

FINAL

APRIL 2000

INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning



WESTERN AUSTRALIAN
PLANNING COMMISSION



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

Final



WESTERN AUSTRALIAN
PLANNING COMMISSION

April 2000





© State of Western Australia

Published by the
Western Australian Planning Commission
Albert Facey House
469 Wellington Street
Perth, Western Australia 6000

Published April 2000

ISBN 0 7309 9128 8

Internet: <http://www.planning.wa.gov.au>

email: corporate@planning.wa.gov.au

Fax: (08) 9264 7566

Phone: (08) 9264 7777

TTY: (08) 9264 7535

Infoline: 1800 626 477

Copies of this document are available in alternative formats on application
to the Disability Services Coordinator

Photography: Ministry for Planning unless otherwise acknowledged



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FOREWORD

The *Industry 2030: Greater Bunbury Industrial Land and Port Access Planning Final Report* is the State Government's planning response to the industrial land and port access needs of the Greater Bunbury region over the next 30 years and beyond.

The report is the culmination of a major study process which involved extensive technical investigations and widespread community and stakeholder consultation.

Well-planned industry and port access are vital to the economic health and well being of Greater Bunbury and the South-West Region of Western Australia. Much of the strong economic development, population and employment growth being experienced in the region is dependent upon downstream processing and export of the region's mining, agriculture and forestry resources.

For the region to continue to develop and prosper, further downstream processing is needed within state-of-the-art industrial estates that enable efficient, internationally competitive and environmentally responsible production and delivery of services to industry. It also means securing improved access to and from the Port of Bunbury to maximise use of this important regional asset and provide the best possible access to shipping services for existing industries operating in the region and those considering locating here.

The strategic planning framework set out in this report will provide a clear direction for investment in the region and will ensure that there are suitable well-located and well-planned industrial estates and transport routes to meet the needs of industry in Greater Bunbury well into the foreseeable future.

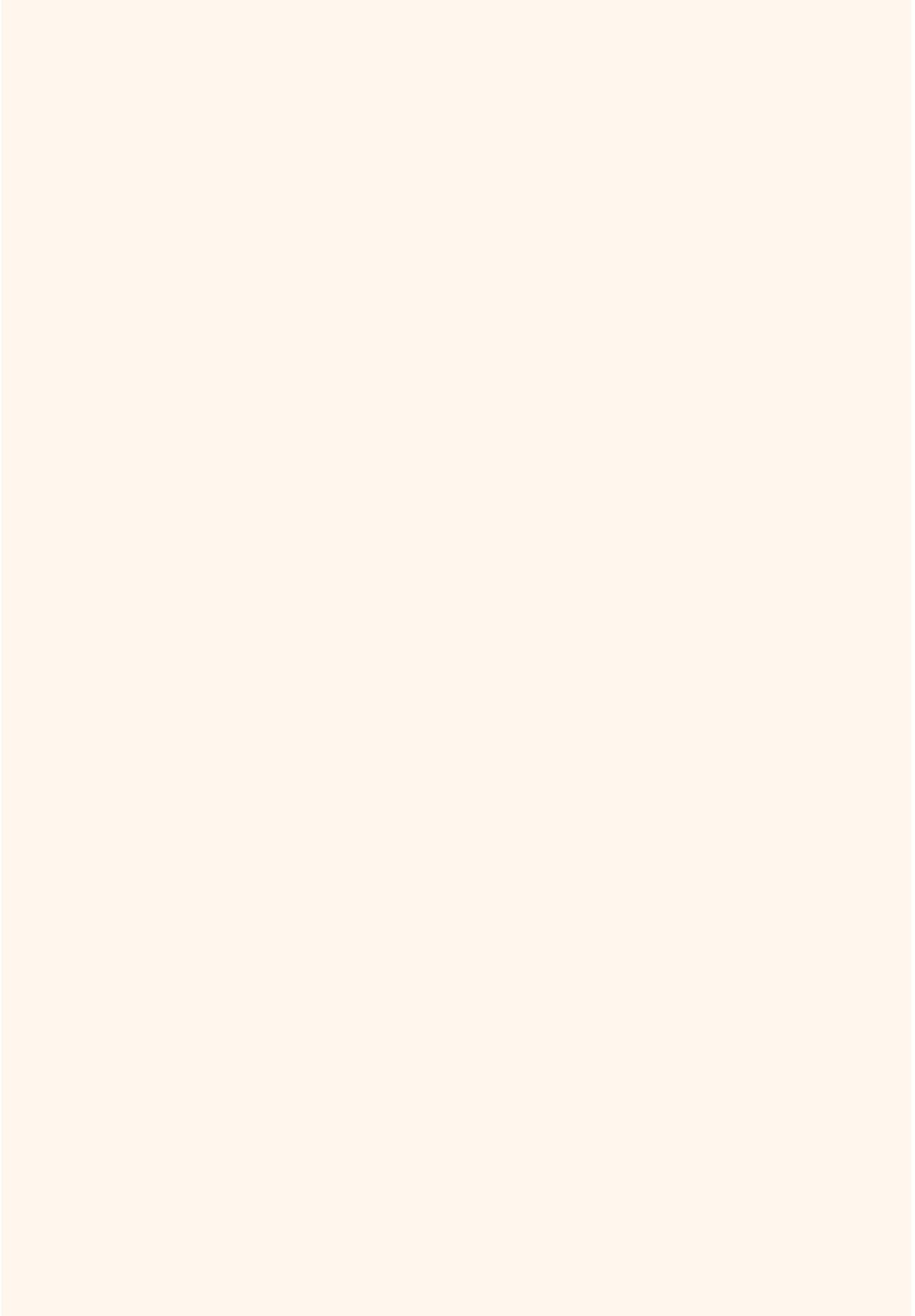


HON. GRAHAM KIERATH MLA
Minister for Planning



HON. COLIN BARNETT MLA
Minister for Resources Development







INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

CONTENTS

Foreword	iii
Part One - Overview	1
1.1 Introduction	3
1.2 What is the purpose of this report?	3
1.3 Structure of the Report	3
1.4 Why were the studies undertaken?	3
1.5 What was the study process?	4
1.6 Public Exhibition Process	4
Part Two - Final Outcomes of Industry 2030 Studies Following Analysis of Public Submissions	5
2.1 Introduction	7
2.2 Kemerton Expansion Study	7
2.3 Bunbury-Kemerton Transport (Rail) Corridor Study	10
2.4 Preston Industrial Park Land Use and Port Access Study	10
2.5 Bunbury Port Access Road Concept Report	12
Part Three - Implementation	15
3.1 Introduction	17
3.2 Proposed Greater Bunbury Region Scheme	17
3.3 Kemerton Land Tenure	18
3.4 Town Planning Schemes	19
3.5 Interim Strategy Plan (Preston)	19
3.6 Local Planning Strategies	19
3.7 Subdivision and Development Control	19
3.8 Government Policy and the Roles of Other State Government Agencies	20
3.9 Community Groups and Individuals	20
3.10 Monitoring and Review	20

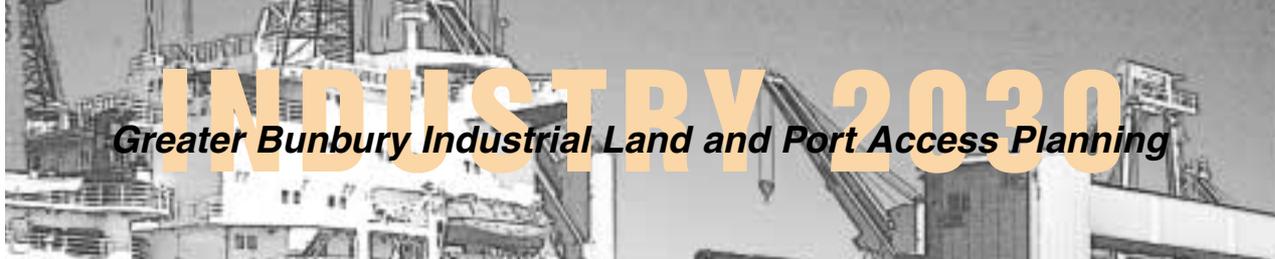


Appendices and Figures

21

Appendix 1	Compatible Use Buffer and the State Industrial Buffer Policy	23
Appendix 2	Economic Mechanisms: Options for Industrial Buffers	24
Appendix 3	Principal Issues Raised in Public Submissions	27
Figure 1	Industry 2030: Summary of Outcomes	33
Figure 2	Kemerton Expansion Study: Constraints	34
Figure 3	Kemerton Expansion Study: Cumulative Noise Modelling Contours (Proposed Industries)	35
Figure 4	Kemerton Expansion Study: Final Concept Plan	36
Figure 5	Kemerton Expansion Study: Final Concept Plan - Boundaries	37
Figure 6	Bunbury-Kemerton Transport (Rail) Corridor	38
Figure 7	Preston Industrial Park Land Use and Port Access Study: Composite Opportunities and Constraints	39
Figure 8	Preston Industrial Park Land Use and Port Access Study: Interim Strategy Plan	40
Figure 9	Glen Iris (Preston) Service Corridor	41
Figure 10	Bunbury Port Access Road Concept Plan (Final)	42





INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

PART ONE

Overview







1.1 Introduction

In 1998, the State Government sought community comment on several important industry and transport studies for the Greater Bunbury area.

The studies were:

- *Kemerton Expansion Study* by BSD Consultants and sub-consultants.
- *Bunbury-Kemerton Transport Corridor Study* by BSD Consultants and the *Bunbury-Kemerton Transport Corridor Study 1997 - Review of Rail Transport Findings* by WPL Railway Engineering Pty Ltd.
- *Preston Industrial Park Land Use and Port Access Study* by Feilman Planning Consultants and sub-consultants.
- *Bunbury Port Access Study* by Halpern Glick Maunsell and Main Roads WA.

The studies were coordinated by the Ministry for Planning in conjunction with the Department of Resources Development, LandCorp, South West Development Commission, Department of Transport, Main Roads WA, Westrail and other agencies on behalf of the Western Australian Planning Commission and the State Government.

Each study was prepared with a particular focus and in such a manner that their combined outcomes would result in suitably located, well-planned industrial estates serviced with integrated transport and infrastructure.

To assist the community consultation process, all four studies were “packaged” and summarised in a community consultation report entitled *Industry 2030: Greater Bunbury Industrial Land and Port Access Planning* (purple cover) which was released for public comment in May 1998.

1.2 What is the purpose of this Report?

This Report represents the State Government’s adopted strategic planning framework for addressing the industrial land and port access needs of the Greater Bunbury region over the next 30 years and beyond.

It describes the outcome of the community consultation process and sets out an integrated industry and transport strategy.

This Report complements the various consultant studies which contain useful technical information.

1.3 Structure of Report

This Report is divided into the following sections:

- Part One provides a context for the studies.
- Part Two summarises changes in response to public submissions and resultant further analysis work now completed. In some cases, Part Two also lists a number of additional technical investigations which need to be carried out before a particular study can be fully implemented.
- Part Three identifies preferred implementation mechanisms.

1.4 Why were the studies undertaken?

The Greater Bunbury area is strategically important to the South-West Region of Western Australia and the State as a whole. Bunbury is the regional centre of the South-West and the State’s largest urban centre outside Perth. Greater Bunbury has a diverse economic base, many geographical advantages and historically is a regional service centre. It is expected to continue to experience strong economic and population growth, much of this related to the export and downstream processing of the region’s primary resources.





Growth in industry and employment requires planning for well-located industrial areas with access to and from the Port of Bunbury. To ensure that there are suitable well-located and well-planned industrial estates and transport routes in Greater Bunbury, the State Government commissioned consultants to undertake a range of industry and transport studies with the following objectives:

- Comprehensively examine industry and port access requirements in Greater Bunbury.
- Provide the necessary information for the State Government to be pro-active in meeting the land and transport needs of strategic industry.
- Finalise zonings and layout of the Preston Industrial Park area as recommended in the *Bunbury-Wellington Region Plan*.
- Assist in creating certainty for affected landowners through finalising structure planning and transport alignments and/or corridors to guide rezoning, subdivision and development.
- Address land use pressures and minimise the potential for incompatible uses.
- Provide for the safe and efficient movement of industrial traffic.

1.5 What was the study process?

The Western Australian Planning Commission's Infrastructure Coordinating Committee, acting on behalf of the State Government, established a technical level working party in mid-1995 to investigate and report on Greater Bunbury industrial land and port access matters. The working party, comprising representatives of State Government agencies and local governments, coordinated the various industry and port access studies.

The study process was as follows:

- Appointment of consultants to undertake the various technical studies on industry and port access matters in Greater Bunbury.

- Consultation with local government, community groups, landowners and interested members of the public.
- Release of the consultant studies and the community consultation report entitled *Industry 2030: Greater Bunbury Industrial Land and Port Access Planning* (purple cover) for public comment.
- Analysis of public submissions (the working party analysed the submissions and made final recommendations to the Western Australian Planning Commission and other agencies).
- Western Australian Planning Commission consideration of the submissions and final report, and adoption of recommendations to State Cabinet.
- State Cabinet decision on Greater Bunbury industrial land and port access planning, including adoption of this Final Report.

