Please note: These minutes are yet to be confirmed as a true record of proceedings

CITY OF BUSSELTON

MINUTES FOR THE COUNCIL MEETING HELD ON 12 MAY 2021

TABLE OF CONTENTS

ITEM NO.	SUBJECT	PAGE NO.
1.	**DECLARATION OF OPENING / ACKNOWLEDGEMENT OF COUNTRY / ACKNOWLEDGEMENT OF VISITORS / DISCLAIMER / NOTICE OF RECORDING OF PROCEEDINGS**	**3**
2.	**ATTENDANCE**	**3**
3.	**PRAYER**	**4**
4.	**APPLICATION FOR LEAVE OF ABSENCE**	**4**
5.	**DISCLOSURE OF INTERESTS**	**4**
6.	**ANNOUNCEMENTS WITHOUT DISCUSSION**	**5**
7.	**QUESTION TIME FOR PUBLIC**	**5**
8.	**CONFIRMATION AND RECEIPT OF MINUTES**	**7**
	Previous Council Meetings	7
8.1	Minutes of the Council Meeting held 28 April 2021	7
	Committee Meetings	7
8.2	Minutes of the Airport Advisory Committee Meeting 21 April 2021	7
8.3	Minutes of the Audit Committee Meeting held 28 April 2021	7
8.4	Minutes of the Policy and Legislation Committee Meeting held 28 April 2021	7
9.	**RECEIVING OF PETITIONS, PRESENTATIONS AND DEPUTATIONS**	**7**
10.	**QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN (WITHOUT DISCUSSION)**	**8**
11.	**ITEMS BROUGHT FORWARD**	**8**
ADOPTION BY EXCEPTION RESOLUTION		**8**
12.1	Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - AIRPORT UPDATE	9
12.2	Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - GENERAL AVIATION HANGAR PRECINCT PROPOSAL	15
12.3	Audit Committee - 28/4/2021 - 2020 FINANCIAL MANAGEMENT SYSTEM REVIEW	22
12.5	Policy and Legislation Committee - 28/4/2021 - SOUTH WEST DESIGN REVIEW PANEL AND PROPOSED LOCAL PLANNING POLICY - DESIGN REVIEW	54
14.1	RFT 09-21 DUNSBOROUGH LAKES SPORTS PRECINCT - EARTHWORKS	62
17.1	COUNCILLORS' INFORMATION BULLETIN	67
ITEMS FOR DEBATE		**78**
12.4	Policy and Legislation Committee - 28/4/2021 - PROPOSED SCHEME AMENDMENT NO. 49 (WESTERN RINGTAIL POSSUM HABITAT PROTECTION SPECIAL CONTROL AREA) & PROPOSED LOCAL PLANNING POLICY (LPP XX : WESTERN RINGTAIL POSSUM HABITAT PROTECTION AREA) - CONSIDERATION	

FOR INITIATION FOR ADVERTISING 78

13.1 DA 20/0916 - MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOP AND TOURIST ACCOMMODATION) 130

18. MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN 552

19. URGENT BUSINESS 552

20. CONFIDENTIAL REPORTS 552

21. CLOSURE 552

MINUTES

MINUTES OF A MEETING OF THE BUSSELTON CITY COUNCIL HELD IN THE COUNCIL CHAMBERS, ADMINISTRATION BUILDING, SOUTHERN DRIVE, BUSSELTON, ON 12 MAY 2021 AT 5.30PM.

1. DECLARATION OF OPENING / ACKNOWLEDGEMENT OF COUNTRY / ACKNOWLEDGEMENT OF VISITORS / DISCLAIMER / NOTICE OF RECORDING OF PROCEEDINGS

The Presiding Member opened the meeting at 5.30pm.

The Presiding Member noted this meeting is held on the lands of the Wadandi people and acknowledged them as Traditional Owners, paying respect to their Elders, past and present, and Aboriginal Elders of other communities who may be present.

2. ATTENDANCE

Presiding Member:		Members:	
Cr Grant Henley	Mayor	Cr Kelly Hick	Deputy Mayor
		Cr Sue Riccelli	
		Cr Ross Paine	
		Cr Kate Cox	
		Cr Paul Carter	
		Cr Phill Cronin	
		Cr Lyndon Miles	

Officers:

Mr Oliver Darby, Director, Engineering and Works Services
Mr Paul Needham, Director, Planning and Development Services
Mrs Naomi Searle, Director, Community and Commercial Services
Mr Tony Nottle, Director, Finance and Corporate Services
Mrs Emma Heys, Governance Coordinator
Ms Melissa Egan, Governance Officer

Apologies:

Cr Jo Barrett-Lennard
Mr Mike Archer, Chief Executive Officer

Approved Leave of Absence:

Nil

Media:

“Busselton-Dunsborough Times”
“Busselton-Dunsborough Mail”

Public:

3

3. PRAYER

The prayer was delivered by Pastor Nathan Seinemeier of the Cornerstone Church.

4. APPLICATION FOR LEAVE OF ABSENCE

Nil

5. DISCLOSURE OF INTERESTS

The Mayor noted that declarations of impartiality interests had been received from:

- Cr Grant Henley in relation to Agenda Item 12.4 'Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration For Initiation For Advertising'.

- Cr Paul Carter in relation to Agenda Item 12.4 'Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration For Initiation For Advertising'.

- Cr Sue Riccelli in relation to Agenda Item 12.4 'Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration For Initiation For Advertising'.

- Cr Kelly Hick in relation to Agenda Item 13.1 'DA 20/0916 - Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation)'.

The Mayor noted that a declaration of financial interest had been received from:

- Cr Ross Paine in relation to Agenda Item 12.4 'Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration For Initiation For Advertising'.

The Mayor advised that, in accordance with regulation 22(2)(a) of the *Local Government (Model Code of Conduct) Regulations 2021*, these declarations would be read out immediately before these items were discussed.

6. ANNOUNCEMENTS WITHOUT DISCUSSION

Announcements by the Presiding Member

The Mayor and Councillor Kate Cox attended the 2021 GWN7 Top Tourism Town Awards in Geraldton. The Mayor was pleased to announce that Busselton was the recipient of the Gold Medal in the Top Tourism Town category, which is a great accolade for everyone involved in tourism in the Busselton community over what has been an extraordinary year.

7. QUESTION TIME FOR PUBLIC

Response to Previous Questions Taken on Notice

Nil

Question Time for Public

7.1 Mr Keith Sims

Question
At the Council meeting in June 2020, when Councillor Riccelli put forward her motion to reduce the Busselton Performing Arts and Convention Centre [BPACC] project budget to $21 million, two Councillors stated if elements were removed from the project, it would be a white elephant and they would not support the project. If elements of the project have now been removed, including the creative industries hub, will the project become the white elephant and not be supported by those Councillors?

Response
(Mayor)
We will take that question on notice.

Question
Why has the critical assumption which required $9.5 million State Government funding now been removed from the January 2021 Business Case [for the BPACC] and the financial burden put onto the ratepayers?

Response
(Mayor)
We will take that question on notice.

Question
Council used the August 2020 business case to decide to continue with the BPACC project. Why was it deleted off the website when the only project change is to remove the creative industries hub?

Response
(Mayor)
The decision to proceed with the project was made in June, prior to August. The amendment to the business plan was the deletion of the creative industries hub, because we were advised by the State Government that no funding would be forthcoming.

Question
Why was the very comprehensive final business plan from August 2020 replaced with a new January 2021 document which includes the creative industries hub?

Response
(Mrs Naomi Searle, Director Community and Commercial Services)
The business case had the actual infrastructure for the creative industries hub removed and that was reflected in the budget as well. This business case you are referring to was used to support a funding application to the Federal Government for $1.5 million.

Question
At what meetings did Council resolve to; one, take the project from $21 million to $30.5 million, and two, in regards to the $28.5 million budget, not receive the $9.5 million grant and make the ratepayers pay that third approximately?

Response
(Mayor)
The resolution was made in June last year, to proceed with the project at that cost and part of that resolution was to seek further funding.

Question
When are the BPACC tender documents due back?

Response
(Mayor)
The BPACC tender closed 2.00pm last Friday and they are being evaluated by staff.

Question
(Mayor)
How long does the evaluation take?

Response
Over a period of time, usually a couple of weeks.

7.2 Ms Anne [Surname not captured]

Question
In respect to the proposed changes to the bushfire notice, has a full environmental study been carried out on the removal of trees?

Response
(Mayor)
The public submission that is currently on *YourSay* is for proposed changes to the Bushfire Notice 2022/23, so it has been deferred until the following year. It is still open for submissions until 31 May.

Response
(Mr Paul Needham, Director Planning and Development Services)
There has been no comprehensive environmental study, but certainly the environmental impacts have been considered in the notice. It is very important to note that the requirements for removal of vegetation in the proposed notice, on the vast majority of residential properties in the City of Busselton, are less than the current notice.

8. CONFIRMATION AND RECEIPT OF MINUTES

Previous Council Meetings

8.1 Minutes of the Council Meeting held 28 April 2021

COUNCIL DECISION

C2105/086 Moved Councillor K Hick, seconded Councillor P Carter

That the Minutes of the Council Meeting held 28 April 2021 be confirmed as a true and correct record.

CARRIED 8/0

Committee Meetings

8.2 Minutes of the Airport Advisory Committee Meeting 21 April 2021

COUNCIL DECISION

C2105/087 Moved Councillor P Carter, seconded Councillor K Hick

That the Minutes of the Airport Advisory Committee held 21 April 2021 be noted.

CARRIED 8/0

8.3 Minutes of the Audit Committee Meeting held 28 April 2021

COUNCIL DECISION

C2105/088 Moved Councillor P Carter, seconded Councillor P Cronin

That the Minutes of the Audit Committee Meeting held 28 April 2021 be noted.

CARRIED 8/0

8.4 Minutes of the Policy and Legislation Committee Meeting held 28 April 2021

COUNCIL DECISION

C2105/089 Moved Councillor K Cox, seconded Councillor K Hick

That the Minutes of the Policy and Legislation Committee Meeting held 28 April 2021 be noted.

CARRIED 8/0

9. RECEIVING OF PETITIONS, PRESENTATIONS AND DEPUTATIONS

Petitions

Nil

Presentations

Mr David Read, Director Element WA, presented as a party with an interest in Item 13.1 'DA 20/0916 - Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation)'.

Mr Read was in favour of the officer recommendation and the alternative recommendation foreshadowed by Councillor Hick.

Deputations

Nil

10. QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN (WITHOUT DISCUSSION)

Nil

11. ITEMS BROUGHT FORWARD

ADOPTION BY EXCEPTION RESOLUTION

At this juncture the Mayor advised the meeting that, with the exception of the items identified to be withdrawn for discussion, the remaining reports, including the Committee and Officer Recommendations, will be adopted en bloc, i.e. all together.

COUNCIL DECISION

C2105/090 Moved Councillor K Hick, seconded Councillor P Carter

That the Committee and Officer Recommendations in relation to the following agenda items be carried en bloc:

12.1 Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - AIRPORT UPDATE

12.2 Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - GENERAL AVIATION HANGAR PRECINCT PROPOSAL

12.3 Audit Committee - 28/4/2021 - 2020 FINANCIAL MANAGEMENT SYSTEM REVIEW

12.5 Policy and Legislation Committee - 28/4/2021 - SOUTH WEST DESIGN REVIEW PANEL AND PROPOSED LOCAL PLANNING POLICY - DESIGN REVIEW

14.1 RFT 09-21 DUNSBOROUGH LAKES SPORTS PRECINCT – EARTHWORKS

17.1 COUNCILLORS' INFORMATION BULLETIN:

CARRIED 8/0

EN BLOC

12.1 Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - AIRPORT UPDATE

STRATEGIC GOAL	5. TRANSPORT Smart, connective and accessible
STRATEGIC OBJECTIVE	5.1 Public transport services that meet the needs of the community.
SUBJECT INDEX	Airport Operations
BUSINESS UNIT	Commercial Services
REPORTING OFFICER	Airport Operations Coordinator - David Russell
AUTHORISING OFFICER	Director, Community and Commercial Services - Naomi Searle
NATURE OF DECISION	Noting: The item is simply for information purposes and noting
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Nil

This item was considered by the Airport Advisory Committee at its meeting on 21/4/2021, the recommendations from which have been included in this report.

COUNCIL DECISION AND COMMITTEE RECOMMENDATION AND OFFICER RECOMMENDATION

C2105/091 Moved Councillor K Hick, seconded Councillor P Carter

That the Council receives and notes the Airport Operations Report.

CARRIED 8/0

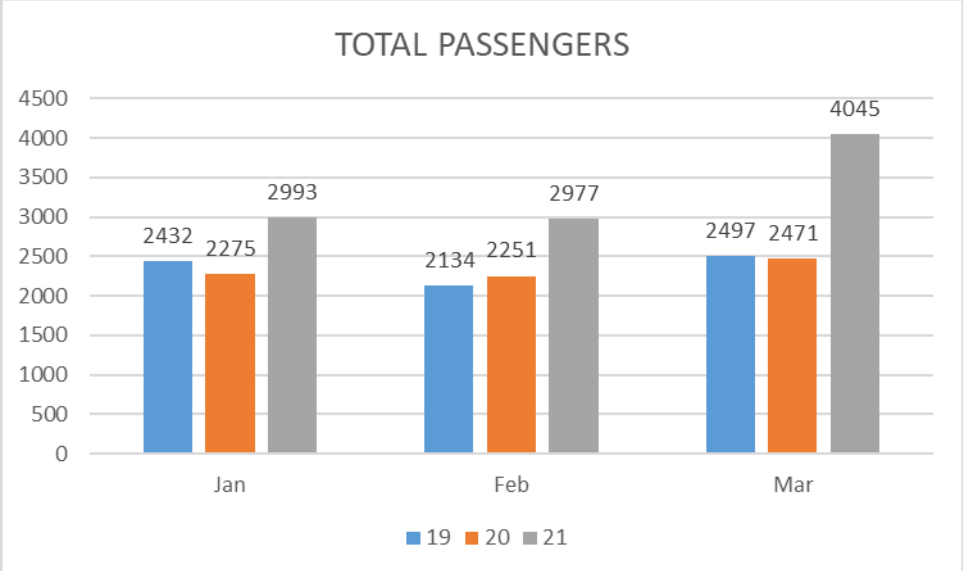
EN BLOC

EXECUTIVE SUMMARY

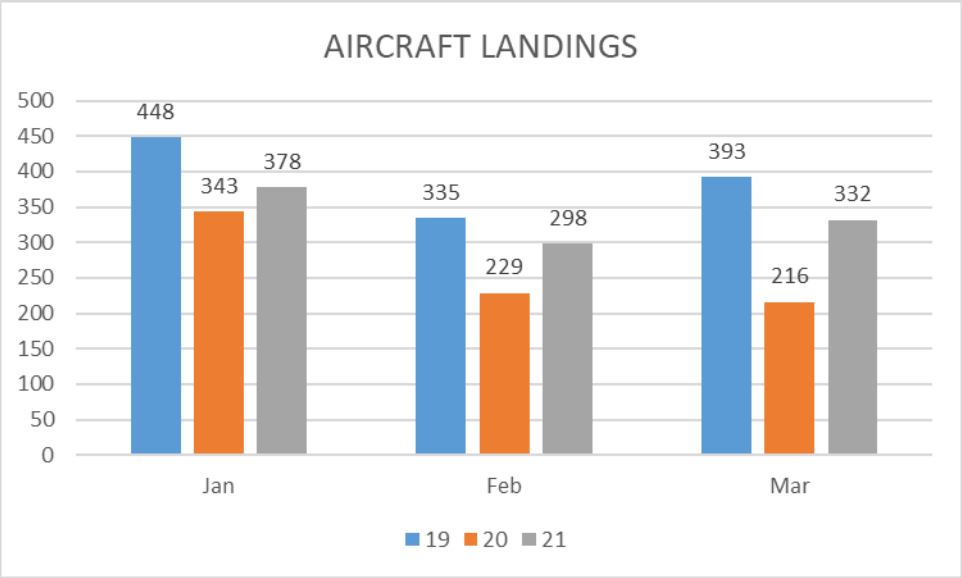
This report provides an overview of the operations and activities of the Busselton Margaret River Airport (BMRA) for the reporting period 1 January 2021 - 31 March 2021. This includes an update on passenger number trends, aircraft landings, actions relating to COVID-19 and general airport operations.

BACKGROUND

Virgin Australia Regional Airlines (VARA) fly in fly out (FIFO) services from Busselton have returned to above pre COVID-19 frequencies with an increase in the overall passenger numbers compared to the same period in 2020. There has been a total of 9,013 passengers for the January – March 2021 reporting period compared to 7,362 passengers in 2020 and 7,700 passengers in 2019.



A total of 1,008 aircraft landings were recorded for the reporting period, an increase from the numbers reported for the same period in 2020 (788) and a decrease to 2019 (1,176). This increase in aircraft landings from 2020 can be attributed to an increase in Busselton Aeroclub flight training (an increase of 39 landings) within the general aviation aircraft (0kg to 1999kg) category, increases in landings in the 30,000kg category aircraft, primarily FIFO charter aircraft (increase 66 landings) and DFES fire-fighting operations totalling 102 landings. The total number of FIFO services using BMRA is currently 15 flights (30 movements) per week utilising the F-100 and A320 aircraft.



Carpark

There are currently 736 car park users using the FIFO swipe card system, with an average of 197 vehicles parked per week for the month of January and with the highest number of vehicles parked on any one day at 291 vehicles (recorded on 27 January) out of an available 422 bays.

Operations

The focus for the reporting period has been on:

- The continued readiness of the Jetstar Melbourne to Busselton service due to commence on the 26 June 2021.
- Officers submitted the new BMRA Aerodrome Manual to CASA in early December for review with approval and issue of the new Aerodrome Certificate expected in May 2021.
- Establishment of the Department of Fire and Emergency Services (DFES) operations and refuelling support of fire-fighting aircraft during the Wooroloo fire emergency.

