



ATTACHMENTS

Development and Infrastructure Services Committee Meeting

13 November 2019

6.00pm

City of Albany Council Chambers

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PROPOSED FRENCHMAN BAY HERITAGE TRAIL



FEASIBILITY STUDY

PREPARED BY H+H ARCHITECTS FOR THE FRENCHMAN BAY ASSOCIATION

FUNDED BY LOTTERYWEST

SEPTEMBER 2015

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EXECUTIVE SUMMARY

This feasibility study (made possible by a grant from Lotterywest) has been prepared for the Frenchman Bay Association (FBA) and outlines a proposal to create a Heritage Trail (the 'Trail') at Whalers Beach, Frenchman Bay, Albany. The Trail would run along the escarpment between the existing stairs at the western and eastern ends of the beach. The stairs lead from the escarpment to the beach, forming a circular route. The section of the Trail on the escarpment would be constructed with a stabilised limestone base and the beach itself would constitute the lower section of the Trail.

The project's overall objective is to commemorate, preserve and share with visitors the rich heritage of this historic section of Frenchman Bay. In addition to the construction of the path, the intention is to provide two sheltered areas to view the expanse of Whalers Beach, plus interpretive signage that would explain the cultural and historical significance of the location. The signage would describe:

- stories of the Noongar people and their early contact with Europeans;
- the critical importance of the fresh water springs to Vancouver, Flinders, Baudin and the other navigators who followed;
- the Vancouver Dam, still in existence, that was so important to the development of Albany;
- the quarantine station on Mistaken Island;
- the Norwegian Whaling Station of which so little remains;
- the wrecks on the beach;
- the colourful history of the islands seen from the escarpment;
- the work of the early botanists, and the visit of Charles Darwin; and
- other events, places and persons of interest.

A world-class Heritage Trail at Frenchman Bay would add to the concentration of tourism attractions on Torndirrup Peninsula. Its appeal to tourists would lay not only in the panoramic scenery but also in the rich and largely unknown history of the location. Access would be free and open to visitors of all ages.

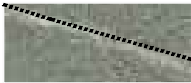
Important infrastructure is already in place in the project area - toilets, BBQ areas and a swimming beach. Discovery Bay, and its café, is close by.

The proposed Concept Plan for the Trail is shown on the following page.

LEGEND



EXISTING WALK TRAILS



EXISTING POWER LINE



EXISTING CONTOUR LINES



PROPOSED FRENCHMAN BAY TRAIL ON PUBLIC LAND:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED FRENCHMAN BAY TRAIL ON PRIVATE LAND:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



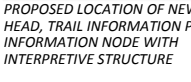
PROPOSED PATH & STEPS TO VANCOUVER SPRING:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED STEPS ADJACENT TO EXISTING HERITAGE STEPS:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED FRENCHMAN BAY TRAIL: BEACH



PROPOSED LOCATION OF NEW TRAIL HEAD, TRAIL INFORMATION POINT OR INFORMATION NODE WITH INTERPRETIVE STRUCTURE



PROPOSED LOCATION FOR INFORMATION NODES WITH 'INTERPRETIVE SIGNAGE' (INDICATIVE LAYOUT)



PROPOSED LOCATION FOR 'DIRECTIVE SIGNAGE', DIRECTIVE SIGNAGE IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM A DISTINGUISHED SECTION IN NEW LIME STONE WALK TRAIL (INDICATIVE LAYOUT)



FRENCHMAN BAY WHALING STATION (RUIN)
HERITAGE REGISTER PLACE 16612

NEW INFORMATION NODE WITH INTERPRETATIVE STRUCTURE



NEW INFORMATION NODE WITH INTERPRETIVE STRUCTURE & SEATING - VIEWING POINT AND A PLACE TO REFLECT

VANCOUVER DAM - NEW VIEWING PLATT FORM



TIMBER DECKED VIEWING PLATFORM WITH TIMBER SEAT AND A TIMBER BOARD WALK FORMING THE TRANSITION TO NEW LIMESTONE PATHWAY

REPORT ITEM DIS181 REFERS

TRAIL HEAD - INTERPRETATION



TRAIL HEAD - INTERPRETATION STRUCTURE & SEATING

'DIRECTIVE SIGNAGE'



'DIRECTIVE SIGNAGE' IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM DISTINGUISHED SECTION IN NEW LIME STONE WALK TRAIL (INDICATIVE LAYOUT)

PATHWAYS



STABILISED LIME STONE WALK TRAILS

SEATING



CONCRETE OR QUARRY-CUT GRANITE BLOCK SEATING TO NEW TRAIL HEAD & ALONG NEW PATH WAYS



Proposed Concept Plan - Draft

WITH INDICATIVE STRUCTURES, MATERIALS AND INTERPRETATION OPTIONS

SCALE 1:1500 @ A1

INDICATIVE INTERPRETATION OPTIONS



SCULPTURES

STRUCTURES

WALLS & SCREENS

FLOORS

PANELS

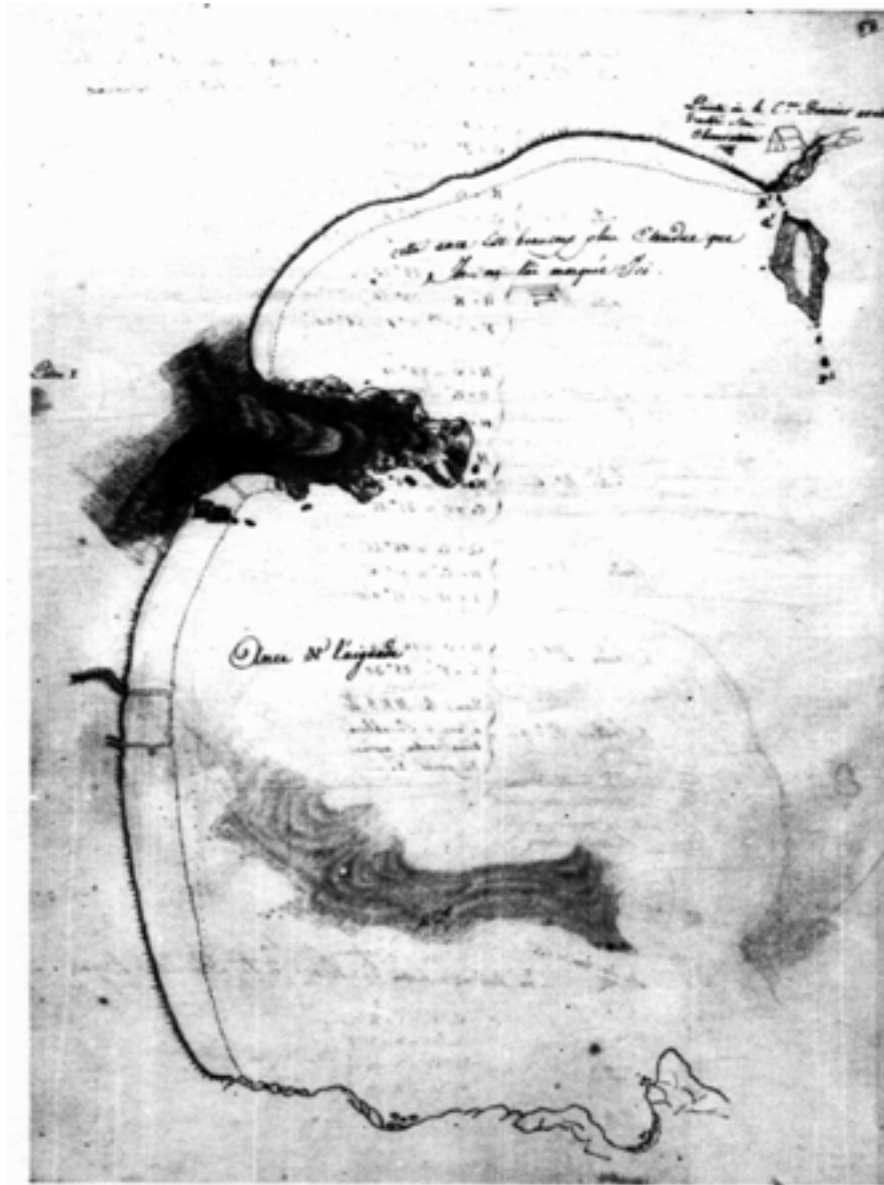
INTRODUCTION

The Purpose of the Heritage Trail Project

Visitors to Whalers Beach at Frenchman Bay are rewarded with beautiful scenery, a fine swimming beach and an attractive picnic area but they are told almost nothing of the extraordinary heritage of the location.

There are no signs to indicate the existence of the Vancouver Dam, the Norwegian Whaling Station, or wrecks that are visible from the shore. Nor is there any awareness that two centuries ago vessels from Britain, France, the United States, Norway and other European countries anchored here under the watchful eyes of Noongar men and women. What brought them to Whalers Beach were the fresh water springs that flowed even at the height of summer. For some years Albany residents themselves were dependent on these springs for a town water supply. There are many stories to be told about the fresh water springs and the people who were drawn to them.

Now is the time to commemorate these events, not only for Albany's residents but also for the growing numbers of tourists who visit Albany. It should be possible to stroll along the Trail, admiring the spectacular scenery and natural vegetation, while imagining the sailing ships anchored in the bay below. The interpretative Trail would enhance the tourism potential of the whole Torndirrup Peninsula.



Freycinet's 1803 map of Stream Bay (Whalers Beach) showing the two streams

The Purpose of the Feasibility Report

The purpose of this report is to:

- explain the rationale for the Trail;
- describe the heritage values of the site;
- map the proposed route;
- identify any environmental impacts in regard to site erosion, disturbance of flora, aesthetics and safety;
- suggest the location and content of the interpretative signage; and
- estimate the cost of construction of the various elements of the Trail

The report will be used to consult further with stakeholders and to approach: (i) various authorities for approvals; and (ii) funding bodies for support.

The Funding for the Feasibility Report

The funding for this feasibility study was provided by a grant from Lotterywest (Grant 421005719).



Picnic group posing on the jetty carrying a pipeline from the P&O Dam to a water lighter towed by the SS Bruce c.1904

OVERVIEW OF PROPOSED TRAIL SITE

Location and Ownership

The site for the proposed Heritage Trail is located on the City of Albany Reserve located between Vancouver Road and Frenchman Bay, along the northern boundary of privately owned Lots 1 and 2 Frenchman Bay Road and along Whalers Beach.

Heritage Significance of the Site

Frenchman Bay has considerable historical significance, some of which has been formally recognised by the Heritage Council of Western Australia through inclusion on the State Register of Heritage Places. A section of the bay incorporates the Frenchman Bay (Norwegian) Whaling Station (ruin), Whalers Beach, Vancouver Spring and Vancouver Dam. The Frenchman Bay Whaling Station (ruin) (1914) is a Permanent Entry (Place No. 16612) on the State Register of Heritage Places. The extent of the registered place is shown on the Heritage Council of Western Australia diagram (Attachment 2).

The statement of significance from the Register is included below.

'Frenchman Bay Whaling Station (ruin), has cultural heritage significance for the following reasons:

the place has considerable value as an archaeological site, being rare as a place where the original purpose is clearly apparent, thus having the ability to reveal characteristics of the early structures of the place;

the place was established in the 20th century and represented an attempt to re-establish the whaling industry in Western Australia;

the freshwater spring has historical significance with recorded use over more than 200 years, and usage also predating European settlement;

the set 'of concrete steps built in 1914 has aesthetic value as a rustic and aged element in the natural beach and bush setting; and,

the place is important for its association with the Norwegian and other Scandinavian whaling men who worked in a harsh, noxious and often dangerous industry in an isolated environment.



The P&O Dam above Whalers Beach c.1870



The Norwegian Whaling Station at Whalers Beach c.1915

The FBA has undertaken considerable research into the history of the Frenchman Bay area. This research has been informed by the Assessment Documentation compiled by the Heritage Council of Western Australia as part of the process of placing the Frenchman Bay Whaling Station on the State Register of Heritage Places.

The FBA has prepared a document entitled 'The Heritage of Frenchman Bay' to support the construction of the proposed Heritage Trail. A copy of this document and the Heritage Council of Western Australia Assessment documentation are included as Attachments 2 and 3.

There are few written stories of Noongar people that are particular to Frenchman Bay and during the next stage it is proposed to fund an archaeologist/anthropologist who could work with Noongar families to recover stories that could be incorporated in the interpretative signage. In addition, the early British and French navigators and their teams of natural scientists; American sealers; British whalers; the Vancouver Dam that supplied Albany with fresh water; and the Norwegian whaling station will all form part of the signage narrative along the proposed Trail.

This location should become a major tourist destination. There are few sites along the Australian coast that have so much history concentrated into such a small geographical area. However, the rich history of this area is not well publicised and is in danger of being lost. We believe that there is the potential for visitors from around Australia and overseas to make this place a major destination when they visit Albany.

Process of Development and Engagement

In preparing this report various stakeholder groups and individuals were consulted to ascertain their views on the type, location and impact of the proposed Trail. Several inspected the proposed Trail circuit accompanied by the FBA and H + H team members. Organisations, listed in alphabetical order, that were consulted include:

- Aurora Environmental
- Albany Historical Society
- Albany Museum
- Albany Public Library
- City of Albany
- Department of Water
- Department of Parks and Wildlife
- Discovery Bay
- Great Southern Development Corporation
- Kinjarling Trail Project Committee
- Noongar traditional Indigenous land owners
- South Coast Natural Resource Management



H+H Architects onsite with Aurora Environmental during the early stages of the Feasibility Study

PROPOSED TRAIL

Outline of Proposed Trail

The proposed Trail can be considered in four parts (Attachment 1):

Part 1 – is the lower portion of the Trail and encompasses Whalers Beach. It commences from a new Trail Head to be located in the upper car park across from the ablution block. The lower portion of the Trail then leads down the access road to the existing lower car park/picnic area at the eastern end of the beach and extends along the beach to the existing steps at the western end.

Part 2 - runs along the top of the escarpment through the City of Albany Reserve from the steps at the western end of Whalers Beach to the western edge of the privately owned Lots 1 and 2, Frenchman Bay Road ('Lots 1 and 2').

Part 3 - consists of a staircase leading from the Trail to a viewing platform situated above the Vancouver Dam.

Part 4 - runs along the escarpment within the privately owned Lots 1 and 2 to the Trail Head located across from the ablution block in the upper car park area above the eastern end of the beach.

There is also an alternative entrance to the Trail at the lookout on Vancouver Road, as mentioned below and shown in Attachment 1. Existing and additional signage will also direct walkers to the main Trail at this entrance.

Depending on the availability of funding, the Trail could be constructed on a part-by-part basis. It would be preferable, however, to build the Trail as a single development.

The proposed route is intended to wind along the top of the escarpment to maximise the view of King George Sound, but also to bring walkers in close proximity to the unique vegetation of the Great Southern District. It is anticipated that there will be different levels of use of the Trail:

- locals who would use the Trail regularly;
- visitors from Perth and other locations in WA who are exploring the south coast; and
- national and international tourists.

The primary Trail Head would be to the side of the existing car park at the end of Frenchman Bay Road. Toilets are conveniently located at the car park. It will have signage showing a map of the Trail and describing key features.

An important and largely unknown historical feature of Frenchman Bay is Vancouver Dam, which was the only source of water to Albany in the early 20th century. In order to avoid disturbance to the vegetation and soil, steps will lead down from the escarpment to a viewing platform situated above the dam. Signage will provide photos of the Dam in the early days and explain its significance.

One of the best vantage points is located midway along the escarpment. It will have a major display, seating and a shelter. This node can be accessed from the existing Vancouver Lookout and this location will provide a second car park and an alternative entry point to the Trail.

Shelters, aesthetically sculpted, will be provided at the Trail Head and mid-way along the escarpment to protect walkers from the rain.

The section of the Trail that runs along the top of the escarpment across the privately owned Lots 1 and 2 would be situated within the required coastal set back and in accordance with the City of Albany's zoning ordinances. The exact siting of the path would most likely follow the existing cleared section on the coastal perimeter of Lots 1 and 2 and would be undertaken in consultation with the owners or their representatives.

Environmental Considerations

Aurora Environmental consultant Melanie Price and Landscape Consultant Sally Malone viewed the proposed Trail location and provided advice about the siting of the Trail and its construction. The route of the proposed Trail takes account of their advice.

In summary, the four main threats are dieback (*Phytophthora cinnamomi*); erosion; disturbance to rare or endangered flora; and fire.

Dieback is present across the study area. This infestation has most likely been due to the earlier introduction of contaminated soil. The vegetation is dieback-susceptible and there is evidence of recent vegetation death. The soil is sandy, free draining and with appropriate trail construction and siting dieback on the site can be managed.

The topography is steep from the escarpment to the beach below. The Trail should be sited well back from the ridge, except where there are opportunities for viewpoints and interpretation facilities at specified locations along the proposed trail alignment. The topography and environmental considerations may constrain the width and therefore a limestone path is initially preferred to a dual use path.

The site contains unique vegetation types, including *xanthorrea* close to the beach and fairly intact banksia woodland. A sensitive approach in these areas is required. For this reason, the Trail pathway should wind around the banksia woodland and avoid, during construction, other unique vegetation types

Fire management will be necessary. The access track under the Western Power powerlines appears to also serve as a permanent strategic firebreak. If confirmed, this will need to be considered in the final fire management design.

Any clearing of new sections of the Trail will require permits from the Department of Parks and Wildlife.

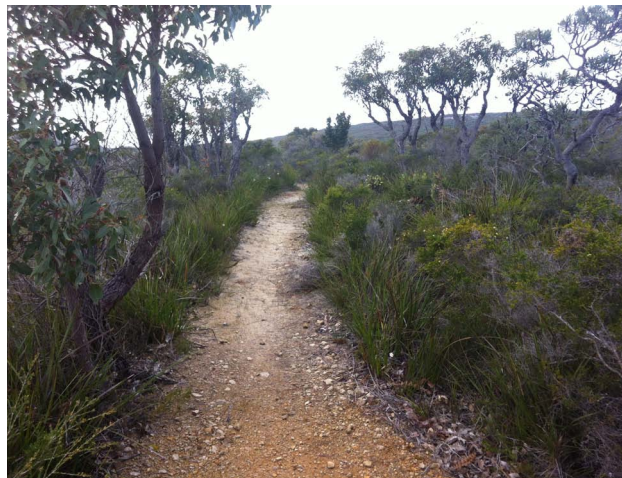
Construction of the Trail

After consideration of advice from the City of Albany Reserves Officers, Aurora Environmental consultants and landscaping consultants it has been determined that the most appropriate trail path is a 1500mm wide stabilised limestone path. This should minimise any risk of dieback and erosion. The path would be constructed in a manner that would enable it to be widened and sealed in a future stage if the need arose.

The key elements and 'signage nodes' along the Trail have been identified and costed. The nodes are identified on the attached plan (Attachment 1). The information shown is indicative only and will be designed when the final budget is known.



Views across the escarpment showing the steep topography



Example of the typical pathways already established onsite

Elements and Interpretive Nodes along the Trail

Eleven node points have been identified:

Node 1 - An 'information' node should anyone enter the Trail from Goode Beach. Orientation information will be provided on the directions and the length of the Trail.

Node 2 - A 'Context' node on the edge of the scarp that provides a broad context for Frenchman Bay and the Trail. There is also an opportunity to provide information on the flora and fauna within the area.

Node 3 - A 'Significant' node that will incorporate a covered 'iconic' lookout with seating. Information will be provided about Frenchman Bay and Mistaken, Seal and Michaelmas Islands

Node 4 - A 'Start' node for visitors approaching the Trail from the Vancouver Road car park. Orientation information will be provided on the directions and the length of the Trail. Information will also be provided on 'The Frenchman Bay Story'

Node 5 - A 'Directional' node to provide directions to Vancouver Dam

Node 6 - A 'Significant' node that will incorporate timber steps and a timber viewing deck. Information will be provided on the Vancouver Dam site. The exact location of the steps and deck will be determined in consultation with the traditional owners of the area to ensure that the course of the natural stream is not disturbed.

Node 7 - A 'Significant' node. Information will be provided on the former Hostel and Tea Rooms and on the concrete steps to the beach.

Node 8 - The 'Trail Head' node - for visitors approaching the Trail from the Frenchman Bay Road car park. Orientation information will be provided on the directions and the length of the Trail. Information will also be provided on Bald Head and 'The Frenchman Bay Story'. The 'Trail Head' node will also incorporate a covered area and seating.

Node 9 - A 'Significant' node. Information will be provided on the former Norwegian whaling station.

Node 10 - A 'Significant' node. Information will be provided on the discharge stream from Vancouver Spring.

Node 11 - A 'Significant' node. Information will be provided on various wrecks – *Elvie* and *Rip*.

Details of the information to be conveyed at the significant node points is outlined in the attached document (Attachment 5).

Indicative Costs

An Indicative Cost Estimate has been prepared by Chris O’Keefe -Quantity Surveyor and Construction Cost Consultant (Attachment 4).

The estimate of \$370,000.00 (Excl GST) includes an allowance for:

- the construction of the Trail;
- the various structures;
- the interpretive panels;
- professional fees; and
- design and contract contingencies
- archaeological survey of Noongar heritage

Potential Future Phases

The proposed Trail is considered a worthwhile stand-alone initiative that will add value to a location that deserves much more recognition and protection. However, it will be undertaken so that it can, if it became desirable, become a section of the much larger and more ambitious network of trails that were reflected in the Kinjarling Trail proposal dating back several years. There are logical extensions of this section of pathway, leading in one direction to Discovery Bay and the Bald Head Walking Trail, and in the other to Little Grove and eventually Albany city centre and beyond.

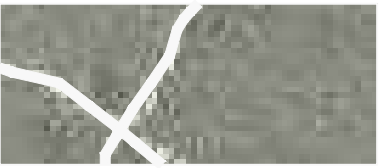
STAGING OF THE DEVELOPMENT

It is probable that the project will need to be completed in stages as funds become available. The stages in priority order are:

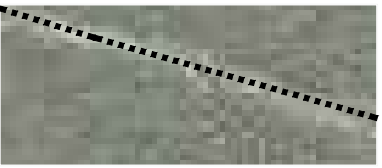
- a) Construction of the stabilised limestone path.
- b) The construction of the main Trail Head (Node 8) and interpretation information at the Vancouver Road car park (Node 4).
- c) Viewing shelter and associated interpretation (Node 3); the steps and viewing deck at the Vancouver Dam site (Node 5); and the interpretation signs associated with the dam and the spring (Nodes 5, 6 and 10).
- d) New steps to Whalers Beach (Node 7)
- e) Other Interpretation nodes (Nodes 1, 2, 9 and 11).

ATTACHMENT 1 - Plan of Proposed Trail

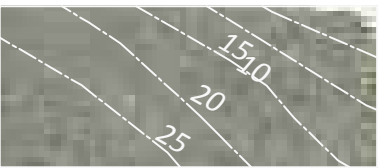
LEGEND



EXISTING WALK TRAILS



EXISTING POWER LINE



EXISTING CONTOUR LINES



PROPOSED FRENCHMAN BAY TRAIL ON PUBLIC LAND:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED FRENCHMAN BAY TRAIL ON PRIVATE LAND:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED PATH & STEPS TO VANCOUVER SPRING:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



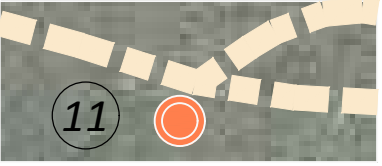
PROPOSED STEPS ADJACENT TO EXISTING HERITAGE STEPS:
1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



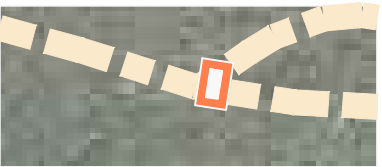
PROPOSED FRENCHMAN BAY TRAIL: BEACH



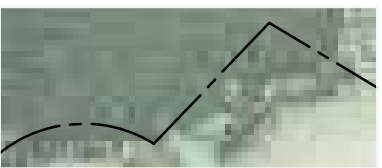
PROPOSED LOCATION OF NEW TRAIL HEAD, TRAIL INFORMATION POINT OR INFORMATION NODE WITH INTERPRETIVE STRUCTURE



PROPOSED LOCATION FOR INFORMATION NODES WITH 'INTERPRETIVE SIGNAGE' (INDICATIVE LAYOUT)



PROPOSED LOCATION FOR 'DIRECTIVE SIGNAGE'. DIRECTIVE SIGNAGE IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM A DISTINGUISHED SECTION IN NEW LIME STONE WALK TRAIL (INDICATIVE LAYOUT)



FRENCHMAN BAY WHALING STATION (RUIN)
HERITAGE REGISTER PLACE 16612

NEW INFORMATION NODE WITH INTERPRETATIVE STRUCTURE



NEW INFORMATION NODE WITH INTERPRETIVE STRUCTURE & SEATING - VIEWING POINT AND A PLACE TO REFLECT

VANCOUVER DAM - NEW VIEWING PLATT FORM



TIMBER DECKED VIEWING PLATFORM WITH TIMBER SEAT AND A TIMBER BOARD WALK FORMING THE TRANSITION TO NEW LIMESTONE PATHWAY

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TRAIL HEAD - INTERPRETATION



TRAIL HEAD - INTERPRETATION STRUCTURE & SEATING

'DIRECTIVE SIGNAGE'



'DIRECTIVE SIGNAGE' IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM DISTINGUISHED SECTION IN NEW LIME STONE WALK TRAIL (INDICATIVE LAYOUT)

PATHWAYS



STABILISED LIME STONE WALK TRAILS

SEATING



CONCRETE OR QUARRY- CUT GRANITE BLOCK SEATING TO NEW TRAIL HEAD & ALONG NEW PATH WAYS



Proposed Concept Plan

WITH INDICATIVE STRUCTURES, MATERIALS AND INTERPRETATION OPTIONS

SCALE 1:1500 @ A1

INDICATIVE INTERPRETATION OPTIONS



SCULPTURES

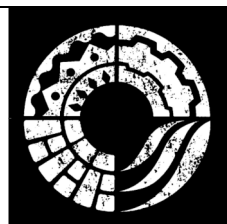
STRUCTURES

WALLS & SCREENS

FLOORS

PANELS

ATTACHMENT 2 - State Register of Heritage Places - Assessment Documentation



**HERITAGE
COUNCIL**
OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES

Permanent Entry

1. **DATA BASE No.** 16612
2. **NAME** *Frenchman Bay Whaling Station (ruin)* (1914)
OTHER NAME Norwegian Whaling Station
3. **LOCATION** Whalers Beach, Frenchman Bay Road, Albany
4. **DESCRIPTION OF PLACE INCLUDED IN THIS ENTRY**
Portion of Lot 300 on Deposited Plan 46683 being part of Reserve 21337 and part of the land contained in Crown Land Title Volume 3136 Folio 715 and Lot 301 on Deposited Plan 53420 being unallocated Crown land and the whole of the land contained in Crown Land Title Volume 3149 Folio 236 as shown on Heritage Council of Western Australia Survey Drawing 16612 (DP53432) prepared by Midland Survey Services.
5. **LOCAL GOVERNMENT AREA** Shire of Albany
6. **OWNER** State of Western Australia
(As to Reserve 21337. Management Order to the City of Albany)
7. **HERITAGE LISTINGS**

Register of Heritage Places:	Permanent Entry	02/09/2008
National Trust Classification:		-----
Town Planning Scheme:		-----
Municipal Inventory (Vancouver Spring):	Adopted	30/06/2001
Register of the National Estate:		-----
8. **CONSERVATION ORDER**

9. **HERITAGE AGREEMENT**

10. **STATEMENT OF SIGNIFICANCE**
Frenchman Bay Whaling Station (ruin), has cultural heritage significance for the following reasons:

the place has considerable value as an archaeological site, being rare as a place where the original purpose is clearly apparent, thus having the ability to reveal characteristics of the early structures of the place;

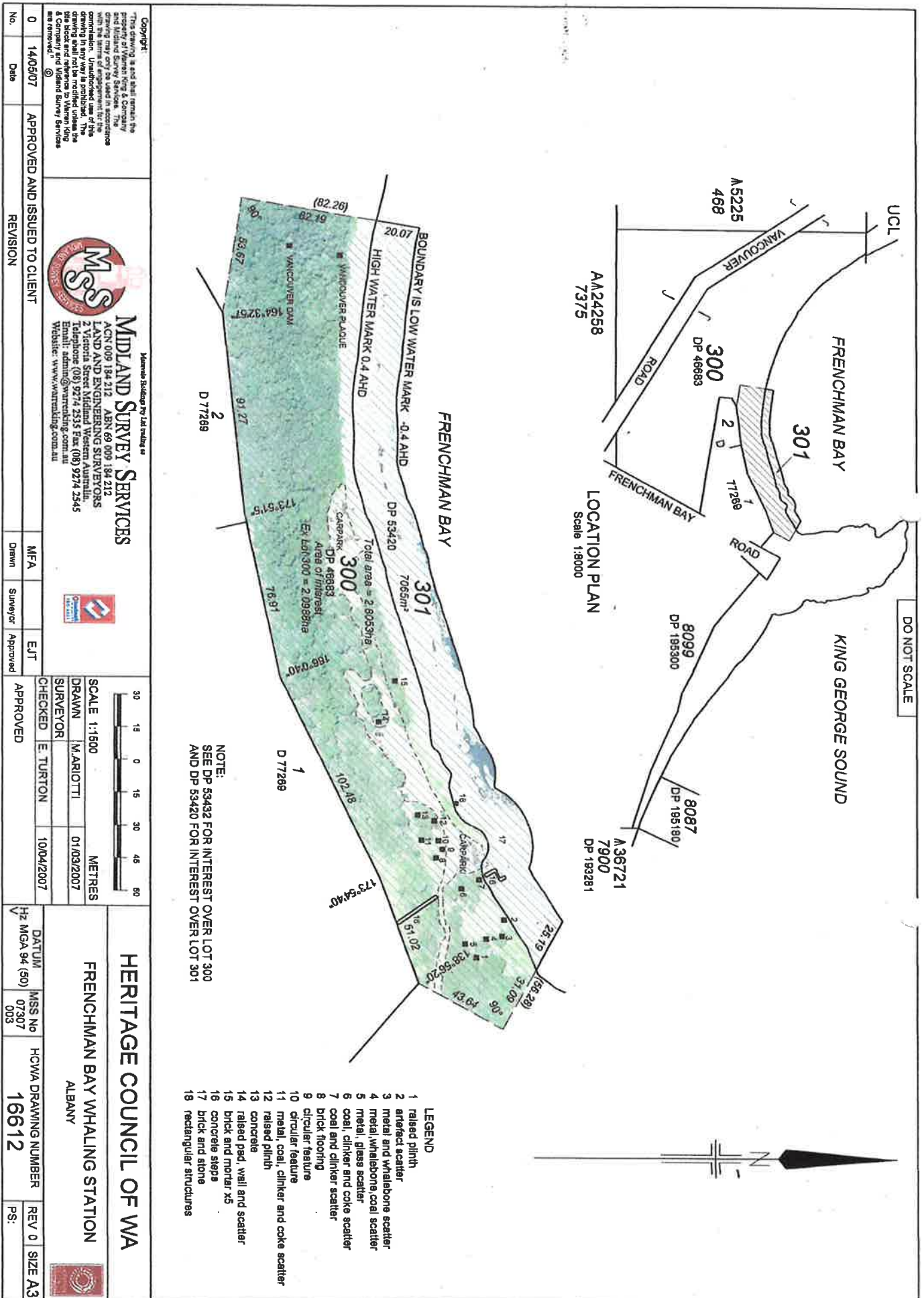
the place was established in the 20th century and represented an attempt to re-establish the whaling industry in Western Australia;

the freshwater spring has historical significance with recorded use over more than 200 years, and usage also predating European settlement;

the set of concrete steps built in 1914 has aesthetic value as a rustic and aged element in the natural beach and bush setting; and,

the place is important for its association with the Norwegian and other Scandinavian whaling men who worked in a harsh, noxious and often dangerous industry in an isolated environment.

The buildings associated with the former hostel and caravan park have some significance for their social and historical value but are outdated and substandard for the purpose for which they are intended and are not readily redeemable.





11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

The criteria adopted by the Heritage Council in November 1996 have been used to determine the cultural heritage significance of the place.

PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

- 1.4 Appreciating the natural wonders of Australia
- 3.3.2. Fishing and whaling
- 3.23 Catering for tourists
- 5.1 Working in harsh conditions

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 106 Workers (incl. Aboriginal, convict)
- 305 Fishing & other maritime industry
- 311 Hospitality industry & tourism
- 503 Natural disasters

11.1 AESTHETIC VALUE*

Frenchman Bay Whaling Station (ruin), in association with the hostel and tearoom buildings on the bluff, contributes to the attractive seaside beach environment that is a popular picnic area. (Criterion 1.1)

Frenchman Bay Whaling Station (ruin) is important for its ability to reveal aesthetic characteristics of the early structures of the place. (Criterion 1.1)

The concrete steps of *Frenchman Bay Whaling Station (ruin)*, that lead from the beach to the bluff, have aesthetic value as a rustic and aged element in the natural beach and bush setting. (Criterion 1.3)

* For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present*, Angus and Robertson, North Ryde, 1989.

For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate*, Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

11.2 HISTORIC VALUE

Frenchman Bay Whaling Station (ruin) was established by a Norwegian based whaling company as part of the expansion of their activities in the southern hemisphere, and operated from 1914 to 1916. The place therefore represents an association with Norway, one of very few countries to continue whaling to the present. (Criterion 2.1)

Frenchman Bay Whaling Station (ruin) was the first station established in WA in the 20th century and represented an attempt to re-establish the industry on the south coast of the State on a larger scale than had been previously practised. (Criteria 2.1 & 2.2)

The freshwater spring has historical significance with recorded use over more than 200 years, predating European settlement, and including the visits of Captain George Vancouver in 1791, Dumont D'Urville's *Astrolabe* in 1827, American whalers in the 19th century, as a water supply for ships calling into the port at Albany from 1900 to 1912, used by *Frenchman Bay Whaling Station (ruin)* from 1912-16 and the Frenchman Bay hostel and caravan park from the 1930s. (Criterion 2.1)

Frenchman Bay has been a popular seaside holiday resort from as early as the 1890s, enhanced by the construction of the hostel in 1936 and establishment of the caravan park in 1959. (Criterion 2.2)

Frenchman Bay Whaling Station (ruin) is important for its association with the Norwegian and other Scandinavian whaling men who worked in a harsh, noxious and often dangerous industry in an isolated environment far from their homes. (Criterion 2.3)

Frenchman Bay Whaling Station (ruin) marked a new era of whaling with technological advancements such as steam-powered ships and machinery and the use of explosive harpoons that increased industry effectiveness and safety. (Criterion 2.4)

11.3 SCIENTIFIC VALUE

Frenchman Bay Whaling Station (ruin) contributes to a wider understanding of the cultural history of the district and the State and has high importance as a possible teaching and research site. It contains within its boundaries 18 archaeological sites associated with the first Western Australian whaling station to use modern whale catching and processing techniques. In addition, there is high potential for subsurface, minimally disturbed archaeological remains. (Criterion 3.1)

Frenchman Bay Whaling Station (ruin) was the first permanent European occupation of this part of King George Sound. Its operation had a significant but short economic impact on Western Australia and the Albany area. The potential therefore to yield further information about the region's early European cultural history through the archaeological record is high. (Criterion 3.2)

11.4 SOCIAL VALUE

Frenchman Bay Whaling Station (ruin) has social significance for its historical associations as an early 20th century whaling station and as a popular site for seaside holidays. (Criteria 4.1 & 4.2)

12. DEGREE OF SIGNIFICANCE**12.1 RARITY**

Frenchman Bay Whaling Station (ruin) is rare as a group of archaeological sites at a place where the original purpose is clearly apparent. The station was the first whaling station in Western Australia to use modern whaling catching and processing techniques, and therefore serves as a benchmark site for the later Australian whaling industry. (Criterion 5.1)

Frenchman Bay Whaling Station is rare as a place in Western Australian settled and operated exclusively by men of non-British decent. (Criterion 5.1)

The place is uncommon for its combination of a popular holiday destination directly adjacent to the whaling industry. (Criterion 5.1)

The archaeological remains of *Frenchman Bay Whaling Station* provide a physical reminder of a way of life and an industry no longer practiced. (Criterion 5.2)

12.2 REPRESENTATIVENESS

Frenchman Bay Whaling Station (ruin) is a ruin representative of the former whaling industry in Western Australia. (Criterion 6.1)

12.3 CONDITION

Frenchman Bay Whaling Station (ruin) archaeological sites are in a disturbed but sound condition. In addition, the sites are presently not under threat and their condition will not alter if land uses remain unchanged. However, the use of some of the remains for picnic seating is severely detrimental to the place, and this practice needs to be discouraged. The historical record shows use of the beach area as a garden, with the eastern section dug for manure, but there is high potential for undisturbed archaeological remains 20cm below the surface over the rest of the site.

12.4 INTEGRITY

Frenchman Bay Whaling Station (ruin) is in poor condition with all elements beyond restoration. The site presents interpretive opportunities, but it has a low degree of integrity. The set of concrete steps has high integrity and continues to function in its original intention.

12.5 AUTHENTICITY

There is some evidence of recent unsympathetic changes to the remaining fabric, but generally, *Frenchman Bay Whaling Station (ruin)* displays a high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by Irene Sauman, Historian and Shane Burke, Archaeologist, in October 2006, with amendments and/or additions by HCWA staff and the Register Committee.

13.1 DOCUMENTARY EVIDENCE

Frenchman Bay Whaling Station (ruin) comprises the site and remnants of a bay whaling station established in 1915 by the Norwegian owned Spermacet Whaling Company at Whalers Beach on Frenchman Bay, Albany. On the bluff above the beach are a 1936 former hostel/tearoom and 1960s caravan park, with associated outbuildings.

Frenchman Bay was chosen as the site of the Spermacet Company's operations because of an ample supply of fresh water and shelter from the prevailing weather. However, the limited nature of this shelter is shown by the number of wrecks in Frenchman Bay and the erosion of the beach during heavy storms.

The water supply at Frenchman Bay was first charted by Captain George Vancouver during his exploratory journey along the coast in September 1791. He watered his ships here at a freshwater spring, which is now marked by a memorial erected by the Albany Historical Society. American whalers who operated off the south coast in the 1800s also watered their ships at the spring, and in 1827 Louis de Sainson painted a meeting between local Aboriginal people and the sailors of the *Astrolabe* while the latter collected fresh water at Frenchman Bay. This painting, showing the saddle-backed rock at the tip of Waterbay Point, hangs in the Western Australian Art Gallery.

The site was marked as a watering place in the 1870s, although not officially gazetted as such until 1893, when it became Reserve 2295 as a watering place for travellers and stock.¹

In 1900, Captain Alex Armstrong and his partner, Waters, leased two acres of the Reserve at a cost of £1 per year for the purpose of providing water for the steamers that called at the Albany port. The water supply at the port at this time was not suitable for the boilers of the steamers, which required water uncontaminated with minerals. The Road Board considered it good sense to make the port more welcoming to all shipping, but it would only provide a lease for twelve months at a time with a six-month cancellation clause so as not to tie up the resource should it need it for its own proposed town water supply scheme.²

In 1902, Armstrong complained that the issue of twelve-monthly leases did not give him security of tenure to improve the site, which he needed to do in order to provide a sufficient supply, as some ships were leaving Albany without a full supply of water and this was giving the port a bad name. The terms of the lease do not appear to have been increased, but Armstrong undertook the improvement work anyway. A sketch map drawn by the Albany District Surveyor's Office in February 1912 shows that Armstrong had made an excavation and dammed the spring, and built a 200-foot jetty with pipes from the dam to the head of the jetty

¹ Department of Land Information (DLI), Reserves Index & Correspondence 29-3-1900, File for Reserve 2295, SROWA, ACC 541 Item 3172/1900.

² File for Reserve 2295, Item 3172/1900, op cit.

where lighters were loaded with water for transport to the Town Jetty. The improvements had cost between £500 and £600.³

The Road Board established its own town water supply in 1912, and Armstrong and Water's lease ended in December that year. The Road Board did not want competing supplies for the port as the provision of water and other facilities for shipping there was a major source of revenue.⁴

American whalers were operating in the Indian Ocean after 1789 and had visited King George Sound before the end of 1828.⁵ By 1837, two whaling companies were operating out of Western Australia: the Fremantle Whaling Company (established February 1837) based at Bather's Beach in Fremantle and the Perth Whaling Company on Carnac Island. The first whale was caught by their combined efforts on 10 June 1837:

This day will be memorable in the annals of the Colony for the killing of the first whale. At Perth, great firing was heard in the direction of Fremantle and it was supposed that a ship had arrived, but a messenger came in breathless haste to say that boats had struck a whale and were engaged with it. This was all that was known when I came away but everyone was running about elated with the news; I went to Fremantle on Thursday with the Governor and others, to examine a jetty and proposed tunnel which has been projected to be cut through a hill there giving an easy access from the beach to the main street. The plan is quite practicable and not very expensive for the distance is only eighty yards and the rock is soft limestone.⁶

The tunnel provided direct access to Fremantle for the sale of whale goods to the community. In that first year of operations, whaling generated revenue of £3,000 from 100 tons of oil and 5 tons of whalebone. By comparison, American whalers earned £30,000 that year from the same coastline.⁷ Large numbers of American whalers, as well as French, frequently operated close inshore, causing conflicts with local whalers. There were numerous incidents between the various companies. James Stirling was lobbied to ban the foreign vessels.⁸

Despite fluctuations in the price of whaling products, by 1844 they comprised 40% of the State's exports. In 1845 there were approximately 300 American, French, British and Australian whaling ships operating off the south coast with numerous shore stations.⁹ 1860 legislation prohibiting unlicensed whalers from operating in WA waters, although this appears to have had little impact. But after the discovery of petroleum oil in Pennsylvania in 1859, whale oil prices crashed. Subsequently, only a few vessels were still operating at the turn of the century.¹⁰

Around 1911, Norwegian whaling interests were looking to the southern hemisphere for possible whaling grounds due to heavy competition in the whaling

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- 3 Correspondence & sketch map, 17 February 1912, File for Reserve 2295, Item 3172/1900, op cit.
 - 4 Correspondence 19 March & 2 July 1912, File for Reserve 2295, Item 3172/1900, op cit; DLI File 2268/1914 for Reserve 2295.
 - 5 Nairn, John, *Western Australia's Tempestuous History* (Carlisle, Vic: Hesperion Press, 1986)
 - 6 Moore, George Fletcher, *Diary of Ten Years Eventful Life of an Early Settler in Western Australia* (1884, facsimile edition 1978, UWA Press)
 - 7 Battye, J.S., *Western Australia: A History from its Discovery to the Inauguration of the Commonwealth* (Oxford, 1924)
 - 8 Nairn, *Tempestuous History*
 - 9 www.whaleworld.org/About_Whale_World/Whaling_History/Whaling_in_Albany, consulted 22 Nov 2006
 - 10 Nairn, *Tempestuous History*

grounds in the northern hemisphere.¹¹ Western Australia already had a history of whaling, particularly along the south coast, and the State Government saw economic benefit in the development of the whaling industry. On 1 January 1912 it issued seven-year licences to the Cape Leeuwin Whaling Company (renamed the Spermacet Whaling Company in November 1913), the Western Australian Whaling Company (located at Point Cloates in the northwest) and the Fremantle Whaling Company, all of which had been established by the Norwegian firm of Christian Nielsen & Associates. Nielsen was represented in Western Australia by the Norwegian Vice-Consul at Fremantle, August Stang, whose brother Christian was associated with the Nielsen company. To ensure the best benefits for the State, the licences required the construction of shore stations. Whalers operating from factory ships were unable to use the whole carcass and only processed the whale for the oil, whereas a shore station allowed the manufacture of guano (fertiliser), cattle fodder and bonemeal from what remained.¹²

The Cape Leeuwin Whaling Company was licensed to operate along the south coast from Cape Leeuwin to Esperance, where it planned to hunt sperm whales. Sperm whales did not migrate and travelled in a loose and widely spread manner rather than the schools favoured by the humpback whales, which followed a seasonal migratory path along the coast. In the 1912 migratory season (winter), the ships of the Spermacet Co, *Vasco Da Gama*, *Fynd* and *Klem*, assisted the Western Australian Whaling Company in the northwest to hunt humpbacks. On 29 October 1912, the ships arrived at Albany and began hunting sperm whales. The Company took 205 sperm whales during the 1912-13 summer, which were processed on a factory ship. A piece of ambergris was also discovered, worth around £4,000. Ambergris is a solid, opaque, ash-coloured inflammable substance secreted by whales and used in the manufacture of perfumes.¹³

On 22 February 1913, the Norwegian vessel *Prince George* is reported as arriving at Albany with machinery for the whaling company. The Cape Leeuwin Company's ships assisted in the northwest hunt again in the winter of 1913, and in September six vessels arrive in Albany from Point Cloates: the steamers *Fynd*, *Hawk*, *Vasco de Gama*, *Clem* and *Eagle*, and the sailing ship *Commonwealth*.¹⁴ In October, the Company leased an area at Frenchman Bay for its shore station. The area was created as Plantagenet Location 3961 and did not include the site of the dam and lighter jetty, although the Company purchased the jetty from Armstrong & Waters.¹⁵ In November 1913, the Company's name was officially changed to the Spermacet Whaling Company.¹⁶

The Company hunted sperm whales again during the 1913-14 summer but not as successfully as the previous summer. *Frenchman Bay Whaling Station (ruin)* was built early in 1914 on the leased land at Frenchman Bay, at a cost of £20,000 to

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- 11 For overview of the establishment and operation of the whaling industry in WA by Norwegian companies see HCWA documentation for P04321 Norwegian Whaling Station (ruin), Point Cloates.
- 12 Puls, Colin, *Frenchman Bay whaling companies and Western Australian Government, 1911-19*, BA honours thesis, UWA, 1970, pp. 22-29.
- 13 Puls, Colin, p. 36, 107.
- 14 List of Norwegian vessels calling at Albany during the year 1913, Norwegian Vice-Consulate Albany, Record Book, 1913-1916, Battye private archives, MN1069, ACC 3314A.
- 15 Correspondence 17 July 1914 from Norwegian Vice-Consul at Fremantle, August Stang, DLI file 2268/1914 for Reserve 2295.
- 16 Puls, Colin, op cit, p. 30.

£28,000.¹⁷ The buildings were constructed from imported timber and bricks, but there was some local building material used. A report in the *Albany Advertiser* in February 1914 on the revival of the timber industry stated that a consignment of karri flooring measuring 6" by 1.5" and 6" by 1" had been delivered to Albany from a mill at Denmark to 'the order of the Whaling Co who are using it in their buildings at Frenchman Bay'.¹⁸

The following gives some idea on the operation and layout of the site:

Frenchman Bay soon changed in appearance. A great wooden platform was built on the beach; it stood on piles and projected over the water as a wide and low pier or wharf. At the seaward extremity this platform sloped down to the water, and extended a little below the surface at low tide, forming a slipway up which whales could be easily hauled. One side at the shore end of this flensing platform, a high two-storey building of wood contained the boilers in which bones and meat could be digested under steam pressure. At the other side another shed contained open boilers for the blubber. There were unglazed windows to the top floor of the big boiler house and up to these openings wooden shores acted as rails on which great metal buckets filled with chunks of whale-meat were hoisted. The contents were tipped through the windows in a manner most convenient for filling the boilers. At the landward end of the flensing platform, and facing the sea, there stood a very well equipped engineer's 'shop'. All sorts of repairs had to be carried out there; but two regular jobs were the fitting of new heads to the explosive harpoons, and making new parts for the engine of a launch which as regularly consumed them. In front of the engineer's 'shop' were steam winches for hauling the heavy whale carcasses up the oily slipway from the sea. As for the rest, there were wooden houses on the bushy slopes above the boiler houses for the shore gangs and for the crews when not on board the 'chasers'. By 1915, £28,000 had been spent on machinery, and much more on coal and stores.¹⁹

Les Douglas, son of Captain Clem Douglas and from a family of Albany seafarers, described *Frenchman Bay Whaling Station (ruin)* as he remembered it as a lad:

There were a large number of big sheds stretching along the beach front, behind a very long brick retaining wall. A long flight of concrete steps led to the top of the hill. At the time of writing, [1991] the steps are still there. The steps were always there. They would have been built for access when the factory was first built. The path went straight up to the first building on the hill which was the kitchen and mess room for all the workers. It was only about 100 ft from the top of the steps. The men's quarters comprised of 5 huge houses including the kitchen and mess room. The four other buildings were spaced about 20 ft apart, to the right. These were the sleeping quarters and contained many rooms. I remember clearly, each room was painted a different colour. Being young I had never seen so many colours and to this day every time I think of Frenchman's Bay Station I see this rainbow of rooms. All, the buildings were built of Norwegian pine, resting on long spruce pine timbers, supported on brick pillars about 2' off the ground.²⁰

There was a small jetty about 200' long with a large 'T' Platform at the end which provided a good working area. There was also a derrick for loading. A light gauge

¹⁷ Puls, Colin, op cit, pp. 37-38, 92-93; *Albany Advertiser*, 5 May 1920, p. 3. Figures vary among sources.