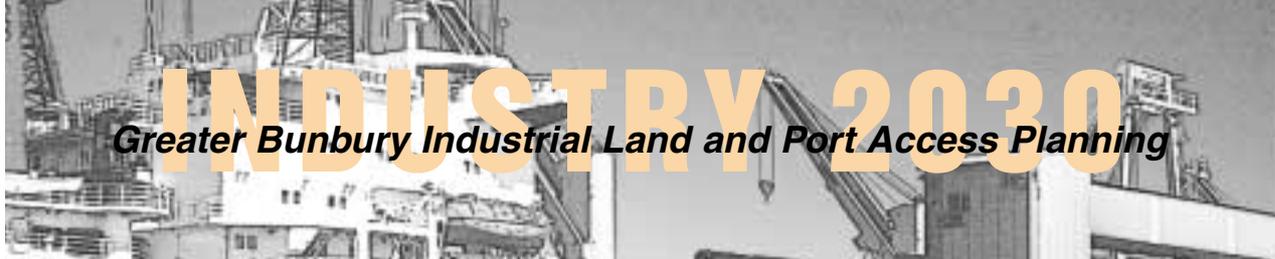
1.6 Public Exhibition Process

The *Industry 2030: Greater Bunbury Industrial Land and Port Access Planning* community consultation report (purple cover), together with the consultant studies, was released for public comment for a period of three months in May 1998, closing on 14 August 1998. During that time, approximately 250 submissions, together with several petitions, were received.

The principal issues raised in the submissions are listed in Appendix 3.

Responses to the issues are set out in a Summary Assessment of Submissions report, available on request from the Ministry for Planning. These also resulted in changes to the community consultation report (purple cover), described in Part Two of this report.





INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

PART TWO

*Final Outcomes of Industry 2030 Studies Following
Analysis of Public Submissions*







2.1 Introduction

The final outcomes of the *Industry 2030* studies, following analysis of the public submissions, are described below.

In some instances the issues raised in the submissions have:

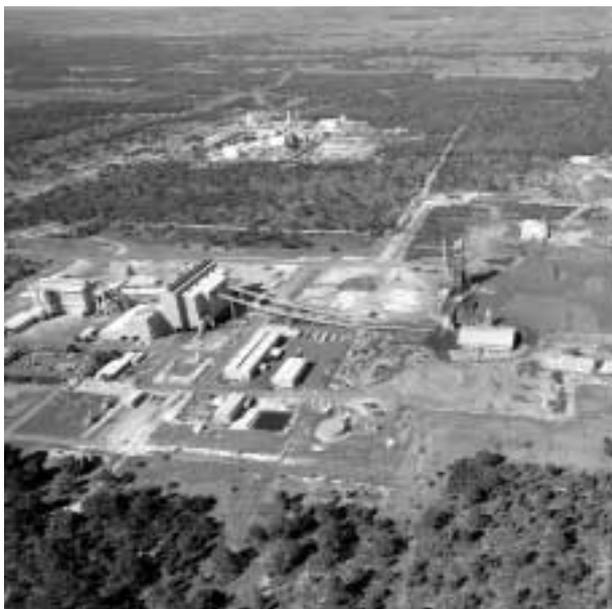
- resulted in modifications to the *Industry 2030* report; and/or
- identified a number of additional technical investigations which need to be carried out before the individual studies can be fully implemented.

The major land use outcomes of the studies are collectively summarised in Figure 1.

2.2 Kemerton Expansion Study

The analysis of public submissions lodged in respect of the *Kemerton Expansion Study* has resulted in modifications being made to the Concept Plan depicted in the Report, and has identified additional technical investigations which will need to be undertaken as part of the ongoing development of the Kemerton Industrial Park.

The Final Concept Plan for the expansion of the Kemerton Industrial Park is depicted in Figure 4.



Existing industrial uses, Kemerton core
(Courtesy: Lloyd-Smith Photographics)

It was derived, in part, from an analysis of the opportunities and constraints depicted in Figure 2 and following the noise modelling analysis depicted in Figure 3.

Table 1 summarises land areas for the industrial core and buffer in the Kemerton Industrial Park.

**Table 1 Summary of Land Areas
Kemerton Industrial Park.**

	Existing	Expansion	Total
Area of Industrial Park (ha)	5429	2114	7543
Area of Industrial Core (ha)	1151	955	2106
Area of Industrial Buffer (ha)	4278	1812	5437#

NOTES:

1. Area of Industrial Buffer includes Inter Industry Buffer, Kemerton Support Industry Area, Public Utility site and Investigation Area for Public Utility.
2. # Total does not add because portion of existing (old) Industrial Buffer is now included in Industrial Core.

The main features of the Final Concept Plan and supporting strategies include:

- An industrial core area expansion of approximately 955 hectares (taking the total industry core to 2106 hectares).
- An expanded buffer area of approximately 1812 hectares (taking the total buffer to 5437 hectares).
- A total park area of approximately 7543 hectares.
- Flora and fauna surveys have been conducted within the Kemerton area and areas of high conservation value identified. The proposed expansion of the industrial core area has been significantly reduced as a result, keeping large areas of conservation value in the expanded buffer.
- Within the industry core, the Environmental Protection Authority has recommended that the areas shown as “Vegetation Management” in Figure 4 be managed to ensure their significant vegetation and wetland values are





FINAL OUTCOMES

retained and protected within the industrial estate.

- Further investigation of water and drainage issues has been undertaken. Results of these investigations include:
 - The main wetlands of significant conservation value have been excluded from the industrial core area.
 - Water and drainage issues are considered capable of management as part of the industrial park implementation and are acceptable for adoption of the Final Concept Plan.
 - A water and drainage management strategy will be developed for the Park. The strategy will address issues associated with surface and groundwater management and seek to ensure that environmental values are maintained, where practicable.
- Some areas of vegetation/landscape interest remain in the core area, including on the ridgeline. In order to minimise impacts on these values, consideration will be given to landscape protection in the form of building setbacks, re-contouring, screen planting requirements and other measures

(particularly when viewed from Old Coast Road) at the detailed structure planning, subdivision and development stages. In particular, development along the north-west ridge of the new industry core will be subject to special planning controls so as to ensure visual impacts are minimised. This will be done in extensive consultation with the local community.

- Further noise modelling has been undertaken to determine the expanded buffer. The revised noise modelling has been reviewed by the Department of Environmental Protection which has advised that it is accurate and appropriate.
- Details on the environmental standards for air, noise and risk required to be met within the individual industrial sites and the buffer boundary can be found in the following reports:
 - *Kemerton Expansion Study - Final Draft Report* (BSD Consultants Pty Ltd August, 1997).
 - *Kemerton Expansion Study - Noise Modelling to Define the Northern Boundary of Industrial Core* (BSD Consultants Pty Ltd August, 1999).



Marriott Road and primary ridge to the west of Kemerton core



Wetland and rural use within the existing buffer



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FINAL OUTCOMES



Presently there are two major industries and three support industries in the Kemerton core
(Courtesy: Lloyd-Smith Photographics)



A range of uses compatible with industry are suitable for the Kemerton buffer

- Detailed modelling revealed that the principal environmental constraint used to establish the buffer boundary was noise emissions from potential industries. Accordingly, additional noise modelling was carried out to define the revised northern boundary of the industrial core and buffer. Figure 3 shows the 40dB(A)¹ noise contour for proposed industries. Future industries must meet this cumulative (combined) noise criteria at the Kemerton Industrial Park buffer boundary.
- A conceptual industry siting plan has been developed for the Kemerton Industrial Park (refer to Figure 4). This plan divides the industrial core into areas for different categories of industries, depending on their potential for various levels of emissions of air, noise and risk. Each parcel of land has a numbered centroid (dot) used as the nominal point source for modelling of potential impacts. Based on the results of the air, noise and risk modelling, each parcel of land has been assigned a high, moderate or low designation. This designation indicates the capacity of each particular parcel within the Final Concept Plan to accommodate each type of emission.
- The coloured designation on each land parcel is not an absolute indication of the actual capacity of the Park, as that will depend on the future industries actually locating in the Park. It is provided to illustrate the possible developments and to allow for assessments to be made to ensure that the buffer areas can contain the potential emissions of industries locating in the Park.
- Two areas to the south-west of the industrial core have been identified for public utility purposes or investigation for public utility purposes. These represent alternative sites for future wastewater treatment plants.
- Aboriginal heritage surveys will be conducted prior to any development on site.

¹ The noise modelling level of 40dB(A) complies with the EPA Noise Regulations.





2.3 Bunbury-Kemerton Transport (Rail) Corridor Study

The analysis of public submissions lodged in respect of the *Bunbury-Kemerton Transport (Rail) Corridor Study* has resulted in strong support for the advertised T1 corridor option with the publicly advertised T3 corridor option being deleted from further consideration by State Cabinet due to the impacts on land use planning and wetlands. This is in addition to an earlier decision to delete the publicly advertised T2 corridor option from further consideration. The analysis has also identified the need for additional technical studies of the preferred corridor (formerly identified as the T1 corridor option) including actual land requirements.

The final alignment of the Bunbury-Kemerton Transport (Rail) Corridor is depicted in Figure 6.

Based on the *Industry 2030* studies and subsequent decisions by State Cabinet, the preferred transport corridors between Kemerton and Bunbury will utilise:

- for road transport, the existing road links including Marriott Road and the Old Coast Road/Perth-Bunbury Highway;
- for future rail transport, a yet-to-be-built spur line parallel to Marriott Road (east of Kemerton) and the existing South-



Current rail access to the Port of Bunbury

West Railway - this will provide a link between the hinterland areas and Kemerton and between Kemerton and the Port of Bunbury.

As a basis for securing a key rail freight corridor between Kemerton and the Port of Bunbury, and achieving long term compatibility between transport activity, land use planning and the community, a second stage study of the Bunbury-Kemerton Transport (Rail) Corridor is being conducted. This will define the land use, environmental and construction cost issues for the corridor.

2.4 Preston Industrial Park Land Use and Port Access Study

The analysis of public submissions lodged in respect of the *Preston Industrial Park Land Use and Port Access Study* has resulted in modifications being made to the draft Strategy Plan depicted in the Study, and has also identified a number of additional technical investigations which need to be carried out before the draft Strategy Plan can be finalised. Accordingly, it is entitled Interim Strategy Plan.

The Interim Strategy Plan is depicted in Figure 8. It was derived, in part, from an analysis of the opportunities and constraints depicted in Figure 7.

This Interim Strategy Plan is an indicative plan, and should be treated as such in the decision-making process, until the following additional technical investigations are carried out and the Plan is finalised:

- a) A more comprehensive examination of access and land use issues in the South West Highway (Boyanup Road) - Bunbury Airport area.
- b) Environmental impact modelling (in accordance with the EPA's criteria) to demonstrate that the Strategy Plan can accommodate the appropriate buffer requirements for noise, air quality and risk.



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FINAL OUTCOMES

- c) A comprehensive water and drainage management strategy (which specifically addresses coordination and implementation issues and clarifies flooding risk in the Ferguson Basin).
 - d) A detailed vegetation survey.
 - e) A detailed survey of wetlands.
 - f) A detailed examination of access issues including road hierarchy, internal road layouts and road connections.
 - g) A more thorough investigation of liquid waste disposal.
- Improved access to the Port of Bunbury via a service corridor that uses the Glen Iris (Preston) Service Corridor into the port (345 metres in width north of the South Western Highway) and the Dardanup-Picton corridor. The Glen Iris (Preston) Service Corridor alignment and cross-section details are depicted in Figure 9.
 - The opportunity for provision of servicing infrastructure to Waterloo through the provision of a service corridor as shown on the Interim Strategy Plan.
 - Promotion of regional recreation facilities in the northern portion of the policy area to provide an appropriate interface with residential development north of the Australind Bypass.
 - Development of areas within the 1-in-100-year floodline is permitted only where it can be demonstrated that appropriate drainage, flood risk and groundwater pollution measures are in place.
 - Development of land east of Moore Road is to have regard to the provisions of the *Dardanup Pine Log Sawmill Agreement Act, 1992* and the *draft Variation Agreement (1996)*.

The Interim Strategy Plan includes the following main features:

- Support for general and light industry in the Preston area, but not heavy industry. However, if a proposed heavier industry meets environmental and other standards, then the proposal will be considered.
- Retention of the Waterloo area for agricultural purposes (40 hectare lot size) as it is unlikely to be required for industry for the next 30 years.
- Deletion of the Waterloo Service Corridor proposed in the draft *Preston Industrial Park Structure Plan (1992)* and the *Bunbury-Wellington Region Plan*.



Continued agricultural use is recommended for the Waterloo area



Rail access to Port of Bunbury via the Glen Iris Service Corridor





- Value added land uses (e.g. furniture manufacturing industries) that maximise the potential of existing timber processing industries are encouraged in the Moore Road area.
- Any proposed upgrading or expansion of the Wesfi/Wespine operations is to ensure that noise and dust impacts are ameliorated to the satisfaction of the Department of Environmental Protection.
- Foreshore reserves will generally be provided each side of the Preston and Ferguson Rivers - with precise foreshore widths to be determined through the mechanisms provided in the *Greater Bunbury Region Scheme*.

2.5 Bunbury Port Access Road Concept Report

The analysis of public submissions lodged in respect of the *Bunbury Port Access Road Concept Report* has resulted in modifications being made to the Concept Plan depicted in this Report. It has also identified additional technical investigations which will need to be undertaken as part of the future detailed design and construction of the Bunbury Port Access Road.