As reported at the last Airport Advisory Committee meeting, the Department of Home Affairs conducted an audit inspection on 8 December 2020 including a site visit and inspection of the terminal building, airside security areas, airside/landside boundary and the BMRA's Transport Security Program. While some feedback was provided on the day verbally, no non-compliances were issued and the Department has written to the City with the following findings that the City may wish to address to improve security outcomes:

- Along the far northern boundary, there is a structure close to the perimeter fencing that may require removal (to be completed).
- Signage on internal terminal doors to indicate entry to the Security Restricted Area (completed).
- Persons required to display ASICs in aviation security zones are not displaying valid ASICs (ongoing).

As at 12 January 2021, the West Australian Government introduced a directive under the *Emergency Management Act 2005* (WA) for all persons entering airport terminal facilities to wear face masks. As such, all staff, contractors, passengers and visitors (noting that there are some exclusions) entering the BMRA terminal building are now required to wear a face mask. Signage has been put up on the terminal entry doors and, when there are no scheduled flights, the terminal doors are locked to prevent access. Signage includes staff contact details for persons who need to conduct business in the terminal building so that access can be provided.

Hangar Leases

Hangar leases and hire agreements by emergency services and private operators continue to occupy 10 of the 12 hangars owned by the City of Busselton, with two other hangars being used to store aircraft ground servicing equipment and airport maintenance equipment owned by the City and the ground handling operator. City officers will continue to liaise with emergency services and aircraft owners to secure interest in the existing hangars and new general aviation precinct.

DFES Aerial Fire Fighting Capability

DFES aerial fire-fighting operations infrastructure was setup at the BMRA in late November 2020 and Coulson Aviation, the Large Air Tanker (LAT) operator for DFES, deployed a C-130 aircraft to the BMRA in December 2020. A second LAT was deployed to the BMRA for a period of time in response to extreme fire risk ratings due to high winds and temperatures in early January and a further two B737 aircraft were deployed to BMRA from NSW to assist in the firefighting response for the Wooroloo fires north of Perth in February. On 20 March 2021, DFES Commissioner visited the BMRA to award certificates of appreciation to the City of Busselton for their support during the LAT operations. DFES fire-fighting operations concluded on 8 April 2021 for the season.

OFFICER COMMENT

FIFO passenger numbers through the BMRA have increased in comparison to previous years and officers expect passenger numbers to continue to increase as FIFO employment recruiting from the South West for the resources sector continues.

Officers continue to liaise regularly with Jetstar executives and operations teams for the commencement of the Busselton - Melbourne flights on 26 June 2021. BMRA is operationally ready to commence Regular Public Transport (RPT) services with the exception of the security screening contractor's team who need to be redeployed and complete final training.

The RAAF deployed six Hawk 127 fighter training aircraft to BMRA on the week of 29 March to conduct formation take-off and landing exercises and facilitated a group of high school students interested in a career in the RAAF. Officers are continuing to liaise with the RAAF regarding the RAAF centenary which occurred on 31 March 2021. Officers are planning to host a BMRA Open Day on 7 November 2021 for the community to come and view the upgraded airport facilities, and invite the RAAF to celebrate their centenary at the same time. Officers will also invite the Busselton Aero Club to participate in the open day by hosting a general aviation 'fly in' and ground display of recreation and general aviation aircraft.

Capital Works

Ongoing capital works and infrastructure improvements for this financial year include:

- Baggage carousel installation for the arrivals building.
- Installation of weatherproof shelters for car park entrance / exit ticket machines.
- Line marking of the new transport operators car park.

Regional Airports Development Scheme 2021-23 (RADS)

The Department of Transport (DoT) Regional Airport Development Scheme (RADS) 2021-23 includes a COVID-19 stimulus initiative to support the State's economic recovery. RADS funding will cover up to 75% of the total eligible project cost for successful applicants for projects that can be completed prior to 31 December 2021.

City officers lodged funding applications for the below listed projects. The City has been notified by the Minister for Transport that it has been successful in its application to complete the airside/landside fencing for the General Aviation precinct (2), with unsuccessful applications for the Royal Flying Doctor's Service (RFDS) transfer station (1) and airside drain netting (3).

1. Relocation of the RFDS/St Johns transfer station from the central apron to the emergency services precinct. The total cost of this project is $188,664 with the City's 25% required contribution of $47,166.
2. Completion of a general aviation (GA) precinct fencing to allow airside/landside access for future hangar owners/tenants. The total cost of this project is $25,558 with the required City contribution of $6,390.00.
3. Airside drain netting of taxiways A and B drains to improve safety by minimising bird / wildlife presence on the aerodrome. The total cost of this project is $190,000 with the required City contribution of $47,500.

Following advice from DoT, the City also submitted funding applications for the three projects above to the Federal Government's Regional Airports Program Round 2.

Regional Airports Program (RAP) Round 2 grant opportunity

Applications for the Department of Infrastructure, Transport, Regional Development and Communications RAP Round 2 grant funding program closed on 18 December 2020. The key objective of the RAP is to improve the safety and accessibility of airports or aerodromes in regional areas of Australia by assisting aerodrome owners/operators to undertake essential works, promoting aviation safety and access for regional communities.

As the City falls under the category of an Australian local government agency or body and the total project cost is equal to or less than $300,000, Commonwealth funding will cover up to 100% of eligible project costs.

Officers have submitted applications for the three projects listed above as well as the two below listed projects:

- Extension of the central apron northern shoulders to facilitate extended taxiing guideline markings and apron edge clearance for A320 and Boeing 737 aircraft utilising bay 11 for RPT operations.
- Clearing of airside swale drains to improve water flow and drainage of the runway strip to ensure safe and compliant winter operations.

Unexpected delays in notifying successful applicants has occurred for RAP Round 2 grant applications, with a new notification date to be confirmed.

Domestic Airports Security Costs Support Program (DASCS)

The City of Busselton as operator of BMRA has been invited to apply for the DASCS program. This grant opportunity was announced on 11 March 2021 as part of the Australian Government's tourism and aviation's flight path to recovery support package and is to support regional airports with security screening costs.

The Program provides a total of $90 million over six months for the period of 29 March 2021 to 30 September 2021. The Program will reimburse grantees for Eligible Expenditure incurred associated with passenger and baggage security screening operations required under the Regulations with a maximum grant amount for the BMRA of $300,000.

Eligible applicants are those domestic airport operators in Australia, or airlines who have screening authority for a terminal in an Australian domestic airport that, between 29 March 2021 and 30 September 2021, will be:

- receiving RPT services, and
- required to undertake passenger and baggage security screening as prescribed by the *Aviation Transport Security Regulations 2005*.

Applications for the Grant close on 1 September 2021.

Tourism Aviation Network Support (TANS) Program

In March 2021, the Federal Government announced the TANS funding package as part of the COVID-19 recovery plan that included subsidies of half-price airfares on selected routes across Australia. With Broome being the only Western Australian destination to be included, officers have approached the Government to include the Melbourne-Busselton RPT service when it commences in June 2021. It is hoped that a further announcement of routes will be made over the coming months.

Busselton Margaret River Airport Commercial and Industrial Precinct

While the City continues to focus on securing new air routes and services, it recognises that landside land use is equally important to the economic viability and success of the BMRA. Landside land use will support the BMRA's growth and is complementary to airside activities. The BMRA Master Plan (2016) identifies a number of land use precincts including the Industrial and Commercial Precinct with its primary purpose to provide facilities and services including:

- Airline support services;
- Freight logistics;
- Aviation engineering, maintenance and servicing; and
- Non-aviation uses including light industrial, specialised industrial, commercial and office facilities where proximity to aviation related services and air transport is required or advantageous.

Officers have advertised an RFQ document to engage consultants to prepare Request for Proposal (RFP) documentation for the BMRA Commercial and Industrial Precinct. The RFP is to provide a framework to attract private sector investors / developers interested in leasehold, outright purchase or investment partnership arrangements. The RFQ closing date is 15 April 2021.

Statutory Environment

The BMRA operates in accordance with the following:

- *Aviation Transport Security Act 2004*
- *Aviation Transport Security Regulations 2005*
- CASA Manual of Standards 139
- Council's Transport Security Plan
- City policies and procedures

Relevant Plans and Policies

There are no relevant plans or policies to consider in relation to this matter.

Financial Implications

Airport revenue at the end of the reporting period totals $1,126,215 compared to the amended budget of $1,269,371. The reason for revenue being less than expected is mainly due to not receiving passenger screening fees for Jetstar services of $121,770.

Actual expenses to April 2021 excluding depreciation, airline marketing and attraction expenses were $488,672 compared to the amended YTD budget of $720,998. Lower expenses are attributed to delays in the commencement of some works projects and no passenger screening services expenses due to Jetstar flights not commencing.

Stakeholder Consultation

Consultation has been occurring on a regular basis with Department of Transport, Government agencies, airport stakeholders, Department of Home Affairs, Aviation Marine Security (AMS), Civil Aviation Safety Authority (CASA), Air Services Australia, Virgin Australia Regional Airline, Qantas Group, the Busselton Aero Club, Albany, Esperance, Geraldton Airports and Australian Airports Association, concerning many topics and issues relating to the Airport.

Risk Assessment

An assessment of the potential implications of implementing the officer recommendation has been undertaken using the City's risk management framework, with risks assessed taking into account any controls already in place. No risks of a medium or greater level have been identified.

Options

The Council may choose not to receive and note the Airport Operations Report.

CONCLUSION

The airport team has had a busy summer period working with the fire-fighting aircraft and are now looking forward to the commencement of RPT services in June. Officers will continue to provide a high level of customer service ensuring the airport is compliant, safe and security is maintained throughout.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

Not applicable.

12.2 Airport Advisory Committee - 21/4/2021 - BUSSELTON MARGARET RIVER AIRPORT - GENERAL AVIATION HANGAR PRECINCT PROPOSAL

STRATEGIC GOAL	5. TRANSPORT Smart, connective and accessible
STRATEGIC OBJECTIVE	5.1 Public transport services that meet the needs of the community.
SUBJECT INDEX	Busselton Margaret River Airport
BUSINESS UNIT	Commercial Services
REPORTING OFFICER	Manager Economic and Business Development Services - Jennifer May
AUTHORISING OFFICER	Director, Community and Commercial Services - Naomi Searle
NATURE OF DECISION	Contractual: To enter into a contract e.g. a lease or the award of a tender etc.
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Airport Aerial Plan Attachment B GA Hangar Lot Site Plan

This item was considered by the Airport Advisory Committee at its meeting on 21/4/2021, the recommendations from which have been included in this report.

COUNCIL DECISION AND COMMITTEE RECOMMENDATION AND OFFICER RECOMMENDATION

C2105/092 Moved Councillor K Hick, seconded Councillor P Carter

That the Council:

1. **Subject to an Expression of Interest process, endorse the construction of up to three General Aviation hangars at the Busselton Margaret River Airport.**

2. **Endorse the allocation of $210,000 from the draft 2021/22 budget to be funded from the Airport Infrastructure Renewal Reserve to a newly created capital account for the construction of general aviation hangars.**

3. **Notes that the CEO will under delegation enter into lease arrangements for the constructed hangars.**

CARRIED 8/0

EN BLOC

EXECUTIVE SUMMARY

This report presents a proposal for Council consideration to fund the construction of general aviation hangars for lease at the Busselton Margaret River Airport (BMRA).

BACKGROUND

Following the completion of the BMRA Redevelopment Project in March 2018, including the construction of a fully serviced General Aviation (GA) precinct, the City of Busselton advertised for Registrations of Interest (RoI) for the lease of vacant hangar lots.

The GA precinct includes 36 hangar lots ranging in size from 150m^2 to 838m^2. The lots are fully serviced and available for recreational and commercial pilots and/or aviation related businesses. The hangar lots are situated adjacent to Code B rated aprons (see Attachment A), have direct access to the runway of 2,520m (TODA) x 45m via dedicated Code B and Code 4C taxiways, and Jet A1 Fuel and Avgas facilities are available. All lots are serviced with water, power, sewer and telecommunications.

The RoI included details on the proposed lease arrangements which were subject to commercial negotiations with the City of Busselton. The following standard lease conditions were put forward:

- Term – 10 years plus a further two 5 year options.
- Rent - by market valuation, with previous valuations indicating $9-11 (excl. GST) per square metre per annum.
- Rent reviews - every five years with all other years subject to CPI (Perth All Groups) rent reviews.
- Outgoings - the Lessee to pay for City of Busselton rates, water consumption (individually metered), electricity (individually metered), communications/NBN and insurances (including Property, Public Liability and Hangar Keepers).

The RoI also included the design guidelines for the development of hangars including setbacks, height restrictions, built form and materials, signage and required approvals.

The RoI was advertised in October 2018 on the City of Busselton's website and social media, local newspapers, aviation magazines and distributed to all West Australian aero clubs and aviation businesses located in Perth and Jandakot Airport precincts. Three RoI submissions were received following the advertising period, however no leases were entered into. There were a number of reasons that contributed towards the lack of submissions received, including:

- Capital funding for hangar construction was difficult to achieve.
- Lease term was considered too short (minimum of 30 years was preferred).
- There was no 'buy back' clause for hangar infrastructure available in the lease.

Since 2018, officers have been approached for information on the hangar lots and currently there is interest from a helicopter operator for one of the larger lots, additionally the Busselton Aero club have expressed interest in hangar lots in the GA precinct.

The City also owns two of the existing large (25m x 50m) hangars situated adjacent to the Busselton Aero Club (see Attachment A). The City purchased the two hangars from the hangar owner consortiums in 2018. The hangars are split internally into 5 and 6 individual hangars and currently 9 of the 11 individual hangars are leased out, with the remaining two used for airport operations and the Margaret River Busselton Tourism Association (MRBTA) ground handlers. There are three leases with McDermott Aviation, Helistar and the Busselton Aero Club which return an annual income of $30,600 and four short-term hangar hire arrangements returning a monthly income of $3,812. The City is frequently approached for additional hangar space on both long-term lease and short-term hangar arrangements.

OFFICER COMMENT

The GA precinct has remained vacant since the completion of the BMRA redevelopment project in 2018 and officers are keen to attract general and recreational pilots and aviation related businesses to the BMRA, and in particular the GA precinct. In considering feedback received from potential lessees during the last RoI of the cost and availability of capital funding, and the reluctance to enter into leases where the infrastructure reverts to City ownership on termination of the lease, officers now propose an alternate proposal as outlined below.

The GA precinct is made up of five sections of different sized lots:

- Lots 3-5 being approximately 830m^2;
- Lots 6-15 being 150m^2;
- Lots 18 -27 being 225m^2;
- Lots 28-36 being between 425-588m^2; and
- Premium lots 16-17, each 587m^2, having dual-sided apron access and facing the runway.

To ensure the efficient and greatest use of the entire GA precinct, the following principles have been applied to how the precinct can be utilised:

- Lots 33-36 reserved for helicopter operators;
- Lots 28-32 and 16-17 reserved for larger GA fixed wing operators and aviation businesses;
- Lots 6-15 and 18-27 reserved for GA/RAA operators;
- Lots 4-5 reserved for aviation related businesses/flight training operators; and
- Lots 3 reserved for potential Busselton Aero Club hangar/clubrooms.

Using the above principles, the primary focus is to attract GA/RAA operators into lots 6-15 initially (see Attachment B). This will activate the precinct and lead to further interest of both operators and aviation related businesses.

To facilitate this, officers propose that the City constructs up to three 10m x 15m sized hangars starting at lot 15 and progressing through to lot 6 based on demand. It is proposed to offer these hangars for long term leases of up to 20 years and/or short term hire arrangements. In offering fully constructed hangars, the City would be able to eliminate some of the barriers preventing the take up of hangar lots, as well as being able to maintain consistency in the initial design and aesthetics of the GA precinct, with standard hangars and colours being used. Leases would be for a minimum of 10 years, up to 20 years and the lease rate would be higher than the market valuation rate to incorporate the return on investment of the hangars constructed by the City. Standard lease conditions as detailed in the RoI issued back in 2018 including outgoings (utilities), insurances, CPI increases and 5 yearly rent reviews would all still apply.

To gauge interest, officers propose that an initial expression of interest is advertised to attract potential lessees and ideally a minimum of two hangars constructed at a time to save on installation costs. Once the initial hangar leases have been secured and hangars constructed, additional hangars would only be constructed on demand. It is also proposed that this approach is initially capped at five hangars. If there is demand beyond this, a report would be brought back to Council to ensure that the funding implications are appropriately considered. The City would also continue to offer undeveloped hangar lots for lease.

Officers have sought quotations for the construction of standard hangars of 10m x 15m x 6m for lots 6-15 (150m^2) including hangar style doors and concrete floors. Quotes for supply and installation, including contingency, all approvals, fees and charges are in the region of $70,000 (incl. GST) per hangar. A recent market valuation completed by the City's Land Asset Management Officer has valued the ground leases of sites in the GA precinct as follows:

- Sites 6-15, 18-27 and 28 -33 at $10 per m^2 per annum
- Sites 16, 17 and 34 -36 at say $11 per m^2 per annum
- Sites 3-5 being larger sites at $9 per m^2 per annum

The valuation has recommended that developed lease lots (i.e. including constructed hangars) include a rental for the building based on a 6% return on the cost of construction of the hangers. Based on a 6% return on investment, the rental rate for a newly constructed hangar on lots 7-15 would be $38 per square metre per annum, totalling a rental return of $5,700 per annum not including outgoings (as opposed to an estimated $1,500 per annum on undeveloped serviced lease lots).

In the event that the EoI process indicates interest, it is recommended that the CEO, under delegation, enter into a lease(s). It should be noted that officers will be required to conduct a formal Request for Quotation process for the construction of hangars.

