundary of the SUZ1 precinct, coastal access areas - Yaringa Rd and Iluka Rd area and Denham Rd and BlueScope foreshore area and potentially Hastings Foreshore Reserve – at the southern boundary of the SUZ1 precinct.

The existing Hastings Port Waters limits (shipping channel and anchorage) are not expected to change irrespective of the final port configuration options (*pers comm* GHD, 2013). There may though be some extension of Hastings Port waters according to the berth face location and associated swing basin. Current Port waters exclusions and restrictions – current water-side restricted zones are in place within 100 metres of the Long Island Point Jetty and Crib Point Jetties – will obviously be extended according to the preferred port configuration option.

3.6.4 Environmental Conditions

The opportunities for recreation and tourism activities such as fishing and boating, and other activities, are fundamentally reliant on maintaining the quality of the marine, coastal and terrestrial environments and natural assets. For example an increase in suspended solids within marine water would impact the visual amenity of coastal and marine waters - suitability of waters, be they marine or inland, for primary and secondary contact recreation (e.g. swimming, boating and fishing) can be dependent on visual clarity (ANZECC and ARMCANZ, 2000). Noise and vibrations in the marine environment have the potential to result in changes to fish behaviour. A change in tidal regime (range, duration) to local areas or more broadly could potentially have several direct and indirect impacts (erosional and depositional process result in changes in the form of beaches and mud flats) on coastal and marine associated recreational values. Also, channel deepening and flow obstruction may change the location of the *null point* in Western Port which has the potential to affect wave heights and tidal movement of water and therefore the suitability of open water areas for recreational boating at periods during the tidal cycle.

3.6.5 Conclusions

A spectrum of environmental condition, from pristine to highly modified depending on the intended activity, is required to support the full spectrum of recreational activities and values.

Near-shore marine, coastal crown land, reserves and parks and other types of public land are the most likely locations of nature based informal recreation in or adjacent to the SUZ1 development precinct, north of Long Island Point.

There are a number of potential effects:

1. It has been assumed that depending on the landuse changes and development staging within SUZ1 existing recreational facilities and locations may become incompatible within future development and landuses within SUZ1. This may include current land based recreational locations such as the Hastings Bluelight Motorcycle Club and the sporting/cricket oval within BlueScope precinct.
2. Extension of the current Port water exclusion zone (berth and associated swing basin) to accommodate the future configuration options will effectively preclude recreational activities such as fishing and boating from a greater area of Western Port than currently. The noise and vibrations associated with geo-technical surveying and port berth construction (piling), although unlikely to have a significant detrimental effect on marine habitats or species, will almost certainly require some form of exclusion zone around work areas and a prescribed monitoring program which may be perceived as further restricting recreational activities. Additional nominal restricted areas will be required around the construction and dredging vessels (during berth construction) that will also further limit allowable fishing areas.
3. Although equally relevant as an amenity consideration, the potential impacts of elevated suspended solids impacts are currently uncertain and have the potential to generate significant public concern. The suitability of waters, be they marine or inland, for primary and secondary contact recreation (e.g. swimming, boating and fishing) can be dependant on visual clarity (ANZECC and ARMCANZ, 2000).

4. There may potentially be changes to access to coastal and foreshore areas within and adjacent to the primary port development precinct and the SUZ1 boundary, depending on staging. Although the primary port development precinct is BlueScope land, the area is being used for walking and other recreation. Any potential restrictions in accessibility of coastal and foreshore areas could potentially be an issue for the local community and visitors (tourists) to Hastings.

3.6.6 Recommendations

This assessment did not involve stakeholder consultation in the process, and as such many of the assumptions and conclusions could not be additionally validated or verified. The following recommendations are action believed required to validate or verify the conclusions and assumptions of this assessment:

1. Consultation with the following stakeholders will be required in any further recreational impact assessment process to validate the outcome and conclusions of this report. It is recommended that the following organisations be participants in any consultation process:
 - Department of Environment and Primary Industries - oversees the management of national and state parks, coastal land, state forest reserves and other Crown land reserves
 - The Fisheries division of the Department of Environment and Primary Industries (Fisheries Victoria) - manages the recreational and commercial fisheries resource
 - Parks Victoria - primary role is to manage Victoria's national parks estate and operates and maintains park facilities
 - Mornington Peninsula Shire Council
 - Melbourne Water
 - Victorian Coastal Council
 - Committees of Management (CoMs) - foreshore reserves, historic buildings on public land and some parks
 - VRFish – Victorian Recreational Fishing Peak Body
 - Western Port Angling Club
 - Kayak Yacht Club
 - Morning Peninsula Marine Alliance

It is acknowledged that there may be other stakeholders that potentially have not been identified and a thorough stakeholder review should be conducted to ensure the list above is comprehensive.

2. Determine the precise location and usage of recreational values, particularly informal recreation and coastal recreation areas, within and in the vicinity of the SUZ1 precinct in consultation with appropriate stakeholders.

4. Cultural Heritage

This assessment documents the known and potential constraints to the project associated with any known and potential (undocumented) Aboriginal and historic heritage present in the SUZ1 and wider study area. The assessment is designed to guide The Authority in complying with the requirements of Aboriginal and historic cultural heritage legislation for the proposed works.

4.1 Method

The desktop assessment sought to inform:

- Any known and potential Aboriginal and historic heritage present in the SUZ1 and wider study area.
- Identify the relevant heritage legislation pertinent to the proposed development.

The study included:

- Search of appropriate databases:
 - Local Planning Scheme Overlays
 - Victorian Aboriginal Heritage Register – VAHR
 - Heritage Victoria Register
 - Heritage Victoria Inventory
 - Commonwealth Heritage List
 - National Heritage List
- Review of previous documented cultural heritage studies and predictive models applicable to the area and broader region.
- Review of appropriate legislation in relation to the nature of the proposed activity:
 - Australian *Environment Protection and Biodiversity Conservation Act 1999*
 - Victorian *Heritage Act 1995*
 - Victorian *Aboriginal Heritage Act 2006*
 - Associated Regulations

4.2 Stakeholders

The primary stakeholders in the results of this cultural heritage assessment are The Authority, the Bunurong Land Council Aboriginal Corporation (BLCAC), the Boon Wurrung Foundation (BWF), Aboriginal Affairs Victoria (AAV), Heritage Victoria (HV) and Mornington Peninsula Shire Council (MPSC).

4.2.1 Government Stakeholders

AAV, HV and MPSC administer and enforce cultural heritage legislation and manage databases on registered cultural heritage places, archaeological sites and previous archaeological surveys. No consultation was undertaken with either government department for this desktop assessment other than to arrange access to site registry information.

4.2.2 Aboriginal Stakeholders

As this report only consists of a desktop study, no consultation has been undertaken with Aboriginal stakeholders as part of this assessment. Currently, there are two Aboriginal groups with a declared interest in the study area: the Bunurong Land Council Aboriginal Corporation (BLCAC), and the Boon Wurrung Foundation (BWF). Applications for registration as Registered Aboriginal Parties (RAPs) for the area under the *Aboriginal Heritage Act* 2006 have previously been declined for both parties. The Aboriginal Heritage Council acknowledged that both groups are traditional owners and it is expected that cultural heritage advisors will consult with both groups.

4.3 Aboriginal Cultural Heritage

To determine the location of previously registered Aboriginal cultural heritage places within the SUZ1 and wider study area, a review of existing statutory listings and controls were examined as follows:

- *Aboriginal Heritage Act*: 2006 (Victorian Aboriginal Heritage Register)
- *Aboriginal Heritage Regulations* 2009

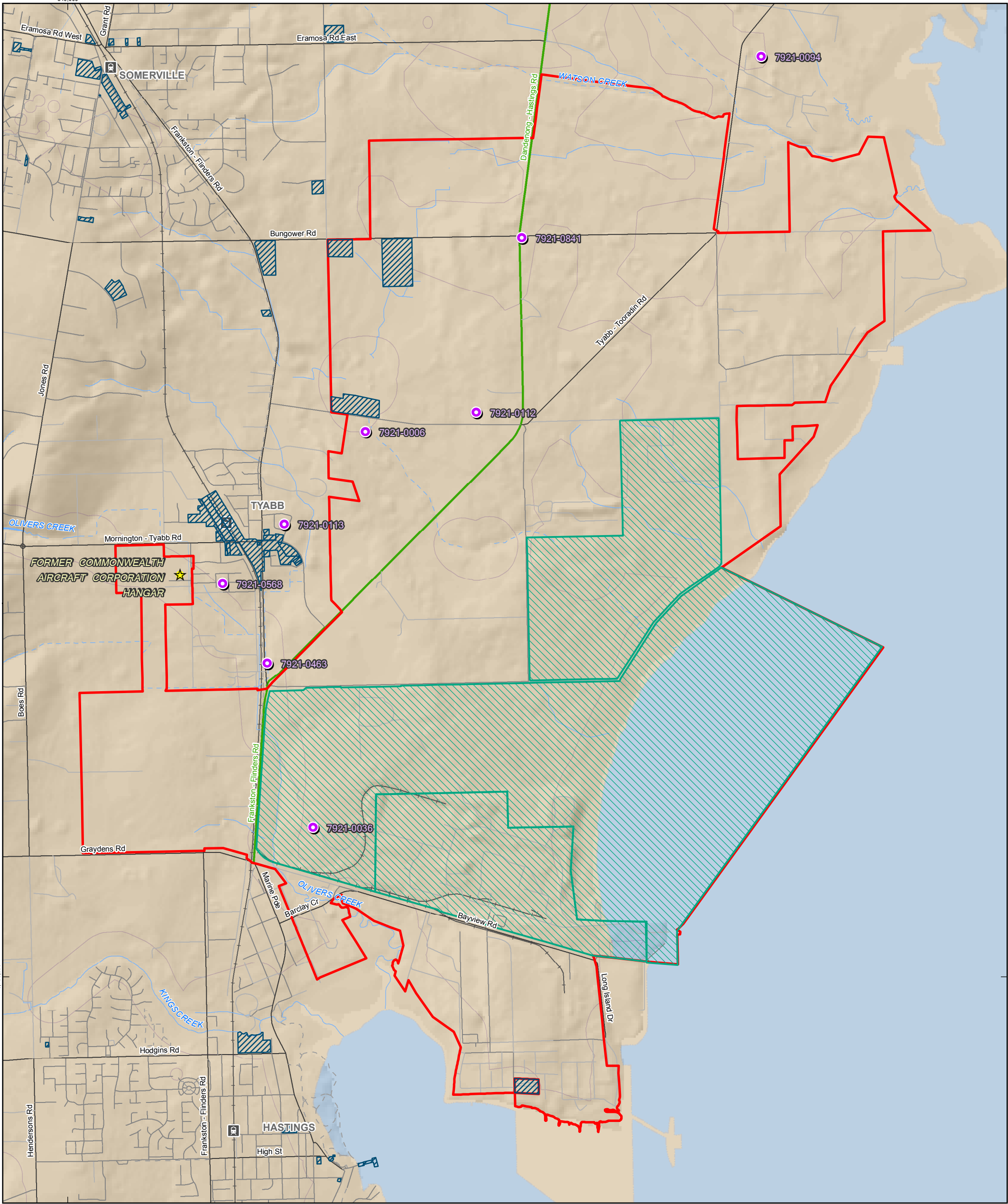
4.3.1 Victorian Aboriginal Heritage Register (*Aboriginal Heritage Act* 2006)

A search of the Victorian Aboriginal Heritage Register (VAHR) was undertaken on 10 May 2013. The search determined that SUZ1 and the wider study area is located within several registered areas of cultural heritage sensitivity as defined under Regulation 4 of the *Aboriginal Heritage Act* 2006 (Vic): Registered cultural heritage places (r22) Named watercourses (r23); Declared Ramsar Wetland (r26); Coastal Crown Land (r27); Coastal land (r28); Parks (r29).

Seven registered Aboriginal cultural heritage places are located within the boundary of SUZ1 (Table 1, Figure 6). Two of the places are registered object collections (7921-0036 and 7921-0841) associated with corresponding artefact scatters. They comprise flint/chert, quartz, silcrete, quartzite or other fine grained stone artefacts. One is a midden with a reference to associated small implements (7921-0007).