¹⁸ *Albany Advertiser*, 25 February 1914, p. 3.

¹⁹ Dakin, William J., *Whalemen adventurers: the story of whaling in Australian waters and other southern seas related thereto, from the days of sails to modern times*, Sydney, Angus & Robertson, 1938, p. 186.

²⁰ Marshall, Gordon de L., *Maritime Albany Remembered: Les Douglas et al*, Kalamunda, Tangee Pty Ltd, c.2001, p. 14; photograph on p. 12, numbered 3715B in the Battye Library collection, is purported to be of the Norwegian whaling station but the landscape indicates it depicts the Cheynes Beach station.

railway line ran down to the jetty and connected to all parts of the station. Hand operated trolleys were used.²¹

The ramp on the seaward end of the flensing deck went out into about ten-feet of water. It appeared to have been held in position by eight to ten large wooden crates about eight-foot square filled with pieces of granite. The slats of the crates were spaced about six inches apart, apparently to allow the underwater surge to pass through.²²

When the station was in operation, the whale chasers towed the whales to *Frenchman Bay Whaling Station (ruin)* where they were treated, but the presence of the factory ship *Rakirua* at various times indicates that some processing was still done on board ship. The oil was stored in large wooden barrels and shipped back to Norway. Other Norwegian ships arrived at Albany occasionally with a load of empty barrels for the station.²³

On 5 June 1914, a day before the Spermacet fleet left for Point Cloates once again, 19-year-old deckhand Christian Flagstad was killed when a one ton piece of whale flesh fell on him while he was collecting oil from the deck of the factory ship *Rakiura* in Frenchman Bay. The accident occurred as a result of the failure of a spruce pine toggle from which the whale flesh was hanging.²⁴

The Public Works Department Water Supply section and August Stang had considerable correspondence over several years regarding the use of the water from Reserve 2295 and how much *Frenchman Bay Whaling Station (ruin)* should pay for it. Stang maintained in July 1914 that they had used very little water from the spring to that time and had water on their own lease close to the surface, which they could tap into. He steadfastly refused to pay any amount the Department claimed as the figure had been arrived at by guesswork and anyway the Company was already paying a licence fee, which should include water. In November 1915, however, he offered to pay £10 for water use for the coming year. An inspection of the site in March 1916 found two wells on the Company's lease supplying most of its water needs.²⁵

During the operation of *Frenchman Bay Whaling Station (ruin)*, the beach became 'most unpleasant, with a thick coating of oil and large pieces of whale lying around, and a noisome smell'. There were no roads connecting Frenchman Bay to Albany and all supplies had to come in by sea. It must have been a lonely life for the whalers, described for the most part as 'clean young men'.²⁶ Most of their wages would have gone back to Norway, but the operation of the station and its vessels was a bonus to the local economy, with a reported £80,000 spent on provisions, coal and general supplies in 1915.²⁷

Two more deaths occurred at *Frenchman Bay Whaling Station (ruin)*. Chief Engineer Hans P. Kittelsen died at age 40 on 24 November 1915, but no cause of

21 Marshall, Gordon de L., op cit, p. 14.

22 Marshall, Gordon de L., op cit, p. 14; Garratt, Dena, *Frenchman Bay Whaling Station (ruin), Frenchman Bay: maritime site inspection report*, Fremantle, WA Maritime Museum, 1994, p. 6.

23 List of Norwegian vessels, op cit; Marshall, Gordon de L., op cit, p. 15.

24 Article from *Albany Advertiser* in the Norwegian Vice-Consulate Albany, Record Book, 1913-16, op cit.

25 Correspondence 17 July 1914 to 14 March 1916, DLI file 2268/1914 for Reserve 2295.

26 Marshall, Gordon de L., op cit, p. 12.

27 Heritage Today, *City of Albany Municipal Inventory*, 2000.

death is recorded, and 44-year-old steward Karl Adoff Nielsen drowned two weeks later on 4 December while swimming at Frenchman Bay.²⁸

On 15 December 1915, Stang informed the Government of Spermacet's decision to close down, caused by both a poor whaling season and the impact of World War I. The closure was gazetted on 29 December, but it was 3 March 1919 before Stang signed an indenture legally surrendering the Company's licence. The size of the sperm whale catch had made the undertaking economically unfeasible and the War created suspicions that the whalers were sympathisers of Germany. The boilers and equipment were relocated to the new station established that year at Point Cloates, but the buildings were left behind. During its period of operation from 1912 to December 1916, the Spermacet Company took 1,125 whales, producing 28,675 casks of oil (1.2 million gallons) and 730 tons of fertiliser. The value of the oil would have been £119,475 and the fertiliser £5,840. This return was about 30% of that achieved by the Point Cloates station in the same period.²⁹

Two Norwegians remained as caretakers at *Frenchman Bay Whaling Station (ruin)*, brothers Hurbert and Lans Larsen. They built a boat and used it to sail into Albany for their stores. In 1920, there were reports that the Spermacet Company had applied to renew its licence to operate the place, but the application was refused.³⁰

In the early 1930s, Point Cloates again began servicing Norwegian whaling ships, but World War II brought rapid closure. Expanded use of factory ships and support chasers also lessened the need for shore-based services. In July 1949, the Nor'-West Whaling Company reopened the station. In September 1950, the Australian Government commenced whaling itself as the Australian Whaling Commission in a station at Babbage Island near Carnarvon. The operation ran until 1955, when the station was sold to Nor'-West Whaling Company, which closed down its Point Cloates station and relocated to the Carnarvon site.³¹ The Albany Whaling Company operated at Frenchman's Bay from 1947 until 1950. It took only six humpback whales.

The Cheynes Beach Whaling Station commenced operations at Frenchman's Bay in 1952 until closure in 1978, the last such station to close in Australia. The last whale was taken on 20 November 1978. The operation had struggled commercially for several years because of increased fuel costs and dwindling stocks. Environmental lobbying pressure finally brought an end to a WA industry that had operated for more than 140 years.

In 1921, a big south-easterly gale that lasted many days created havoc along the Albany coastline, tearing up trees, washing away beaches and sinking boats at their moorings. It wrecked a large portion of *Frenchman Bay Whaling Station (ruin)*. The jetty was swept away leaving only the end standing. The brick retaining wall collapsed, allowing seas to undermine the foundation of buildings

28 Norwegian Vice-Consulate Albany, Record Book, 1913-16, op cit.

29 Puls, Colin, op cit, p. 92-95.

30 Marshall, Gordon de L., op cit, p. 15; *Albany Advertiser*, 5 May 1920, p. 3.

31 <http://www.whales.org.au/published/whalemen/forward.html>, consulted 22 November 2006

close to the wall and many fell, including the brick building on the right of the flensing deck.³²

In May 1923, tenders were called for purchase of what remained.

Tenders for all the buildings as they now stand. Soft wood, hard woods, kitchen ranges, trolleys and light rails at the Frenchman's Bay Whaling Station. Tenders are invited for the lot as it now lies at the station... Walter Wheeldon, Auctioneer and Sworn Valuer.³³

Members of the Douglas family, namely Clem, his father William and brother Bert successfully tendered to dismantle and salvage *Frenchman Bay Whaling Station (ruin)*. They camped at the site for periods over the ensuing five years while they did the work. Bert Douglas was Captain of the State Steamship *Eucla*, which made several trips into the Bay where its surfboats were used to take off material.

There was a vast quantity of wood around... There were also hundreds of wooden barrels, for whale oil, some in good condition which they were able to sell... The station's jetty was in such a poor state of repair that the Douglasses had to construct a makeshift one of their own to bring the wood off.³⁴

A lot of coal and whale manure was salvaged, which was sold in Albany. The whale manure was discovered by accident as it had been covered by sand over the years. Some of the salvaged timbers were used to build a lighter, with a single spruce pole providing a 35-foot mast. In 1998, some of the wood and rails were still in storage at the old Douglas homestead, 'Maitland' on the Upper Kalgan River. The younger family members, including Les Douglas and his cousin Lenny Powell searched for 'lost treasure'; the ambergris that was reputed to have been buried somewhere at the site. It was not found.³⁵

Frenchman Bay had been a favoured holiday venue since at least 1896, when the steam launch *Jessie* made several trips, ferrying people for a public picnic. On New Year's Day 1902, Armstrong & Sons ran two launches on excursions to the Bay. The operation of the whaling station curtailed the enjoyment of the place until 1920, when Armstrong & Waters took the Steamship *Awhina* on two round trips on 26 January.³⁶ Access was only possible by sea, but in the early 1930s, as more people owned motor vehicles, there was considerable local agitation for a road to the Bay. Letters were published in the *Albany Advertiser* and the Tourist and Information Bureau offered funds to build the road on a route they had planned and which the Road Board inspected. The Frenchman Bay Road was completed by December 1934 when it was reported that:

The road terminates a few yards from the flight of steps leading down to the old whaling station and the beach. Water is obtainable a few chain from the steps along the beach.³⁷

Mrs D. van Raalte applied to the Road Board for a licence to operate a tea kiosk near the beach during the summer months. It was to be of rustic design, and the licence appears to have been issued because a newspaper report on 7 January states that on New Year's Day there were a considerable numbers of people

32 Marshall, Gordon de L., op cit, p. 16.

33 *Albany Advertiser*, 12 May 1923, p. 2.

34 Marshall, Gordon de L., p. 12.

35 Marshall, Gordon de L., p. 14-16.

36 *Albany Advertiser*, 15 October 1896 p. 2; 3 January 1902, p. 3 & 21 January 1920, p. 2.

37 *Albany Advertiser*, 6 December 1934.

swimming and fishing, with a number of families having a camping holiday, while 'the convenience of visitors had been further added to by the establishment of a tea kiosk near the beach'.³⁸

In February 1935, the *Albany Advertiser's* editorial extolled the virtues of the beauty spot that was Frenchman Bay and which was so popular among holiday makers, but called for the provision of sanitary conveniences as soon as possible, by working bee if necessary.³⁹ Also at this same time, Reserve 2295 was cancelled and was included with the site of the former *Frenchman Bay Whaling Station (ruin)* in a new reserve, 21337 for the purpose of camping, which was vested in the Albany Road Board.⁴⁰ In July 1935, the Board called tenders for the leasing of an area of the Reserve, the tenders to include specifications for improvements to cater to tourists. Included in the lease was the right to draw water from the dam at Vancouver's Spring and to erect a pump and pipes for the purpose.⁴¹ A few months later the purpose of Reserve 21337 was altered to 'Recreation, Health & Pleasure Resort... somewhat similar to Yanchep'.⁴²

The first lease was issued to Herbert (Bert) Harding and in November 1936 it was reported that 'an enterprising young man is even now erecting a hostel and tea rooms'. Harding's 'Frenchman's Bay Hostel' offered accommodation for a limited number of guests at moderate tariff, and supplied dainty afternoon teas, cool drinks, ices, lunches, fruit, confectionary and other necessities for the perfect picnic. Fresh running water from the spring and shade from the abundant number of willow-leaved Peppermint Myrtles (*Agonis flexuosa*) in the area added to the appeal of the Bay. By 1938 a tennis court had been laid and a golf course was under construction.⁴³

Mr. Bert Harding's Frenchman's Bay Hostel, overlooking the Bay, is a splendid place to stay for a Bay holiday, or to have a meal if you prefer comfort to picnic simplicity and sand in the sandwiches. There is a tennis court for those who can't work off all their energy in hikes, bathing and the other pursuits for which the area is noted.⁴⁴

Bert Harding and his wife ran the Hostel for several years, until 1 January 1941, when the lease was transferred to Edgar Stubbs.⁴⁵ During the war years, Edgar and Evelyn Stubbs' four young grandchildren lived at the Hostel while their father Ches Stubbs served in the armed forces. Edgar Stubbs had a vegetable garden near the foot of the steps that did very well, probably because the area was well fertilized with whale manure. The hostel had five bedrooms and a communal bathroom. The main clientele during the war years were honeymooners, while defence force personnel posted to the signal station on Stony Hill, a few miles to the west, spent their leave at Frenchman Bay.⁴⁶

38 *Albany Advertiser*, 7 January 1935, p. 3

39 *Albany Advertiser*, 21 February 1935.

40 DLI Reserves Index, Reserves 2295 & 21337.

41 DLI file, Reserve 21337, SROWA, WAS 211 CONS 1641, Item 2182-1934-01RO, 1934-1981.

42 Correspondence 25 July & 13 October 1935 & map of the reserves and leased area, DLI file, Reserve 21337, Item 2182-1934-01RO, op cit.

43 *Albany Advertiser*, 16 November 1936, holiday issue, p. 17.

44 *Albany Advertiser*, 28 November, 1938, holiday issue, p. 36.

45 DLI file, Reserve 21337, Item 2182-1934-01RO. op cit.

46 Abbott, Pat (nee Stubbs), 'Life at Frenchman Bay in the Forties (The hostel, the whaling station)', In *Southside of Princess Royal Harbour: history and personal reminiscences*, compiled by the South Coast Progress Association (Inc), Albany, South Coast Progress Association, 1988, pp. 109-113.

In 1948, the lease of the Frenchman Bay Hostel was acquired by William, Kenneth and Alick Proudlove of Proudlove's Bus & Taxi Service. They had taken the lease on behalf of a relative, Harold Gibson, who was in England at the time, and on 21 January 1948, the lease was transferred to Gibson who, with his wife, ran the place for the next eighteen years. In 1959, the Gibsons leased a further five acres and established a caravan park.⁴⁷ The timber and tile ablution block is likely to have been added at this time to service the caravan sites.

On 1 October 1963, in the presence of 150 people and after much research to establish the location where Captain George Vancouver had watered his ships, *Discovery* and *Chatham* in September 1791, the Albany Historical Society erected a Notch Weir Memorial at the site of the spring at Frenchman Bay. Emu Point was previously thought to be the site of this event when Vancouver had claimed the western half of Australia for Britain.⁴⁸

The Memorial subsequently had to be removed by the Town Council after storm damage. Modern GPS technology later threw doubt on the location of Vancouver's Spring and the Memorial was not replaced immediately. It was later argued that GPS technology should not be applied to the calculations as Vancouver would have been using eighteenth century navigation technology and that had to be used to correctly locate his watering place. The Notch Weir Memorial was replaced at Frenchman Bay in March 2004.⁴⁹

Later lessees of the hostel and caravan park were Mr and Mrs W. Broughall (4 years), Mr and Mrs E. Freeman (5 years) and Mr and Mrs C. Cooper, who took over in December 1972. In 1971, the guesthouse section ceased to operate. Apart from the fact that sufficient trade was generated by the shop and tearoom, the guest facilities were in need of costly modernising.⁵⁰

The lease of the hostel and caravan park site included a clause whereby the Road Board could not allow a competing facility to offer refreshments within one mile of the place. When the Jaycee Community Foundation leased the former Cheynes Beach whaling station they were not able to develop the facilities into a tourist attraction as they were within a mile radius of the Frenchman Bay hostel. To solve this problem it was decided to create a freehold site for the hostel and caravan park and thus release the Shire from the lease and its restrictions. Plantagenet Location 7584 was created with an area of 3.26ha covering the hostel buildings and the caravan park, and the lessees at that time, Peter and Anne Bott, purchased the site, which they then leased out.⁵¹ In the 1990s a prefabricated house was added to the site and the hostel building was no longer occupied as for a residential function.

In 1994, *Frenchman Bay Whaling Station* was included in the Albany Maritime Heritage Survey and in 1995 it was included in the Port-Related Structures

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- 47 DLI file, Reserve 21337, Item 2182-1934-01RO, op cit; *Albany Advertiser*, 15 December 1972, p. 11.
- 48 *Albany Advertiser*, 1 October 1963, p. 1. A weir is a notch of regular form through which water flows, and the term is also applied to the structure containing such a notch.
- 49 'Site of notch weir memorial, Vancouver Spring, Frenchman Bay Albany', Albany Historical Society, Inc, *Members' Magazine*, May 1999, pp. 2-10; Plaque attached to the Memorial.
- 50 *Albany Advertiser*, 15 December 1972, p. 11.
- 51 DLI file, Reserve 21337, SROWA, WAS 211 CONS 6461, Item 2182-1934-02RO, 1981-1989; Certificate of Title, Vol. 1746 Fol. 534, 28 March 1986.

Survey.⁵² Vancouver Spring is entered on the City of Albany Municipal Heritage Inventory as an historic site.⁵³

Physical evidence indicates that there have been numerous additions to the 1936 hostel building over the years. The timber and tile ablution building shows evidence of having been used for another purpose and relocated to the site. The bunkhouse appears to date from the same period as the hostel. The garage is a typical c.1950s construction. Physical and historical evidence show that none of these buildings are remnants of *Frenchman Bay Whaling Station (ruin)*. The tennis court associated with the hostel is now covered by the public car park while it is not known where the golf course was located. The last tenant of the hostel building was undertaking renovations and had replaced the timber floor in the tearoom before his tenancy was terminated.

The beach at Frenchman Bay, as elsewhere, is subject to change due to the action of storms and tides. In 2004, a storm washed away several metres of Whalers Beach, further undermining and moving the brick and concrete remains of *Frenchman Bay Whaling Station (ruin)*.⁵⁴ This is confirmed by surveys of the site undertaken in the early 1990s, which indicate that more of the remnants were visible at that time.⁵⁵

In 2005, title to the freehold land on the bluff was transferred to Frenchman's Bay Pty Ltd, and the site has been further subdivided into two lots.⁵⁶ A development proposal for the site, put forward in 2006, involves the construction of a five-star resort with beach houses, holiday apartments, convention/function centre, shopping and office facilities. The plan proposes to retain the existing concrete steps from *Frenchman Bay Whaling Station (ruin)* and construct two more in similar style.⁵⁷

In 2006, the caravan park and all buildings on the bluff are vacant and the site has been secured by a cyclone wire fence. The Notch Weir Memorial remains in place, and Vancouver's Spring and the dam remain largely intact in the undergrowth. The ruins of *Frenchman Bay Whaling Station (ruin)* remain along the beach and the concrete steps continue to provide access between the beach and the bluff.

13.2 PHYSICAL EVIDENCE

Frenchman Bay Whaling Station (ruin) comprises objects of brick, stone and unreinforced concrete at Whalers Beach in Frenchman Bay on the south side of Waterbay Point, located on reserve land. On the bluff above the beach is a former caravan park with associated outbuildings on freehold land. The site is situated on the northern edge of Torndirrup National Park, approximately 22 kilometres from Albany off Frenchman Bay Road, which ends in a bituminised car park adjacent to the entrance to the former caravan park site. A 1980s cement

⁵² Wolfe, Adam, *The Albany Maritime Heritage Survey, 1627-1994*, December 1994, pp. 144-45; Cumming, D.A., et al, *Port related structures on the coast of Western Australia*, Fremantle, WA Maritime Museum, 1995.

⁵³ Heritage Today, *City of Albany Municipal Inventory*, 2000; HCWA database.

⁵⁴ Information provided on site by Ian Wilson, president of the South Coast Progress Association.

⁵⁵ Garratt, Dena, op cit; Wolfe, Adam, op cit, pp. 144-145.

⁵⁶ Certificates of Title, Vol. 1883 Fols. 426 & 427 for Lots 1 & 2 on Diagram 77269.

⁵⁷ Dykstra Planning, *Development application: Proposed five star resort, Frenchman Bay, Albany*, May 2006.

toilet block is located at the north end of the car park, and a road runs from the west corner down to Whalers Beach, about 17 metres below, where there is a parking area and picnic facilities with rotundas, barbeques and seating, and the remnant fabric of *Frenchman Bay Whaling Station (ruin)*.

The buildings associated with the former caravan park consist of the 1936 weatherboard and iron hostel building that has had numerous additions; a rectangular weatherboard and tile ablution building, likely relocated to the site c.1959; a rectangular weatherboard and iron bunkhouse of similar age to the hostel; a c.1950s timber-framed asbestos clad double garage with timber lean-to; and a 1990s pre-fabricated timber and iron residence. The buildings are located in a group at the eastern end of the site near the entrance from the car park, with rough concrete slabs marking the caravan sites to the west along the top of the bluff. The site has been landscaped. There is a levelled and grassed outdoor area associated with the tearoom of the former hostel overlooking the Bay. It is enclosed with a brick and pipe fence on the north and east sides. Other landscaping includes low stone retaining walls, bitumen and gravel roadways and parking areas, native bush and some exotic plantings, the main feature of which is a mature date palm (*Phoenix canariensis*) adjacent to the hostel.

Further west along the beach is a stone memorial marking the location of Vancouver's Spring, which has been dammed.

Ablution building

The ablution building was considered a possible remnant of *Frenchman Bay Whaling Station (ruin)*. It functioned as an ablution block with toilet and shower facilities for patrons of the caravan park west of the hostel. The building abuts the west wall of the hostel. It is single-storey and rectangular measuring 14.1m by 3.3m, with the longest margin on 65° magnetic. The foundations are cement with laterite inclusions, while the walls are 165mm and 170 mm (6½" and 7") wide weatherboards attached with bullet head wire nails to a timber cross frame. Some of the weatherboards are hand cut, but most are machine sawn. All timber framing is machine sawn. Samples of timber from the weatherboard and frame were examined with a microscope that showed the timber's cellular structure to be of the *Eucalyptus* genus, most likely jarrah (*Eucalyptus marginata*).

The roof comprises unbranded cement Marseille style tiles attached to jarrah battens nailed to jarrah rafters. The roof timbers do not contain old nail holes suggestive of roof alteration, but blanked off windows in the north and east walls (the later against the west wall of the tearoom) suggest the structure had a different purpose in the past.

There is no archaeological evidence supporting the claim that the ablution building is contemporary with *Frenchman Bay Whaling Station (ruin)*. The materials used are local (jarrah), and these are cut to Imperial measurements used in Australia from first settlement to 1972. The historical record states that the station's accommodation and kitchen facilities were of Norwegian pine, with bearers supported by brick stumps, but the survey encountered none of these features and the building had a concrete foundation.

The concrete in the foundation contained a small amount of laterite aggregate. Many of the beach-based sites also contained concrete, but none had laterite as an aggregate inclusion indicating that the ablution building and beach sites are not contemporary. In addition, the roof frame of the ablution building carries

cement tiles that came into vogue shortly after World War II. The roof's rafters and battens show no evidence for alterations such as old nails, nail holes or timber stains suggesting that the building's present roof is original comprising materials forty year's older than the whaling station's period of use.

Blanked off windows suggest a different original function for the building.

Whalers Beach archaeological sites

The purpose of this section is to describe the material remains of *Frenchman Bay Whaling Station (ruin)* in detail to determine the past function of the place and evaluate preservation. Some of the archaeological remains – in the form of granite and brick piers – have been used to provide seating in an area near the western boundary of the site. This practice needs to be discouraged.

The archaeological record is spread over a 150 metre line parallel with the beach. The survey comprised visually analysing, measuring and photographing the components comprising the place.

Site 1 is a raised plinth of brick and mortar stucco. It measures 762mm by 647mm, with the longest measurement on 65° magnetic. Four heavy corroded studs protrude from the top. A recessed trapezoid shape on the top of the plinth suggests that a structure with this shape rested on it at some stage.

Site 2 is a high-density (25 to 50 artefacts per square metre) artefact scatter of coal, clinker and iron fragments eroding from a 2m by 2m cup-shaped depression facing the beach. One piece of clear glass was also present. The artefacts are eroding from a lighter coloured, sandy matrix that sits on a natural unit of black, peaty soil.

Site 3 comprises a low-density (0.5 to 10 artefacts per square metre) scatter of metal and small whalebone fragments in a 1.5m by 2m wide clearing. A Peppermint (*Agonis flexuosa*) in the middle of this clearing has grown over time and brought the artefacts to the surface.

Site 4 comprises a medium density (11 to 49 artefacts per square metre) scatter of metal, small whalebone and coal fragments in a 2m by 2.5m wide clearing. Similar to Site 3, a Peppermint tree's growth has brought the artefacts to the surface.

Site 5 comprises a low-density scatter of metal fragments and one piece of melted glass in a 2.5m by 3m wide clearing. Similar to Sites 3 and 4, a Peppermint tree has brought the artefacts to the surface.

Site 6 is a high-density 1.5m by 3m wide scatter with large (12.5mm to 25mm) pieces of coal, clinker and coke. The coal is similar to eastern Australian Newcastle coal and is not from Collie Western Australia. The artefact scatter's density is high around the trunk of a peppermint tree, the growth of which has brought the material to the surface.

Site 7 is a high-density 1m by 2m wide scatter with large (12.5mm to 25mm) pieces of coal and clinker, similar to that at Site 6. A peppermint tree has again brought the material to the surface.

Site 8 is a fragmented section of collapsed brick wall or brick flooring. It has 17 courses with lime-based mortar used for cement. The machine pressed, unbranded bricks average 224mm long, 62mm deep and 110mm wide. The

feature is angular but 1.3 by 2 metres at its widest points. Tree growth has raised the southern end. Also associated with the site are fragmented clinker and one piece of creamware ceramic.

Site 9 is a circular, ground level feature with a 4m diameter. It contains brick (averaging 224mm long, 62mm deep and 110mm wide), hewn metamorphosed granitic stone and un-reinforced mortar sections. The mortar sections suggest that a round object, like a tank, sat on the feature. In the centre is a 915mm by 915mm square cement boss. Four heavily corroded studs protrude from the top of the boss, and a 390mm by 390mm square recess in the boss suggests a support function for this component. The boss is set at 65° and 155° magnetic. (Refer photo Site 9 & 10)

Site 10 is similar to site 9 but has a 4.4 m diameter. The boss and square recess is 915mm by 915mm and 390mm by 390mm respectively. Nearby but associated with this site were large (12.5mm to 25.4mm) coal fragments. (Refer photo Site 9 & 10)

Site 11 is a high-density 1.5m by 3m wide scatter with large (12.5mm to 25mm) pieces of coal, clinker, coke and corroded ferrous metal fragments. The coal is similar to eastern Australian Newcastle coal and is not from Collie.


Site 12 comprises a rectangular raised 1110 mm by 640 mm concrete and brick plinth with a flat 580mm by 640mm concrete section 100mm to the south. Four recesses for studs are in the corners of the raised section.

Site 13 is a 2870mm by 690mm concrete feature. It comprises two raised sections measuring 2870mm by 300mm and 2870mm by 190mm respectively, separated by a lowered area measuring 2870mm by 200mm.

Site 14 is a raised pad with 19.6m by 8m dimensions. A 0.5m high retaining wall of hewn metamorphosed granitic stone brick forms the pad's north face and sections of the east face. A 4m by 3m area in the pad's north-east corner contains a heavy density scatter of coal and clinker fragments but, the whole pad area contains light and medium density artefact scatters of mostly coal and clinker fragments. The feature's long axis is at 64.5° magnetic.

Site 15 is complex of five ground level brick and mortar features in a 3.5m by 3m area. Two of the features contain heavily corroded studs suggesting a support function.

Site 16 is a flight of 62 concrete steps from the top of the bluff to bottom. The steps are 1m wide. The feature's alignment is 146° magnetic.

Site 17 is a 15m by 25m area comprising brick and stone. The brick component consists of high-fired machine pressed red brick (averaging 224mm long, 62mm deep and 110mm wide) used in pier construction between 1.5m and 1.9m in length. No piers are in situ, with all collapsed. Three pier shapes exist: 'L' shaped measuring 800mm on the long arm and 400mm on the short;  shaped, and square measuring 370mm by 370mm. (Refer photos Site 17[1] & Site 17[2])

The metamorphosed granitic stone component of Site 17 consists of large angular blocks. Some blocks have flat faces on which brick has been mortared, while others have been split to form 1.8m by 0.3m long blocks placed end-on-end on the seaward side of the site.

Site 18 comprises four rectangular structures. The construction of two of these structures is the same, measuring 2270mm by 1740mm by 640mm, and consisting of brick outside sections and a stone and mortar centre. The outside brick sections have three, 1-inch diameter steel studs with eight threads to an inch protruding from them. The west face of the west feature has unpointed mortar, suggesting that the bricks were laid against an already existing wall or other feature that inhibited the pointing of the mortar. Between these two features is a square structure of granite and brick rubble held together with mortar. Distinct formwork patterning of either timber or corrugated iron is visible in the four sides of the structure and eight highly corroded steel studs protrude from the top surface. These three structures are tilted seaward about 10 degrees.

The last feature of Site 18 is a brick and mortar structure at ground level. The partial covering with sand dunes inhibited the taking of accurate measurements or determining the extent of the structure.

This archaeological record reflects only a small percentage of the physical remains of *Frenchman Bay Whaling Station (ruin)* when operating in the 1910s. However, despite cultural and natural disturbance, function can be determined for much of the archaeological remains. Site 17 is the slipway and flensing deck. Descriptions of the structure when it was in use suggest that many of the brick pier components were buried in sand, much of which was washed away with the 1921 storm.⁵⁸ The brick piers were cemented to metamorphosed granitic stone that formed the foundations of the slipway and flensing deck. The 1921 storm also exposed these.

Despite damage inflicted by natural causes and the apparent disorder of the site, the slipway and flensing deck's artefacts retain structural integrity to approximate deck dimensions and possibly what the structure looked like when in use. The piers' stone foundations have moved little (with two possibly in situ), suggesting that the slipway and flensing deck was supported by four lines of piers running at right angles from the beach. Stone appears to have been used as a retaining wall or minor breakwater on the east face of the slipway and flensing deck. The centre piers supporting the slipway and flensing deck were square or rectangular, but the 'L' and ■ shaped piers are in an approximate line 13 metres from the edge of the present car park. This line of irregular shaped piers suggests the edge of some part of the slipway and flensing deck, whether the extent of the beach before the 1921 storm or the location of the brick retaining wall mentioned in historical documents.⁵⁹ The site's archaeological remains suggest eight metres for the deck's approximate width.

The condition of sites 2 and 18 also indicate disturbance by storm surge and wind. Evidence preserved on the four brick and stone features indicate they were originally enclosed in a structure, while their 10 degree angle seaward indicates foundation undercutting. There is evidence suggesting that the four features have resided and slumped forward by as much as one metre. The shape of three of the four brick and stone features and the steel stud fittings attached suggest their use to support machinery, most likely a steam engine. Douglas' sketch of the station's layout shows a double-storey brick building west of the slipway and

⁵⁸ Garrett, Dena, *Frenchman Bay Whaling Station (ruin)*, *Frenchman Bay. Maritime Heritage Site Inspection Report*. Department of Maritime Archaeology, Western Australian Maritime Museum, number 82, 1994; Marshall, Gordon, *Maritime Albany Remembered* Les Douglas et al. 2001, p.16.

⁵⁹ Marshall, Gordon, op cit.

flensing deck, but it is unclear if this structure housed the components of Site 18.⁶⁰ There are no other brick remains near Site 18 indicative of a collapsed brick structure, and this supports Dakin's claim that the structure was of timber, rather than brick.⁶¹ The exposure of Site 2 is also due to natural disturbance.

Sites 9 and 10 are most likely foundations for digesters or cookers, and not tanks as previously suggested. These cylindrical steel objects that sometimes operated under steam pressure contained agitators that mixed the fluid containing whale meat and blubber allowing rapid processing. The concrete and steel bosses in the centre of the structures held the agitators' shafts.

Sites 2 to 7 and 11 are indicators for the nature of the subsurface archaeological remains. All are formed by natural processes: Site 2 by wind and wave action, and Site 3 to 7 and 11 by tree growth bringing material to the surface. These sites were not selected points where artefacts were deposited but instead suggest that the whole area has a subsurface layer of material from the whaling station period. Site 2 suggests that this layer is about 20 cm below the present ground level, with a high potential of containing small artefacts like coal, clinker, whalebone and iron fragments, but also larger structural objects.

Douglas' sketch suggests a barrel storage function for the west section of the site, and the retaining wall and level area of Site 14 suggests it was used for this function.⁶² Site 15 nearby probably has a related function, and may be associated with the narrow gauge tramway that took trolleys from the processing area to the barrel storage site, and finally to the loading jetty. The function of sites 1, 12 and 13 is unclear, while the bricks used for various site features do not appear Western Australian made. Western Australian pressed bricks from this period were frogged and carried a brand name, but none of the bricks on the site have these characteristics. Their origin is unknown.

The steps (site 16) are most likely from the whaling station period, but their location does not positively correlate with the historical record. Douglas places them west of the flensing deck and the structure containing digesters, but the results of the archaeological survey suggest that the deck and digesters are west of the steps.⁶³ A survey of the slope leading to the former tearooms failed to find any evidence for a previous flight of steps.

Vancouver Spring, Dam and Memorial

Vancouver Spring Memorial is located west along the beach, past the picnic facilities. A stone structure about one metre high and wide, it straddles the stream issuing from the spring. The base section is partially covered with sand.

A plaque attached to the horizontal section reads;

This spring was charted by
Captain George Vancouver
in September 1791
It has been used ever since as a source of fresh water by
explorers and seafarers, local residents and visitors
16 March 2004 City of Albany

⁶⁰ Marshall, Gordon, op cit.

⁶¹ Dakin, William, *Whalemen Adventures*, 1938, p.186.

⁶² Marshall, Gordon, op cit, p. 19

⁶³ Marshall, Gordon, op cit.

The course of the stream over the sand to the sea is clearly discernible. An overflow stream can be seen a little further back to the east. A full inspection of the dam that is built around the spring was attempted through the thick undergrowth, but a swarm of bees had established a hive in the pump house and one sting was sufficient warning to leave promptly. The following is a description of the dam when last inspected by Les Douglas about 1991.

The dam cannot be more than five or so metres above the level of the beach, but the thick undergrowth goes up to the water's edge, in some places overhanging it, with the result that one comes upon the dam suddenly, noticing it only when the ground becomes wet underfoot. The best method of approach appears to be up the creek bed, then veering to the right.

There is a small corrugated iron pumphouse on the left shoreward side, housing an engine... giving the name on the inside wall of Bates & Co. The stream discharges just next to this and again further along the dam... The dam itself is long and narrow... but it is difficult to see its full length owing to the overgrowth.

The stream enters at the north end, and there are two or more wooden barriers across the dam, and a pipe running across it from the pumphouse. The water is clear and fresh looking, and it is possible to see into it for a distance of six or eight feet, except that it is full of freshwater grass. The sides are lined with wood ...[that] looks only forty or so years old, but may be older. The pipes have been replaced... It was not possible to go to the other side of the dam ... owing to the undergrowth.⁶⁴

Frenchman Bay Whaling Station (ruin) is in poor condition with all elements beyond restorative opportunities. However, the archaeological signature of the place suggests rich subsurface material strata. Presently the subsurface archaeological remains are in a stable environment and unthreatened, but consultation should occur before proposed ground breaking activities are undertaken. The site presents interpretive opportunities, but it has a low degree of integrity. There is some evidence of recent unsympathetic changes to the remaining fabric, but generally, *Frenchman Bay Whaling Station (ruin)* displays a high degree of authenticity.

There was no physical evidence found on the bluff of *Frenchman Bay Whaling Station (ruin)* buildings that had been located in that area.

13.3 COMPARATIVE INFORMATION

Western Australia's south coast was the home of many 19th century shore-based whaling stations.⁶⁵ Owned mostly by Australian or British companies, the stations had moderate success using aspects of the natural environment like granite shelves as slipways and flensing decks and hills for lookout positions. However, many of the shore-based operations could not compete against the American pelagic whaling. Stations existed at Torbay between 1844 and c.1864, Barker Bay 1849 to c.1873, Two Peoples Bay between 1842 and 1844 and c.1870s, Cheynes Beach 1846 to 1877, Cape Richie 1870 to c.1872, Doubtful Island Bay 1836 to 1838 and 1863 to 1870s, Barrier Anchorage c.1871 and Thomas' Fishery near Cape Arid c.1862.⁶⁶

⁶⁴ Marshall, Gordon de L., op cit, p. 17; sketch plan of dam from 'Site of Notch Weir Memorial...', op cit, p. 7.

⁶⁵ Gibbs, Martin, *The Historical Archaeology of Shore Based Whaling in Western Australia 1836-1879*. PhD thesis, Centre for Archaeology, University of Western Australia, 1995.

⁶⁶ Gibbs, Martin, op cit; pp. 410-52.

After a lapse of about thirty years, *Frenchman Bay Whaling Station (ruin)* began a new era in Western Australian whaling. It was the first station established in the 20th century, and was dissimilar to the former 19th century stations because of technological advancements like steam-powered ships and station machinery and the use of explosive harpoons that increased industry effectiveness and safety. In addition, the station's operation by men from the efficient Norwegian whaling industry saw the introduction of whaling experience not seen previously.

Frenchman Bay Whaling Station (ruin) and *Norwegian Bay Whaling Station (ruin)* north of Point Cloates, Ningaloo, were the only two whaling stations operating in Western Australia before 1950. The Spermacet Whaling Company was associated with both stations and the layout of the stations was understandably similar. A photograph of Cheynes Beach station around 1952 shows that little had changed over forty years. Digesters are located at the flensing deck's end and the whale processing area and loading jetty linked by narrow gauge tramway. However, historical and archaeological evidence indicate that *Frenchman Bay Whaling Station (ruin)* was much smaller than the *Norwegian Bay Whaling Station (ruin)*, potentially containing two digesters compared with possibly 40 at Point Cloates.⁶⁷

13.4 KEY REFERENCES

Garratt, Dena, *Frenchman Bay Whaling Station (ruin)*, *Frenchman Bay: maritime site inspection report*, Fremantle, WA Maritime Museum, 1994.

Puls, Colin, *Frenchman Bay whaling companies and Western Australian Government, 1911-1919*, BA honours thesis, UWA, 1970.

13.5 FURTHER RESEARCH

Frenchman Bay Whaling Station (ruin) was one of only two whaling stations operating in Western Australia in the early 20th century. Its foreign ownership and operation is unusual in Western Australian history. Information about the number of whales caught and the financial turnover is available, but little is known about the Norwegian men who lived at the station. Further research on these men's lives working as whalers, harpoon smiths, cooks, carpenters and other professions is needed to add humanness to presently innate physical remains. In addition, the archaeological survey recorded sites associated only with whale processing, with no personal artefacts like smoking pipes, ceramics or glass found. The place needs further archaeological and historical research on these topics to enable a more complete and rounded picture of operation and life at Frenchman Bay.

Further research is required into the Aboriginal history of the place, both before and after European occupation.

⁶⁷ HCWA assessment documentation, P04231 Norwegian Bay Whaling Station (ruin).

ATTACHMENT 3 - The Heritage of Frenchman Bay

The Heritage of Frenchman Bay

**This document has been written to support the proposal to construct a
history trail in Frenchman bay**

**Frenchman Bay Association
March 2014**

Introduction

Producing an account

The historical accounts of Albany and its hinterland are mainly about the settlement and development of the township; the events that unfolded at Frenchman Bay are incidental. The historical record contains few photographs taken at Frenchman Bay. Further, the sites where key events occurred and the remnants of early settlement on the southern shores of King George Sound have not been adequately preserved and commemorated.

This is all the more surprising given the colorful early history in which French, Americans and Norwegians, along with the British, played a prominent part. As for the Indigenous landowners who watched the visitations and colonisation unfold, there is almost no reference to their life at Frenchman Bay.

This documents summarises some of the stories that could feature on a history trail situated above Whalers Beach.

Narrative

The narrative of the early history Frenchman Bay can be woven around several themes:

1. The Mineng people who had lived around King George Sound for thousands of years;
2. The arrival of the British, initially Vancouver in 1791, and later Flinders in 1801, who searched for a safe anchorage, a supply of timber, and above all a year-round supply of potable water;
3. The scientific expeditions of Baudin, Freycinet and Peron in 1803, and d'Urville in 1826;
4. The development of the settlement of Albany and its dependence on fresh water from Frenchman Bay during the 19th and early 20th centuries;
5. The Norwegian and Cheynes Beach whaling stations at Frenchmen Bay; and
6. Frenchman Bay as a destination for picnickers and tourists during the late 19th and 20th centuries.

What's visible from the escarpment above Whalers Beach

The bay, defined by present day Whalers Beach, was considered by Vancouver and Flinders to be part of King George Sound and not specifically named. It constitutes a section of Frenchman Bay that stretches from Mistaken Island in the north to the Flinders Peninsula and Bald Head in the south.

The two permanent springs that flow into the ocean at Whalers Beach are of particular importance in the narrative of Frenchman Bay. In addition, the islands and other geographic features visible from above Whalers Beach are the sites of important events that contribute to the narrative.

Frenchman Bay: Then and Now

Vancouver's Spring

A number of springs feed into Frenchman Bay but by far the most significant is Vancouver's Spring. The stream fed by this spring empties onto present day Whalers Beach. The spring was of enormous significance to ships visiting the west coast of New Holland because it produced a strong, permanent flow of good quality water. A second spring within a hundred metres of Vancouver's Spring also produced a steady flow and is documented by early European visitors.

Francois Peron, who visited Frenchman Bay in 1803 as a naturalist later wrote:

Discovered in 1791 by Vancouver, its {King George Sound} importance is made all the greater by the fact that along a stretch of coast at least equal in magnitude to the distance between Paris and St Petersburg, it is the only well-known part of New Holland where it is possible to obtain fresh water at all times. (p. 105, Voyage of Discovery to the Southern Lands)

Peron records that the knowledge of the spring saved the lives of the crew of the *Casuarina* that arrived from the Cape of Good Hope at the site with only a few bottles of water remaining.



Vancouver's Spring, 2014

Later in the 19th century the P & O shipping Company dammed the spring in order to supply vessels anchored in the Sound (see below).

Today, the existing signage needs to be replaced. The sign identifying the site as Vancouver's Spring has rusted at its base and toppled. The gully leading up the hill towards the dam is gradually being eroded because of unauthorised pedestrian traffic. However, the notch weir, to which a plaque was attached in 2004, remains in good condition.

Stream Bay

The French, led by Nicolas Baudin, named the bay into which the springs flowed Stream Bay (*Anse de l'Aiguade*) in 1803. The expedition's cartographer, Louis Freycinet, drew a

map showing the promontory now known as Waterbay Point, Mistaken, Island and the two streams running across the sandy beach to the ocean.



Freycinet's map of Stream Bay

Baudin set up tents on the beach, one for sick crewmembers and the other for his scientific team. He used the opportunity to wash the ship's linen and hammocks in the fresh water available from the springs.



Louis de Sainson's painting of water collection from the springs at Stream Bay (Whalers Beach)

In an 1826 expedition, Durmont d'Urville's visited Frenchman Bay. The expedition's artist, Louis de Sainson produced a painting from that expedition depicting crewmembers loading fresh water from the springs by bucket on to a small boat. The Frenchmen are shown conversing with Mineng people, one of whom is carrying a bucket of water.

Mistaken Island

Mistaken Island was initially named by Matthew Flinders who visited King George Sound in 1801, a year ahead of the Baudin expedition. Because of his imprisonment in Mauritius when attempting his return to England, Flinders' journal and maps were not published until 1814.

During his visit in 1803 Baudin, remarked that it was 'a reasonably pleasant island'. He instructed his astronomer to set up a camp on the island to undertake scientific observations and named it 'Observatory Island'. The scientists had to subsequently move from the island to the mainland after they accidentally set fire to it.

Mistaken Island was used as a make-shift quarantine station in the 1830s. A map of 1831 names the whole of Frenchman Bay 'Quarantine Bay'. Passengers on ships with contagious diseases such as smallpox were required to stay on the island in tents for two weeks. The quarantining of the Colonial Secretary, F. P. Barlee, (second only to the Governor in importance) and his wife on the island triggered some prompt improvements. The indignant Barlee used his office to ensure the construction of the permanent quarantine station near Point Possession in 1874.

Later the island acquired the name 'Rabbit Island' following the attempt by early settler George Cheyne to breed rabbits. Other livestock were introduced to the island. These ventures failed and the island resumed its earlier name 'Mistaken Island'.

Seal Island

Seal Island was named by Vancouver after observing a large colony of seals basking on its rocky shore. After reading Vancouver's account of the seals in the Sound, Captain Isaac Pendleton from New York visited the Sound in 1803 in search of 20,000 seal skins which he planned take to Canton on the China coast. Instead, when he arrived in King George Sound there was not the bonanza he was hoping for. He did have the good fortune of meeting Baudin who told him over dinner on the *Geographe* about the rich takings in Bass Strait. Pendleton, supplied with maps and directions by Baudin, set off for the Tasmanian coast. A year later, Islanders in the Pacific murdered Pendleton and six of his crew when they went ashore.

When Vancouver sailed from the Sound he left a bottle containing a parchment on the island. A decade later Flinders visited the island to look for the bottle but couldn't find it leading him to surmise that there had been other European visitors who had taken it.

It was assumed by Flinders that a British whaler, the *Elligood*, captained by Christopher Dixon, was the culprit. He visited the Sound in 1800, though died of scurvy along with nine of his crew on his way back to Britain.

Flinders in turn left a bottle and parchment on Seal Island. However, when Captain Phillip King landed on Seal Island in 1818 to look for Flinders' bottle and parchment he found instead the skeleton of a goat's head and the remains of a bottle that were left by Lieutenant Forster, captain of the *Emu* which visited in 1815.

When Lockyer visited the Island in 1827 he found the remains of a hut, presumably erected by a sealer – but no bottles.

Local Historian, Robert Stephens sardonically referred to Seal Island as the 'Isle of Lost Bottles'. What happened to the bottles, and the parchments they contained, remains a mystery.

Michaelmas Island

In the early 19th century a large number of whalers and sealers plied the southern coast of New Holland. Most were American though some were from New South Wales. Among them were boats with gangs of sealers who could be likened to pirates. Often Indigenous people bore the brunt of their criminal behaviour.

When Major Lockyer first visited King George Sound in the *Amity* in 1826 he noticed a large plume of smoke rising from Michaelmas Island. He assumed it was set by persons in distress or else for some inexplicable purpose and resolved to send a boat to investigate.

An officer from his ship subsequently returned from Michaelmas Island with four Indigenous men who had had been marooned there. That same day, one of Lockyer's crewmembers was fatally speared while bathing in Oyster Harbour. It was thought that the rescued men were among the party that murdered the crewmember.

The next day on an island inside Oyster Harbour, Lockyer found the body of an Indigenous man who, as it became clear, had been murdered over two months earlier by sealers.

Several days later Lockyer encountered a gang of sealers who had approached the *Amity* for provisions. It emerged that the men marooned had been taken to Michaelmas Island shortly after their tribesman had been murdered. Further, a woman and child had been abducted and were being held on Eclipse Island by a Samuel Bailey. Bailey was apprehended and the woman released. The child's parents could not be identified and she was later sent to Sydney. Lockyer did his best to restore relations between the Mineng and the settlers.