Statutory Environment

When disposing of property whether by sale, lease or other means, a local government is bound by the requirement of section 3.58 of the *Local Government Act 1995* (the Act) which requires giving local public notice when disposing of property. The public notice must describe the property concerned, gives details of the proposal and invites submissions to be made before a specified date, not less than two weeks after the notice is first given. Any submissions received before the date specified in the notice must be considered.

Section 3.58(4) of the Act requires that the disposition includes either a valuation not more than six months old or a declaration by resolution that a valuation older than 6 months is considered a true indication of the value at the time of the disposition. A valuation was obtained from the City's Land Asset Management Officer (a licensed valuer) on 25 March 2021.

Relevant Plans and Policies

The proposal to construct hangars at the Busselton Margaret River Airport General Aviation Precinct aligns with the Busselton Margaret River Airport Master Plan 2016-36.

Financial Implications

There are no budget allocations in the 2020/21 adopted budget or draft 2021/22 Budget for this proposal. The City's Long Term Financial Plan (LTFP) indicates there are funds available in the Airport Infrastructure Renewal Reserve (the Reserve) over the next three years that could be used for the construction of GA hangars, with an opening 2021/22 balance forecast of $1,444,145. Transfers from the Reserve towards marketing and incentives for 2022/23 and 2023/24 total $730,000 and $227,100 for fleet purchases. This leaves an unallocated amount of $487,045 over the next three years, not including any net operating profit transferred into the Reserve at the end of the financial year(s).

Based on a rental rate of $38 per square metre per annum and an annual rental of $5,700 being transferred back to the Reserve, the construction of a single hangar at a cost of $70,000 would be recouped within 13 years including the proportion of the land rental income and not taking into account any CPI or rental review increases.

Alternatively, if the EOI for constructed hangars / leases resulted in a positive outcome (3-5 leases signed), then the City could consider borrowing funds so that the Reserve is not impacted. Using the rental rate of $38 per square metre and annual rental income of $5,700, the repayments of a $70,000 loan over 20 years at 2% ($4,255 p.a.) would be covered with a minimal amount left.

While the hangars would be new builds and maintenance costs would be minor in the first decade, the City would be responsible for structural and asset renewal maintenance under the lease. This would need to be factored into the airport operational budget for future years. It would be expected that securing the leases and activating the GA precinct would result in increased landing fees and potentially attract new general aviation businesses which would contribute to the overall Airport revenue.

Stakeholder Consultation

Officers have consulted with existing general and recreational aviation operators and the Busselton Aero Club to gauge interest in the proposal which has generally been positive. An expression of interest would be advertised to determine the demand for constructed hangars and leases.

Risk Assessment

An assessment of the potential implications of implementing the officer recommendation has been undertaken using the City's risk management framework, with risks assessed taking into account any controls already in place. No risks of a medium or greater level have been identified.

Options

As an alternative to the proposed recommendation, the Council could:

1. Choose not to support the proposal to construct GA hangars for lease and continue to advertise undeveloped lease lots.
2. Authorise the CEO to proceed with an expression of Interest and bring back a proposal for funding once submissions have been received.

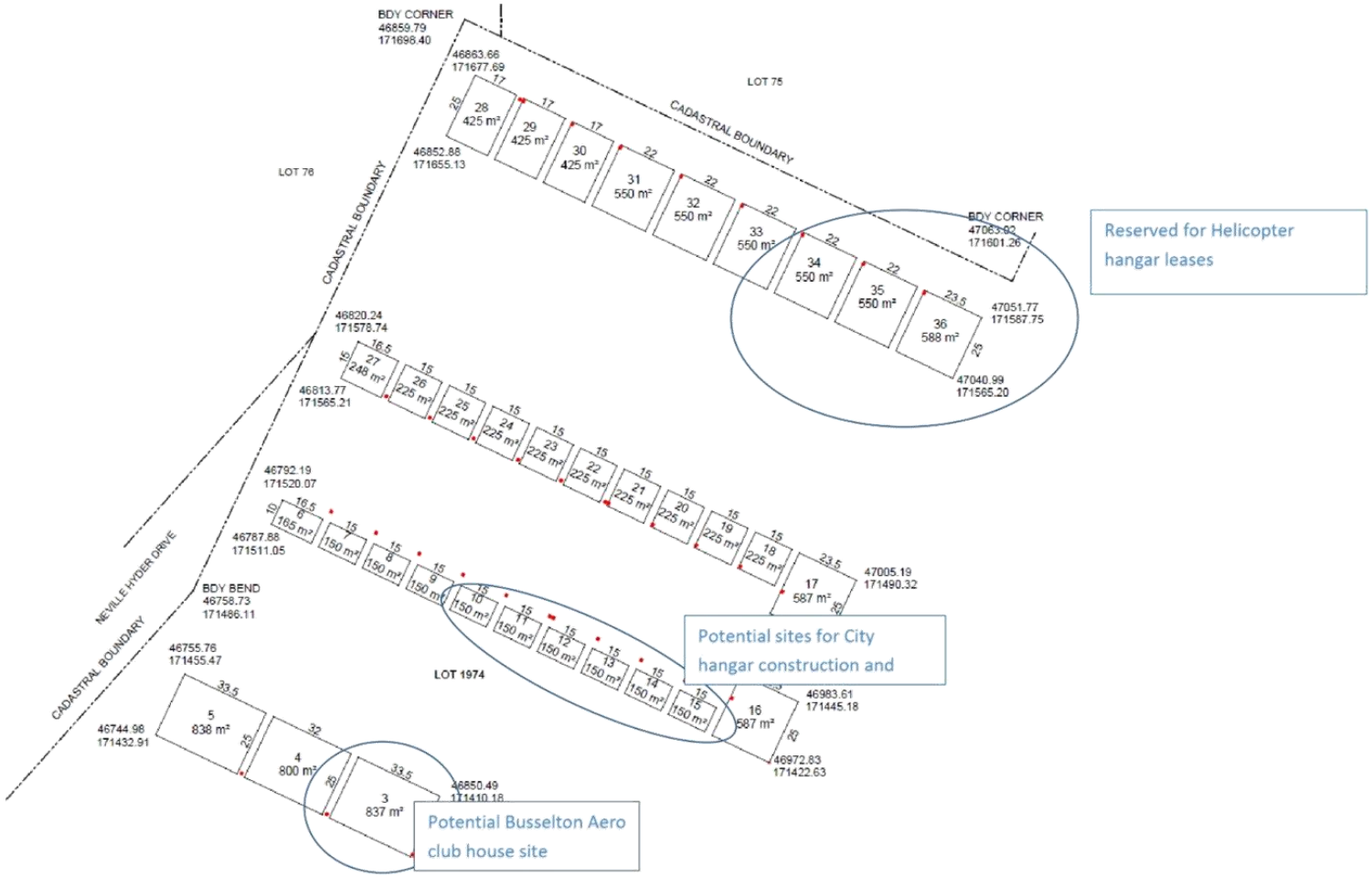
CONCLUSION

The BMRA redevelopment project included the construction of a purpose built GA precinct with 36 hangar lots of various sizes. Officers advertised a RoI to lease the hangar lots in 2018, however no leases have been taken up, with feedback suggesting that obtaining capital funding and lease terms and conditions were a barrier to GA/RAA pilots and operators taking up leases. Despite this feedback, there have been regular enquiries for hangar space in the two existing large hangars owned by the City suggesting that there is genuine interest in hangar occupation at the BMRA. To facilitate this, and generate activity at in the GA precinct, officers propose that the City constructs the GA hangars and re-advertise for lease opportunities on both long-term and short-term hangar hire arrangements through an expression of interest process.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

If Council support the officer recommendation, officers will advertise an expression of interest in May and June 2021. If there is interest for operators to enter into a lease, officers would be keen to have the first GA hangars constructed prior to the BMRA Community Open Day to be held in November 2021 to showcase the GA precinct opportunities.


GENERAL AVAITION PRECINCT
EXISTING 2 HANGARS OWNED BY THE CITY
Lot 22
Lot 78
Neville Hyder Dr
Busselton-Margaret
Lot 1974
© City of Busselton 2021


BDY CORNER
46859.79
171698.40
46863.66
171677.69
LOT 75
CADASTRAL BOUNDARY
LOT 76
CADASTRAL BOUNDARY
46852.88
171655.13
28
425 m²
29
425 m²
30
425 m²
31
550 m²
32
550 m²
33
550 m²
34
550 m²
35
550 m²
36
588 m²
BDY CORNER
47063.92
171601.26
47051.77
171587.75
47040.99
171565.20
Reserved for Helicopter hangar leases
46820.24
171578.74
46813.77
171565.21
27
248 m²
26
225 m²
25
225 m²
24
225 m²
23
225 m²
22
225 m²
21
225 m²
20
225 m²
19
225 m²
18
225 m²
17
587 m²
47005.19
171490.32
46792.19
171520.07
46787.88
171511.05
6
165 m²
7
150 m²
8
150 m²
9
150 m²
10
150 m²
11
150 m²
12
150 m²
13
150 m²
14
150 m²
15
150 m²
16
587 m²
46983.61
171445.18
46972.83
171422.63
Potential sites for City hangar construction and
NEVILLE HYDER DRIVE
BDY BEND
46758.73
171486.11
CADASTRAL BOUNDARY
46755.76
171455.47
LOT 1974
5
838 m²
4
800 m²
3
837 m²
46744.98
171432.91
46850.49
171410.18
Potential Busselton Aero club house site

12.3 Audit Committee - 28/4/2021 - 2020 FINANCIAL MANAGEMENT SYSTEM REVIEW

STRATEGIC GOAL	6. LEADERSHIP Visionary, collaborative, accountable
STRATEGIC OBJECTIVE	6.1 Governance systems, process and practices are responsible, ethical and transparent.
SUBJECT INDEX	FINM007
BUSINESS UNIT	Finance and Corporate Services
REPORTING OFFICER	Finance Coordinator - Jeffrey Corker
AUTHORISING OFFICER	Director Finance and Corporate Services - Tony Nottle
NATURE OF DECISION	Executive: Substantial direction setting, including adopting budgets, strategies, plans and policies (excluding local planning policies); funding, donations and sponsorships; reviewing committee recommendations
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A 2020 Financial Management System Review

This item was considered by the Audit Committee at its meeting on 28/4/2021, the recommendations from which have been included in this report.

COUNCIL DECISION AND COMMITTEE RECOMMENDATION AND OFFICER RECOMMENDATION

C2105/093 Moved Councillor K Hick, seconded Councillor P Carter

That the Council receives the 2020 Financial Management Systems Review and acknowledge the results as presented in Attachment A in accordance with Regulation 5(2)(c) of the *Local Government (Financial Management) Regulations 1996*.

CARRIED 8/0

EN BLOC

EXECUTIVE SUMMARY

In accordance with Regulation 5(2)(c) of the *Local Government (Financial Management) Regulations 1996* (the Regulations), a local government is to undertake reviews of the appropriateness and effectiveness of the financial management systems and procedures of the local government regularly (and not less than once in every 3 financial years) and report the results of those reviews to the local government.

This report provides the findings of the Financial Management System Review (FMSR) as completed by AMD Chartered Accountants (AMD) (the Auditor) in February 2021.

BACKGROUND

As per the Regulations, City officers engaged AMD to undertake an independent review of the City's financial management systems. AMD had previously undertaken the FMSR on the City's behalf in 2016, with the next review scheduled to be undertaken in the second half of 2019. As a result of COVID-19 and other extenuating circumstances, and as agreed with the Office of the Auditor General (OAG), the 2019 FSMR was delayed and undertaken in February 2021. This report presents the findings of that FSMR.

OFFICER COMMENT

The FMSR was comprehensive, with seven key focus areas being considered. A summary of those, and the appropriate scope and approach undertaken, is as follows:

I. Collection of Monies

Site visits were completed for 9 outstations and the City's central Customer Service.

The following procedures were completed (as applicable) at each site:

- Documented internal controls, procedures and reconciliations in relation to all sources of income;
- Tested collection, receipting, invoicing and posting procedures over cash receipts on a sample basis;
- Counted petty cash and float on hand ensuring materially correct;
- Reviewed the fees and charges schedule to ensure adequate internal controls in place over receipting; and
- Reviewed credit control procedures in respect to sundry debtors and rate debtors.

II. Custody and security of money

Site visits were completed for 9 outstations and the City's central Customer Service at the Administration Building. These visits reviewed the security of cash and banking procedures to ensure the appropriate controls and procedures are in place.

III. Maintenance and security of the financial records

Reviewed information technology (IT) systems to assess physical security, access security, data backups, contingency plans, compliance and systems development; and also reviewed registers maintained (including key register, tender register, gifts and travel registers etc.) and the minutes of Council meetings.

IV. Accounting for Municipal or trust transactions

The scope and approach was as follows:

- Reviewed all monthly reconciliations including bank, sundry debtors, sundry creditors, fixed assets, rates debtors and rateable value reconciliations ensuring they are correctly reconciled and reviewed;
- Reviewed and tested in detail most recent municipal and trust bank reconciliations prepared;
- Reviewed processes in respect to BAS, FBT Return and other statutory returns preparation;
- Reviewed use of reserve funds and determined whether changes in reserve purposes have been budgeted or public notice was provided;
- Reviewed trust ledger balances; and
- Reviewed policies and procedures in respect to insurance, recording claims and insuring newly acquired assets.

V. Authorisation for incurring liabilities and making payments

The scope and approach was as follows:

- Reviewed controls and procedures over the authorisation of purchase orders and making of payments;
- Tested sample of payments to ensure compliance with stated procedures;
- Reviewed credit card processes and procedures, testing transactions on a sample basis;
- Reviewed petty cash processes and procedures, testing transactions on a sample basis;
- Completed sample testing of asset additions and asset disposals;
- Reviewed asset capitalisation and depreciation policy and ensure compliance with stated policies; and
- Reviewed new loans received ensuring budgeted for or public notice provided.

VI. Maintenance of payroll, stock control and costing

The scope and approach was as follows:

- Completed site visit to the depot to review security over stocks held and allocation / costings of stocks used (including fuel and inventory stocks);
- Reviewed the allocation of public works overheads, plant operating costs and administration overheads completed;
- Reviewed payroll controls and procedures to ensure effective controls are in place, and complete tests on a sample basis to ensure these controls were operating effectively;
- Reviewed procedures and policies in place in respect of human resource management legislative and compliance requirements, recruitment, performance appraisal, disciplinary and termination procedures and leave entitlements;
- Reviewed listing of leave taken by employees ensuring authorised leave forms completed; and
- Reviewed annual leave balances and identify employees with more than eight weeks annual leave.

VII. Preparation of budgets, budget reviews, accounts and reports required by the Act or the Regulations

The scope and approach was as follows:

- Reviewed policy and procedure manual;
- Reviewed the procedures for preparation of the monthly financial statements, annual financial statements and annual Budget, including assessment of accounting policy, notes and applicable reporting requirements and efficiency of the process;
- Reviewed monthly financial statements ensuring presented to Council within two months and information contained within monthly financial statements in accordance with Regulation 34 of *Local Government (Financial Management) Regulations 1996*;
- Reviewed the mid-year budget review to ensure compliance with Regulation 33A of the *Local Government (Financial Management) Regulations 1996* and assessment of budgetary expenditure controls in place;
- Ensured prior year audit report and management letter have been presented to the Audit Committee and Council; and

- Reviewed compliance with Part 6 of the *Local Government Act 1995* and *Local Government (Financial Management) Regulations 1996*.

As a result of the above, the Auditor has made a number of recommendations to further improve the City's overall financial management systems. These are listed within the attached report.

As part of the FMSR, the responsible officers provided comment on each of the recommendations. Of the fourteen recommendations, five have a moderate risk rating, with the remainder rated as low.

With respect to the moderate risk items, the following areas have been identified for improvement:

- Testing of IT backup systems
- Business Continuity Plan
- Control and Custody of Keys
- Review of User Profiles
- Post Tender Review Process

No recommendations were made in respect to Focus Area 7 of the report (Preparation of budgets, budget reviews, accounts and reports required by the Act or the Regulations). The FMSR indicated key underlying policies and processes in relation to the preparation of budgets, budget reviews, accounts and reports required by the Act or Regulations are appropriate, in line with the best practice and are operating effectively.

City officers will implement the amendments and improvements to ensure risks are controlled in accordance with the comments provided within the attached report.

Statutory Environment

Section 6.10 of the *Local Government Act 1995* states that the Regulations may provide for the controls over the financial management of the local government.

Regulation 5 of the *Local Government (Financial Management) Regulations 1996* outlines the areas a CEO is to establish efficient systems and procedures over.

Regulation 5(2)(c) requires that a review of those systems be undertaken regularly and reported to the local government.

Relevant Plans and Policies

Various Operational Practices (OP) and other documents are referred to within the FMSR. These include:

- The Business Continuity Plan
- Mobile Phone
- Risk management Framework
- Corporate data management and security
- Operation of Business Customer Account (Store) cards
- Petty Cash
- Performance Improvement and Discipline
- Code of Conduct
- Motor Vehicle Policy

Other documents are in the development stage, including the Information Security Management OP, Asset Policy and the Work from Home OP, which are documents established under the CEO's authority.

Financial Implications

The financial impact of implementing changes to systems or processes contained within the recommendations will be considered in future budget deliberations.

Stakeholder Consultation

No external stakeholder consultation was required or undertaken in relation to this matter.

Risk Assessment

The FMSR contains an assessment of risk with each recommendation given an individual risk rating. Five findings were found to be of moderate risk, with the remaining nine rated as minor.

Options

Council may determine to recommend additional requirements upon officers in response to recommendation contained within the FMSR.

CONCLUSION

In accordance with Regulation 5(2)(c) of the *Local Government (Financial Management) Regulations 1996*, this report provides the findings of the Financial Management System Review as completed by AMD Chartered Accountants (AMD) in February 2021.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

Responses to the specified individual recommendations of the FMSR will be undertaken in accordance with management comments contained within the document.