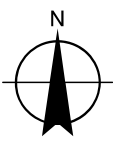
Table 1 Registered Aboriginal Cultural Heritage Place within SUZ1

VAHR Number	Place Name	Component
7921-0006	Bunguyan Water Holes Bungunyan Kings Station	Artefact Scatter
7921-0007	Shooters Camp Lagoon	Shell Midden
7921-0036	Lysaght 1/ BlueScope Westernport 1'	Artefact Scatter
7921-0036	Lysaght 1	Object Collection
7921-0112	O'Neils Rd	Artefact Scatter
7921-0841	Bungower Rd Ia 1	Artefact Scatter
7921-0841	Bungower Rd Ia 1	Object Collection



- | | | | |
|---------------------------|---------------------|-----------------|------------------------|
| SUZ1 | Highway | River | VAHR Aboriginal Place |
| Bluescope Steel Boundary | Arterial | Stream | Heritage Register Site |
| Cultural Sensitivity Area | Local | Channel / drain | |
| Heritage Planning Overlay | Unsealed road | Connector | |
| | Track and bike path | | |

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**PORT OF
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DEVELOPMENT AUTHORITY

Port of Hastings Development Authority
Development Strategy

Job Number	31-29829
Revision	A
Date	24 Jul 2013

Cultural Heritage Values and Waterways

Figure 6

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Data source: VicMap (Jan 2013), Aboriginal Affairs Victoria (May 2013), PoHDA, Created by:Cillingworth

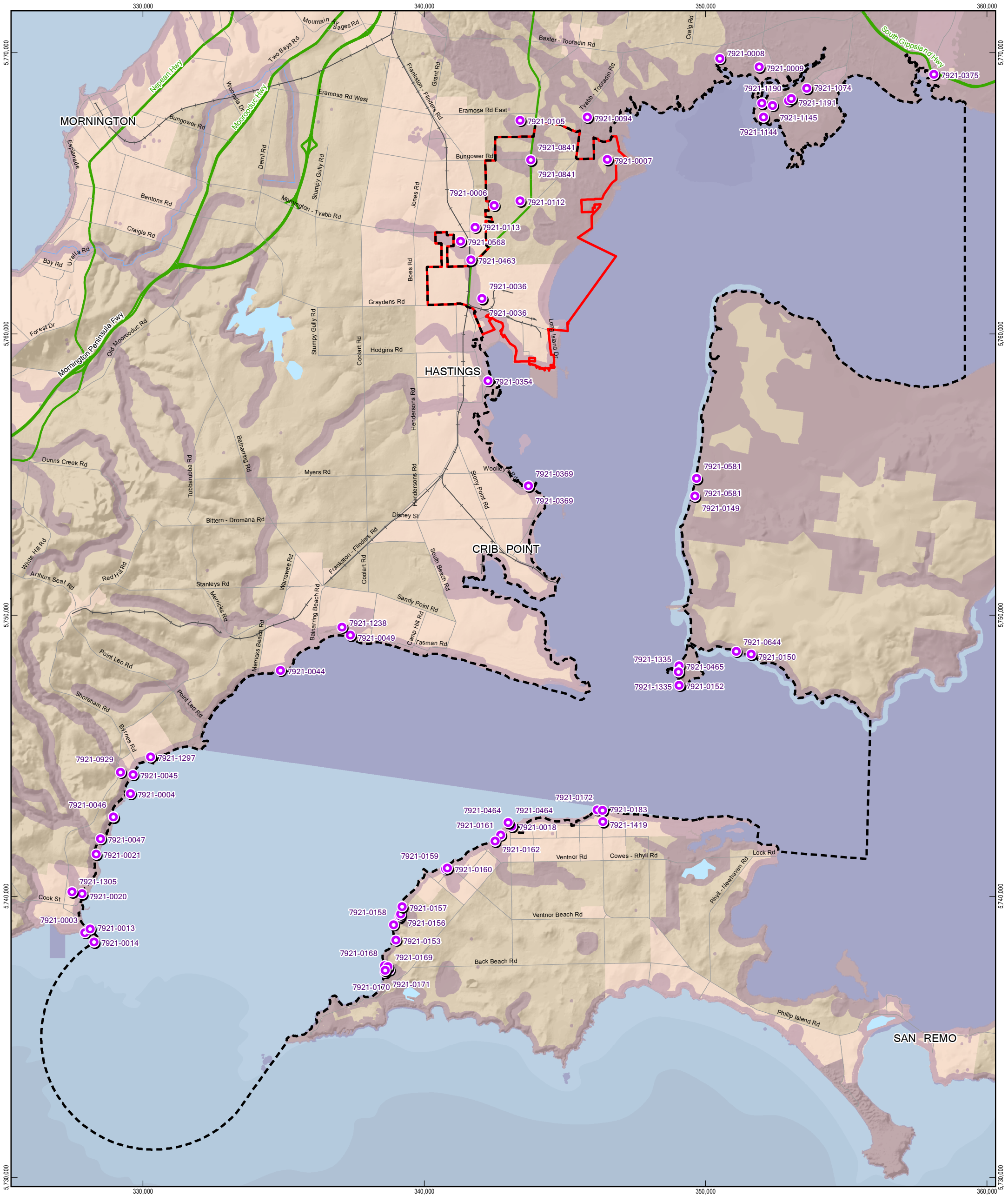
180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

A further 50 Aboriginal cultural heritage places are registered in the 200 m shoreline buffer associated with the wider study area (Figure 7).

Table 2 Registered Aboriginal Cultural Heritage Place in wider study area

VAHR Number	Place Name	Component
7921-0004	Shoreham Beach 1	Shell Midden
7921-0013	West Head 2	Artefact Scatter
7921-0014	West Head 3	Shell Midden
7921-0018	Saltwater Creek Phillip Is	Shell Midden
7921-0020	Kennon Cove	Shell Midden
7921-0021	Manton Creek	Shell Midden
7921-0032	Warneet	Shell Midden
7921-0032	Warneet	Artefact Scatter
7921-0044	Coles Beach	Earth Feature
7921-0045	Shoreham Pines	Shell Midden
7921-0046	Shoreham Beach 2	Shell Midden
7921-0046	Shoreham Beach 2	Earth Feature
7921-0047	Shoreham Beach 3	Artefact Scatter
7921-0049	Coolart 1	Artefact Scatter
7921-0149	Fairhaven 1	Artefact Scatter
7921-0150	Hooker Rex 1	Shell Midden
7921-0152	Tortoise Head 1	Shell Midden
7921-0153	Flynn Reef 1	Shell Midden
7921-0154	Mc Haffies 1	Shell Midden
7921-0155	Mc Haffies 2	Artefact Scatter
7921-0156	Mc Haffies 3	Artefact Scatter
7921-0157	Mc Haffies 4	Shell Midden
7921-0158	Mc Haffies 5	Artefact Scatter
7921-0159	Boat Creek 1	Shell Midden
7921-0160	Boat Creek 2	Shell Midden
7921-0161	Saltwater Creek 1	Artefact Scatter
7921-0162	Saltwater Creek 2	Artefact Scatter
7921-0167	Cat Bay 12	Shell Midden
7921-0168	Cat Bay 13	Shell Midden
7921-0169	Cat Bay 14	Shell Midden
7921-0170	Cat Bay 18	Shell Midden

VAHR Number	Place Name	Component
7921-0171	Cat Bay 19	Shell Midden
7921-0172	Mussel Rocks 1	Shell Midden
7921-0183	Cowes Anvil Stone	Artefact Scatter
7921-0354	Hastings Hist. Society Artefacts	Object Collection
7921-0369	Jacks Beach 1	Shell Midden
7921-0369	Jacks Beach 1	Artefact Scatter
7921-0375	Fishermans Cottage Collection	Object Collection
7921-0463	Tyabb 1	Artefact Scatter
7921-0464	Red Rocks 1	Artefact Scatter
7921-0464	Red Rocks 1	Shell Midden
7921-0465	Tortoise Head 2	Shell Midden
7921-0581	Fairhaven Campsite, French Island	Artefact Scatter
7921-0581	Fairhaven Campsite, French Island	Shell Midden
7921-0644	Burley Cliffs 1	Artefact Scatter
7921-1144	Rutherford Parade 1	Artefact Scatter
7921-1297	Shoreham Foreshore Reserve	Scarred Tree
7921-1335	Tortoise Head 3	Artefact Scatter
7921-1335	Tortoise Head 3	Earth Feature
7921-1335	Tortoise Head 3	Shell Midden



- ExistingConditionsStudyArea_MGA55_20130404

SUZ1

Cultural Sensitivity Area

Township boundary

Water area
- Highway

Major Road

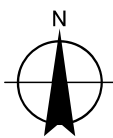
Rail

Water course

VAHR Aboriginal Place



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55



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Port of Hastings Development Authority
Development Strategy

Job Number 31-29829
Revision A
Date 24 Jul 2013

Registered Aboriginal Cultural Heritage Places (VAHR) Study Area

Figure 7

4.3.2 Previous Archaeological Reports

Regional Reports

Two regional archaeological assessments (Sullivan 1981; Gaughwin 1981; 1983) provide some comparative data on the range and distribution of Aboriginal archaeological sites in the region.

Gaughwin surveyed inland areas of Phillip Island, French Island and the northern sections of Western Port Bay. The majority of sites that were identified were located on the interface between higher ground in proximity to wetlands and swamps, such as Koo Wee Rup Swamp (Gaughwin 1983, 113). Using the results of her studies Gaughwin (1983, 158) proposed that Aboriginal subsistence in the Western Port Catchment was based primarily on plains adjacent to wetlands, with the coastal margin relatively unimportant in terms of subsistence resources and utilisation.

Sullivan argued that the Western Port coastline was less intensively utilised than Port Phillip Bay, with sites concentrated around swamps in the hinterland. The nature of sites on the Mornington Peninsula was consistent with the ethnohistorical data, which pointed to the regular movement of Aboriginal people between the south west Peninsula (Bass Strait coastline) and large swamps in the Western Port plains, outside the study area (Sullivan 1981, 96).

A cultural heritage assessment of French Island National Park by Alley-Porter in 2010 resulted in the identification and registration of 16 new Aboriginal cultural heritage places, and the definition of areas of both cultural heritage sensitivity and archaeological potential. Alley-Porter identified several coastal places being at risk from degradation through severe erosion. Management recommendations included stabilisation and regular assessment of sites; and detailed survey of coastal areas in the north of French Island not previously surveyed (Alley-Porter 2010, 99). Two landforms were considered to be of moderate archaeological sensitivity and potential: coastal areas that comprise the intertidal zones, shoreline and beach surfaces; and the Tortoise Head promontory connected to French Island by a narrow isthmus and the location of four cultural heritage places affected by erosion (7921-1335, 7921-1336, 7921-0465, 7921-0152 Figure 7) and one historic site (McKenzies Well H7921-0023 Figure 8).

Local Reports

The remainder of the reports in this region are localised and assist in developing an understanding of the archaeological sensitivity and site distribution along the littoral zone of the project area. Several archaeological assessments have been conducted within and on land adjacent to the SUZ1 footprint. A selection of local studies is presented in Appendix B.

A cultural heritage desktop study for the Port of Hastings Stage One Investigation was undertaken by Long, Feldman and Chandler (2009). The scope of works comprised the extension of reclamation works at Old Tyabb Reclamation Area Reclamation Area, marine dredging and land-side development and ancillary road and rail upgrade within the existing Bayview Road Corridor associated with the further development of the locale as a port. The study determined that the development is likely to trigger a cultural heritage management plan, as per Section 46 of the *Aboriginal Heritage Act* 2006.

Wheeler et al. (2009) conducted a CHMP (10200) on behalf of the Lefta Corporation Pty Ltd for a proposed industrial sub-division on 359 hectares of non-operational land owned by BlueScope Steel. The activity area is within the current SUZ1 bounded by Frankston Flinders Road and McKirdy's Road to the west, Western Port Bay to the east and the BlueScope Mill to the south (Plan 1). The proposed activity is described as potentially servicing the proposed expanded port facilities (Wheeler 2009;27). The CHMP conducted 42 manual and mechanical test excavations. A total of 265 stone artefacts were identified in 29 of the test pits. The results confirmed that a continuous low-density artefact scatter with no vertical integrity exists across the activity area.

The place extent of previously registered Aboriginal cultural heritage place 7921-0036 was updated and re-registered as 'BlueScope Westernport 1' incorporating surface places 7921-0036 'Lysaght 1' and 7921-0037 'Lysaght 2'. The CHMP concluded that the impact of development on scientifically significant Aboriginal cultural heritage is low.

Management Recommendations to minimise and mitigate impact on Aboriginal cultural heritage during proposed subdivision works include:

- A programme of archaeological salvage excavation prior to construction in two parts of the activity area with participation from Traditional Owner Aboriginal groups (at the time of writing the salvage excavation included in the CHMP Recommendations had not been undertaken by the proponent);
- Cultural heritage inductions for all construction and sub-consultants employed to work on the site;
- Procedures for the management, storage and re-burial of artefacts;
- Retention of topsoil on site where possible; and
- Consideration given to the using the Aboriginal name 'Curnweel' in part of the development.

The CHMP also established contingencies to manage the possibility of new Aboriginal cultural heritage places being found and establishes dispute resolution procedures in the event that a Registered Aboriginal Party (RAP) is appointed.

Walther and Wheeler (2009) conducted a CHMP (10678) for South East Water Ltd for the proposed development of a recycled water and sewer rising main from a water treatment plant in Somers to the BlueScope Steel plant located within the current SUZ1 (Plan 1). A total of 35 test excavations were conducted by mechanical hand hand-controlled excavation. Most of test locations had no original topsoil deposits and the activity area had been heavily disturbed by past land use. No Aboriginal cultural heritage material was identified.

Prideaux and Jakovljevic (2011) conducted a complex assessment, an amendment to the Blue Scope Recycled Water Main and Sewer Rising Main triggered by the presence of 7921-0036. No cultural heritage material was identified and the CHMP was discontinued.

Aboriginal cultural heritage places are known to occur in the wider region, and seven known registered places exist within the current SUZ1 footprint. Previous archaeological reports indicate that areas near waterways and coastline have moderate archaeological potential. As part of the current study area is adjacent to a waterway and the coastline there is a potential for additional Aboriginal cultural material to be present in areas of little disturbance.