Mineral sands from Beenup are transported by truck to BHP's storage and ship loading facility in the Port of Bunbury Inner Harbour

(Courtesy: South West Development Commission)

These additional technical investigations include detailed design requirements such as intersection treatments, drainage provision, environmental assessment requirements and investigation of local road connections within the Bunbury Port area.

The final Concept Plan and design for the Port Access Road is required to be submitted to the Water and Rivers Commission and the Department of Environmental Protection for environmental approval.

The final Bunbury Port Access Road Concept Plan is depicted in Figure 10.

The Concept Plan includes the following key features:

- Harris Road passes under the Port Access Road alongside the Ferguson River to link with the Picton-Boyanup Road. (The redundant section of Harris Road may then be available for adjoining landowners.)
- The link between South Western Highway and the Port Access Road is located at Windsor Road to provide improved sightlines along the South Western Highway. The link to the Port



The proposed Bunbury Port Access Road will improve the efficiency and safety of increasing truck movements

(Courtesy: South West Development Commission)





Access Road has also been shortened to reduce impacts on the abattoir site.

- Johnston Road is connected to the Port Access Road as a T-junction and to the Australind Bypass as a signalised four-way intersection with Vittoria Road to provide for access to and from Kemerton.
- The Port Access Road passes under the Australind Bypass near the western railway bridge abutment.
- A connection from Eaton to the Port Access Road is provided via Temple Road.
- The Port Access Road passes over the Ferguson River and the Picton-Boyanup Road.
- The Port Access Road crosses the Koppers spur line as a level crossing.
- The Port Access Road follows the edge of the sand ridge to the proposed Moore Road interchange on the Bunbury Outer Ring Road.

- Local Road connections within the Port area between the Australind Bypass and the Port have been removed to facilitate proposals for future expansion of the port. Further detailed investigation is being undertaken in regard to internal local roads and connections to the Port Access Road within the Port area.

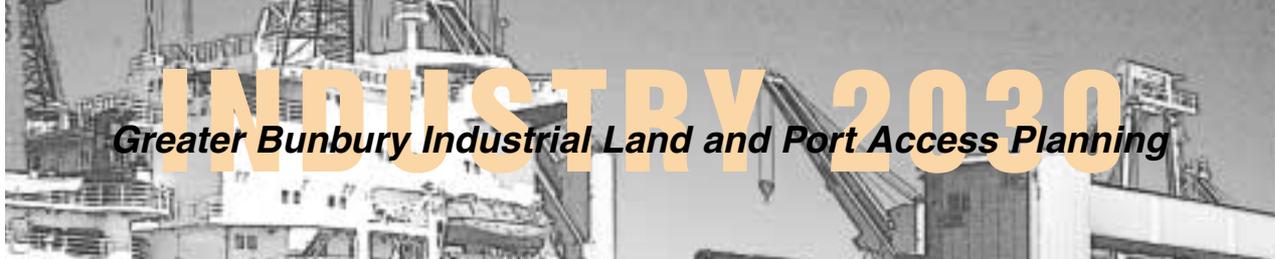


The Port Access Road will improve access to and from the Port of Bunbury to maximise use of this important regional asset

(Courtesy: South West Development Commission)







INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

PART THREE

Implementation







3.1 Introduction

The *Industry 2030* studies have been adopted by the Western Australian Planning Commission and endorsed by State Cabinet as the preferred strategic planning framework for addressing the industrial land and port access needs of the Greater Bunbury region over the next 30 years and beyond.

The specific means of implementation of each of the studies are described below.

3.2 Proposed Greater Bunbury Region Scheme

A draft *Greater Bunbury Region Scheme* is currently being prepared by the Western Australian Planning Commission under the guidance of the Greater Bunbury Region Planning Committee.

It is anticipated that the draft Region Scheme will be released for public comment in early 2000.

The *Greater Bunbury Region Scheme*, being a regional statutory planning scheme, will incorporate regional reservations, broad land use zones and associated scheme provisions.

Kemerton Expansion Study

The outcomes of the *Kemerton Expansion Study* are intended to be reflected in the Region Scheme in the following manner:

- a) The Kemerton industrial “core” be included in an “Industrial” zone.
- b) The Kemerton industrial “buffer” area be included in a “Rural” zone with a “Special Control Area” designation applied over it.

Under the proposed Region Scheme, the “Special Control Area” will ensure that development within the control area does not prejudice the use of the Kemerton industrial “core” for industrial purposes, and local governments in considering development applications within the area will be required to have due regard to the purpose of the “Special Control Area”.

- c) The Western Australian Planning Commission and the Environmental Protection Authority propose to jointly prepare a strategic plan for conservation of remnant vegetation of State and regional significance in the Kemerton and Greater Bunbury region. On completion of this strategic plan, consideration will be given to incorporating this in the *Greater Bunbury Region Scheme*. It is expected this will include some additional areas of the Kemerton industrial “buffer” area being reserved for Regional Open Space.

Bunbury-Kemerton Transport (Rail) Corridor Study

The rail transport route within the Bunbury-Kemerton Transport (Rail) Corridor (formerly identified as the T1 corridor option) will be reflected in the Region Scheme by means of a reservation which is proposed over the extent of land required. Because of the timing of the completion of the second stage *Bunbury-Kemerton Transport (Rail) Corridor Study* however, additions to the existing rail reservation will have to be introduced into the Region Scheme by means of an amendment to the Scheme after it has come into effect.

Preston Industrial Park Land Use and Port Access Study

Until the final Strategy Plan is prepared, the provisions of the Interim Strategy Plan will be reflected in the Region Scheme in the following manner:

- a) Existing local government town planning scheme zonings will be shown for the Preston area pending completion of the additional studies described in Section 2.4 of this report and subsequent preparation of a final Strategy Plan.
- b) A reservation is proposed over the Glen Iris (Preston) Service Corridor alignment.

It is anticipated that the provisions of the final Strategy Plan, when prepared, will be introduced into the Region Scheme by means of a subsequent amendment to the Scheme.





*Improving access to the Port of Bunbury will maximise use of port infrastructure
(Courtesy: South West Development Commission)*

Bunbury Port Access Road Concept Report

The final Concept Plan will be reflected in the Region Scheme by means of a reservation which is proposed over the Port Access Road alignment.

3.3 Kemerton Land Tenure

Industrial Core

It is intended that the expanded industrial core will be progressively brought into public ownership.

It would be normal practice to implement a staged acquisition program. Land not required at present could be retained in private ownership until needed. A strategy for interim land use pending future acquisition and staged development may be adopted, including non-conforming use rights. Where possible, following acquisition, existing uses may be allowed to continue, for example, by lease-back.

Buffer Areas - Overview

The expanded Industrial Buffer is a compatible use buffer (explained in Appendix 1).

Land in the buffer could be used in the long-term for purposes to be authorised in the local town planning scheme. These would include many agricultural, mining, industrial, commercial and recreational uses, so long as they conform with buffer criteria, together with conservation areas.

Most of the land identified as “buffer” north of the existing Kemerton Industrial Park is in private ownership.

Various options for the ownership and management (or “economic mechanisms”) of the buffer are provided in Appendix 2 and include:

- continuing compatible land uses;
- future compatible land uses;
- purchase of development rights;
- transfer of development rights;
- participation in estate development;
- negotiated purchase by the State Government; and
- compulsory purchase by the State Government.

The preferred approach is for the expanded buffer to remain in private ownership and be used for land uses compatible with the industrial core. Compatible uses are those that can co-exist with nearby heavy industry which may have impacts such as noise, risk and emissions outside the individual site boundaries.

Where it is not practicable to establish satisfactory compatible uses, alternative economic mechanisms will be considered. It is intended that, where buffer properties are to be acquired, acquisition will be on a staged basis, over time.





Setbacks and vegetation will form part of the industry buffers

3.4 Town Planning Schemes

The relevant local governments are encouraged to reflect the outcomes of the *Industry 2030* studies by resolving to initiate suitable amendments to their respective town planning schemes.

Following approval of the *Greater Bunbury Region Scheme*, planning legislation provides that, where inconsistencies between a Region Scheme and local government planning schemes occur, the provisions of the Region Scheme will prevail.

Within 90 days of finalisation of the *Greater Bunbury Region Scheme* it is required, under Section 18 of the *Western Australian Planning Commission Act 1985*, that all affected local governments resolve to prepare the necessary amendments to their planning schemes to ensure consistency with the Region Scheme.

3.5 Interim Strategy Plan (Preston)

The Interim Strategy Plan, prepared as an outcome of the *Preston Industrial Park Land Use and Port Access Study*, will be used by all relevant decision-making authorities as an indicative plan to guide rezoning, subdivision

and development within the Preston Industrial Park area pending the outcome of the additional studies described in Section 2.4 of this report and subsequent preparation of a final Strategy Plan.

3.6 Local Planning Strategies

Local planning strategies are policy-based documents adopted by local governments. They often take a broad, long-term planning view about the future of an area and thus help provide strategic direction for town planning schemes, which tend to be short-term and specific.

Local planning strategies should be incorporated into planning schemes for the sake of simplicity and as a means of adding statutory force. Local planning strategies of the City of Bunbury and of the Shires of Harvey and Dardanup will need to be reviewed to ensure their consistency with the outcomes of the *Industry 2030* studies as described in this Report.

3.7 Subdivision and Development Control

Under Section 20 of the Town Planning and Development Act 1928, the Western Australian Planning Commission is responsible for decisions on subdivision applications on all alienated (freehold) land throughout Western Australia. In determining subdivision applications within the Greater Bunbury region, the Western Australian Planning Commission will have regard to the outcomes of the *Industry 2030* studies as described in this Report.

Similarly, in determining planning appeals arising from decisions within the Greater Bunbury region, the Minister for Planning and the Town Planning Appeal Tribunal should have regard to the outcomes of the *Industry 2030* studies as described in this Report.

Local governments are encouraged to ensure their decisions on development applications are consistent with *Industry 2030* pending amendment of their respective town planning schemes.





3.8 Government Policy and the Roles of Other State Government Agencies

The outcomes of the *Industry 2030* studies have flow-on effects for other government agencies and authorities, and will influence the prioritising of funding and works.

They should assist other agencies and authorities in planning and discharging their responsibilities within the Greater Bunbury region, including providing advice to the Western Australian Planning Commission on subdivision referrals and other planning matters and as a general reference in day-to-day decision-making.

Industry 2030 is Government policy and, to this extent, will be binding on all Government agencies and authorities.

3.9 Community Groups and Individuals

A significant non-statutory role for the *Industry 2030* studies is in their leadership in articulating to community groups and individuals a clear future for industrial land and port access within the Greater Bunbury region.

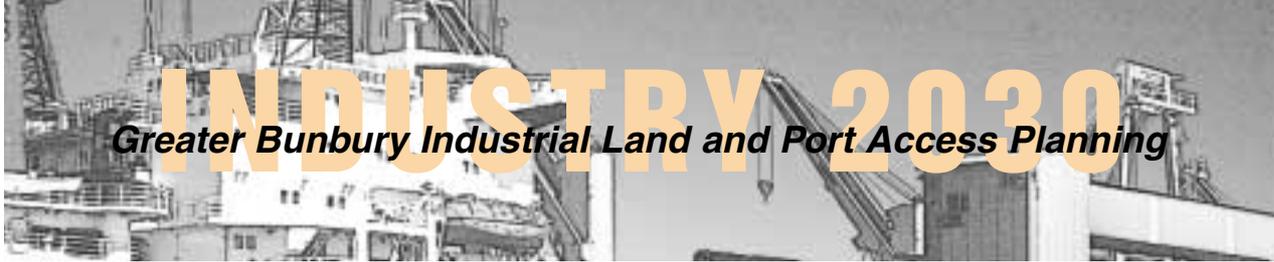
The outcomes of the *Industry 2030* studies will also provide for greater certainty and consistency in planning decision-making than existed previously, and this will assist investment and land use decisions by individuals.

3.10 Monitoring and Review

It is recommended that *Industry 2030* be the subject of ongoing monitoring by the relevant Government agencies and formally amended from time to time, as required.

Wherever possible, it is recommended this be done in conjunction with amendment of the *Greater Bunbury Region Scheme* in the interests of consistency and ease of implementation.





INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

APPENDICES and FIGURES







Compatible Use Buffer and the State Industrial Buffer Policy

Within the Kemerton Industrial Park buffer, a compatible use buffer is required under the terms of the *State Industrial Buffer Policy*. The Policy requires buffers between industries and “sensitive uses” such as residential, schools and hospitals. In the *Kemerton Expansion Study*, the requirements for separation between future industries and “sensitive uses” have been modelled in accordance with Environmental Protection Authority standards.

The *State Industrial Buffer Policy* is a Statement of Planning Policy under Section 5AA of the *Town Planning and Development Act, 1928* (as amended). This means it will be taken into account in all town planning decisions. Any town planning scheme that is made or amended since the Policy was introduced must conform with the Policy.

The Policy provides that the Western Australian Planning Commission must be satisfied that appropriate “economic mechanisms” can be applied to ensure the interests of affected landowners in the buffer.

Town planning legislation provides for compensation under a town planning scheme (or amendment) if land can be used only for a public purpose due to a reservation in the scheme. There is a procedure to compensate the owner for use of the property by the public authority, normally by acquisition.