He wrote in his journal:

From the lawless manner in which these Sealers are ranging about requires some immediate measures to control them as, from what we know as also from what I have learnt from themselves, they are a complete set of Pirates going from Island to Island along the southern coast...a great scene of villainy is going on, where to use their own words there are a great many graves, a number of desperate Characters, runaway prisoners from Sydney and Van Dieman's Land.

Bald Head

Bald Head, dominating the entrance to King George Sound, was named by Vancouver in 1791. It was visible to the early seafarers 'from 14 leagues out to sea'. Bald Head has retained its name and is often referred to by early visitors to the Sound in their journals.

Vancouver appears to have hiked to the end of the peninsula (later named Flinders Peninsula) as he observed in his diary the existence on the peak of Bald Head of 'coral'. 'Nowhere have I seen it so high up and so perfect' he wrote in his journal. This seemed to him evidence that the over many years the sea level must have fallen.

The so-called 'coral' became a matter of fascination among the scientists who followed in Vancouver's footsteps. Later visitors thought it might be petrified tree parts. Peron, a naturalist on Baudin's expedition, thought that the coral or petrified trees sections were in fact 'more or less hard sandstone, which preserves merely the shape of the plants that served them as moulds'. They were not genuine fossils.

Further, contrary to Vancouver, the French read the evidence to show that the sandstone peninsula leading to Bald Head had risen from the floor of the sea. It must have been a 'peaceful upheaval', according to Peron.

Captain King, who visited King George Sound in 1818 and obtained specimens of the material, was of the view that the material was 'merely sand agglutinated by calcerous matter', essentially agreeing with Peron..

De Sainson and M, Gaimard, officers on d'Urville's *Astrolabe* wrote that on their visit to the top of Bald Head in 1826 they 'did not find the faintest trace of any coral'. However, they did report that the top of Bald Head was 'pocked with meteors', a rather dubious claim.

To end matters, none other than Charles Darwin in 1836 made the trip to inspect the limestone material and provided a detailed explanation in his account *The Voyage of the Beagle*. It was largely consistent with that of Peron and King.

Interest in fossils, geomorphology, and variations in fauna and flora produced the intellectual ferment that eventually led to Darwin's groundbreaking *The Origin of the Species* published in 1859.

The Flora and Fauna

Early English and French Botanists quickly recognised that King George Sound was a botanic 'hot spot' with a huge number of previously unclassified plants. Menzies, Brown and Leschenault are some of the most prominent botanists who visited. Some of the species growing above Whalers Beach bear the names of these early botanists.

The ships had qualified gardeners on board who assisted the botanists collect specimens though their special function was to pot and nurture exotic specimens that were then returned to Kew gardens in England or to Paris. Sometimes the officers had to vacate their cabins to make room for the large number of specimens collected.

A major destination was the chateau of Empress Josephine, the wife of Napoleon Bonaparte. Animals were also collected and shipped back to France where some ended up in the estate of Joesphine.

In addition to collections held by museums and displayed in government gardens there were also collections from New Holland in private hands. Botanists exchanged or bought specimens to build their collections.

The botanical work undertaken on these voyages was multifaceted. Botanists and gardeners collected specimens. Artists were employed to illustrate them. Botanists, not necessarily the collectors, scientifically named and classified the specimens. Gardeners propagated from seed or cuttings. There was an ambiguous grey area concerning the claims of those who collected and illustrated the plants to sell the items privately.

In later years, collectors in Europe employed locals to visit King George Sound and scour the countryside for new specimens and send the material back to them for classification.

The P & O Dam

Visiting whalers and sealers would have continued to use the water source during the 19th Century as it was available at any time of the day or night, all year round and free of charge. The early seafarers collected the fresh water from the stream as it entered the beach. It is thought that the first dam was constructed in the 1850s – amounting to little more than a excavation on the side of the escarpment immediately below the emergence of the spring.

Demand for fresh water was growing. The Peninsular & Orient Company (P & O) won the sea-mail contract across southern Australia with a scheduled stop in Albany. These vessels carried the mail for the whole of the Swan River Colony.



The P & O dam in the 1890s

In order to supply the water requirements of their fleet in Albany, P & O built a dam at Vancouver's Spring to form a reservoir with a reliable and sustainable supply from which lighters would fill up and take water to their steamers. The water from Vancouver's Spring was preferred because of its purity. They could not risk using water with mineral contaminants that would corrode the boilers.

From about 1890 to 1902, Albany's water supply was insufficient to meet shipping demands. As a result, in 1902 Armstrong and Sons acquired a lease for the section of Frenchman bay containing the old P & O Dam. They refurbished the dam and constructed a jetty at the beach. Water was pumped from the dam through a pipeline that ran to the end of the 200-foot jetty seen in the photo below. The water was stored on lighters (flat bottomed barges) that were towed to ships anchored in the Sound.

Armstrong was contracted to supply water from Vancouver Dam to the Town of Albany and various types of shipping (including Boer War transports) until about 1912. By 1914, Albany's water supply had improved and the Frenchman Bay supply was only occasionally required for shipping purposes.



The jetty and pipeline to water lighter circa 1902

From the 1920s to the 1980s, various tearooms, chalets and caravan parks were established above Whalers Beach and used the Vancouver Dam reservoir as a water supply - until a bore was drilled above the beach in the late 1980s. Even when the mains water supply from Albany reached the Goode Beach area in 1983, people still collected water from Vancouver Spring for various domestic purposes (including tea making), because of the good taste of the water compared to the scheme water!



The dam in 2014

Norwegian whaling station

In 1912, the Norwegian-owned Spermacet Whaling Company began hunting sperm whales on the southern coast. After taking over 200 whales in the first season they decided to set up a shore station. They began by purchasing the lighter jetty from Armstrong and Waters that contained the pipeline from the Vancouver Spring.

Today, little is left of the Norwegian Whaling Station. Further, there are few photographs and no contemporary accounts of life of the Norwegians who lived there. The workforce

was almost entirely Scandinavian and the station was not accessible by road. A rare photograph illustrates the substantial collection of buildings that were in use from 1914 to 1916 – a fact that is hard to imagine when visitors swim and barbeque at the site today. It is extraordinary that over such a short space of time the whole complex was obliterated. There are no plaques or signs explaining the significance of the site.

The station was constructed from imported timber and bricks as well as from some locally supplied karri planks. In the area above the beach that became the site of a hostel and later a caravan and camping site, there are no known archaeological remains of the whaling station of any significance. Yet this area contained the station's living quarters and consisted of five large houses, one of which served as a kitchen and mess. Four are visible in the photograph below.



The Norwegian Whaling Station circa 1915

The large two-storey building on the beachfront contained the boilers and was of timber construction. To the right is another two-storey building of brick that was used for engineering purposes.

The concrete stairs led from the processing buildings on the beachfront up the escarpment to the living quarters clearly seen in the photograph above. The stairs are the only intact remnant of the whaling station that survives today.



2014 photo showing the stairs leading from the work area to the living quarters

There are scattered remains of the brick embankment used to form a retaining wall on the lower level of the whaling station. This wall was intended to protect the buildings and equipment from high tides and erosion.

A massive storm in 1921 undermined the brick embankment causing a large brick building to topple. This storm, in effect, ended any plans for a renewal of the whaling station on that site. The site was subsequently sold for salvage,



The debris in the 1960s



The debris in 2014

Although the Norwegians dug two wells they also used Vancouver Dam for both a potable and process water supply – by installing a pipeline along the beach from the dam to various areas of the whaling station. Both the spring and the dam occur within the heritage-listed precinct of the Norwegian Whaling Station at Whalers Beach.

Wrecks

There are a number of wrecks in Frenchman Bay, usually hidden under sand. One that has a section visible on Whalers beach is the *Elvie*, a water lighter made locally from jarrah. The lighters were used to haul water or coal to ships anchored in the Bay.



Elvie wreck, Frenchman Bay 1922

The wrecks were usually plundered for usable pieces of timber and in most cases little is now visible. A section of the *Elvie* has been restored and is shown above Whalers Beach in the photo below. The rough-hewn ribs are clearly visible.



Restored section of *Elvie* showing jarrah planks and ribs

The Hostel and Tea Rooms

Frenchman Bay was a favoured picnic destination from the late nineteenth century. Access to Whalers Beach was possible only by boat and the enterprising Armstrong and Waters company ferried Albanians to the cove for one shilling per round trip. There were even moonlight cruises. Albany had a strong picnic culture and it was common for people to take large hampers and dress to the nines.

Tourism temporally ceased at Frenchman Bay following the establishment of the Norwegian whaling station - the oil slick and pieces of whale carcasses that floated about made sure of that. The odors were described as 'noisome'. Following the demise of the whaling station tourism resumed. In 1934, a road was built that connected Albany to Whalers Beach and a tea kiosk was established.

Recognising its potential for tourism, the local authority established a new reserve for the purpose of camping and issued a lease that allowed water from the dam at Vancouver Spring to be pumped to the site for tourist purposes. In 1936 a hostel was built on the site of the Norwegian kitchen and mess at the summit of the stairs from Whalers Beach.



The tea rooms and hostel in the 1940s

Today there is nothing left of the hostel except the date palm that once graced its entrance.



The site of the tea rooms and hostel , 2014

Frenchman Bay Association: March 2014

ATTACHMENT 4 - Indicative Cost Estimate

INDICATIVE COST ESTIMATE

FRENCHMAN BAY TRAIL PROJECT

H + H ARCHITECTS

CHRIS O'KEEFE CONSTRUCTION COST CONSULTANT

Jun-15

FRENCHMAN BAY TRAIL PROJECT**Ref : A794****INDICATIVE COST ESTIMATE****9/06/2015****PROJECT COST SUMMARY**

Total Cost from Summary	\$ 251,000
Design/Contract Contingency	\$ 38,000
Professional Fees	\$ 51,000
Subtotal	\$ 340,000
GST	\$ 34,000
TOTAL INDICATIVE COST ESTIMATE	\$ 374,000

Exclusions :

This estimate excludes the following costs :

Cost escalation to date of construction

Full Estimate Summary

Job Name : A794 - FRENCHMANJob Description

Client's Name:

FRENCHMAN BAY TRAIL PROJECT

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
	Roads, Footpaths, Paved Areas	51.75		129,900		129,900
	Outbuildings and Covered Ways	37.85		95,000		95,000
	Landscaping and Improvements	10.40		26,100		26,100
		100.00		251,000		251,000
<hr/>						
Final Total : \$						251,000

Trade Breakup

Job Name : A794 - FRENCHMANJob Description

Client's Name:

FRENCHMAN BAY TRAIL PROJECT

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
<i>Trade : 1 <u>Roads, Footpaths, Paved Areas</u></i>						
1	1.5m wide limestone trail	1,000.00	m	70.00		70,000.00
2	Timber decked viewing platform, access path & steps	64.00	m2	350.00		22,400.00
3	Timber stairs adjacent to existing tearooms	15.00	m	2,500.00		37,500.00
<u>Roads, Footpaths, Paved Areas</u>						Total : 129,900.00
<i>Trade : 2 <u>Outbuildings and Covered Ways</u></i>						
1	Trail head interpretation structure & seating		Item			45,000.00
2	Information node interpretative structure		Item			50,000.00
<u>Outbuildings and Covered Ways</u>						Total : 95,000.00
<i>Trade : 3 <u>Landscaping and Improvements</u></i>						
1	Vancouver spring barrier		Item			3,000.00
2	Relocate existing elements		Item			3,100.00
3	Interpretive panels		Item			20,000.00
<u>Landscaping and Improvements</u>						Total : 26,100.00

ATTACHMENT 5 - Interpretative Information

The Heritage of Frenchman Bay

Note: The text below will need to be abbreviated and simplified if we decide to use it. We will need to decide whether to employ someone to do this after we have agreed on the level of detail and style of presentation required. Max Angus

Nodes 4 and 8: The Frenchman Bay Story

Frenchman Bay, as this location is now named, has a surprisingly rich history.

The Noongar people have lived around King George Sound for many thousands of years. They observed the comings and goings of the first Europeans to visit King George Sound. *(Is there a Noongar word for the Sound?)* Though initial contacts with sailors from the British and French navies were friendly, their encounters with the sealers and whalers were sometimes bloody and abusive.

The arrival of the British, first Captain George Vancouver in 1791, and a decade later Commander Matthew Flinders in 1801 put King George Sound on the map. They found a safe anchorage, timber for repairs and fuel, and, above all, a year-round supply of potable water.

The French followed shortly after, launching a large scientific expedition, led by Commander Nicolas Baudin, assisted by his head-strong lieutenant Louis Freycinet and scientist Francois Peron in 1803. Captain Jules d'Urville followed in 1826. They were attracted by the certainty of fresh water provided by the spring that has flowed continuously to this day. In later years this section of King George Sound became known as Frenchman Bay and the beach onto which the stream flowed is now known as Whalers Beach.

Botanists and naturalists on board the British and French vessels were astounded by the diversity of the fauna and flora. Hundreds of specimens were collected and sent back to Europe.

The settlement of Albany developed during the 19th and early 20th centuries was also dependent on fresh water from the same spring that had supplied the early British and French sailors. The need for the spring water increased as sailing ships were replaced by steam ships. Their boilers required pure water. A dam was built in the 1860s. Pipes carried the water along a jetty to lighters that carted the water to waiting ships.

In 1914 a Norwegian company established a large whaling station at Frenchmen Bay at this very site. It closed after a few years and little now remains.

Frenchman Bay was a destination for picnickers and tourists during the late 19th and 20th century. There was no access by road until the 1930s. In the second half of the 20th century a hostel was built on this site.

You can find out more about the history of Frenchman Bay from the 11 plaques that are situated at intervals along this circular trail that runs along the top of the scarp and then returns along the beach.

It will take about 40 minutes to walk the trail.

Nodes 4 and 8: Map showing the various features of King George Sound and an outline of the trail.

Node 8: Bald Head

Bald Head, dominating the entrance to King George Sound, was named by Vancouver in 1791. It was visible to the early seafarers 'from 14 leagues out to sea'. Bald Head has retained its name and is often referred to by early visitors to the Sound in their journals.

Vancouver appears to have hiked to the end of the peninsula as he observed in his journal the existence of 'coral' on the peak of Bald Head. 'Nowhere have I seen it so high up and so perfect' he wrote in his journal. This seemed to him evidence that the over many years the sea level must have fallen.

The so-called 'coral' became a matter of fascination among the scientists who followed in Vancouver's footsteps. Later visitors thought it might be petrified tree parts. Peron, a naturalist on Baudin's expedition thought that the coral or petrified trees sections were in fact 'more or less hard sandstone, which preserves merely the shape of the plants that served them as moulds'. They were not genuine fossils.

Further, contrary to Vancouver, the French read the evidence to show that the Bald Head peninsula had risen from the floor of the sea. It must have been a peaceful upheaval, according to Peron.

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De Sainson and M, Gaimard, officers on d'Urville's *Astrolabe* wrote that on their visit to the top of Bald Head in 1826 they 'did not find the faintest trace of any coral'. However, they did report that the top of Bald Head was 'pocked with meteors', a rather dubious claim.

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Interest in fossils, geomorphology, and variations in fauna and flora produced the intellectual ferment that eventually led to Darwin's groundbreaking *The Origin of the Species* published in 1859.

Node 7: The Hostel and Tea Rooms

Frenchman bay was a favoured picnic destination from the late nineteenth century. Access to Whalers Beach was possible only by boat and the enterprising Armstrong and Waters company ferried Albanians to the cove for one shilling per round trip. There were even moonlight cruises. Albany had a strong picnic culture and it was common for people to take large hampers and dress to the nines.

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Recognising its potential for tourism, the local authority established a new reserve for the purpose of camping and issued a lease that allowed water from the dam at Vancouver Spring to be pumped to the site for tourist purposes. In 1936 a hostel was built on the site of the Norwegian kitchen and mess at the summit of the stairs from Whalers Beach.

Today there is nothing left of the hostel except the date palm that once graced its entrance.

Node 9: Norwegian whaling station

In 1912 the Norwegian-owned Spermacet Whaling Company began hunting sperm whales on the southern coast. After taking over 200 whales in the first season they decided to set up a shore station. They began by purchasing the lighter jetty from Armstrong and Waters that contained the pipeline from the Vancouver Spring.

Today, little is left of the Norwegian Whaling Station. Further, there are few photographs and no contemporary accounts of life of the Norwegians who lived there. The workforce was almost entirely Scandinavian and the station was not accessible by road. A photograph illustrates the substantial collection of buildings that were in use from 1914 to 1916 – a fact that is hard to imagine when visitors swim and barbeque at the site today. It is extraordinary that over such a short space of time the whole complex was obliterated. There are no plaques or signs explaining the significance of the site.

The station was constructed from imported timber and bricks as well as from some locally supplied karri planks. In the area above the beach that became the site of a hostel and later a caravan and camping site, there are no known archaeological remains of the whaling station of any significance. Yet it contained the station's living quarters and consisted of five large houses, one of which served as a kitchen and mess. Four are visible in the photograph below.

The large two-storey building on the beachfront contained the boilers and was of timber construction. To the right is another two-storey building of brick that was used for engineering purposes.

The concrete stairs led from the processing buildings on the beachfront up the escarpment to the living quarters clearly seen in the photograph above. The stairs are the only intact remnant of the whaling station that survives today.

The remains of the brick embankment used form a retaining wall on the lower level of the whaling station. It was intended to protect the buildings and equipment from high tides and erosion.

A massive storm in 1921 undermined the brick embankment causing a large brick building to topple. This storm, in effect, ended any plans for a renewal of the whaling station on that site. The site was subsequently sold for salvage,

Node10: The stream Vancouver's Spring

A number of springs feed into Frenchman Bay but by far the most significant is Vancouver's Spring. The stream fed by this spring empties onto present day Whalers Beach. The spring was of enormous significance to ships visiting to the west coast of New Holland because it produced a regular flow of good quality water all year round. A

second spring within a hundred metres of Vancouver's Spring also produced a steady flow and is documented by early European visitors.

Francois Peron, who visited Frenchman Bay in 1803 as a naturalist later wrote:

Discovered in 1791 by Vancouver, its {King George Sound} importance is made all the greater by the fact that along a stretch of coast at least equal in magnitude to the distance between Paris and St Petersburg, it is the only well-known part of New Holland where it is possible to obtain fresh water at all times. (p. 105, Voyage of Discovery to the Southern Lands)

Peron records that the knowledge of the spring saved the lives of the crew of the *Casuarina*. The boat had broken its rudder and the voyage had taken much longer than expected. The crew headed straight for King George Sound and reached the spring with only a few bottles of water remaining.

Hydrology and Hydrogeology of the Spring

The catchment area for the spring is predominantly to the west and northwest in the granite hills above the Whalers Beach. Rainfall and surface runoff infiltrate the soil and sand covering the granite hills and form groundwater flow, which moves along the top the low permeability granite into the sand forming the escarpment above Whalers Beach. Within the spring catchment, all groundwater flow reports to the spring area and discharges near the base of the escarpment above Whalers Beach.

The size of this catchment and the annual amount of rainfall-runoff infiltration determines the sustainable yield of Vancouver Spring. The rate of flow from the spring is seasonal and depends on the rainfall pattern. The smallest flows occur at the end of summer (April), when groundwater levels are declining due to the lack of rainfall over summer. The largest flows occur at the end of winter (October), when groundwater levels are higher due to infiltrating rainfall over winter. There is enough rainfall-runoff recharge over winter to increase groundwater storage in the catchment and this storage sustains groundwater flows to the spring during summer.

The spring has probably been flowing for thousands of years and therefore the balance of catchment size and rainfall-runoff infiltration volumes has resulted in a sustainable, continuous flow from the spring, which has served historical maritime expeditions and Albany well.

Stream Bay

The French named the bay into which the springs flowed Stream Bay ((*Anse de l'Aiguade*) in 1803. The expedition's cartographer, Louis Freycinet, drew a map showing the promontory now known as Waterbay Point, Mistaken Island and the two streams running across the sandy beach to the ocean. He explains in an annotation that the long beach to the north, now known as Goode Beach, is not drawn to scale.

Baudin set up tents on the beach, one for sick crewmembers and the other for his scientific team. He used the opportunity to wash the ship's linen and hammocks in the fresh water available from the springs.

In an 1826 expedition, Durmont d'Urville's visited Frenchman Bay. The expedition's artist, Louis de Sainson produced a painting from that expedition depicting crewmembers loading fresh water from the springs by bucket on to a small boat. The

Frenchmen are shown conversing with Noongar people, one of whom is carrying a bucket of water.

Node 3 (Below lookout showing a panoramic view of the Sound)

Mistaken Island

Mistaken Island was initially named by Matthew Flinders who visited King George Sound in 1801, a year ahead of the Baudin expedition. Because of his imprisonment in Mauritius when attempting his return to England, Flinders' journal and maps were not published until 1814.

During his visit in 1803 Baudin, remarked that it was 'a reasonably pleasant island'. He instructed his astronomer to set up a camp on the island to undertake scientific observations and named it 'Observatory Island'. The scientists had to subsequently move from the island to the mainland after they accidentally set fire to it.

Mistaken Island was used as a make-shift quarantine station in the 1830s. A map of 1831 names the whole of Frenchman Bay 'Quarantine Bay'. Passengers on ships with contagious diseases such as smallpox were required to stay on the island in tents for two weeks. The quarantining of the Colonial Secretary, F. P. Barlee and his wife on the island triggered some prompt improvements. Barlee used his office to ensure the construction of the permanent quarantine station near Point Possession in 1874

Later the island acquired the name Rabbit Island following the attempt by early settler George Cheyne to breed rabbits. Other livestock were introduced to the island. These ventures failed and the island resumed its earlier name 'Mistaken Island'.

Seal Island

Seal Island was named by Vancouver after observing a large colony of seals basking on its rocky shore. After reading Vancouver's account of the seals in the Sound, Captain Isaac Pendleton from New York visited the Sound in 1803 in search of 20,000 seal skins which he planned take to Canton on the China coast. Instead, when he arrived in King George Sound there was not the bonanza he was hoping for. He did have the good fortune of meeting Baudin who told him over dinner on the *Geographe* about the rich takings in Bass Strait. Pendleton, supplied with maps and directions by Baudin, set off for the Tasmanian coast. A year later, Islanders in the Pacific murdered Pendleton and six of his crew when they went ashore.

When Vancouver sailed from the Sound he left a bottle containing a parchment on the island. A decade later Flinders visited the island to look for the bottle but couldn't find it leading him to surmise that there had been other European visitors who had taken it.

It was assumed by Flinders that a British whaler, the *Elligood*, captained by Christopher Dixon, was the culprit. He visited the Sound in 1800, though died of scurvy along with nine of his crew on his way back to Britain.

Flinders in turn left a bottle and parchment on Seal Island. However, when Captain Phillip King landed on Seal Island in 1818 to look for Flinders' bottle and parchment he found instead the skeleton of a goat's head and the remains of a bottle that were left by Lieutenant Forster, captain of the *Emu* which visited in 1815.

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Local Historian, Robert Stephens sardonically referred to Seal Island as the 'Isle of Lost Bottles'. What happened to the bottles, and the parchments they contained, remains a mystery.

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An officer from his ship subsequently returned from Michaelmas Island with four Noongar men who had had been marooned there. That same day, one of Lockyer's crewmembers was fatally speared while bathing in Oyster Harbour. It was thought that the rescued men were among the party that murdered the crewmember.

The next day on an island inside Oyster Harbour, Lockyer found the body of a Noongar man who, as it became clear, had been murdered over two months earlier by sealers.

Several days later Lockyer encountered a gang of sealers who had approached the *Amity* for provisions. It emerged that the marooned Noongar men had been taken to Michaelmas Island shortly after their tribesman had been murdered. Further, a woman and child had been abducted and were being held on Eclipse Island by a Samuel Bailey. Bailey was apprehended and the woman released. The child's parents could not be identified and she was later sent to Sydney. Lockyer did his best to restore relations between the Noongar and the settlers.

He wrote in his journal:

From the lawless manner in which these Sealers are ranging about requires some immediate measures to control them as, from what we know as also from what I have learnt from themselves, they are a complete set of Pirates going from Island to Island along the southern coast...a great scene of villainy is going on, where to use their own words there are a great many graves, a number of desperate Characters, runaway prisoners from Sydney and Van Dieman's Land.

Node 3

The Flora and Fauna

Early English and French Botanists quickly recognised that King George Sound was a botanic 'hot spot' with a huge number of previously unclassified plants. Menzies, Brown and Leschenault are some of the most prominent botanists who visited. Some of the species growing above Whalers Beach bear the names of these early botanists.

The ships had qualified gardeners on board who assisted the botanists collect specimens though their special function was to pot and nurture exotic specimens that were then returned to Kew gardens in England or to Paris. Often the officers had to vacate their cabins to make room for the large number of specimens collected.

A major destination was the chateau of Empress Josephine, the wife of Napoleon Bonaparte. Animals were also collected and shipped back to France where some ended up in the estate of Josephine.

In addition to collections held by museums and government gardens collections from New Holland were in private hands. There was a flourishing market for rare plants. Botanists exchanged or bought specimens to build their collections.

The botanical work undertaken on these voyages was multifaceted. Botanists and gardeners collected specimens. Artists were employed to illustrate them. Botanists, not necessarily the collectors, scientifically named and classified the specimens. Gardeners propagated from seed or cuttings. There was an ambiguous grey area concerning the claims of those who collected and illustrated the plants to sell the items privately.

In later years, collectors in Europe employed locals to visit King George Sound and scour the countryside for new specimens and send the material back to them for classification.

Node 6: Vancouver Dam Site

The P & O Dam

Visiting whalers and sealers would have continued to use the water source during the 19th Century as it was available at any time of the day or night, all year round and free of charge. The early seafarers collected the fresh water from the stream as it entered the beach. It is thought that the first dam was constructed in the 1850s – amounting to little more than an excavation on the side of the escarpment immediately below the emergence of the spring.

Demand for fresh water was growing. The Peninsular & Orient Company (P & O) won the sea-mail contract across southern Australia.

In order to supply the water requirements of their fleet, P & O built a dam at Vancouver Spring to form a reservoir with a reliable and sustainable supply from which lighters would fill up and take water to their steamers. The water from Vancouver's Spring was preferred because of its purity. They could not risk using water with mineral contaminants that would corrode the boilers.

From about 1890 to 1902, Albany's water supply was insufficient to meet shipping demands. As a result, in 1902 Armstrong and Sons acquired a lease for the section of Frenchman bay containing the old P & O Dam. They refurbished the dam and constructed a jetty at the beach. Water was pumped from the dam through a pipeline that ran to the end of the 200-foot jetty seen in the photo below.

Armstrong was contracted to supply water from Vancouver Dam to the Town of Albany and various types of shipping (including Boer War transports) until about 1912. By 1914, Albany's water supply had improved and the Frenchman Bay supply was only occasionally required for shipping purposes.

Although the Norwegians dug two wells they also used Vancouver Dam for both a potable and process water supply – by installing a pipeline along the beach from the dam to various areas of the whaling station.

From the 1920s to the 1980s, various tearooms; chalets; and caravan parks were established above Whalers Beach and used the Vancouver Dam reservoir as a water supply until a bore was drilled above the beach in the late 1980s. Even when the mains water supply from Albany reached the Goode Beach area in 1983, people still collected water from Vancouver Spring for

various domestic purposes (including tea making), because of the good taste of the water compared to the scheme water!

Node 11: Wrecks

There are a number of wrecks in Frenchman bay, usually hidden under sand. One that has a section visible on Whalers beach is the *Elvie*, a water-lighter made locally from jarrah. The lighters were used to haul water or coal to ships anchored in the Bay.

The wrecks were usually salvaged for usable pieces of timber and so in most cases little is now visible. A section of the *Elvie* has been restored and is shown above Whalers Beach in the photo below. The rough-hewn ribs are clearly visible.

Another wreck, the *Rip* rests in the waters below, mostly buried by sand. An outline of the *Rip* can sometimes be seen close to shore 100 metres south of the *Elvie*.

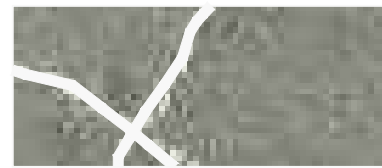


NEW INFORMATION NODE WITH INTERPRETIVE STRUCTURE & SEATING - VIEWING POINT AND A PLACE TO REFLECT

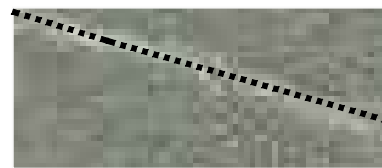


TIMBER DECKED VIEWING PLATFORM WITH TIMBER SEAT AND A TIMBER BOARD WALK FORMING THE TRANSITION TO NEW LIMESTONE PATHWAY

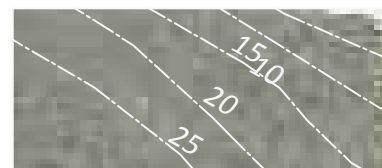
LEGEND



EXISTING WALK TRAILS



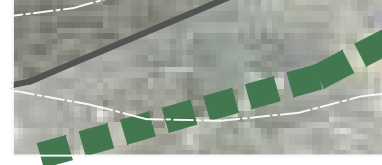
EXISTING POWER LINE



EXISTING CONTOUR LINES



PROPOSED FRENCHMAN BAY TRAIL ON PUBLIC LAND: 1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED FRENCHMAN BAY TRAIL ON PRIVATE LAND: 1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



PROPOSED STEPS ADJACENT TO EXISTING HERITAGE STEPS: 1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



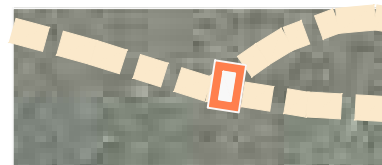
PROPOSED FRENCHMAN BAY TRAIL: BEACH



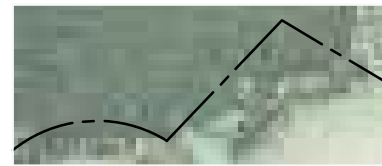
PROPOSED LOCATION OF NEW TRAIL HEAD, TRAIL INFORMATION POINT OR INFORMATION NODE WITH INTERPRETIVE STRUCTURE



PROPOSED LOCATION FOR INFORMATION NODES WITH 'INTERPRETIVE SIGNAGE' (INDICATIVE LAYOUT)



PROPOSED LOCATION FOR 'DIRECTIVE SIGNAGE'. DIRECTIVE SIGNAGE IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM A DISTINGUISHED SECTION IN NEW LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)



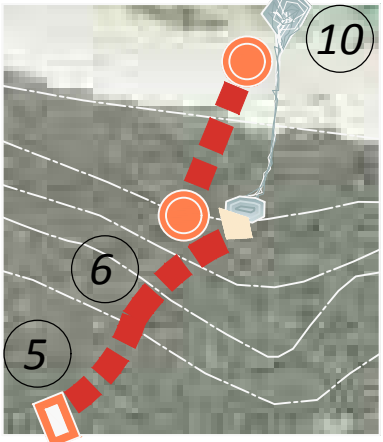
FRENCHMAN BAY WHALING STATION (RUIN) HERITAGE REGISTER PLACE 16612



Proposed Concept Plan - Draft

WITH INDICATIVE STRUCTURES, MATERIALS AND INTERPRETATION OPTIONS

SCALE 1:1500 @ A1



PROPOSED PATH & STEPS TO VANCOUVER SPRING & VANCOUVER DAM: 1.5m WIDE PEDESTRIAN LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)

INDICATIVE INTERPRETATION OPTIONS



SCULPTURES



STRUCTURES



WALLS & SCREENS



FLOORS



PANELS

TRAIL HEAD - INTERPRETATION



TRAIL HEAD - INTERPRETATION STRUCTURE & SEATING

'DIRECTIVE SIGNAGE'



'DIRECTIVE SIGNAGE' IN NEW PATH WAY CAST IN LIME STONE COLOURED CONCRETE TO FORM DISTINGUISHED SECTION IN NEW LIMESTONE WALK TRAIL (INDICATIVE LAYOUT)

PATHWAYS



STABILISED LIME STONE WALK TRAILS

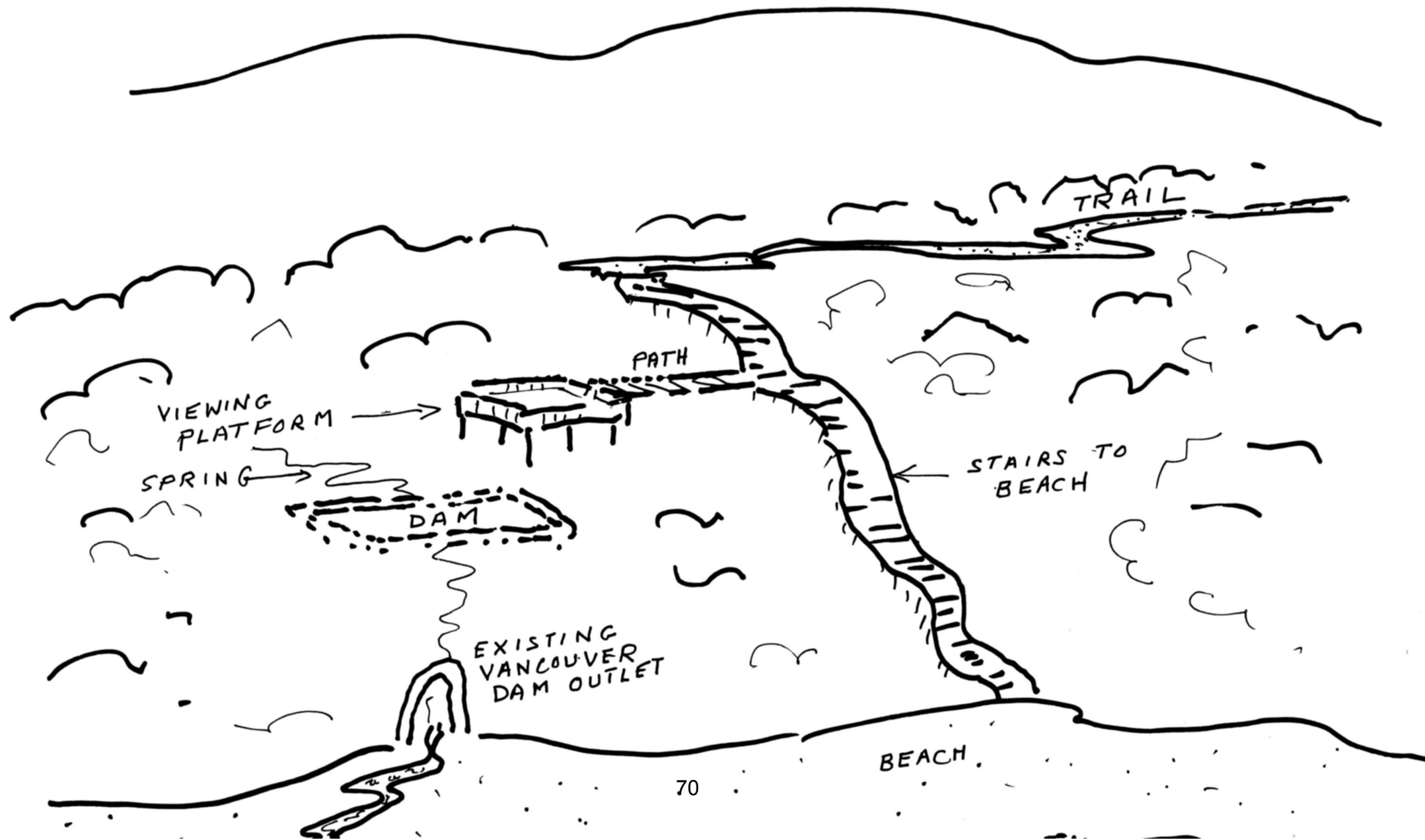
SEATING



CONCRETE OR QUARY- CUT GRANITE BLOCK SEATING TO NEW TRAIL HEAD & ALONG NEW PATH WAYS



FRENCHMAN BAY HERITAGE TRAIL
VANCOUVER SPRING & DAM SECTION



Proposed Frenchman Bay Heritage Trail

Public Comment Summary

- Council approved the study in October 2017 (DIS055) to be publicly advertised and returned to a future Council meeting. The process was delayed through mutual agreement, and it was agreed to put the proposal out to broad public comment in August 2019.

OCM item 31/10/2017 RESOLUTION

“THAT Council APPROVE the Frenchman Bay Heritage Trail Feasibility Study and Concept Plan for PUBLIC ADVERTISING and that submissions received as part of the public advertising be presented to Council with a Responsible Officer Recommendation at a future Council Meeting.”

- **Public Comment Period:** 5 – 30 August 2019.
- **Advertising:**
 - Public notice and display ads in two local papers for two weeks (01/08/19 & 08/08/19);
 - The two local papers publishing articles on the public comment period.
 - Direct mail to 298 community groups and residents, including local Indigenous community representatives (29/07/19);
 - Direct E-Letter via direct emails to 49 residents, and forwarded from Frenchman Bay Association to their database of members (30/07/19);
 - Poster Ads were displayed in various locations throughout Albany, including the Little Grove Store along with information sheets and submission forms;
 - Website Public Comment page listing (30/07/19 – 30/08/19);
 - Social Media listing (02/08/19) reaching 2,304 people, 94 engagements, 5 shared and 3 general interest comments;
 - The Albany Advertiser promoted the information session on social media (08/08/19), with 2 shares; and
 - Listing in the City of Albany E-Weekly Community News (02/08/19), with a total delivered of 1,635 and 1,099 opened.
- **Consultation:**
 - The Community Information Session occurred on Sunday 11 August, 1.30 – 2.30pm at the South Coast Progress Association Hall.
 - 43 interested residents registered their attendance at the information session, and two staff from the City of Albany supporting the session.

- **Comments:**

- 28 formal submissions received during the public comment period.
- There was one informal verbal submission received during the public comment period; an expression of interest from a local Menang representative interested and supportive of being involved in the interpretation elements of the trail.
- Submissions were from within proximity to Frenchman Bay (20), within the broader area of Albany (6), and Perth (2).
- The data is available for review (names and addresses removed) and a summary of comments attached. (see appendices 1 & 2)
- Of the 28 people who participated in the public comment period there were;
 - 22 supported the proposal;
 - 3 conditional support to the proposal;
 - 2 people opposed the proposal; and
 - 1 was neither opposed or supported the proposal, suggesting funds would be best spent on maintaining existing paths.

Recommendation:


THAT Council

- ENDORSE the Frenchman Bay Heritage Trail Feasibility Study and concept plan; and
- Support the Frenchman Bay Association to seek external funding to progress to detailed design.

FILE: CR.COC.64			
RECORD #	PROXIMITY	OVERALL	COMMENTS
IF19349903	local	Support	Supportive. Great idea, more walking trails
IF19349900	Albany	Support	Supportive. Good to know history of area and help keep it alive instead of being forgotten, this could also become a tourist attraction
IF19349898	local	Support	Supportive. It would be an asset, should keep the old steps in place near tea rooms
IF19349896	Albany	Support	Supportive. Great idea, would love to see some aboriginal legends and place names incorporated in this plan
IF19349894	local	Support	In full support, really love the idea. Just like to ensure all measure are taken in the construction of dieback spread
IF19349892	local	Support	Supportive. Great benefit to the tourist potential
IF19349890	local	Support	Supportive. Add to the visitor experience but dieback hygiene is critical, signage, noongar stories, seating, placement of areas
IF19349888	Albany	Support	Supportive. I love the idea of signage in English and Noongar and I hope all history is incorporated on the signs
IF19349886	local	Support	Supportive. Good plan, positive for the area
IF19349885	local	Support	Supportive. It will be a good investment and considering that there is a caravan park close by it might want to make people stay for longer
IF19349883	Albany	Support	Supportive. It will certainly highlight the significance of the area and reel over seas tourist in to spread the word
ICR19349721	local	Support	Supportive. Great idea for locals and it will be an attraction for many to see
ICR19349721	local	Support	Supportive. Great idea and a great plan, I will look forward to using it
IF19349354	local	Opposed	Opposed. This is such a miraculous waste of vegetation, money and time.
EF19349319/EF19190305	Albany	Conditional Support	Conditional Support. Need for power lines to be put underground, incorporate to existing tracks to be incorporated. Locate away from escarpment, avoid existing banksia grove. Rehabilitate un-utilised track, trail should not presume future availability of lots 1 & 2. Priority should be removal of power lines. realign trail to run just north parallel to Vancouver Rd.
EF19350048	local	Support	Supportive. The area needs to be shared and developed in line without tourism objectives, and part of the Trails Hub Strategy.
EF19350290	Perth	Support	Supportive. Historical trails are perfect for Albany. Please include the period of "convict" past as well in the interpretation. Historian.
EF19351128	local	Support	Supportive. Striking scenery and heritage. A tourist drawcard and destination for Torndirrup Peninsula.
ICR19350067	local	Neutral	Neither opposed or unopposed. Suggest money could be better spent on making the paths at Frenchman Bay safer for bike riders.
ICR19350764	Albany	Support	Supportive. An added attraction to the region. Cultural, environmentally and historically sensitive. Ensure no access to beach for vehicles.
ICR19351535	local	Support	Supportive. Very well planned. It would be a welcome addition to tourism especially with the new hotel being built.
EF19351584	local	Conditional Support	Conditional Support. Detailed design to consider placement of trail in consultation with Noongar Elders and qualified consultants (environment and engineering). Consider class of trail Class 1 or 6 (fully sealed and disabled access or unmarked route). Path width 1.2m. Interpretation selective and concise, with web links to more info. Panels on anodised aluminium. Seating materials high UV and salt impact proof. City to acquire trail on portion of private land as POS.
EF19351784	local	Support	Supportive. Sharing unknown heritage stories. Tourist attraction to showcase heritage and environment. Supported by agencies i.e. GSCORE. Regional trail should be included in City Trail Hub Strategy.
EF19102763/EF19102763	Perth	Conditional Support	Physical implementation not supported. Heritage and historical installations supported. Should be similar to the fish traps project, with min. enviro disruption. Issues with access to private land.
EF19351884	local	Support	Supportive. Combination of Noongar and European heritage for local and tourists in Albany. Setting attraction. A lot of work already done to realise. Adjacent owners supportive of trail. Commend endorsement by council.
EF19352029	local	Support	Supportive, with some concerns. The viewing platform at the Vancouver Spring and Dam must be at least 100 metres away. Disturbance of natural vegetation be kept to the minimum. The stabilisation of the escarpment must not be endangered.
ICR19351894	local	Support	Supportive. Major visitor attraction in the region and support the Gap, Blowholes, Stoney Hill and Whaling Station. Accessible to all abilities and good viewing. Rich heritage and untold stories in location.
IF19351920	local	Opposed	Opposed. There are enough trails on the peninsula which cost for ongoing maintenance. Need to preserve environment. Most tourists go to Discovery Bay. Already have a gravel road to the headland. Need a resort to keep people from camping and partying along the beach.