Plan 1 Plan of part of the CHMP 10200 and 10678 activity area and the extent of 7921-0036 (Wheeler 2009; 31)

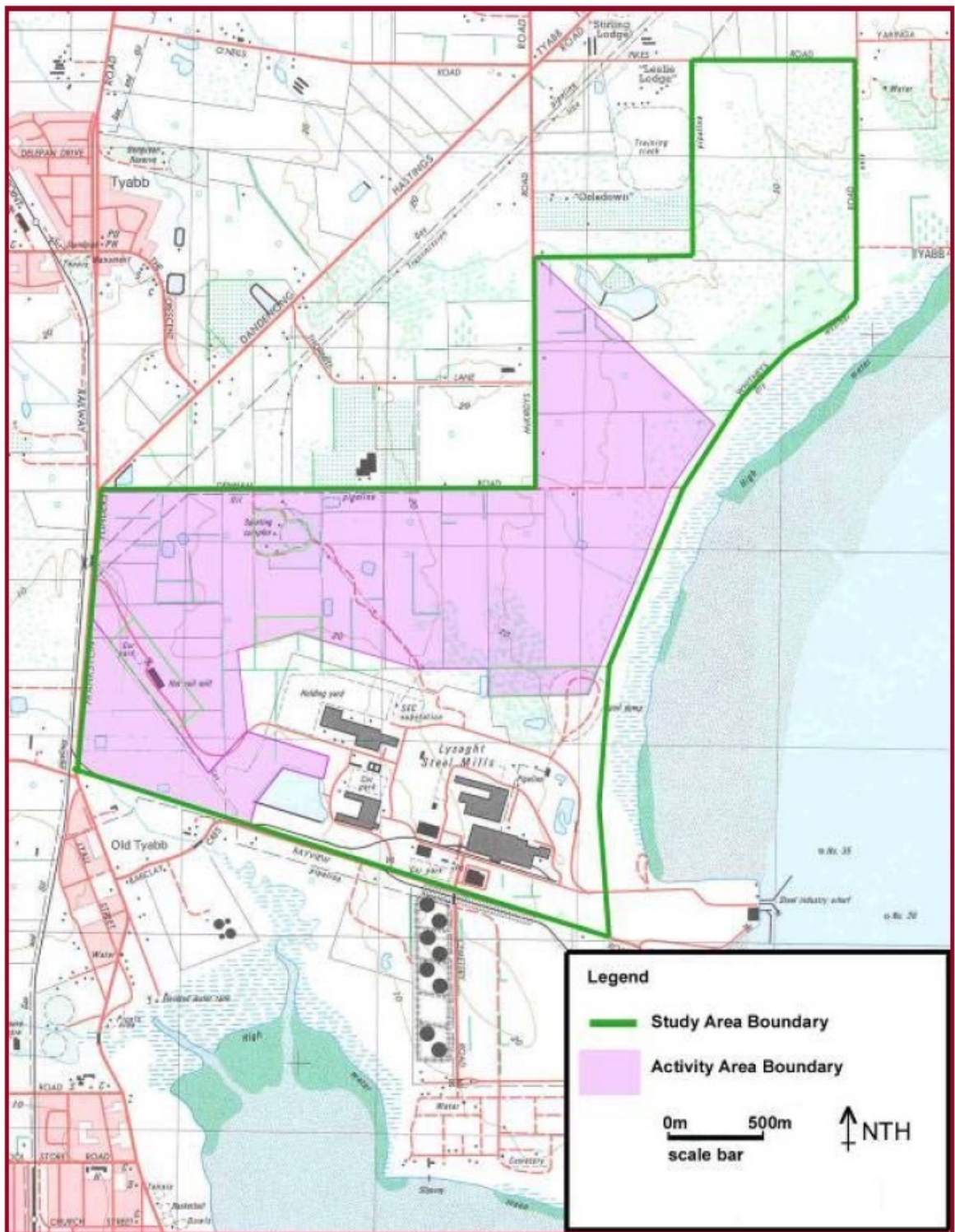


Figure 2. Topographic map showing the study area and extent of activity area. Basemap: Tyabb 7921-3-1 Victorian Topographic Map, 1:25 000. 1985. Division of Survey and Mapping, Department of Property and Services, Melbourne.

4.4 Historic Cultural Heritage

To determine the location of previously registered or listed historic sites, places and structures within the SUZ1 and wider study area, a review of existing statutory listings and controls were examined as follows:

- *Environment Protection and Biodiversity Conservation Act*: 1999 (amended 2004)
(National Heritage List, Commonwealth Heritage List, Register of the National Estate)
- *Heritage Act*: 1995 (Victorian Heritage Register, Victorian Heritage Inventory)
- *Planning and Environment Act* 1987 (Mornington Peninsula, French Elizabeth Sandstone Islands and Bass Coast Planning Schemes)

Shipwrecks are protected in Victoria under the Victorian *Heritage Act* 1995 and the Commonwealth *Historic Shipwrecks Act* 1976. All shipwrecks and shipwreck relics in Victorian waters that are at least 75 years old are protected by these two laws. Some shipwrecks less than 75 years old can also be protected. Both laws are administered by the Maritime Heritage Unit, Heritage Victoria.

Following consultation with Heritage Victoria (HV) on the 09 August 2013 the locations of potential shipwreck positions were identified. The potential shipwreck positions are presented in Appendix C.

A detailed historic heritage table is also presented in Appendix C.

4.4.1 National Heritage and Commonwealth Lists (*EPBC Act*)

On 29 May 2013 a search was undertaken of the Australian Heritage Database (incorporating the Register of the National Estate and the National Heritage List) and the Commonwealth Heritage List. There are no sites on either lists within the SUZ1 boundary or the wider study area.

4.4.2 Victorian Heritage Register and Heritage Inventory (*Heritage Act* 2005)

On 29 May 2013 a search was undertaken of Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI). One VHR site (Table 3, Figure 7) is located within the SUZ1 area.

Table 3 Registered VHR Heritage Places within SUZ1

Register Number	Place Name	Statutory Control
H0094 (VHR)	Former Commonwealth Aircraft Corporation Hangar	Victorian Heritage Register (<i>Heritage Act</i> 1995)

Six VHR sites and 15 VHI sites (Table 5) are located on the coastal fringes of the wider marine study area. There is one registered shipwreck (Table 4) located within the marine corridor study area.

Table 4 Registered Shipwreck

Register Number	Place Name	Statutory Control
S560(VHR)	Redbird	Victorian Heritage Register (<i>Heritage Act</i> 1995)

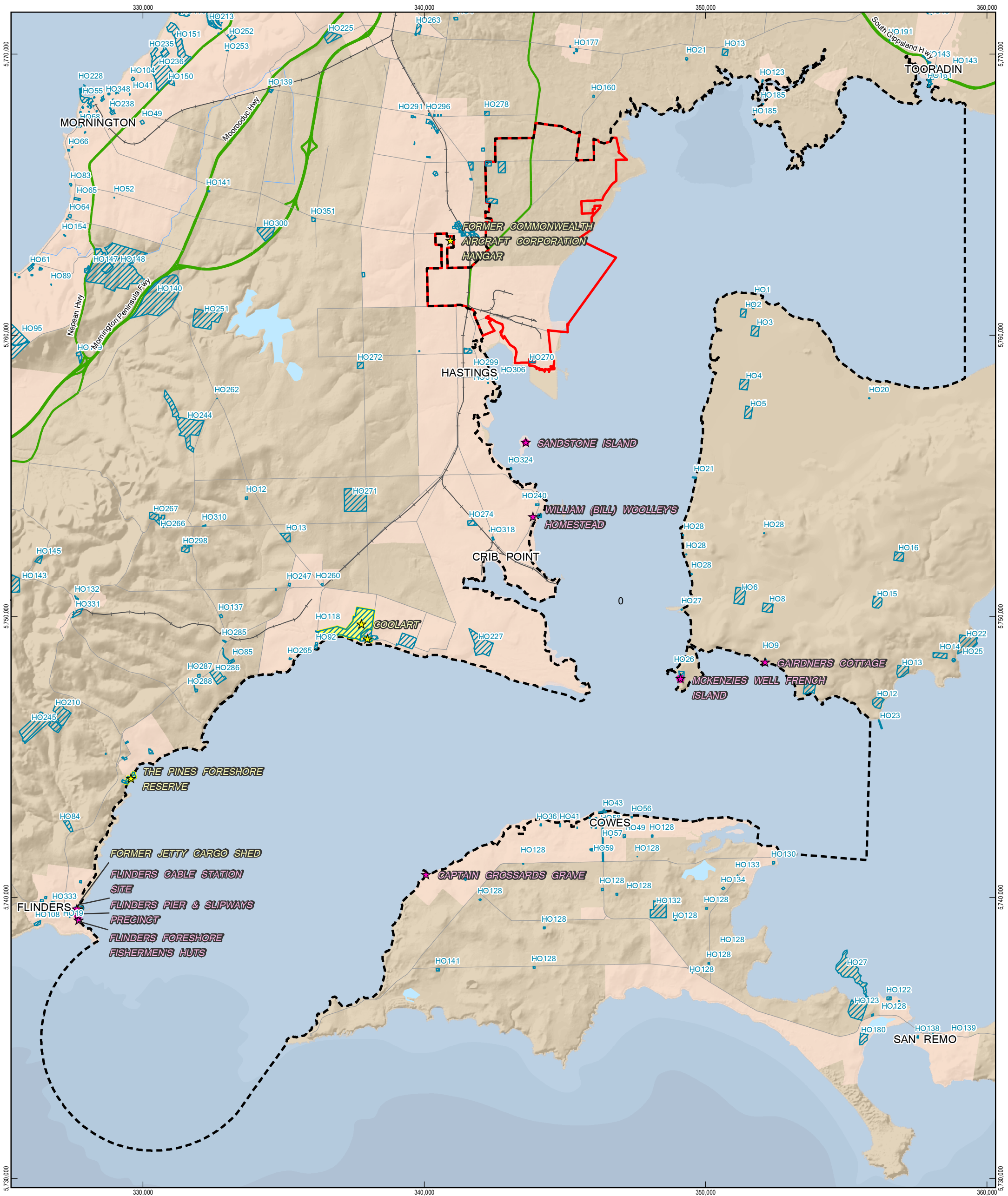
4.4.3 National Trust of Australia (Victoria)

The National Trust of Australia (Victoria) Register is a non-statutory heritage listing. It was reviewed on 29 May 2013. Sites listed with the Register are also represented in Table 5.

Table 5 Registered Historic Cultural Heritage Places within wider study area

Register Numbers	Site Name	Statutory Control
H0284 (VHR); HO116 (HO)	Harewood	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H0759 (VHR) ; HO118 (HO) ; B4683 (NTR)	Coolart	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H0906 (VHR) ; HO81 (HO); B6332 (NTR)	Former Jetty Cargo Shed	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H1614 (VHR); H7921-0014 (VHI); H7921-0002 (VHI) HO27 (HO); L10088 (NTR)	Churchill Island	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H1996 (VHR); HO116 (HO)	The Pines Foreshore Reserve	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H2292 (VHR); HO302 (HO)	Lord Somers Camp	Victorian Heritage Register (<i>Heritage Act</i> 1995)
H7920-0007 (VHI)	Fiddlers Green	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0001 (VHI)	Corinella Penal Settlement	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0010 (VHI)	Gairdners Cottage	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0014 (VHI)	Churchill Island Sealers Site	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0023 (VHI)	Mckenzie's Well French Island	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0027 (VHI)	French Island Recreation Camp	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0051 (VHI)	Former Boat Shed	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0059 (VHI); HO140 (HO)	Captain Grossards Grave	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0073 (VHI); HO46 (HO)	Flinders Cable Station Site	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0097 (VHI)	Sandstone Island	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0107 (VHI)	Flinders Foreshore Fishermen's Huts	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0108 (VHI) HO81 (HO)	Flinders Pier & Slipways Precinct	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0112 (VHI)	William (Bill) Woolley's Homestead, Crib Point	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H7921-0115 (VHI)	Grimwade & Felton/Cheetham Salt Works Site, French	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)
H8021-0052 (VHI)	Former Queensferry Township Site	Victorian Heritage Inventory (<i>Heritage Act</i> 1995)

Register Numbers	Site Name	Statutory Control
HO324 (HO)		Heritage Overlay, Mornington Peninsula Planning Scheme (<i>Planning and Environment Act</i> 1987)
HO26 (HO)		Heritage Overlay, Mornington Peninsula Planning Scheme (<i>Planning and Environment Act</i> 1987)



- ExistingConditionsStudyArea_MGA55_20130404

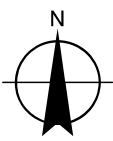
SUZ1

Heritage Planning Overlay

Township boundary

Water area
- Highway
- Sealed road
- Rail
- Water course
- Victorian Heritage Inventory (VHI) Site
- Victorian Heritage Inventory (VHR) Site

1:125,000
0 0.5 1 2 3 4 5
Kilometres
Paper Size A3
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55



PORT OF
HASTINGS
DEVELOPMENT AUTHORITY

Port of Hastings Development Authority
Development Strategy

Job Number 31-29829
Revision A
Date 24 Jul 2013

Registered Historic Cultural Heritage
Sites - Study Area

Figure 8

4.4.4 Heritage Overlays (*Planning and Environment Act 1987*)

On 29 May 2013 a search was undertaken of local planning scheme overlays – heritage. Four sites were listed on the Heritage Overlay, Mornington Peninsula Planning Scheme within SUZ1 (Table 6 and Figure 6).