Zoning under a local town planning scheme does not give rise to a claim for compensation, even if the owner considers that the potential economic value of the land may be reduced. Nor is there any entitlement to compensation if a planning authority decides not to zone land for a new use proposed by a landowner.

These provisions ensure that decisions are taken in the best interests of the community as a whole, without the planning authority being liable to individual landowners for perceived losses of value due to restrictions on use. Similarly, no betterment is collected for gains in value through the planning process.

Under the *State Industrial Buffer Policy*, buffers are required to separate incompatible uses such as heavy industry and residential. In some cases, buffers could contain land reserved for a public use, but in the main would be zoned for “compatible uses”. This envisages that a suitable use can take place on the land. Under town planning legislation, therefore, such zoning is not subject to compensation.

However, the Buffer Policy recognises that the need for the buffer does not emanate from activities in the buffer itself. The Policy therefore seeks to ensure that landowners can obtain a fair outcome notwithstanding the designation of the industrial buffer.





APPENDIX 2

Economic Mechanisms: Options for Industrial Buffers

The following are the range of possibilities for industrial buffers and their applicability to the Kemerton circumstance.

1. Future Compatible Land Uses

This approach applies where an existing use is not compatible with a buffer, but can be changed to an economic use of the land that will be compatible in the long term. For example, an existing residential use would not be compatible, whereas a future commercial use without residential accommodation would comply with environmental standards in the buffer.

This outcome would be generally satisfactory where the future use value is equal to or exceeds the existing use value. Landowners would thus obtain the benefit of an increase in land value and be able to hold the re-valued asset or trade it to obtain alternative land elsewhere.

In some cases, this approach would not be successful if there is insufficient market for the amount of land that could be zoned in this way. At Kemerton, it is unlikely there would be strong demand for additional general or light industrial uses in the buffer, although specific areas may be suitable for particular industries.

In principle, continuation of existing compatible uses such as farming is acceptable and desirable in buffers. In the case of Kemerton, compatible uses are those that can co-exist with nearby heavy industry which may have impacts such as noise, risk and emissions outside the individual site boundaries.

Broadly, most existing uses would be regarded as compatible, for example farming, commercial stock operations, various types of industry, quarrying, commercial tree growing and the like. However, any land use that involves large numbers of people in one place, such as tourist accommodation, entertainment venues and spectator sporting events would not be compatible with the buffer.

2. Purchase of Development Rights

This “economic mechanism” is based on the concept that a buffer may affect some development rights on a property:

- a) By preventing the continuance of a “non-conforming” use that was legally permitted under the town planning scheme prior to the rezoning or new provisions. In such cases, where these are not compatible with the buffer, arrangements would be made to acquire these particular interests.
- b) For future permitted uses which are currently allowed by the town planning scheme but which would no longer be acceptable in a buffer, specifically a residential dwelling in the case of Kemerton. Purchase would be restricted to this component, reducing compensation costs and allowing current activities, such as farming, to continue.

The local government cannot normally refuse an application to construct a residence on rural zoned land if it conforms with standard planning and building regulations or denies a non-conforming use right. If these rights are to be denied by the terms of the buffer designation, the local government would require indemnity for such refusal.

In such cases, the proponent (State Government in the case of Kemerton) may offer to purchase the ability to build a single dwelling on the land, leaving other rights intact. Under present legislation, it appears that this can be done by purchase of the freehold and resale with a memorial placed on the title confirming the removal of the residential use entitlement.

This approach would envisage purchase only of the right to build a single dwelling on an existing lot. Expectations of future subdivision for additional residential lots would not be compensated unless approvals were already in place.





INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

APPENDIX 2

3. Transfer of Development Rights

If development rights have to be reduced at one place for planning reasons, then they could be transferred to another place where they would be acceptable. For example, if an owner has two pieces of land, one affected by a planning control, and another not affected, the owner could develop the second portion more intensively by using the rights that apply to the affected portion.

Given the right circumstances, such rights could be transferred to different properties or to different ownership. In the latter case, the “receiving” property owner would pay the “providing” property owner for the value of the rights transferred. The mechanism pre-supposes that the more intense development is in itself acceptable to the planning authority in the receiving location.

This mechanism works best for heritage places and for areas of natural beauty, where the landowner has some sensitivity for the protection of the area, but does not want to forgo development opportunities.

The mechanism could equally apply to buffer areas where an owner wishes to retain use of the buffer land while arranging to transfer to another location the development rights that are incompatible with the buffer purpose.

Current planning legislation makes this approach difficult.

4. Participation in Estate Development

This approach is based on the concept of sharing the net proceeds of a total development scheme among a group of participating landowners. The estate, including the industry zoning and the buffer, would be planned and developed as a whole.

Each participant would contribute the asset value of their land, and share in the proceeds of the sale of land. This process would work best where a group of participants would expect to benefit from an overall value uplift, as a result of the rezoning and development actions.

There are several inhibiting factors in cases such as Kemerton. The long-term nature of the development, the scale of the infrastructure needed, and the limited value uplift over costs means that the development of large industrial lots is unlikely to be profitable in a strictly commercial sense.

In addition, participants may seek a guaranteed buy-out (“put option”) to protect the liquidity of their asset, placing a contingent liability on the whole scheme.

5. Negotiated Purchase by the State Government

This option envisages a fairly straightforward process where the State Government commits to purchase of property affected by an industrial buffer for which the State Government is the proponent. To offset the initial cash flow, some of the acquired land can be re-sold or leased for compatible uses.

Priority would be given to properties with active investment patterns that are disrupted by the buffer designation, and properties for residential owner-occupancy, especially where there is an element of hardship attributable to the buffer designation. Properties with viable compatible uses, such as mining, would be a lower priority for acquisition along with unimproved properties intended for future investment gain.

The State is limited by statute in the manner it can deal on such land. Generally speaking, the offer price is controlled by the fair market value of the land and improvements. This is the consideration that a willing seller would expect to get for the property, without the buffer designation, from a willing buyer with full knowledge of the facts and the state of the market. This approach is quantifiable through the valuation process.

Personal circumstances over and above the assessed property value are not subject to market effects and cannot be determined in an accountable way. In general, in property transactions personal factors and expectations are not taken into account by purchasers, lenders or liquidators.



In certain cases, an unwilling seller may consider that net funds from the sale would be insufficient to acquire an equivalent asset after all write-offs, taxes and re-establishment costs are accounted for. This may arise, for example, if the property is over-capitalised relative to market expectations, or if it is operated as part of a conglomerate that would be less profitable without that unit of production.

Negotiated purchase at fair market value, it is suggested, will be satisfactory for both parties where the assessed property value including improvements gives rise to a market transaction such as might occur between investors irrespective of the buffer.

Where there are complications as mentioned above, the State has limited powers to go beyond a negotiated fair market value.

6. Compulsory Purchase by the State Government (“Resumption”)

Compulsory purchase by the State Government is provided for under a number of Acts of Parliament to ensure that any land required for public purposes can be brought into the Crown’s ownership without obstruction by the current landowner, and with due regard to appropriate terms and compensation.

The procedure is specific and there is little scope for discretion in the expenditure of public money to acquire land for public use.

In general, the procedure sets out to replicate the fair market value of the land, assuming the reason for the acquisition is not a factor. The relevant factors are the current and approved uses together with reasonable expectations of future development opportunities, such as the market would consider relevant if the property is transacted between a “willing seller and a willing buyer”. There is provision for payment of an additional sum or percentage (“solatium”) to compensate the landowner for the cost of re-establishing elsewhere.

If this does not produce a figure that is agreed by both parties, there is provision for arbitration, including appeal to a judicial tribunal. It is then a matter for the court to determine the fair market value plus any solatium.

Title to the land is transferred to the Crown as soon as the appropriate notice is gazetted, thereby giving the State Government access to the land to carry out the public work. The compensation arrangements may take some further time, and consequently there is provision for the State Government to pay immediately an agreed proportion of the proposed acquisition figure.





Principal Issues Raised in Public Submissions

During the three month community consultation period approximately 250 submissions, together with several petitions, were received.

This Appendix describes the principal issues raised in the submissions.

The statements below demonstrate the broad spectrum of views and opinions expressed by the public in response to the community consultation report entitled *Industry 2030: Greater Bunbury Industrial Land and Port Access Planning* (purple cover).

These statements do not necessarily represent the views of either the State Government, the Western Australian Planning Commission or any of the agencies associated with the individual *Industry 2030* studies.

Responses to each of the individual issues described below are set out in a Summary Assessment of Submissions which is available separately, on request, from the Ministry for Planning.

1. Kemerton Expansion Study

Wetlands

Comment that wetlands need to be protected.

Drainage

Concerns were expressed on the effect of drainage on the remaining habitat and on water supply.

Water supply

Existing users of water supply (e.g. horticulturalists) felt they should have priority access over future industrial demands and concerns were expressed that future industries may create water shortages.

Water table levels and recharge

Concern that the park expansion and future industrial development will alter water table levels.

Industrial emissions to water sources

Concerns were expressed that the expansion of industry may increase the potential of groundwater and surface water quality changes (for example, salinity, nutrients, heavy metals).

Hydrological studies

View that more hydrological and related studies need to be carried out.

Wellesley River

Comment that the Wellesley River should have a foreshore buffer.

Flora and fauna

Comment that the expansion area contains rare/good quality native flora and fauna which must be conserved — these matters need to be considered further.

Noise, light, emissions

Concerns were expressed about the potential impact of noise, light, dust, vibration and air emissions on the nearby population and environment.

Ridge line

Comment that industry should not be located on or beyond the ridge line on the western boundary in order to provide for visual amenity and noise and light attenuation.

Buffer area

Comment that Kemerton buffer should remain as a conservation buffer; that any new areas of buffer should comply with current zoning uses for those properties; and that there should be no light/heavy industry.

View that any proposed mining in the buffer should not be allowed and tenements should be revoked.





APPENDIX 3

Comment that the proposed buffer area should not be reduced and in some areas should be increased (to protect agriculture/residential areas).

Rural amenity

Concerns were expressed that rural amenity will be lost.

Waste management

Comment expressing opposition to the option of an ocean outfall for the management of liquid waste.

Comment expressing opposition to a solid waste site at Sandalwood Road, Shire of Harvey.

Comment expressing opposition to a solid waste site at Henty Road, Shire of Dardanup.

Comment that all solid waste should be contained within the Kemerton Industrial Park.

Strategic industrial areas

Comment that the Dover Report shows that the industrial park should be of the order of 1,000 to 2,500 hectares and that the current size of 1,200 hectares is in this range.

Original plans for Kemerton

Statement that the original plans for Kemerton indicated that the Park would not be expanded.

Future expansion

Concerns were expressed that the industrial core will be expanded further in future for more industrial developments, beyond current expansion proposals.

Decentralisation of industry

Comment that planning should encourage industry to locate in inland areas.

Requirement for expansion

Comments that Kemerton is presently under-utilised and that there may be a perception that industry does not want to establish at Kemerton (due to prohibitive costs and environmental constraints).

Perceptions of the region

Concerns were expressed that further expansion of Kemerton Industrial Park will alter perceptions of the region as having rural/environmental characteristics and a “clean/green image”

Comment that industry may deter tourism.

Location of industry

Comment that area should remain for agriculture, tourism and residential.

Concerns were expressed that heavy industry will compromise existing agricultural and other industries in the region.

Land acquisition

Comment that an offer to purchase land (resumption of the Fee Simple) should be made to all affected landowners, regardless of whether their properties are in the core or in the buffer. Concerns were expressed that purchase of development rights only is not sufficient.

View that an offer to resume land should be made as soon as possible and settlement should be prompt.

Concerns were expressed over the perception of immediate access rights to the Crown to land compulsorily acquired, whilst the compensation payable may take some time thereafter to settle.

Valuation of properties

Comment that the purchase price should include additional compensation allowances (capital gains tax, stamp duty on new property, removal expenses, rent, pain and suffering, loss of income etc).

Relocation

Comment that some people do not wish to move.

Comment that living on the property (located in the buffer) is necessary for the viability of some businesses.





Port

Comment that the abandonment of the port option reduces the strategic significance of Kemerton.

Concerns were expressed that there will be renewed pressure for a port near Kemerton.

Park management

Comment that local government must play a key role in control of assessment of industry locating in Kemerton.

Concerns were expressed that approvals for activities given today may override more stringent conditions which future generations may otherwise have enforced.

Heritage

Statement that Aboriginal Heritage surveys will be required prior to development on site.

Decision-making

Comment that an early decision needs to be made on the expansion of Kemerton to end uncertainty.

Socio-economic matters and impacts

Concerns were expressed for socio-economic stability of the region and, in particular, issues associated with unemployment and crime.

Comment that studies are required on the social impacts and implications of high growth rate for the region (including infrastructure, education, health, emergency services).

Comment that there has been continuous and historical community opposition to industrial growth in the area.

2. Bunbury-Kemerton Transport Corridor Study

Water and environment

Statement that Option T1 is preferred due to minimal impact on waterways and wetlands.

Comment that Option T3 will destroy a significant bird nesting area.

Disruption to surrounding population

Comment that Option T3 will have a significant impact on agricultural land, especially dairy farms.

View that Option T3 will have a significant impact on lifestyle and property values.