<p style="text-align: center;">NOVEMBER 2019</p> <p style="text-align: center;">Schedule of Submissions and Recommended Modifications</p> <p style="text-align: center;">LOCAL STRUCTURE PLAN No.10</p> <p style="text-align: center;">Lot 10 Chester Pass Road and Lot 521 Mercer Road, Walmsley.</p>				
No.	Address	Summary of Submissions <i>Note: This is a broad summary of the submissions only. A copy of the submissions in full has been provided to the Council as a separate document.</i>	City Recommended Modification	City Reason
Utilities				
1.	Water Corporation	<p><u>Wastewater</u></p> <p>The ultimate servicing of most of this land relies on the construction of a major waste water pumping station generally in the position shown on the attached plan.</p> <p>Provision will need to be made for a suitable site and odour buffer for the future WWPS's as part of more detailed local structure planning stages for this land.</p>	<p>Note comment from the Water Corporation relating to requirement for waste water pumping station and buffer around the waste water pumping station.</p> <p>No modification to structure plan recommended.</p>	<p>The waste water pumping station and buffer is planned to be located on land, which is outside of the structure plan area.</p> <p>The Water Corporation advised the City that a 30m buffer is required around the pumping station.</p> <p>The pumping station and buffer are not expected to impact on planning for the structure plan area.</p>
Stormwater				
2.	Department of Water and Environmental Regulation.	<p>DWER received an updated "stormwater management strategy" in April 2019. DWER advised that a stormwater management strategy is only a component of a LWMS, and that more information was required.</p> <p>DWER acknowledges that the schedule of modifications (no.25) requires the local structure plan to be updated to address the stormwater management deficiencies identified by DWER.</p> <p>DWER supports the inclusion of the drainage line in Lot 10 to be upgraded to a living stream.</p>	<p>Note comment from DWER regarding stormwater management.</p> <p>No modification to structure plan recommended.</p>	<p>An updated stormwater Management Plan map was provided and advertised to show water catchment areas, stormwater flow paths, conceptual design for stormwater basins and location of stormwater basins.</p> <p>Structure plan provisions have been updated to address public and agency comments and include:</p> <ul style="list-style-type: none"> • <i>Require a holistic approach to stormwater treatment that avoids localised and temporary drainage treatment where possible.</i> • <i>Stormwater being designed to feed into silt traps, which connect to the stormwater system and treated downstream.</i> • <i>Stormwater is not to be discharged from development onto Chester Pass Road or into the Chester Pass Road drainage system.</i> • <i>Stormwater basins in POS areas is to be developed in accordance with measures applicable to the WAPC Liveable Neighbourhoods.</i>
3.	properties on the west side of Chester Pass Road.	<p>The recommendations contained within the Stormwater Management Strategy address the fact that significant drainage flows through the existing industrial area.</p> <p>The proposal to develop a 'Living Stream' through the north-west corner of the structure plan is supported. This will enable the industrial drain to be converted to provide a link between the drainage /POS area running through Lots 6 and 272 on the western side of Chester Pass Road and the Foreshore Reserve shown on Lot 5498 to the north.</p>	<p>Note comment from properties on the west side of Chester Pass Road regarding effluent management and setbacks to the watercourse running through Lot 10.</p> <p>No modification to structure plan recommended.</p>	<p>The following provision has already been included to address effluent management associated with industries:</p> <ul style="list-style-type: none"> • <i>Retention and infiltration are to occur on site using individual soakwells, retention basins or other measures as deemed necessary. Oil and grease traps are to be provided within each building site to the satisfaction of the local government to ensure that nutrient export off the site is kept to a</i>

		<p>The provision of attenuation/filtration basins will need to be designed to a high standard to ensure industrial waste is not exported off site.</p> <p>Provision of appropriate setbacks to on-site effluent disposal units, in accordance with the Sewerage Policy will also help to minimise the export of nutrients.</p>		<p><i>minimum.</i></p> <p>The City's scheme also includes the following provision to ensure setback from watercourses.</p> <p>4.3.6 Setbacks from Watercourses</p> <p>4.3.6.1 <i>To protect development from inundation or flooding; to maintain the environment in its natural form; and to ensure the natural biophysical processes of the watercourse are accommodated, the construction or placement of any building or on-site effluent disposal systems shall be setback so as to achieve a minimum separation distance from the known high-water mark of a watercourse as follows:</i></p> <p>(a) 30 metres from any seasonally flowing watercourse; or</p> <p>(b) 50 metres from any watercourse with permanent water; or</p> <p>(c) 100 metres from any river or estuary unless a lesser setback can be achieved under State Planning Policy 2.6.</p>
4.		<p>Lot 990 (152) Mercer Road, Lange, which is located on the Southern side of Mercer Road could be significantly impacted by stormwater disposal from the development of the land on the northern side of Mercer Road.</p> <p>A stormwater culvert runs under Mercer Road and discharges onto my property.</p> <p>For the thirteen years that I have been living here, stormwater has flooded through the culvert on three occasions, flowing through the Northern portion of my property, overflowing the dam, then draining into the creek that runs north of Mason Road.</p> <p>While these storm events have not impacted negatively on my property, I am concerned that any increase in stormwater will inhibit the use of my land and result in a 'Living Stream' being required, as proposed in the Stormwater Management Strategy. Refer attached plan.</p> <p>My understanding is that a developer is required to retain stormwater on-site so that any off-site flow remains at predevelopment levels. Given the extensive and steep catchment (67.3ha), on the Northern side of Mercer Road, the practicality of retaining all the post development stormwater on-site to me sounds impossible.</p>	<p>Note concerning comment from the property on the south side of Mercer Road regarding stormwater management.</p> <p>No modification to structure plan recommended.</p>	<p>Subdivision and development of the structure plan area (land north of Mercer Road - Lot 521) will be required to mitigate any increase in runoff volume and rate caused by more paved areas, steep gradients and reduction in soil infiltration.</p> <p>Stormwater design may be required to convey flood flows to a detention basin (developed north of Mercer Rd) to reduce runoff releases. Release rate are usually based on:</p> <ul style="list-style-type: none"> • Historical (undeveloped) release rates; • Capacity of the downstream existing waterway; and • Local drainage design criteria. <p>The Local Structure Plan No.10 (Local Water Management Strategy) suggests that the existing creek flowing through Lot 990, should be developed as a 'Living Stream'. Development of the creek as a 'Living Stream' may occur when the landholder of the Lot 990 proposes to subdivide or develop their land.</p>

		<p>No doubt the development of the residential land to the North will not occur for many years. However, in the meantime the Stormwater Management Plan effectively blights my land and will potentially make it difficult if I wish to sell it.</p> <p>My question to Council is, who will pay for the development of the 'Living Stream' through my property?</p> <p>While I have no objection to the development of the land above my property, I object to the creation of a 'Living Stream' on my property as I have not been consulted and no information has been provided as to the extent of work that will be required and who will pay for it. If there is no other alternative to using my land for stormwater management, then I believe the proponents should commit to acquiring the property based on a fair market value.</p>		<p>The Local Structure Plan No.10 does not apply to Lot 990 Mercer Road and therefore is not relying on Lot 990 to manage stormwater.</p> <p>Existing creek flow routes through Lot 990.</p>  <p>The following provisions have already been included in the Local Structure Plan No.10 to address stormwater management associated with residential development north of Mercer Road.</p> <ul style="list-style-type: none"> <i>An Urban Water Management Plan is undertaken at the subdivision stage to provide detailed design in accordance with Department of Water and Environmental Regulation and local government requirements.</i> <i>Stormwater basins in POS areas is to be developed in accordance with measures applicable to the WAPC Liveable Neighbourhoods.</i>
Public Support				
5.		<p>The business plan of the Ardess Estate provides for the leasing of land which enables fledgling companies to set up without the expense of having to buy a site as is the case with other locations. This reduction in start up costs enhances the likelihood of success and benefits Albany as a whole.</p> <p>The proposed housing area is superior in many aspects and due to its central location will go some way in reducing the urban sprawl we are witnessing. Being located in an area where essential services already exist will be of financial benefit to the City in not having to provide services further out.</p>	<p>Note public comments, which support designating land for industry and residential.</p> <p>No modification to structure plan recommended.</p>	<p>There are limited locations to establish transport depots in the municipality given scheme limitations, the availability of serviced and affordable industrial land and the suitability of access for large vehicles.</p> <p>The Pendeen Industrial Estate is realistically the only estate in Albany where it is currently possible to establish a transport depot.</p> <p>The Milpara industrial Estate supports a transport depot in a light industry zone, however, the land is not currently available and does not have direct frontage to Chester Pass Road (RAV route).</p>
6.		<p>The revised Structure Plan addresses matters previously raised by neighbours, City Councillors and other stakeholders.</p>		

		<ul style="list-style-type: none"> • The Traffic Impact Assessment by Wood and Grieve revealed no safety or capacity issues associated with additional development at the site. • My understanding is that Main Roads have made no objection to the Plan. RAVs already use Chester Pass road and are already going past Ardess. • The owners of Ardess support temporary approvals for RAV dependent uses and can provide written assurances to the City that they will not be sued by lease holders. Ardess owners will inform prospective leaseholders upfront of their temporary approval period and the need to have an 'exit' strategy or change their business to having only as-of-right vehicles at Ardess. • There are opportunities for some transport businesses to relocate from locations with greater traffic and safety concerns (for example; Albany Freight Lines). Other transport depots or related uses at Ardess will not require RAVs. Ardess is well located to accommodate these uses on a long-term basis post completion of the Ring Road. • Ardess is a unique industrial estate in Albany that leases land, which substantially reduces risk and capital for established and growing businesses. • The Structure Plan supports job creation and it secures the extension of Range Road. Additionally it provides a district sized area of public open space and provides a new primary school site. 		<p>The Robinson Industrial Estate is also not accessible to RAV vehicles and the Mirambeena Industrial Estate has limited land zoned to accommodate a transport depot.</p> <p>The Ardess Industrial Estate adjoins Chester Pass Road which is a designated freight route. There are a number of logistics and related uses along with appropriate buffers to sensitive uses. It is owned by one landowner and leased which provides a cost effective alternative to purchasing land for various smaller scale transport depot businesses.</p> <p>As outlined above, there is essentially a monopolistic situation in Albany which limits transport depots to the Pendeen Industrial Estate. This has a number of implications including:</p> <ul style="list-style-type: none"> • impacting smaller transport businesses who may require a smaller operating area; • on individual businesses establishing, growing and their associated profitability; • the ability for businesses to create jobs; • opportunity costs of businesses not being established or growing and Albany missing out on new job opportunities; • it is considered better practice to allow market competition and have alternative sites than Albany's logistics requirements and land pricing being dependent on one estate (Pendeen) and one associated land developer; and • increased land acquisition costs being added to transport business costs which are in-turn passed onto Albany consumers. <p>In comparison, enabling transport depots to establish at the Ardess Industrial Estate represents a viable alternative for small to medium sized transport businesses. This will assist to ensure Albany is provided with cost effective logistics and associated job creation.</p>
7.		<p>The plan:</p> <ul style="list-style-type: none"> • Brings clarity to the future use of this land. • Addresses concerns previously raised by neighbours, City Councillors and other stakeholders. • Provides a logical and significant expansion of Albany's industrial areas that will help businesses establish, grow, and generate new jobs for Albany. • Provides a logical, significant and convenient expansion of Albany's residential areas, and the councils rate payer base. 		
8.		<p>General industrial land is almost impossible to lease in Albany. The General Industry land in Robinson does not have appropriate Main Roads approvals to have regular large truck movements into the estate. The lack of available General Industry land for lease is the reason the Walmsley family are seeking the introduction of a portion of general industry zoned land.</p> <p>One of the major objections that has been raised in relation to the inclusion of general industry is that the Main Road are planning on stopping all large truck movements on Chester Pass Road. I'm yet to see this confirmed in writing from Main Roads and understand that my client has received advice that restrictions will only be placed on Hanrahan Road not Chester Pass Road. The traffic impact study completed for the structure plan supports the additional truck movements to the estate.</p> <p>The client has overcome noise objections by including a generous buffer zone between the industry development and future residential developments. The restriction of access on Terry Road, Range Road or Mercer Road also gives future landowners assurances that traffic and safety impacts will be appropriately addressed.</p>		

9.		<p>We are in support of the Structure Plan being accepted by the Albany City Council.</p> <p>The Plan provides for a future housing area with a good quality aspect and a relatively close proximity to the city centre.</p> <p>It promotes industrial and commercial development which is alongside an existing main arterial road, and a continuation of an existing commercial corridor.</p> <p>Businesses will be given opportunities to flourish, thus providing employment and services and residents will have the choice of quality locations for housing.</p>		
10.		<p>I urge the City Council to whole-heartedly approve the Structure Plan.</p> <p>In the future, as we become increasingly in need of making good use of our resources, housing closer to City amenities will be of vital importance. The Plan provides for this. The inclusion of a school site will mean that children will be close enough to their school to walk or bike ride.</p> <p>In light of Bunnings relocating to Chester Pass Road, there will be a demand for other businesses to have their premises in the vicinity. The Plan provides unique opportunities for businesses to lease premises in a desirable location that will ensure their success, thus providing good employment opportunities and valued services to the community.</p>		
11.		<p>I would like to show my support for the proposed Structure plan as recommended by your own planning department at the City of Albany.</p>		
12.		<p>I refer to the abovementioned proposed Structure Plan, which I would like to support.</p> <p>After a recent and brief review of the proposal, it would seem a logical commercial extension along Chester Pass Rd, also the residential precinct with the future southern road links (ie Range Rd).</p> <p>It would appear that there are existing commercial business within this area, (ie nursery, courier etc).</p> <p>Larger businesses such as Bunnings relocating do provide some impetus for this land to be used for a variety of commercial and industrial uses.</p> <p>I would not think that access by larger vehicles would be a deterrent in allowing any non residential development to occur along Chester Pass Rd.</p> <p>The upgrade of Chester Pass Rd has provided a much needed safe corridor thru this section of Albany and, Main Roads WA over time would be likely to continue this past the current Mercer Rd intersection with the four lane road way.</p> <p>Albany's growth in general has waned in recent years and I consider this a positive proposal, which I do not object to.</p>		

13.		<p>As neighbours to the Ardess Industrial Estate, we support Ardess's proposal for RAV use.</p> <p>After concerns raised with the initial Structure Plan, we have spent considerable time and money to address and alleviate the concerns raised by neighbours, City Councillors and other stakeholders. It should be noted however, that some of the concerns have been raised by direct competitors to our proposal.</p> <p>The Traffic Impact Assessment by Wood and Grieve indicated no safety or capacity issues associated with our proposed development. This proposal allows for current transport businesses operating out of locations with greater traffic and safety concerns, to relocate to a far safer site. It is a far more desirable site being on the outskirts of the City.</p> <p>It should be noted that this proposed Structure Plan has many positives for the City. As part of the proposal, we have set aside land for a new primary school, a very large area for public open space and provided for the extension of Range Road at our own considerable cost.</p> <p>Ardess is a unique industrial estate in Albany which enables businesses to lease land thereby substantially reducing the risk and capital requirements of new and established businesses. This will enable businesses to expand and therefore create additional employment for Albany workers.</p>		
14.		<p>The existing Ardess Estate is an aesthetically pleasing landscaped environment, creating a village ambience.</p> <p>This development will create a business and environmental hub for Albany that other can only aspire to emulate.</p>		
15.		<p>Other transport depots or related uses at Ardess will not require RAV's, and the location is well suited to accommodate these on a long-term basis once the ringroad is completed.</p> <p>The Ardess plan provides an excellent opportunity to continue development along an existing commercial corridor and with it's lease model provides a low risk options for businesses which will help support job creation.</p> <p>This plan also provides an excellent location for a residential area with a school and parkland, close to town and shopping. It is perfect for the long term growth of Albany.</p> <p>I strongly urge you to adopt this plan as it will make our city a better place long into the future.</p>		
Transport Depot				
16.		<p>The Traffic Impact Assessment by Wood and Grieve revealed no safety or capacity issues associated with additional development at the site.</p> <p>RAVs use Chester Pass road and are already going past Ardess.</p> <p>There are opportunities for some transport businesses to relocate from locations with greater traffic and safety concerns (eg; Albany Freight Lines).</p>	<p>Note comments relating to transport depots and access opportunities associated with Chester Pass Road and a Traffic Impact Assessment.</p> <p>Recommend limiting the amount of transport depots within the Light Industry area to two.</p>	<p>A Transport Impact Assessment completed for the structure plan area determined that Restricted Access Vehicles (19m long vehicles) are capable of safely accessing the industrial estate subject to minor modifications to the Private Access Road and until such time that the entire structure plan area is developed.</p>

17.		<p>Transport Depots will result in additional Heavy Vehicles and traffic conflict.</p> <p>The proposal to allow transport depots within the expanded Ardess Industrial Estate will compound the traffic conflict issues on the section of Chester Pass Road between Menang Drive and the roundabout.</p> <p>There have been ongoing safety concerns with this section of Chester Pass Road.</p> <p>The existing access road to the Ardess Estate is substandard and there are already delays with trucks entering and leaving the site. Additional heavy vehicles will exacerbate the problems.</p>		<p>The operation of the Private Access Road / Chester Pass Road intersection was assessed considerate of post development conditions associated with:</p> <ul style="list-style-type: none"> • Traffic demand and capacity; • Delay in traffic movement; and • Queue length. <p>It was determined that vehicles may have difficulty in turning out onto Chester Pass Road following full development of the entire structure plan area.</p> <p>The Transport Impact Assessment modelled transport movement considerate of various factors, including the development of 30 industries at the Ardess Estate and the movement of around 180 Restricted Access Vehicles (90 Restricted Access Vehicles with 2 movements per day – one in and one out of the estate).</p> <p>Based on the modelling, it is recommended that a limit is placed on the amount of transport depots operating within the industrial estate.</p>
18.		<p>The proposal to allow transport depots within the Light Industrial Estate will result in additional truck movements and will compound the traffic conflict issues on Chester Pass Road between Menang Drive and the round-about. Additional heavy vehicles will exacerbate the problems.</p> <p>The issue of heavy vehicle usage on the 'inner' section of Chester Pass Road was specifically mentioned by the City of Albany representatives to Wignalls in 2016. It was made clear that the objective of both the City of Albany and Main Roads WA was to reduce trucking movements and to not allow any further access areas for heavy vehicles on this route. This was the requirement with a new crossover into Wignalls property.</p> <p>Transport planning and traffic safety in respect of key access routes should not be left to chance. It is not acceptable to facilitate industrial expansion without first addressing potential negative traffic impacts and resolving such matters. The responsibility rests with the proponent and shouldn't be left to others, as nominated in Table 1 – Actions, dot point four "Should a review of heavy vehicle access along Chester Pass Road determine that negative impacts apply, restricted access regulations may be imposed, meaning the transport depot may have to relocate or change the combination of trailers to comply".</p>		
19.		<p>Traffic safety is a concern as Chester Pass Road will be the main means of access to these future residential areas. Provision for up to 180 RAVs per day without additional passing/slip lanes will impact on the significant increase in residential traffic using the road. The diagrams in the Transport Impact Assessment illustrating the turning movements of RAVs accessing the Ardess Industrial Estate area, clearly illustrate how they utilise both lanes in either direction when entering or leaving the area. Mixing of trucks of this scale with increasing numbers of residential traffic is contrary to orderly and proper planning.</p>		
20.		<p>While the case can be made for smaller freight operations utilising smaller vehicles to distribute goods around the urban area, larger operators using RAVs should be located on the perimeter of the urban area with access to the Ring Road. Industrial areas such as Pendeen and Mirambeena Industrial estates have been specifically designed for such land use.</p>		

21.		<p>The restriction of transport depots to the 'General Industrial' area, which is buffered by the 'Light Industrial' area, is an improvement. However, the proposal to still allow major transport depots involving RAVs will still have a negative impact on our proposed residential development particularly where it fronts onto Chester Pass Road.</p> <p>The impact of up to 180 RAV movements per day, entering and leaving the estate, is a major concern, particularly as additional slip lanes, passing lanes are not apparently being required.</p> <p>It is recommended that a distinction needs to be made between transport depots using RAVs and freight operations using smaller vehicles which do not have such an impact on the roads and surrounding sensitive land use. This will require the current definition of 'Transport Depot' in Council's Local Planning Scheme to be amended to make the distinction between major freight depots using RAVs and those that use smaller vehicles.</p> <p>The Transport Impact Assessment prepared by Wood & Grieve Engineers, concludes that further analysis to confirm the likely future intersection treatment and upgrade of Chester Pass I Terry Road intersection is required. There is no mechanism proposed in the AWLSP to require the cost of any additional upgrade of the intersection, over and above that proposed in the Warrenup -Walmsley Local Structure Plan, to be paid for by the proponents. We request that the structure plan be amended to require any such works to be paid for by the developer s of the industrial estate.</p>		
22.		<p>A concern is that development of our land fronting Chester Pass Road will incur additional costs to ameliorate the noise of RAVs using the road when they should be using the industrial area at Menang Drive and not coming further into Albany.</p> <p>Unfortunately, the Wood & Grieve Transport Impact Assessment has neglected to address the issue of noise as set out in the State Planning Policy 5.4, 'Road and Rail Transport Noise and Freight Considerations in Land Use Planning'.</p> <p>Such information is clearly required if Council is to be able to assess the likely impact of allowing RAVs to utilise Chester Pass Road and possibly other roads in the area.</p>	<p>Dismiss comment suggesting that noise issues associated with transport depots has not been considered and that development of transport depot's at Lot 10 Chester Pass Road will invoke additional costs to residential development, in order to ameliorate the noise of RAVs.</p> <p>No modification to structure plan recommended.</p>	<p>Chester Pass Road is approved by Main Roads WA for access via Restricted Access Vehicles (vehicles >19 in length). As such, the City's Local Planning Scheme No.1, cl.4.6.7, recommends that residential development adjacent to Chester Pass Road is developed to attenuate against noise. The City's scheme states:</p> <p><i>4.6.7 Residential Uses Adjacent to Heavy Freight Routes</i></p> <p><i>In the case of any development located within 100 metres from the outer edge of the carriageway of Albany Highway (north of Chester Pass Road roundabout), Chester Pass Road, Hanrahan Road, Princess Royal Drive, the Albany Ring Road alignment or the railway line located within the Scheme Area and proposed to be used for residential or tourist occupation, the Local Government shall have regard to the policy statements and recommendations in the Western Australian Planning Commission's Statement of Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning and may require appropriate noise attenuation measures.</i></p> <p>The Chester Pass Road, which accesses the subject site is managed by Main Roads WA and is approved for use by Restricted Access Vehicles (RAVs).</p>
23.		<p>Heavy Vehicles cause more damage to the road network than commercial and residential traffic.</p> <p>Allowing Transport Depots, even for a short period is probably going to cost the City ratepayers more in road repairs.</p> <p>We are also concerned that money is spent on significant road upgrading, widening, slip lanes and intersections at Ardess Industrial Area. Surely, it is better to use the land at Mirambeena and Pendeen where the roads are already up to standard for B Doubles and RAV7's.</p> <p>Noise pollution is not a concern at Pendeen whereas the proximity of residential to Ardess could pose disturbance problems to residents.</p>		

24.		<p>The house where I live is located adjacent to Chester Pass Road and I have experienced the off-site impacts of what is supposed to be a 'Light Industrial' area.</p> <p>Noise and dust have a significant impact on the amenity of my residential house. Noise is generated by trucks accessing the industrial area, particularly as they change gear to accelerate out of or to slow down to enter the area. The noise is particularly disturbing in the very early hours of the morning. At night the manoeuvring of vehicles on-site with reverse 'beeping' also has a significant impact.</p> <p>The revised structure plan proposes to set the transport depots back 200 metres within the site, which will help to ameliorate the on-site noise. However, it will do nothing to overcome the noise of the RAVs and larger 'as of right' vehicles entering and leaving the area.</p> <p>A structure plan has recently been approved for my land so that it can be developed for residential development. Consequently, there will be many more residential houses fronting Chester Pass Road in the future. Chester Pass Road will be the main access to and from the area and it is never good to mix residential traffic with RAVs. The turning movements illustrated in the Wood & Grieve Transport Assessment, indicate that both lanes in either direction will be impacted by the trucks, as they access the industrial area. Where there is an alternative, surely it is poor strategic planning to allow potential conflict like this to occur?</p> <p>It appears to be an oversight that a noise impact assessment has not been carried out as part of the 'Traffic Impact Assessment'. It is clearly a major consideration given the potential impact on residential housing abutting Chester Pass Road. My concern is that there will be an additional cost to people buying into the residential estate if RAVs and large 'as of right' vehicles are encouraged to use the road.</p>		<p>RAV's currently use the section of Chester Pass Road, south of the Menang Drive for various means including for deliveries and for servicing.</p> <p>Main Roads WA has not indicated intent to close the section of Chester Pass Road, south of the Menang Drive.</p> <p>The structure plan recommends locating transport depots to comply with the Environmental Protection Authority guidelines (200m setback to sensitive premises).</p>
25.		<p>While transport depots served by RAVs within the proposed general Industry area will be setback 200 metres from residential areas, the RAVs will still have a significant impact on the residential development which will abut either side of Chester Pass Road.</p> <p>The noise, dust and vibration of such vehicles are currently experienced by the owner of Lot 6 whose house is located opposite the Ardess Industrial area. There will be many more future residents who will be similarly impacted, however, they rely on Council to ensure their future amenity is protected. The Transport Impact Assessment fails to incorporate a noise and vibration assessment of the additional RAVs and heavy vehicles using Chester Pass Road.</p> <p>The impact of RAVs and heavy vehicles will also impact on land use other than proposed residential development. Between Harvey Road and Menang Drive there is an opportunity to build on existing uses such as Wignalls Winery and the Strawberry Farm to create an attractive tourist orientated entry statement to Albany from the north once the Ring Road has been built. Encouraging such vehicles to continue to use this stretch of road will be detrimental to these businesses and the expansion of other compatible uses. Heavy vehicles will be mixing with increasing volume of tourist traffic.</p>		

Temporary Planning Approval				
26.		<p>The owners of Ardess support temporary approvals for RAV dependent uses and can provide written assurances to the City that they will not be sued by lease holders.</p> <p>Ardess owners will inform prospective leaseholders upfront of their temporary approval period and the need to have an 'exit' strategy or change their business to having only as-of-right vehicles at Ardess.</p> <p>Ardess is a unique industrial estate in Albany that leases land which substantially reduces risk and capital for established and growing businesses.</p>	<p>Dismiss comment suggesting that temporary planning approval for transport depot's isn't likely to work.</p> <p>Note comment by the owners of the Ardess Industrial Estate supporting the requirement to adhere to a temporary approval arrangement for transport depots.</p> <p>Recommend including a provision to limit the approval period of transport depot's to 5 years.</p>	<p>Main Roads WA commented that:</p> <p><i>Main Roads has no plans at this time to remove Restricted Access Vehicle access from the proposed Albany Ring Road into the City of Albany along South Coast Hwy and Albany Hwy.</i></p> <p><i>Vehicle restrictions will be instigated on an as required basis after consultation with the City of Albany, these will be driven by town planning requirements involving community and industry consultation.</i></p> <p>Structure plan conditions have been included to facilitate the relocation of transport depot's, should the Main Roads WA decide to remove Restricted Access Vehicle access from Chester Pass Road.</p> <p>A person who contravenes the provisions of a planning scheme, including temporary approval, commits an offence in accordance with the Planning and Development Act 2005.</p> <p>Unless otherwise provided, a person who commits an offence under the Act is liable to a fine of \$200 000 and, in the case of a continuing offence, a further fine of \$25 000 for each day during which the offence continues.</p>
27.		<p>The idea of having temporary planning approvals for Transport Depots isn't likely to work. Cost of gravel hardstanding is expensive and once a trucking depot leases land in Ardess, a developer after spending a large sum of money is going to be resistant to the trucking depots leaving their site. This can possibly cost the ratepayers and the City, the result of litigation.</p>	<p>Recommend mentioning the opportunity for the re-approval of a transport depot (after the 5 year temporary approval) subject to on-going approval for Restricted Access Vehicle movement on Chester Pass Road.</p>	
28.	.	<p>The proposal to allow transport depots accessed by RAVs on a temporary basis would seem impractical. Once established it is most unlikely such operations would relocate. The relocation of Transport Depots, once established, has been especially challenging for the City of Albany. The suggested use of Sunset Clause as a mechanism for land use control is extremely optimistic.</p> <p>Temporary development approvals are problematic and difficult to enforce. The concept of "limiting the approval period of transport depot's that utilise Restricted Access Vehicles for a period that expires no later than the expected completion date of the Ring Road" is illogical. Past experience shows that relocation of Transport Depots is highly likely to become a major issue in the future.</p>	<p>Recommend including a provision to ensure transport depots are setback min 200m from residential premises.</p> <p>Recommend including a provision to ensure transport depots are located considerate of any visual impact.</p>	
29.		<p>The proposal to allow transport depots accessed by RAVs on a temporary basis appears to be completely unrealistic. Once established it is unlikely that they will relocate and council will be on the back foot if they are trying to relocate them.</p>		
30.		<p>Clause 38 of Council's agenda report notes that transport depots accessed by RAVs may only be able to use the Ardess Estate as an interim location until such time as the Ring Road is built. It is suggested that temporary approvals can be provided for 3 to 5 years.</p> <p>Council should be well aware of the difficulty of relocating businesses, particularly trucking depots once they have established in an area. The forces of inertia will inevitably make it difficult for a business to relocate and unless council is willing to enter into time consuming and expensive litigation, the easy and more popular option will be to take no action. In so doing, Council will undermine its credibility and ability to attract private investment to Albany.</p>		
31.		<p>The suggestion that trans port depots using RAVs be granted temporary planning approval makes no sense as experience shows that once established it will be very difficult to relocate them for obvious reasons.</p>		

ALBANY RING ROAD				
32.	Main Roads WA	<p>Main Roads has no plans at this time to remove Restricted Access Vehicle access from the proposed Albany Ring Road into the City of Albany along South Coast Hwy and Albany Hwy.</p> <p>Vehicle restrictions will be instigated on an as required basis after consultation with the City of Albany. These will be driven by town planning requirements involving community and industry consultation.</p>	<p>Note comment from Main Roads WA, which acknowledges that Chester Pass Road is approved for use by Restricted Access Vehicles and that Main Road WA does not intend, at this present time, on removing accessibility rights.</p> <p>No modification to structure plan recommended.</p>	<p>The Albany Ring Road is being developed to relieve safety issues associated with large trucks using the Chester Pass Roundabout and to provide unrestricted large truck access to the Albany Port.</p> <p>The Ardess Industrial Estate adjoins Chester Pass Road which is a designated freight route, and which provides direct RAV access to the future Albany Ring Road.</p>
33.	.	<p>Given the recent funding announcement for the Ring Road, and the 3-5 year timeframe for construction, there is no justification to allow major transport depots and associated RAVs into the residential and urban areas inside the Ring Road.</p> <p>This aspect of SP10 appears short sighted. It is generally accepted that the RAV designation for Chester Pass Road is likely to change in the short term.</p>	<p>Dismiss comment suggesting that Restricted Access Vehicles will be removed from the section of Chester Pass Road, due to the impending development of the Albany Ring Road.</p> <p>No modification to structure plan recommended.</p>	
34.		<p>Given that it now appears likely that the Ring Road will be built, it makes no sense to draw major transport depots and associated RAVs into the residential areas, which have been planned on either side of Chester Pass Road. This is even more extraordinary when Pendeen Estate has been specifically established for such land use and there is room to accommodate them.</p>		
35.		<p>The prospect that the Ring Road is now likely to be constructed within the short term and that RAVs may be restricted from using this stretch of Chester Pass Road suggests that planning to accommodate them is contrary to all good planning and common sense.</p>		
36.	.	<p>It does not make sense to encourage additional heavy vehicles into light Industrial Areas inside the Ring Road. The Mirambeena and Pendeen Industrial Estates have been planned and developed for such uses and take full advantage of the Ring Road, without compromising nearby Residential uses and future urban expansion.</p> <p>It is also understood that ‘inner’ Chester Pass Road, will become a “Permit Road” once the Ring Road is completed and that RAV and heavy vehicles wouldn’t be able to use in this area.</p> <p>The Pendeen Industrial Estate was specifically made for this land use, which begs the question “Why is yet another area within this boundary being considered yet again?” The landowners are asking for some permanency and transparency to the planning process in this area within Menang Drive.</p>		
Local Planning Strategy				
37.		<p>While the need to provide for the transport and freight industry is understood, provision for major transport depots and RAVs in this location appears to be completely at odds with sensible strategic planning.</p> <p>About nine years ago my company (Ertech Pty Ltd) constructed for Main Roads WA what today is known as Menang Drive so that it enabled large trucks to bypass inner Albany on their way to the Woodchip mill and /or Albany Port .</p>	<p>Dismiss the recommendation that transport depots should be located adjacent to Menang Drive and not further into inner Albany.</p> <p>Uphold the suggestion that the proposal to rezone the land at the Ardess Industrial Estate to ‘General Industry’ is inconsistent with the City’s Local Planning Strategy.</p>	<p>The Chester Pass Road, which accesses the subject site is approved for use by Restricted Access Vehicles (RAVs). RAV’s currently use the section of Chester Pass Road, south of the Menang Drive for various means including for servicing and wholesaling.</p> <p>Main Roads WA has not indicated intent to close the section of Chester Pass Road, south of the Menang Drive.</p>

		As I understand an Industrial area was created at the intersection of Chester Pass Road and Menang Drive to facilitate the logistics and support facilities for the expected increase of large trucks using that new Bypass. It seems illogical to now encourage trucks to move further into inner Albany. Large trucks should use what was created for them in the first place!	Recommend deleting the proposal to rezone land at the Ardess Industrial Estate to 'General Industry'.	The Pendeen Industrial Estate is realistically the only estate in Albany, which is located adjacent to the Albany Ring Road and which has current approved RAV access. This effectively creates a monopolistic situation in Albany which may increase costs associated with a lack of supply and high demand.
38.		The proposal for General Industrial zoning and development at Ardess is inconsistent with the intent and recommendations in Albany Local Planning Strategy both the 2010 document and the 2019 version endorsed by Council in April. ALPS - 2019 Part 1, Section 5.2 Industry states "Should the City see consistent growth, in the general industrial sector there is sufficient land available to meet demand until 2031 and further to 2040". Why then is the City of Albany considering expansion of Ardess Industrial Estate into having trucking depots on site when there is sufficient land elsewhere available for the long term.	Recommend maintaining and expanding the 'Light Industry' zone and including the following provisions: <ul style="list-style-type: none">• Consider uses/development based on the permissibility in the Scheme's Zoning Table for the Light Industry Zone.• Introduce, via a scheme amendment, the transport depot use with the permissibility of a 'D' use within the core of the Light Industry precinct.• Support an increased range of low-impact employment and associated uses. This includes support for emerging uses related to information technology and communications such as data centres. Modify via a Scheme amendment as required.	Enabling transport depots to establish at the Ardess Industrial Estate represents a viable alternative, with the opportunity to lease land. This will assist to ensure Albany is provided with cost effective logistics and associated job creation. The Merrifield Real Estate agents commented: <i>The current tenants have chosen to locate in Ardess Estate as leasing land significantly reduces the upfront costs of setting up a site.</i> <i>The City of Albany should be aware that general industrial land is almost impossible to lease in Albany. The General Industry land in Robinson does not have appropriate Main Roads approvals to have regular large truck movements into the estate. The lack of available General Industry land for lease is the reason the Walmsley family are seeking the introduction of a portion of general industry zoned land.</i>
39.		The recently endorsed Albany Local Planning Strategy (ALPS) nominates the Ardess-Walmsley Investigation Area 6 as Light Industry. There is no basis for it to be General Industry. As set ALPS states, there is currently 373ha General Industrial zoned land; this is sufficient to meet demand until 2031, and further to 2040. There is no demonstrated demand for additional General Industrial areas. Structure Plan 10 is inconsistent with ALPS. Creation of a new General Industry area inside the ring road will compromise the strategic direction and actions of ALPS in regard to Industry.	Recommend also including the following conditions, to limit land use conflict in accordance with Environmental Protection Authority guidelines for the development of Transport Depot's:	
40.		I note that the Albany Local Planning Strategy confirms that there is significant 'General Industrial' land available for the foreseeable future and there may only be a shortfall in 'Light Industry' land in the future. I have no objection to light industry providing it is genuine light industry which has no off site impacts on my property.	<ul style="list-style-type: none">• All transport depots are to be restricted to the central core of the light industry precinct, as shown on the Structure Plan map, which have a buffer of at least 200 metres from off-site sensitive uses.• Transport depots to be located considerate of visual impact to surrounding landscape. Preference is for transport depots to be located in lower areas toward Chester pass Road. Tree planting surrounding transport depots may-be necessary for screening purposes.	
41.		The Albany Local Planning Strategy (ALPS) states that based on a consistent growth rate there is sufficient 'General Industry' land to meet demand until 2031 and further to 2040. The only shortage is estimated to be for 'Light Industry' land, with another 26 hectares required by 2031. ALPS also notes that there is vacant land located in the Pendeen Industrial Estate which is ideally located and buffered to accommodate general industry and in particular, transport depots serviced by RAVs. Contrary to some claims the land is available for either acquisition or lease. If, as has been argued, land closer to the urban area is required, then there is over 35 hectares of vacant land zoned for Light and General Industry on either side of John Street. Part of this land is currently being subdivided and brought on to the market.		
42.		Provision to allow major transport depots using RAVs is contrary to good strategic planning, particularly given that the Albany Ring Road is likely to be constructed within a few years.		

		While the case can be made for smaller freight operations utilising smaller vehicles to distribute goods around the urban area, larger operators using RAVs should be located on the perimeter of the urban area with access to the Ring Road. Industrial areas such as Pendeen and Mirambeena Industrial estates have been specifically designed for such land use.		
43.		With a view to developing a residential estate with many attractive attributes, we are concerned that a compatible 'Light Industry' area is being converted into a 'General Industry' area which will impact on the amenity of surrounding residential development. As stated in the Albany Local Planning Strategy the demand is for additional Light Industrial land not General Industrial land. There are more strategically located areas to accommodate major freight depots and it makes no planning sense to accommodate them in an area where Council is likely to have to ensure they relocate within a few years' time.		
44.		Transport depots and expansive dry industries should only be allowed in the industrial zones that are alongside the ring road.		
45.		Element of Structure Plan 10 are inconsistent with the ALPS and contrary to good planning. Section 7.1 of Part 1 of ALPS recognises that 'the impact of heavy freight movements on communities and tourism is significant and the management of potential road conflicts between heavy freight traffic and adjacent land uses is an important planning consideration' and the Albany Ring Road will function as a more efficient heavy haulage route, improve road safety and reduce road use conflicts. It makes no sense and would be a considerable waste of money to temporarily allow additional heavy vehicles into a designated light Industrial Areas inside the Ring Road.		
46.		ALPS notes in the section under 'Roads' that the impact of heavy freight movement on communities and tourism is significant and that the management of potential road conflict between heavy freight traffic and adjacent land uses is an important planning consideration. The proposed structure plan is clearly contrary to the strategy's Strategic Direction to "Provide for a safe and efficient road network that caters for the needs of freight, local and tourist traffic."		
47.		Both Mirambeena and Pendeen Industrial Estates have been planned and developed for land uses associated with heavy vehicles. There is scope for expansion. The intersections and road networks are designed with slip lanes and adequate turning areas. Those designated General Industry zones capitalise on the Ring Road, without negatively impacting Residential uses and future urban expansion. In addition to the noise and disruption caused by trucks, the light pollution from Transport Depots is a major nuisance.		
Terry Road				
48.		<p>The proposal to create Terry Road as an 'Integrated Arterial Road' is contrary to the recently approved Warrenup-Walmsley Local Structure Plan which, following preparation of a Traffic Impact Assessment and consultation with relevant agencies, was designated as a Neighbourhood Connector Road.</p> <p>The traffic Impact Assessment prepared by Wood & Grieve Engineers provides no supporting information to justify this change. In fact it concludes that traffic generated will be significantly less than that previously estimated.</p>	<p>Dismiss comment suggesting that Terry Road should be designated as a 'Neighbourhood Connector Road' and not an 'Integrated Arterial Road'.</p> <p>No modification to structure plan recommended.</p>	Terry Road is proposed to provide vehicle access between Bayonet Head (outlying suburb) and Albany's central Business District. The Commission's Liveable Neighbourhood document recommends the development of an 'Integrated Arterial Road' for connection between centres and other key destinations. These roads have limited crossovers to enable the movement of vehicles and a cycle lane.

		Designation as an 'Integrated Arterial Road' is likely to unnecessarily result in increased development costs.		
49.		Retention of Terry Road as a Neighbourhood Connector Road is also requested. Wood & Grieve's Transportation Impact Assessment does not appear to provide any reason why it should be upgraded to an Integrated Arterial Road.		
50.		I request that the proposed local access road from the Ardess Industrial area, which connects through our property to the realigned Terry Road, be deleted and that access to and from the industrial area be restricted to the existing access from Chester Pass Road and via a loop road through to Mercer Road.	Dismiss recommendation to delete access from the industrial estate to the north (Terry Road). No modification to structure plan recommended.	Access from the Ardess Industrial Estate to Terry Road is currently available. It is intended that heavy vehicles use the existing private access onto Chester Pass Road and that 'as of right' vehicles use the crossover to Terry Road.
51.		Because 'as of right' vehicles can also have a significant impact on amenity, it is also requested that the local road shown connecting the industrial area to the realignment of Terry Road on our property, be deleted. Given the size of the industrial area and intended use, it is requested that access be restricted to the current private road and its extension to form a loop road connecting back to Mercer Road. Refer attached sketch. Finally, the designation of Terry Road as an Integrated Arterial Road is questioned. The Traffic Impact Assessment makes it clear that overall traffic numbers will be significantly less than previously estimated and that Mercer Road will carry more traffic than Terry Road. Consequently it is questioned why Terry Road is being upgraded from a Neighbourhood Connector Road with the potential for additional road widening and associated costs. It is requested that the previously adopted arrangement endorsed by the Warrenup -Walmsley Local Structure Plan be retained.		A neighbourhood connector road has been endorsed by previous structure planning to provide a convenient local travel option for future developed areas on the east side of Chester Pass Road. The neighbourhood connector road will provide access between Chester Pass Road, Range Road and Terry Road. The Commissions draft Liveable Neighbourhoods document supports the use of neighbourhood connectors by restricted vehicles (e.g. small trucks).
52.		Given the scale of the industrial area and provision to include general industry, we are particularly concerned at the proposal to create 'Local Road' access directly into our residential area. We request that this road be deleted and that access to and from the industrial area be via Chester Pass Road and via a loop road to Mercer Road. Refer attached plan. It is understood that RAVs will be restricted to the existing Chester Pass Road access, however, the impact of 'as of right' vehicles can still have a significant impact on the residential amenity of our development.		
53.		The AWLSP represents a significant increase of the existing 'Light Industry' area and additional 'General Industry'. Apart from the possibility of increased RAVs accessing the area, there will be an increase in 'as of right' trucks. These heavy vehicles will have unrestricted access to surrounding roads and Clause 43 of Council's agenda report recommends that these roads be "designed and developed to accommodate heavy vehicles". In this regard the proposed 'local road' shown on the structure plan, which runs north across the existing Terry Road reserve to connect to the realigned Terry Road within Lot 5498, is strongly opposed. It is requested that it be deleted and that access to and from the industrial area be restricted to the existing access off Chester Pass Road and an internal loop road which exits onto Mercer Road. Providing for industrial traffic to filter		

		through residential areas, will significantly and unnecessarily impact on the amenity and safety of these areas.		
REMNANT VEGETATION				
54.	Department of Biodiversity, Conservation and Attractions.	<p>The proposed modification to the structure plan reduces the retention of native vegetation from approximately twelve hectares to 2.5 hectares, which will not only reduce the natural amenity for this area but also may reduce threatened species habitat for black cockatoo species and western ringtail possum.</p> <p>The proposed amended structure plan will form the basis for a Local Planning Scheme amendment and subsequent subdivision and development approvals.</p> <p>Currently only desktop information is available on fauna values associated with native vegetation within the subject land.</p> <p>Prior to any scheme amendment, DBCA recommends that habitat assessment for black cockatoo species and western ringtail possum is conducted within the associated native vegetation so that the City of Albany can make an informed decision, with further advice from DBCA, on the impact of subdivision and development resulting from the amended scheme on native fauna values protected under the Biodiversity Conservation Act 2016.</p>	<p>Note comment relating to flora and fauna.</p> <p>Uphold comment relating to habitat assessment at scheme amendment stage.</p> <p>It is recommended that the following requirement is included within structure plan provisions:</p> <p><i>Any subdivision or development application, proposing to clear or impact the linear native vegetation corridor on Lot 521 Mercer Road is to be accompanied by a habitat assessment of native vegetation to determine impact on black cockatoo species and the western ringtail possum.</i></p>	<p>The City's Local Planning Strategy 2010 highlights the structure plan area for urban purposes.</p> <p>The structure plan is recommending development of the land for residential purposes to comply with the City's Local Planning Strategy 2010.</p> <p>As per Department of Environment Regulation clearing guidelines, the structure plan recommends the partial clearing of a strip of vegetation on the basis that:</p> <ul style="list-style-type: none"> • The native vegetation does not comprise of a 'significant habitat'; • The native vegetation does not comprise a high level of biological diversity; • The native vegetation is not significant as a remnant of native vegetation in an area • The native vegetation is not in association with a watercourse or wetland; • The clearing of native vegetation is not likely to exacerbate the incidence or intensity of flooding or deterioration in the quality of surface on underground water. <p>Other than the City buying land to protect vegetation or the Environmental Protection Authority issuing a protection order, there is limited opportunity to protect the strip of vegetation located within the structure plan area.</p> <p>Note: It is considered inappropriate to cede POS for conservation purposes.</p>
SCHOOL				
55.	Department of Education	<p>The Western Australia Planning Commission's (WAPC) Development Control Policy 2.4 - School Sites (Policy) states that a 4.0ha public primary school site is to be provided for every 1500 dwellings within its catchment. It is worth noting that a higher dwelling yield may warrant either an additional public primary school or a larger public primary school site.</p> <p>With reference to the 'Stormwater Management Strategy REV B' Plan, it appears that a drainage basin is located within or adjacent to the future public primary school site. This is not supported as it does not accord with the relevant provisions of the WAPC's Draft Liveable Neighbourhoods 2015. School sites shall be located in areas that do not present undue site constraints such as areas subject to inundation as this would affect the usability of the land for school development and compromise safety of the students.</p>	<p>Note comments from the Department of Education relating to:</p> <ul style="list-style-type: none"> • Dwelling yield determines the amount and size of school; • School sites should be located in areas that do not present undue site constraints; • A minimum of three roads about a school site; • Sharing POS with school oval. <p>No modification to structure plan recommended.</p>	<p>The area identified by the structure plan for residential development is expected to accommodate in excess of 1500 dwellings (114ha X 14 dw/ha).</p> <p>The structure plan has indicated the need for a school in accordance with the Western Australia Planning Commission's (WAPC) Development Control Policy 2.4 - School Sites (Policy), which states that a 4.0ha public primary school site is to be provided for every 1500 dwellings within its catchment.</p> <p>Future stages of the planning process (subdivision) will further refine the size and location of the school and access arrangements.</p>

		<p>It is noted that two sides/boundaries of the school site are abutting land earmarked for 'Parks and Recreation'. It is a requirement of the Policy that a minimum of three roads abut a school site to facilitate traffic circulation and accommodate on-street embayment parking for pick-up and drop-off of students. Accordingly, the two road access to a school site would severely impair the operation of the school.</p> <p>In view of the above, the Department would support the draft revised AWLSP subject to the above matters being addressed to the Department's satisfaction. Additionally, it is noted that the draft AWLSP favours joint community/school recreational use of the primary school oval. Should the City of Albany wish to utilise the 'Parks and Recreation' land for shared public open space, the Department welcomes the opportunity to liaise with the City of Albany on this matter.</p>		
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NOVEMBER 2019

Schedule of Modifications

LOCAL STRUCTURE PLAN No.10

Lot 10 Chester Pass Road and Lot 521 Mercer Road, Walmsley.

1. It is recommended that the structure plan is amended as demonstrated by the 'November Recommended Structure Plan Provisions' and which includes the following:

- a) Recommend including a provision to limit the approval period of transport depot's to 5 years.
- b) Recommend mentioning the opportunity for the re-approval of a transport depot (after the 5 year temporary approval) subject to on-going approval for Restricted Access Vehicle movement on Chester Pass Road.
- c) Recommend limiting the amount of transport depots within the Light Industry area to two.
- d) Recommend including a provision to ensure transport depots are setback min 200m from residential premises.
- e) Recommend including a provision to ensure transport depots are located considerate of any visual impact.
- f) Recommend deleting the proposal to rezone land at the Ardess Industrial Estate to 'General Industry'. Recommend maintaining and expanding the 'Light Industry' zone.
- g) Recommend including a provision that enables the consideration of uses/development based on the permissibility in the Scheme's Zoning Table for the Light Industry Zone.
- h) Recommend including a provision(s) that enables the consideration of transport depot's with the permissibility of a 'D' use within the core of the Light Industry precinct.
- i) *Recommend clarifying that:*
 - *There is no limit to the number of transport depots that utilise only as-of-right vehicles.*
- j) Recommend including the following conditions, to limit land use conflict in accordance with Environmental Protection Authority guidelines for the development of Transport Depot's:
 - *All transport depots are to be restricted to the central core of the light industry precinct, as shown on the Structure Plan map, which have a buffer of at least 200 metres from off-site sensitive uses.*
 - *Transport depots to be located considerate of visual impact to surrounding landscape. Preference is for transport depots to be located in lower areas toward Chester pass Road. Tree planting surrounding transport depots may-be necessary for screening purposes.*
- k) Existing structure plan provisions require the sealing of access and car parking areas as a means to manage dust. It is recommended that temporary uses (e.g. transport depots) may utilise other less permanent methods to manage dust. The following provision is recommended:
 - *All access and car parking areas are to be sealed to avoid dust. The exceptions are for temporary uses and where associated with a Temporary Development Approval. In these instances, the applicant is to demonstrate that suitable materials will be used and there are suitable arrangements in place to manage dust to the satisfaction of the City.*
- l) Recommended that the following requirement is included within structure plan provisions:
 - *Support the residential precinct, including the future school site and POS, being rezoned to 'Future Urban'. Any subdivision or development application, proposing to clear or impact the linear native vegetation corridor on Lot 521 Mercer Road is to be accompanied by a habitat assessment of native vegetation to determine impact on black cockatoo species and the western ringtail possum.*

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

ARDESS-WALMSLEY LOCAL STRUCTURE PLAN

PART ONE - IMPLEMENTATION

1. Structure Plan area

This Structure Plan shall apply to Lot 10 Chester Pass Road, Walmsley and Lot 521 Mercer Road, Walmsley being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (Plan 1).

2. Structure Plan content

This Structure Plan comprises:

- a) Part 1 - Implementation section - This section contains the Structure Plan map and statutory planning provisions and requirements.
- b) Part 2 – Non-statutory (explanatory) section - This section to be used as a reference guide to interpret and justify the implementation of Part One.
- c) Appendices – Technical reports and supporting plans and maps.

3. Interpretation and Scheme relationship

Unless otherwise specified in this part, the words and expressions used in this Structure Plan shall have the respective meanings given to them in the *City of Albany Local Planning Scheme No. 1* (the Scheme) including any amendments gazetted thereto.

The Scheme prevails over the Structure Plan in the case of any inconsistency.

4. Operation

The date the Structure Plan comes into effect is the date the Structure Plan is approved by the Western Australia Planning Commission (WAPC).

5. Vision

The Structure Plan vision is to:

- a) Develop two precincts, one comprising light ~~and general~~ industry and the other comprising residential.
- b) Provide a major employment area.
- c) Separate the light industrial industry and residential precincts by a landscaped major north/south transport route.
- d) Provide a district size public open space along with an adjoining primary school central to the residential precinct.

6. Preferred character, design objectives, strategies, requirements and actions

Table 1 sets out the preferred character, design objectives, strategies, requirements and actions for the light industrial industry precinct and the residential precinct. This establishes the longer-term direction, intended outcomes, required additional technical investigations along with requirements (standards).