The Heritage Overlay provisions are set out at Clause 43.01 of all Victorian planning schemes. A local Schedule to the Heritage Overlay lists the properties affected by the Overlay and any additional controls which may apply to that particular site. The Heritage Overlay is additionally mapped in the individual planning scheme to show the location and extent of heritage controls over a particular heritage place.

Table 6 Heritage Overlay Sites within SUZ1

Register Number	Statutory Control
HO269 (HO) HO269 (HO) HO270 (HO) HO311 (HO)	Heritage Overlay, Mornington Peninsula Planning Scheme (<i>Planning and Environment Act 1987</i>)

The following Heritage Overlays applied to the wider marine study area: Mornington Peninsula Shire, French Elizabeth Sandstone Islands and Bass Coast Planning Schemes. Note, Heritage Overlays include places of local significance as well as places included in the Victorian Heritage Register (Table 5 and Figure 8). Although places listed in the VHR are also listed in the schedule to the Heritage Overlay, these places are subject to the requirements of the *Heritage Act 1995*, and not the heritage provisions of the planning scheme. Other planning provisions may still apply to the use or development of the subject place.

4.4.5 Previous Archaeological Reports

A heritage study in 2001 conducted by Graeme Butler and Associates examined the former Hastings Shire within the Mornington Peninsula Shire Council. Volume One (Graeme Butler & Associates 2001a) detailed registered heritage places while Volume Two (Graeme Butler & Associates 2001b) documented the impact that European people had on the physical environment in the region.

The regional distribution of previously registered sites is of limited value for the predictive modelling of historical sites within SUZ1, as historical sites tend to be located at specific focal points of settlement rather than distributed in a predictable manner across the landscape (Long, Feldman and Chandler 2009). These results represent only a preliminary assessment of the study area and it is to be expected that further research, primarily field survey, will result in a clearer determination of the non-indigenous cultural heritage values of SUZ1, in particular the archaeological values. It should be noted that the potential non-indigenous cultural heritage values within the reclamation and disturbed areas is very low.

4.5 Results

The results describe and assess the potential constraints posed by the Port of Hastings Development to Aboriginal and historic cultural heritage places and values within SUZ1 and the wider study area.

4.5.1 Statutory Obligations

Table 7 Statutory obligations within SUZ1

Potential Impact/Constraints	Legislative Obligations	Mitigation Measure
Known registered Aboriginal cultural heritage places impacted before, during and after development works. Harm to registered Aboriginal cultural heritage places 7921-0006, 7921-0007, 7921-0036, 7921-0841, 7921-0112	Pursuant to r. 6 of the <i>Aboriginal Heritage Regulations</i> 2007 a CHMP is required.	Management recommendations and contingency plans based on results of CHMP.
Undocumented Aboriginal cultural heritage places impacted before, during and after development works.	Pursuant to r. 6 of the <i>Aboriginal Heritage Regulations</i> 2007 a CHMP is required.	Management recommendations and contingency plans based on results of CHMP.
Known registered VHR historic heritage places impacted before, during and after development works. Full or partial disturbance of the Former Commonwealth Aircraft Corporation Hangar (VHR H0094)	Pursuant to s. 73 of the <i>Heritage Act</i> any changes to registered places require permit approval by the Executive Director, Heritage Victoria.	A consent will be required from Heritage Victoria to disturb this site.
Undocumented/ Unlisted historic archaeological sites impacted before, during and after development works Full or partial disturbance of historic archaeological site (HI)	Pursuant to s. 129 (1) of the <i>Heritage Act</i> an application to the Executive Director for consent to: <ul style="list-style-type: none"> – uncover or expose an archaeological relic; or – excavate any land for the purpose of discovering, uncovering or moving an archaeological relic; or – deface or damage or otherwise interfere with an archaeological relic or carry out an act likely to endanger an archaeological relic. 	Undertake archaeological - investigation, monitoring and/or recording measures as deemed appropriate in accordance with accepted methodologies for such sites and in accordance with the regulatory requirements under the <i>Heritage Act</i> .
Known Heritage Overlay sites impacted before, during and after development works Full or partial disturbance of Heritage Overlay sites HO268, HO269, HO270, HO311.	Pursuant to Clause 43.01 of all Victorian Planning Schemes a planning permit is required from Mornington Peninsula Shire Council for a range of works.	Undertake a detailed investigation of the controls identified in the Schedule to the Heritage Overlay.

Table 8 Potential statutory obligations within wider marine study area

Potential Impact/Constraints	Statutory Control	Mitigation Measure
<p>Known registered Aboriginal cultural heritage places along coastal littoral impacted by turbidity plumes; changes to tidal heights; and vibration during construction and operation phases.</p> <p>Harm to registered Aboriginal cultural heritage places (e.g. 7921-1335, 7921-1336, 7921-0465, 7921-0152 on French Island coastal zone).</p>	<p><i>Aboriginal Heritage Act</i> 2006 and <i>Aboriginal Heritage Regulations</i> 2007</p>	<p>Assess the topographical relief of registered Aboriginal cultural heritage places with respect to vibration and hydrodynamic modelling of tidal surges to determine potential areas of erosion or deposition.</p>
<p>Undocumented Aboriginal cultural heritage places along coastal littoral impacted by turbidity plumes; changes to tidal heights; and vibration during construction and operation phases.</p>	<p><i>Aboriginal Heritage Act</i> 2006 and <i>Aboriginal Heritage Regulations</i> 2007</p>	<p>Assess the topographical relief of registered Aboriginal cultural heritage places with respect to vibration and hydrodynamic modelling of tidal surges to determine potential areas of erosion or deposition.</p>
<p>Known registered historic heritage places impacted by turbidity plumes; changes to tidal heights; and vibration during construction and operation phases.</p> <p>Full or partial disturbance of registered VHR, VHI and/ or HO sites</p>	<p><i>Heritage Act</i> 1995 <i>Planning and Environment Act</i> 1987</p>	<p>Assess the topographical relief of registered historic heritage places with respect to vibration and hydrodynamic modelling of tidal surges to determine potential areas of erosion or deposition.</p>
<p>Undocumented/ Unlisted historic archaeological sites impacted by turbidity plumes; changes to tidal heights; drilling and vibration during construction and operation phases.</p> <p>Full or partial disturbance of historic archaeological site (HI) or shipwreck (VHR)</p>	<p><i>Heritage Act</i> 1995 <i>Commonwealth Historic Shipwrecks Act</i> 1976 <i>Planning and Environment Act</i> 1987</p>	<p>Assess the geo-physical data in relation to Heritage Victoria's shipwreck data (Appendix C) to avoid potential shipwreck locations.</p>

4.6 Applicable Statutory Controls

The Cultural Heritage Desktop Assessment indicates that there are seven previously recorded Aboriginal cultural heritage places within SUZ1. Sites and objects have been recorded within the broader area and region and therefore further site types may be present. The most commonly occurring site type for the area are lithic artefact scatters.

SUZ1 is located within several registered areas of cultural heritage sensitivity as defined under Regulation 4 of the *Aboriginal Heritage Act* 2006 (Vic): Registered cultural heritage places (r22) Named watercourses (r23); Declared Ramsar Wetland (r26); and Coastal land (r28).

The proposed development of a new port facility and transport corridor is a high impact activity, as defined in Division 5 of the Regulations as it includes:

Buildings and works for specified uses (Regulation 43)

(1) The construction of a building or the construction or carrying out of works on land is a high impact activity if the construction of the buildings or the construction or carrying out of the works

(a) would result in significant ground disturbance; and

(b) is for or associated with the use of the land for any one or more of the following purposes -

(xxiii) a utility installation, other than a telecommunications facility, if-

(B) the works are a linear project that is the construction of a pipeline with a length exceeding 500 metres.

Constructing specified items of infrastructure (Regulation 44)

(1) The construction of any one or more of the following is a high impact activity if the construction would result in significant ground disturbance—

(d) rail infrastructure;

(e) a road;

(g) a telecommunications line consisting of an underground cable or duct with a length exceeding 500 metres.

(2) In this regulation, telecommunications line has the same meaning as in the VPP.

The proposed development within SUZ1 therefore triggers the requirement for a mandatory Cultural Heritage Management Plan (CHMP) under Regulation 6 because:

(a) all or part of the activity area for the activity is an area of cultural heritage sensitivity; and

(b) all or part of the activity is a high impact activity.

Alternatively, a CHMP would need to be undertaken within SUZ1 if an Environment Effects Statement is required for the development. Section 49 of the *Aboriginal Heritage Act 2006* applies:

(1)...if a proponent or other person is required to prepare an Environment Effects Statement under the Environment Effects Act 1978 in respect of any works.

(2)The proponent or other person must, before commencing the works, also prepare a cultural heritage management plan for the area in which the works are to be carried out.

(3)In this section— "Environment Effects Statement" and "proponent" have the same meanings as in the Environment Effects Act 1978; "works" includes "public works" within the meaning of the Environment Effects Act 1978.

Although CHMPs have been conducted within SUZ1 (10200 and 10678) the *Aboriginal Heritage Act 2006* requires a new CHMP to be prepared when there are changes to the activity or actions that are inconsistent with approved CHMPs, or there are changes to the activity that will require a statutory authorisation.

A constraint associated with historic heritage values was identified from the desktop assessment. Pursuant to s. 73 of the *Heritage Act* any changes to the Victorian Heritage Register place of H0094 will require permit approval by the Executive Director, Heritage Victoria. There would also be requirements to undertake further archaeological assessments for unidentified historic archaeological under the *Heritage Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999*.

A detailed investigation of the controls identified in the Mornington Peninsula Shire Council Schedule to the Heritage Overlay for sites HO268, HO269, HO270, HO311 is also required. Pursuant to Clause 43.01 of all Victorian Planning Schemes a planning permit is required from Mornington Peninsula Shire Council for a range of works including but not limited to:

- Land subdivision
- Demolition or removal of a building (including part of a building)
- Externally altering a building by structural work, rendering, sandblasting or in any other way

Decision guidelines are set out at Clause 41.03-4 and require the consideration of the State Planning Policy Framework and the Local Planning Policy Framework and any relevant local heritage guidelines, heritage studies or assessments, including site-specific assessments.

4.7 Recommendations

Consultation with Aboriginal Affairs Victoria on 09 August 2013 confirmed that a mandatory CHMP would need to be undertaken in compliance with requirements of the *Aboriginal Heritage Act* 2006 and the *Aboriginal Heritage Regulations* 2007 for proposed development within SUZ1, as follows:

1. A statutory authorisation will be required for the activity in the form of a permit issued under the *Planning and Environment Act* 1987 or other approval under any Act or regulations to develop land for all or part of an activity (subject to confirmation).
2. The activity area contains areas of cultural heritage sensitivity (land within 200 metres of named waterways, Ramsar wetlands and coastal land) and a previously registered Aboriginal cultural heritage places (7921-0006, 7921-0007, 7921-0036, 7921-0841, 7921-0112).
3. Components of the proposed activity are defined as high impact activities (e.g. an industry, transport terminal, warehouse, road, railway and telecommunications cables).

Alternatively, a CHMP would need to be undertaken if an Environment Effects Statement is required (section 49).

An application to the Executive Director, Heritage Victoria would be required pursuant to s. 73 of the *Heritage Act* before any disturbance or alterations to the Former Commonwealth Aircraft Corporation Hangar (VHR H0094) were made.

An archaeological investigation in accordance with accepted methodologies for unidentified historic archaeological sites and in accordance with the regulatory requirements under the *Heritage Act* is recommended.

A detailed assessment of the controls identified in the Mornington Peninsula Shire Council Schedule to the Heritage Overlay for sites HO268, HO269, HO270, HO311 is required. Pursuant to Clause 43.01 of all Victorian Planning Schemes a planning permit is required from Mornington Peninsula Shire Council for a range of works.

Following consultation with Heritage Victoria (HV) on the 09 August 2013 the locations of potential shipwreck positions within the marine corridor were identified. The potential shipwreck positions are presented in Appendix C. These locations will inform the locations of the geo-physical and geo-technical testing so that shipwreck locations can be avoided.

A detailed investigation of the topographical relief of registered Aboriginal cultural heritage places and historic sites within the wider marine study area is recommended. Assessing the topographical relief with respect to vibration and hydrodynamic modelling would identify potential areas at risk of erosion or deposition.