AMD
CHARTERED ACCOUNTANTS

2020 Financial Management System Review

City of Busselton

February 2021

The Institute of Internal Auditors

WALGA PREFERRED SUPPLIER

Independent Member of BKR INTERNATIONAL

CHARTERED ACCOUNTANTS AUSTRALIA + NEW ZEALAND

AMD
CHARTERED ACCOUNTANTS

T +61 (8) 9780 7555
F +61 (8) 9721 8982

E amd@amdonline.com.au
www.amdonline.com.au

AMD Audit & Assurance Pty Ltd
ACN 145 719 259 t/a AMD

Unit 1, 28-30 Wellington Street,
Bunbury, WA 6230
PO Box 1306, Bunbury, WA 6231

26 March 2021

Mr Mike Archer
Chief Executive Officer
City of Busselton
Locked Bag 1
BUSSELTON WA 6280

Dear Mike

2020 FINANCIAL MANAGEMENT SYSTEMS REVIEW

We are pleased to present the findings and recommendations resulting from the City of Busselton's (the "City") *Local Government (Financial Management) Regulation 1996*, Financial Management System Review.

This report relates only to procedures and items specified within the 2020 Financial Management System Review Services Proposal and does not extend to any financial report of the City.

We would like to thank Paul, Jeffrey, and the Finance team for their co-operation and assistance whilst conducting our review.

Should there be matters outlined in our report requiring clarification or any other matters relating to our review, please do not hesitate to contact our office.

Yours sincerely
AMD Chartered Accountants

TIM PARTRIDGE FCA
Director

Liability limited by a scheme approved under Professional Standards Legislation

Independent Member of
BKR INTERNATIONAL
CHARTERED ACCOUNTANTS
AUSTRALIA + NEW ZEALAND



AMD CHARTERED ACCOUNTANTS

Table of Contents

1. Executive Summary 5
1.1. Background and Objectives 5
1.2. Summary of Findings 5
1.3 Limitations 7
2.1. Scope and approach 8
2.2. Detailed findings and recommendations 8
3. Custody and security of money 9
3.1. Scope and approach 9
3.2. Detailed findings and recommendations 9
3.2.1. Security of Cash 9
4. Maintenance and security of the financial records 11
4.1. Scope and approach 11
4.2. Detailed findings and recommendations 11
4.2.1. Testing of IT System Backups 11
4.2.2. Business Continuity Plan 12
4.2.3. Control and Custody of Keys 13
4.2.4. Review of User Profiles 14
4.2.5. IT Policies and Procedures 15
4.2.6. Policy and Procedure Review 16
4.2.7. Code of Conduct 17
5. Accounting for municipal or trust transactions 18
5.1. Scope and approach 18
5.2. Detailed findings and recommendations 18
5.2.1. Month End Procedures Checklist 18
5.2.2. Fuel Card Statement Review 19
6. Authorisation for incurring liabilities and making payments 20
6.1. Scope and approach 20
6.2. Detailed findings and recommendations 20
6.2.1. Post Tender Review Process 20
6.2.2. Asset Capitalisation and Asset Useful Life Assessment 21
7. Maintenance of payroll, stock control and costing 22
7.1. Scope and approach 22
7.2. Detailed findings and recommendations 22
7.2.1. Property and Stock Security 22
7.2.2. Excessive Annual Leave Balances 23
8. Preparation of budgets, budget reviews, accounts and reports required by the Act or the Regulations 24
8.1. Scope and approach 24
8.2. Detailed findings and recommendations 24
9. Guidance on Risk Assessment 25



AMD
CHARTERED ACCOUNTANTS

Inherent limitations

Due to the inherent limitations of any internal control structure, it is possible that fraud, error or non-compliance with laws and regulations may occur and not be detected. Further, the internal control structure, within which the control procedures that have been subject to review, has not been reviewed in its entirety and, therefore, no opinion or view is expressed as to its effectiveness of the greater internal control structure. This review is not designed to detect all weaknesses in control procedures as it is not performed continuously throughout the period and the tests performed on the control procedures are on a sample basis. Any projection of the evaluation of control procedures to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

We believe that the statements made in this report are accurate, but no warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, the City of Busselton's management and personnel. We have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted with the report. We are under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form unless specifically agreed with the City of Busselton's. The review findings expressed in this report have been formed on the above basis.

Third party reliance

This report was prepared solely for the purpose set out in this report and for the internal use of the management of City of Busselton. This report is solely for the purpose set out in the 'Scope and Approach' of this report and for City of Busselton's information, and is not to be used for any other purpose or distributed to any other party without AMD's prior written consent. This review report has been prepared at the request of the City of Busselton's Chief Executive Officer or its delegate in connection with our engagement to perform the review as detailed in the 2020 Financial Management System Review Services Proposal. Other than our responsibility to the Council and management of the City of Busselton, neither AMD nor any member or employee of AMD undertakes responsibility arising in any way from reliance placed by a third party, including but not limited to the City of Busselton's external auditor, on this review report. Any reliance placed is that party's sole responsibility.

1. Executive Summary

1.1. Background and Objectives

The primary objective of our Financial Management System Review (FMSR) was to assess the adequacy and effectiveness of systems and controls in place within the City; in accordance with AMD's 2020 Financial Management System Review Services Proposal (the "Review").

The responsibility of determining the adequacy of the procedures undertaken by us is that of the Chief Executive Officer (CEO). The procedures were performed solely to assist the CEO in satisfying his duty under Section 6.10 of the *Local Government Act 1995* and Regulation 5(1) of the *Local Government (Financial Management) Regulations 1996*.

Our findings included within this report are based on the site work completed by us on the 8th to 11th February 2021. Findings are based on information provided and available to us during and subsequent to this site visit.

1.2. Summary of Findings

The procedures performed and our findings on each of the focus areas are detailed in the following sections of the report:

- Section 2 – Collection of money;
- Section 3 - Custody and security of money;
- Section 4 - Maintenance and security of the financial records;
- Section 5 - Accounting for municipal or trust transactions;
- Section 6 - Authorisation for incurring liabilities and making payments;
- Section 7 - Maintenance of payroll, stock control and costing records; and
- Section 8 – Preparation of budget, budget reviews, accounts and reports required by the *Local Government Act 1995* or the *Local Government (Financial Management) Regulations 1996.*

Following the completion of our review and subject to the recommendations outlined within sections 2 to 8, we are pleased to report that in context of the City's overall internal control environment, policies, procedures and processes in place are appropriate, and have been operating effectively at the time of the review.

Findings reported by us are on an exceptions basis, and do not take into account the many focus areas tested during our review where policies, procedures and processes were deemed to be appropriate and in accordance with better practice.

The following tables provide a summary of the findings raised in this report:

	Catastrophic Risk	Major Risk	Moderate Risk	Minor Risk
Number of new issues reported	0	0	5	9

For details on the review rating criteria, please refer to Section 9.

Ref	Issue	Risk Rating
2. Collection of money		
We have no findings to report in respect to the collection of money.		
3. Custody and security of money		
3.2.1	**Security of Cash** Review and further enhancement recommended in respect to physical cash security measures at the Busselton Airport and Geographe Leisure Centre.	Minor
4. Maintenance and security of financial records		
4.2.1	**Testing of IT System Backups** System backups are not currently tested on a periodic basis.	Moderate
4.2.2	**Business Continuity Plan** The existing Business Continuity Plan has not been tested in respect to the effectiveness of IT.	Moderate
4.2.3	**Control and custody of keys** Review and further enhancement recommended in respect to City property and equipment keys and property.	Moderate
4.2.4	**Review of User Profiles** The City does not review user profiles and appropriateness of access to systems based on potion descriptions/requirements.	Moderate
4.2.5	**IT Policies and Procedures** A number of the Shire's IT policies and procedures are not formally documented. Furthermore, there is no sign in/out process for City laptops loaned to employees, and no register maintained.	Minor
4.2.6	**Policy and Procedure Review** Various policies and procedures not reviewed in accordance with stated review date.	Minor
4.2.7	**Code of Conduct** The current Code of Conduct for Elected Members, Committee Members and Employees does not detail the reporting mechanism in the event of a breach.	Minor
5. Accounting for municipal of trust transactions		
5.2.1	**Month End Checklist** No checklist utilised for month end procedures.	Minor
5.2.2	**Fuel Card Statement Review** Fuel card statement not signed off to evidence independent review.	Minor
6. Authorisation for incurring liabilities and making payments		
6.2.1	**Post tender review process** No post tender review process completed.	Moderate
6.2.2	**Asset Capitalisation and Asset Useful Life Assessment** Inconsistencies noted between the 2019/2020 Financial Report and the City's Fixed Asset Register. Currently no Asset Capitalisation Policy in place.	Minor
7. Maintenance of payroll, stock control and costing records		
7.2.1	**Property and Stock Security** Review and enhancement to depot security and security is recommended.	Minor
7.2.2	**Excessive Annual Leave Balances** Employees identified with an excessive annual leave balance.	Minor
8. Preparation of budgets, budget reviews, accounts and reports required by the Act or Regulations		
We have no findings to report in respect to the preparation of budgets, budget reviews, accounts and reports required by the Act or Regulations.		



AMD
CHARTERED ACCOUNTANTS

1.3 Limitations

We draw your attention to the following limitations:

- We were not required to and did not undertake an audit in accordance with Australian Auditing Standards. Consequently, no assurance will be expressed.
- We have not verified the authenticity or validity of the documentation made available to us.
- We have included information that we obtained verbally in this document. We cannot verify that this information is credible or truthful.
- If additional or new documentation or information is brought to our attention subsequent to the date of this report, which would affect the observations detailed below, we reserve the right to amend and qualify our findings accordingly.



AMD CHARTERED ACCOUNTANTS

Collection of money

2.1. Scope and approach

Site visits were completed for the following locations operated by the Shire:

- Art Geo;
- Busselton Airport;
- Busselton Jetty Tourist Park;
- Busselton Library;
- Busselton Waste Transfer Station;
- Customer Service Centre;
- Dunsborough Waste Facility;
- Geographe Leisure Centre; and
- Naturalist Community Centre.

The following procedures were completed (as applicable) at each site:

- Documented internal controls, procedures and reconciliations in relation to all source of income;
- Tested collection, receipting, invoicing and posting procedures over cash receipts on a sample basis
- Counted petty cash and float on hand ensuring materially correct;
- Reviewed fees and charges schedule and ensure adequate internal controls in place over receipting; and
- Reviewed credit control procedures in respect to sundry debtors and rate debtors.

2.2. Detailed findings and recommendations

Our review indicated key underlying policies and processes in relation to the collection of money by the Local Government are appropriate, in line with the best practice and operating effectively.

Accordingly, we have no recommendations to raise in respect to the collection of money.

3. Custody and security of money

3.1. Scope and approach

- Conducted site visits of cash collection points to review the controls and procedures over the collection, receipting, recording and banking of cash collected offsite;
    - Art Geo;
    - Busselton Airport;
    - Busselton Jetty Tourist Park;
    - Busselton Library;
    - Busselton Waste Transfer Station;
    - Customer Service Centre;
    - Dunsborough Waste Facility;
    - Geographe Leisure Centre; and
    - Naturalist Community Centre;
- Reviewed the security of cash and banking procedures to ensure the appropriate controls and procedures are in place.

3.2. Detailed findings and recommendations

3.2.1. Security of Cash

Finding Rating: Minor

Inquires and observations indicated the following with respect to the physical security of cash:

- Cash is retained in the Geographe Leisure Centre Café till over extended break times (between 12 and 3pm);
- Cash from electronic till and/or parking meters at the Busselton Airport is collected on an ad hoc basis rather than on a scheduled periodic / pre-determined basis; and

Implication / Risk

Lack of appropriate internal controls over security of City funds may result in an increase in the risk of theft.

Recommendation

We recommend cash handling, collection and storage processes and procedures at the Busselton Airport and Geographe Leisure Centre be reviewed with an objective of enhancing controls over City monies.

Management Comment:

With regard to the GLC, the City believes controls are currently sufficient. There is a Covid screen that covers the counter and the cash cannot be accessed without starting the computer or breaking into the cash drawer. This is considered highly unlikely as the café kiosk is directly behind reception which is manned 100% of the time.

With regard to the Airport parking meters the Operational Practice (OP) will be updated to reflect that the cash be reconciled and banked on a monthly basis.

Responsible Officer:

GLC – Dave Goodwin, Manager Community and Recreation Services





Airport – Jenny May, Manager Economic and Business Development Services

Completion Date:
GLC – Not applicable
Airport – 30 April 2021

4. Maintenance and security of the financial records

4.1. Scope and approach

- Reviewed information technology (IT) systems to assess physical security, access security, data backups, contingency plans, compliance and systems development; and
- Reviewed registers maintained (including key register, tender register, gifts and travel registers etc.) and Council minutes.

4.2. Detailed findings and recommendations

4.2.1. Testing of IT System Backups

Finding Rating: Moderate

Our inquiries indicated there is no formal schedule maintained to test system backups to ensure recovery of data is achievable and effective, ensuring no significant interruption to the extent a backup restoration is required.

Implication / Risk
Risk of significant delays in business interruption in the event of unforeseen circumstances.

Recommendation
We recommend a documented system backup recovery testing schedule be implemented with dates of testing recording, details of systems and or services tested and result of the tests, including any remedial action required.

Management Comment:
The City acknowledges and agrees with this finding. The City proposes to extend the existing list of IT Daily Checks to include types, schedule and reporting of backup and associated tests.

Responsible Officer:
Kris Davis, Manager Information Services

Completion Date:
30 September 2021



AMD
CHARTERED ACCOUNTANTS

4.2.2. Business Continuity Plan
Finding Rating: Moderate

Our inquiries indicated Business Continuity Plan testing has not been carried out specific to the City's IT.

Implications/Risks
Risk of delays and business interruption in the event of unforeseen circumstances.

Recommendation
We recommend the City implement a process to test and evaluate the Business Continuity Plan with respect to IT, ensuring it is up to date, adequately designed, and will effectively mitigate disruption in the event of unforeseen circumstances.

Management Comment:
Whilst the City does test the BCP, detailed ICT tests are not performed. It is proposed to add an ICT specific section to the BCP testing schedule. This will be done post the scenario and include the members identified in the BCP. A process of testing for the items outlined in the BCP will be developed, and an ICT Disaster Recovery Plan created.

Responsible Officer:
Kris Davis, Manager Information Services

Completion Date:
31 December 2021



AMD CHARTERED ACCOUNTANTS

4.2.3. Control and Custody of Keys
Finding Rating: Moderate

Our inquiries and observations during site visits to the City Depot and ArtGeo identified the following:

- There is no documented policy or procedure in place addressing controls for small plant key signing in and out at the depot;
- The small plant key box located within the depot workshop is unlocked each morning, remaining unlocked during the day;
- The light vehicle key lock box located within the depot is not maintained in a secure location and is unlocked each morning, remaining unlocked during the day;
- While an external key register is maintained, the register includes a number of 'short term keys' which were signed out over 12 months ago and have not been returned; and
- The ArtGeo key box is maintained next to an open door and not locked during opening hours.

Implications / Risks
Risk of unauthorised use of City property and equipment.

Recommendation
We recommend a review of property and equipment access control procedures be conducted considering implementing:

- A register of keys held at any time at the depot workshop;
- A sign in/out process for all keys held at the depot;
- A review of the external key register be conducted ensuring up to date and that all keys have been returned as required; and
- Key boxes to be securely locked where practical.

Management Comment:
With regard to the City Depot, a number of the suggested measures are already in place including a sign in/out procedure and registers of keys held. However the need for improvements is acknowledged and accordingly the following is proposed:

- Relocation of multiple key boxes to one central location within the main depot building;
- Review of key register and reissuing of keys where necessary;
- Consider introducing swipe cards to all Operations Services staff to access central key box.

With regard to Art Geo, the key box has been relocated and will be locked; as recommended.

Responsible Officer:
City Depot – Matt Twyman, Manager Operations Services
Art Geo – Maxine Palmer, Manager Events and Cultural Services

Completion Date:
City Depot – 30 June 2021
Art Geo - Complete



AMD
CHARTERED ACCOUNTANTS

4.2.4. Review of User Profiles
Finding Rating: Moderate

We noted there is no periodic review of user profiles with respect to network access to ensure all users have appropriate system access relevant to their current position description / requirements.

Implications/Risks
Risk of unauthorised access to the City's network.

Recommendation
We recommend periodic reviews be completed to ensure all user profiles are up-to-date and in accordance with position description / requirements.

Management Comment:
The City believes that the risk does not match the audit finding, and that there is already a good process for closing accounts of terminated employees and expired contract staff in place. However, it is agreed that core technologies should be checked periodically to ensure user profiles access is correct. Accordingly it is proposed that the City will create a process of testing including a schedule for user profiles within the core ERP environment.

Responsible Officer:
Kris Davis, Manager Information Services

Completion Date:
31 December 2021



AMD CHARTERED ACCOUNTANTS

4.2.5. IT Policies and Procedures
Finding Rating: Minor

Our inquiries indicated the Shire does not have formal documented policies or procedures relating to the following:

- Cyber security;
- Working from home;
- Bring your own devices ("BYOD"); and
- Issuing of swipe card and the access assigned to cards.

Furthermore, we noted there is no sign in/sign out process with respect to City laptops loaned to employees, nor is a register maintained of employees who have been allocated a City owned Laptop.

Implications / Risks

- Increased risk of unauthorised infiltration of Shire's IT infrastructure and access to confidential information.
- Risk existing procedures and practices in respect of the use of the Shire's IT facilities, cyber security requirements, access controls, personally held devices, personal file sharing accounts and removable devices are not formally documented.