Noise, pollution and risk

Statement that noise is a key issue, followed by risk in heavily populated areas (Option T3).

Future planning

Comment that Option T3 contradicts existing plans (Bunbury-Wellington Region Plan, Shire of Harvey District Planning Scheme etc).

View that Option T3 will impact on significant land developments in the area that are already underway or approved.

Comparative costs

Comment that findings which favour Option T3 are based on incorrect/incomplete data.

View that Option T1 is cheaper to build.

Other issues

Statement that the existing rail line should be used.

Statement that Option T1 involves less land resumption.

Statement that Option T1 is in plans already and will be built anyway.

Statement that Option T3 is a shorter distance to the port.





APPENDIX 3

3. Preston Industrial Park Land Use and Port Access Study

Future use of Waterloo area

View that the Waterloo area should be retained for agricultural purposes.

Boyanup Road realignment

Comment that the proposed realignment of the South West Highway (formerly Boyanup Road) should follow the southern boundary of the proposed airport extension to account for the approved industrial subdivision layout of the Bunbury Industry Park.

Heavy industry

Statement that heavy industry is not required or supported in the Preston Industrial Park - particularly if expansion of the Kemerton Industrial Park proceeds.

Glen Iris (Preston) Service Corridor

Comment that there is a strong case for reviewing the width of the Preston Service corridor and reducing it from 400 metres to 240 metres. This is because:

- a) The conveyor system is an unsuitable component of the service corridor and should be removed, given its potentially adverse impact upon the adjoining residential area.
- b) The width of the proposed landscape buffer has not been justified.

Modelling

Statement that modelling in accordance with the Environmental Protection Authority's criteria is required to demonstrate that the Strategy Plan for the Preston Industrial Park can accommodate the appropriate buffer requirements for noise, air quality and risk.

Water and drainage management

Comment that a detailed overall water and drainage strategy for the Preston Industrial Park needs to be developed and should be guided by, for example, a systems approach to the

management of water resources (ISO 14000); promotion of water use efficiency; and promotion of water sensitive design principles, etc.

Vegetation

View that all remnant vegetation within the study area should be retained.

Comment that there are several areas of intact remnant vegetation which should be assessed by the Environmental Protection Authority at the statutory planning stage to determine their conservation value prior to zoning and that a vegetation survey should be required as part of this assessment.

Regional showground, regional recreation facilities

Comment that the showground and regional recreation areas need to be carefully considered in terms of economic viability.

Statement that the concept of location of the regional recreation facilities adjacent to the Australind Bypass opposite Eaton is supported. The intrusion of other industrial uses into this area, which would be permitted if the land was designated as Mixed Use, is opposed.

Wetlands

Comment that wetland areas should be protected and excised from areas shown as industrial in the Strategy Plan (and their protection should be considered in the context of the *Southern Swan Coastal Plains Wetlands Study*).

Foreshore reserves

View that a foreshore and industrial buffer on the Preston and Ferguson Rivers should be provided. The width of this should be determined in consultation with the Water and Rivers Commission and the Leschenault Inlet Management Authority but, as a minimum, it should follow the 1-in-100-year floodline.

Statement expressing strong opposition to the imposition of a 50 metre wide buffer zone on either side of the Ferguson River as it will





INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

APPENDIX 3

restrict development potential and have negative impact on property values.

Flooding

Statement concerning flooding risk on the Ferguson River requires clarification - local data shows that the Ferguson Basin has flooded where the river passes through Copplestone North and the Picton Policy Area No. 5 on Plan No. 9, but the maps do not show this basin.

Residential/industrial buffers

Various concerns about adequacy of buffers between residential/rural residential areas and existing industrial facilities and proposed industrial areas; and the consequential negative impacts that will be experienced by residents as a result. Particular areas of concern are:

- a) Padbury Fields Estate/Copplestone Small Holding Zones and proposed industrial area.
- b) Industrial area on Moore Road and adjacent residential areas.
- c) The buffer zone between the Wespine facility and the Padbury Field Estate.

Mineral sands/minerals

Comment that minerals and basic raw materials resources are present at several locations in the area under consideration but supplies of basic raw materials are not considered to be threatened by land use changes considered likely in the area. There are known deposits of titanium mineral in the northern section of the Preston Industrial Park - any proposals for land use rezonings should be referred to the Department of Minerals and Energy.

Comment that at Waterloo, on the South West Highway, there is a small brick manufacturing facility utilising locally extracted clays. Planning within a distance of this facility must take into account the potential for land use conflicts to arise at this location.

Landscape buffers

View that width of the proposed landscape buffer within the Preston Service Corridor has not been justified.

Statement that prescriptive details on landscape buffers should only be considered as part of local structure planning for each individual industrial cell.

Golding Crescent

Concern about possible impact that further industrial development will have on health, safety and quality of life of residents in Golding Crescent and on property values.

Vegetation corridors

Comment that the vegetation corridor located at the northern end of the proposed Bunbury airport extension should be realigned to correspond with the alignment of the vegetation corridor on the western side of the South West Highway (as shown in the City of Bunbury's draft *Town Planning Scheme No. 7 and the Bunbury-Wellington Region Plan*).

Comment that the vegetation corridor located on the northern side of Walshe's abattoir linking Manea Park to the Preston River should be reinstated to comply with the recommendations of the City of Bunbury's draft *Town Planning Scheme No. 7 and the Bunbury-Wellington Region Plan*.

Internal roads

Statement that there is a need to clarify the road hierarchy within Preston Industrial Park and clarify a number of issues related to access points linking the Preston Industrial Park to Harris Road.

Comment that a number of proposed road alignments and road connections shown on the Strategy Plan are now redundant and should be deleted.

Solid/liquid waste

Statement that the magnitude of solid and liquid waste generated at Preston Industrial Park should be estimated and details of where the



waste will be disposed of and how it will be managed should be considered as part of the environmental review of the Greater Bunbury Region Scheme.

Industrial demand

View that the amount of land provided for industry purposes is excessive and is likely to inhibit development.

Site-specific concerns

Various site-specific issues were raised.

4. Bunbury Port Access Road Concept Report

Intersection of Harris Road and proposed Bunbury Outer Ring Road

Statement that the Shire of Dardanup supports the proposed alignment and recommends that Harris Road be connected to the Bunbury Outer Ring Road to improve access within the proposed industrial area.

Mineral and raw material resources

Comment that the Port Access Road (PAR) will have a very minor impact on a mineral sands Mining Act tenement that lies south of Australind Bypass and mostly east of the railway (R70/0018 - Westralian Sands Ltd. Picton titanium minerals).

Parklands industrial estate

Concern expressed about increased heavy vehicle use on Harris Road and, in particular, impacts on the existing Parklands Industrial Estate.

Preston River, flood protection

Comment that the Port Access Road and proposed modifications to the current alignment of the Preston River need to recognise existing and future flood protection infrastructure and options. The Port Access Road must not have a negative effect on flood relief. The road proposals will need the endorsement of the Water and Rivers Commission.

Realignment of Martin Pelusey Road

Comment that the realignment of Martin Pelusey Road will impact on a house and boarding kennels. A modification to this alignment will reduce the impact on the property.

Vittoria Road

Statement from the City of Bunbury that it endorses the preferred route subject to the State Government funding all works including traffic management devices on Vittoria Road. The Council also advises that no decision has been made by Council in regard to closure of Estuary Drive.

Closure of Estuary Drive

Comment from the Bunbury Port Authority that it supports the closure of Estuary Drive because it would become inefficient as a result of increased rail traffic, roundabout to port, grade separated interchange and Koombana Drive intersection.

Environmental assessment

Comment that the Port Access Road may cause direct and indirect impacts and will require further assessment under Part IV of the Environmental Protection Act. More information is required on noise, risk, vegetation and drainage to properly assess the proposal. Alignment should not be finalised until assessment under Part IV of the Act has been completed. Remnant vegetation and ecosystems should be avoided in the Port Access Road development.

Site-specific concerns

Various site-specific issues were raised.

NOTE:

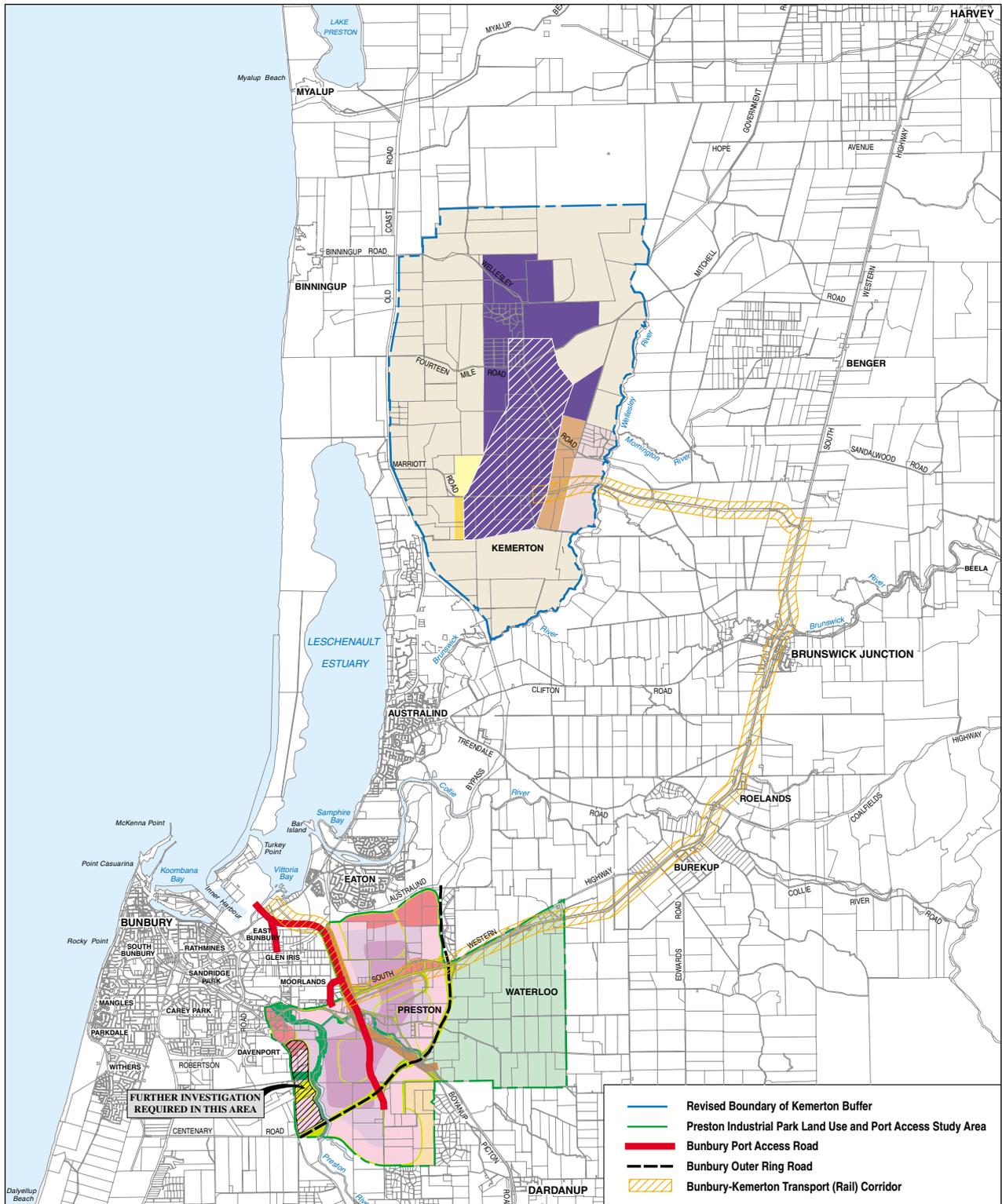
Additional information and responses to public submissions are set out in a Summary Assessment of Submissions available on request from the Ministry for Planning.