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

Table 1 - Preferred character, design objectives, strategies, requirements and actions		
	<u>Light Industrial-Industry Precinct</u>	<u>Residential Precinct</u>
Preferred character	To create an <u>light industrial-industry</u> precinct that provides a range of land uses and employment opportunities which limit offsite impacts including noise, visual, dust and transport.	To create a primarily residential neighbourhood based on a connected grid-based local street network, that has been modified to respond to the topography and key site and amenity features.
Design Objectives	<ul style="list-style-type: none"> • Ensure development facing public roads is appealing and is appropriately landscaped. • Support development that <u>minuses minimises</u> land use conflict with adjoining residential areas through setbacks, landscaping, noise mitigation, land use and building orientation. • Require a holistic approach to stormwater treatment that avoids localised and temporary drainage treatment where possible. • Require landscaping of streets with appropriate trees and shrubs. • Require an active built form interface with Range Road. 	<ul style="list-style-type: none"> • Encourage residential subdivision generally at a conventional density (lot sizes of approximately 400-600m²) with opportunities for smaller lots adjacent to public open space (POS) and school. • Promote joint POS and primary school recreation. • Promote portion of POS contribution as finance for use in developing infrastructure associated with POS areas. • Support diverse housing outcomes in key locations, such as near key roads, interfacing with POS, on prominent corners and in other appropriate locations. • Encourage a subdivision design that prioritises a connected, legible and gridded street network, with modifications that respond to site conditions, topography and amenity features. • Encourage subdivision design that incorporates discrete design elements that will result in a diverse and attractive public realm and sense of place. • Avoid cul-de-sacs. • To require landscaping of streets with canopy trees. • Require an active built form interface with intergrator arterial roads, neighbourhood connector roads and POS. • Require a holistic approach to stormwater treatment that avoids localised and temporary drainage treatment where possible.
Strategies	<ol style="list-style-type: none"> 1. Support light industry <u>and related uses, and general industry. Locate the light industry surrounding the general industry as a buffer to neighbouring sensitive uses.</u> 2. Consider <u>uses/development based on the permissibility in the Scheme's Zoning Table for the Light Industry Zone.</u> 3. Introduce, <u>via a scheme amendment, the transport depot use with the permissibility of a 'D' use within the core of the Light Industry precinct.</u> 2-4. Incorporate landscaped setback 	<ul style="list-style-type: none"> • Support residential development at minimum of R20. • Promote higher density adjacent to POS and the primary school and other relevant parts of the precinct. • <u>Support the residential precinct, including the future school site and POS, being rezoned to 'Future Urban'.</u> • <u>Any subdivision or development application, proposing to clear or impact the linear native vegetation corridor on Lot 521 Mercer Road is to be accompanied by a habitat assessment of native vegetation to determine</u>

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

	<p>areas or other amelioration measures between light industry and sensitive uses.</p> <p>3-5. Limit industrial activity subject to public road capacity.</p> <p>4-6. Connect new industrial areas to reticulated sewerage.</p> <p><u>7. All transport depots are to be restricted to the central core of the light industry precinct, as shown on the Structure Plan map, which have a buffer of at least 200 metres from off-site sensitive uses.</u></p> <p>5-8. Following rezoning, <u>Support a maximum of two transport depots that have Restricted Access Vehicles (RAV's) parked overnight in the General Industry area following rezoning.</u></p> <p><u>9. There is no limit to the number of transport depots that utilise only as-of-right vehicles.</u></p> <p><u>10. Any transport depot or other use that can be considered, that is accessed by Restricted Access Vehicles RAV's and where RAV's are parked overnight, can be considered for Temporary Development Approval for a period that expires not later than the expected completion date of the Ring Road (to be confirmed by Main Roads) of 5 years.</u></p> <p>6-11. <u>Chester Pass Road is currently approved for RAV's. Re-approval of a transport depot (associated with RAV's) is subject to on road vehicle restrictions, which may be instigated by Main Roads WA on an as required basis after consultation with the City of Albany; and</u></p> <p>7-12. <u>Any transport depot or Other permitted or discretionary uses that can be considered, that is are accessed by "as-of-right" less than three (3) commercial vehicles (non RAV's) can be located-considered in the Ardess Estate without time restrictions.</u></p>	<p><u>impact on black cockatoo species and the western ringtail possum.</u></p>
Requirements	<ul style="list-style-type: none"> Require a mix of lot sizes to accommodate different uses (e.g. 2000m² – 2ha). Maximum total of 30 industrial-industry lots/industrial land uses may be considered within the <u>light industrial industry</u> precinct. This requirement applies due to limitations on adjoining transport infrastructure. <u>Transport depots to be located in the central core of the light industry precinct, as shown on the Structure Plan map, which have a buffer of at</u> 	<ul style="list-style-type: none"> An Urban Water Management Plan is undertaken at the subdivision stage to provide detailed design in accordance with Department of Water and Environmental Regulation and local government requirements. Stormwater is designed to feed into silt traps, which connect to the stormwater system and treated downstream. All residential lots being connected to the reticulated sewerage system.

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

	<p><u>least 200 metres from off-site sensitive uses.</u></p> <ul style="list-style-type: none"> • <u>Transport depots to be located considerate of visual impact to surrounding landscape. Preference is for transport depots to be located in lower areas toward Chester pass Road. Tree planting surrounding transport depots may be necessary for screening purposes.</u> • A revised traffic impact assessment is required setting out mitigation measures and associated treatments, should the number of vehicle movements to and from the <u>light industrial-industry</u> precinct exceed the current threshold detailed in the Transport Impact Assessment report (March 2019). • An Urban Water Management Plan is undertaken at the subdivision stage to provide detailed design in accordance with Department of Water and Environmental Regulation and local government requirements. • Stormwater is designed to feed into silt traps, which connect to the stormwater system and treated downstream. • Stormwater is not to be discharged from development onto Chester Pass Road or into the Chester Pass Road drainage system. • Retention and infiltration are to occur on site using individual soakwells, retention basins or other measures as deemed necessary. Oil and grease traps are to be provided within each building site to the satisfaction of the local government to ensure that nutrient export off the site is kept to a minimum. • The landscaping strip adjoining the Chester Pass Road boundary is to be retained and managed. • The living stream to be landscaped. • Intersections to be developed as generally indicated on the Structure Plan map. • Range Road to be developed as two lanes with a 30m road reserve. • Road closure as per the Structure Plan map. • Subject to Main Roads Western Australia permitting Restricted Access Vehicles (RAV's) on Chester Pass Road, between the Ardess Industrial Estate and Menang Drive, RAV access to and from the Ardess Industrial Estate is via the Private Access Road onto Chester Pass Road. • No RAV access onto Terry Road, Range Road or Mercer Road. 	<ul style="list-style-type: none"> • Subject to the outcomes of the required Traffic Impact Assessment, the intersections to be developed as generally indicated on the Structure Plan map. • Range Road to be developed as two lanes with a 30m road reserve. • Consideration for pedestrian and cycling movement within subdivision design. • A minimum of 10 per cent POS provided in residential areas in accordance with WAPC policy. POS is to be provided generally in accordance with the Structure Plan map. The district POS area to be developed central to residential areas and is to incorporate portion of remnant vegetation as indicated on the Structure Plan map. The POS is to provide a range of opportunities suitable for sporting activities, nature space, playgrounds and other facilities. • Support portion of POS contribution as finance for use in developing infrastructure associated with POS areas. • Support opportunities for joint community/school recreational use of the primary school oval. • Stormwater basins in POS areas is to be developed in accordance with measures applicable to the WAPC Liveable Neighbourhoods. • Revegetation using native species in areas of POS is to occur to promote fauna habitat and flora diversity. • At the time of rezoning, identify measures necessary to overcome land capability issues for southern areas adjacent to Mercer Road. • Prevent direct vehicular access between lots and Range Road, Terry Road and Mercer Road. • Suitably address an appealing street frontage to Range Road, Terry Road and Mercer Road through the design of subdivision roads and lots and the design/orientation of buildings. • The need for service roads will be addressed at the subdivision stage through more detailed assessment of a range of design considerations including land uses, topography, stormwater management, landscaping and addressing urban design and built form outcomes. • The orientation and design of buildings should be sympathetic to the existing landform.
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NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

	<ul style="list-style-type: none"> • Access is permitted between the industrial precinct and Terry Road, Range Road and Mercer Road for as-of-right vehicles. • No additional crossovers to Chester Pass Road. • A right turn exit ban from the Private Access Road to Chester Pass Road required following full development of the site. Any right-turn ban would best be achieved through signage, as opposed to physical design. • Trees on the inner radius of the bend in the Private Access Road to be removed to allow for appropriate sight lines for oncoming traffic. Provide additional shoulder width at the corner to allow for two opposing RAV's to pass each other simultaneously <u>(as per the Transport Impact Assessment report 2019)</u>. • Roads in the industrial precinct, including private roads, are to be developed to accommodate heavy vehicles. • The existing zoned industrial area may remain unsewered and confined to dry industries if all lots are above 1 hectare. On-site wastewater disposal shall utilise alternative treatment effluent disposal systems unless the applicant can provide advice to the local government that soil conditions are conducive to the operation of septic tanks and leach drains and will not result in unacceptable loss of nutrients to surrounding waterways, or create a risk to public health. • Additional industrial areas, currently zoned 'General Agriculture', to be connected to reticulated sewerage. A sewer pump station may be necessary. • Industrial uses are required to meet industrial buffer standards (including as relevant risk, noise, dust, emissions and other potential nuisances) and to not create detrimental impact on surrounding land uses. • <u>All access and car parking areas are to be sealed to avoid dust. The exceptions are for temporary uses and where associated with a Temporary Development Approval. In these instances, the applicant is to demonstrate that suitable materials will be used and there are suitable arrangements in place to manage dust to the satisfaction of the City.</u> • No direct vehicular access is permitted between lots and Chester Pass Road and Range Road. 	
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NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

	<ul style="list-style-type: none"> Suitably address an appealing street frontage to Range Road, Terry Road and Mercer Road through the design of subdivision roads and lots and the design/orientation of buildings. 	
Actions	<ul style="list-style-type: none"> Rezoning of the land to 'Light Industry' and 'General Industry' in accordance with the Structure Plan map. <u>A Scheme Amendment to facilitate transport depots in the core of the light industry precinct in accordance with the Structure Plan map.</u> Special conditions applicable to industrial zones are to be updated and included in Schedule 11 of the Scheme . Notification on title and notification via development approvals that Chester Pass Road is a major heavy vehicle freight route and buildings in the vicinity may be affected by transport noise and vibration. Should a review of heavy vehicle access along Chester Pass Road determine that negative impacts apply, restricted access regulations may be imposed, meaning the transport depot may have to relocate or change the combination of trailers to comply. At the time of rezoning or subdivision, the following studies may be necessary: <ol style="list-style-type: none"> Urban Water Management Plan. A Local Development Plan to address street frontages and design outcomes adjoining Range Road. Revegetation/landscaping plan. 	<ul style="list-style-type: none"> Rezoning of the land to 'Future Urban'. At the time of rezoning or subdivision, the following studies may be necessary: <ol style="list-style-type: none"> Urban Water Management Plan. Bushfire Attack Level Contour Map. Traffic Impact Assessment, which includes intersection treatment locations and intersection and road upgrades/contributions. Local Development Plan. Revegetation/landscaping plan. <u>At the subdivision or development stage, a habitat assessment of native vegetation is to determine impact on black cockatoo species and the western ringtail possum. The assessment is required as part of an application proposing to clear or impact the linear native vegetation corridor on Lot 521 Mercer Road.</u>

7. Land use and subdivision requirements

The Structure Plan map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area.

7.1 Land Use Permissibility

Land use permissibility within the Structure Plan area shall be in accordance with the corresponding zone or reserve under the Scheme.

~~The land uses, zones and reserves designated under the Structure Plan map (Plan 1) are to plan for the co-ordination of future subdivision and development of the Structure Plan area.~~

The Structure Plan shall be given due regard by the local government when assessing development applications. Once incorporated into the Scheme, the use and development controls of the Structure Plan will have force and effect.

The Structure Plan map (Plan 1) provides designations guiding the preferred locations for future land uses and future key infrastructure including roads. The designations are indicative and will

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

be refined through detailed investigations and design at the time of rezoning, subdivision and/or development as appropriate.

~~Land within the Structure Plan area that is zoned 'General Agriculture' requires rezoning to 'Future Urban' via an amendment to the Scheme.~~

~~It is expected that the expanded light industrial area will be rezoned to 'Light Industry' while the land east of Range Road will be rezoned to 'Future Urban'.~~

5.3 Light Industry

~~The main access to the Ardross Industrial Estate is via a single entry road onto Chester Pass Road. Secondary access is permitted between the estate and Terry Road for as of right vehicles.~~

5.2 Residential

~~Plan 1 identifies residential density codes for the Structure Plan area.~~

~~A range of R-Codes will apply to residential areas shown on the Structure Plan. This will provide flexibility, allowing the final R-Code to be applied closer to the time when the land will be subdivided.~~

~~On average, the Structure Plan area could accommodate approximately 14 dwellings per hectare. There are opportunities to create additional lots subject to market demand.~~

5.4 Public open space

~~A minimum of 10 per cent public open space (POS) will be provided in residential areas in accordance with WAPC policy. POS is to be provided generally in accordance with Plan 1. The POS will provide a range of opportunities suitable for sporting activities, nature space, playgrounds and other facilities.~~

~~There may also be opportunities for joint community/school recreational use of the primary school oval.~~

7.2 Subdivision

Key requirements to support or implement subdivision applications are set out in Table 1.

Subdivision of the land should address the requirements and actions outlined in Table 1 and generally be in accordance with the Structure Plan (Plan 1) approved by the WAPC with any minor variations approved by the WAPC.

~~The minimum lot size is 1 hectare in the area classified and then zoned as 'Light Industry'.~~

For land zoned 'General Agriculture', other than the creation of super lots, further subdivision will not be supported prior to rezoning to the 'Future Urban' zone.

7.3 Conditions of subdivision approval

At the time of subdivision, the following conditions may be recommended, as applicable, requiring the preparation and/or implementation of the following:

- Urban Water Management Plan.
- Bushfire Management Plan.

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

- A Local Development Plan to address matters in section 6.2.
 - Revegetation/landscaping plan.
 - Preventing direct vehicular access between lots and Chester Pass Road, Range Road, Terry Road (section classified as an Integrator Arterial Road) and between residential lots and Mercer Road.
 - Notification of titles, for lots adjoining Chester Pass Road, advising that Chester Pass Road is a major heavy vehicle freight route and buildings in the vicinity may be affected by transport noise and vibration.
 - ~~All residential lots being connected to the reticulated sewerage system.~~
- a) ~~Notification on titles advising that reticulated sewerage is not provided to light industrial lots and setting out that uses need to be 'dry industries'.~~

8. Development requirements

8.1 General

Development will be controlled by the Scheme and will be guided by the Structure Plan (Plan 1), the *Residential Design Codes* (for residential development), any approved Local Development Plan and any relevant Local Planning Policies.

~~The proposed predominant land use within the Structure Plan area will be residential development. It is also proposed to further develop and expand the Ardross Industrial Estate as a key employment area.~~

~~6.3 Light Industrial development~~

~~Development in the area classified as 'Light Industry' will be serviced with on-site wastewater disposal. Existing and proposed industries will be 'dry type' light industrial uses. Development is required to have low wastewater generation and low volume of process water for disposal. Development shall comply with the State Government Sewerage Policy.~~

~~On-site waste water disposal shall utilise alternative treatment effluent disposal systems unless the applicant can provide advice to the local government that soil conditions are conducive to the operation of septic tanks and leach drains and will not result in unacceptable loss of nutrients to surrounding waterways, or create a risk to public health.~~

~~The local government will require stormwater disposal measures to be implemented to ensure that maximum retention and infiltration occurs on-site through the use of individual soakwells, retention basins or other measures as deemed necessary. Oil and grease traps are to be provided within each building site to the satisfaction of the local government to ensure that nutrient export off the site is kept to a minimum.~~

~~The landowner shall retain and manage the landscaping strip adjoining the Chester Pass Road boundary of the site.~~

~~Industrial uses are required to meet industrial buffer standards (including as relevant risk, noise, dust, emissions and other potential nuisances) and to not create detrimental impact on surrounding land uses.~~

~~Development that incorporates restricted access vehicles will be advised that there is no guarantee that restricted access vehicles will be permitted to use Chester Pass Road between Menang Drive and the main roundabout (intersection with Albany Highway, North Road and Hanrahan Road) following the Albany Ring Road being completely constructed and operational to the Port of Albany. Associated development approvals may also contain conditions or advice relating to future limitations of access for restricted access vehicles.~~

NOVEMBER RECOMMENDED STRUCTURE PLAN PROVISIONS

~~6.2 Residential development~~~~The orientation and design of buildings should be sympathetic to existing landform.~~

8.2 Local Development Plans

Local Development Plans will be required to support applications for subdivision and development relating to the following:

- a) Industrial and residential development adjoining Range Road to address access, car parking, built form, possible mixed uses and landscaping.
- ~~b) Lots located between Terry Road and the bush corridor to address access, built form, bushfire management and landscaping.~~
- c) Lots adjoining Terry Road (section classified as an Integrator Arterial Road) and Mercer Road, if there is no service road, to address access, built form and landscaping.
- d) Where residential lot sizes are 260m² or less.

9. Other requirements

9.1 Developer contributions

~~The local government will have due regard to a Contribution Plan prepared for the site and area.~~

Developer contributions are to be made in accordance with the WAPC's State Planning Policy 3.6 and any Local Planning Policy adopted by the City of Albany.

9.2 Staging

~~The Ardross Industrial Estate is long established industrial estate. It is initially proposed to expand the industrial area eastwards to the extension of Range Road.~~

The Structure Plan proposes a substantial residential precinct ~~area~~ east of Range Road. It is likely that the development will be staged over the next couple of decades. The staging will be flexible and should adapt to competing development fronts and the varying attractiveness and cost of subdividing other development.

Lot 521 is zoned 'General Agriculture'. Accordingly, it will need to be rezoned prior to residential subdivision and development proceeding. The residential precinct to be rezoned to 'Future Urban'.

COMBINED JUNE 2019 AND NOVEMBER 2019

Schedule of Modifications

LOCAL STRUCTURE PLAN No.10

Lot 10 Chester Pass Road and Lot 521 Mercer Road, Walmsley.

- 1) It is recommended that the structure plan is amended with conditions ensuring that;
 - I. New industrial areas are connected to reticulated sewer;
 - II. Subdivision to create lots <1ha in the existing industrial area shall connect to deep sewer; and
 - III. All residential areas are connected to deep sewer.

- 2) It is recommended that the structure plan is modified to note that the existing zoned industrial area may remain unsewered and confined to dry industries until such time as more dense development in the area needs to be accommodated in which case deep sewerage is required.

- 3) It is recommended that the structure plan is amended to show a district area of POS central to the residential precinct.

- 4) It is recommended that the structure plan text and map is changed to identify portion of the proposed conservation area for residential development and portion for 'POS - Nature space'.

- 5) It is recommended that the structure plan document references that industrial demand and supply has been addressed through the draft Albany Local Planning Strategy 2018.

- 6) As per Environmental Protection Guidelines and neighbour comment, it is recommended that the structure plan is modified to restrict transport depots from locating within 200m of residential development.

- ~~7) It is recommended that the structure plan is modified such that transport depots are not permitted within a 200m buffer to residential uses. It is recommended that the structure plan is modified to show a 'Light Industry' area adjacent to residential (200m buffer area) and a 'General Industry' area central to the industry precinct (>200m to residential). The structure plan is to allow transport depots in the general industry area and not the light industry area.~~

- 8) It is recommended that the structure plan is modified to ensure a range of lot sizes (including lots less than 1ha).

- 9) It is recommended that the structure plan prescribes the need for controls over industrial uses and development, to avoid potential conflict (e.g. noise, odour and visual amenity) with adjacent residential uses.

- 10) It is recommended that the structure plan includes a provision that ensures industrial and residential areas are appropriately zoned prior to subdivision.

- 11) It is recommended that the structure plan is modified to include requirements that:
 - I. restrict direct access from lots to major arterial roads; and
 - II. ensure buildings are orientated toward major arterial roads (visual amenity).

- 12) It is recommended that the structure plan includes the following conditions, culminating from a traffic assessment:
 - I. Trees on the inner radius of the bend in the Private Access Road be removed to allow for appropriate sight lines for oncoming traffic. Provide additional shoulder width at the corner to allow

for two opposing RAV's to pass each other simultaneously.

- II. Max total 30 industrial lots/industrial land uses may be considered within the industrial areas. This condition applies because of limitations on adjoining transport infrastructure. A transport assessment has determined that the maximum number of vehicles that the current intersection design (Chester Pass Rd) can handle is 180v/day.

13) It is recommended that the following notification accompanies a development application for a transport depot at Lot 10 Chester Pass Road:

Should a review of heavy vehicle access along Chester Pass Road determine that negative impacts apply, restricted access regulations may be imposed, meaning the transport depot may have to relocate or change the combination of trailers to comply.

14) It is recommended that the structure plan makes provision to ensure the northern road connection to Chester Pass Road is for as-of-right vehicles only and not for RAV7 vehicles (heavy haulage vehicles).

15) It is recommended that a provision is included to ensure roads within the structure plan area are designed and developed to accommodate heavy vehicles.

16) It is recommended that a provision is included to ensure that no additional access to Chester Pass Road may be permitted.

17) The structure plan needs to be amended to show an emergency fire access to Chester Pass Road. This is in-line with the approved Development Guide Plan for Ardross, which supports an emergency fire access to Chester Pass Road.

18) It is recommended that a provision is included to ensure landholders are aware (notification on title and notification on Development Applications) that Chester Pass Road is a major heavy vehicle freight route and buildings in the vicinity may be affected by transport noise and vibration.

19) It is recommended that provision is included within the structure plan to ensure roads are developed to an urban standard, to the satisfaction of the City.

20) It is recommended that the structure plan is modified to show proposed R5/10 area as having a minimum density code of R20.

21) It is recommended that, reference within the structure plan, to contribution planning for the proposed school, is deleted.

22) It is recommended that the structure plan is amended to identify measures necessary to overcome land capability issues for a 'Mapping Unit No.2' area (low development capability area).

23) Recommend including provision to ensure stormwater is not discharged from development to the Chester Pass Rd drainage system.

24) It is recommended that the structure plan map is amended to show a waterway within the Lot 10 and also extending north over the neighbouring Lot 5498.

25) It is recommended that the structure plan is amended to show landscaping of the waterway.

26) It is recommended that the structure plan is updated to show how stormwater drainage will be managed within the planned development area. In particular, the structure plan needs to demonstrate:

- a) How infiltration on site for at-source control will be achieved through bio-retention, floodways, treatment drains, public open space and should provide indicative locations for this infrastructure. Note: More basins as structural controls would be expected to be required for sub-catchment;
- b) How runoff in steep areas will be controlled to avoid erosion;

c) A flow path in the event that land is affected by flooding (1% Annual Exceedance Probability).

27) Recommend deleting the Contributions Plan in the structure plan (Appendix 12). Recommend replacing the wording in Section 3.9 of the LSP with the following:

“Developer contributions are to be made in accordance with the WAPC’s State Planning Policy 3.6. Contributions may be required for:

- 1. The ceding and development of land for a north/south link road, namely ‘Range Road’.*
- 2. Road upgrading and/or intersection treatments as may be required at the subdivision stage, as recommended by a Traffic Analysis to the satisfaction of the City of Albany.*

Note: The value of contribution for Range Road may consider:

- 1. Value of land ceded (30m W/L?); +*
- 2. Road construction costs; divided by*
- 3. Proportion of vehicles attributed to structure plan; divided by*
- 4. Expected dwellings; =*
- 5. Cost per lot.*

Note: Road upgrading and/or intersection treatments may be required for Terry Road, Mercer Road and the intersection between the Range Road and Mercer Road. Cost sharing mechanisms may apply.”

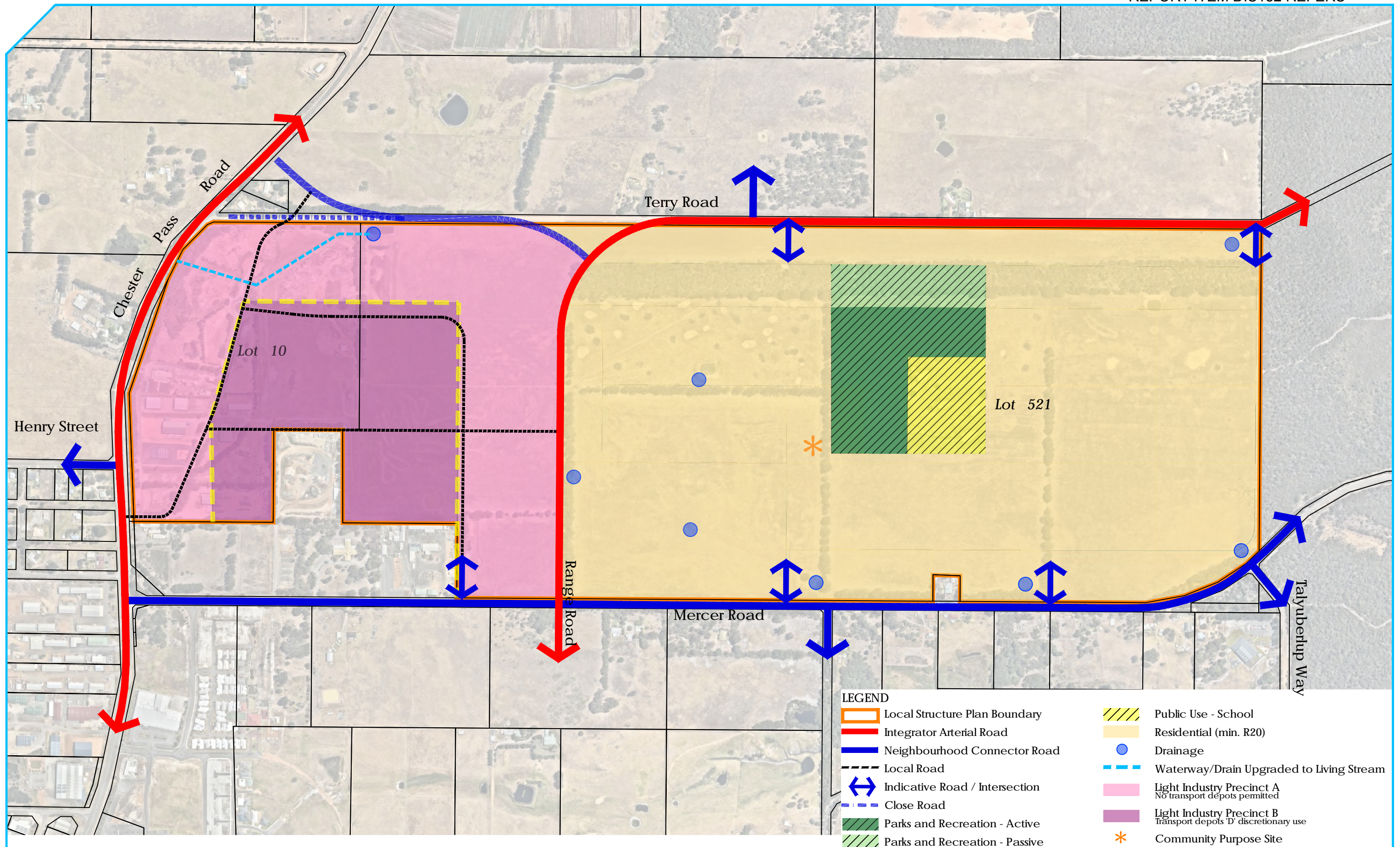
28) It is recommended that the structure plan is amended as demonstrated by the ‘November Recommended Structure Plan Provisions’ and which includes the following:

- a) Recommend including a provision to limit the approval period of transport depot’s to 5 years.
- b) Recommend mentioning the opportunity for the re-approval of a transport depot (after the 5 year temporary approval) subject to on-going approval for Restricted Access Vehicle movement on Chester Pass Road.
- c) Recommend limiting the amount of transport depots within the Light Industry area to two.
- d) Recommend including a provision to ensure transport depots are setback min 200m from residential premises.
- e) Recommend including a provision to ensure transport depots are located considerate of any visual impact.
- f) Recommend deleting the proposal to rezone land at the Ardess Industrial Estate to ‘General Industry’. Recommend maintaining and expanding the ‘Light Industry’ zone.
- g) Recommend including a provision that enables the consideration of uses/development based on the permissibility in the Scheme’s Zoning Table for the Light Industry Zone.
- h) Recommend including a provision(s) that enables the consideration of transport depot’s with the permissibility of a ‘D’ use within the core of the Light Industry precinct.
- i) Recommend clarifying that:
 - *There is no limit to the number of transport depots that utilise only as-of-right vehicles.*
- j) Recommend including the following conditions, to limit land use conflict in accordance with Environmental Protection Authority guidelines for the development of Transport Depot’s:
 - *All transport depots are to be restricted to the central core of the light industry precinct, as shown on the Structure Plan map, which have a buffer of at least 200 metres from off-site sensitive uses.*
 - *Transport depots to be located considerate of visual impact to surrounding landscape. Preference is for transport depots to be located in lower areas toward Chester pass Road. Tree planting surrounding transport depots may-be necessary for screening purposes.*
- k) Existing structure plan provisions require the sealing of access and car parking areas as a means to manage dust. It is recommended that temporary uses (e.g. transport depots) may utilise other less permanent methods to manage dust. The following provision is recommended:

- *All access and car parking areas are to be sealed to avoid dust. The exceptions are for temporary uses and where associated with a Temporary Development Approval. In these instances, the applicant is to demonstrate that suitable materials will be used and there are suitable arrangements in place to manage dust to the satisfaction of the City.*

l) Recommended that the following requirement is included with structure plan provisions:

- *Support the residential precinct, including the future school site and POS, being rezoned to 'Future Urban'. Any subdivision or development application, proposing to clear or impact the linear native vegetation corridor on Lot 521 Mercer Road is to be accompanied by a habitat assessment of native vegetation to determine impact on black cockatoo species and the western ringtail possum.*



LOCAL STRUCTURE PLAN

Lot 10 Chester Pass Road and Lot 521 Mercer Road

Walmsley

H	INDUSTRY, BUFFER	191028
G	BASINS, SCHOOL, POS	190519
F	VARIOUS MODIFICATIONS	190411
E	NOTES AND MODS	180515
D	ADD EMERGENCY A. WAY.	171118
C	MINOR MODIFICATIONS	171023
B	MINOR MODIFICATIONS	171022
REV	DESCRIPTION	YYMMDD

DRAWING NUMBER	REV	SCALE	SHEET
EP 170520 06	H	1:7500	A3

0 150 300m

based for design intent only
All areas and dimensions are subject to detail design + survey.

edge
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CITY OF ALBANY

Road Cost Apportionment Schedule

Kalgan Rural Village

March 2019

This document acts as an updated addendum to the Kalgan Rural Village Structure Plan and determines how Land Developers in the area will contribute to infrastructure upgrades.

Revision

Date	Description	Revision	Author
June 2014	Original issue	Rev 0	Paul Camins – Development Engineer
April 2019	Updated costs and lot yield	Draft 1	Alan Millar – Development Engineer

Executive Summary

The intensification of residential land through subdivision will create significant demands on the existing road infrastructure.

Developers are required to contribute to the upgrade of this existing road infrastructure at:

- Hunton Road intersection with South Coast Hwy
- Wheeldon Road – traffic modifications
- Riverside Road

The contributions required are:

- a payment of \$3,441.16 (incl GST) as at March 2019 (increased annually on 1 July by CPI), for each additional lot created in the Kalgan Rural Village area, for the purposes of upgrading the entry points to the Kalgan Rural Village site.
- an additional payment of \$5,195.08 (incl GST) as at March 2019 (increased annually on 1 July by CPI), for each additional lot identified as impacting on Riverside Road, to equally contribute to its upgrade.

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Introduction

This document is an updated Road Cost Apportionment Schedule from the original issue in June 2014. Since this time, there has been a significant amount of development activity in the area, interest for further subdivision, and infrastructure works completed. As such, there is a need to revise the contribution amounts with an updated estimated lot yield plan.

In 2012, the Kalgan Rural Village Structure Plan (KRVSP) was endorsed. The intensification of residential land use will increase the population of the area and create significant demands on existing infrastructure. This was recognized as part of the Structure Plan, and various negotiations were undertaken with the City of Albany and Main Roads WA and commitments made. The outcome of these negotiations proposed road upgrades to ensure that the road network in the area is safe and will meet the expectations of the current and future land owners. The endorsed KRVSP requires that contributions be made to upgrade a number of roads within the Structure Plan area.

The amount of contribution required was not determined as part of the development of the Structure Plan and has left developers unsure of the contribution amount. The funds acquired from contributions will be set aside for the roads within the Structure Plan area.

The road upgrade cost to meet the total development shall be calculated and this will be the total cost to meet the needs of a “build-out scenario” (i.e. all lots able to be created, are created).

Proposed Development

Development Area

There are three precincts identified under the Kalgan Rural Village Structure Plan (KRVSP), with Precinct 2 and Precinct 3 identified as key areas for subdivision. Precinct 2 has been further split into 3 sub-precincts. Appendix A shows an updated Lot Yield Assessment (Ayton Baesjou, February 2019) based on existing approved subdivisions and predicated subdivisions.

The Precincts are defined in the KRVSP as:

PRECINCT 1 - HISTORIC VILLAGE CORE

The historic community node is to be protected and enhanced as a local activity centre. Infill and consolidation through the subdivision of freehold lots is supported subject to further design and assessment to address capability, fire safety, protection of water courses and vegetation, and to ensure enhancement of cultural, heritage and landscape values and the village character.

Currently, there has not been a strong interest for development within this precinct.

PRECINCT 2 - RURAL VILLAGE ACTIVITY CENTRE

Controlled expansion of the settlement south and east of the Kalgan River and Highway is supported through subdivision and development.

Precinct 2 encompasses the majority of the developable area as special residential lots. There are some lots to the north of South Coast Hwy with some development potential as a result of the Structure Plan.

PRECINCT 3 - RURAL VILLAGE NORTH

In recognition of existing lot sizes, land uses and the constraints of the highway, limited subdivision and boundary rationalisation will be considered. The traditional commercial node is to be retained and enhanced. Development proposals shall give consideration to access, trails, vegetation protection, food production and employment generation.

Whilst Precinct 3 is partially separated by the highway, the area remains a critical part to the Structure Plan, with residents utilising Hunton Road to access the Village Centre and Nanarup Road.

Lot Yields

Updated lot yields are tabulated in Appendix B. Lots within the rezoned area that have chosen not to be a part of the Structure Plan development have been assigned a nominal predicted yield.

The total and additional lots per precinct that have been used for the calculation are summarised below.

	Total Lots	Additional lots
Precinct 1	15	7
Precinct 2a	88	81
Precinct 2b	80	75
Precinct 2c	23	17
Precinct 3	34	11
Total	243	191

Existing Roads

Hunton Road

The existing road formation is a 6 metre seal with 1 metre gravel shoulders either side. This is consistent with the City of Albany levels of service standards.

The existing bridge over Chelgiup Creek was replaced and upgraded in 2018 via government funding. Hunton Road is signposted at 60 km/h north of Riverside Road, with traffic counts indicating an estimated AADT (Annual Average Daily Traffic) of 59 north of Wheeldon Road and 131 south of Riverside Road. South of Riverside Road, Hunton Road is a derestricted speed zone.

Riverside Road

Riverside Road was sealed with a single coat 14mm seal between Hunton Road to Myola Drive (first intersection) in 2017. A second 7mm coat seal is still required to create a 2-coat seal.

From the intersection of Hunton Road to Myola Drive, 280m in length, there is a wider 8.5m formation and less restrictive vegetation. Part of this section has been reshaped by the developer of lot 100 in order to make the intersection for his development safe. The end section that will service proposed section 2c has a narrower formation, with a 4 metre width and heavily vegetated and therefore unsuitable for heavy and regular traffic in its current form. Riverside Road is a derestricted speed zone with 2012 traffic counts indicating an AADT of 43.

Wheeldon Road

Wheeldon Road currently provides a through way between South Coast Highway and Hunton Road as well as a parking area for the Luke Penn walk, along the Kalgan River. The existing bridge is narrow, at 5.5 metres wide and the road either side of the bridge has a 5.8m wide seal with 1 metre gravel shoulders. This is a high bridge spanning approximately 70m. Aboriginal heritage surveys

undertaken in the area have established that future disturbance to the Kalgan River bed is not supported. Wheeldon Road is signposted at 60 km/h with 2012 traffic counts indicating an AADT of 102.

Churchlane Road

Churchlane Road currently provides a connection between South Coast Highway and Chester Pass Road. There are no other roads intersecting with Churchlane Road. The formation of the road is gravel, with a width of 7 metres and drains for all weather access. With the minimal additional development, sealing of the road would not be required. This is a derestricted speed zone with traffic counts indicating an AADT of 55.

South Coast Highway

South Coast Highway is a major heavy haulage and travel route, heading east from Albany towards Jerramungup. The section fronting the village is designated as a MRWA RAV Network 7, which allows road trains up to 36.5m long and up to 107 tonnes. The posted speed limit is 90Km/h. As a priority heavy haulage route, modification to and safety of intersections is a priority. Anticipated traffic flows from developments on Hunton Road and changes to be made to Wheeldon Road will increase the burden on the intersection of Hunton Road and South Coast Highway. The noise implications of developing lots on South Coast highway and the noise path will not change lot outputs as these properties are smaller and more heavily vegetated.

Traffic

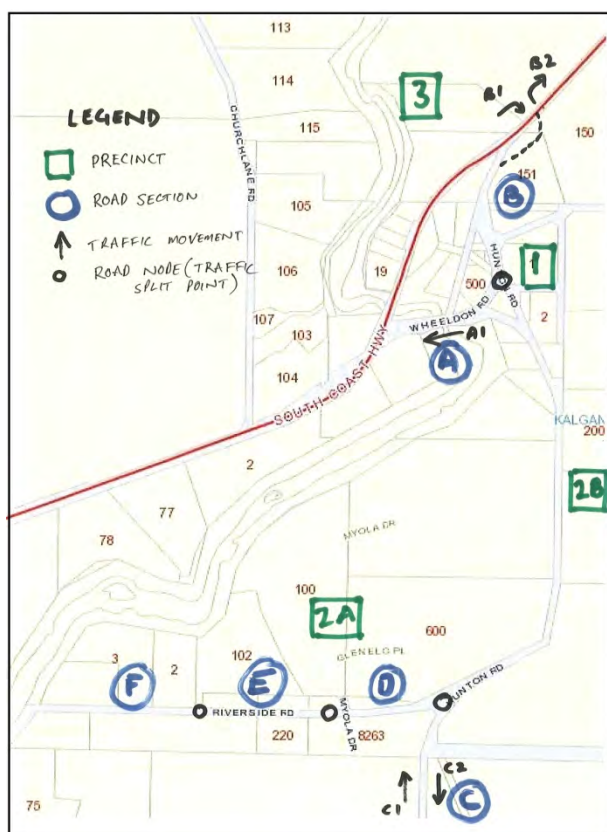
Traffic volumes

The build-out of the Rural Village project will significantly increase traffic volumes. Presently, properties are predominantly larger lifestyle hobby farm lots generating minimal traffic.

In order to calculate the additional vehicles expected as a result of development, a number of assumptions have been made.

Assumptions in additional volume calculations

- Each additional property will generate 4 return trips, or 8 vehicle movements per day for each property. This is justified by the anticipated residents being regular commuters into the Albany area for work.
- 0% organic traffic growth (only by development) for existing traffic within the Village Area (consistent with traffic counts).
- Traffic that would travel from South Coast Highway through Wheeldon Road being reallocated to Hunton Road following the realignment.
- Use of Hunton Road and/or Wheeldon Road as a through road, from South Coast Highway to Nanarup Road, will remain consistent with present usage patterns.
- 90% (80% west and 10% east) of traffic generated from development will use South Coast Highway with 10% heading south towards Nanarup Road. The primary reason for this would be that Hunton Road and Nanarup Road is the route that offers the fastest access to Flinders Park Primary School and Grammar School.
- Due to the expense of widening the Wheeldon Road Bridge, Wheeldon Road is to receive a one way and right turn restriction treatment, therefore 50% of the existing traffic will be reallocated to Hunton Road.
- 100% of traffic from the development area of Churchlane Road and the Hunton Road developments will not head north to Chester Pass Road.
- 10% of traffic from Precinct 3 will use Hunton Road, with schools being the major destination



Traffic Movement	Precinct Calculation
A1	$0.8 \times 0.5 \times (1+2A+2B+2C)$ $+ 0.1 \times 0.5 \times (3)$
B1	$0.9 \times 0.5 \times (1+2A+2B+2C)$ $+ 0.1 \times 0.5 \times (3)$
B2	$0.1 \times (1+2A+2B+2C)$
C1 = C2	$0.1 \times 0.5 \times$ $(1+2A+2B+2C+3)$

Assumed relevant post-development traffic movements from Kalgan Rural Village

Pre-development traffic counts and post-development calculations are detailed in Appendix C. In summary, the expected additional traffic on the roads in question are summarised below.

Modifications required to meet projected volume	% New development	Total	Net additional vehicles	Projected reduction in vehicles	Projected additional vehicles	Existing Vehicles	per Day	
One way treatment	84%	631.4	529.4	51	580.4	2012	102	Wheeldon Rd
Intersection realignment at South Coast, Highway and bridge replacement	93%	834.4	775.4	-51	724.4	2012	59	Hunton Rd north of Wheeldon
None	54%	283.8	152.8		152.8	2010	131	Hunton Rd south of Riverside
Grade, bind and seal to 6.0m 2-coat seal	90%	427	384		384	2012	43	Riverside Road 0 -270
Upgraded and 2-coat seal to 5.5m	76%	179	136		136	2012	43	Riverside Road 270 - 700
Widened to allowing passing opportunities. Resheet.	78%	92	72		72	2012	20	Riverside Road 700 - 1100

Design Recommendations

Hunton Road Bridge Upgrade

The bridge was upgraded on Hunton Road in 2018. As these works were government funded, these works no longer form part of the Road Cost Apportionment Schedule.

Realignment of Hunton Intersection

The intersection of Hunton Road and South Coast Highway has insufficient Approach Sight Distance (ASD), at the existing 90km/h speed limit. Main Roads WA will not support a further decrease of the speed limit in this section as the road is a Strategic Transport Route for heavy haulage.

The preferred option and that identified by Main Roads WA and proposed by the KRVSP is a realignment of the road to intersect at a safer location with the addition of an auxiliary turning lane and slip lane. The Hunton Road to South Coast Highway intersection is to be realigned 100m to the east. This will meet the warrants for the ASD and allow a perpendicular intersection layout.

Auxiliary lanes at Hunton Intersection

Without this development, the through traffic on South Coast Highway is expected to be in the order of 1,750 vehicles a day by 2031. An estimate at the Peak Hour of 13.5% (Austroads Guide 4A recommends using between 11-16% of AADT to determine this figure) means the hourly traffic is 236 vehicles.

Without the development, traffic counts (at Wheeldon Road) indicate that there are currently approximately 6 vehicles turning right from South Coast Highway in the peak hour.

As a result of development, expected daily traffic returning via the right hand turn is 775 vehicles per day. Using a 13.5% peak hour gives an estimate of traffic turning right of 106 vehicles in the peak hour. This meets Austroads and Main Roads warrants for a Right Turn Auxiliary Lane. Although there is less traffic expected to be turning left onto Hunton Road from South Coast Highway, the number of fast moving heavy vehicles on South Coast Highway justify the requirement for a left turn pocket.

It is proposed that slip lanes for both left and right turning traffic entering Hunton Road from South Coast Highway be provided. This project will require the resumption of land as well as an environmental impact assessment.

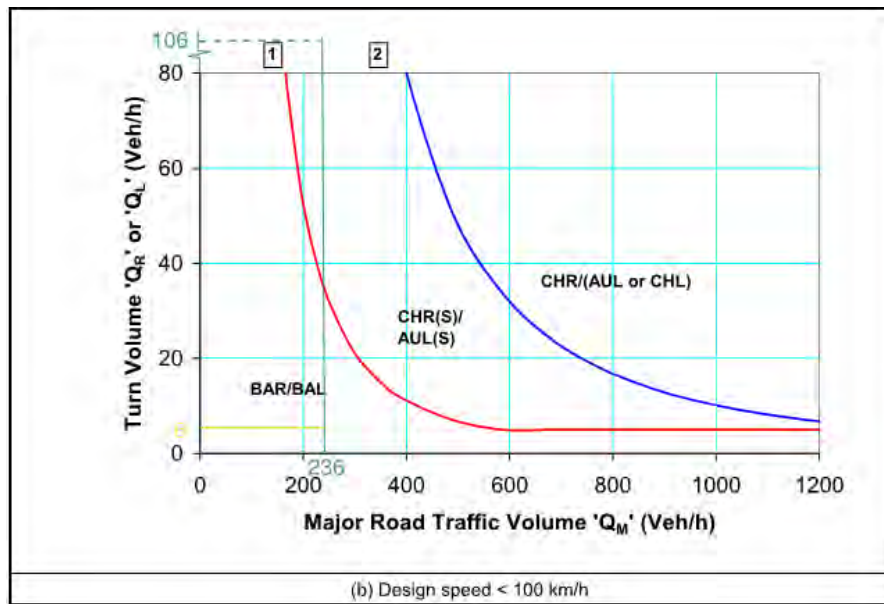


Figure 4.9: Warrants for turn treatments on the major road at unsignalised intersections¹

In Figure 4.9 from Austroads *Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections*, Main Roads WA recommends the application of Figure 4.9, but with the AUR treatment in lieu of the CHR(S) treatment².

The intersection of the green lines shows the anticipated traffic from the development and the intersection of the yellow lines shows current traffic volumes. This shows a significant jump in the traffic conflicts expected at the intersection and warrants an AUR treatment. A preliminary concept design is attached as Appendix D.

The estimated costing for this work forms part of Appendix E and totals \$573,501 (excl GST) excluding the bridge upgrade.

Wheeldon Road

Wheeldon Road also has a narrow bridge, over the Kalgan River. It is proposed that the intersection with South Coast Highway is restricted to left turn egress only. This is due to poor approach sight distance for right turns and the high expense in modifying the bridge on South Coast Highway. Cyclists would continue to be able to use this road from South Coast Highway and allow the owner of 6 Wheeldon Road, direct vehicular access to the Village Centre.

¹ From Austroads *Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections*

² The CHR(S) treatment incorporates line-marked “islands” to help channelize traffic. The AUR treatment is a rural auxiliary lane (right turn pocket) without channelization. Technical application only- cost difference negligible.



Indicative treatment to the Wheeldon Road and South Coast Highway Intersection

The estimated costing for this work forms part of Appendix E and totals \$77,000 (excl GST).

Riverside Road

Riverside Road is a local road that also provides access down to the Kalgan River. It currently experiences minimal traffic of 43 vehicles per day. With development along the road, the demands will be significantly increased. The design standard requirements for Riverside Road (refer Appendix D2) have been determined and split into 3 starting from Chainage 0 at the Hunton Road intersection:

- Chainages 0 – 270: As part of the Contributions this section of road has been sealed with a single coat 14mm seal, and requires a second 7mm seal. This section has a 6.0m wide seal with 1.2m unsealed shoulders.
- Chainages 270 – 700: 179 vehicles per day are expected to use this section of road at build-out. This section is heavily vegetated and would be treated as a narrower formation road with a minimum 5.5m wide 2-coat seal. Upgrading of this section of road is expected to occur in the 2019/20 financial year.
- Chainages 700 – 1100: This section of road is estimated to only carry up to 92 vehicles per day at build-out. The road is quite narrow and heavily vegetated. In order to minimise tree removal and keep the traffic speed environment low, the expected treatment would involve upgrade works to improve sight distance and passing opportunities, but not sealing this section of road. At the time works are proposed it may be deemed prudent to seal this section of road, but it does not form part of the contribution calculations. Due to the emergency access requirement to have two access points, it is proposed that the internal subdivision road connect to Myola Drive. This may further reduce the need to seal this section road. Timing for these works will be dependent upon subdivision activity along this section of road.