Recommendation
We recommend policies and procedures outlining the terms and conditions in respect to those areas highlighted above be documented, approved, implemented and monitored on an ongoing basis. Furthermore, we recommend a register of City laptops loaned to employees be developed with appropriate sign in / sign out controls implemented accordingly.

Management Comment:
With regard to Cyber security, an "Information Security Management" OP is to be developed.

A 'Working from Home' Operational Practice is in the draft stage and should be finalised by 20 April 2021.

BOYD is included in the City's existing Mobile Phone OP, acknowledging this does need updating. It is also included within individual employee contracts for applicable staff.

Swipe card access is principally covered by the existing "Civil and Administration Access" OP.

The issues involving loaned equipment are acknowledged and better controls are being developed.

Responsible Officer:
Kris Davis, Manager Information Services
Sarah Pierson, Manager Governance and Corporate Services

Completion Date
Copies of existing documentation will be provided ASAP. The Information Security Management OP is to be developed by 30 September 2021, and the laptop tracking register and processes by 31 December 2021.



AMD
CHARTERED ACCOUNTANTS

4.2.6. Policy and Procedure Review
Finding Rating: Minor

Our review of various City frameworks, policies and procedures identified the following:

- The Risk Management Framework which was reviewed by the Audit Committee on the 27 May 2020 refers to former AS/NZS ISO 31000:2009 rather than ISO 31000:2018;
- IS104 (OPP) Corporate Data Management and Security states an annual review frequency however the current version is dated 5 June 2013;
- IS103 (OPP) City Provided Mobile Phone Usage was last reviewed May 2014 (as required review frequency noted);
- FIN105 (OPP) Operation of Business Customer Account (Store) Cards was last reviewed October 2014 (as required review frequency noted);
- FIN100 (OPP) Petty Cash was last reviewed January 2014 (as required review frequency noted); and
- HR406 (OPP) Performance Improvement and Discipline was last reviewed June 2017 (2 yearly review frequency stated therefore review was due June 2019).

Implications / Risks
Risk of policy being out of date and non-compliance with stated policy.

Recommendation
We recommend policies and procedures are reviewed in accordance with stated dates, including updating references to applicable legislation and standards as changes arise.

It may be appropriate for policy reviews to occur annually, however frequency of the review will depend on the nature of the policy, However we suggest all policies, procedures and plans should be reviewed based upon the nature of the matter contained within.

Management Comment
The City has been working through a full review of its Policies and Procedures, with all Council Policies now reviewed. Operational Practices are currently being reviewed, with recent focus being concentrated on Human Resource OP's, however as time permits this will broaden. The capacity to review OP's within the required timeframe has been primarily a resourcing issue. A schedule for the review of the remaining OP's will be developed.

Responsible Officer:
Kris Davis, Manager Information Services
Sarah Pierson, Manager Governance and Corporate Services
Paul Sheridan, Manager Financial Services

Completion Date:
With regard to the OP's specifically listed, it is proposed to have these reviewed by 30 September 2021.



AMD CHARTERED ACCOUNTANTS

4.2.7. Code of Conduct
Finding Rating: Minor

Our review of the City's Code of Conduct identified the documents do not outline the reporting mechanisms in place which would enable stakeholders to report a potential breach of the Code of Conduct. In addition, the Code of Conduct does not address what would occur in an employee or Councillor was to breach the Code of Conduct.

Implications / Risks
Potential inability to report a breach of the Code of Conduct.

Recommendation
We understand that the Code of Conduct is currently under review due to recent changes to the Local Government Regulations and therefore recommend that the Code of Conduct be updated in line with the Local Government (Model Code of Conduct) Regulations 2021, ensuring that the reporting mechanisms and consequences if an employee or Councillor was to breach the Code of Conduct be included.

We note the new mandatory requirements arising from the Local Government (Model Code of Conduct) Regulations 2021 are not required to be in place until 3 May 2021.

Management Comment
The City has been waiting for the changes to the Local Government Act and Regulations be completed prior to undertaking a review of its Code of Conduct. A draft new employee code has been developed and meets all of the requirements. A draft new Code of Conduct for Councillors has also been developed. These are to be endorsed by Council and the CEO in the near future.

Responsible Officer:
Sarah Pierson, Manager Governance and Corporate Services

Completion Date:
30 April 2021

5. Accounting for municipal or trust transactions

5.1. Scope and approach

- Reviewed all monthly reconciliations including bank, sundry debtors, sundry creditors, fixed assets, rates debtors and rateable value reconciliations ensuring correctly reconciled and reviewed;
- Reviewed and tested in detail most recent municipal and trust bank reconciliations prepared;
- Reviewed processes in respect to BAS, FBT Return and other statutory returns preparation;
- Reviewed use of reserve funds and determined whether changes in reserve purposes have been budgeted or public notice was provided;
- Reviewed trust ledger balances; and
- Reviewed policies and procedures in respect to insurance, recording claims and insuring newly acquired assets.

5.2. Detailed findings and recommendations

5.2.1. Month End Procedures Checklist

Finding Rating: Minor

Our inquiries indicated there is no overarching month end procedures checklist utilised to support completeness of key month end accounting reconciliations.

Implications / Risks

- Risk month end procedures not completed, independently reviewed and signed off prior to month end finalisation.
- Risk that errors and omissions are not detected and corrected in a timely manner.

Recommendation

While our review indicated month end reconciliation processes are adequate, as best practice we recommend an overarching checklist be implemented whereby all key month end procedures are listed with the checklist signed (either manually or electronically) by both the preparer and the independent reviewer.

Management Comment:

A Checklist will be developed.

Responsible Officer:

Paul Sheridan, Manager Financial Services

Completion Date:

30 June 2021



AMD CHARTERED ACCOUNTANTS

5.2.2. Fuel Card Statement Review
Finding Rating: Minor

Our inquiries indicated Fuel Card usage is reviewed on a regular basis, however there is no evidence to support this review.

Implications / Risks
Risk that fraud, misuse of cards, errors or omissions are not detected and investigated/corrected in a timely manner.

Recommendation
We recommend fuel card statements be signed / marked to evidence independent review.

Management Comment:
Various measures are in place to control and monitor use of fuel cards. Validation check processes are imbedded in the system, daily and monthly limits in place, and alerts built in where limits are approached. Finance staff will establish a process whereby the monthly invoice is reviewed and signed off by Fleet Staff.

Responsible Officer:
Paul Sheridan, Manager Financial Services
Mark Wong, Manager Waste and Fleet Services

Completion Date:
31 April 2021

6. Authorisation for incurring liabilities and making payments

6.1. Scope and approach

- Reviewed controls and procedures over the authorisation of purchase orders and making of payments;
- Tested sample of payments to ensure compliance with stated procedures;
- Reviewed credit card processes and procedures, testing transactions on a sample basis;
- Reviewed petty cash processes and procedures, testing transactions on a sample basis;
- Completed sample testing of asset additions and asset disposals;
- Reviewed asset capitalisation and depreciation policy and ensure compliance with stated policies; and
- Reviewed new loans received ensuring budgeted for or public notice provided.

6.2. Detailed findings and recommendations

6.2.1. Post Tender Review Process

Finding Rating: Moderate

We noted the City of Busselton does not have a formal post tender performance evaluation process on completion of large or critical projects / tenders.

Implications / Risks
Lack of formalised documentation evidencing tender performance assessment.

Recommendation
WALGA best practice guidelines recommend formal performance management assessments be completed at the end of the tender period once goods or services have been tendered.

We recommend a contract performance evaluation procedure be documented, implemented through the communication to all staff and monitored on an ongoing basis to ensure compliance with stated procedures. We suggest it may be useful for the procedure to include standard a contract compliance checklist, in particular for the monitoring of ongoing service contracts.

Management Comment:
AMD's suggested practice appears sensible if it can be implemented without unreasonable administrative burden. The City will review WALGA best practice guidelines with a view to developing an OP for formal contract performance evaluation.

Responsible Officer:
Ben Whitehill, Manager Legal and Property Services

Completion Date:
30 June 2021

6.2.2. Asset Capitalisation and Asset Useful Life Assessment

Finding Rating: Minor

An analysis of the depreciation periods for major asset classes disclosed in the 2019/2020 notes to the financial report compared to major asset class useful lives set up in the Fixed Asset Register identified the following variations:

Asset Class	Depreciation period per Fixed Asset Register	Depreciation period per the 2019/2020 notes to the financial report
Heavy Plant & Equipment	3 – 23 years	3 – 10 years
Light Mobile Plant	7 – 29 years	2 years
Light to Medium Vehicles	3 – 9 years	3 – 5 years
Public Art	0 – 21 years	Not disclosed
Furniture & Fittings	3 – 15 years	3 – 10 years
Footpaths	20 – 50 years	20 – 40 years

In addition, at the time of the review, the City's internal Asset Capitalisation Policy had not been implemented.

Implications / Risks

- Risk assets have not been depreciated in accordance with accounting policies as disclosed within the notes to the financial reports.
- Risk of non-compliance with the Regulation 17(A)(5) of the *Local Government (Financial Management) Regulation 1996* (asset capitalisation threshold of $5,000)

Recommendation

We recommend that the notes to the financial report be updated to reflect depreciation periods (useful lives) as applied in the Fixed Asset Register.

In addition, we recommend the City's internal Asset Capitalisation Policy is developed, documented and implemented.

Management Comment:

A project is already underway to develop an overarching Assets Policy, as is a review of the effective lives and componentisation of major building and infrastructure assets. A review of Financial Asset Register will be undertaken which will include asset stocktakes; restructure of categories; componentisation of all assets where applicable; review of effective lives and depreciation methods

Responsible Officer:

Paul Sheridan, Manager Financial Services

Completion Date:

31 December 2022

7. Maintenance of payroll, stock control and costing

7.1. Scope and approach

- Completed site visit to the depot to review security over stocks held and allocation / costings of stocks used (including fuel and inventory stocks);
- Reviewed of the allocation of public works overheads, plant operating costs and administration overheads completed;
- Reviewed payroll controls and procedures to ensure effective controls are in place, and complete tests on a sample basis to ensure these controls were operating effectively;
- Reviewed procedures and policies in place in respect of human resource management legislative and compliance requirements, recruitment, performance appraisal, disciplinary and termination procedures and leave entitlements;
- Reviewed listing of leave taken by employees ensuring authorised leave forms completed; and
- Reviewed annual leave balances and identify employees with more than eight weeks annual leave.

7.2. Detailed findings and recommendations

7.2.1. Property and Stock Security

Finding Rating: Minor

Our inquiries and observations during various site visits identified the following:

- The security gate providing access to the Depot is not monitored;
- There are no security cameras monitoring the depot yard, storeroom or facilities; and
- The fuel tanker at the Dunsborough Waste Facility is not locked during the day.

Implications / Risks

- Increased risk of unauthorised access to Council property and facilities.
- Risk of misappropriate of stocks and consumables.

Recommendation

We recommend a review of the security protocols at the City depot and Dunsborough Waste Facility be reviewed and updated considering the matters above.

Management Comment:

The Security of the Busselton Works Depot will be reviewed, including automated vehicle access, CCTV, and Fencing. Any upgrades will be subject to budget availability.

A process will be enacted to ensure the fuel tank and the Dunsborough Waste Facility is locked at all times.

Responsible Officer:

Matt Twyman, Manager Operations Services

Completion Date:

Security upgrades will be subject to Budget availability



AMD CHARTERED ACCOUNTANTS

7.2.2. Excessive Annual Leave Balances
Finding Rating: Minor

From our review of the annual leave listing as at the date of our review, we noted 27 employees who had accrued in excess of eight weeks annual leave, with some of these employees also having a present long service leave entitlement.

Implications / Risks
The cost to Council is greater if annual leave is not paid out on a regular basis due to the cumulative effect of salary increases over a period of time.

Recommendation
It is a fundamental principle of good internal control for employees to take regular holidays, however not in excess of their leave accrual balance. Therefore we recommend leave balances be reviewed and managed to reduce the number of employees with excess leave.

Management Comment:
As at the end of February there were 29 people with leave balances in excess of 8 weeks, representing only 8% of permanent employees. The average years of service of these staff is 12.99 years. It is largely therefore an issue of historical management that the City is currently working to resolve, within award provisions which require genuine consultation before leave directions can be provided, and cognisant of managing workload. Leave plans are in place for most of the 29 employees, noting that 9 have only just over 8 weeks accrued.

Leave plans will continue to be implemented and managed for employees with annual leave in excess of 8 weeks. The City's Senior Management Group will continue to receive month end excessive leave reports.

Responsible Officer:
Sarah Pierson, Manager Governance and Corporate Services

Completion Date:
Ongoing

8. Preparation of budgets, budget reviews, accounts and reports required by the Act or the Regulations

8.1. Scope and approach

- Reviewed policy and procedure manual;
- Reviewed the procedures for preparation of the monthly financial statements, annual financial statements and annual Budget, including assessment of accounting policy, notes and applicable reporting requirements and efficiency of the process;
- Reviewed monthly financial statements ensuring presented to Council within two months and information contained within monthly financial statements in accordance with Regulation 34 of *Local Government (Financial Management) Regulations 1996*;
- Reviewed the mid-year budget review to ensure compliance with Regulation 33A of the *Local Government (Financial Management) Regulations 1996* and assessment of budgetary expenditure controls in place;
- Ensured prior year audit report and management letter have been presented to audit committee and Council; and
- Reviewed compliance with Part 6 of *the Local Government Act 1995* and *Local Government (Financial Management) Regulations 1996*.

8.2. Detailed findings and recommendations

Our review indicated key underlying policies and processes in relation to the preparation of budgets, budget reviews, accounts and reports required by the Act or Regulations are appropriate, in line with the best practice and operating effectively.

Accordingly, we have no recommendations to raise in respect to the preparation of budgets, budget reviews, accounts and reports required by the Act or Regulations.

9. Guidance on Risk Assessment

Risk is uncertainty about an outcome. It is the threat that an event, action or non-action could affect an organisation's ability to achieve its business objectives and execute its strategies successfully. Risk is an inherent component of all service activities and includes positive as well as negative impacts. As a result not pursuing an opportunity can also be risky. Risk types take many forms – business, economic, regulatory, investment, market, and social, just to name a few.

Risk management involves the identification, assessment, treatment and ongoing monitoring of the risks and controls impacting the organisation. The purpose of risk management is not to avoid or eliminate all risks. It is about making informed decisions regarding risks and having processes in place to effectively manage and respond to risks in pursuit of an organisation's objectives by maximising opportunities and minimising adverse effects.

The risk guidelines stated within Risk Management – Guidelines Standard AS / NZS ISO 31000-2018 and are based in the City of Busselton's Risk Management Framework.

Our guidance to risk classification in completing our review is as follows:

Measure of Likelihood of Risk

Likelihood is the chance that the event may occur given knowledge of the organisation and its environment. The following table provides broad descriptions to support the likelihood rating:

Rating	Description	Frequency
Rate	May occur but only in exceptional circumstances	1 in 10,000 – 100,000 Less than once in 15 years
Unlikely	Could occur at some time	1 in 1,000 to 10,000 At least once in 15 years
Possible	Should occur at some time in the future	1 in 100 – 1,000 At least once in five years
Likely	Will probably occur in most circumstances	1 in 10 – 100 At least once a year
Almost Certain	Is expected to occur in most circumstances	> 1 in 10 More than once a year

**Above Extracted from the City's Risk Management Framework.*

Measure of Consequence of Risk

Consequence is the severity of the impact that would result if the event were to occur. The following table provides broad descriptions to support the consequence rating:

DESCRIPTOR	Insignificant	Minor	Moderate	Major	Catastrophic
Public Health / OSH	Minor injury or first aid treatment cases	Injury / disease causing medical treatment	Serious injury / disease causing hospitalisation	Death or life threatening injury or multiple serious injuries causing hospitalisation	Multiple deaths or multiple life threatening injuries or severe permanent disabilities
Financial	< $ 50K	$ 50k to $250k	$250k to $1m	$1m to $5m	➢ $5m
Operational	Negligible impact to service delivery	Inconvenient delays with recovery within acceptable timeframe	Significant delays service delivery with unacceptable recovery time or inconvenient delays to major deliverables	Substantial delays to service delivery or Non achievement of major deliverables	Non achievement of key deliverables
Reputational	Minor adverse local community comment or complaint	Minor media interest with low news profile, e.g. local paper	Public embarrassment, moderate news profile (including TV)	High news profile, third party action, Local Member inquiry	Widespread national news profile, formal government inquiry
Environmental	Brief pollution but no environmental harm	Mino / transient environmental harm	Significant environmental harm with mid-term recovery	Significant long term environmental harm	Catastrophic, long term environmental harm

**Above Extracted from the City's Risk Management Framework.*

Risk Analysis Matrix – Level of Risk

Finding Rating for each audit issue was based on the following table:

		CONSEQUENCE				
		Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD	Almost Certain	M11	H16	E20	E23	E25
	Likely	M7	M12	H17	E21	E24
	Possible	L4	M8	M13	H18	E22
	Unlikely	L2	L5	M9	H14	H19
	Rate	L1	L3	M6	M10	H15

L = Low Risk
M = Medium Risk
H = High Risk
E = Extreme Risk
**Above Extracted from the City's Risk Management Framework.*



AMD
CHARTERED ACCOUNTANTS

12.5 Policy and Legislation Committee - 28/4/2021 - SOUTH WEST DESIGN REVIEW PANEL AND PROPOSED LOCAL PLANNING POLICY - DESIGN REVIEW

STRATEGIC GOAL	2. PLACE AND SPACES Vibrant, attractive, affordable
STRATEGIC OBJECTIVE	2.3 Creative urban design that produces vibrant, mixed-use town centres and public spaces.
SUBJECT INDEX	Local Planning Policy
BUSINESS UNIT	Development Services
REPORTING OFFICER	Manager Development Services - Lee Reddell
AUTHORISING OFFICER	Director, Planning and Development Services - Paul Needham
NATURE OF DECISION	Legislative: adoption of "legislative documents" such as local laws, local planning schemes and local planning policies
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Draft Design Review Policy

This item was considered by the Policy and Legislation Committee at its meeting on 28/4/2021, the recommendations from which have been included in this report.