5. References

- Alley-Porter, E. 2011. French Island National Park Cultural heritage Assessment. A Report to Parks Victoria.
- AECOM Land use assessment report for Port of Hastings stage one development (AECOM, 2009)
- Braccini, J. M., Walker, T. I., Conron, S. D. (2008). Evaluation of effects of targeting breeding elephant fish by recreational fishers in Western Port. Draft Final report to Fisheries Revenue Allocation Committee. (December 2008.) 59 + ii pp. (Fisheries Research Brand: Queenscliff, Victoria, Australia).
- Brandon L. Southall, Ann E. Bowles, William T. Ellison, James J. Finneran, Roger L. Gentry, Charles R. Greene Jr., David Kastak, Darlene R. Ketten, James H. Miller, Paul E. Nachtigall, W. John Richardson, Jeanette A. Thomas, & Peter L. Tyack. (2007). Marine Mammal Noise Exposure Criteria: Initial Scientific Recommendations. Aquatic Mammals, Volume 33, Number 4. Document and Publication Services, Western Illinois University, Macomb, USA.
- Department of Primary Industries 2009, Port Phillip and Western Port Management Plan, Fisheries Victoria Management Report Series No. 69, Department of Primary Industries, Melbourne.
- DEPI (2006) Port Phillip Bay Crucial to Victoria's Western Snapper Stocks, Department of Environment and Primary Industries, Research Note FN0593, Victoria, October 2006
- Ernst and Young (2009) Economic Study of Recreational Fishing in Victoria, Ernst and Young, Melbourne
- Gaughwin, D. 1981. Sites of Archaeological Significance in the Western Port Catchment. Environmental Studies Division, Ministry for Conservation, Victoria, Publication 367.
- Gaughwin, D. 1983. Coastal Economies and the Western Port Catchment. Unpublished M.A. thesis, Division of Prehistory, La Trobe University.
- Graeme Butler and Associates. 2001a. Hastings District Heritage Study Stage Two. Volume 1. Heritage Place Reports, Project Methods, Recommendations. Unpublished Report to Mornington Peninsula Shire Council.
- Graeme Butler and Associates. 2001b. Hastings District Heritage Study Stage Two. Volume 2. Environmental History. Unpublished report to Mornington Peninsula Shire Council.
- Long, A., Feldman, R., and Chandler, J. 2009. Port of Hastings Stage One Investigations Cultural Heritage Study. Unpublished Report to AECOM.
- Personal Communication, 06/06/2013, Simon Conron - Leading Scientist Fisheries Victoria |Department of Environment and Primary Industries - simon.conron@depi.vic.gov.au
- Prideaux, F. and Jakovljevic, A. 2011. Blue Scope Recycled Water Main Amended Alignment (Hastings), Mornington Peninsula. CHMP 11409 discontinued.
- Sullivan, H. 1981. An Archaeological Survey of the Mornington Peninsula. Victoria Archaeological Survey Occasional Report Series, No.6. Ministry for Conservation, Victoria. Unpublished (2002) Mornington Peninsula and Western Port Biosphere Reserve – Stage 1 Nomination Form
- Walther, E. and Wheeler, J. 2009 Blue Scope Recycled Water Main and Sewer Rising Main Hastings to Somers. CHMP 10678.
- Wheeler, J., Lane, S. and Matarese, L. (2009) Westernport Industrial Subdivision, Hastings. CHMP 10200.

Appendices

Appendix A – Amenity Policy Framework

Legislation and Regulations

Specific provisions relating to the management and planning of recreational activities appear almost entirely absent from Victoria state legislation and regulations. Nonetheless a number of State Act and Regulations are applicable to the management and planning of specific recreational activities.

Environment Protection Act 1970 (with 2001 amendments)

The aims of the Environment Protection Act 1970 include sustainable use and holistic management of the environment. Principles of Environment Protection defined in the Act which are applicable the management and planning of recreational activities include: the integration of economic, social and environmental considerations; conservation of biological diversity and ecological integrity; integrated environmental management; and enforcement

Fisheries Act 1995 (Victoria) and Regulations (2009)

The Fisheries Act (1995) created a framework for regulation, management, development and conservation of Victorian fisheries, aquatic habitats and ecosystems, aquaculture industries and

The Fisheries Regulations (2009) provide for the control and management of fisheries in Victoria on a sustainable basis and provides for any other matters authorised to be prescribed in the Fisheries Act 1995, including species take limits and gear restrictions.

Marine Safety Act 2010 (Vic) and Regulations (2012)

The new Marine Safety Act 2010 (Vic) and Marine Safety Regulations 2012 (Vic) apply to marine operations in Victoria. The objectives of the Regulations are to provide for safe marine operations in Victoria through the registration and operation of vessels and the licensing operators of recreational vessels and hire drive vessels, the certification of commercial and hire vessels and prescription of various other matters associated with the Marine Safety Act 2010.

Crown Land (Reserves) Act 1978 and Land Act 1958

As described in the Act, crown land is a class of public land, provided for the enjoyment and benefit of the people of Victoria. Public land covers the range of government owned land which includes national and other parks, state forests, and public purpose reserves. Reserves of Crown land for public purposes include parks and land for a particular public use. The Crown Land Act includes definitions and provisions associated with coastal crown land and designated ports.

State Planning Policy Framework

The State Planning Policy Framework (SPPF) outlines matters of State importance that are to be considered when land use and development decisions are made. The following clauses contain the State policies that are of relevance to the project.

Clause 11 Settlement

Clause 11 identifies the requirements for long term planning of urban growth. In accordance with this clause, planning is to provide sufficient land that is zoned and serviced for a range of urban land uses, to avoid environmental problems caused by locating incompatible land uses to close together, and enable sustainable development that makes best use of existing settlement patterns, transport, social facilities and utilities.

Clause 13.03-1 Use of Contaminated and Potentially Contaminated Land

Clause 13.03-1 seeks to ensure that potentially contaminated land is suitable for its intended future use and development. It is required that the following guidelines be considered in making a decision:

- State Environment Protection Policy (Prevention and Management of Contamination of Land).
- Ministerial Direction No. 1 – Potentially contaminated land.
- National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, 1999).

Clause 13.04-1 Noise Abatement

Clause 13.04-1 seeks to control noise effects on sensitive land uses. The policy seeks to ensure that development is not prejudiced and community amenity is not reduced by noise emissions. It is required that the following guidelines be considered in making a decision:

- State Environment Protection Policy (Control of Music Noise from Public Premises) No. N-2.
- State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1 (in metropolitan Melbourne).
- Interim Guidelines for Control of Noise from Industry in Country Victoria (Environment Protection Authority, 1989).
- A Guide to the Reduction of Traffic Noise (VicRoads 2003).

Clause 13.04-2 Air Quality

Clause 13.04-2 seeks to protect and improve air quality. The clause primarily focuses on the inter-relationship between land use and transport. It also seeks to ensure, wherever possible, the suitable separation of land uses that reduce amenity (e.g. industry) from sensitive land uses (e.g. residential). It is required that the following guidelines be considered in making a decision:

- State Environment Protection Policy (Air Quality Management).
- Recommended Buffer Distances for Industrial Residual Air Emissions (Environmental Protection Authority, 1990) in assessing the separation between land uses that reduce amenity and sensitive land uses.

Clause 14.04-2 Water Quality

Clause 14.04-2 seeks to protect water quality. Land use activities are to be sited and managed to minimise the discharge of contaminated runoff or wastes to waterways. Incompatible land use activities are discouraged in areas subject to flooding, severe soil degradation, groundwater salinity or geotechnical hazards where the land cannot be sustainably managed. Incompatible land uses are discouraged in aquifer recharge or saline discharge areas and in potable water catchments.

Clause 15.01-1 Urban Design

Clause 15.01-1 seeks to encourage the creation of urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.

Clause 17.02-1 Industrial Land Development

Clause 17.02-1 seeks to ensure the availability of industrial land. It encourages the identification of land for industrial development in urban growth areas where good access is available for employees, freight and road transport and where appropriate buffer areas can be provided between proposed industrial land and nearby sensitive uses.

The clause also states that industrial activity in industrial zones needs to be protected from the encroachment of unplanned uses which would adversely impact industrial viability. These uses include commercial, residential and other sensitive uses. Industrial uses that have appropriate standards of safety and amenity are encouraged to locate within activity centres. Also, approval of non-industrial uses in areas identified for industry should be avoided in order to maintain the availability of land for future industrial requirements.

As outlined in this clause, the following guidelines need to be considered in making a decision:

- Recommended Buffer Distances for Industrial Residual Air Emissions (Environmental Protection Authority, 1990).

Local Planning Policy Framework

The following sections of the Local Planning Policy Framework contained within the Mornington Peninsula Planning scheme are relevant to this Amenity Analysis.

Clause 21.03 Mornington Peninsula – Regional Role and Local Vision

Port development

The environmental value and sensitivity of Western Port is recognised, however, further port development is considered an opportunity for the Mornington Peninsula. As such there are a number of challenges, including the following, which must be effectively managed:

- Ensuring adequate protection of the Bay, its catchment and environmental systems.
- Proper management of the port land resource and the establishment of the infrastructure necessary to support port related uses.
- Avoiding land use conflicts by maintaining separation between port development and sensitive township areas.

Clause 21.06 Strategic Framework and the Peninsula's Settlement Pattern

To protect local values and ensure appropriate port related development the local policy recommends the following strategies:

- Establish a strategic framework plan, that recognises the key strengths and values of the Peninsula, including:
 - Access to deep-water channels in Western Port, with large areas of land separated from existing settlements and able to support port related development.
 - Provision of appropriate buffers / separation between residential areas and incompatible land uses, including extractive industries, airfields and land designated for port and port related development.

Clause 21.08 Foreshore and Coastal Areas

To preserve and protect the natural eco systems and landscapes it is recommended to implement this objective by:

- Applying the Special Use Zone (SUZ 1 - Port Related Uses) to identify land adjacent to Western Port that may be utilised for port related activity provided that high environmental standards are met.

Clause 21.10 Managing Port Area Development

The protection of the “long term value of Western Port for selected port and industrial purposes that depend upon or gain significant economic advantage from proximity to natural deep water channels is a key objective”.

Appendix B – Previous Archaeological Studies

Investigation	Report Number	Assessment Type	Results
Barker, 2012 6 Broughton Avenue, Cowes, Proposed Residential Development: Desktop and Complex Assessments	12251	CHMP Complex Assessment	<ul style="list-style-type: none"> There are no registered Aboriginal Cultural Heritage Places located in the Activity Area. Previous archaeological assessments in the region have indicated that Aboriginal archaeological sites within the region are likely to be located on high ground (sandy dunes) adjacent to swamps/drainage lines or along the high energy Bass Strait coastline. The Western Port Bay coastline is considered to be of low potential for Aboriginal sites however several sites have been located within close proximity. Sites are more likely to be situated on the crests and upper slopes of intact sand dunes rather than the lower slopes. Shell middens and artefact scatters are the most likely predominant site types. The Activity Area was most likely subject to vegetation clearance during the early settlement of Cowes. Thus any surface sites existing at the time are likely to have been highly disturbed and distributed. Soaks in dune depressions may have been used as water sources by Bun wurrung people. A 1 x 1 test pit and 12 shovel test pits were excavated – revealed that the Activity Area was of very low potential sensitivity for Aboriginal cultural deposits. No Archaeological material was located in pits. Test pits in the Activity Area revealed a consistent pattern of sub-surface conditions, whereby an upper level of humic, sandy soil overlies deep sandy deposits.
Spillane, A.E., 1973 Traces Left by the Aborigines on Phillip Island	233	Desktop or Paper or Due Diligence or Other	<ul style="list-style-type: none"> Phillip Island likely inhabited by Bunarong people when Western Port was discovered. They most likely lived there during breeding seasons of Mutton-birds, Penguins and Seals. On the southern shore of Phillip Island approximately three miles from the San Remo Bridge there is a large Mutton-bird rookery. Stone relics can be found on the cliff tops nearby. Camp sites (and stone relics) occur a short distance north-east of Saltwater Creek. Remains of feasts can be found at Boat Creek (north-west of the Island). Main camping ground situated at Cat Bay.
Walther, E and Wheeler, J., 2009 Blue Scope Recycled Water Main and Sewer Rising Main, Hasting to Somers, Victoria Cultural Heritage Management Plan (AAV# 10678).	10678	CHMP Complex Assessment	<ul style="list-style-type: none"> Eight Aboriginal sites with 1 km of the study area. Project intercepts one of these: Lysaght (VAHR 7921-0036) which is a low density artefact scatter site (concluded to be of low scientific significance) with no potential for intact archaeological deposits with rarity, integrity or research value. No artefacts or Aboriginal archaeological sites were located during the survey. 22 test excavation locations: no artefacts were recovered. Majority of area heavily disturbed; area unlikely to contain Aboriginal cultural heritage. Study Area forms part of a low relief coastal landscape that occupies the western fringe of Western Port.

Investigation	Report Number	Assessment Type	Results
Schell, P., 2005 Erehwon Point, Cowes. Aboriginal Cultural Heritage Assessment. A report to Bass Coast Shire Council.	3120	Survey	<ul style="list-style-type: none"> Archaeological inspection of 50 m existing track at Erehwon Point, Phillip Island. Field survey encompassed 50 m section of track and adjacent landforms. No sites recorded during field survey. Whole study area assessed to have 'low' Aboriginal archaeological sensitivity rating. Erehwon Point is small headland at eastern end of main beach at Cowes. Landscape of the study area is comprised of altered dunes (benched and gravel added) characterised by volcanic and agglomerate outcrops, overlain by brown-buff sand.
Prideaux, F. and Jakovljevic, A., 2011 Blue Scope Steel Recycled Water Main Amended Alignment (Hastings), Mornington Peninsula Cultural Heritage Management Plan (AAV#11409)	11409	CHMP	<ul style="list-style-type: none"> Project triggered a mandatory CHMP because it is a high impact activity within an area of Aboriginal cultural heritage sensitivity r.6 (Bluescope Westernport 1 VAHR 7921-0036) (AHR 2007 r.22(1)). Landform of site: low relief coastal landscape. Three sites identified within broader geographical region. One site Bluescope Westernport 1 within activity area boundary (in-situ sub-surface artefact scatters). This site also includes two surface sites BS-AS1 and BS-AS2. Archaeological significance of this site was considered relatively low but potentially still has cultural significance. Desktop assessment concludes high potential for Aboriginal cultural material to be located anywhere within the activity area. Complex assessment conclusion: site previously disturbed, no cultural material found but test pits not extensive, still potential for cultural material within the study area.
Chamberlain, M., 2011 Boat Storage Facility 15 Ellery Street, Hastings Cultural Heritage Management Plan CHMP#11809	11809	CHMP Standard Assessment	<ul style="list-style-type: none"> Study site is in Hastings within 200 m of the coast (an area of cultural heritage sensitivity). Desktop assessment determined that the archaeological potential of the activity area was very low and limited to isolated artefacts or low density artefact scatter. Results of survey and soil test showed deep layer of fill over Tertiary aged sand: therefore not likely that Aboriginal heritage will be found and a complex assessment not warranted. No Aboriginal cultural heritage identified during assessment: activity not expected to harm Aboriginal cultural heritage.