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FIGURE 1



INDUSTRY 2030 : SUMMARY OF OUTCOMES



WESTERN AUSTRALIAN PLANNING COMMISSION
 Produced By Cartographic Section, Bunbury Office, Ministry for Planning.
 April 2000
 0 1 2 3
 Kilometres

For detailed mapping see the following reports:
 - Kemerton Expansion Study - Final Draft Report
 - Preston Industrial Park Land Use & Port Access Study (August 1997)
 - Bunbury-Kemerton Transport Corridor (Phase 1) Final Draft Report
 - Bunbury Port Access Study

PRESTON INDUSTRIAL PARK

- Core General Industry Precinct
- Secondary General Industry Precinct
- Transitional Industry Precinct
- Mixed Use Precinct
- Service Corridor

- Conservation Reserve
- Landscape Buffer
- Rural
- Small Holding Development Area
- Airport Runway Extension

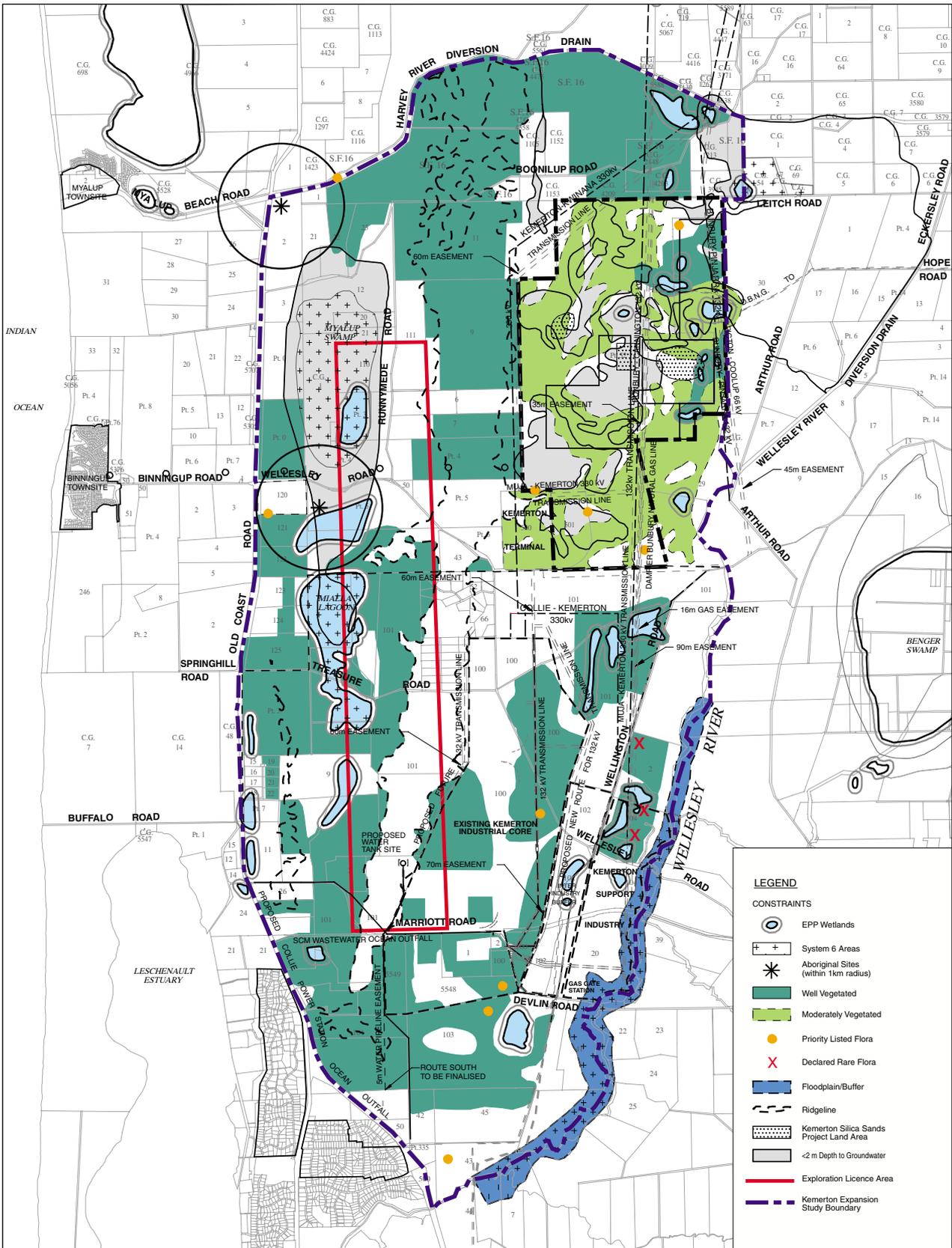
LEGEND

KEMERTON EXPANSION STUDY

- Existing Industry Core
- Expanded Industry Core
- Buffer
- Existing Inter Industry
- Existing Inter Industry Buffer
- Public Utility
- Investigation Area For Public Utility



FIGURE 2



LEGEND

CONSTRAINTS

- EPP Wetlands
- System 6 Areas
- Aboriginal Sites (within 1km radius)
- Well Vegetated
- Moderately Vegetated
- Priority Listed Flora
- Declared Rare Flora
- Floodplain/Buffer
- Ridgeline
- Kemerton Silica Sands Project Land Area
- <2 m Depth to Groundwater
- Exploration Licence Area
- Kemerton Expansion Study Boundary

BSD CONSULTANTS
Original plan prepared by BSD Consultants for Kemerton Expansion Study - Final Draft Report



April 2000
Kilometres

**KEMERTON EXPANSION STUDY
CONSTRAINTS**

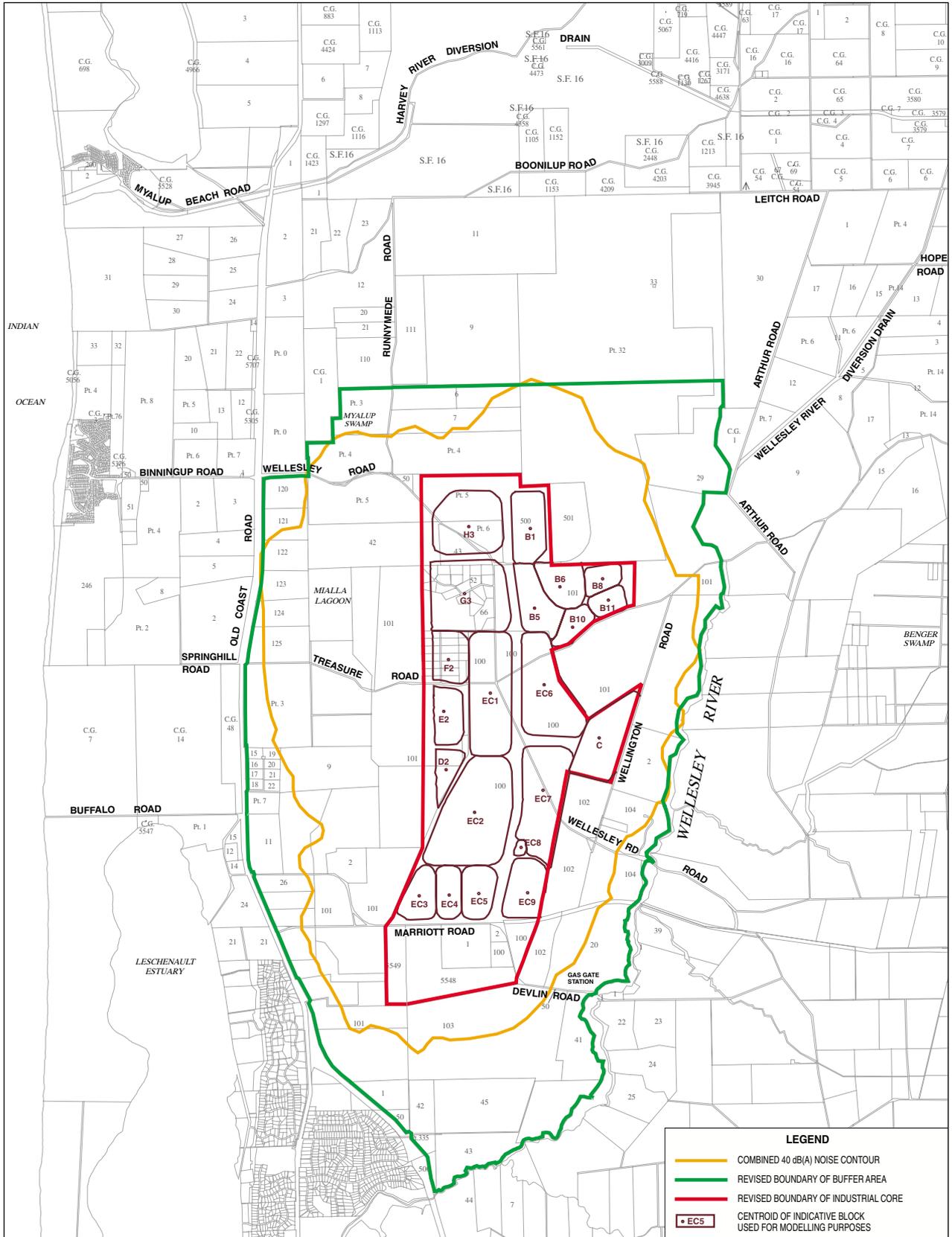
Produced by Cartographic Section, Burbury Office, Ministry for Planning.



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FIGURE 3



BSD
 Based on original plans prepared by BSD Consultants for Kemerton Expansion Study - Final Draft Report and noise modelling to define the northern boundary of industrial core.



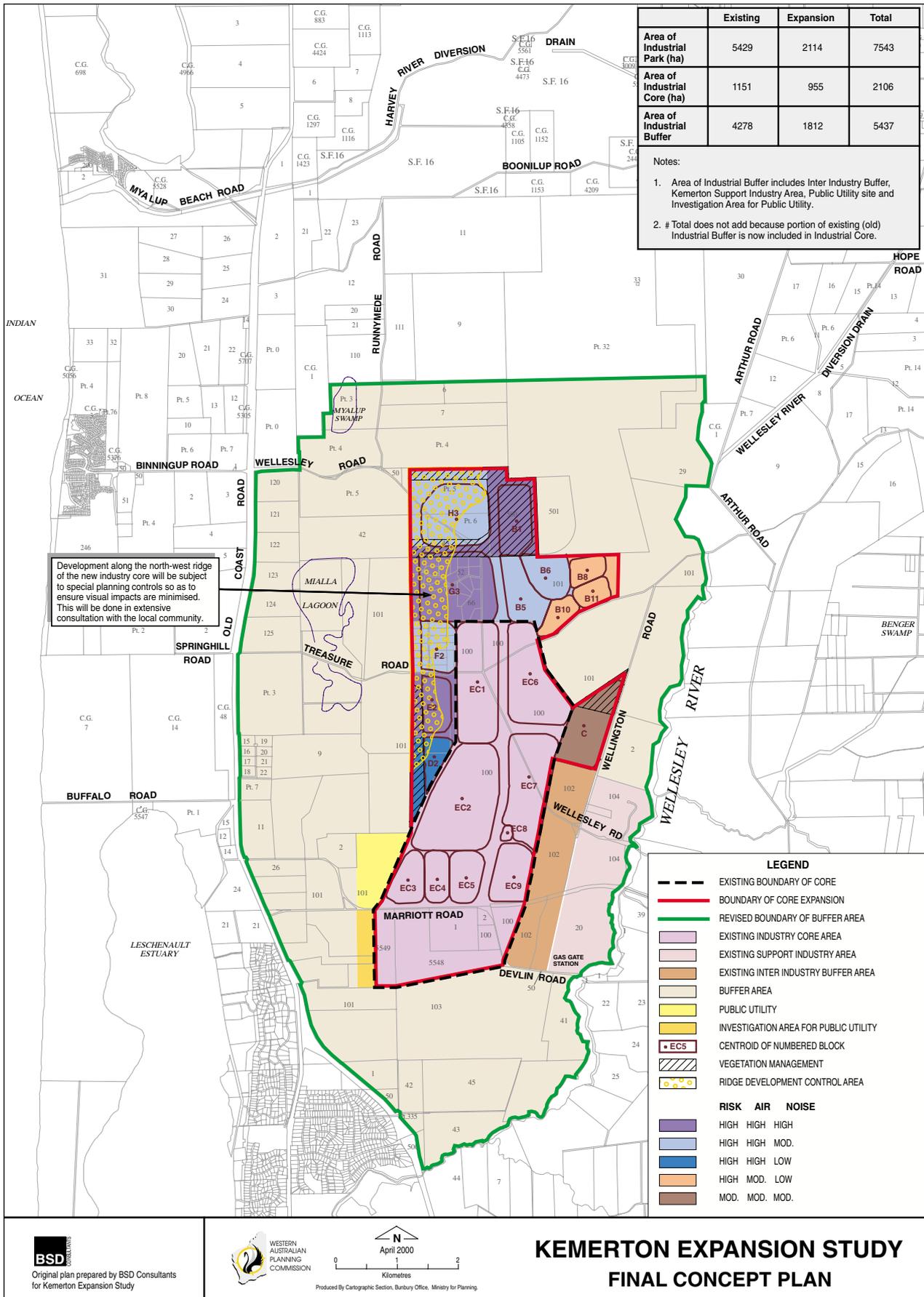
WESTERN AUSTRALIAN PLANNING COMMISSION
 N
 April 2000
 0 1 2
 Kilometres
 Produced by Cartographic Section, Bunbury Office, Ministry for Planning.