COUNCIL DECISION AND COMMITTEE RECOMMENDATION AND OFFICER RECOMMENDATION

C2105/094 Moved Councillor K Hick, seconded Councillor P Carter

That the Council:

1. **Resolves to initiate for the purposes of public consultation a new Local Planning Policy 'Design Review' (Attachment A) by advertising the proposed policy in accordance with clause 4 of Part 2 of Schedule 2 - Deemed Provisions for Local Planning Schemes of the *Planning and Development (Local Planning Schemes) Regulations 2015.***

2. **Authorises the Chief Executive Officer to enter a memorandum of understanding with other participating South West local governments for the operation and management of a South West Joint Design Review Panel.**

3. **Consider allocating appropriate funding in the 2021/22 financial year budget to enable the establishment and operation of a South West Design Review Panel.**

CARRIED 8/0

EN BLOC

EXECUTIVE SUMMARY

Design Review Panels (DRPs) are groups of independent experts who advise on the design quality of a project or development proposal. DRPs have been operating in Australia for over 20 years and 80% of Perth's metropolitan local governments have established a DRP, which are now reinforced through the State Government's Design WA initiative. Officers have been working with other local authorities within the South West region to establish a South West Design Review Panel (SWDRP). A Memorandum of Understanding (MOU) and Terms of Reference (TOR) have been prepared by the participating local governments.

At this point in time, there is commitment from the following local governments:

- City of Bunbury
- Shire of Augusta Margaret River
- Shire of Harvey
- Shire of Collie

For design review to occur through the development assessment process, a Local Planning Policy (LPP) is required to:

1. Establish a 'head of power', in creating a relationship between the development assessment and design review process;
2. Outline the types of applications that will trigger design review; and
3. Address fees and charges.

BACKGROUND

City officers have been in ongoing discussions with other South West local government planners to gauge support for a shared DRP. The advantages of a SWDRP are lower costs and a larger pool of experts to draw from, thus improving the potential pool of expertise and lowering the risk of conflict of interest.

In order for the SWDRP to function, an MOU has been drafted between the participating local governments. The MOU is an agreement between the parties to work together to establish and maintain a DRP. The MOU states that participating local governments will contribute equally to funding an Expression of Interest (EOI) process and ongoing member recruitment costs, after which the DRP will operate on a 'user pays' basis, where costs incurred presenting an item (such as panel member sitting fees) will be borne by the local government presenting an item.

Further operational guidance will be provided by way of the TOR document which sets out the role and stature of the DRP, governance, member appointment and responsibilities, remuneration, and meeting procedures. Importantly, the TOR refer to an LPP to establish the types of applications that will require design review, as well as a process around fees and charges. An LPP is advantageous as it can be tailored from place to place to recognise the differences in development scale and frequency between local authorities.

The *Planning and Development (Local Planning Schemes) Regulations 2015* (Regulations) provide that LPPs may be prepared by a local government in respect of any matter relating to planning and development regulated through a local planning scheme (Scheme).

The intention of an LPP is to provide guidance to applicants/developers and the community in regard to the decision-making process, as well as to the local government when exercising discretion under a Scheme. An LPP must be consistent with the intent of the relevant Scheme provisions and cannot vary development standards or requirements set out in a Scheme or impose other mandatory requirements upon development.

LPPs are given due regard in the assessment of development applications and are listed as a "consideration of application by local government" when making determination of a development application under Schedule 2, clause 67 of the Regulations.

OFFICER COMMENT

Design review is an independent and impartial evaluation process through which a panel of experts on the built environment assesses the design of a proposal. DRPs can be used for development applications, major public works, structure plans, local development plans and design related local planning policies.

DRPs often contain a wide range of experience that can cover architecture, heritage, urban design, landscape architecture and planning. Their focus is principally on pre-lodgement advice, so that the DRP can influence the drafting of plans before the applicant is committed through fully worked up drawings.

State Planning Policy 7.0 Design of The Built Environment (SPP7.0) sets out the objectives, measures, principles and processes which apply to the design and assessment of built environment proposals through the Western Australian planning system. It also provides the overarching framework for a range of supporting State Planning Policies that provide design quality guidance for specific types of planning and development proposals.

The WAPC's *Design Review Guide* works with SPP7.0 to assist local governments with the establishment and operation of DRPs and supports consistency in the design review processes already in operation across the State.

SPP7.0 states that planning authorities, including local government, should establish or arrange access to design review processes to review:

- complex planning proposals;
- proposals identified as benefitting from design review; or
- matters as set out in the Regulations or recommended in the Design Review Guide.

Of the 29 metropolitan local governments in Perth, 25 have established DRPs. There are no DPRs in regional WA at the present time. The SWDRP will be a first for the State. The Office for the Government Architect (OGA), the Department of Planning, Lands and Heritage and the South West Development Commission are all supportive of establishing the joint SWDRP.

Proposed Local Planning Policy

The LPP is proposed to achieve three things:

1. establish a 'head of power', in creating a relationship between the development assessment and design review process;
2. outline the types of applications that will require design review; and
3. outline process on fees and charges.

As outlined above, the operational aspects of the DRP are dealt with through the MOU and TOR. Council approval for these documents is not proposed for these documents given their operational nature but it is a recommendation of this agenda item that Council authorises the Chief Executive Officer to enter the MOU on behalf of the City for the operation and management of the SWDRP.

Under Part 3 of the Deemed Provisions of the Regulations, the City must have regard to an LPP in determining a development application, meaning the proposed LPP will provide a relationship between the development assessment and design review process.

Part 4.1(e) of the draft LPP establishes the DRP role in the development application process as follows:

e) The Design Review Panel performs an advisory function and the decision maker shall give due regard to the panel's advice. The Design Review Panel does not report on compliance with the Scheme or policies.

Part 4.2 of the draft LPP sets the threshold for the types of applications that are referred to the DRP. It is important to strike a balance on what matters require DRP review. The lower the threshold, the higher the number of meetings and therefore cost. Too high a threshold and matters which would have benefited from design review might be overlooked.

The threshold included in the draft LPP is provided below:

4.2 THRESHOLD

a) The Design Review Process may apply to:

i) *All applications that meet the mandatory or optional requirement for Development Assessment Panels applications, where there is a design element that may impact on the character, appearance or streetscape of an area; or*

ii) Major development proposals where there is a design element that may have a significant impact on the character, appearance, or streetscape of an area at the discretion of the City; or

iii) Any other planning proposal (e.g. Scheme Amendment, Structure Plan, Precinct Plan, Local Planning Policy, Local Development Plan, Design Guidelines; or City project) relating to the design of development and places may be referred to the Design Review Panel at the discretion of the City.

Importantly, the above provides discretion for the Director of Planning and Development to require design review in instances where other criteria are not fully met but the proposal would benefit from design input. Outside of the development assessment process, the City can refer its own projects to the DRP at its discretion.

Normally, a proposal is reviewed three times by a DRP, but this is not mandatory. The draft LPP allows for three design reviews at no cost to the proponent, provided one of the reviews occurs before the lodgement of a development application. This is to incentivise early engagement with the panel, which increases opportunities for DRP feedback to be incorporated into a design at a lower cost to the proponent.

If no review is undertaken before lodgement, then only one review will be provided at no cost to the proponent. This may provide an incentive for the applicant to take on board the DRPs early feedback to avoid costs associated with a third review.

A Scheme Amendment may be appropriate at some point to introduce a trigger to require applicants of specified development to participate in the design review process, however this is not considered necessary at this time given the level of positive buy-in from applicants to the informal design review processes being undertaken on significant development within the City currently. Officers will liaise with the Department of Planning Lands and Heritage on this matter and seek to introduce a relevant provisions as part of the Scheme Review process if deemed necessary.

Statutory Environment

The key statutory environment is set out in the *Planning and Development Act 2005* and related subsidiary legislation, including the *City of Busselton Local Planning Scheme No. 21* (the Scheme) and the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations), especially Schedule 2 (Deemed Provisions) of the Regulations, which form part of the Scheme.

Division 2, clause 4 sets out the procedure for making a local planning policy.

Relevant Plans and Policies

State Planning Policy 7.0 Design of the Built Environment (SPP7.0)

SPP7.0 states that planning authorities should establish or provide access to design review processes for complex planning proposals. This is set out in the WAPC's "Design Review Guide – Guidance for Local Governments to set up and operate a design review process".

Financial Implications

Establishment and Maintenance Costs

Estimates put establishment costs at $5,000, covering advertising and circulating an Expression of Interest Campaign (EOI) and potential recruitment costs if administration staffing is outsourced. Costs for outsourcing administration support for the panel are likely to be $7000 per annum. These estimates are based on costings from the City of Stirling.

Other options that are being explored are 'rotating' the hosting of the DRP such that administrative support can be undertaken with existing staffing arrangements. This would involve the Cities of Bunbury and Busselton and the Shire of Augusta Margaret River taking turns in hosting the DRP meetings and undertaking the administrative tasks, including preparing and circulating agendas, invites, taking minutes and formulating recommendations with the Panel Chair. This would reduce this workload to once quarterly, which is manageable within existing staffing arrangements and would negate the staffing cost. The Shire is also exploring for external funding assistance to cover the establishment costs.

The total establishment and maintenance costs when shared between the five participating local governments may be $2,400 per year for the City, however these may be further reduced based on the above.

Meeting Costs

The TOR sets the remuneration of the Panel Members, which is at $500 per meeting for the chair and $400 per meeting for other members, inclusive of preparation time. Costings have been based on five panel members, but this may be adjusted down depending on the outcomes of the EOI process. Based on this approach, one meeting would cost $2,100.

The estimated budget for operating the SWDRP would be $33,070 annually based on 12 meetings per year. Under the terms of the draft MOU, the meeting costs would be divided equally between those local governments with matters to be considered at a particular meeting. This model is yet to be tested through an EOI process however so there may need to be changes to the model if there is insufficient interest based on offering only one fee per meeting, irrespective of the number of matters to be considered.

Based on the details above, a budget allocation of $35,470 for the 2021/22 financial year will be requested through the budgeting process. The costs to run the DRP process are expected to fluctuate dependent on the level of development proposed on any given year and could be returned to general municipal funds at budget review if unlikely to be expended in the financial year. It is noted that development applications the subject of Design Review are likely to generate significant application fees which would off-set the cost of the review. City projects referred to DRP would need to account for referral costs in the project budget.

It should be noted that support to advertise the draft LPP does not commit Council to supporting any particular budget allocation or prevent Council from reconsidering the timing of a DRP process based on financial constraints. It is also possible that the City could pursue a full cost recovery methodology.

Stakeholder Consultation

Part 2, Division 2 of the Deemed Provisions requires that a local government undertake consultation before adopting or amending a local planning policy (although a minor amendment can be made without consultation). At least 21 days must be allowed for the making of submissions.

It is proposed that consultation will be for a period of four weeks and will be undertaken as follows:

- Notices in the local newspaper for four consecutive weeks, as well as on the City's website, including the subject and nature as well as objectives of the proposed LPP; and
- A portal is to be created using the City's *YourSay* platform for the online lodgement of submissions.

Risk Assessment

An assessment of the potential implications of implementing the officer recommendation has been undertaken using the City's risk management framework, with risks assessed taking into account any controls already in place. No risks of a medium or greater level have been identified.

Options

As an alternative to the proposed recommendation, the Council could:

1. Choose not to initiate the Policy recommended to be initiated as part of this report; and/or
2. Modify the Policy before initiation.

CONCLUSION

It is recommended that Council support the proposed initiation of the LPP as described in this report.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

Implementation of the officer recommendation would involve public consultation of the initiated Policy as outlined in the consultation section of this report above. It is expected that this will commence within one month of the Council decision. A subsequent report will be presented to the Council following public consultation outlining the nature of any submissions received in relation to the Policy and any necessary modifications to the Policy (where applicable).

Local Planning Policy No. XX Design Review

Version: Proposed

1. Head of Power and Scope

This Policy has been adopted pursuant to *Planning and Development (Local Planning Schemes) Regulations 2015*, Schedule 2 (Deemed Provisions), Clause 4 and applies to development across the whole of the City.

The Panel will be established and operate consistent with the process outlined by the State Government Design Review Guide - Guidance for local governments (the Design Review Guide) as augmented by the adopted Terms of Reference.

2. Purpose

The purpose of this Policy is to:

2.1 Supplement the City's development assessment process and projects by providing design input from an independent panel of design experts; and

2.2 Ensure higher quality built form outcomes and an improved public realm through Design Review of development applications and City projects; and

2.3 Outline the types of applications of other planning documents that will require Design Review; and

2.4 Set out the weight afforded to the advice provided by a Panel; and

2.5 Establish process for fees and charges.

3. Interpretation

Terms should be interpreted in the same way as they would be interpreted if they were contained or within the Scheme, other than those terms defined below:

"Design Review" means an independent and impartial evaluation process in which experts on the built environment assess the design of a proposal.

"Panel" means a selected panel of experts who undertake a design review of a proposal.

"Scheme" means *City of Busselton Local Planning Scheme No. 21*

4. Policy Statement

4.1 THE DESIGN REVIEW PROCESS

a) The City will use the Panel to undertake design review for matters outlined at Part 4.2 of this policy;

b) The establishment and operation of the Panel is to occur in accordance with an adopted term of reference;

c) The Panel shall assess proposals against the design principles of *State Planning Policy 7.0 Design of the Built Environment* (WAPC, 2019);

d) The Panel performs an advisory function and the decision maker shall give due regard to the Panel's advice. The Panel does not report on compliance with the Scheme or policies;

e) The City encourages proponents to undertake design review early in the design concept stage, prior to the submission of a development application. A number of referrals to the Panel may be required depending on the complexity of the proposal.

4.2 THRESHOLD

a) The Design Review process may apply to:

i) All applications that meet the mandatory or optional requirement for Development Assessment Panels applications, where there is a design element that may impact on the character, appearance or streetscape of an area; or

ii) Major development proposals where there is a design element that may have a significant impact on the character, appearance, or streetscape of an area at the discretion of the City; or

iii) Any other planning proposal (e.g. Scheme Amendment, Structure Plan, Precinct Plan, Local Planning Policy, Local Development Plan, Design Guidelines; or City project) relating to the design of development and places may be referred to the Panel at the discretion of the City.

The purpose of the Panel is to provide independent, expert advice on the design quality of the proposed development to the applicant, City officers, Council and the decision maker, to encourage innovative, high-quality designs that meet the needs of all stakeholders and the community.

4.3 FEES AND CHARGES

a) No charge will be incurred by the proponent for up to three Design Reviews, provided at least one of those occur prior to lodgement of a development application.

b) The proponent shall reimburse the City for the sitting fees of Panel members for all subsequent Panel meetings.

c) Fees are to be paid to the City in accordance with Council's adopted schedule of fees and charges.

5. Review Details

Review Frequency		2 yearly		
Council Adoption	**DATE**		**Resolution #**	
Previous Adoption	**DATE**		**Resolution #**	

14.1 RFT 09-21 DUNSBOROUGH LAKES SPORTS PRECINCT - EARTHWORKS

STRATEGIC GOAL	2. PLACE AND SPACES Vibrant, attractive, affordable
STRATEGIC OBJECTIVE	2.2 Attractive parks and open spaces that create opportunities for people to come together, socialise and enjoy a range of activities.
SUBJECT INDEX	Tenders
BUSINESS UNIT	Major Projects and Facilities
REPORTING OFFICER	Major Projects - Contract Admin & Tech Officer - Natalie Walker
AUTHORISING OFFICER	Director, Engineering and Works Services - Oliver Darby
NATURE OF DECISION	Contractual: To enter into a contract e.g. a lease or the award of a tender etc.
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Published Under Separate Cover Confidential Tender Evaluation Report RFT 09-21 Dunsborough Lakes Sports Precinct Earthworks Attachment B Published Under Separate Cover Confidential Tender Evaluation - Panel Consensus Score Sheet Attachment C Published Under Separate Cover Confidential Tender Evaluation Sheet

COUNCIL DECISION AND OFFICER RECOMMENDATION

C2105/095 Moved Councillor K Hick, seconded Councillor P Carter

That the Council:

1. **Pursuant to RFT 09-21 Dunsborough Lakes Sports Precinct – Earthworks, accept the tender from Leeuwin Civil Pty Ltd for clearing and earthworks for the Dunsborough Lakes Sports Precinct (tendered price $698,599.50 exclusive of GST) as the most advantageous tender (Successful Tenderer), subject to minor variations to be negotiated in accordance with Regulation 20 of the Local Government (Functions and General) Regulations 1996 (FG Regs).**

2. **Delegate power and authority to the Chief Executive Officer to:**

    a. **negotiate and agree with the Successful Tenderer minor variations in accordance with Regulation 20 of the FG Regs, subject to such variations and final terms not exceeding the overall project budget; and**

    b. **enter into a contract with the Successful Tenderer for supply of the relevant goods and services.**

CARRIED 8/0

EN BLOC

EXECUTIVE SUMMARY

The City of Busselton invited tenders under Request for Tender RFT 09-21 Dunsborough Lakes Sports Precinct – Earthworks for a suitably experienced and qualified contractor to carry out clearing and earthworks for the Dunsborough Lakes Sports Precinct, Lot 40 Dunsborough Lakes Drive.

This report summarises the submissions received, and recommends that Council:

- endorse the outcome of the evaluation panel's assessment;
- delegate power and authority to the CEO to negotiate and agree final terms and conditions with the Successful Tenderer, Leeuwin Civil Pty Ltd; and
- enter into a contract for the clearing and earthworks for the Dunsborough Lakes Sports Precinct in accordance with the Specification.