Investigation	Report Number	Assessment Type	Results
<p>Schell, P., 2004</p> <p>French Island National Park</p> <p>Aboriginal Cultural Heritage Assessment</p> <p>A report for Parks Victoria</p>	2953	Survey	<ul style="list-style-type: none"> • Report presents results of archaeological survey of French Island National Park in Western Port Bay. • Eight previously registered Aboriginal archaeological sites occur in the Park. Field assessment identified an additional five and an artefact collection. • Registered sites on French Island currently represented by stone artefact occurrences and shell midden material, and are situated on a range of inland and coastal landforms. • Current distribution of Aboriginal sites suggests they occur on a wide range of landforms present throughout the Park, and it is likely that distribution is wider than currently known (not all landforms were surveyed). • Guidelines are provided for planning and implementing proposed ground disturbing works to reduce risk of impacting Aboriginal sites.
<p>Thomas, S. & Wilson, J., 2012</p> <p>18 The Esplanade, Cowes, Dwellings</p> <p>Cultural Heritage Management Plan</p>	12068	CHMP Complex Assessment	<ul style="list-style-type: none"> • The activity area represents a block of land (18 The Esplanade, Cowes) with residential allotments to the west and south, Western Port Bay to the north, and Warley Avenue to the east (c. 770 m²). • The activity area encompasses land within 200 m of Western Port Bay, an area of cultural heritage, and is an area of cultural heritage sensitivity. • A total of five shovel test pits (400 x 400 mm in size to 600 mm depth), one 1 x 1 m and one 0.5 x 0.5 m test pits were excavated across the activity area. • No Aboriginal cultural heritage places are located within the activity area. • No dense deposits of stone artefacts or other materials of cultural origin representing Aboriginal cultural heritage places of higher significance are likely to occur within the activity area. • There are no rocks, caves or overhangs within the activity area, so no possibility for rock art sites or quarries. • No mature native trees remain, leaving no possibility for scarred trees to be present.

Investigation	Report Number	Assessment Type	Results
<p>Gaughwin, D., 1981</p> <p>Sites of Archaeological Significance in the Western Port Catchment, Volume 1</p> <p>Report for Ministry for Conservation, Victoria</p>	4	Survey	<ul style="list-style-type: none"> • Report presents results of archaeological survey of the Western Port Catchment. • A total of 266 sites located and recorded (208 on Phillip Island, 3 on French Island, 15 in the Top of the Bay, 12 on the San Remo Peninsula, 23 on other coasts and 4 in the Uplands near Gembrook). • Poor ground visibility throughout the area influenced the results, and predominance of coastal sites reflects the available ground visibility of the study area. • Documents relating to the Aborigines who lived in the Catchment highlighted the relationship between the environment, its resources and the human population. • Very few well-preserved sites were recorded. • Seven sites (Jessie Island 3, Point Grant 1 and 2, Barry's Beach 4, Swan Lake 4, Corinella 3 and Boat Creek 1) and nine areas of archaeological significance (Summerlands, Cat Bay, Swan Lake and Point Grant, Forrest Caves, Woolamai Beach, Surf Beach, Smith Beach, Thorny Beach East and Cobb Bluff) are delineated in the text and accompanying maps. • Areas of potential archaeological significance (Coronet Bay, Thorny Beach West and Shetland Heights Beach), or archaeologically sensitive areas, also discussed. • Recommendations are made for management.
<p>Vines, G. & Patton, K., 2008</p> <p>166 Marine Parade, Hastings</p> <p>Proposed Commercial Development: Cultural Heritage Management Plan</p>	10368	CHMP Complex Assessment	<ul style="list-style-type: none"> • Document presents a Cultural Heritage Management Plan for a proposed commercial development at 166 Marine Parade, Hastings. • An initial archaeological survey of the subject site identified low Aboriginal and historical archaeological potential in the entire study site. • Subsurface testing also carried out, which verified the activity area has been heavily disturbed by clearing, grading and land fill in the recent past. This is confirmed by relevant in situ soil tests carried out by Civil Test Pty Ltd (in 2007). • No recorded Aboriginal or historical sites will be impacted by the proposed development, which involves ground disturbance generally to a maximum depth of 300 mm into the natural occurring clays. • Identified no Aboriginal cultural heritage within the activity area, and indicate that a very low likelihood any Aboriginal cultural heritage may be present.

Investigation	Report Number	Assessment Type	Results
<p>Keble, R.A., 1928</p> <p>Kitchen Middens on the Mornington Peninsula</p> <p>Victorian Naturalist Vol. XLV, pp. 151-159.</p>	128	Desktop or Paper or Due Diligence or Other	<ul style="list-style-type: none"> • Roughly classifies the surface of the Mornington Peninsula into sand and clay areas. Tyabb Sands (<i>extend from Langwarrin to Coolart, between Stony Point railway and Western Port Bay</i>) and Tootgarook Sands (<i>comprise the whole of the Peninsula between Bass Strait and Port Phillip Bay, west of Wallermeryong, south of Toom Toom Allock, and west of a line from Toom Toom Allock to Dromana</i>) are the areas on which the Aborigines have left abundant evidences of occupation (with two exceptions, one being Sandy Point, and the other on the ridge on the west side of the Wallermeryong, parallel to it, and between the Toom Toom Allock and Blacks' Camp at the corner of Cape Schanck and Flinders Road). • Traces of Aboriginal cultural heritage are rare or entirely absent on the clay areas, with those occurring in clay areas [on Mount Martha pre-emptive right and Yaen Yaen (Bunguyan)] actually on patches of white sand. • Homesteads were built at the Balla Balla, Tyabb and Bungunyan waterholes on Aboriginal camp sites. • Traces of native habitation (e.g. axes, flakes, middens, etc.) found at the edges of permanent waters, but also on the Bass Strait shore between Rowley's Rocks and the back beach at Rye (described as the most interesting area), which has no swamps or creeks within some miles. Other described sites with traces found include Langwarrin railway station, Barrett's Swamp, Blacks' Camp (Somerville), shores of Rutherford's Inlet, Brilla, Balla Balla, Tyabb Waterholes (homestead), Shooter's Camp or Lagoon, Bungunyan (King's Station), Tulam (at Midden Creek, and in dune sand), watershed between Double Creek and the Yallerong, across Tyabb and Tootgarook Sands, across open shores of the southern part of Western Port Bay and Bass Strait, on the small promontory below the lighthouse at Cape Schanck, a mile inland from and on a platform above Boag's Rocks, in a road cutting on the Boniyong (grazing land north of the swamp) near the State School, Tootgarook Swamp, Arthur's Seat, Mt. Martha, and raised beaches on the shore north of Mornington. • Some (rare) traces found at the raised beaches opposite the Meremerdiwokewoke (Manton's Creek/Tucks), West Head, up Stockyard Creek (Targoot in part), the Wallermeryong (Main Creek), foreshore of Western Port Bay where the mangrove grows (all camps inshore), Toom Toom Allock (Drumna Mullock), Port Phillip shore, and Yaen Yaen swamp (three miles south of Moorooduc railway station). • Nothing found at Bandienanmer, Parrewurruckwurruck, Merram Merram and Coolart. • Did not geologically survey Curnweel, Babbaleip, Coolamadoolam, Manmangur, Gunyong, Kakeraboite or creeks flowing north-westerly into Port Phillip Bay from Mt. Eliza.

Investigation	Report Number	Assessment Type	Results
<p>Minos, R., Mialanes, J., Clarke, V., Kiddell, H., Woodfield, L. & Hobbs, J., 2008</p> <p>Industrial Factory Subdivision, 290 Marine Parade, Hastings</p> <p>Cultural Heritage Management Plan</p>	10536	CHMP Complex Assessment	<ul style="list-style-type: none"> • Cultural Heritage Management Plan prepared for a factory subdivision at 290 Marine Parade, Hastings. • Olivers Creek lies within 200 m of the activity area and is an area of cultural heritage sensitivity. • Desktop, standard and complex assessments were completed for the Plan. • No Aboriginal cultural heritage was identified during the standard assessment. • A complex assessment involving sub-surface testing indicated that there is little likelihood that any Aboriginal cultural heritage sites exist, as the activity area has suffered from significant ground disturbances in the past. • Contingencies are outlined in the Plan for the management of Aboriginal cultural heritage, in case any be identified during site works. • A checklist also included to ensure there is compliance with the Plan.
<p>Long, A. & Edmonds, V., 2006</p> <p>Origin Energy Mornington Peninsula Towns Project, Merricks Beach, Gas Reticulation Network</p> <p>Archaeological Sub-surface Testing Programme</p> <p>A Report to Origin Energy Asset Management Services.</p>	3503	Test Excavation	<ul style="list-style-type: none"> • Report presents results of an archaeological sub-surface testing programme conducted in zones identified as having Aboriginal archaeological potential within the proposed natural gas reticulation networks within the township of Merricks Beach, on the east coast of the Mornington Peninsula. • Study area specifically described as consisting of the urban boundary of the township of Merricks Beach, excluding private land of freehold, leasehold or other Crown title. • A previous archaeological and cultural heritage assessment for the proposed Mornington Peninsula Towns Project, conducted in the study area, identified zones of potential Aboriginal cultural heritage values. • More detailed environmental, ethnographical, Aboriginal and historical site information said to be provided in Long <i>et al.</i> 2006, and the adjoining Balnarring and Somers reticulation networks are the subject of a separate report (Long, A., Feldman, R., Schell, P. & Howell-Meurs, J., 2006: <i>Origin Energy Mornington Peninsula Towns Project – St Andrews Beach, Balnarring and Somers Gas Reticulation Networks. Archaeological and Cultural Heritage Assessment</i>. Unpublished report to Origin Energy Asset Management Services). • An archaeological sub-surface testing programme utilised mechanical test pits to determine the sensitivity of shallow surface and sub-surface deposits across the raised beach upon which the township has been developed. • No Aboriginal archaeological sites were identified, and it was confirmed that the reticulation network will be installed into either areas of low Aboriginal archaeological potential or areas disturbed through previous development and other activities, including road construction, maintenance and service installation.

Investigation	Report Number	Assessment Type	Results
Hislop, K., 2012 Four-Townhouse Development at 30 Skinner Street, Hastings Cultural Heritage Management Plan	12441	CHMP Desktop Assessment	<ul style="list-style-type: none"> Cultural Heritage Management Plan (CHMP) provides a detailed assessment of the cultural heritage values associated with the property and proposed activity at 30 Skinner Street, Hastings (an area of 1,480 m²). The activity area occurs in an area of cultural heritage sensitivity, being within 200 m of a Ramsar Wetland (Western Port Bay). The desktop assessment found: no previously recorded Aboriginal Places within the activity area; one collection of stone artefacts of unknown provenance within 200 m of the activity area; six other Aboriginal Places within the geographic region (associated with riverine environments); two CHMPs that have otherwise been completed within 200 m of the activity area that did not identify any Aboriginal cultural heritage; and nine CHMPs within 200 m of the Western Port wetlands along the same stretch of the coastline as the activity area, none of which found Aboriginal cultural heritage and all of which stated it is highly unlikely or there is no likelihood of finding Aboriginal cultural heritage within their activity areas. The activity area lies within <i>Bun wurrung</i> country, and Europeans first settled in the region during the 1840s. All surface features were cleared throughout the activity area in 2011, with underground features still in place. The desktop assessment concluded that the activity area is unlikely to contain Aboriginal cultural heritage. A field inspection confirmed the disrupted condition of the shallow soils (300-400 mm depth) of the activity area. Oral history from the Bunurong Land Council Aboriginal Corporation identified Hastings as being an area not suited for camping, only resource collection. General and specific cultural heritage recommendations (to become compliance requirements on approval of the CHMP) are also described.