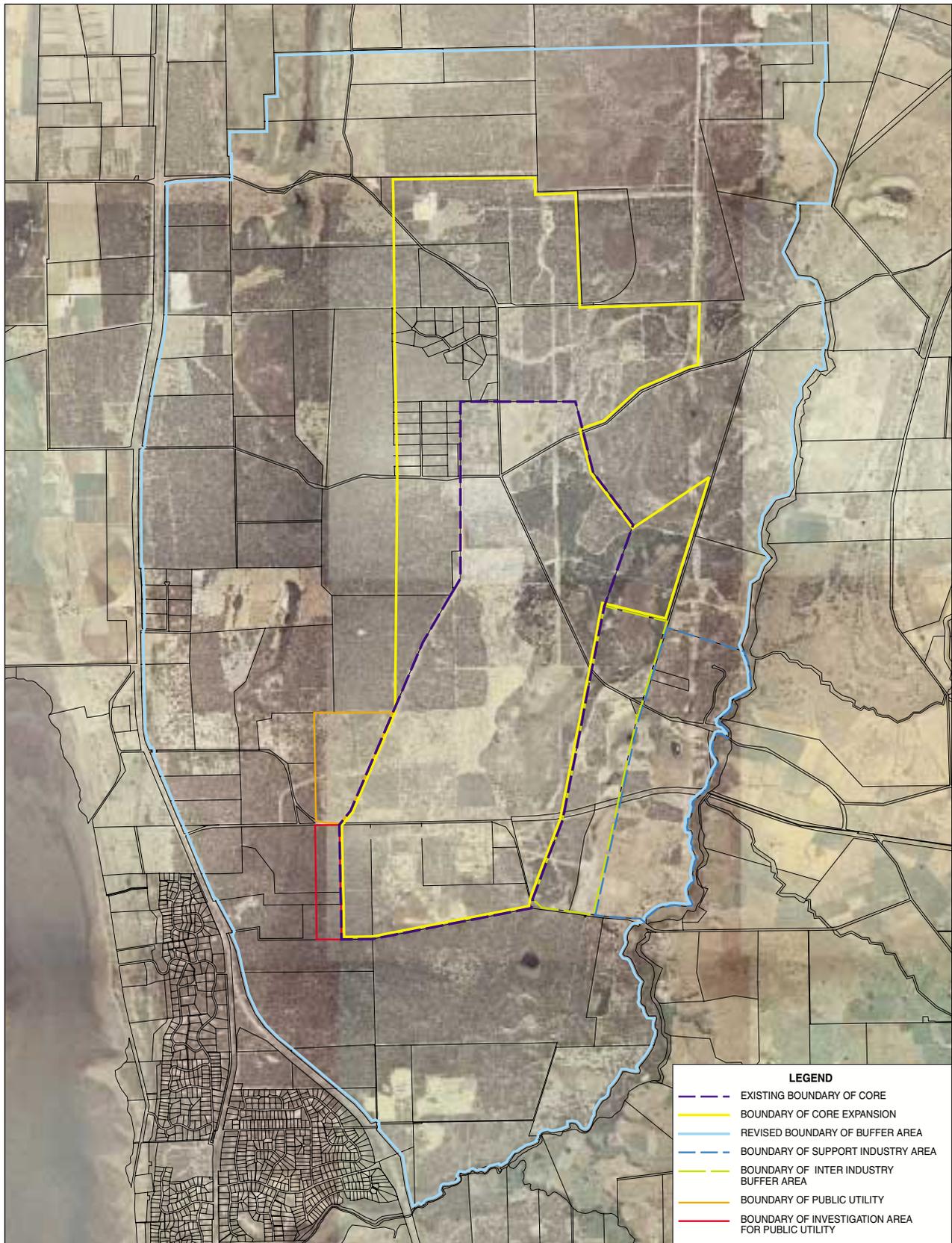
KEMERTON EXPANSION STUDY

CUMULATIVE NOISE MODELLING CONTOURS (PROPOSED INDUSTRIES)



FIGURE 4





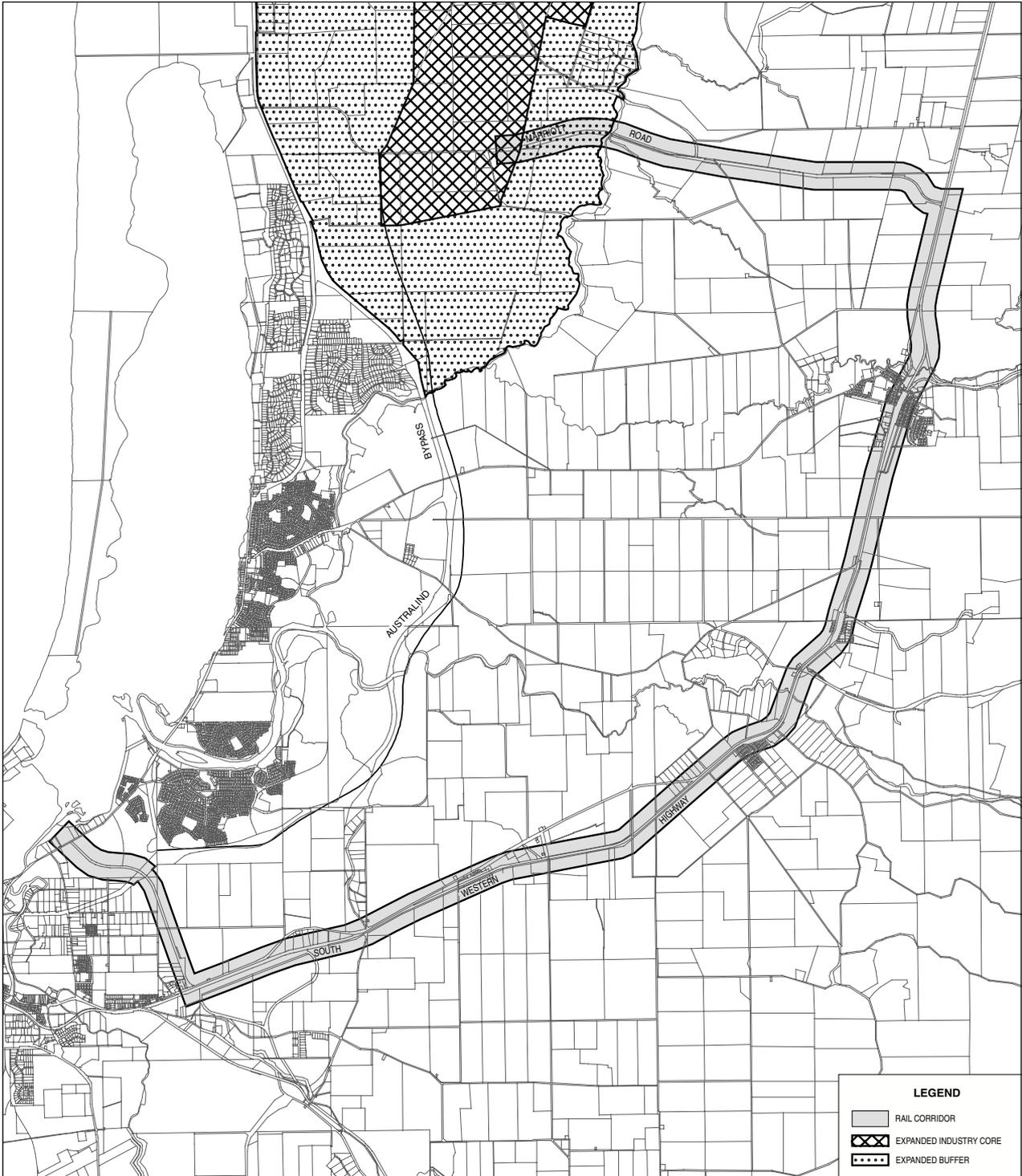
BSD CONSULTANTS
Original plan prepared by BSD Consultants for KEMERTON Expansion Study - Final Draft Report

WESTERN AUSTRALIAN PLANNING COMMISSION
Produced by Cartographic Section, Bunbury Office, Ministry for Planning
Date of photography: February 1999

**KEMERTON EXPANSION STUDY
FINAL CONCEPT PLAN - BOUNDARIES**



FIGURE 6



BSD CONSULTANTS
 Original plan prepared by BSD Consultants for Bunbury-Kemerton Transport Corridor (Phase 1) Final Draft Report

WESTERN AUSTRALIAN PLANNING COMMISSION
 April 2000
 0 1 2 3
 Kilometres
 Produced By Cartographic Section, Bunbury Office, Ministry for Planning.

**BUNBURY-KEMERTON
 TRANSPORT (RAIL) CORRIDOR
 RAIL TRANSPORT CORRIDOR**



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FIGURE 7

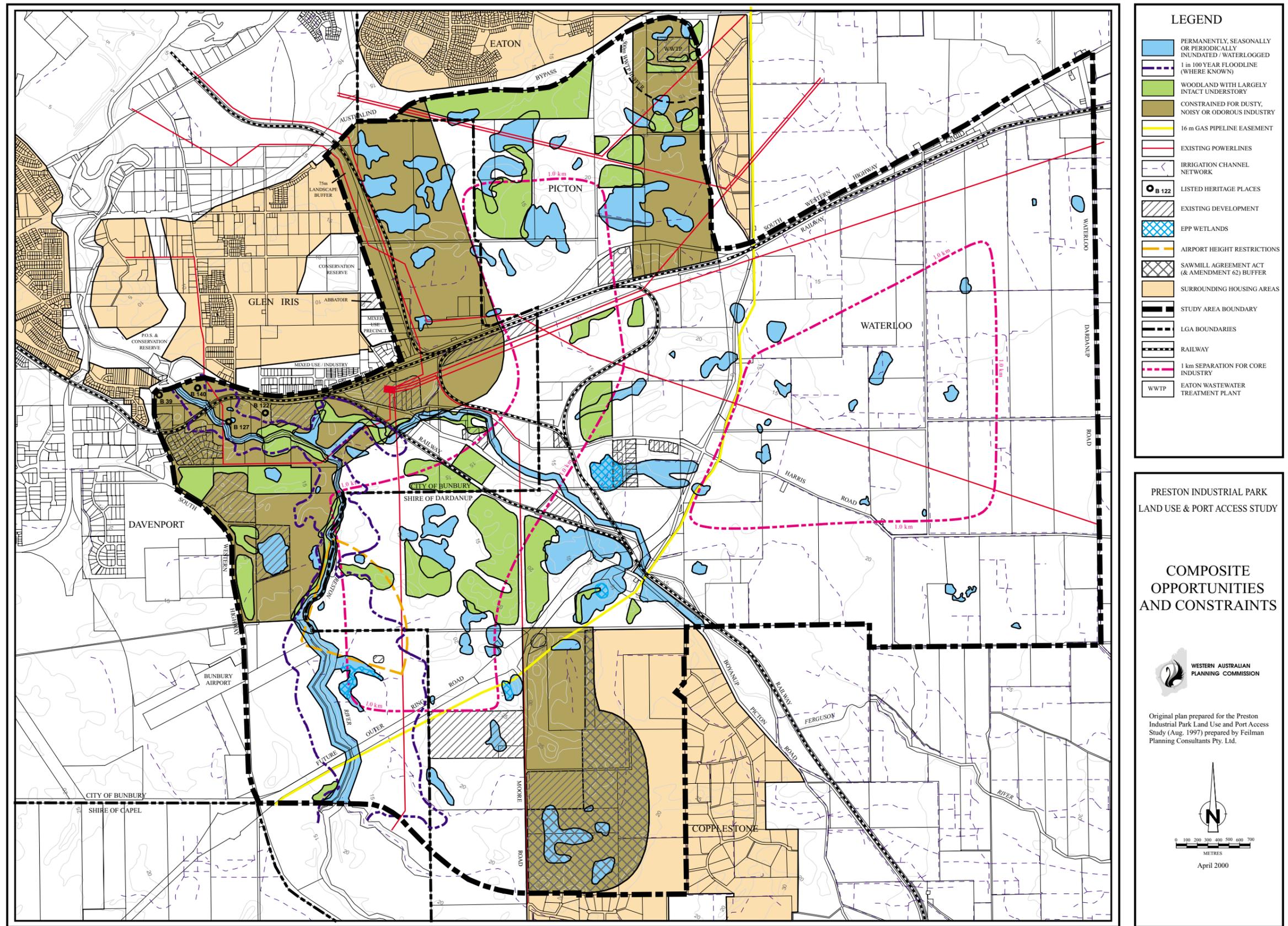
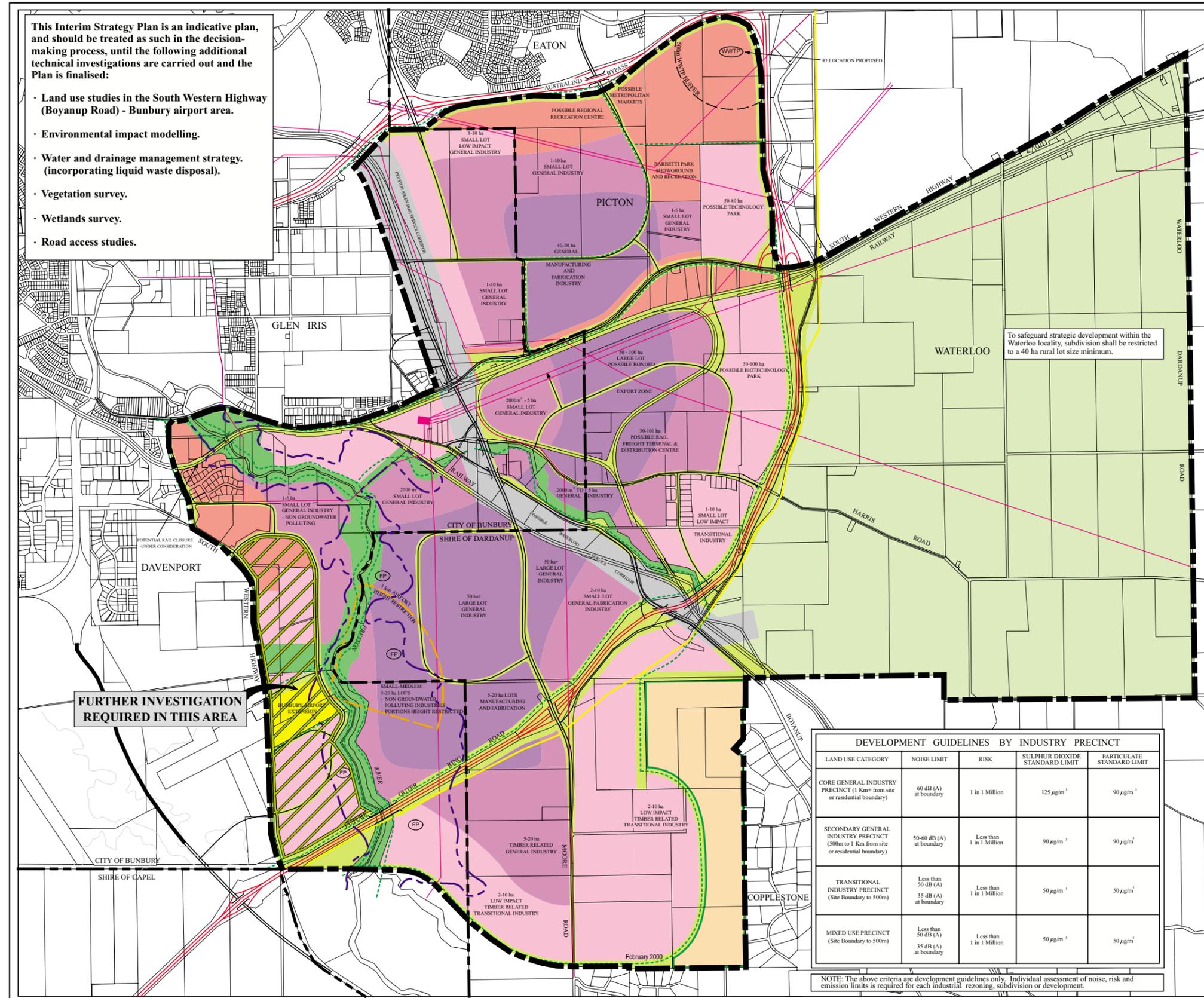