BACKGROUND

Lot 40 Dunsborough Lakes Drive (formerly Lot 10 Commonage Road) is City-owned land purchased from the Water Corporation, zoned as special use and identified as open space for sport and recreation purposes within the Dunsborough sub-district.

The Dunsborough Lakes Sporting Precinct is identified in the City of Busselton Sports Facilities Analysis and Future Requirements (KA3 Action Plan Priority 1) and the Long Term Financial Plan 2020.

The precinct will be accessible from the future school which will be located on the corner of Dunsborough Lakes Drive and Diamante Boulevard. The overall design allows for potential future expansion of the precinct and the facility.

The precinct will include fit for purpose facilities for a mix of senior and junior participants for cricket, soccer, netball and basketball clubs, as well as other potential sporting groups in the future.

The project is jointly funded by the City of Busselton, the State Government's Community Sporting and Recreation Facilities Fund and a Commonwealth Government's Community Infrastructure.

The sports field procurement and construction has been separated into specialised components (clearing, earthworks, services pre-lay, drainage, irrigation and turf installation) to increase opportunities of local contractors. Construction of the sports fields will commence in May 2021 and is expected to be complete in October 2021.

The carpark and courts are planned to be constructed in late 2021 and the pavilion is planned to be constructed in 2022.

Consultation has been taking place with relevant sporting groups to develop the design of the precinct.

A brief scope of works for RFT 09-21 Dunsborough Lakes Sports Precinct – Earthworks is as follows:

- Clearing of approximately 1 hectare of bushland (canopy area) in line with clearing permit approval
- Removal of topsoil
- Subgrade preparation
- Earthworks fill
- Table drain construction

OFFICER COMMENT

The tender was issued as a public tender on Saturday 20 March 2021 and closed at 2:00pm on Tuesday 20 April 2021. The invitation to tender was advertised in 'The West Australian' and the 'Busselton Dunsborough Times'.

The City received three compliant tender submissions from the following companies:

- BCP Contractors Pty Ltd
- Cape to Cape Excavations
- Leeuwin Civil Pty Ltd

Assessment Process

In accordance with the City's procurement practices and procedures, tender assessments were carried out by a tender evaluation panel comprising City officers with relevant skills and experience.

The tender assessment process included:

- Tenders received were assessed against relevant compliance criteria. The compliance criteria were not point scored. Each submission was assessed on a *Yes/No* basis as to whether each criterion was satisfactorily met. All tenders were deemed compliant.

- The assessment of tenders against the following qualitative criteria; weighted according to the table below:

Criteria	**Weighting**
• Relevant Experience	25%
• Local Benefit	5%
• Demonstrated Understanding	20%

The qualitative criteria were scored depending on the extent of which each tenderer was able to appropriately satisfy each criteria. The tendered prices were then assessed together with the weighted qualitative criteria and the tenders scored and ranked to determine the most advantageous outcome to the City; based on principles of representing best value for money. That is, although price is a consideration, the tender containing the lowest price will not necessarily be accepted by the City and nor will the tender be ranked the highest on the qualitative criteria.

Summary of Assessment Outcomes

The outcome of the evaluation panel's assessment was as that Leeuwin Civil Pty Ltd was determined to be the highest ranked tenderer.

Leeuwin Civil offered a competitive price and displayed appropriate previous experience in completing earthwork projects of similar scale and scope. They also demonstrated a comprehensive understanding of the project requirements and program. Leeuwin Civil identified local community support for charities, schools and sports.

Evaluation Panel Recommendation

Based on the Evaluation Panel's assessment and overall ranking of the tenders, it is recommended that it is most advantageous to the City to accept the tender from Leeuwin Civil Pty Ltd (Preferred Tenderer).

Leeuwin Civil Pty Ltd, compared to the other Tenderers, demonstrated they have:

- Strong relevant experience in completing projects of a similar scale and scope.
- A comprehensive understanding of the project requirements.
- Supported local community groups, schools and charities.
- In this case, also the lowest price tenderer.

Statutory Environment

The contract value is greater than $500,000, therefore, in accordance with section 5.43(b) of the *Local Government Act 1995* (the Act), read with Delegation 3J, the tender is required to go before the Council.

In terms of section 3.57 of the Act, a local government is required to invite tenders before it enters into a contract of a prescribed kind under which another person is to supply goods and service. Part 4 of the *Local Government (Functions and General) Regulations 1996*:

- requires that tenders be publicly invited for such contracts where the estimated cost of providing the required goods and/or service exceeds $150,000; and

- under Regulations 11, 14, 18, 20 and 21A provides the statutory framework for inviting and assessing tenders and awarding contracts pursuant to this process.

With regard to the RFT, City officers have complied with abovementioned legislative requirements.

Relevant Plans and Policies

The City's purchasing policies, its occupational health and safety and asset management were all relevant to the RFT, and have been adhered to in the process of requesting and evaluating tenders.

Financial Implications

The estimated total value of the requirements for RFT 09-21 over the full contract term is $698,599.50 excluding GST. The value is slightly more than estimated but remains within the available budget allocation for this component of work.

RFT 09-21 forms part of the 2020/21 Dunsborough Lakes Sports Precinct budget allocation, which comprises of:

Community Facilities - City District Reserve	$400,000
Community Facilities - Dunsborough Lakes Reserve	$938,000
New Infrastructure Development Reserve	$700,000
Parks, Gardens & Reserves Reserve	$250,000
Total	**$2,288,000**

The project is jointly funded by the City of Busselton, the State Government's Community Sporting and Recreation Facilities Fund and a Commonwealth Government's Community Infrastructure.

Stakeholder Consultation

Consultation with the relevant sporting groups has taken place to develop the detailed design of the precinct. The sporting groups consulted have included:

- Dunsborough Cricket Club
- Dunsborough Towners Football Club (Senior Soccer)
- Dunsborough Soccer Club (Juniors)
- Dunsborough Coasters Netball
- Dunsborough Basketball Club
- Dunsborough Football Club

Risk Assessment

An assessment of the potential implications of implementing the officer's recommendation has been undertaken using the City's risk management framework, with the intention being to identify risks which, following implementation of controls, are identified as medium or greater. There are no such risks identified, with the Preferred Tenderer assessed as being capable of delivering the services to a suitable service level.

Options

As an alternative to the proposed recommendation, the Council could:

1. Award the tender to an alternative tenderer. In the view of the officers, this could result in the tender being awarded to a tenderer that is not most advantageous to the City.
2. To not award the tender. This would mean re-advertising the tender, resulting in significant delays to contract award of the earthworks, which would impact on the timing of other sports precinct works. This may have a reputational risk to the community if the sports fields are not being ready for the 2022 sporting season.

For the reasons provided in this report, the abovementioned options are not recommended.

CONCLUSION

It is recommended that Council accept the tender RFT 09-21 Dunsborough Lakes Sports Precinct – Earthworks from Leeuwin Civil Pty Ltd as the most advantageous to the City, subject to minor variations to be negotiated by the CEO, not exceeding the overall project budget.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

The selection of the Successful Tenderer can be made immediately after the Council has endorsed the officer recommendation, subject to successful negotiation in accordance with the officer recommendation.

Should Council adopt the officer recommendation, it is anticipated that the contract for construction will commence in late May 2021.

17.1 COUNCILLORS' INFORMATION BULLETIN

STRATEGIC GOAL	6. LEADERSHIP Visionary, collaborative, accountable
STRATEGIC OBJECTIVE	6.1 Governance systems, process and practices are responsible, ethical and transparent.
SUBJECT INDEX	Councillors' Information Bulletin
BUSINESS UNIT	Executive Services
REPORTING OFFICER	Reporting Officers - Various
AUTHORISING OFFICER	Chief Executive Officer - Mike Archer
NATURE OF DECISION	Noting: The item is simply for information purposes and noting
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Current Running State Administrative Tribunal Reviews Attachment B Department of Communities Letter of Thanks Attachment C Letter from Department of Water and Environmental Regulation

COUNCIL DECISION AND OFFICER RECOMMENDATION

C2105/096 Moved Councillor K Hick, seconded Councillor P Carter

That the items from the Councillors' Information Bulletin be noted:

17.1.1 State Administrative Tribunal Reviews

17.1.2 Correspondence from Busselton Old Time Dance Inc.

17.1.3 Correspondence from US Consul General David J Gainer following recent visit to Busselton

17.1.4 Correspondence from Department of Communities

17.1.5 Correspondence from Department of Water and Environmental Regulation

17.1.6 Correspondence from Hon Alannah MacTiernan MLC - Election Win and Priorities

17.1.7 Correspondence from Hon Dave Kelly MLA Minister for Water; Forestry; Youth

CARRIED 8/0

EN BLOC

EXECUTIVE SUMMARY

This report provides an overview of a range of information that is considered appropriate to be formally presented to the Council for its receipt and noting. The information is provided in order to ensure that each Councillor, and the Council, is being kept fully informed, while also acknowledging that these are matters that will also be of interest to the community.

Any matter that is raised in this report as a result of incoming correspondence is to be dealt with as normal business correspondence, but is presented in this bulletin for the information of the Council and the community.

INFORMATION BULLETIN

17.1.1 State Administrative Tribunal Reviews

A summary of the Current State Administrative Tribunal reviews, as at 31 March 2021 is provided at Attachment A.

17.1.2 Correspondence from Busselton Old Time Dance Inc.

"A big thank you from all our members from the Old Time Dance for the City's kind donation from the fund. The City's donation made it possible for us to have a very successful festival. We were able to donate $2,000 to the Royal Flying Doctors. Our sincere thanks for your continual support."

Busselton Old Time Dance Inc. were successful in receiving a $250 contribution from the City's Donations, Contributions and Subsidies fund in March 2021.

17.1.3 Correspondence from US Consul General David J Gainer following recent visit to Busselton

"Dear Grant,
It was a pleasure to meet you and Mike during my recent visit to Busselton. I enjoyed the opportunity to learn more about the City and the positive work you are doing within the region. I value you taking the time to share your insights with me, and I look forward to continuing to explore opportunities to grow U.S. partnerships within Busselton."

17.1.4 Correspondence from Department of Communities

Correspondence has been received from the Department of Communities, thanking the City for its assistance during the recent Yallingup Bushfires. A copy of the correspondence is provided at Attachment B.

17.1.5 Correspondence from Department of Water and Environmental Regulation

A Notice of a Classification letter, issued under s.15 of the *Contaminated Sites Act 2003* relating to the former Dunsborough landfill site has been received. A copy of the correspondence is provided at Attachment C.

17.1.6 Correspondence from Hon Alannah MacTiernan MLC - Election Win and Priorities

"Dear Grant,
Thank you and Mike for your kind words on my election and re-appointment as Minister. I very much look forward to meeting with you soon to discuss ways we can continue to work together for the benefit of our community."

17.1.7 Correspondence from Hon Dave Kelly MLA Minister for Water; Forestry; Youth

"Dear Grant,
Thank you for your letter of congratulations. It is an honour to be reappointed as a Minister in the McGowan Government. I look forward to continuing to work with the City of Busselton on matters related to the Water, Forestry and Youth portfolios."

As at 22 April 2021

APPLICATION (Name, No. and City File Reference)	PROPERTY	DATE COMMENCED	DECISION BEING REVIEWED	RESPONSIBLE OFFICER	STAGE COMPLETED	NEXT ACTION AND DATE OF ACTION AS PER SAT ORDERS	DATE COMPLETED / CLOSED
CITY OF BUSSELTON							
Lindberg v City of Busselton	4822 Bussell Highway, Busselton	October 2019	Review of a decision to give a direction under s.214.	Ben Whitehill / Lee Reddell	• Directions hearing on the 8 November 2019 against the decision of the City to give a direction under s.214. • The matter was adjourned to a further directions hearing on 29 November 2019 in order to determine whether the application is misconceived or lacking in substance pursuant to s.47 of the *State Administrative Tribunal Act 2004* • Directions hearing on the 29 November 2019 where it was resolved: - The application is amended by substituting Mr Doug Hugh Lindberg as applicant in place of Mr Johnson. - The matter is listed for an on-site mediation on 6 January 2020. - Mr Michael Johnson is invited to attend and participate in the mediation. • Mediation on 6 January 2020 where it was resolved that : - the applicant is to provide additional information to the respondent by 3 February 2020; - The matter is listed for mediation on 13 February 2020. • Mediation on 13 February where, following further discussion with the landowners and Mr Johnson, it was resolved to adjourn the proceeding back to a further directions hearing on 17 April 2020. • Directions hearing on 17 April was vacated and listed for a directions hearing on 5 June 2020. • Directions hearing on 5 June was vacated and listed for a directions hearing on 7 August 2020. • Directions hearing on 7 August 2020 was vacated and listed for a directions hearing on 6 November 2020. • Directions hearing on 6 November 2020 was vacated and listed for a directions hearing on 5 February 2021. • Directions hearing on 5 February 2021 was vacated and listed for a directions hearing on 7 May 2021.	Directions Hearing 7 May 2021	
JOINT DEVELOPMENT ASSESSMENT PANEL							
NIL							

WESTERN AUSTRALIAN PLANNING COMMISSION							
Newport Geographe v WAPC	Port Geographe	November 2020	Review of structure plan / subdivision conditions.	State Solicitors Office / Paul Needham	• Mediation Scheduled for 10 December 2020 • 10 December 2020 mediation hearing resulted in scheduling of further mediation hearing for 3 March 2021 (the City attended the 10 December and 3 March hearings) • 3 March mediation hearing resulted in a s31 order for WAPC reconsideration by 18 May 2021, and a directions hearing scheduled for 28 May 2021. City of Busselton may also be asked to reconsider its recommendations to the WAPC on the proposals. If that occurs, formal Council consideration would be appropriate, rather than a delegated decision.	• WAPC reconsideration by 18 May 2021 (may be preceded by Council reconsideration of the City's recommendation to the WAPC). • Directions hearing 28 May 2021.	

Government of **Western Australia**
Department of **Communities**

City of Busselton
Application No | Receipt No
CIO ID
12 APR 2021
Property ID | Doc ID
Retention
City of Busselton

File No:
Enquiries: 6277 3666 / Roma Boucher

10 March 2021

Msrs Mike Archer, CEO and Grant Henley, Mayor
City of Busselton
Post Office Box 1
BUSSELTON WA 6280

Dear Mike and Grant,

The Department of Communities (The Department) Busselton office would like to thank the City of Busselton for its assistance with opening the Geographe Leisure Centre for the recent Yallingup Bushfires.

In particular, well done to Blake Moore, Community Emergency Services Manager and kind thanks to Ian McDowell, Dave Goodwin and James from the Facilities Team for their assistance in opening the Geographe Leisure Centre as an evacuation centre during the evening of Saturday, 6th February 2021.

Could the Department's letter please be passed onto the Local Emergency Management Committee members.

Thank you again for your assistance.

Yours sincerely

Amber Fabry
Regional Executive Director
Department of Communities
South West

Government of Western Australia
Department of Water and Environmental Regulation

Your ref:
Our ref: DMO 8451
Enquiries: Penny Woodberry
Phone: 1300 762 982
Fax: (08) 6364 7001
Email: info@dwer.wa.gov.au

Greg Simpson
Environmental Management Coordinator
City of Busselton
Locked Bag 1
Busselton WA 6280

Dear Sir/Madam

NOTICE OF A CLASSIFICATION OF A KNOWN OR SUSPECTED CONTAMINATED SITE GIVEN UNDER SECTION 15 OF THE *CONTAMINATED SITES ACT 2003*

The site detailed below (the site), was classified by the Department of Water and Environmental Regulation (the department) under the *Contaminated Sites Act 2003* (the Act) on 28 November 2019 as *'contaminated – remediation required'*:

- That portion of Lot 352 on Deposited Plan 56267 as shown as Subject A on Deposited Plan 419206 on certificate of title LR3148/649, Dunsborough 6281
- That portion of Lot 351 on Deposited Plan 56267 as shown as Subject C on Deposited Plan 419206 on certificate of title LR3148/648, Dunsborough 6281
- That portion of Lot 272 on Deposited Plan 190994 as shown as Subject B on Deposited Plan 419206 on certificate of title LR3100/879, Dunsborough 6281

Following the submission of further information, the site has been re-classified.

This notification is being sent to you in accordance with section 15(1) of the Act on the grounds that you, as the recipient, are one or more of the following:

(a) owner of the site (contact details sourced from the current certificate of title);
(b) occupier of the site;
(c) relevant public authority;
(d) person who, in the CEO's opinion, there is particular reason to notify;
(e) person who made the report under section 11 or 12; and
(f) person who, in the CEO's opinion, may be responsible for remediation of a site classified as *contaminated – remediation required.*

Site Re-Classification

Category of site classification: Remediated for restricted use

Date of site classification: 20/04/2021

Reasons for classification: This site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006.

The site was first classified under section 13 of the Act based on information submitted to the department by February 2016. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by 20 January 2021.

The site was reported because it has been used as a landfill from the 1960s to 1989. Landfilling is a land use which has the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Environment Regulation [DER], 2014).

Contamination assessments were carried out in 2015, 2016 and 2019. Buried waste, likely to include asbestos-containing materials (ACM), is present at the site and fragments of ACM were present in surface soils at quantities exceeding those specified in the 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' (Department of Health, May 2009).

Waste material on site was found to be generating landfill gases such as methane, carbon dioxide and hydrogen sulphide, at concentrations and flows below corresponding 'Gas Screening Levels', as published in 'Assessing risks posed by hazardous ground gases to buildings' (CIRIA 2007). Landfill gas was found to pose a 'very low risk' at or beyond the site boundary.

Groundwater monitoring carried out at a location inferred to be down gradient of the buried waste found that nutrients (nitrogen and phosphorus) and hydrocarbons were present at concentrations below health-based and ecological assessment levels as published in the 'National Environment Protection (Assessment of Site Contamination) Measure 1999' (the NEPM) and the "Australian and New Zealand Guidelines for Fresh and Marine Water Quality" (Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ), 2000).