Investigation	Report Number	Assessment Type	Results
<p>Mitchell, J. & McFarlane, E., 2011</p> <p>Proposed Residential Subdivision at 277 Marine Parade, Hastings, Victoria</p> <p>Cultural Heritage Management Plan</p>	11511	CHMP Complex Assessment	<ul style="list-style-type: none"> • Cultural Heritage Management Plan details findings for 277 Marine Parade, Hastings, with the activity area comprising one small block of privately owned land (Lot 1, Section 18, Parish of Tyabb). • The desktop assessment indicated that the activity area forms a part of the geographic region defined as the northwest coastal region of Western Port Bay. • Thirteen Aboriginal sites have been registered on the Victorian Aboriginal Heritage Register in this region, the majority of which are stone artefact scatters. • The closest registered Aboriginal place to the activity area is an artefact scatter containing surface and subsurface material over 700 m to the northeast. • No Aboriginal sites, caves, rock shelters, cave entrances or culturally marked mature indigenous trees were identified in the activity area during a standard assessment archaeological survey of the activity area. • Three 1 x 1 m test pits and six 50 x 50 cm random shovel test pits (ranging in depths of between 32 and 57 cm) were excavated across the entirety of the activity area, with a particular focus on a slightly raised south-western section, during a complex subsurface testing program. • European rubbish and introduced fill was found throughout the majority of the excavated pits. • No Aboriginal cultural heritage material was found within any of the pits. • In light of the prior disturbance throughout the activity area, lack of registered sites within the vicinity of the activity area and the low lying swampy landform having no potential to contain Aboriginal material, it was deemed very unlikely that any previously unknown Aboriginal cultural heritage would be uncovered by the proposed activity.

Investigation	Report Number	Assessment Type	Results
<p>Dugay-Grist, L. & Cowled, A., 2012</p> <p>Proposed Unit Development 134 Salmon Street, Hastings</p> <p>Cultural Heritage Management Plan</p>	11835	CHMP Complex Assessment	<ul style="list-style-type: none"> The activity area is located at 134 Salmon Street, Hastings on land (1210 m²) currently occupied, and owned by Simon Pitard. A section of the activity areas is located within a specified area of cultural heritage sensitivity: declared Ramsar wetlands. The land within the activity area has been subject to disturbance in the form of clearing and the construction of a residential house; however, these activities are concentrated in the eastern section of the activity area and are not considered to have significantly impacted the entire activity area. A review of previously registered places in the geographic region indicates a small number of low density stone artefact scattered located inland from the Westernport Bay coastline, mainly along Warringine and Olivers Creeks. These artefact scatters have been found in a variety of contexts including on rises, floodplains, and exposed in areas of ploughed land. There are few cultural heritage places located within the region, but this may be a reflection of lack of survey and excavation work. Some CHMPs have been undertaken within 4 km of the activity area, most of which did not locate any cultural heritage values. Devilbend Reservoir and Devilbend Creek (located 7 km west of the activity area) include a large number of cultural heritage places. The desktop review indicated low potential for archaeological material within the activity area. No new Aboriginal places, mature indigenous trees, caves, rock shelters or cave entrances were identified within the activity area during the standard assessment; however, the eastern section of the activity area was unable to be effectively surveyed due to existing infrastructure (e.g. house) and dense grass cover across the activity area caused poor ground surface visibility and made some parts difficult to access. Subsurface testing was conducted in areas of potential sensitivity that are to be impacted by the proposed activity. Some sections of the activity area were found to be undisturbed, but no Aboriginal cultural heritage materials, features or potentially sensitive deposits were identified in any of the excavation areas, indicating the area was most likely not used intensively by Aboriginal people. No Aboriginal cultural heritage or areas identified as likely to contain Aboriginal cultural heritage were identified during the complex assessment of the activity area. Contingencies are provided for the possible discovery of Aboriginal cultural heritage during works, with any sites identified likely to date to the mid to late Holocene.

Appendix C – Potential Shipwreck Locations and Detailed Historic Heritage Table

Please note this data is confidential and should not be published or provided to a third party without approval from Heritage Victoria. The data comes from a range of sources and the accuracy of positions cannot be guaranteed.

The 'truthed' column in the following tables indicates that a position for the wreck is known, however if there is a 'no' it means that divers have not been on site and HV still classify it as 'unfound'.

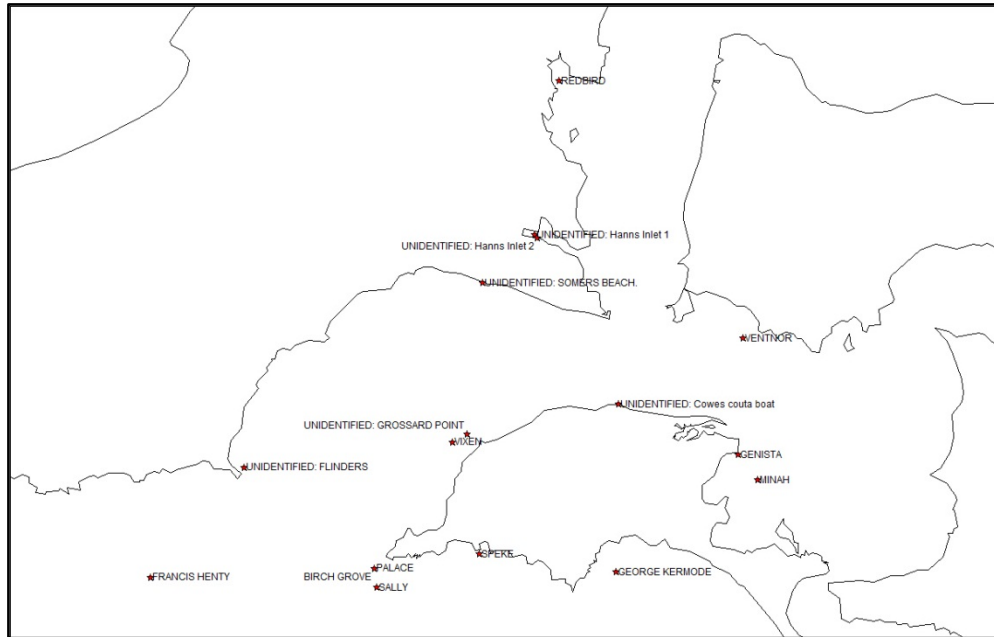
Shipwreck locations within Western Port

HV ID Number	AHO ID Number	Shipwreck Name	Truthed	Latitude	Longitude	Datum	Position Source
249	6436	EVERGREEN	No	-38.5667	145.367		AHO - Reported
324	6442	HERO	No	-38.5667	145.367		AHO - Reported
1036	6466	VIXEN	No	-38.4667	145.15		AHO - Reported
1017		GENISTA		-38.4664	145.31	WGS84	Wreck Report
690		VENTNOR		-38.4152	145.31	WGS84	Unknown
743		UNIDENTIFIED: FLINDERS		-38.4818	145.035	WGS84	Unknown
784		UNIDENTIFIED: GROSSARD POINT		-38.4628	145.158	WGS84	Unknown
798		UNIDENTIFIED: SOMERS BEACH.		-38.3963	145.163	WGS84	Unknown
877		UNIDENTIFIED: Cowes cuta boat		-38.4467	145.242	WGS84	Wreck Report
895		UNIDENTIFIED: Hanns Inlet 1		-38.3742	145.191	WGS84	Aerial Photo
896		UNIDENTIFIED: Hanns Inlet 2		-38.3753	145.192	WGS84	Aerial Photo
514		PALACE	No	-38.5235	145.11	WGS84	Unknown
560		REDBIRD		-38.3062	145.2	WGS84	Divers
603		SALLY	No	-38.5318	145.111	WGS84	Unknown
627		SPEKE		-38.5152	145.168	WGS84	Unknown
93		BIRCH GROVE	No	-38.5235	145.11	WGS84	Unknown
273		FRANCIS HENTY		-38.5318	144.985	WGS84	Unknown
301	6439	GEORGE KERMODE		-38.5202	145.245	WGS84	Divers
468		MINAH		-38.4771	145.322	WGS84	Unknown

Unlocated shipwrecks within Western Port

HV ID Number	Shipwreck Name	Ship type	Built date	Wrecking date	Min long	Min lat	Min long	Min lat	Area
83	BRIGHTON	Wooden sailing	1832	14 JUL 1855	145	-38.5	145.483	-38.2333	1248.778
93	BIRCH GROVE	Wooden sailing	1856	11-Feb-32	145.108	-38.525	145.108	-38.525	0.0314
97	BLUEBIRD	Wooden motor	0	1945	145.16	-38.4667	145.177	-38.45	2.74872
178	DANDENONG		1891	8-Feb-13	145	-38.5	145.483	-38.2333	1248.778
348	ITALIA	Wooden sailing	1866	6 JUN 1881	145	-38.5	145.483	-38.2333	1248.778
400	LADY BRASSEY	Wooden sailing	1898	3-Sep-30	145.233	-38.3667	145.225	-38.3917	1.93852
514	PALACE		1866	11-Feb-32	145.108	-38.525	145.108	-38.525	0.0314
522	PERSEVERANCE		1865	SEP 1874	145	-38.5	145.483	-38.2333	1248.778
529	PHOENIX		1866	12 OCT 1876	145	-38.5	145.483	-38.2333	1248.778
577	RIVER CHIEF	Wooden sailing	1845	4 FEB 1858	145	-38.5	145.483	-38.2333	1248.778
603	SALLY	Wooden sailing	1838	16 AUG 1843	145.11	-38.5333	145.11	-38.5333	0.0314
684	TYRO		1877	30-Jan-06	145.15	-38.4833	145.127	-38.5167	7.43342
703	VIXEN		1886	20-Jul-17	145.24	-38.44	145.217	-38.45	2.22727
821	FRANKSTON - FAIREY FIREFLY	Airplane	0	20-Jul-47	145.338	-38.1742	144.923	-38.8608	2756.496

Potential Shipwreck Positions within the Marine Corridor – information supplied by Heritage Victoria



Register Number	Place Name	Register Description
H0284 (VHR); H0116 (HO)	Harewood, 3300 South Gippsland Highway Koo Wee Rup, Cardinia Shire	<p>Harewood at Tooradin was built in 1865-8 on a sandy rise on the eastern shore of Western Port Bay for pastoralist William Lyall to plans drawn up by the Melbourne architect of Italian origin, Alessandro Martelli. It replaced an earlier cottage on Lyall's run. Lyall was born in Scotland, migrated to Port Phillip by way of Van Diemen's Land in 1847, and took up several pastoral runs throughout the colony. He was also a partner in a leading Melbourne firm of stock agents. He had made plans in 1858 to build a house here to use as a hunting lodge on his 30,000 hectare run, but there is no evidence that Harewood was used as anything other than a family home. During the late nineteenth and early twentieth centuries Harewood was the centre of social life in the Western Port district.</p> <p>Lyall was a prominent member of the Acclimatisation Society, and introduced here Australia's first hares (which gave the name to the property), as well as partridges, deer, pheasants, shaggy highland cattle and various plant species. His interests were wide-ranging: he also imported pedigree English cattle, sheep and horses for breeding; he attempted oyster culture in Western Port in 1873; he imported a brick-making machine in 1876 to supply the district with bricks; and he lost money in unsuccessful attempts to drain the Koo Wee Rup swamps, including giving the Lang Lang River its first outlet to Western Port Bay. Lyall and his family were closely connected with the final years of the local Bunarong tribe, and Jimmy and Eliza, the last full-blood members of the tribe, lived in the room at the end of the stables during their later years. Lyall's descendants lived in the house until the 1960s.</p> <p>Harewood at Tooradin is a large picturesque stuccoed brick house. The front part consists of two separate single storey hipped roofed sections with a separately roofed hall between. The hall originally had a hipped roof and a small porch; by 1890 it had a gable with decorative bargeboards and a larger gabled porch also with a bargeboards. The hall is a feature of the design and was originally covered with glass, which was partly replaced by timber in the 1880s; the hall was originally decorated with large pot plants. The rear of the house consists of a two storeyed L-shaped section, with a small porch over the back door and a two storey timber verandah on the side facing the bay. The roof is of corrugated iron. Several pieces of the original furniture, much of it made to order for Lyall in England, remain in the house. Most of the original outbuildings have been demolished, but the weatherboard stables have survived. The stable building is likely to incorporate the original hut on the site, built by Edw in Cockayne in about 1850.</p>

Register Number	Place Name	Register Description
H0759 (VHR); HO118 (HO); B4683 (NT)	Coolart, 36-40 LORD SOMERS ROAD SOMERS and BALNARRING, MORNINGTON PENINSULA SHIRE	<p>Coolart originally formed part of one of the oldest grazing properties on the Mornington Peninsula.</p> <p>"Coolart" or "Coolourt" (meaning sandy area in the local aboriginal dialect) was first taken up in 1840 by Alfred and Henry Meyrick after whom the nearby Creek and township of Merricks are named. They developed a vast extent of land, but moved to Gippsland c. 1846.</p> <p>The Coolart lease changed hands a number of times. Most of its owners, many of them prominent figures - have left their mark on the property. Between 1846 and 1875 the lessees were William and John Payne (1846-53), Harry Drew (1853-54), Joseph Hann (1853-62), and John Benn and Theodutus John Sumner (1862-75).</p> <p>Benn and Sumner were leading Melbourne businessmen and senior partners in Grice, Sumner and Co.</p> <p>It is believed that the "barracks" (or original accommodation) building and brick outbuildings were erected in the 1860s. Because of its probable age and historical associations the barracks may be regarded as one of the most important historic buildings on the peninsula. The main two-storey brick residence was built for Frederick 1 Grimwade, the noted businessman and philanthropist who owned Coolart from 1895-1907. It was built in 1896-97 to the design of the architectural firm Reed, Smart and Tappin. Grimwade sold Coolart to Thomas Shaw Armstrong, a grazier, in 1907. Subsequent owners were Capt JAS Balmain, Stewart Robertson, John Freehan and the noted Melbourne businessman Thomas J Luxton whose family owned with the McEwans Hardware chain of stores. Luxton had a significant involvement with the property, most notably in the creation of the modern homestead garden and the creation of wetlands and a private wildlife reserve.</p>