FIGURE 8



This Interim Strategy Plan is an indicative plan, and should be treated as such in the decision-making process, until the following additional technical investigations are carried out and the Plan is finalised:

- Land use studies in the South Western Highway (Boyanup Road) - Bunbury airport area.
- Environmental impact modelling.
- Water and drainage management strategy. (incorporating liquid waste disposal).
- Vegetation survey.
- Wetlands survey.
- Road access studies.

LEGEND

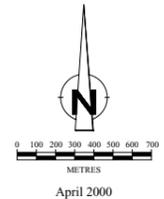
- CORE GENERAL INDUSTRY PRECINCT
- SECONDARY GENERAL INDUSTRY PRECINCT
- TRANSITIONAL INDUSTRY PRECINCT
- MIXED USE PRECINCT
- SERVICE CORRIDOR
- CONSERVATION RESERVE (Indicative only - see text for details)
- LANDSCAPE BUFFER / RURAL
- AIRPORT RUNWAY EXTENSION
- SMALL HOLDING DEVELOPMENT AREA
- EXISTING & FUTURE CONTROLLED ACCESS HIGHWAYS (C.A.H.)
- MAJOR ROADS (EXISTING AND FUTURE)
- RAILWAY
- STUDY AREA BOUNDARY
- LGA BOUNDARIES
- EXISTING POWERLINES
- EXISTING GAS EASEMENT
- AIRPORT HEIGHT RESTRICTION LINE
- FLOODLINE
- DUAL USE / BRIDLE PATHS
- FLOOD PRONE & LOW LAND CAPABILITY
- WASTE WATER TREATMENT PLANT
- FURTHER INVESTIGATION REQUIRED

**PRESTON INDUSTRIAL PARK
LAND USE & PORT ACCESS STUDY**

**INTERIM
STRATEGY PLAN**



The Interim Strategy Plan is based on the Preston Industrial Park Land Use and Port Access Study (Aug. 1997) prepared by Feilman Planning Consultants Pty. Ltd.



DEVELOPMENT GUIDELINES BY INDUSTRY PRECINCT

LAND USE CATEGORY	NOISE LIMIT	RISK	SULPHUR DIOXIDE STANDARD LIMIT	PARTICULATE STANDARD LIMIT
CORE GENERAL INDUSTRY PRECINCT (1 Km ² from site or residential boundary)	60 dB (A) at boundary	1 in 1 Million	125 µg/m ³	90 µg/m ³
SECONDARY GENERAL INDUSTRY PRECINCT (500m to 1 Km from site or residential boundary)	50-60 dB (A) at boundary	Less than 1 in 1 Million	90 µg/m ³	90 µg/m ³
TRANSITIONAL INDUSTRY PRECINCT (Site Boundary to 500m)	Less than 50 dB (A) 35 dB (A) at boundary	Less than 1 in 1 Million	50 µg/m ³	50 µg/m ³
MIXED USE PRECINCT (Site Boundary to 500m)	Less than 50 dB (A) 35 dB (A) at boundary	Less than 1 in 1 Million	50 µg/m ³	50 µg/m ³

NOTE: The above criteria are development guidelines only. Individual assessment of noise, risk and emission limits is required for each industrial rezoning, subdivision or development.



INDUSTRY 2030

Greater Bunbury Industrial Land and Port Access Planning

FIGURE 9

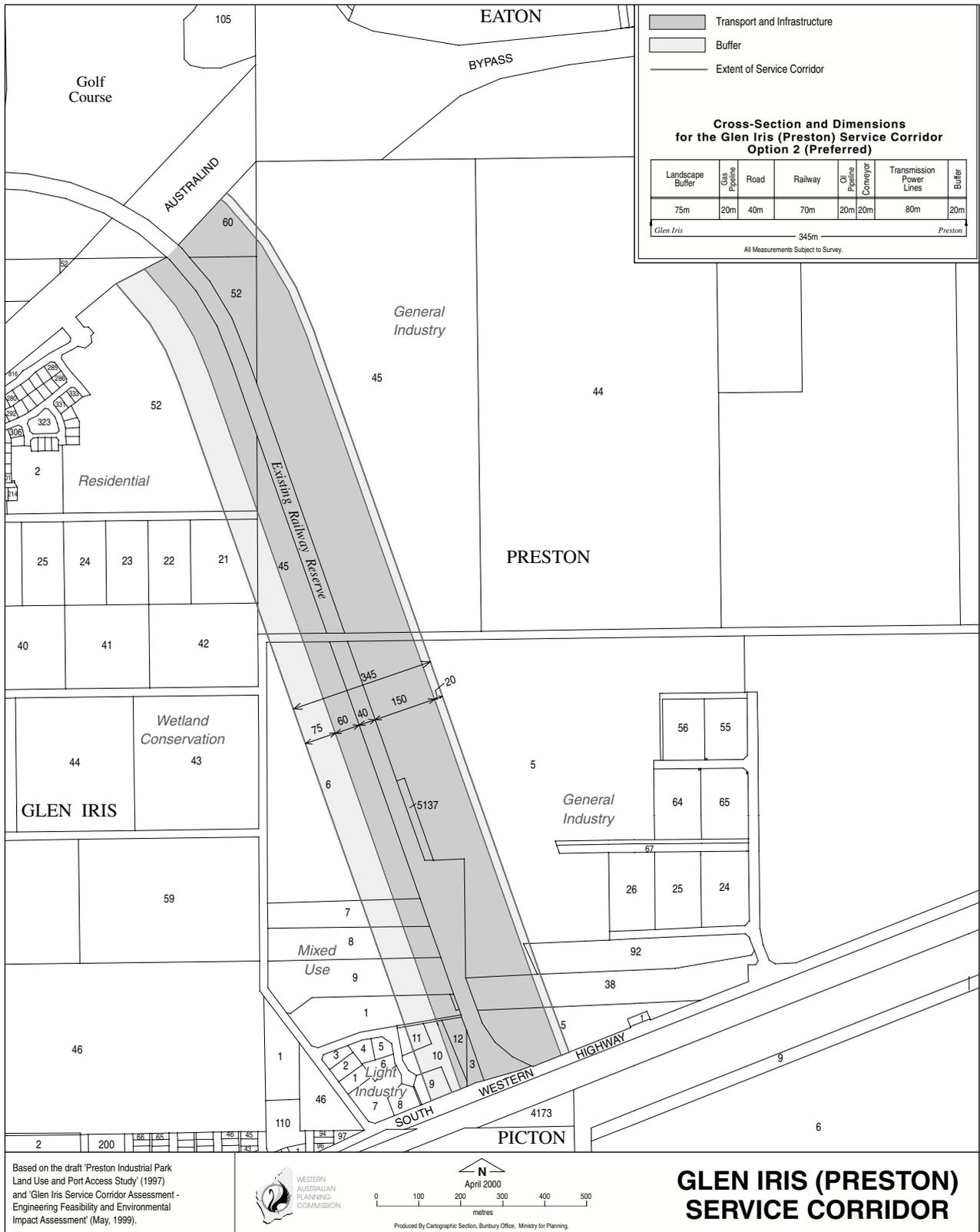
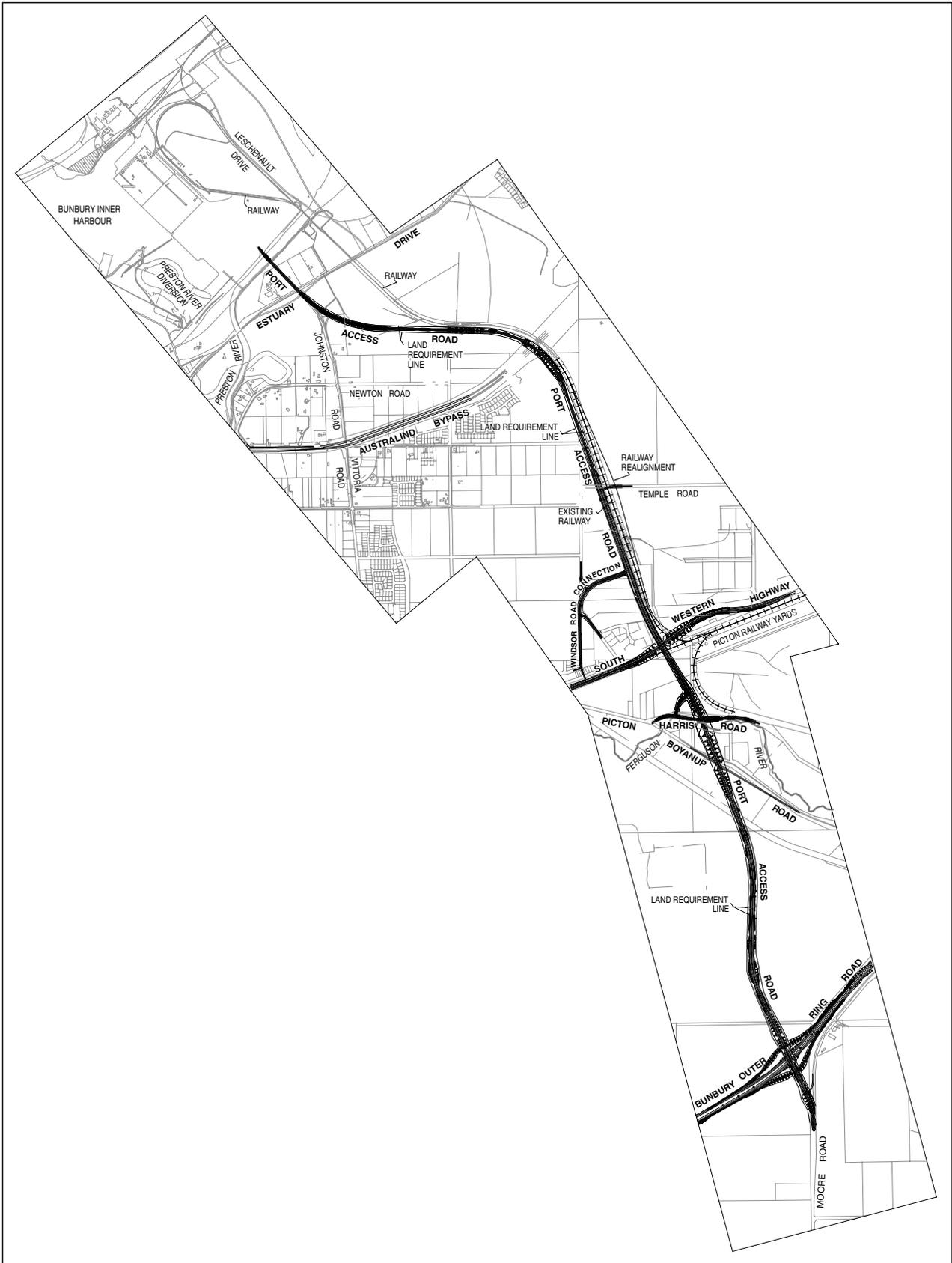




FIGURE 10



<p>Halpern Glick Maunsell HGM</p> <p><small>Original plan prepared by Halpern Glick Maunsell for Bunbury Port Access Road - Concept Report</small></p>	<p> WESTERN AUSTRALIAN PLANNING COMMISSION</p>	<p style="text-align: center;">N April 2000</p> <p style="text-align: center;">0 200 400 600 800 1000 metres</p> <p style="text-align: center;"><small>Produced By Cartographic Section, Bunbury Office, Ministry for Planning</small></p>	<p style="text-align: center;">BUNBURY PORT ACCESS ROAD CONCEPT PLAN (FINAL)</p>
---	---	--	---