The estimated costing for this work forms part of Appendix E and totals \$307,129 (excl GST). The cost of all works on Riverside Road would be shared by all the developers using the road, no matter where their entry point is. It should be noted that upon revision of the costs, the cost per lot has increased from the 2014 Road Cost Apportionment Schedule, due to additional works expected along the section between Chainages 270-700. However, in order to maintain equity to future developers paying contributions for Riverside Road, the contribution for Riverside Road will remain the same as the 2014 Road Cost Apportionment Schedule with CPI included.

Environmental Impacts and Heritage Area

The road realignment occurs in both an environmentally sensitive and Aboriginal Heritage area. This will mean that an environmental impact assessment and Heritage Assessment will need to be completed prior to ground disturbance. An allowance for this has been included as part of the Contributions Plan.

Land Resumption

Land resumptions have taken place to improve the realignment of Hunton Road with South Coast Highway. The actual costs have been included in the cost estimates.

Works required directly by individual Developers

The construction costs of all internal roads currently within private lots will be borne by the developer or in some cases by agreement with adjoining developers. These will be covered by subdivision conditions.

The upgrade of Andrews Road to a sealed standard will be a subdivision condition on lots 4821 and 4904, dependent upon which is first. A cost sharing arrangement may be considered between these two landowners. Sealing of some road frontages may also be a condition on some Precinct 1 lots.

Cost Sharing and Contributions

The proposed sharing of costs is summarised in Appendix B and includes improvements to Wheeldon Road, Hunton Road and South Coast Highway intersection and Riverside Road.

The City of Albany share is based on the existing traffic with the cost associated with the additional traffic from the Kalgan Rural Village development to be paid for by the developers.

The Construction costs of the works are calculated at March 2019 and shall be increased by CPI to when the contribution is paid. The contribution payment must be paid prior to clearance of the new subdivided lots.

In summary;

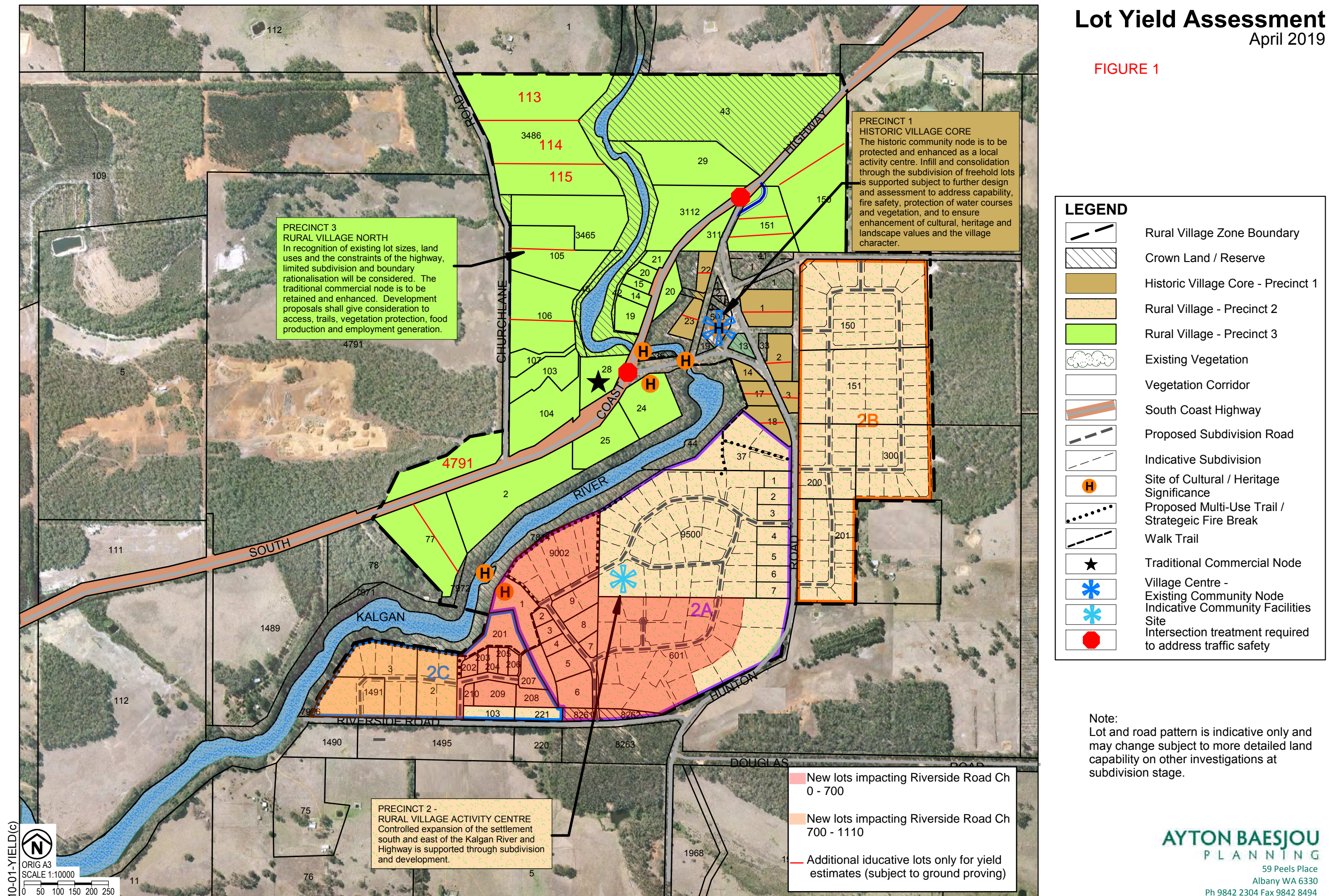
- a payment of \$3,441.16 (incl GST) as at March 2019, for each additional lot created in the Kalgan Rural Village area, for the purposes of upgrading the entry points to the Kalgan Rural Village site.
- an additional payment of \$5,195.08 (incl GST) as at March 2019, for each additional lot identified as impacting on Riverside Road, to equally contribute to its upgrade.

Appendix A – Marked-Up Figure 1 from KRVSP indicating Lot Yields and impact on Riverside Road

Lot Yield Assessment

April 2019

FIGURE 1



Appendix B – Lot Yield and Contribution Calculation

REPORT ITEM DIS183 REFERS

Lot	Area	Total lots estimated	Additional Lots Created (less parent lot)			Contribution A - SCH Intersections	Contribution B - Riverside Rd Upgrade	Total Contribution for current lot
			Intersections	Riverside Rd Reseal 0-700	Riverside Rd Reseal 700-1150			
22 Precinct 1		2	1			\$3,128	\$0	\$3,128
23 Precinct 1		2	1			\$3,128	\$0	\$3,128
1 Precinct 1		2	1			\$3,128	\$0	\$3,128
2 Precinct 1		2	1			\$3,128	\$0	\$3,128
17 Precinct 1		2	1			\$3,128	\$0	\$3,128
18 Precinct 1		2	1			\$3,128	\$0	\$3,128
3 Precinct 1		2	1			\$3,128	\$0	\$3,128
14 Precinct 1		1				\$0	\$0	\$0
1730 Precinct 2a		8	7			\$21,898	\$0	\$21,898
100 Precinct 2a		9	8	8		\$25,027	\$40,524	\$65,551
9002 Precinct 2a		4	3	3		\$9,385	\$15,197	\$24,581
10 Precinct 2a		2	1	1		\$3,128	\$5,066	\$8,194
9500 Precinct 2a		36	35			\$109,491	\$0	\$109,491
37 Precinct 2a		5	4			\$12,513	\$0	\$12,513
601 Precinct 2a		24	23	19		\$71,951	\$96,245	\$168,196
201 Precinct 2b		17	16			\$50,053	\$0	\$50,053
200 Precinct 2b		9	8			\$25,027	\$0	\$25,027
150 Precinct 2b		20	19			\$59,438	\$0	\$59,438
151 Precinct 2b		21	20			\$62,566	\$0	\$62,566
300 Precinct 2b		13	12			\$37,540	\$0	\$37,540
102 Precinct 2c		9	8	8		\$25,027	\$40,524	\$65,551
1491 Precinct 2c		2	1		1	\$3,128	\$5,066	\$8,194
3 Precinct 2c		6	5		5	\$15,642	\$25,328	\$40,969
2 Precinct 2c		4	3		3	\$9,385	\$15,197	\$24,581
103 Precinct 2c		1				\$0	\$0	\$0
221 Precinct 2c		1				\$0	\$0	\$0
3486 Precinct 3		3	2			\$6,257	\$0	\$6,257
105 Precinct 3		2	1			\$3,128	\$0	\$3,128
106 Precinct 3		2	1			\$3,128	\$0	\$3,128
151 Precinct 3		3	2			\$6,257	\$0	\$6,257
150 Precinct 3		2	1			\$3,128	\$0	\$3,128
77 Precinct 3		2	1			\$3,128	\$0	\$3,128
4791 Precinct 3		2	1			\$3,128	\$0	\$3,128
24 Precinct 3		2	1			\$3,128	\$0	\$3,128
20 Precinct 3		2	1			\$3,128	\$0	\$3,128
2 Precinct 3		1				\$0	\$0	\$0
25 Precinct 3		1				\$0	\$0	\$0
28 Precinct 3		1				\$0	\$0	\$0
104 Precinct 3		1				\$0	\$0	\$0
103 Precinct 3		1				\$0	\$0	\$0
107 Precinct 3		1				\$0	\$0	\$0
3465 Precinct 3		1				\$0	\$0	\$0
14 Precinct 3		1				\$0	\$0	\$0
15 Precinct 3		1				\$0	\$0	\$0
19 Precinct 3		1				\$0	\$0	\$0
21 Precinct 3		1				\$0	\$0	\$0
29 Precinct 3		1				\$0	\$0	\$0
3112 Precinct 3		1				\$0	\$0	\$0
311 Precinct 3		1				\$0	\$0	\$0
		240	191	39	9	\$597,510	\$243,144	\$840,654

	Intersections	Riverside
Cost Estimate less COA contribution	\$597,509.93	\$243,144.14
Cost per additional lot (exc GST)	\$3,128.32	\$5,065.50
	\$3,441.16	\$5,572.05

Riverside 2014 contribution (incl GST)	\$ 4,864.67
Riverside 2014 with CPI to 2018 (incl GST)	\$ 5,195.08

Total Lots	Additional lots	
Precinct 1	15	7
Precinct 2a	88	81
Precinct 2b	80	75
Precinct 2c	23	17
Precinct 3	34	11
	240	191

COST SUMMARY

	Total Cost ex GST	% developers to pay	
Hunton Intersection	\$573,501	93%	\$532,949
Wheeldon Rd	\$77,000	84%	\$64,561
Riverside Rd 0-270	\$58,414	90%	\$52,532
Riverside Rd 270-700	\$176,679	76%	\$134,237
Riverside Rd 700-1150	\$72,036	78%	\$56,376

Appendix C – Traffic Calculations and Counts

		Add'l Lot Yields	Daily Trips		(A) Increase Wheeldon Rd (one way)	(B) Increase Hunton Rd north of Wheeldon	(C) Increase Hunton Rd south of Riverside	(D) Increase Riverside Road 0-270	(E) Increase Riverside Road 270-700	(F) Increase Riverside Road 700-1100	Increase in Precinct 3
Precinct 1		7	7x8	56	22.4	28	5.6				
Precinct 2a		81	81x8	648	259.2	324	64.8	248			
Precinct 2b		75	75x8	600	240	300	60	0			
Precinct 2c	0-700	8	8x8	64	25.6	32	6.4	64	64		
Precinct 2c	700-1150	9	9x8	72	28.8	36	7.2	72	72	72	
Precinct 3		11	11x8	88	4.4	4.4	8.8	0			88
Total		191		1528	580.4	724.4	152.8	384	136	72	88

Existing Traffic

102 59 131 43 43 20 N/A

	Existing Vehicles per Day		Projected additional vehicles	Projected reduction in vehicles	Net additional vehicles	Total	% New development	Modifications required to meet projected volume
Wheeldon Rd	102	2012	580.4	51	529.4	631.4	84%	One way treatment
Hunton Rd north of Wheeldon	59	2012	724.4	-51	775.4	834.4	93%	Intersection realignment at South Coast, Highway and bridge replacement
Hunton Rd south of Riverside	131	2010	152.8		152.8	283.8	54%	None
Riverside Road 0 -270	43	2012	384		384	427	90%	Grade, bind and seal to 6.0m 2-coat seal
Riverside Road 270 - 660	43	2012	136		136	179	76%	Upgraded and 2-coat seal to 5.5m
Riverside Road 660 - 1100	20	2012	72		72	92	78%	Widened to allowing passing opportunities. Resheet.

Appendix D – Proposed Upgrade Treatments



n:\works\service\infrastructure\05 future works\h hunton road realignment\03 design\drawings\14005-preliminary.dwg

Appendix E – Treatment Cost Estimates

Description	Unit	Qty	Rate	\$	\$
ESTABLISHMENT AND TRAFFIC CONTROL					
<i>Land Resumption (completed)</i>	<i>item</i>	<i>1</i>	<i>\$58,914.45</i>	<i>\$58,914.45</i>	
Establishment on Site	item	1	\$25,000.00	\$25,000.00	
Survey	item	1	\$5,000.00	\$5,000.00	
Environmental impact assessment	item	1	\$10,000.00	\$10,000.00	
Traffic Control	item	1	\$40,000.00	\$40,000.00	
Aboriginal Heritage	item	1	\$20,000.00	\$20,000.00	
					\$158,914.45
EARTHWORKS					
Clearing of site	m ²	3000	\$2.20	\$6,600.00	
Strip and respread topsoil	m ²	1050	\$5.00	\$5,250.00	
Cut to fill	m ²	1940	\$8.00	\$15,520.00	
Import fill	LCM	5000	\$16.00	\$80,000.00	
Trim subgrade	m ²	1692	\$5.00	\$8,460.00	
					\$115,830.00
DRAINAGE					
Supply and lay RCP 375mmø	m	33	\$175.00	\$5,775.00	
Headwalls Single	ea	4	\$800.00	\$3,200.00	
					\$8,975.00
METALCOURSES					
250mm gravel	m ²	3014	\$45.00	\$135,630.00	
					\$135,630.00
BITUMINOUS SURFACING					
2 coat seal	m ²	2228	\$11.00	\$26,747.00	
Asphalt intersection	m ²	240	\$40.00	\$9,600.00	
Kerb at intersection	lm	80	\$50.00	\$4,000.00	
Ascon	item	1	\$10,000.00	\$10,000.00	
QA	item	1	\$5,000.00	\$5,000.00	
					\$55,347.00
ROAD DECOMMISSIONING					
Remove materials to spoil	m ²	1050	\$20.00	\$21,000.00	
					\$21,000.00
LINEMARKING AND SIGNAGE					
Estimate	item	1	\$3,000.00	\$3,000.00	
					\$3,000.00
TOTAL ESTIMATE (excluding GST)					\$498,696.45
Survey and Superintendence					\$49,869.65
Contingency					\$24,934.82
TOTAL ESTIMATE (excluding GST)					\$573,500.92

Item	Description	Unit	Qty	Rate	\$	\$
1	ESTABLISHMENT AND TRAFFIC CONTROL					
1.1	Establishment on Site	Unit	1	\$5,000.00	\$5,000.00	
1.2	Survey	Unit	1	\$5,000.00	\$5,000.00	
1.3	Traffic Control	Unit	1	\$8,000.00	\$8,000.00	\$18,000.00
2	ROAD INFRASTRUCTURE					
2.1	Kerbing and island fill	Unit	1	\$50,000.00	\$50,000.00	\$50,000.00
3	LINEMARKING AND SIGNAGE					
3.1	Estimate	Unit	1	\$2,000.00	\$2,000.00	\$2,000.00
TOTAL ESTIMATE (excluding GST)						\$70,000.00
Survey and Superintendence						\$7,000.00
TOTAL ESTIMATE (excluding GST)						\$77,000.00

Description	Unit	Qty	Rate	\$	\$
ESTABLISHMENT AND TRAFFIC CONTROL					
Traffic Control	Unit	1	\$6,000.00	\$6,000.00	\$6,000.00
BITUMINOUS SURFACING					
<i>Works completed single 14mm coat</i>	<i>item</i>	<i>1</i>	<i>\$20,474.73</i>	<i>\$20,474.73</i>	
2nd coat seal 7mm	m ²	1620	\$11.00	\$17,820.00	
intersection extra over	item	1	\$5,000.00	\$5,000.00	\$43,294.73
LINEMARKING AND SIGNAGE					
Estimate	item	1	\$1,500.00	\$1,500.00	\$1,500.00
ESTIMATE (excluding GST)					\$50,794.73
Survey and Superintendence					\$5,079.47
Contingency					\$2,539.74
TOTAL ESTIMATE (excluding GST)					\$58,413.94

Description	Unit	Qty	Rate	\$	\$
ESTABLISHMENT AND TRAFFIC CONTROL					
Establishment on Site	Unit	1	\$5,000.00	\$5,000.00	
Survey	Unit	1	\$5,000.00	\$5,000.00	
Traffic Control	Unit	1	\$6,000.00	\$6,000.00	
					\$16,000.00
EARTHWORKS					
Clearing of site	m ²	1720	\$2.20	\$3,784.00	
Preparation of subgrade	m ²	2795	\$5.00	\$13,975.00	
Cut and fill	item	1	\$50,000.00	\$50,000.00	
					\$67,759.00
GRAVEL COURSES					
SGR extra	m ²	559	\$15.00	\$8,385.00	
Trim	m ²	2795	\$5.00	\$13,975.00	
					\$22,360.00
BITUMINOUS SURFACING					
2 coat seal	m ²	2365	\$11.00	\$26,015.00	
					\$26,015.00
EXTEND CULVERTS	item	1	\$20,000.00	\$20,000.00	
					\$20,000.00
LINEMARKING AND SIGNAGE					
Estimate	item	1	\$1,500.00	\$1,500.00	
					\$1,500.00
ESTIMATE (excluding GST)					\$153,634.00
Survey and Superintendence					\$15,363.40
Contingency					\$7,681.70
TOTAL ESTIMATE (excluding GST)					\$176,679.10

Description	Unit	Qty	Rate	\$	\$
ESTABLISHMENT AND TRAFFIC CONTROL					
Establishment on Site	Unit	1	\$5,000.00	\$5,000.00	
Survey	Unit	1	\$5,000.00	\$5,000.00	
Traffic Control	Unit	1	\$5,000.00	\$5,000.00	
					\$15,000.00
EARTHWORKS					
Clearing of site	m ²	1200	\$2.20	\$2,640.00	
Preparation of subgrade	m ²	2800	\$5.00	\$14,000.00	
					\$16,640.00
GRAVEL COURSES					
Trim and overlay	m ²	2800	\$10.00	\$28,000.00	
					\$28,000.00
BITUMINOUS SURFACING					
2 coat seal	m ²	0	\$5.75	\$0.00	
					\$0.00
LINEMARKING AND SIGNAGE					
Estimate	Unit	1	\$3,000.00	\$3,000.00	
					\$3,000.00
ESTIMATE (excluding GST)					\$62,640.00
Survey and Superintendence					\$6,264.00
Contingency					\$3,132.00
TOTAL ESTIMATE (excluding GST)					\$72,036.00

<p style="text-align: center;">SEPTEMBER 2019</p> <p style="text-align: center;">Schedule of Submissions and Recommended Modifications</p> <p style="text-align: center;">Kalgan Rural Village Cost Apportionment Schedule 2019</p>			
No.	Address	Summary of Submissions <i>Note: This is a broad summary of the submissions only. A copy of the submissions in full has been provided to the Council as a separate document.</i>	City of Albany Comments
1.	Delma Baejou (Ayton Baesjou Planning) on behalf of:	<p>Letter received EF19349457. Extract below.</p> <p><i>"In 2012 an amount of \$45,000 was required to be paid to the City of Albany in respect of clearance of subdivision WAPC reference 145181.</i></p> <p><i>This amount of \$45,000 was paid, 'under protest' on the understanding that an adjustment would be made once the final fee was determined. Both the quantum and the methodology of the contribution were challenged at the time. The 2012 contribution was incorrectly based on 3 lots @ \$15,000. The 'per lot' contribution should have only been for two additional lots that were created.</i></p> <p><i>Accordingly, an immediate refund is sought of the overcharge that was paid to the City of Albany. Based on the 2019 contribution of \$3,441.16 per lot, the appropriate fee for 2 lots is \$6,882.32. Therefore, a refund of \$38,117.68 (plus interest) is expected."</i></p>	<p>A reimbursement of \$28,460.40 occurred on 4/09/2014 (ref ICI14925319).</p> <p>Confirm amount to be reimbursed following acceptance of policy.</p>
2.		<p>Letter received EF19349467.</p> <p>Request for reimbursement for 9 lots paid at \$8,666.17 per lot, to the proposed rate of 9 lots at \$3,441.16 per lot for the contribution to upgrade at the entry points to the Kalgan Rural Village site.</p>	<p>Confirm amount to be reimbursed following acceptance of policy.</p>
3.	Nick Ayton (Ayton Baesjou Planning) on behalf of:	<p>Letter received EF19349468. Extract below.</p> <p><i>The Lot Yield Assessment April 2019, Figure 1, and Appendix B Cost Schedule, need to be adjusted to reflect recent subdivisional approvals as follows:</i></p> <p><i>1. With regard to lot 601, only 4 lots are shown having their access off Hunton Road. This needs to be adjusted to show 5 lots as Lot 7 now has a constructed access to Hunton Road and not Riverside Road.</i></p> <p><i>2. Lot 100 and 9002 need to be adjusted to show a total of 14 additional lots whereas only 11 are shown. It is also understood that Lot 9 Myola Drive is to be subdivided into 2 lots creating another additional lot.</i></p> <p><i>3. The Developer Contribution Plan dated June 2014 was based on the Structure Plan which showed Lot 601 as being subdivided into 14 lots. 3 of these lots had direct access onto Riverside Road and a further 8 lots were served by a cul de sac off Myola Drive which in turn was accessed via Riverside Road. In total therefore 11 lots relied on Riverside Road for access. However, the revised Structure Plan used in the March 2019 Schedule incorporates a lot configuration showing a total of 24 lots. As noted in point 1 above, 5 of the lots have direct access onto Hunton Road and 2 have direct access onto Riverside Road. The remaining 17 lots have</i></p>	<p>1. Noted – agreed.</p> <p>2. Lots 10 and 9002 will be adjusted to show a total 6 lots instead of 7 lots as per the current subdivision WAPC 154446. The remaining area reflects the existing subdivision layout. Lot 9 is shown on Appendix A as having the potential to subdivide to 2 lots and will be included in Appendix B.</p> <p>3. Access to Hunton Road is not yet available from Lot 601 and the timing remains unknown. Until this time, all lots subdivided from Lot 601 will utilise Riverside Road. In order to achieve a fair and equitable approach for both the subdivision of Lot 601 and previous subdividers along Riverside Road, adopting the original number of lots which were to connect to Riverside Road under the previous contribution plan would appear appropriate. This would be for 11 lots accessing Riverside Road.</p>

		<p><i>access off Myola Drive or a loop road which runs off Myola Drive and connects through the adjoining property to the north (Lot 9500) and Hunton Road.</i></p> <p><i>Under the Traffic Section in the March 2019 Schedule, the fifth dot point notes that 90% of traffic generated from the development will use South Coast Highway with only 10% heading towards Nanarup Road.</i></p> <p><i>Now that the approved subdivision for Lot 601 provides for access through to Hunton Road, traffic will have the option of using either Riverside Road or the internal subdivisional road (proposed Glenelg Drive) to access Hunton Road. As it is estimated that the majority of traffic will head towards South Coast Highway, the quickest and most convenient route will be via the internal subdivisional road for most of the internal lots. Consequently, it is considered inequitable that all of the 16 internal lots are required to contribute to Riverside Road when most of them will not use it.</i></p> <p><i>Based on the estimate that 90% of traffic will use South Coast Highway, the majority of the 16 internal lots, i.e. approximately 14 lots, will not depend on Riverside Road.</i></p> <p><i>Based on this assumption, a total of 5 lots will access Riverside Road. However, the developers are prepared to accept a more conservative assessment that 9 lots will utilise Riverside Road. Refer attached plan. This is considered a fair and reasonable basis to contribute to Riverside Road, particularly as the developers have incurred considerable costs connecting their subdivision through to Hunton Road. This has included fully constructing approximately 100m of the road into Lot 9500 and creation of an easement in gross through to Hunton Road to meet bush fire plan emergency access requirements until such time as the subdivisional road is constructed. The developers of Lot 9500 intend to construct this section of road as the next stage of their development.</i></p>	<p>Subsequent to this letter, a meeting was held with the developer where it was agreed that the recommendation in point 3 above would be appropriate.</p>
4.		<p>Email received EF19349593. Extract below.</p> <p><i>The meeting was held to discuss the Kalgan Rural Village proposed subdivision and the lack of public open space. The almost complete disregard for the environment was also a major concern. One of those present best described the subdivision, particularly Richard Fry's section, as an "instant Ghetto".</i></p> <p><i>Chris Andrews 50 acre property of mostly natural bush in wonderful condition, is also part of the subdivision. It was proposed at a committee meeting of the Kalgan Settlers Assoc that we seek advice from the above experts as to how the committee could purchase Andrews property and so keep it in the district as park land/community open space.</i></p> <p><i>It was agreed by all of the above that the purchase of the property has to be driven by the Kalgan Settlers Assoc with financial support coming from several different sources.</i></p> <p><i>Those present all agreed that they would do all that they could to assist the Kalgan Settlers Committee in their endeavours to raise the money and that there was precedent for us being successful.</i></p>	<p>Matters raised noted.</p>

5.	Delma Besjou (Ayton Baejou Planning) on behalf of	<p>Letter received EF19349457. Extract below.</p> <p><i>The proposed Developer Contribution of \$3,441.16 per additional lot is considered reasonable. This is more in keeping with landowner expectations, as outlined in various correspondence and meetings with the City of Albany staff during preparation and finalisation of the Kalgan Rural Village Structure Plan.</i></p> <p><i>An amount of \$51,840.43 was paid to the City of Albany in respect of clearance of Condition 4 of subdivision approval (WAPC reference 151504). This figure agreed by the City of Albany in November 2017 and was based on the 2014 draft fee plus CPI for 6 lots.</i></p> <p><i>The fee for 6 lots under the new proposal of \$3,441.16 per lot is \$20,646.96 therefore we request a reimbursement of \$31,193.47.</i></p>	Confirm amount to be reimbursed following acceptance of policy.
6.		<p>Letter received LT19348426. Extract below.</p> <p><i>In regard to Lot 151, I have no intention to proceed with any subdivision plans. The high costs involved and the very real likelihood of a long time frame in selling the lots, makes it unviable. There are already too many lots coming on stream!!!</i></p>	Noted. The policy will implement a clear approach for road contributions in the event subdivision does occur in the future.
7.		<p>Letter received ICR 19349484. Extract below.</p> <p><i>I paid a total of \$74,428.47 previously (9 lots) but under the new rate the amount for 9 lots is \$30,970.44.</i></p> <p><i>Therefore a refund of \$43,458.03 is expected now.</i></p> <p><i>I have another new 4 lots awaiting clearance (WAPC ref 154446 – Deposited Plan 416445) which will require a Kalgan Village Contribution of a total of \$13,764.64.</i></p> <p><i>This leaves a balance of \$29,693.39 (not including interest and CPI). I expect this to be reimbursed immediately.</i></p>	Confirm amount to be reimbursed following acceptance of policy.
8.		<p>Letter received ICR 19349487. Extract below.</p> <p>The letter details timelines and background information regarding the contributions previously paid. The main issue relates to the construction works Mr Douglas carried on Riverside Road as part of providing an intersection to his subdivision. Mr Douglas claims that these works were to form part of his contribution to Riverside Road. Extract below.</p> <p><i>I was not required to do the portion of Riverside Road upgraded by I agreed. At the June 2008 meeting on site, with engineers, planners, surveyors and myself it was agreed that I would do this upgrade as a contribution for the yet to be established structure plan.</i></p>	<p>The City does not have any records regarding this agreement, or justification as to why these works would form part of the contribution costs. A formal letter has been provided by the City in response (LT19192142).</p> <p>It is recommended cost apportionment schedule remain unchanged.</p>



*Planning and Development
(Local Planning Schemes)
Regulations 2015 – Part 6, Division 1 (r.65)*

“Report of a Review of Local Planning Scheme No.1”



Development Services

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1. Introduction

This document is a 'Report of a review of Local Planning Scheme No.1' (Scheme No.1).

The 'Report' is the result of the *Planning and Development (Local Planning Schemes) Regulations 2015* (Reg's), which requires that, in each fifth year following the date a scheme was last published in the Government Gazette, the Local Government shall prepare a review by way of a report to the Commission on the operation of the scheme.

2. Background

Land use and development within the City of Albany is governed by the Scheme No.1.

The Scheme No.1 was gazetted on 28 April, 2014 to replace five (5) schemes and to oversee development and land-use applications within the whole municipality.

Since gazettal of the Scheme No.1 in 2014, there has been 18 scheme amendments, including a recent Amendment No. 29 (2019), which introduced new provisions consistent with deemed provisions contained in the Reg's.

The City has recently adopted a Local Planning Strategy (Strategy 2019), which recommends that the City's Scheme No.1 is further modified to make consistent with the States Model Scheme and in view of submissions received during the advertising of the Strategy 2019.

3. Scheme Details

The Scheme No.1 consists of:

- a) A 'Preliminary' section that defines the scope, content and objectives of the scheme;
- b) Sections dealing with land zoned and land reserved in the City of Albany;
- c) A zoning table, which identifies which land uses may or may-not be considered in different zones;
- d) General development standards; and
- e) Specific areas with specific standards.

The format of the City's Scheme No.1 generally aligns with the State's Model Scheme; however, there are discrepancies with zone classifications, reserve classifications and land use definitions.

The standards in the City's Scheme No.1 for specific areas (e.g. Special Residential areas), are also convoluted. For example, there are two sets of standards applicable to rural living areas. Only one set is needed.

4. Strategic Context

The City's Scheme No.1 has been amended to meet recommendations of the 2010 Local Planning Strategy.

The Commission resolved in September 2019 to finally endorse the City of Albany, Local Planning Strategy 2019.

The Strategy 2019 includes recommendations to bring the Scheme No.1 in-line with the Commission's Model Scheme and to address issues raised the result of public and agency consultation.

REPORT OF A REVIEW OF LOCAL PLANNING SCHEME NO.1.

5. Scheme amendments

The following table lists the Scheme No.1 amendments since gazettal in 2014.

No.	Amendment Summary	Gazettal Date
13	First omnibus amendment to address matters arising from the implementation of Local Planning scheme No.1, including; Rectify zoning anomalies Rectify land use permissibility Adding land uses Rectify typographical errors	10/06/16
8	Rezoning Lot 103 Cockburn road, Mira Mar from "Residential R30" to "Regional Centre Mixed Business" Rezone Lot 104 Campbell Road, Mira Mar from "Residential R30" with 'Additional Use AU17 Medical Centre' to "Regional Centre Mixed Business"	17/06/16
2	Relates to the Landcorp development at Emu Point. Reserve a portion of Lot 3000 Emu Point Drive, Collingwood Park and Lot 3001 on Deposited Plan 51548 (currently zoned 'Future Urban') and a portion of Lot 1523 Emu Point Drive, Emu Point (currently zoned 'Future Urban') for 'Parks and Recreation'. Transfer a portion of Lot 3000 Emu Point Drive, Collingwood Park from the 'Parks and Recreation' local scheme reserve to the 'Future Urban' zone	05/08/16
16	Modify Schedule 4 - Special Use Zone No. SU17, condition 1 to include 'Park Home Park' as a land use with 'D' permissibility. Modify Schedule 4 - Special Use Zone No. SU17, to insert a new condition 6.	05/08/16
11	Rezone Lot 312 and Lot 1315 Cockburn Road Mira Mar from "Residential R30" to "Regional Centre Mixed Use" with R30 density code and "A31" designation in accordance with the Scheme Amendment Map.	30/09/16
1	Establishing Special Use Zone SU25 and the associated provisions to provide the statutory framework enact the Middleton Beach Improvement Plan.	24/01/17
10	Rezoned Lot 11 (No.264) Nanarup Road, Kalgan from 'Residential R1' to 'Special Residential Zone SR21' and insert relevant provisions	10/02/17
18	Establishing provisions for aged persons accommodation and healthcare hub. Rezoned Lots 201, 202 and 203 Chester Pass Road from 'General Agriculture' to 'Special Use Zone SU23'. Amended Schedule 4 - Special Use Zones No 23.	10/02/17
19	Amendment to normalise the structure plan provisions into the scheme, including both reservations and residential densities.	17/02/17
21	Rezoned Lots 16, 17 & 541 Mercer Road and Lots 38, 371 & 372 Catalina Road Lange from the General Agriculture zone to the Future Urban Zone.	11/07/17
17	Rezoning 107 (Lot 36) Catalina Road, Lange from 'Public use: Government' Local Scheme Reserve to the 'Residential' zone with an applicable density code of 'R30'.	12/09/17
14	Rezone Lots 1447, 3 and 72 Frederick Street, Albany from the 'Residential' zone to the 'Regional Centre Mixed Use' zone; Rezone Lot 144 Frederick Street, Albany from the 'Parks and recreation' reserve to the 'Regional Centre Mixed Use' zone; and	24/10/17
25	Rezoning a 2.7785ha portion of Lot 1000 (No. 16) Lockheed Road, Lange from 'General Agriculture' zone to 'Future Urban' zone.	12/01/18
4	Designating an Additional Use Site over Lot 104 Rocky Crossing Road, Willyung including Additional Uses of Plant and Equipment Storage and Maintenance, Office (Incidental), Mobile Asphalt Plant, and Storage of materials associated with the preparation and production of asphalt on Lot 104 Rocky Crossing Road, Willyung. Amending Schedule 2 - Additional Uses to incorporate provisions relating to Lot 104 Rocky Crossing Road, Willyung.	01/06/18

REPORT OF A REVIEW OF LOCAL PLANNING SCHEME NO.1.

22	Creating a new 'Environmental Conservation' reserve. Adding a notation to the Scheme Map legend. Adding Planning Objectives for the 'Environmental Conservation' reserve to clause 3.6 of the Scheme Text. Rezoning Lot 1 Jason Road and Lot 476 Sibbald Road, Bayonet Head from 'General Agriculture' zone to 'Future Urban' zone.	30/10/18
28	Designating Lot 312 Bay View Drive as an 'Additional Uses' site No. 33 to allow for grouped and multiple dwellings.	18/1/19
33	Designating a portion of Lot 1 Frenchman Bay Road, Little Grove as an Additional Use site and providing the ability for group and multiple dwellings and commercial uses.	25/6/19
29	Text Amendment – Replacing and Introducing New Provisions consistent with the Model Provisions contained in the Planning and Development (Local Planning Schemes) Regulations 2015.	24/8/19

6. Development Activity in Local Government Area

Structure plans

The following structure plans have been endorsed under the Scheme No.1:

- YAKAMIA STRUCTURE PLAN;
- LSP1 - STRUCTURE PLAN FOR PENDEEN INDUSTRIAL AREA 1A2;
- MIDDLETON BEACH ACTIVITY CENTRE STRUCTURE PLAN;
- LSP14 – MCKAIL STRUCTURE PLAN (AMENDMENTS TO ORIGINAL);
- LSP17 – JOHNSTON CREEK RURAL RESIDENTIAL;
- EAST-GLEDHOW-SOUTHERN-CATCHMENT-STRUCTURE-PLAN;
- LSP5 - WARRENUP/WALMSLEY LOCAL STRUCTURE PLAN;
- LSP18 - GEORGE STREET, GLEDHOW.

Dwelling commencements (based on building licences);

Approximately 1000 Building Permits have been issued for new dwellings since the gazettal of the Scheme No.1.

Commercial development activity

The City of Albany has had the following significant commercial private sector developments under the Scheme No.1:

Development Name	Value (millions)	Stage
Juniper Nursing Home	30m	Completed
Waterfront Hotel	17m	Commenced construction
Coles Shopping Centre	11m	Completed
Frenchman Bay Tourist Development	10m	DA issued.
Dog rock Hotel additions	8.5m	DA issued
Student Housing Serpentine Road	8.3m	Commenced construction
Cockburn Road Group Dwellings	6.2m	Completed
Sporting Stadium	5.3m	Completed
MSWA Facility	5m	DA issued
Earl St group dwellings	4.55m	DA issued
Service Station Mckail	3.5m	Under Construction
Bethel School Early Learning Centre	3.5m	Completed
Cockburn Rd Day Hospital	3.4m	Completed

REPORT OF A REVIEW OF LOCAL PLANNING SCHEME NO.1.

Duke St Mixed use Development	2.2m	Building Permit issued
Student Housing Stirling Terrace	2m	Completed
Service Station Shell	1.8m	Completed
Amity Rose Funeral parlour	1.8m	Completed
Service Station Caltex	1.2m	Completed
Service Station Puma	1.1m	Completed

Other available development information - to assist in understanding the Development patterns and activity in the area.

The City of Albany has issued approximately 3300 development determinations since the gazettal the Scheme No.1. The number of determined development applications a year is generally increasing.

Year	Applications Determined
2014	586
2015	606
2016	637
2017	655
2018	624

7. Population Change

The City of Albany is a regional local government located within the Great Southern Region of Western Australia. The local government area covers 431,048ha with a 2018 population of 37,826 residents.

Western Australia Tomorrow Population Report No.11 provides the following Band C forecast figures for the City of Albany Local Government Area:

2021 – 39,230

2026 – 41,620

2031 – 44,340

Based on the City's population forecast, and the research undertaken for the preparation of the Strategy 2019, there is sufficient land already zoned in Albany for more than 60 years of growth.

One of the key objectives of the Strategy 2019, is to contain urban development and rural living within the existing supply of land zoned and planned for settlement growth and to promote urban consolidation by making better use of existing zoned land and infrastructure through urban renewal, infill residential and rural living development.

Urban consolidation will be achieved through building on the existing strengths of the regional centre and other activity centres, such as Middleton Beach and Albany Waterfront, and by progressively expanding the City's retail centric shopping area to meet the shopping, employment and recreational needs of the community. Consolidation will also be achieved by undertaking urban renewal initiatives in Spencer Park and Centennial Park and by identifying residential infill opportunities that will offer a variety of housing types.

8. Consultation

The City has recently reviewed its Strategy 2019, which involved an extensive consultation process to recommend actions for reviewing the City's Scheme No.1.

9. Officer's comments

Is the scheme capable of facilitating the type of development for which demand is anticipated?

Noting that the Scheme No.1 has been subject to a number of amendments and including two omnibus amendments, it is considered that the planning scheme is capable of facilitating and guiding the future development demands for the City of Albany.

The LSP 2019 has identified that there is suitable supply of land structure planned and zoned to accommodate the rate of demand.

The recently adopted LSP 2019 has however highlighted areas in which the Scheme No.1 should be modified.

Are there structure plans that need to be incorporated into the scheme?

There are a number of structure plans and associated provisions, which may be incorporated into the Scheme via 'Special Control Areas'.

There may also be the need to identify Development Contribution Areas and to develop Development Contribution Plans for the purpose of acquiring cash and/or land contributions for important regional infrastructure.

Can the direction and recommendations established in the Local Planning Strategy be implemented through the Scheme or are amendments to the scheme required?

Amendments to the scheme are required, the result of the Strategy 2019 recommendations.

Does a review of the local planning strategy need to be undertaken?

As outlined earlier, the City has reviewed the Local Planning Strategy 2010 and has endorsed the Strategy 2019.

The review process of the Local Planning Strategy 2010 was undertaken with the following inputs;

- The preparation of background papers in conjunction with Working Groups consisting of relevant staff and State agencies;
- Specialist reports on key strategic matters; and
- Stakeholder consultation throughout the strategy preparation.

The background papers undertook investigation into five subjects, namely: population, settlement and housing; the economy & employment lands; community; environment; and infrastructure and services.

The specialist reports prepared are as follows:

REPORT OF A REVIEW OF LOCAL PLANNING SCHEME NO.1.

- *Review of Albany Activity Centres Planning Strategy (2015);*
- *Industrial Ecology Mapping and Industry Attraction Strategy (2015);*
- *Industrial Land Strategy (2017); and*
- *Albany Regional Hot Spots Land Supply Update (2015).*

As a result of this analysis and discussion, what recommendation will the local government make to the WAPC in regard to the review of the scheme?

The City of Albany considers that the Scheme No.1 is functioning well with the recent introduction of model provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015 (Scheme Amendment 29)*.

Noting that the Strategy 2019 has been endorsed with recommendations to undertake amendments to the scheme and noting some inconsistencies with the State's Model Scheme and convoluted standards for rural living areas, it is recommended that the existing scheme is repealed and that a new scheme is prepared in its place.

10. Recommendation

That Council, pursuant to Regulation 66(3) of the *Planning and Development (Local Planning Schemes) Regulations 2015* recommend to the Western Australian Planning Commission, that the City of Albany *Local Planning Scheme No.1* should be repealed and a new scheme prepared to accommodate recommendations of the Local Planning Strategy 2019.

Albany Emu Point

Development Application

Telstra

Reference: 205428-EMUP

Revision: 0

18 June 2019

aurecon

*Bringing ideas
to life*

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1 Overview

Aurecon act on behalf of our client Telstra. We have been instructed by our Client to prepare and lodge a Development Application to the City of Albany seeking approval for development of a telecommunications facility at 222 Collingwood Road, Collingwood Park.

The purpose of this new facility is to provide improved mobile phone network services to the Emu Point locality.

The proposed works are limited to the installation of a 33.8m monopole with a triangular headframe at the 354m level accommodating six (6) panel antennas, three (3) remote radio units, and three (3) tower mounted amplifiers, a low impact equipment shelter, and ancillary works within an 80m² security fenced compound.

This submission will seek to clearly articulate the nature and community benefit that will result from the proposed development and how it complies with the planning policy framework, as well as demonstrating that all feasible alternative options were investigated.

1.1 Balancing Visual Impacts Against Community Benefit

We understand that Middleton Bay, Oyster Harbour, Mount Clarence and the Gull Rock National Park are all regionally important landscape features for which developers must approach cautiously and ensure any design response is sympathetic to its natural setting. We also recognise that any visual impact needs to be weighed against the overall benefit that the provision of effective communications systems brings to a community and its visitors.

To this effect Telstra has sought to not position the base station in a natural depression and to seek separation from the coastline and residential zoned land, thus reducing the height of the structure necessary to achieve coverage objectives and reducing reliance on blending and screening initiatives.

"Minimise the height of the tower by assessing the local topography or height of buildings for the proposed area. Choose the site that minimises the height of the tower most effectively."

Visual Landscape Planning in Western Australia WAPC, 2007 p. 138

Telstra has also sought to locate the base station in the eastern-most part of the subject land so as to maximise separation and shield the ground level infrastructure and lower portions of the pole when viewed from Collingwood Road or the Australian Christian College.

1.2 Preliminary Consultation and Network Analysis

In order to prepare this submission Aurecon has undertaken preliminary consultation with the City of Albany as part of the candidate site assessment process. It is clear from network performance analysis and network user feedback that there is an immediate need to improve telecommunication services in the Emu Point locality.

Furthermore, increased tourism and recreational activity as well as residential expansion is expected (particularly north of Bayonet Head) such that the existing telecommunication services network needs to accommodate this additional demand.

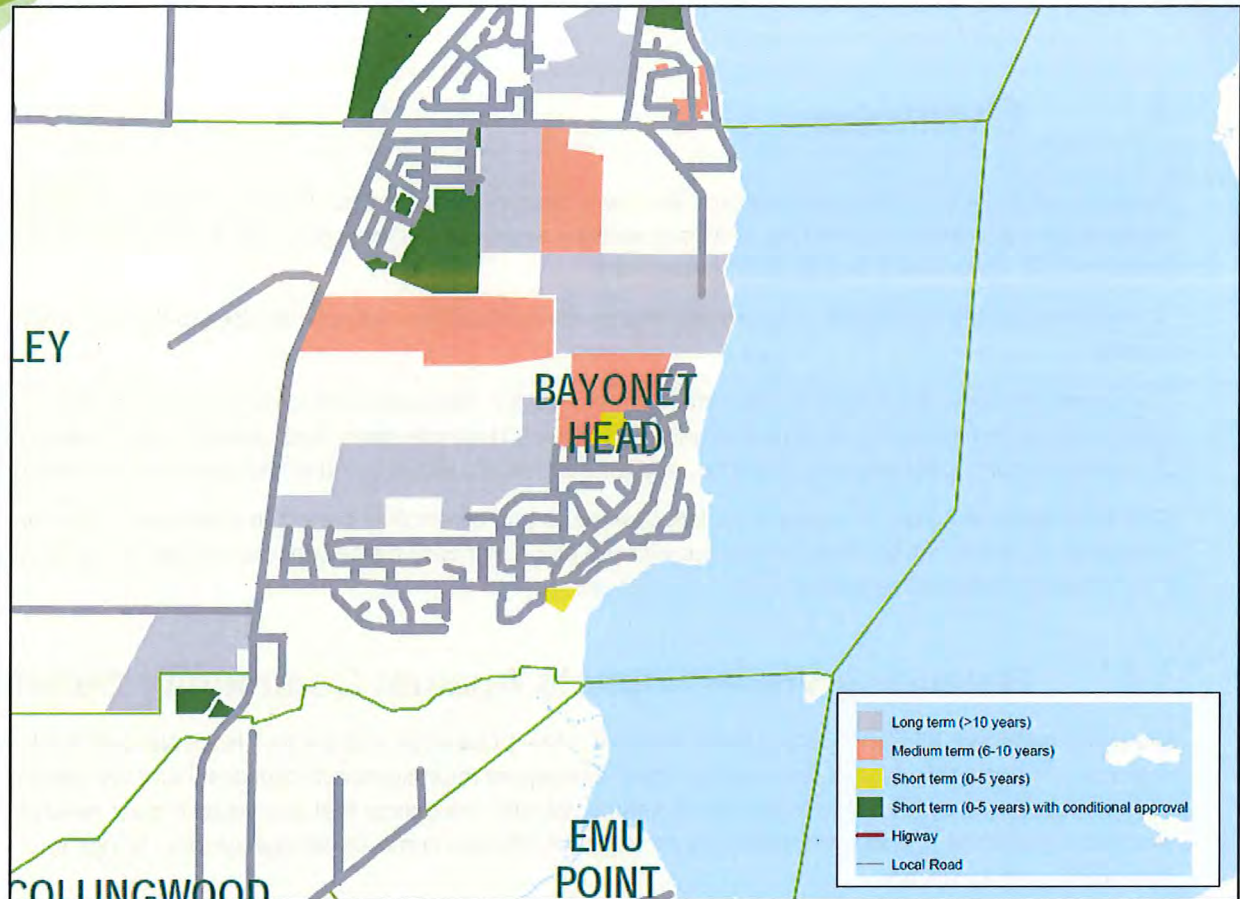


Figure 1 Local Planning Strategy 2019 future development areas

1.3 Regulatory Compliance

Telstra places very high importance on EME safety and complies with all relevant Australian laws and standards implemented by Federal, State and Territory governments and regulatory bodies.

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) EME exposure guidelines are based on careful analysis of the scientific literature and are designed to offer protection for all ages, including children and pregnant women, against identified health effects of EME with a large in-built safety margin.

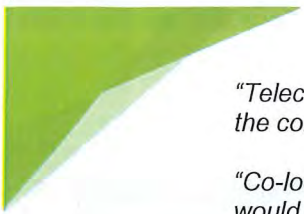
In Australia, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) EME safety standard is based on the international ICNIRP Guidelines. All base stations must comply with the strict EME safety standards regardless of where they are located. The proposed installation will comply with the Australian Communications and Media Authority (ACMA) regulatory arrangements with respect to electromagnetic radiation (EMR) exposure levels. EMR Exposure Levels from this site have been calculated in accordance with the ARPANSA prediction methodology and report format and will not exceed 0.37% of the permissible level.