Register Number	Place Name	Register Description
H0906 (VHR) ; HO81 (HO); B6332 (NT)	Former Jetty Cargo Shed	<p>The former Jetty Cargo Shed (c. 1871) at Flinders is of architectural, historic, social and scientific importance as:</p> <ul style="list-style-type: none"> • One of a small number of bow roof structures remaining in Victoria which represent a building form and type once commonly utilised for port structures. Although relocated one chain west of its original location it remains relatively intact and is in an appropriate foreshore location. • Is among the oldest of a small number of similar port structures still standing. • The shed in conjunction with the nearby jetty is a strong visual reminder of the former dominance of sea transport for moving heavy cargoes to isolated coastal settlements. Provides an example of the use of corrugated iron for roofing purposes which utilises the properties of the material to provide a durable, strong roof, with minimal roof openings, was easily transportable and requires minimum support when curved. • The shed has associations with the Shire of Flinders township following the completion of the second submarine telegraph cable between Victoria and Tasmania, opened in May 1869. The cable came ashore in the vicinity of the Flinders jetty and a telegraph station was located at the end of Cook Street overlooking the jetty. A small section of land line connected the cable to the existing telegraph line at Cape Schanck.
H1614 (VHR); H7921-0014 (VHI); H7921-0002 (VHI) HO27 (HO); L10088 (NT)	Churchill Island	<p>Churchill Island, Westernport Bay off Phillip Island, includes the entire island and linking timber bridge, with all building and objects located on it. The island is the site of the first European 'settlement' in Victoria, Lt. James.</p> <p>Grant of the Lady Nelson having built a cottage and planted wheat, corn and a garden in 1801, no evidence of which remains. The present, symmetrical weatherboard homestead dates possibly from the 1860s; parts may be older. There is a cannon from the warship Shenandoah (1865).</p> <p>The island is unique in the history of Victoria and was until recently the only privately owned island in Victoria. It is a most important landscape element in Western Port Bay. The present homestead is representative of homestead building.</p> <p>The island has been acquired by the government of Victoria in January, 1976 for public uses. Future plans are unclear. Current landscape is pastoral.</p>

Register Number	Place Name	Register Description
H1996 (VHR); HO116 (HO)	The Pines Foreshore Reserve	<p>The stand of about 250 Monterey Pine trees (<i>Pinus radiata</i>) on the foreshore at Shoreham (The Pines) is a place of cultural heritage significance at a State level as a representative surviving example of pine trees marking a beach resort. Pine trees were a classic seaside planting to provide windbreaks and protection for habitations behind the foreshore. Many such pine plantings around Port Phillip Bay and Western Port Bay have been or are being replaced. The landscape of which the pines constitute an important element, is of outstanding aesthetic significance. The Pines are a very impressive stand of trees, and are unique as the best example in Victoria of a stand of pines on a foreshore reserve.</p> <p>The stand of pines at Shoreham is of aesthetic significance. It is also of historical and social significance. The Monterey Pines are a unique element in a significant landscape. They are of aesthetic significance as a key component of an organically evolved landscape with a high aesthetic value for its scenic beauty. The Pines are important for their landmark quality on the Western Port littoral of the Mornington Peninsula. They give the Shoreham foreshore its distinctive character. The vistas from the sand and from the water where The Pines are contrasted with the sea and sky are important to the site. The Pines create an unusual and distinctive experience of the intersection of beach and land which is visually different from the low indigenous cover to be seen at Honeysuckle Point and other areas along the coast.</p> <p>The Pines are also of historical significance as an associative landscape marking the use of Shoreham as a beach and surfing resort. Early plantings of pines are the most visible reminder of the settlement period and pines became a classic seaside planting. The Pines stand as a representative marker in the imposed landscape following European settlement and in particular signify the recreational use of Shoreham as a beach resort from the 1920s although some of the trees probably date from earlier than 1920. Similar plantings protecting the beaches of Merricks, Somers and Balnarring have been partially removed in recent years, increasing the significance of The Pines as a surviving example of post European settlement beach planting.</p>

Register Number	Place Name	Register Description
H2292 (VHR); H0302 (HO)	Lord Somers Camp, 148 LORD SOMERS ROAD SOMERS, MORNINGTON PENINSULA SHIRE	<p>The Lord Somers Camp was established as a recreation camp for teenage boys by the Governor of Victoria, Lord Somers in 1929, with the first camp held at the purpose-designed site in Somers in 1931.</p> <p>Lord Arthur Herbert Tennyson Somers was Governor of Victoria from 1926 until 1931. He was inspired to create the annual camps after hearing of the Duke of York camps in Britain, which were held from 1921. Both men were concerned about class differences and wanted to find ways to break down prejudices and build understanding between young people of different backgrounds. They believed that by bringing the boys to live together for a week, they would take this new-found understanding of all members of society with them into adulthood. The first Lord Somers Camp for Boys was held at the Scout camp at Anglesea River in January 1929, with forty teenaged boys from public schools and forty boys from working-class backgrounds invited to participate by Lord Somers. Anglesea Scouts were given the role of 'Slushies', who performed the chores, so the holidaying boys, known as 'groupers', were free to play sports and organised games in the healthy outdoor environment, away from the city. The camp had only one rule, to 'play the game', and after competitions the winners would applaud the losers. An association in Melbourne, known as Power House, was formed so that the boys could maintain the connections established at the Big Camps. Such was the success of the first two camps that it was decided that a permanent site should be found, which was close to the beach, secluded but within easy reach of Melbourne, and with flat land for sports fields. The site at Balnarring East was on land donated from the Coolart estate (H0759). The town planner Saxil Tuxen surveyed the site and Arthur Stephenson of architectural firm Stephenson & Meldrum designed the camp buildings to be of a simple, rustic appearance to blend with the landscape and to encourage a close-knit community. The buildings, including a large dining hall and several dormitories, formed a square around a central parade ground. The camps encouraged respect for the monarchy and patriotism, and there were regular services held at the Bush Chapel.</p> <p>The first Big Camp at this site was held in 1931, and was the first with co-founder Dr 'Doc' McAdams as Camp Chief, a position he held until 1954. Somers returned to England in 1932, but kept close contact with the camp and Power House members. Aside from a break during World War II, the Big Camps (and later Big Camps for Girls) have continued to be run annually at the site.</p> <p>Lord Somers Camp site is located in a bush setting, near a creek and the beach, and consists of single-storey accommodation and communal buildings situated around a parade ground. Though most of the original buildings have been replaced, new buildings have been constructed in a sympathetic manner, retaining the simple, rustic appearance of Stephenson's design. The original dining hall features exposed timber beams, timber wall panelling, fold-down trestle tables, a large stone fireplace and a war memorial plaque. It has a small mezzanine level from which films were projected to the outdoor cinema screen. The one remaining original dormitory building contains small bedrooms and bathrooms opening off a narrow hallway with a timber dado. The central quadrangle and parade ground with flagpoles remains, and the larger dormitory buildings and an office building which surround it were constructed in the 1980s.</p>

Register Number	Place Name	Register Description
		The site is part of the traditional land of the Kulin Nation. Lord Somers Camp is of historical significance to the state of Victoria. Lord Somers camp is of historical significance as a demonstration of the rising concern in the interwar period about class differences and the impact of childhood experiences on adulthood. The location and bush setting of the camp is significant for demonstrating the ideal of the mental and health benefits of a natural setting away from the city. It is also of significance for its association with Lord Somers, Governor of Victoria between 1926 and 1931.
H7920-0007 (VHI)	Fiddlers Green	N/A
H7921-0001 (VHI)	Corinella Penal Settlement	Although the first settlement was short-lived, more than 50 structures had been erected including houses, stores, dairy, fences, pig sties, sheep hurdles, kitchens, barracks and wells. Despite its being dismantled in 1828, settlement structures were still identifiable in 1835 when European colonisation recommenced. During archaeological investigations recently, more than 15 features have been defined from both early and subsequent settlements.
H7921-0010 (VHI)	Gairdners Cottage	Heritage Inventory Significance: This site is mainly significant for the surviving panels of wattle and daub, which are of a very early date (c. 1848).
H7921-0014 (VHI)	Churchill Island Sealers Site	Heritage Inventory Significance: Originally described (1983) as a "sealers" site. Current survey suggests this is extremely unlikely.
H7921-0023 (VHI)	Mckenzie's Well French Island	Large underground tank or well of handmade bricks remains at a house site. The well is 5 m in diameter, 8-10 m deep and has a dome of bricks about 1 m above the ground. It is plastered inside and out with a thick (12 mm) layer of cement.
H7921-0027 (VHI)	French Island Recreation Camp	Formerly McLeod Prison Farm; 82 cells, 41 of which are maintained; recreation hall/chapel and ante-rooms; cellar, possibly used for refrigeration; two prison ablution blocks, one modified for use by day visitors and guests. Other features are the Governor's quarters, a burnt-out dormitory, small saw mill and fence post treatment plant, an unused abattoir and several farm shed. Inventory Significance: State
H7921-0051 (VHI)	Former Boat Shed	Foundations of former foreshore boat shed.
H7921-0059; HO140 (HO)	Captain Grossards Grave	N/A
H7921-0073 (VHI); HO46 (HO)	Flinders Cable Station Site	The cable station site is situated on a small hill near a now historic reserve or park behind and above Flinders jetty. It apparently consists of bluestone foundations that have been grassed over and the area has not been built upon - it is the original telegraph station reserve. There is a brass plaque currently marking the site but no remaining buildings.

Register Number	Place Name	Register Description
H7921-0097 (VHI)	Sandstone Island	Small rural island (22ha) has national and state heritage value in demonstrating patterns of agricultural land use and pioneering settlement of an island system. Mostly cleared with some old Moonahs (Melaluca Lancelota), and introduced plants. One modern holiday home exists. The island contains potential archaeological evidence for several 19 century dwellings now demolished. Fieldwork is yet to be done. The Island is privately owned and thus far all information has been gathered from documentary sources.
H7921-0107 (VHI)	Flinders Foreshore Fishermen's Huts	Listing consists of the potential archaeological remains of small timber fishermen's huts situated on the Flinder's foreshore between the pier and the Navy Base. Huts appear on photographs from 1900.
H7921-0108 (VHI) HO81 (HO)	Flinders Pier & Slipways Precinct	The site consists of timber railed slipways and concrete enclosed work area with a winch shed situated south of Flinder's Pier. The site is partially converted into a picnic ground and no longer in use. A former pier (1866-8) alignment may exist near the present pier.
H7921-0112 (VHI)	William (Bill) Woolley's Homestead, Crib Point	A domestic site situated at the S/E corner of the Former Western Port Refinery. There are no apparent structures remaining other than a brick well, however it is difficult to determine partial remaining structures or foundations due to heavy vegetation coverage. No European artefacts were visible on the ground surface. Numerous fruit trees including apple, lemons, figs and almonds. There were also various other European trees and ornamental plants. A brick well was still present and the remains of a corrugated iron water tank. There were cement slabs, steps and garden beds bordered by bricks. Physical Conditions: Poor/Fair
H7921-0115 (VHI)	Grimwade & Felton/Cheetham Salt Works Site, French	The Grimwade & Felton/Cheetham Salt Works Site includes a square brick lined well/tank, approx. 5 metre wide x 2 metre deep which sits on the edge of the hill approx. 5 metres above the beach. The overall site also includes excavations associated with the collection and channelling of water run-off and other purposes associated with the use of the site. There is a considerable amount of archaeological remains, these consist of handmade bricks, building rubble, rusted metal and the remains of what appear to be iron water tanks. Visibility is low over most of the site due to the long grass. On the pebbled beach below the archaeological site are the remains of what was an extensive jetty and landing installation.
H8021-0052 (VHI)	Former Queensferry Township Site	Site consists of a number of archaeological features and artefacts. These include the following: <ul style="list-style-type: none"> • Piles of basalt ballast and both hand-made and machine-pressed bricks. • Introduced trees including a mature pine with coal deposits in root system. • The cut for a substantial coastal road ("The Esplanade") with associated features including post-holes. • A timber "Sea Wall" displaying a number of different construction techniques.

Register Number	Place Name	Register Description
		<ul style="list-style-type: none"> • A possible wharf. • A complex drainage system displaying a number of different construction techniques. • Pylons associated with a Jetty. • A linear feature which may indicate location of earlier wharf. • Late 19th/early 20th century artefacts visible all along the current shoreline. • A timber floor (cellar?) in eroding context on shore with surviving floor surface, demolition material and probable occupation deposits. Metal, glass, pottery and textile visible. • A large metal vessel (broken) next to a bore. • Numerous rectangular and linear features visible on aerial imagery indicating potential for remains of former structures and evidence of past land-use practices.

GHD

180 Lonsdale Street
Melbourne, Victoria 3000



T: (03) 8687 8000 F: (03) 8687 8111 E: melmail@ghd.com.au

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