The State Telecommunications Planning Policy is consistent with recent planning tribunal rulings that *issues relating to EMR levels are not deemed to be valid planning considerations* and states:

"Standards set by ARPANSA incorporate substantial safety margins to address human health and safety matters; therefore, it is not within the scope of this Policy to address health and safety matters. Based on ARPANSA's findings, setback distances for telecommunications infrastructure are not to be set out in local planning schemes or local planning policies to address health or safety standards for human exposure to electromagnetic emissions."

State Planning Policy 5.2, August 2015

We have designed a monopole structure with a triangular headframe which limits height and bulk whilst allowing for the co-location of emergency services organisations and other carriers consistent with the Guidelines for the Location, Siting and Design of Telecommunication Infrastructure (WAPC, 2004).



"Telecommunications facilities should be located and designed to meet the communication needs of the community."

"Co-location of telecommunications facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result."

Visual Landscape Planning in Western Australia p. 139

1.4 Need for the Facility

We will seek to demonstrate that there is a genuine need to improve telecommunication services in the Emu Point area, that Telstra has undergone a rigorous site selection process, that the chosen site best satisfies the planning framework, and that all reasonable steps have been employed so as to ensure the development is consistent with the principles of sustainability and, on balance should be supported.

1.5 Lodgement and Payment of Application Fee

Payment of the application fee of \$640 being 0.32% of the estimated \$200,000 cost of development (ex. GST) is proposed to be made by credit card. We will call at the time of lodgement to pay the Development Application fee over the phone.

A reduced size PDF of this submission with appendices will be submitted.



2 Coverage Objective

Adequate and reliable telecommunications are essential for all aspects of contemporary community life, from supporting the State's economy to creating and maintaining connected and cohesive social networks. Contact between emergency services and the community increasingly relies on the telecommunications networks.

State Planning Policy 5.2. Telecommunications Infrastructure, August 2015

This site will enhance Telstra's 3G and 4G wireless network depth of coverage and has been engineered to provide future 5G services.

The facility will provide service availability and good call quality in the vicinity of Emu Point, Collingwood Park and Collingwood Heights. Notwithstanding the above it can be confidently predicted that Emu Point itself will receive continuous coverage, additionally broader improvements will occur within 5km of the facility including the coastal locations such as Bayonet Head and Middleton Beach. The proposed facility will offer enhanced service to residents and tourists to the surrounding area (who accentuate peak seasonal demand) and reduce the transmitting power and; therefore, radio frequency exposure levels to each user based on the radio environment.

The further a base station is from network users, the weaker the mobile signal is and the slower the data rate of transfer. The weaker signal level also has difficulty penetrating buildings and therefore has detrimental effect on in-building coverage. Surrounding obstructions and topography also has an impact on the signal strength. The best location to build base stations is closest to where these mobile services are required. The further a base station is from its technically optimal position additional stations are then required, or else there will be coverage gaps.

3 Site Details and Surrounding Land Use

- The legal description of the subject land is 222 Collingwood Road, Collingwood Park being Lot 505 on Plan 413242 (volume 2964 Folio 969).
- The land is zoned General Agriculture.
- The proposed Telstra lease area includes an 80m² security fenced compound to accommodate a Telstra equipment shelter and the monopole itself.
- The geology of the locality is characterised by lacustrine deposits; includes lakes, playas, and fringing dunes.
- The subject land has recently been subdivided. The proposed compound location took into account likely building envelopes.
- The nearest residence is located on General Agriculture zoned land 110m to the southwest.
- The nearest intersection of Collingwood Road and Parkes Street is located 270 m to the north.
- The proposed ground level infrastructure will be screened by existing vegetation when viewed from most vantage points notably the terminus of Wright Street.

3.1 Site Context



Figure 2 Local Context



Figure 3 Broad Context

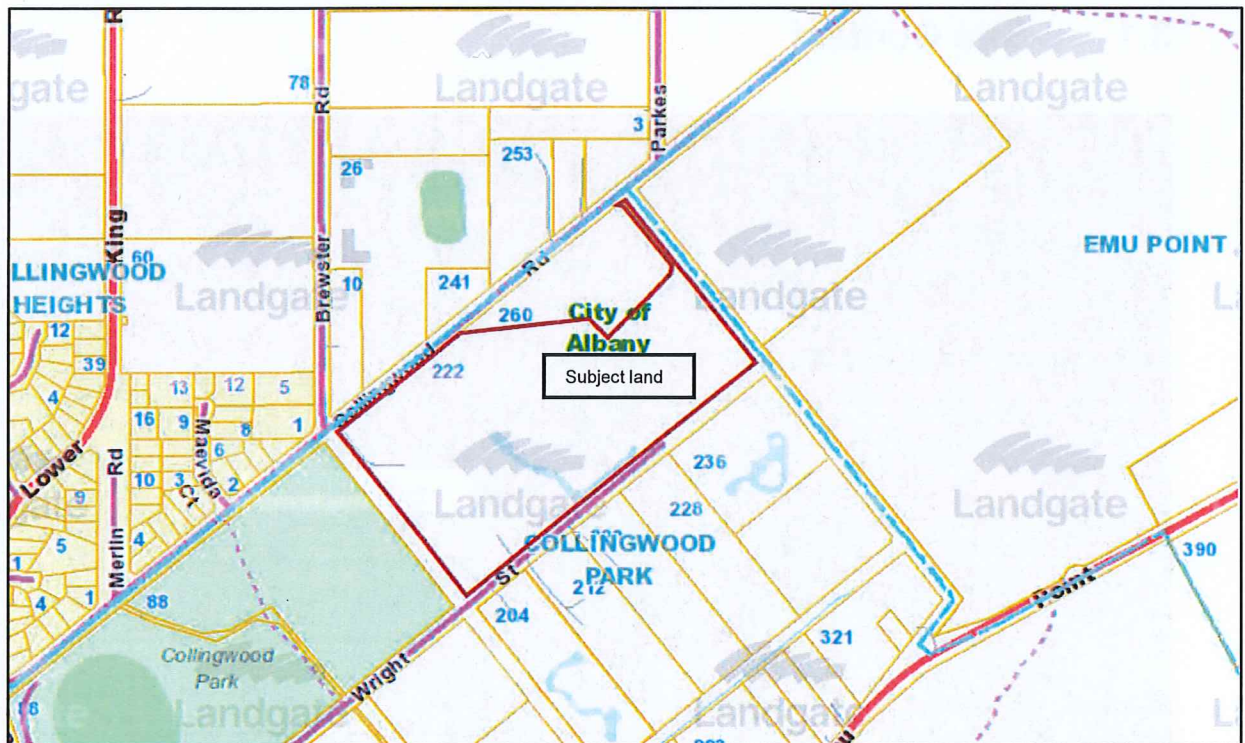


Figure 4 Cadastral plan of the locality (source Landgate 26/04/2019)

4 Proposal Details

The proposed telecommunications facility will comprise the following:

- 33.8m steel monopole with internal hybrid cables.
- Six (6) RVVPX310.11B-T2 panel antennas attached to a triangular headframe at the 35m centreline level.
- ICS Mark 4.0 low-impact equipment shelter.
- Ancillary equipment necessary for the operation and proper functioning of the facility (tower mounted amplifiers, remote radio units, junction boxes, GPS antenna, cable tray, and EME signage).
- Security chain-mesh fencing.
- The entire area required to be leased is 80m².

The slimline monopole design minimises the visual impact and can accommodate panel, omni and yagi (directional) antennas as well as and parabolic dishes.

The low-impact equipment shelter has a concealed roof with a height not exceeding 3m and will be externally clad with Pale Eucalypt. Plans and elevations of the proposed facility are provided at **Appendix B**.

Telstra vehicular access for routine maintenance will be infrequent (1-2 times per year) via an existing access track off Collingwood Road. Vehicles accessing the site for maintenance purposes are typically sedans or medium SUV's. The final power and fibre link cable route and design will be subject to Western Power, landowner and Telstra requirements. The final footing design will be subject to geotechnical investigation.

No external flood lighting or aviation lighting is proposed. There is no legislative requirement for obstacles located away from aerodromes to be fitted with navigation lighting. The height above ground level for which structures must be reported to the Civil Aviation Safety Authority and may be fitted with lighting is 110m. Aurecon will; however, advise Airservices Australia of the height and location of the tower so they can update their database of tall structures which is made available to aviation operators.

4.1 Environmental Commitment

Telstra is committed to delivering continuous improvements in their environmental performance. A copy of Telstra's Environmental Policy is available at <http://www.telstra.com.au>. **Telstra's contractors are required to operate in accordance with the environmental standards and controls contained within the Telstra Environmental Handbook and the Telstra Contracting Handbook for Contractors, Sub-Contractors and their Employees.** The Handbooks outline Telstra's minimum environment management standards and HSE standards pertaining to water, air, flora, fauna, energy, noise, water, other natural resources, heritage and their interrelation. Contractors are also required to fulfil their contract requirements which include having in place and complying with an environmental management system that is consistent with Australian Standards ISO 14001:2004.

The proposed facility will comply with the Australian Communications and Media Authority regulatory arrangements with respect to electromagnetic radiation (EMR) exposure levels. The State Administrative Tribunal orders and many local planning policies pertaining to telecommunications infrastructure acknowledge that health is not a planning consideration given the licensing requirements have due regard to public health.

Plans and elevations of the proposed facility are provided at **Appendix B**.



4.2 Construction and Noise

Noise and vibration emissions associated with the proposed facility are expected to be limited to a ten (10) week construction and commissioning phase. Noise generated during the construction phase is anticipated to be of short duration and accord with the standards outlined in the Department of Water and Environment Regulation (DWER) Environmental Protection (Noise) Regulations 1997. Construction works are planned only to occur between the hours of 7.00am and 6.00pm.

5 Site Selection Process

5.1 Precautionary Approach

Telstra has applied the Precautionary Approach in the selection and design of the proposed site in accordance with Sections 4.1 and 4.2 of the *Communications Alliance Industry Code C564:2011 for Mobile Phone Base Station Deployment*.

In selecting this site, Telstra has used industry best practice to assess potential candidate sites, taking into account technical and non-technical criteria including:

- service objectives;
- potential to co-locate at an existing telecommunications facility or building structure;
- visual impact on the surrounding area;
- the need to obtain relevant town planning approvals;
- the proximity to community-sensitive locations;
- the proximity to areas of environmental heritage or significance;
- the availability of secure tenure;
- the availability of public utilities, such as power;
- minimisation of electromagnetic radiation exposure to the public; and
- other cost factors.

Upgrading existing Telstra facilities or co-locating on existing telecommunications facilities, in addition to low-impact installations on tall buildings or structures are always investigated. These solutions are not only the least impactful, but they are often the most cost-effective. Unfortunately, such options were unable to achieve the coverage objective.

5.2 Candidate Sites

In 2012 Telstra sought to identify a site centred around the Bayonet Head settlement to improve capacity and coverage in the Bayonet Head/Emu Point. These site investigations identified six candidate sites two of which were then short-listed and only one then not eliminated for failing to meet minimum technical requirements. This investigation process was ultimately unsuccessful. In 2018 a new search 'ring' was released further south to provide the capacity and depth of the coverage to the Emu Point area see Figure 5.

Numerous sites and options have been excluded either due to environmental and planning constraints, impacts on amenity, development pressures and/or lack of landowner interest, or alternatively for not meeting coverage objective thresholds. Of the nine identified candidate sites which were assessed five sites were eliminated for not meeting minimum threshold scores across the four technical disciplines assessed being:

Table 1 Site Assessment Criteria

Technical Discipline	Primary Consideration
Property	the ability to secure land tenure, and the timing and terms of any subsequent agreement
Design and Construction	construction costs, ease of access for construction and maintenance activities, the availability of power, and access to the fibre network
Town Planning and Environment	social, environmental and heritage considerations, and the ability and timing to obtain regulatory approvals
Radio Frequency (RF) Design	the ability to meet coverage objectives and the overall business case

Table 2 Candidates eliminated and not short-listed as part of the 2018 rescoping exercise




Address	Design Option and Reason for Elimination
46 Buffalo Road, Collingwood Heights (Lot 46 on Plan000164)	Monopole option Reasons for its elimination: Owners not interested.
Off Battle Road, new AC power pole (Lot 102 on D82246)	40m Monopole option Reasons for its elimination: Unable to meet coverage objectives due to low elevation, owners not interested in Telstra proposal
Reserve R6862	Monopole option Reasons for its elimination: Class A Reserve for the purpose being protection of Boronia. Unlikely to be considered favourably by City of Albany.
Southern Raw Pet Meats Pty, 204 Wright Street, Collingwood Park (Lot 5 on Diagram 84205)	Monopole option Reasons for its elimination: Owner cannot accommodate Telstra in any area other than a swamp on this small lot, therefore Telstra offer was declined.
Telstra Exchange, 8 Bayonet Head Road	40m Monopole option Reasons for its elimination: Outside search area (approx. 2km). Site previously investigated.

The short-listed candidates shown on the figure below were assessed by each of the technical disciplines and their performance scored accordingly in order for a prime candidate to be identified. Candidate G was, on balance, scored as being the preferred option and development approval sought.

**Figure 5 Short-listed candidate map and revised search area**

The justification for not pursuing development approval for the other short-listed candidates are summarised in the following table.

Table 3 Short-listed candidate sites not pursued

Site Name/Address		Reason for Not Pursuing
Candidate D Reserve R42964 (At Emu Point Marina and Boat Harbour)		Poor property score. There are several leases on this reserve for marine associated activities in line with the reserve purposes. The only vacant space is around 800m ² , noting that clearing of this site has been an issue in the past. Poor RF score. Candidate would be suitable to cover Emu Point only and won't add much to the surrounding localities including Merlin Road, Lower King Road and Breaksea Crescent.
Candidate E Reserve R15879 (off Clark Street)		Poor town planning score. Residential zoned land and residences in the immediate vicinity. Likely clearing of remnant vegetation with conservation value.
Candidate F Reserve R32341 (North Albany Oval, Collingwood Park)		Failed minimum RF threshold score. The location is not completely covering Emu Point and is also not covering the southern Bayonet Head compared to other candidates. Candidate is only good for covering Lower King Road.

Notwithstanding the coverage to Emu Point is not as good as Candidate E, the proposed site has the least known constraints and perceived impacts compared to other potential sites where landowner interest was expressed to Telstra.

5.3 Existing Facilities

The nearest facilities identified in the Radio Frequency National Site Archive (RFNSA) website and their distance from the proposed site are as follows:

- Telstra/Optus, rooftop, Albany Health Campus 30 Warden Avenue, Spencer Park, 2.35km southwest from the proposed location.
- Telstra/Optus/Vodafone 50m lattice tower, 333 Mercer Road, Walmsley, 2.47km north northwest from the proposed location.
- Telstra Shop, in-building facility, 82 Lockyer Avenue, Centennial Park, 4.59km southwest from the proposed location

Upgrades at the above sites cannot achieve the desired coverage objectives, particularly for locations on the coast somewhat shielded by terrain and in building coverage. A new facility is; therefore, the only feasible option to maintain network coverage and be future-ready for 5G networks services.

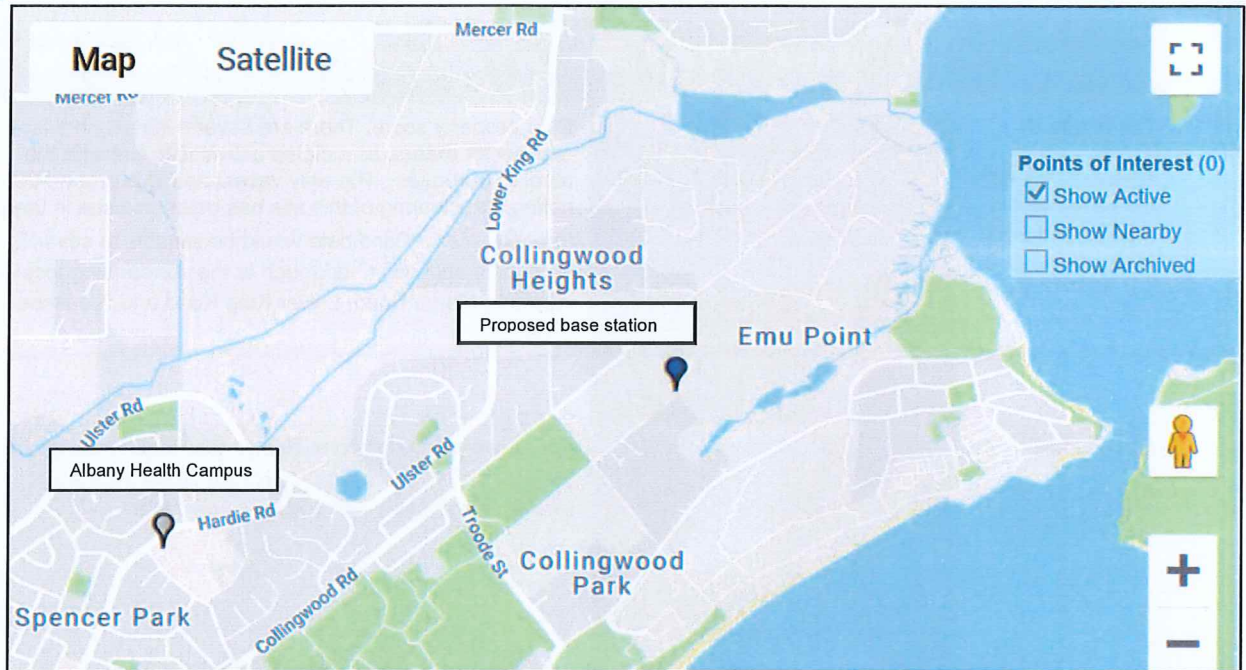


Figure 6 Nearby base station facilities (source: RFNSA website 24/04/2019)

6 Heritage and Environmental Significance

GIS constraints mapping has been prepared for the proposed facility utilising the State Land Information Platform datasets available through Landgate. This mapping exercise that there are no significant environmental or heritage constraints on the proposed site, see **Figure 7** and **Appendix E**.

A search of the Department of Aboriginal Affairs heritage database has not identified any Registered Aboriginal heritage sites in the area. Nonetheless, Telstra's contractors are experienced with ensuring compliance with the requirements of the *Aboriginal Heritage Act 1972* and the controls contained within Section 8.3 of *Telstra's Environment Handbook* specific to indigenous heritage.

The site is not subject to an acid sulphate soil risk area.

Heritage and flora and fauna surveys have not been independently undertaken by Telstra over the proposed site although it is acknowledged that the site has been disturbed and the compound area does not contain any remnant vegetation.

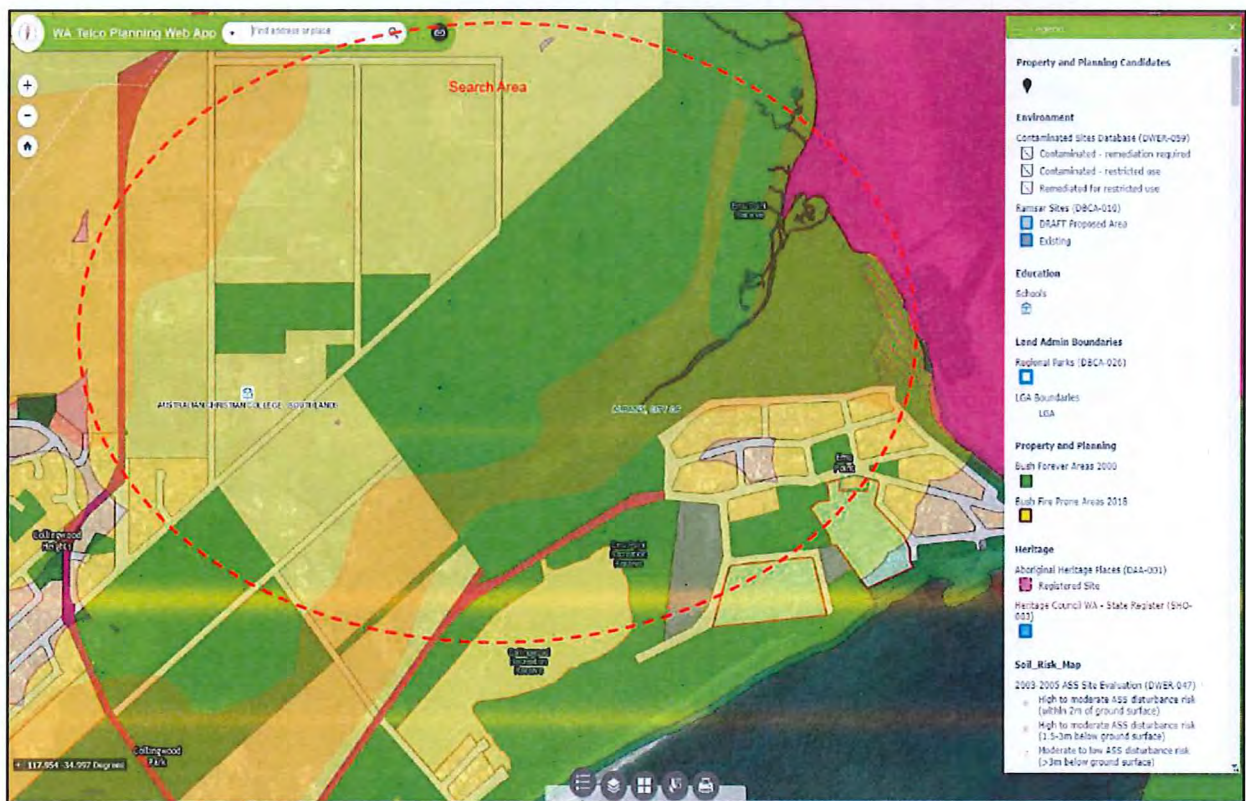


Figure 7 Constraints mapping identifying the search area

6.1 Bushfire Risk

Notwithstanding that the subject land is identified as a bush fire prone area subject to or likely to be subject to bush fire attack, the proposed development is classified under the Building Code of Australia as Class 10b (non-habitable structures). The monopole structure is steel with internal feeders and the equipment shelter non-habitable and of a design routinely used in areas with a Bushfire Attack Level of Fire Zone. As such, the development is fully compliant with *AS3959 Construction of Buildings in Bush Fire Prone Areas* and will not result in any additional fire load or risk to occupants.

The compound itself will be free of vegetation forming part of an asset protection zone in conjunction with abutting access tracks and fire breaks, as well as cleared pasture.

6.2 Health impacts

Whilst minimising the visibility of telecommunications infrastructure from community sensitive land uses such as schools, hospitals and childcare facilities to mitigate perceptions of impacts on human health is recognised in the planning policy framework. Objections on the basis of public health impacts is not a planning consideration.

This position is recognised by state planning policy, more recently adopted local government planning policies in Western Australia, and the SAT.

"The Health Department of Western Australia considers there is currently no health basis for restricting either the siting of mobile telephone towers or ground level access to them."
WAPC Planning Bulletin 46, 2000

"A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."
World Health Organisation fact sheet 1993 (June 2014)

"Perceptions (of potential health problems) without more, are an unsuitable basis for evaluating amenity concerns to the point where a proposal, which is otherwise justified and compliant, should be refuse planning approval."
[WASAT 2009, 117]

7

Visual Landscape Assessment

7.1 Assessment against Part 3 Visual Landscape Planning in Western Australia – a manual for evaluation, assessment, siting and design (WAPC, 2007)

It is best practice to undertake a 'visual impact assessment', prepared in accordance with 'Visual Landscape Planning in Western Australia', to demonstrate to the satisfaction of the local government that the proposal satisfies the local planning policy framework. The Manual provides broad guidelines that should be read in conjunction with those specifically drafted for telecommunications infrastructure (SPP 5.2).

Part 1 of the Manual 'Introduction' addresses the planning context, distinguishes between visual landscape evaluation (plan making) and visual impact assessment (development assessment), and outlines the scope of the Manual.

Part 3 of the Manual 'Guidelines for Location, Siting and Design' provides guidance for utility towers, including telecommunications towers. This guidance assists in ensuring proposals reduce their potential impact on visual landscape character.

Aurecon has previously met with Tara Cherrie-Morgan and Stephanie Clegg who were the (former) Department of Planning Project Managers responsible for the production and implementation of the Manual to discuss the intent of the Manual specific to telecommunications. These discussions also concentrated on appropriate design responses to minimise visual impact in urban and coastal environments. Subsequent to understanding this Manual, Visual Landscape Assessment has been prepared on the premise that outlooks from Middleton Bay, Oyster Harbour, Mount Clarence and the Gull Rock National Park represent 'regionally significant views', and that 'locally significant views' exist from the local road network (notably Collingwood Road, Emu Point Road). It was noted that the Manual is not State Policy rather it provides guidelines applicable to development on private land to assist in the protection of *significant* landscapes.

The Manual refers to three broad, basic visual character objectives:

1. protection and maintenance of visual landscape character;
2. restoration and enhancement of degraded visual landscape character, or opportunities for enhancement; and for other areas
3. the broad objective is to undertake a combination of protection and enhancement where appropriate, and elsewhere to undertake best practice siting and design.

We consider that the proposed site should be viewed in its local context as a modified rural agricultural area, although not in need of restoration or enhancement. In its broader context the proposed site should be viewed as an area of coastal and rural landscape character.

The Manual provides for three specific visual management objectives to meet the fore-mentioned broad visual character objectives:

- a) not evident: development may be hidden, screened or not visible from specified viewing locations;
- b) blending: development may be evident, but generally not prominent in that it borrows from the existing landscape setting; and
- c) prominent: development may be a dominant feature in the landscape, drawing attention to itself.

Where the broad objective is protection the pragmatic broad objective for managing the visual impact of the proposed monopole is (b) blending, because it is not feasible to screen the pole from view, nor is the proposed pole designed to be prominent in the way that an iconic building or public art may be. This is the approach that Telstra has taken to proposed ground level infrastructure. Given there is no existing development restoration and enhancement strategies to make existing development blend better have not been proposed.

The term blending is also described as 'harmonise with', 'compliment' or 'borrow from'. To ensure that a development blends with existing valued landscape character, it is necessary to identify the dominant visual components of the landscape. The rural landscape contains a number of notable elements such as undulating terrain, both natural and built form, and dark green through to light brown tones. In close proximity to the facility Collingwood Road is a dominant landscape feature that separates areas with two distinct characteristics. North of Collingwood Road built form has a greater influence due to smaller allotments and the scale is smaller and enclosed due to taller roadside vegetation. South of Collingwood Road the scale is larger and open due to more expansive clearing and lower coastal vegetation class. The locality is predominantly characterised by native eucalypt shrubs and trees less than 12m in height. Light colours such as zincalume® or white are often avoided to better blend with the dark green eucalypt foliage. The equipment shelter has a concealed roof to minimise bulk and is proposed to be externally colour-treated pale eucalypt. Chain mesh security fencing has been proposed, in part to be less visually intrusive than solid fencing and in part to minimise any potential vandalism or graffiti.

The Manual recommends that "...remnant bush be retained wherever feasible, as it provides a strong visual reminder of an area's original landscape character, thus forming a major component in an urban area's current expression of character." No vegetation disturbance is proposed. Section 1.7 of *Telstra's Environmental Handbook - Flora, Fauna, Habitat and Weeds* requires the limit of the footprint to be clearly marked/tagged and noxious weeds to be destroyed or removed.

There is no legislative requirement for obstacles located away from aerodromes to be fitted with navigation lighting. The height above ground level for which structures must be reported to the Civil Aviation Safety Authority (CASA) and may be fitted with lighting is 110m.

The Manual identifies that development adjacent to urban coastline "*should be not visually intrusive when viewed from the adjacent foreshore reserve, especially beaches, lookouts, dual use paths, and picnic sites*". This will not be the case due to physical separation distances, relatively tall vegetation and the topography of the area. It is our assertion the facility will not be visible from any point on the coastline.



Figure 8 looking northeast from Wright Street

The Manual also suggests that "...where possible choose higher points that appear less prominent when viewed from key views and/or travel routes." Although a higher point has not been selected there is limited deviation in elevation across the subject land. The alignment of the local road network is such that there are few motorist viewsheds that directly align with the proposed facility. Wright Street that facilitates limited traffic

movements (dead end road) is the exception. However; tall roadside vegetation will completely screen the facility when travelling along this road see **Figure 8**.

The Manual recognises that *"colour does not appear to be a design option with the recently constructed towers."* The galvanised steel monopole is not proposed to be colour-treated. The galvanised finish will be less visually intrusive than a darker painted shade, particularly against lighter backgrounds such as the sky. The sky will be the backdrop from the majority of publicly assessable viewing angles.

7.2 Photo Montages Methodology

Aurecon have digitised the proposed monopole structure into three photographic images taken from Collingwood Road (red arrows on **Figure 9**) that represent collective view experiences deemed to be locally significant viewpoints. The view perspectives were prepared from eye level (1.65m).

The series of viewpoints from Collingwood Road were provided to the City to confirm their acceptance prior to the montages being produced.

Aurecon has endeavoured to ensure accuracy in the production of the photo montages. Individual view experiences may change due to factors not modelled; such as atmospheric conditions, the time of day, the weathering of materials used in construction and minor variation in the siting of the structure.



Figure 9 Montage perspectives



Figure 10 Perspective A looking East from Collingwood Road



Figure 11 Perspective B looking South East from Collingwood Road



Figure 12 Perspective C looking South from Collingwood Road

7.3 Visual Impact Analysis Nearest Dwelling

The City additionally requested Aurecon to have due regard to the visual impact when viewed from the nearest dwelling located at 236 Wright Street (green arrow on **Figure 9**). In order to understand the visibility of the proposed facility from the nearest dwelling the terrain and landscape features were digitised based on aerial imagery. The precautionary principle was applied particularly when estimating the height of the vegetation to increase the confidence in the outputs.

A montage perspective **Figure 13** and line of sight analysis was prepared to illustrate the likely extent of the facility that would be visible from this perspective (see **Appendix F**). The extent to which the facility was in the primary of peripheral view was to be in the primary line of sight and to be able to be illustrated by preparing the montage perspective from the axis of the dwelling consistent with the orientation of the dwelling. The digitisation process has scaled the proposed structure utilising known height datums drawn from landscape features. The analysis was undertaken at desktop level and was unable to take into consideration the location of windows or major openings.

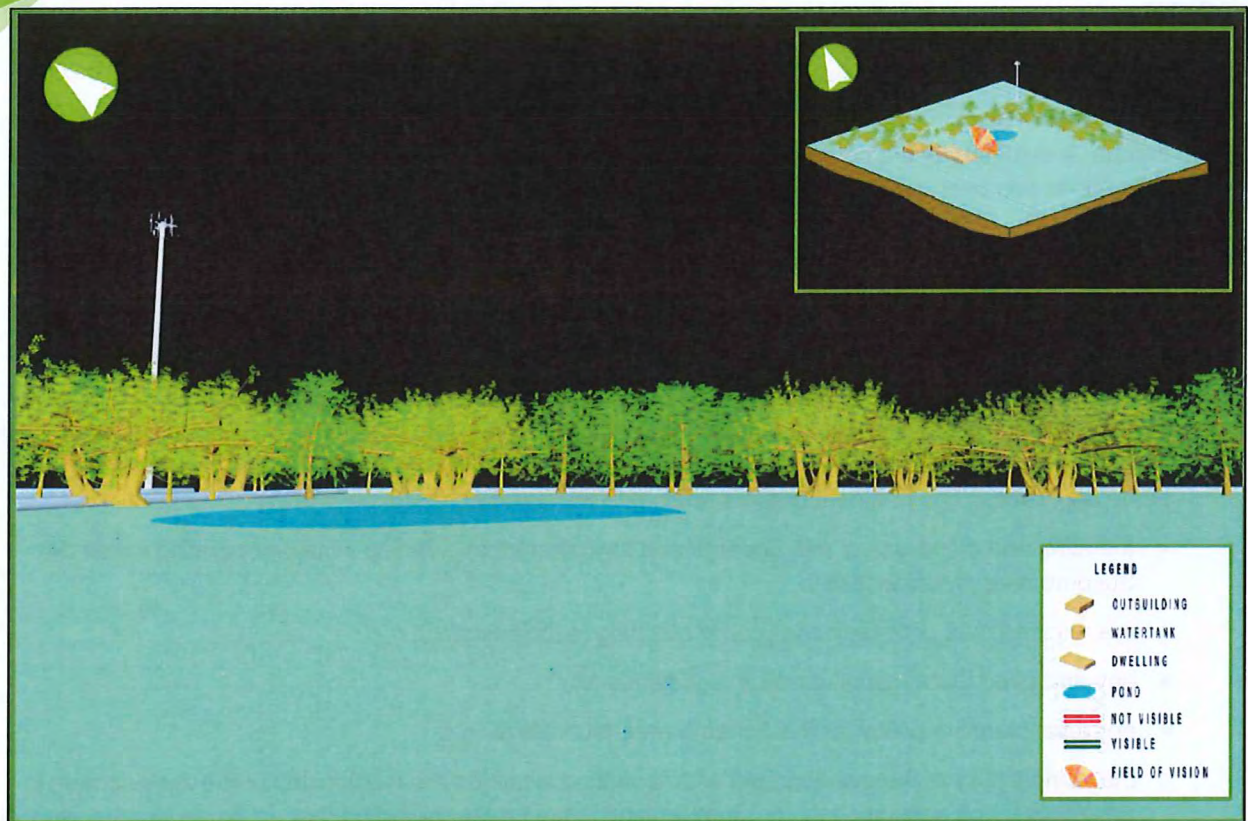


Figure 13 Montage perspective from 236 Wright Street

8 Planning Policy Framework

The following section identifies the pertinent Federal, State and Local Government policies and assessment criteria. A summary of the compliance against the key objectives and relevant requirements from these documents has been provided as applicable.

8.1 Planning and Development (Local Planning Scheme) Regulations

Clause 67 of the Deemed Provisions provides that in considering an application for development approval, the local government is to have due regard to a range of specified matters to the extent that, in the opinion of the local government (and the Tribunal on review), those matters are relevant to the development the subject of the application. The pertinent matters relating to this application are as follows:

- the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area (subclause (a));
- the requirements of orderly and proper planning (subclause (b));
- any approved State planning policy (subclause (c));
- any local planning policy for the Scheme area (subclause (g));
- the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development (subclause (m));
- the amenity of the locality including the character of the locality (subclause (n));
- the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals (subclause (x)); and
- Any submissions received on the application (subclause (y)).

8.2 Western Australian Planning Commission Statement of Planning Policy No 5.2 – Telecommunications Infrastructure

The State Planning Policy was released in September 2015 and has primarily sought to ensure a more consistent approach in the preparation, assessment and determination of planning decisions for telecommunications infrastructure. As such, we have ensured sufficient information as outlined in Section 6.3.1 'Information to be Submitted When Lodging a Development Application' has been provided.

The State Policy now provides the direction that telecommunication infrastructure should not be prohibited in any zone in the zoning table and that, subject to guidance within a planning scheme, be designated as a permitted use in some zones. *Furthermore*, buffer zones and/or setback distances are not to be included in planning schemes or local planning policies. There is a clear direction in the State Policy to facilitate the roll out of an efficient telecommunications network unless the location and siting unreasonably affects places of cultural or environmental significance, or the visual impact on balance has not been mitigated to outweigh the community benefit of the service it will provide the community. We contend that the location, siting and design of our proposed infrastructure has been suitably considered and is acceptable when weighed against the planning policy framework.

The proposed installation is located, sited and designed in accordance with the following Policy Measures.

Table 4 Assessment against the State Telecommunications Infrastructure planning policy

SPP 5.2 Policy Measures	Response
<p>Telecommunications infrastructure should be sited and designed to minimise visual impact and whenever possible:</p> <p>a) be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites;</p> <p>b) be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land;</p> <p>c) not be located on sites where environmental, cultural heritage, social and visual landscape values may be compromised and</p> <p>d) display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape.</p>	<p>Telstra has taken significant steps to select a site and location that will minimise perceived negative impacts on the visual amenity of the area.</p> <p>The location is approximately 1km from the nearest coastline, over 800m from Collingwood Park, and over 400m from Emu Point Road. The facility is not anticipated to be visible from any of these locations.</p> <p>The subject land is not identified by the local planning policy framework as being in an area of landscape protection, nor containing any places of cultural heritage significance.</p> <p>No vegetation will be impacted from the works.</p> <p>The monopole has been designed to limit bulk and employs a headframe that allows the height to be minimised. The natural factory finish of the monopole will blend as far as practical against lighter backgrounds such as the sky and the equipment shelter will be colour-treated to blend against darker eucalypt backgrounds.</p>
<p>Telecommunications infrastructure should be located where it will facilitate continuous network coverage and/or improved telecommunications services to the community.</p>	<p>Telstra through its strategic planning processes has identified this site as having the potential to address existing depth of coverage issues in the Emu Point area and near shore areas partially shadowed by terrain. The site is centrally located to service the catchment population of that is mooted for residential expansion including the future Bayonet Head development and tourist accommodation north of Middleton Beach.</p>
<p>Telecommunications infrastructure should be co-located and whenever possible:</p> <p>a) Cables and lines should be located within an existing underground conduit or duct; and</p> <p>B) Overhead lines and towers should be co-located with existing infrastructure and/or within existing infrastructure corridors and/or mounted on existing or proposed buildings.</p>	<p>Co-location or mounting to an existing building or tall structure was not an option to achieve the coverage objective.</p> <p>The final layout and configuration of fibre and power cables will be to the agreement of Western Power, the landowner and Telstra.</p> <p>Feeder cables will be run internal of the monopole.</p>

With respect to the above points this proposal through its siting, design and location has addressed these Policy Measures as far as practical.

8.3 Albany Regional Strategy (WAPC, 1994)

The Albany Regional Strategy (ARS) establishes the planning direction for the regional and no doubt informed the Albany Local Planning Strategy 2010. The ARS identified twelve major aims that included:

- Identify infrastructure requirements to cater for the growth in the timber and tourist industries.
- Identify infrastructure requirements and upgrades for regional utilities such as energy from electricity and gas, *telecommunications*, *internet access*, and boating and port facilities.
- Allow for the continued growth of tourism in the area.

8.4 City of Albany Local Planning Scheme No. 1 (LPS1)

In accordance with the LPS1 Telecommunications Infrastructure:

“means land used to accommodate any part of the infrastructure of a telecommunications network and includes any line, equipment, apparatus, tower, antenna, tunnel, duct, hole, pit or other structure used, or for use in or in connection with, a telecommunications network.”

The facility is proposed within the General Agriculture zone (see **Figure 14**). Telecommunications infrastructure is a 'D' use in all zones in accordance with the Zoning Table. Council may, at its discretion, permit this use in the zone.

The pertinent objectives of the General Agriculture zone include to:

- Provide for the sustainable use of land for agricultural and rural activities.;
- Support complementary land uses where those land uses do not detract from adjoining agricultural and rural activities and are compatible with the character and amenity of the area; and to
- Prevent land uses and development within the zone that may adversely impact on the continued use of the zone for agricultural and rural purposes.

It is our assertion that the proposed facility will not compromise any of the objectives of the zone and telecommunications infrastructure is a landuse activity that is encouraged by the planning policy framework to the exclusion of other zones with residential or conservation focus. As such, telecommunications infrastructure is reasonably expected to locate and be a feature of rural zoned land.

The subject land is not affected by a structure or layout plan, nor will it impact on a place of heritage value.

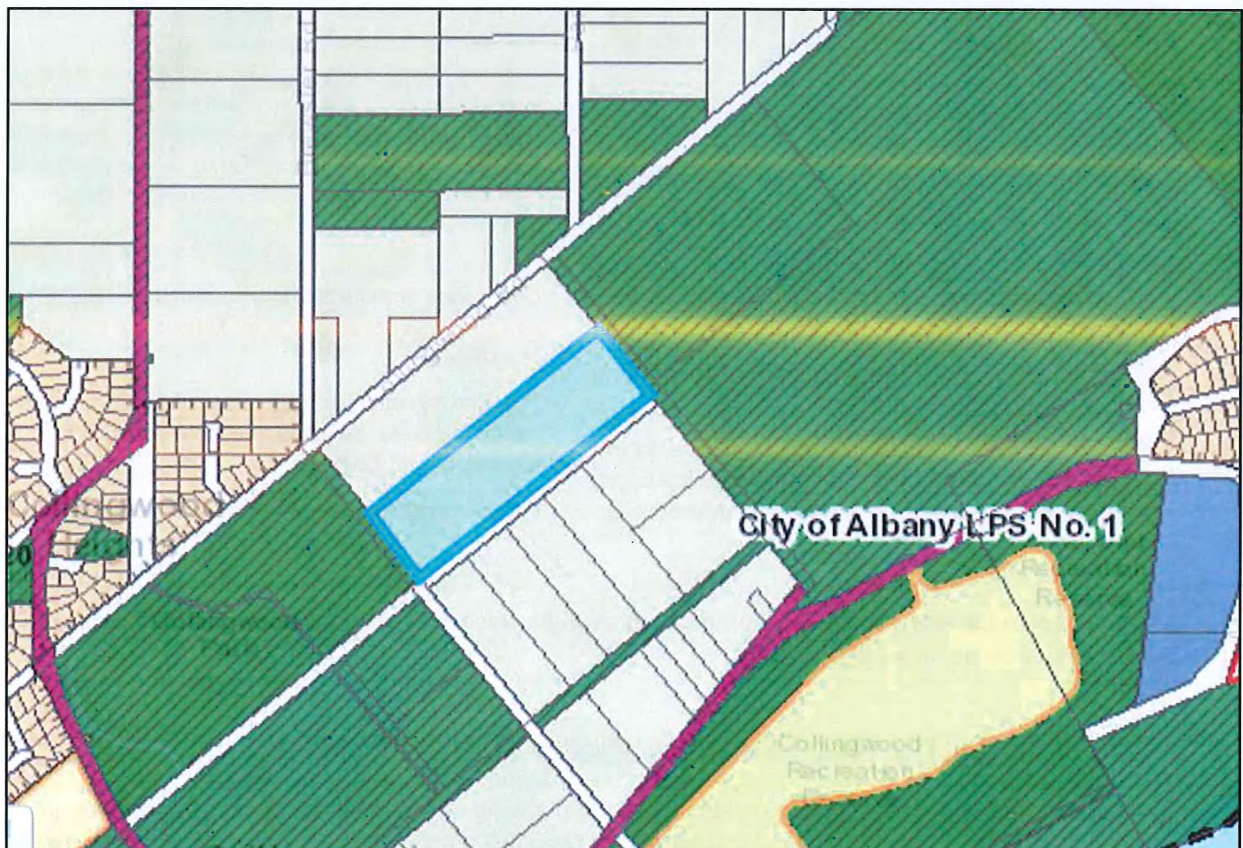


Figure 14 LPS1 mapping (source Plan WA 26/04/2019)

The pertinent aims of the LPS1 include to:

- Implement the findings of the *Albany Local Planning Strategy* within the City.
- Protect historic buildings, areas and precincts and promote Aboriginal and European heritage awareness.
- Retain the sense of place and protect from inappropriate development those natural and built qualities that differentiate Albany from other places.

- Provide for increased population growth within the City by establishing controls for the co-ordinated planning and development of land to be used for residential purposes allowing for complimentary uses to provide a range of services to meet the needs of the residents.
- Promote a diversity of activity and those rural developments that maximise the productive use of the region's agricultural resources.
- Respond to the changing needs of the City through the provision of social, administrative and land use initiatives which support the retention and growth of rural townsites, the urban population and advance sustainable land use practices.
- Promote opportunities for new and value-added industries and businesses, particularly those industrial and business activities that create synergies with existing activities.

8.5 Albany Local Planning Strategy (2010)

The adopted 2010 Local Planning Strategy drew upon the Albany Regional Strategy and is also a high order document that provides general guidance and objectives.

The planning principle within the 2010 Strategy specific to infrastructure servicing is to *provide a high quality and integrated sustainable infrastructure to facilitate growth*. Specific to telecommunications the planning objective is to *encourage the extension and maintenance of high-quality telecommunications for the whole City of Albany district*. The proposed infrastructure aligns with the strategic direction and; specifically, the strategy objective for regional infrastructure to provide *high quality telecommunications infrastructure and services*. It is further noted that the action specific to telecommunications seeks to *encourage service providers to upgrade and extend telecommunications infrastructure and services, services to rural and coastal communities*...

8.6 City of Albany Local Planning Strategy (2019)

The 2019 Strategy is yet to be endorsed by the Western Australian Planning Commission; however, has been approved by the Council. A preliminary review has not identified any substantive change of direction in relation to telecommunications infrastructure from the adopted 2010 Strategy. The importance of an effective communications network to ensure economic competitiveness is further underscored, and the need to identify mobile phone base stations in structure plans has been affirmed.

Effective telecommunications infrastructure, including phone and internet services, is essential for social connectivity, for households, businesses, and the district economy and to ensure safety. Mobile phone, television, radio reception and broadband availability in the district vary in quality or sometimes availability. This has a major impact on current and future commercial activities along with impacting the lifestyle of residents. Access to mobile phone coverage in the district is patchy but has improved. There is an on-going need to address mobile phone 'black spots' to obtain greater coverage.

It is imperative that planning for telecommunications/broadband and the digital economy, and the infrastructure that will deliver it, be incorporated into planning considerations. The provision of telecommunications/broadband services is an integral driving force which can provide opportunities for the development of the district. Quality telecommunications/broadband infrastructure (the 'communications highway') can, for instance, assist in the implementation, coordination and sharing of service delivery in the district. The land use planning system can assist to encourage the extension and maintenance of high-quality telecommunications for the district.

(source Local Planning Strategy 2019 Part 2 – 5.5.5 Telecommunications)

8.7 Telecommunications Local Planning Policy

The City of Albany does not have a telecommunications local planning policy.

9 Telecommunications Industry Regulation Overview

9.1 Telecommunications Industry Regulation Overview

The principal regulation body is the Australian Communications and Media Authority (ACMA). ACMA regulates compliance with legislation, broadcast licence conditions, reports of communications industry matters including its performance, and issues telecommunications licences and allocates and licences the radiofrequency spectrum. Under the Commonwealth *Telecommunications Act 1997* the telecommunications industry has considerable scope for self-regulation. As such, the industry has developed Codes of Practice via the Communications Alliance industry group. ACMA registers such Codes and is empowered to respond to breaches of these Codes and drive more formal regulation.

The Telecommunications Industry Ombudsman may also respond to breaches of these Codes or resolve disputes between Carriers and their users.

9.2 Telecommunications Act 1997

The *Telecommunications Act* (Act) was enacted to provide a regulatory framework that among other objectives promotes the long-term interest of end-users of carriage services, the efficiency and international competitiveness of the Australian telecommunications industry, and the availability of accessible and affordable carriage services that enhance the welfare of Australians.

Under the Act State and Territory laws prevail except in limited circumstances most notably the inspection of land, maintenance activities, the installation of low-impact facilities, subscriber connections and temporary defence facilities. The definition of a low-impact facility as stipulated by the *Telecommunications (Low-impact Facilities) Determination 2018* does not extend to this proposed new facility.

9.3 Telecommunications Code of Practice 1997

The Telecommunications Code of Practice underpins the Telecommunications Act and deals with the following activities:

1. Inspection of land
2. Subscriber connection
3. Low-impact facilities
4. Temporary defence activities
5. Maintenance of facilities

The emphasis is on best practice planning, design and installation of facilities, in addition to compliance with industry standards and the minimisation of environmental impacts. The proposed facility is considered best practice given the site selected has no significant environmental constraints and the visual impact is the least necessary to effectively provide improved telecommunications in the locality.

10 Conclusion

Telstra's network is strategically planned and co-ordinated to ensure the best possible coverage is provided with minimal need for new base stations. The proposed facility is part of Telstra's strategic plan for improving mobile telecommunications in regional locations, servicing both the local community and visitors to the area.

With the continual improvement and development of wireless technology, the demand on the mobile phone network is continually increasing. Additionally, the demand from network users for better coverage and their expectations on where they can obtain service and the level of that service means that Telstra needs to constantly monitor the coverage we are providing to our network users and find ways to improve their experience. A base station has a limited number of users which it can support at any one time, therefore as the demand from both mobile phone and wireless broadband users increase so does the requirement to build more base stations to support this demand.

The facility will provide improved telecommunications services leading to improved convenience and safety for residents, travellers and visitors in the Emu Point area and to significant residential expansion identified by the Bayonet Head Interim Outline Development Plan. Telstra has applied the Precautionary Approach in the selection and design of the proposed site in accordance with Sections 4.1 and 4.2 of the Communications Alliance Industry Code C564:2018 for Mobile Phone Base Station Deployment. In addition, upgrading of existing base station sites were ruled out given their physical distance from the area for which additional depth of coverage will be provided.

All base station candidate sites are scored for their suitability against town environmental/ conservation/ heritage criteria in addition to coverage objectives, land tenure (the ability to secure a lease) and construction costs. As such, development approval is being sought which will not require the removal or destruction of any vegetation, not result in significant soil disturbance, not impact on culturally significant land, and will allow for significant separation to residential zoned land and to the coastline. The facility is also sufficiently set back from Collingwood Road and Emu Point Road so as not to affect the locally significant view experience for motorists.

The choice of a monopole is in response to the need to provide sufficient elevation to antennas whilst respecting the structural engineering requirements and need to minimise visual impact and bulk. Furthermore, the monopole will ensure additional fixing points are available for future Telstra upgrades and emergency services organisations and, if desired, additional antennae and equipment for multiple telecommunication carriers. The base station has drawn upon recognised blending techniques prescribed by Visual Landscape Planning in Western Australia – a manual for evaluation, assessment, siting and design for prominent development including pale eucalypt colour treating for the equipment shelter and use of permeable fencing and maintaining a factory steel finish for the monopole to blend against lighter backgrounds.

Infrequent vehicular access will be provided from Collingwood Road via an existing crossover and along an existing access track.

The installation will comply with the Australian Communications and Media Authority regulatory arrangements with respect to electromagnetic radiation (EMR) exposure levels.

Respectfully, Council is requested to grant Approval to Commence Development in accordance with the provisions of the City of Albany Local Planning Scheme No. 1 in light of the justification provided above.

11 Further Information

The proposed installation will comply with the Australian Communications and Media Authority regulatory arrangements with respect to electromagnetic radiation (EMR) exposure levels. EMR Exposure Levels from this site have been calculated in accordance with the ARPANSA prediction methodology and report format and will not exceed 0.37% of the permissible level (see **Appendix C**).

Further information on a range of issues relevant to the placement of mobile phone towers, industry codes of practice and legislation, and EME and health fact sheets are available at <http://www.acma.gov.au/Citizen/Spectrum/About-spectrum/EME-hub> or by phoning the Radiocommunications Licensing and Telecommunications Deployment Section on 1300 850 115 or email at info@acma.gov.au. The Australian Communications and Media Authority is a government regulator of telecommunications and radio communications.

Should you require clarification or any further information with regard to the above or attached, please do not hesitate to contact the undersigned on 6145 9405 or at joel.gajic@aurecongroup.com.

Yours faithfully



Joel Gajic

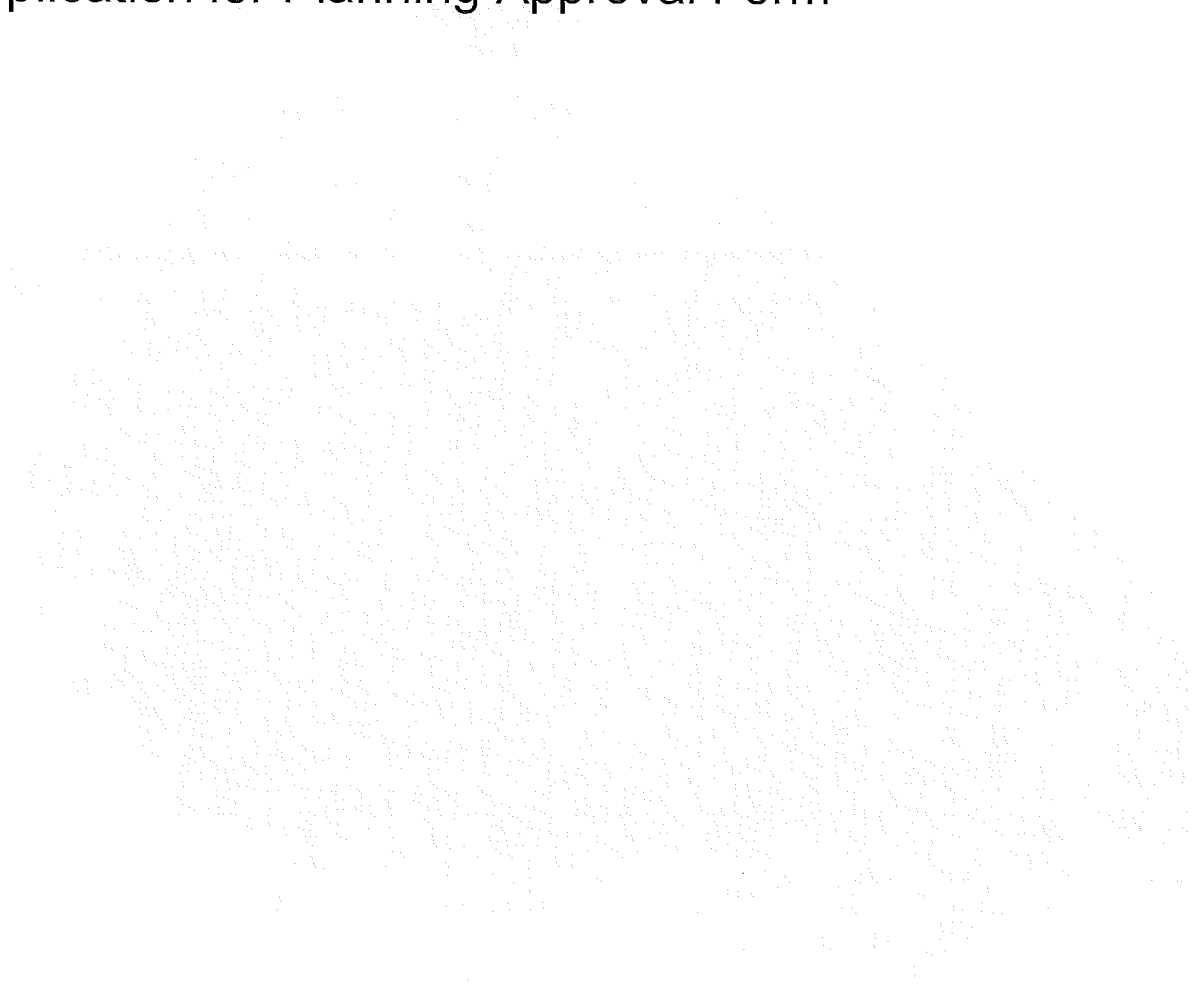
Manager, Environment and Planning

Aurecon Pty Ltd

Appendices

Appendix

Application for Planning Approval Form



Appendix A

Site Plans and Elevations

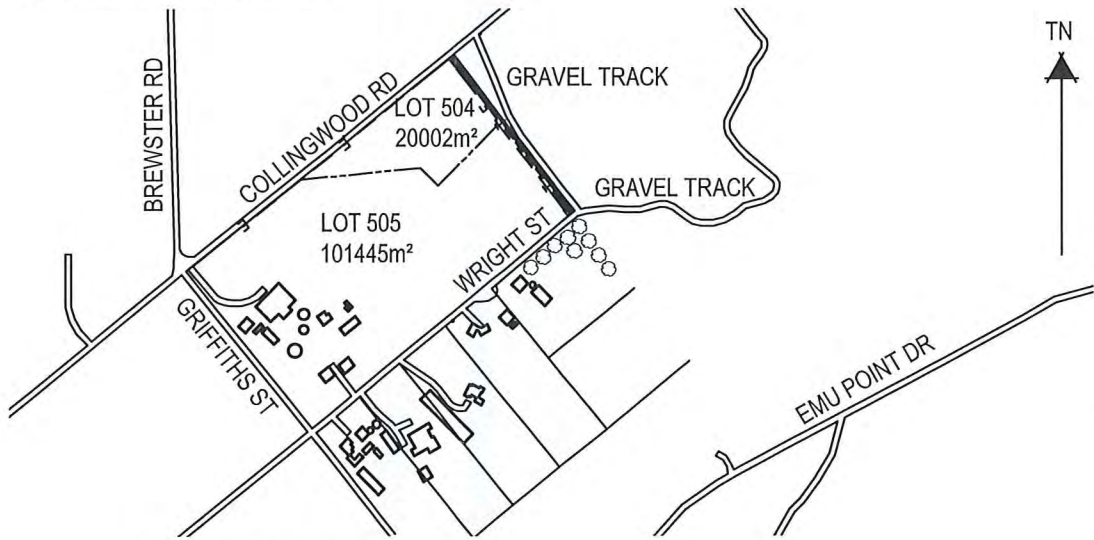
RFNSA SITE No. 6330032



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LOCALITY PLAN
NOT TO SCALE

REFER TO SHEET S1-1 FOR DETAIL
OF MONOPOLE AND SHELTER



SITE ACCESS

100m 0 100m 200m 300m 400m 500m SCALE 1:10000

PROPOSED TELSTRA P5 PIT

EXISTING NBN CABLE PIT

EXISTING PROPERTY
ACCESS TRACK

EXISTING 8.0m WIDE
ACCESS GATE

LOT 504
20002m²

PROPOSED TELSTRA ACCESS TRACK

EME SIGN #13 TO BE INSTALLED ON
PROPOSED TELSTRA COMPOUND WITH
3.0m WIDE SECURITY ACCESS GATE.

PROPOSED CONCRETE PAD FOOTING
(REFER NOTE 4 & 5)

PROPOSED ICS MK4.0 STANDARD
EQUIPMENT SHELTER ON 600Ø PIER
FOOTING

PROPOSED TELSTRA
UNDERGROUND POWER
SUBMAIN ROUTE

REFER TO S1-1 FOR ANTENNA DETAILS

LOT 505
101445m²

EXISTING NBN CABLE PIT

EXISTING WESTERN
POWER UNIPILLAR

EXISTING METER BOX
AND UNIPILLAR

EXISTING WP SERVICE POLE:
ID 561748

SITE LAYOUT

25m 0 25m 50m 75m 100m 125m SCALE 1:2500

NOTES :

- FOR EME SIGNS NOTED AS #X REFER TO 005486 DOCUMENTS FOR DETAILS.
- #2 EME SIGN TO BE SECURED TO REAR OF EVERY ANTENNA AS PER 005486 DOCUMENT.
- #6 EME SIGN TO BE SECURED 1.5m A.G.L. ON MONOPOLE.
- #13 EME SIGN TO BE FIXED ON TELSTRA COMPOUND GATE.
- FOUNDATIONS ARE SHOW INDICATIVE ONLY FINAL DESIGN IS SUBJECT TO RESULTS OF GEOTECHNICAL INVESTIGATION AND DETAILED DESIGN.
- THIS DRAWING SET IS A PRELIMINARY DRAWING ONLY AND IS ISSUED FOR COMMENTS. IT IS NOT A DETAILED SURVEY / STRUCTURAL DRAWINGS AND THEREFORE COULD BE SUBJECT TO CHANGE.
- ALL ACCESS POINTS ON THE STRUCTURE MUST BE BIRD PROOFED AS PER EXTERNAL PLANT POLICY 003615.
- FINAL LOCATION OF POWER ROUTE, FIBRE LINK CABLE SUBJECT TO LAND OWNER, TELSTRA AND WESTERN POWER REQUIREMENTS.

PROPERTY DESCRIPTION

LOT 505 ON PLAN 413242
CITY OF ALBANY

SITE STRUCTURE CO-ORDINATES (GDA94)
GPS READING ACCURACY: ±xxm
CENTRE OF MAST/POLE/TOWER

LATITUDE -34.996909° (GDA94)

LONGITUDE 117.927505° (GDA94)



TO BE READ IN CONJUNCTION WITH SHEETS S1-1, S3 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA08963.01	JJS	JL	ISSUE FOR APPROVAL 30077675WO15	DJC	AAS	16.04.19	1

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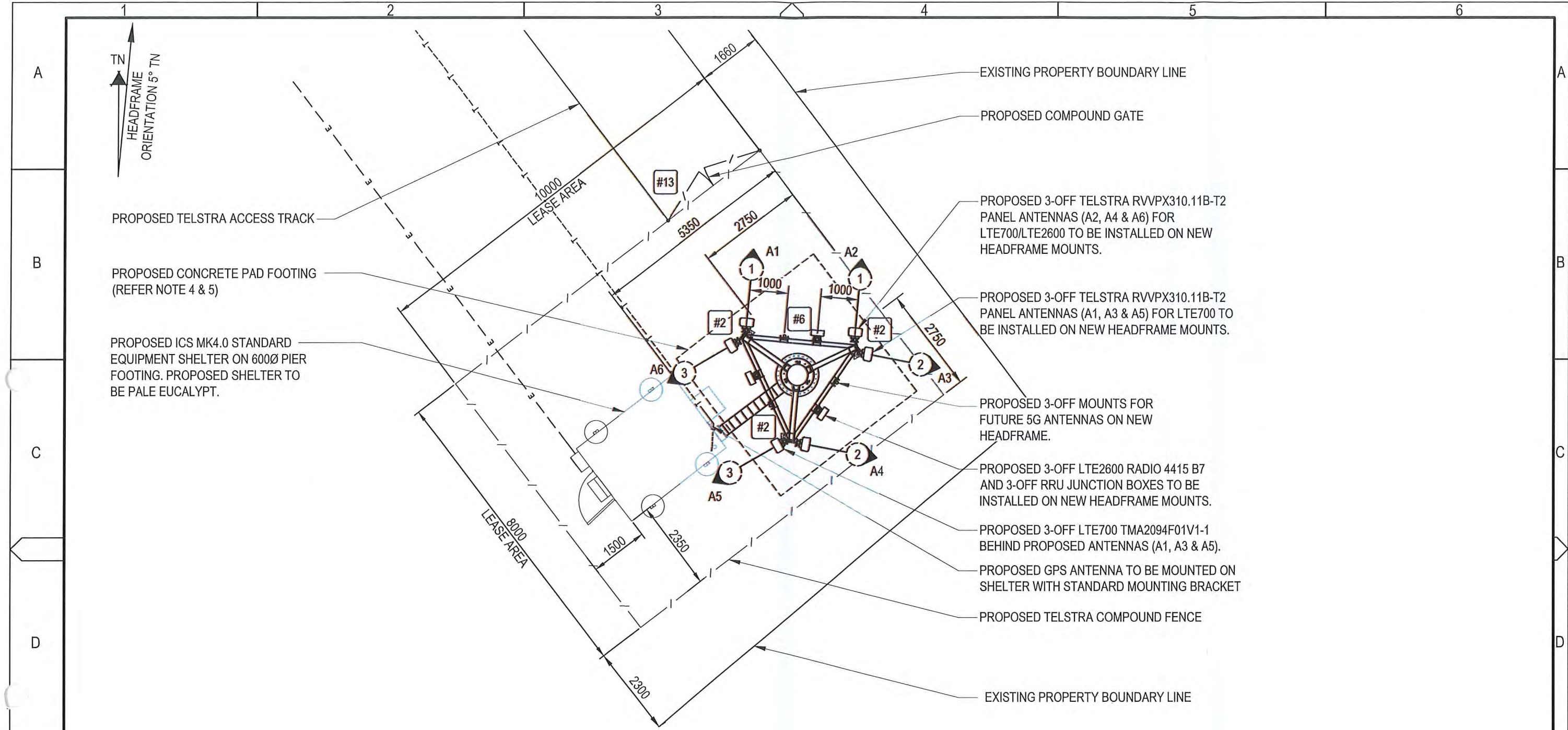
PRELIMINARY



MOBILE NETWORK SITE 328797
ALBANY EMU POINT
SITE LAYOUT AND ACCESS
222 COLLINGWOOD ROAD, COLLINGWOOD PARK WA 6330

DWG NO. W109265

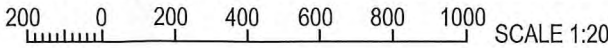
SHT NO. S1
INDEX



NOTES :

1. FOR EME SIGNS NOTED AS #X REFER TO 005486 DOCUMENTS FOR DETAILS.
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7. ALL ACCESS POINTS ON THE STRUCTURE MUST BE BIRD PROOFED AS PER EXTERNAL PLANT POLICY 003615.
8. FINAL LOCATION OF POWER ROUTE, FIBRE LINK CABLE SUBJECT TO LAND OWNER, TELSTRA AND WESTERN POWER REQUIREMENTS.

ANTENNA LAYOUT AT E.L. 35.0m



TO BE READ IN CONJUNCTION WITH SHEETS S1, S3 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA06963.0	JJS	JL	ISSUE FOR APPROVAL 30077675WO15	DJC	AAS	16.04.19	1

PRELIMINARY



MOBILE NETWORK SITE 328797
ALBANY EMU POINT

ANTENNA LAYOUT

222 COLLINGWOOD ROAD, COLLINGWOOD PARK WA 6330

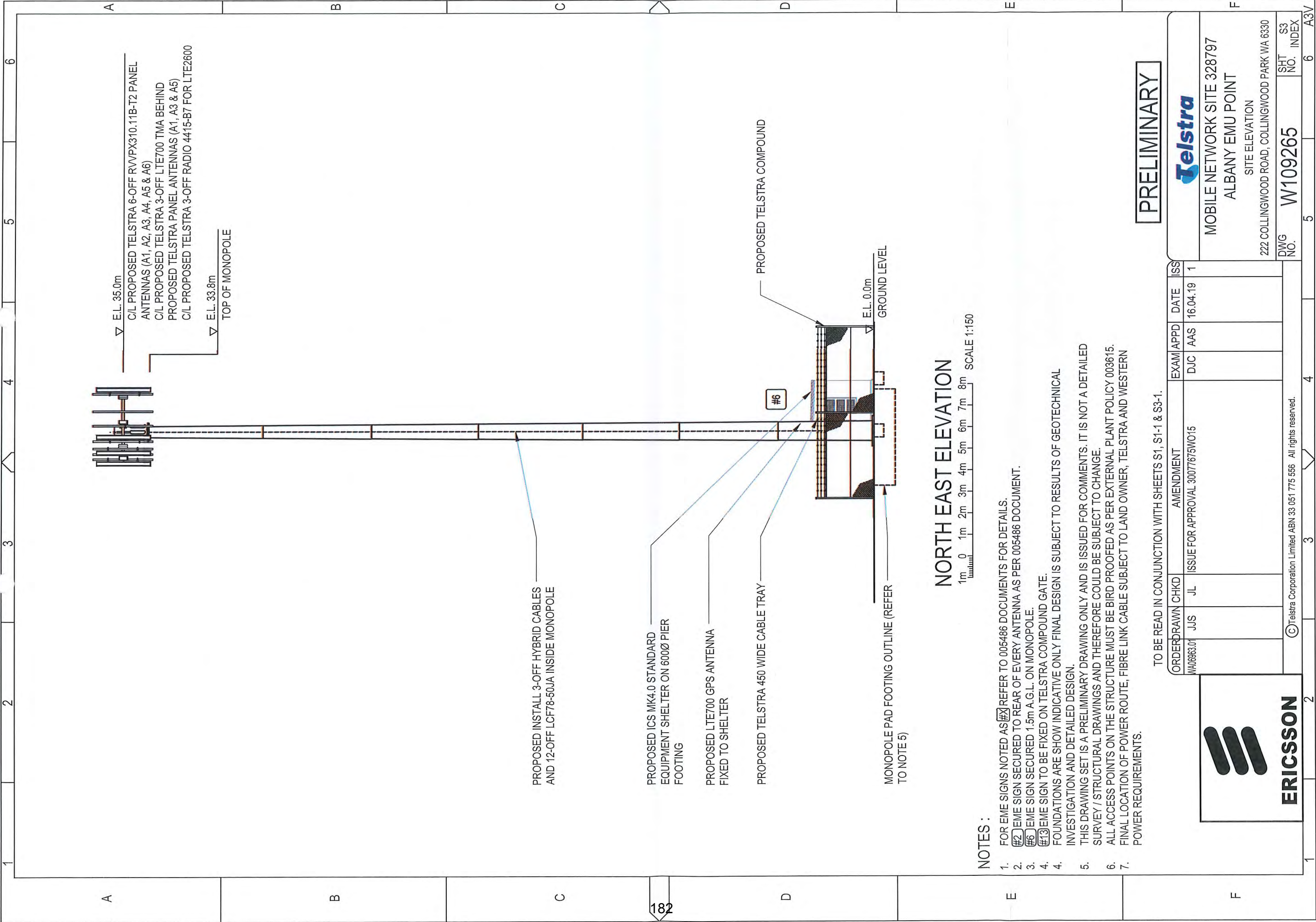
DWG
NO.

W109265

SHT
NO.

S1-1
INDEX

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1	2	3	4	5	6
A	B	C	D	E	F
TELSTRA ANTENNA CONFIGURATION TABLE					
ANTENNA No	ANTENNA TYPE & SIZE H x W x D	ANTENNA ACTION REQUIRED	ANTENNA HEIGHT C/L A.G.L.	ANTENNA BEARING (°T)	SECTOR NO. & TECHNOLOGY
A1	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	5°	S1: LTE700 S1: LTE700 S1: SPARE S1: SPARE S1: SPARE S1: SPARE S1: LTE700 S1: LTE700 S1: LTE2600 S1: LTE2600 S1: LTE2600 S1: LTE2600 S2: LTE700 S2: LTE700 S2: SPARE S2: SPARE S2: SPARE S2: SPARE S2: LTE700 S2: LTE700 S2: LTE2600 S2: LTE2600 S2: LTE2600 S2: LTE2600 S3: LTE700 S3: LTE700 S3: SPARE S3: SPARE S3: SPARE S3: SPARE S3: LTE700 S3: LTE700 S3: LTE2600 S3: LTE2600 S3: LTE2600 S3: LTE2600
A2	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	5°	
A3	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	100°	
A4	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	100°	
A5	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	240°	
A6	ARGUS RVWPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	35.0m	240°	
183					
A	B	C	D	E	F

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-1 & S3.

PRELIMINARY

ORDER/DRAWN WA0696301	CHKD JJS	JL	AMENDMENT ISSUE FOR APPROVAL 30077675W015	EXAM/APPD DUC AAS	DATE 16.04.19	ISS 1
©Telstra Corporation Limited ABN 33 051 775 556 All rights reserved.						
Telstra						
MOBILE NETWORK SITE 328797 ALBANY EMU POINT ANTENNA CONFIGURATION TABLE 222 COLLINGWOOD ROAD, COLLINGWOOD PARK WA 6330						
DWG NO.	W109265			5	6	A3V
S3-1 NO.	INDEX					



Appendix B

Environmental EME Report (ARPANSA Format)

Environmental EME Report

Location	222 Collingwood Road, COLLINGWOOD PARK WA 6330		
Date	17/06/2019	RFNSA No.	6330032

How does this report work?

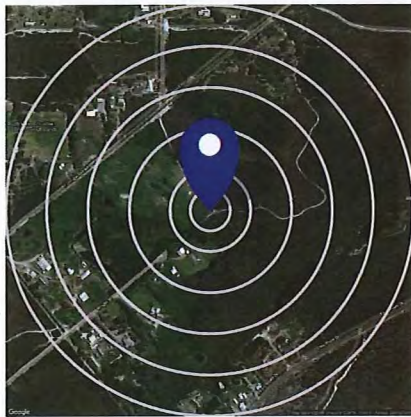
This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at 222 Collingwood Road, COLLINGWOOD PARK WA 6330. These levels have been calculated by Telstra using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

A document describing how to interpret this report is available at ARPANSA's website:

[A Guide to the Environmental Report.](#)

A snapshot of calculated EME levels at this site

There are currently no existing radio systems for this site.



The maximum EME level calculated for the **proposed** changes at this site is

0.37%

out of 100% of the public exposure limit, 212 m from the location.

EME levels with the proposed changes

Distance from the site	Percentage of the public exposure limit
0-50 m	0.1%
50-100 m	0.096%
100-200 m	0.37%
200-300 m	0.37%
300-400 m	0.27%
400-500 m	0.15%

For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at <http://www.rfnsa.com.au/6330032>.

Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration. The proposal would modify the base station to include all the services listed under the proposed configuration.

Carrier	Existing		Proposed	
	Systems	Configuration	Systems	Configuration
Telstra			4G	LTE700 (proposed), LTE2600 (proposed)

An in-depth look at calculated EME levels at this site

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360° circular bands.

Distance from the site	Existing configuration			Proposed configuration		
	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
0-50m				1.97	10.24	0.1%
50-100m				1.52	6.12	0.096%
100-200m				2.48	16.37	0.37%
200-300m				2.63	18.4	0.37%
300-400m				2.34	14.57	0.27%
400-500m				1.79	8.51	0.15%

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the [Communications Alliance Ltd Deployment Code C564:2018](#) or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Maximum cumulative EME level for the configuration

Location	Height range	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
No locations identified				

Appendix C

Certificate of Title

WESTERN



AUSTRALIA

REGISTER NUMBER 505/DP413242	
DUPLICATE EDITION 1	DATE DUPLICATE ISSUED 16/4/2019

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

VOLUME
2964FOLIO
969

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 505 ON DEPOSITED PLAN 413242

REGISTERED PROPRIETOR:
 (FIRST SCHEDULE)

STEPHEN JOHN WOLFE OF PO BOX 1494 ALBANY WA 6331

(AF 0117814) REGISTERED 27/3/2019

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
 (SECOND SCHEDULE)

1. I714866 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 2/12/2003.
2. EASEMENT BURDEN CREATED UNDER SECTION 136C T.L.A. FOR RIGHT OF CARRIAGEWAY PURPOSES - SEE DEPOSITED PLAN 413242
3. *O117815 NOTIFICATION CONTAINS FACTORS AFFECTING THE WITHIN LAND. LODGED 27/3/2019.
4. *O117816 NOTIFICATION SECTION 165 PLANNING & DEVELOPMENT ACT 2005 LODGED 27/3/2019.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
 * Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
 Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

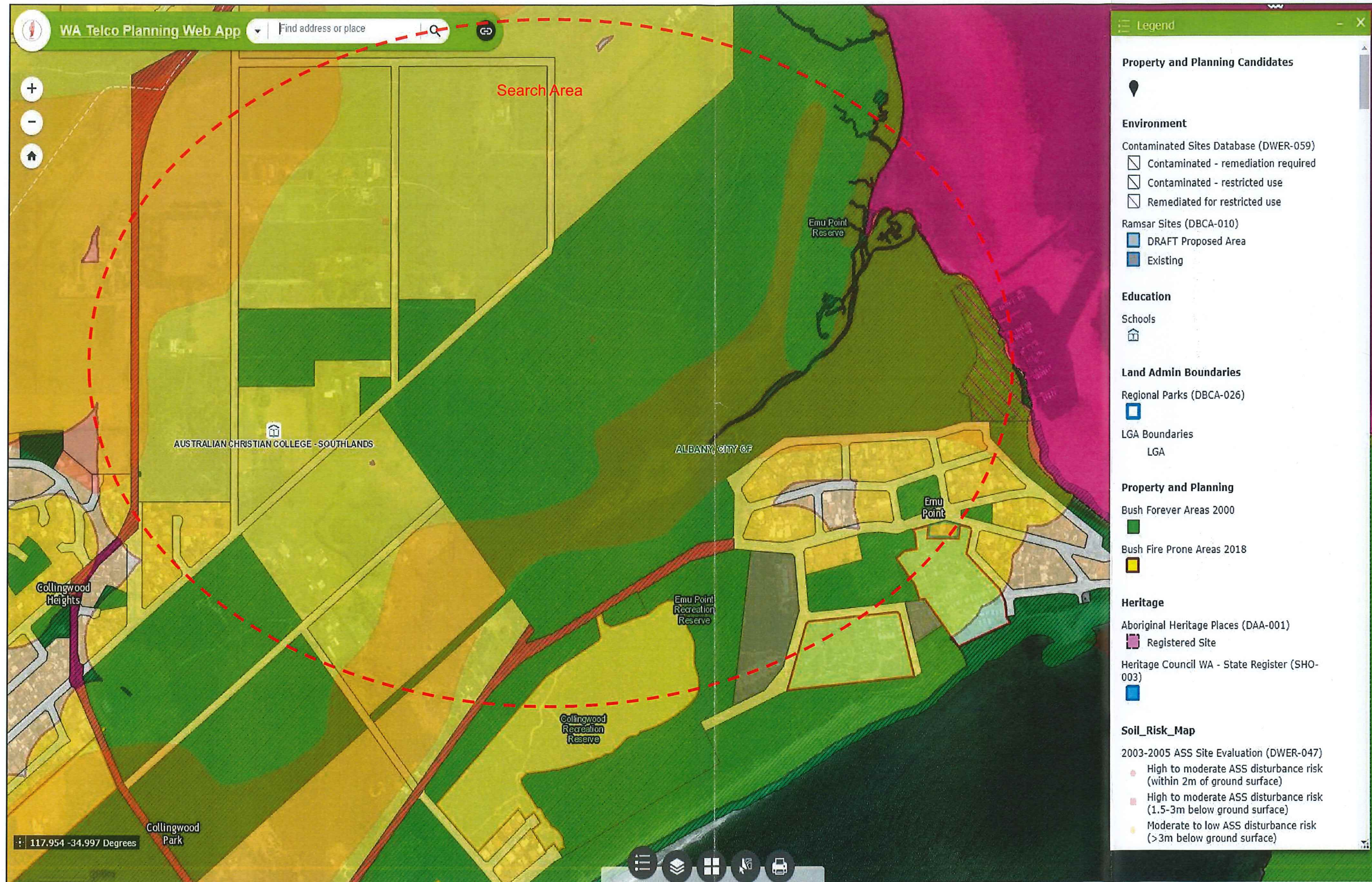
STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP413242
 PREVIOUS TITLE: 2116-682
 PROPERTY STREET ADDRESS: 222 COLLINGWOOD RD, COLLINGWOOD PARK.
 LOCAL GOVERNMENT AUTHORITY: CITY OF ALBANY

Appendix D

Environmental Constraints Map



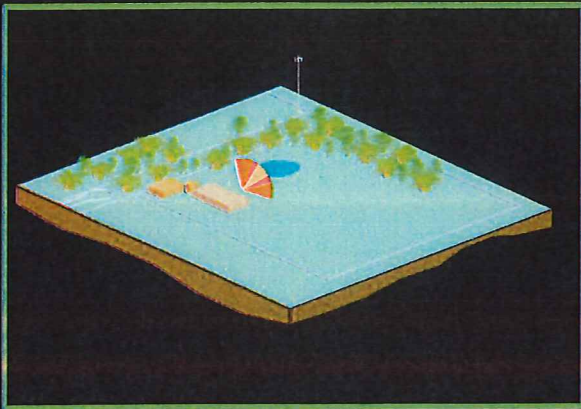
0 200m 400m 600m

Coordinate system: MGA Zone 50










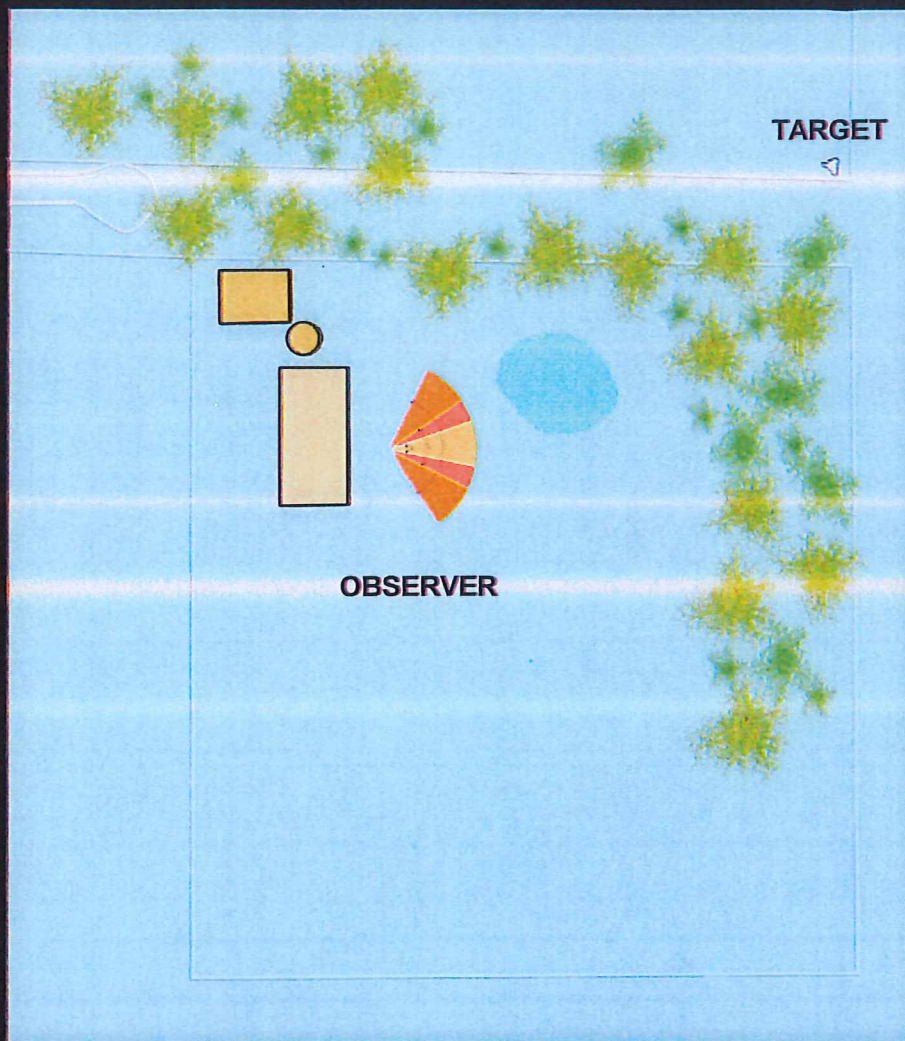
Appendix F

236 Wright Street Visual Impact Analysis

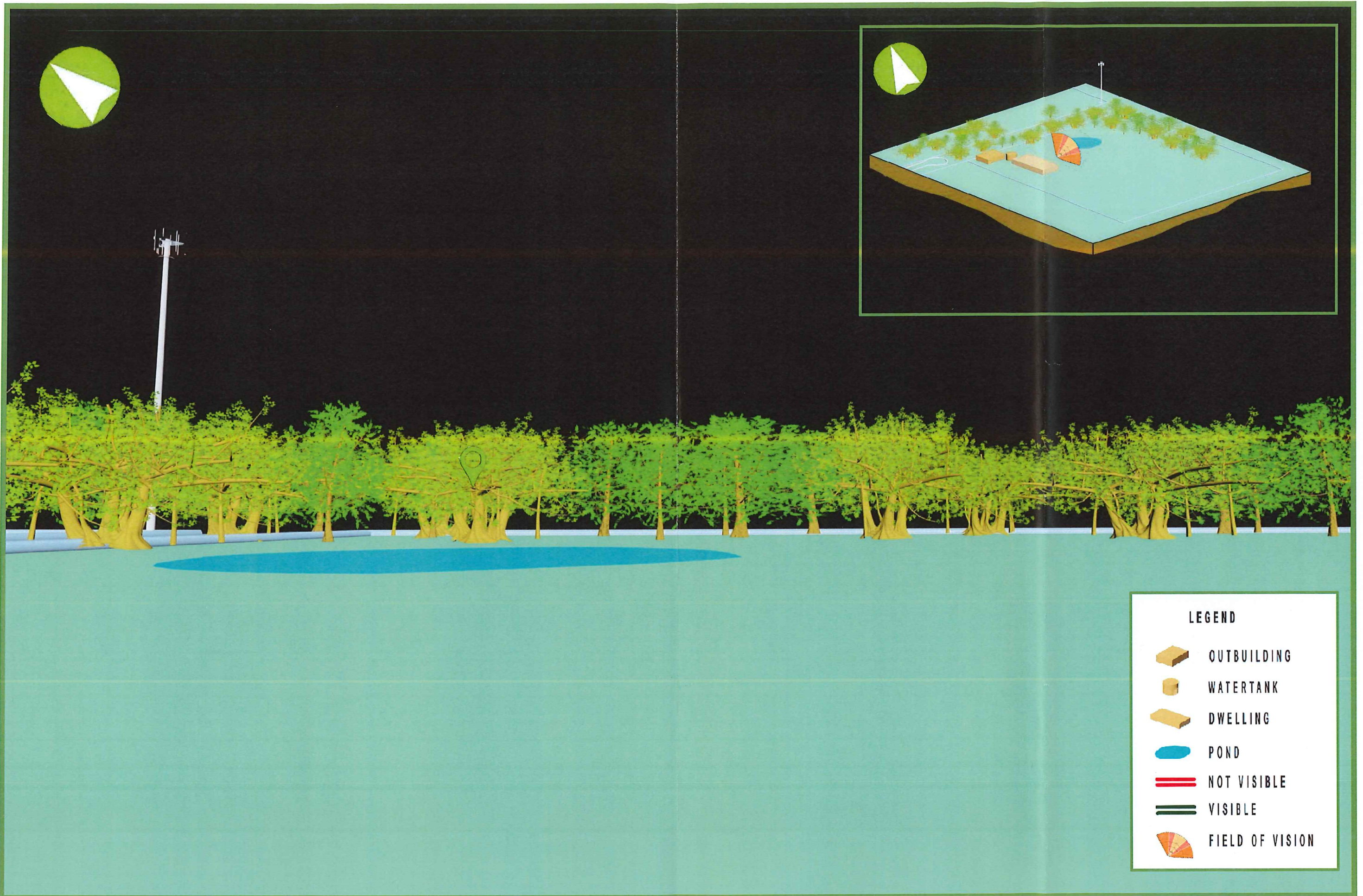


LEGEND

-  OUTBUILDING
-  WATERTANK
-  DWELLING
-  POND
-  NOT VISIBLE
-  VISIBLE
-  FIELD OF VISION

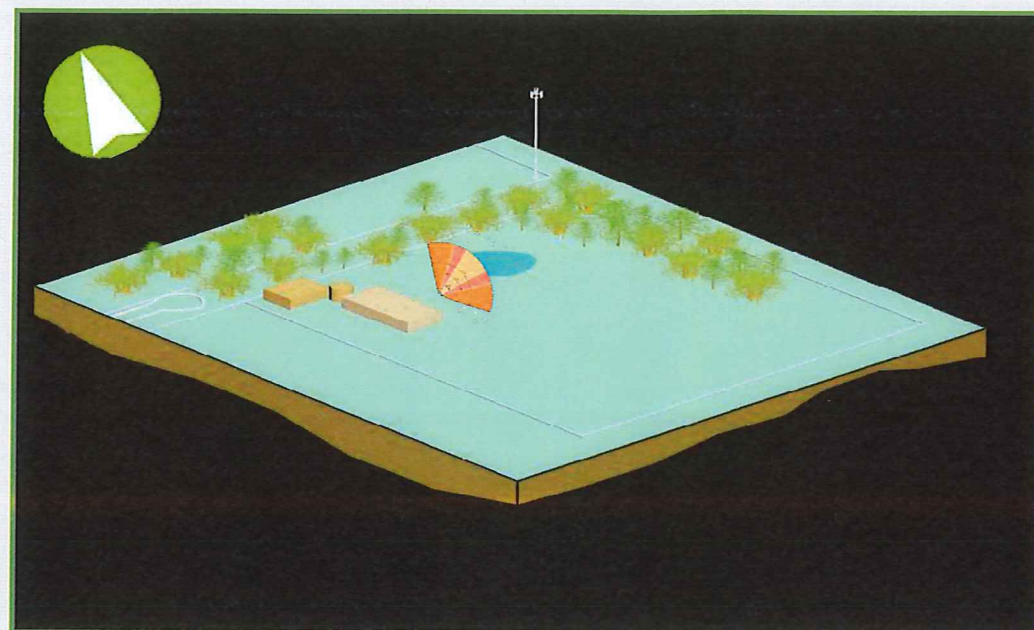


Date: 16/05/2019



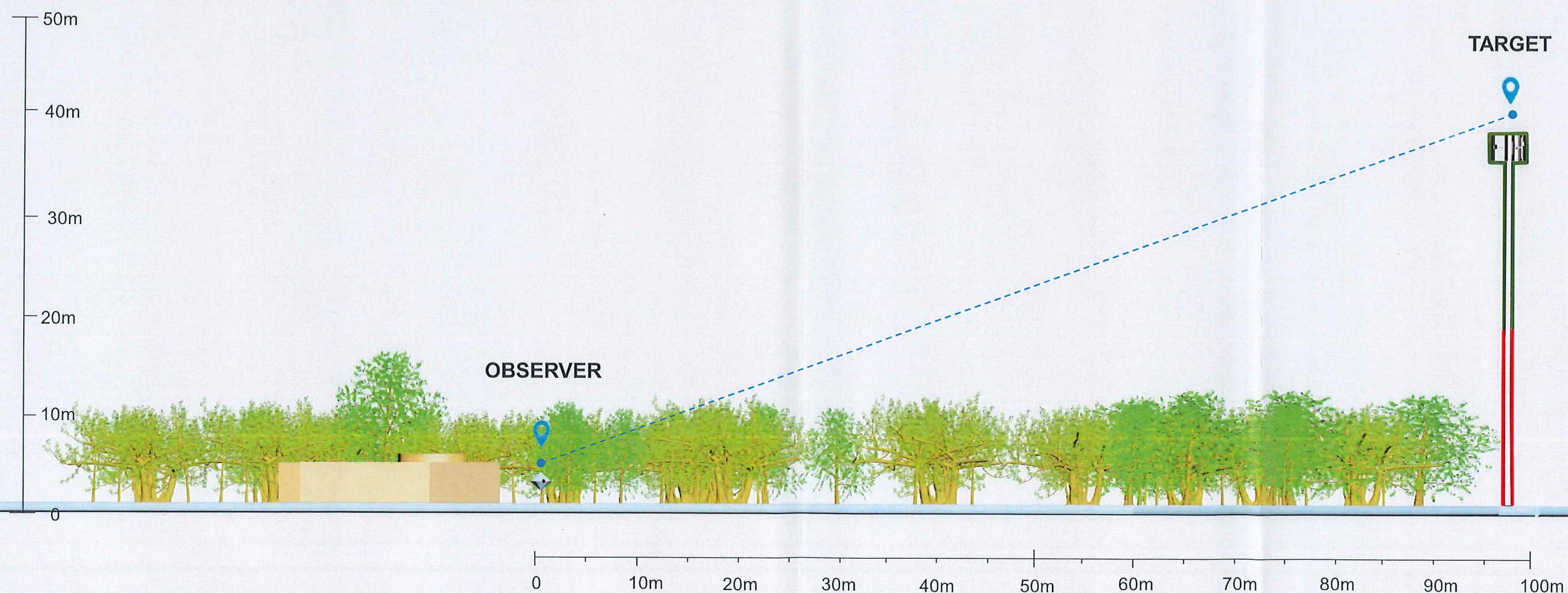
Date: 16/05/2019





LEGEND

- OUTBUILDING
- WATERTANK
- DWELLING
- POND
- NOT VISIBLE
- VISIBLE
- FIELD OF VISION



Date: 16/05/2019



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*Bringing ideas
to life*

Aurecon offices are located in:

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Namibia, New Zealand, Nigeria,
Philippines, Qatar, Singapore, South Africa,
Swaziland, Tanzania, Thailand, Uganda,
United Arab Emirates, Vietnam.

<p align="center">DEVELOPMENT APPLICATION P2190328 PUBLIC SUBMISSIONS Telecommunication Infrastructure - Mobile Phone Base Station 222 Collingwood Road, Collingwood Park</p>			
No.	Government Agency/Public Summary of Submission(s)	Proponent Comment	Officer Comment and Recommendation
1.	<p>We strongly oppose the application.</p> <p>The area is among wetland and a migrating bird thoroughfare from Lake Seppings to Green Island.</p> <p>Visually the tower will impact a general agriculture zoning, when the tower could easily fit within the commercial area of Emu Point.</p>	<p>Telstra is unaware of any impact the proposal will have on birdlife. The proposed monopole structure has no moving parts or guyed wires.</p> <p>The Guidelines for the Location, Siting and Design of Telecommunications Infrastructure encourages facilities to be located in rural and industrial zones.</p> <p>The City of Albany does not have a Local Planning Policy which addresses Telecommunications Infrastructure. As such, this proposal has relied upon the State Planning Policy 5.2 (SPP 5.2) - Telecommunications Infrastructure to guide the proposal. SPP 5.2 states that telecommunications infrastructure should not be prohibited in any zone. Furthermore, this Policy states that buffer zones and/or setback distances are not to be included in planning schemes or local planning policies.</p> <p>The planning policy framework does not require the facility to be invisible, indeed height is an integral component of the successful functioning of a network. A visual impact assessment has been undertaken and it remains our assertion that the community benefit the technology will bring outweighs any visual impact.</p>	<p>Objection noted.</p> <p>The infrastructure is located within an existing cleared area and the proposal does not require the removal of any native vegetation.</p> <p>The impact on visual amenity is specifically assessed within the statutory framework. Amenity and views are identified as a factor to be assessed within WA Planning Commission (WAPC) State Planning Policy 5.2. The WAPC landscape planning manual is used in reference to determining landscape values.</p>

2.	<p>We oppose the location of the proposed mobile phone base station.</p> <p>We are the owners of two properties in close vicinity to the proposed site. Our main concern is with regards to the Electromagnetic Energy which will be emitted from the wireless base station. There are numerous articles available on the internet which clearly outlines the health concerns when living in close proximity to towers emitting EME.</p> <p>Also of great concern is the fact that in Table 2. Candidates eliminated and not short listed..., Page 14 – <i>reserve R6862 was not considered as it is a Class A reserve for the protection of Boronia</i>. We find it incredible that protection of a plant is considered above the location of the tower in close proximity to people's homes. Given the size of this reserve, and the fact that the mobile phone base station is listed as being 80m2 we think the impact on any rare plants would have to be minimal.</p> <p>A viable alternative would be to take the tower further down Collingwood Road in a more easterly direction, which would reduce the proximity to homes, and give a more direct line to Emu Point.</p>	<p>The facility will comply with Federal standards set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and be licensed by the Australian Media and Communications Authority (ACMA). The EME Report which accompanied the Development Application demonstrates that the proposal will operate well within the prescribed safety standards administered by ARPANSA. The EME report can also be viewed at www.rfnsa.com.au/6330032.</p> <p>In our view, the community benefit outweighs any environmental impact. Minimising the disturbance of vegetation is one of many considerations including, but not limited to; the ability to secure tenure and achieve the coverage objective. We submit that the most viable location has been selected and should be assessed on its merits.</p> <p>Furthermore, measures to, as far as practical, minimise visual impact have been stated in the planning submission including, the siting of the proposed facility behind relatively tall vegetation and the topography of the area to screen ground level infrastructure and lower portions of the monopole from Wright Street. Telstra also proposes to colour-treat the equipment cabinet to pale eucalypt to blend with the dark green eucalypt foliage and to maintain a natural factory finish for the monopole to blend when viewed against lighter backgrounds such as the sky.</p>	<p>Objections noted.</p> <p>The City accepts and agrees with the proponent's response in response to EMEs.</p> <p>The City is required to assess the application on its merits. The proposal has been assessed against the relevant City of Albany statutory framework. This includes assessment against WA Planning Commission (WAPC) State Planning Policy 5.2 – <i>Telecommunications Infrastructure</i>. The WAPC Western Australian Planning Commission's <i>Visual Landscape Planning in Western Australia – a manual for assessment, siting and design</i> is used in reference to determining landscape values.</p>
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