Remedial works comprising a series of surface inspections and hand picking to remove fragments of ACM at the site were carried out from 2015 to 2019. A capping layer comprising a layer of a minimum of 100 mm of clean fill and mulch (and erosion control matting to steeper slopes) was placed over degraded areas of the site where buried waste is present and revegetated in stages from 2017 to 2020.

An Ongoing Site Management Plan (OSMP) (dated December 2020) outlines management measures for maintenance of the capping layer and vegetation at the site, and to restrict any activity (such as excavation) that may disturb the capping layer or expose buried waste. A risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under passive recreational use provided that the Site Management Plan is implemented.

Based on the information provided, the site is suitable for passive recreational use as long as the OSMP is implemented, but may not be suitable for more sensitive land uses (e.g. residential housing or child care centres).

The site is contaminated and has been remediated such that it is suitable for passive recreational use subject to ongoing implementation of the OSMP, but may not be suitable for a more sensitive land use. Therefore, the site is classified as 'remediated for restricted use'.

A memorial stating the site's classification will be placed on the certificate of title, and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use.

The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the

contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, the department recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use.

Other Relevant Information:

Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification.

Where the land is part of a transaction - sale, mortgagee or lease agreement, the land owners MUST PROVIDE WRITTEN DISCLOSURE (on the prescribed Form 6) of the site's status to any potential owner, mortgagee (e.g. financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department.

Action Required:

Please refer to the Restrictions on Use applicable to the site.

General Information

The nature and extent of contamination and any restrictions on the use of the land, if applicable, are listed in Attachment A.

Information in relation to the classification of the site is available free of charge as a summary of records via the Contaminated Sites Database at www.der.wa.gov.au/contaminatedsites.

In some instances the department has had to classify sites based on historical information. A site may be re-classified at any stage when additional information becomes available, for example where a new investigation or remediation report completed in accordance with the department's 'Contaminated Sites Guidelines' and the *National Environment Protection (Assessment of Site Contamination) Measure 1999*, is submitted to the department. The current site classification is the classification most recently conferred on the site.

Memorials

In accordance with section 58(3) of the Act, the department will give notice to Landgate to withdraw the current memorial(s) lodged against the Certificate(s) of Title relating to the site. Parcel(s) without a registration number or certificate of title will not have a memorial lodged against them until a certificate of title has been created. Once complete, confirmation of the lodgement of the memorial(s) will be forwarded to the following people:

(a) each owner,
(b) Western Australian Planning Commission;
(c) CEO of the Department of Health;
(d) Local Government Authority;
(e) relevant scheme authority.

Given that memorial(s) will be lodged against the site, the Western Australian Planning Commission (WAPC) may not approve the subdivision of the land under Section 135 of the *Planning and Development Act 2005*, or the amalgamation of that land with any other land without seeking, and taking into account, the advice of the department as to the suitability of the land for subdivision or amalgamation. Furthermore, a responsible authority (e.g. Local Government

Authorities) may not grant approval under a scheme for any proposed development of the land without seeking, and taking into account, advice from the department as to the suitability of the proposed development.

Disclosure upon sale / lease / mortgage of the site

Where the land is part of a transaction – sale, mortgage or lease agreement – and is classified as

- *contaminated – remediation required;*
- *contaminated – restricted use; or*
- *remediated for restricted use;*

land owners MUST PROVIDE WRITTEN DISCLOSURE (on the prescribed Form 6 enclosed) of the site's status to any potential owner, mortgagee (e.g. financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department.

Important note: Failure to provide written notice is an offence and carries a penalty of up to $125,000 and a daily penalty of $25,000.

Appealing the Site Classification

All site classifications given by the department are appealable. However, only certain people can lodge a valid appeal. The people who can lodge a valid appeal varies, depending on the classification category, as detailed in Fact Sheet 4: *Site classifications and appeals*. Appeals need to be lodged in writing with the Contaminated Sites Committee at Forrest Centre, Level 22, 221 St Georges Terrace, Perth WA 6000, within **45 days** of being given this notification. The appeal should set out the appellant's relationship to the site, and must include the grounds and facts upon which it is based. An appeal fee (currently $45) applies.

To find out more about the appeal process, see the Contaminated Sites Committee website at www.csc.wa.gov.au or contact the office of the Committee on (08) 6364 7264.

For further information on all aspects of site classification, please refer to Fact Sheet 4 and the 'Contaminated Sites Guidelines', which are available from the department's website at www.der.wa.gov.au/contaminatedsites or by contacting the Contaminated Sites Information Line on 1300 762 982.

Yours sincerely

MM Brierley

Michelle Brierley, A/Manager

CONTAMINATED SITES REGULATION
Delegated Officer under section 91
of the *Contaminated Sites Act 2003*

20/04/2021

Enc. Attachment A – Nature and Extent and Restrictions on Use.

Fact Sheet 4: *Site classifications and appeals*
Fact Sheet 5: *Buyer beware – buying and selling contaminated land*
Form 6 – Land Owner's Disclosure Before Completion of Land Transaction

ATTACHMENT A – Nature and Extent and Restrictions on Use

- That portion of Lot 352 on Deposited Plan 56267 as shown as Subject A on Deposited Plan 419206
- That portion of Lot 351 on Deposited Plan 56267 as shown as Subject C on Deposited Plan 419206
- That portion of Lot 272 on Deposited Plan 190994 as shown as Subject B on Deposited Plan 419206

Nature and Extent: Buried waste from historical landfilling, likely including asbestos-containing material (ACM), is present beneath a capping layer of revegetated clean fill and mulch at the site.

Restriction on Use: The land use of the site is restricted to passive recreational use with minimum access to soils, which excludes sensitive uses with accessible soil such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed including changes to landforms or construction of infrastructure or for a more sensitive use such as non-passive recreational open space, residential use or childcare centres without further contamination assessment and/or remediation.

Due to the presence of buried waste beneath the site, the ongoing site management plan must be implemented which includes restriction of disturbance of capping layer and soil.

DMO8451 Former Dunsborough Landfill



LEGEND

☐ Cadastre

N

0 ~150 m

Scale 1:6342
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Prepared by: woodbep
Prepared for:
Date: 25/02/2021 12:32:14 PM

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.

Government of Western Australia
Department of Water and Environmental Regulation

WA Crown Copyright 2002

ITEMS FOR DEBATE

12.4 Policy and Legislation Committee - 28/4/2021 - PROPOSED SCHEME AMENDMENT NO. 49 (WESTERN RINGTAIL POSSUM HABITAT PROTECTION SPECIAL CONTROL AREA) & PROPOSED LOCAL PLANNING POLICY (LPP XX : WESTERN RINGTAIL POSSUM HABITAT PROTECTION AREA) - CONSIDERATION FOR INITIATION FOR ADVERTISING

STRATEGIC GOAL	3. ENVIRONMENT Valued, conserved and enjoyed
STRATEGIC OBJECTIVE	3.1 Development is managed sustainably and our environment valued.
SUBJECT INDEX	Local Planning Schemes and Amendments
BUSINESS UNIT	Strategic Planning
REPORTING OFFICER	Planning Officer - Joanna Wilkinson
AUTHORISING OFFICER	Director, Planning and Development Services - Paul Needham
NATURE OF DECISION	Legislative: to adopt legislative documents e.g. local laws, local planning schemes, local planning policies
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Dunsborough - Existing Zoning Attachment B Dunsborough - Proposed Zoning Attachment C West Busselton - Existing Zoning Attachment D West Busselton - Proposed Zoning Attachment E East Busselton - Existing Zoning Attachment F East Busselton - Proposed Zoning Attachment G LPP XX WRP Habitat Protection Area Attachment H WRP Working Group Directions Paper

This item was considered by the Policy and Legislation Committee at its meeting on 28/4/2021. The item lapsed for want of a quorum.

DISCLOSURE OF INTEREST	
Date	12 May 2021
Meeting	Ordinary Council
Name/Position	Cr Grant Henley, Mayor
Item No./Subject	Item No. 12.4 'Policy and Legislation Committee - 28/4/2021 - Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration for Initiation for Advertising'
Type of Interest	Impartiality Interest
Nature of Interest	I own property which is located inside the affected area.

DISCLOSURE OF INTEREST	
Date	12 May 2021
Meeting	Ordinary Council
Name/Position	Cr Paul Carter, Councillor
Item No./Subject	Item No. 12.4 'Policy and Legislation Committee - 28/4/2021 - Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration for Initiation for Advertising'
Type of Interest	Impartiality Interest
Nature of Interest	A person to whom I am closely associated owns a property which is located inside the affected area.

DISCLOSURE OF INTEREST	
Date	12 May 2021
Meeting	Ordinary Council
Name/Position	Cr Sue Riccelli, Councillor
Item No./Subject	Item No. 12.4 'Policy and Legislation Committee - 28/4/2021 - Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration for Initiation for Advertising'
Type of Interest	Impartiality Interest
Nature of Interest	A person to whom I am closely associated owns a property which is located inside the affected area.

DISCLOSURE OF INTEREST	
Date	12 May 2021
Meeting	Ordinary Council
Name/Position	Cr Ross Paine, Councillor
Item No./Subject	Item 12.4 'Policy and Legislation Committee - 28/4/2021 - Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration For Initiation For Advertising'
Type of Interest	Financial Interest (Indirect)
Nature of Interest	I own a property which is located inside the affected area.

5.58pm: At this time, Councillor Paine left the meeting.

Councillor Henley foreshadowed an alternative recommendation prior to the meeting. In accordance with the City's Standing Orders, it was moved prior to the officer recommendation, which was:

OFFICER RECOMMENDATION

That the Council resolves to:

I. In pursuance of the *Planning and Development (Local Planning Schemes) Regulations 2015*, initiate Amendment No. 49 to the *City of Busselton Local Planning Scheme No. 21* for community consultation, for the purposes of:

1. Amending Part 5 *"Special Control Areas"* by inserting new clause 5.15 as follows –

5.15 WESTERN RINGTAIL POSSUM HABITAT PROTECTION AREA

5.15.1 PURPOSE

The purpose of this special control area is to designate an area that is known to include trees of the species WA Peppermint which provide core habitat for the critically endangered Western Ringtail Possum, and to assist in the protection and enhancement of this habitat.

5.15.2 OBJECTIVES

The objectives of this special control area are to –

(a) Provide for site planning that maximises retention of existing mature and healthy WA Peppermint on affected sites, and protects the ongoing health of existing WA Peppermint trees on adjoining sites and road reserves.

(b) Provide a framework so that the protection of Western Ringtail Possum habitat is given high regard in decision-making.

(c) Provide measures to offset the removal of mature and healthy WA Peppermint, where removal is approved.

(d) Support the continuing and ongoing consolidation and expansion of urban development, consistent with the aims of this Scheme, and the objectives of the zones which apply to any affected site.

5.15.3 DEFINITIONS

For the purposes of clause 5.15, the meaning of terms used are as follows –

"LPP No. XX" refers to the City's Western Ringtail Possum Habitat Protection Area Policy (as amended).

"offset planting" means the planting of replacement WA Peppermint to offset the loss of such vegetation that has been approved for removal.

"removal" means the pruning, lopping, transplanting or root removal of WA Peppermint vegetation.

"WA Peppermint" means all vegetative parts of the tree species *Agonis flexuosa* including canopy, trunks, branches, and root system.

5.15.4 PROVISIONS

(a) The following provisions apply to all land shown on the Scheme Map as being within the "Western Ringtail Possum Habitat Protection Area" special control area.

(b) There shall be no removal of WA Peppermint without the prior development approval of the local government, where:

(i) a tree has a trunk diameter of 100mm or greater when measured at 1.4 metres above ground level (see LPP No. XX); or

(ii) removal exceeds a canopy area of 50m² in any 12 month period *(50m² is approx. 7m x 7m)*; or

(iii) there is an impact on roots or canopy in a tree protection zone, as described in LPP No. XX.

(c) In consideration of an application for development approval, the local government may vary site and development requirements to facilitate the preservation of WA Peppermint in accordance with clause 4.5 of the Scheme and the approved R-Code variations within LPP No. XX.

(d) Development approval for the removal of the WA Peppermint may be granted where the local government is satisfied that the applicant has demonstrated that:

(i) it is not possible to avoid removal; and

(ii) all reasonable steps to minimise removal are being taken.

(e) In granting development approval, the local government may apply conditions that require one or more of the following measures:

(i) Retention of WA Peppermint, whereby a tree protection plan shall be prepared in accordance with LPP No. XX;

(ii) Offset planting of WA Peppermint trees in accordance with guidelines and planting rates specified in LPP No. XX;

(iii) Payment in lieu of offset planting, in accordance with the rates specified in LPP No. XX;

(iv) A Notification, pursuant to Section 70A of the *Transfer of Land Act 1893*, to be placed on the Certificate(s) of Title advising that there is a presumption against removal of WA Peppermint without the prior development approval of the local government, in accordance with the relevant provisions of this Scheme.

(f) Where the proposed removal has been assessed and approved under State or Federal environmental legislation, then the provisions of this special control area do not apply.

(g) The removal of WA Peppermint that is dead, dying or poses a hazard to property or life, or is required to meet bushfire management requirements, is exempt from the requirements of sub-clauses 5.15.4 (b) - (e). The local government may require that the person responsible for the removal demonstrate that it was necessary for this reason.

2. Modifying clause 5.1.1 *"Operation of Special Control Areas"* by including a new area – *"Western Ringtail Possum Habitat Protection Area"* after the Drive-Through Facility Control Area as listed.

II. Amend the Scheme Map by identifying *"Western Ringtail Possum Habitat Protection Area"* as shown on the Scheme amendment map and illustrated at Attachments B, D and F.

III. Pursuant to Regulation 35 (2) of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations), determine that Amendment No. 49 is a standard amendment in accordance with r. 34 of the Regulations as it is an amendment that is consistent with a local planning strategy for the scheme that has been endorsed by the Commission.

IV. Note that, as the Amendment is in the opinion of the Council consistent with Part V of the *Planning and Development Act 2005* (Act) and Regulations made pursuant to the Act, upon preparation of necessary documentation, the Amendment be referred to the Environmental Protection Authority (EPA) as required by the Act, and on receipt of a response from the EPA indicating that the Amendment is not to be subject to formal environmental assessment, be advertised for a period of 42 days, in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015*. In the event that the EPA determines that the Amendment is to be subject to formal environmental assessment, this assessment is to be prepared prior to advertising of the Amendment.

V. Initiate for the purpose of public consultation a new Local Planning Policy – LPP XX: Western Ringtail Possum Habitat Protection Area, as set out at Attachment G, by advertising the Local Planning Policy in accordance with clause 4 of Part 2 of Schedule 2 – Deemed Provisions for Local Planning Schemes of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

COUNCIL DECISION AND ALTERNATIVE RECOMMENDATION

C2105/097 Moved Councillor G Henley, seconded Councillor P Carter

That the Council defers consideration of Item 12.4 'Policy and Legislation Committee - 28/4/2021 - Proposed Scheme Amendment No. 49 (Western Ringtail Possum Habitat Protection Special Control Area) & Proposed Local Planning Policy (LPP XX : Western Ringtail Possum Habitat Protection Area) - Consideration for Initiation for Advertising' to allow for further explanatory information to be provided to Councillors and for current planning matters to be considered prior to introducing this proposed amendment, with the item to be returned to Council by the end of 2021.

CARRIED 7/0

Reasons: Deferral of this item is proposed to allow for further information to be provided to Councillors and to allow consideration of other current planning matters, before introducing another broad scheme amendment.

I have observed significant stress in our planning area given the volume, complexity and contentious nature of developments currently being assessed. Throwing in another broad scheme amendment such as this would not, I believe, be wise.

I am also aware that not all Councillors have had the benefit of the significant amount of briefings and consultation I have on this issue. I would therefore like to see this item deferred to ensure all Councillors have enough time to understand the item.

EXECUTIVE SUMMARY

Council is asked to consider initiating Scheme Amendment No. 49 which proposes a new special control area 'Western Ringtail Possum Habitat Protection Area', and a new Local Planning Policy 'LPP XX: Western Ringtail Possum Habitat Protection Area' (LPP XX). Existing zoning is illustrated at Attachments A, C and E.

Amendment No. 49 and LPP XX will be bound together in practice, meaning that the policy will provide operational detail for the implementation of the Scheme amendment.

Amendment No. 49 and LPP XX are recommended to be adopted for the purposes of public advertising.

BACKGROUND

During 2006/07 Councillors and staff, in conjunction with the Federal Department of Environment, Water, Heritage and Arts, began thinking about how the habitat of *Pseudocheirus occidentalis* or Western Ringtail Possum (WRP) in the district might better be protected. Between 2008 and 2010 various Council actions included specific items within the 2008/09 financial year budget, the 2008/09 Corporate Plan, and the 2010-2020 Strategic Plan. The first formal Council decision (C0905/186) to support these actions was made at its meeting of 27 May 2009:

> *That the Council requires the CEO to consider how protection can be provided for individual peppermint trees in the area designated as the core habitat for the Western Ringtail Possum as prescribed by the Federal Department of Environment, Water, Heritage and Arts. That this consideration be directed to the development of a policy and/or Town Planning Scheme amendment that would require where possible the retention of individual and/or groups of peppermint trees, particularly those that are not afforded protection under existing DEC controls. The Policy and/or Town Planning Scheme Amendment mechanism be reported back with the draft content as part of either the next scheduled Policy (Planning) Review of the Scheduled Town Planning Scheme Review.*

A WRP Habitat Protection Plan was completed in November 2009 which highlighted a number of elements affecting WRP habitat, as well as draft Scheme provisions to protect the habitat. On 25 May 2011, Council resolved (C1105/170) to note the WRP Habitat Protection Plan and support its use as a background document to assist with further planning and management of issues relating to WRP habitat; and to amend Town Planning Scheme No. 20 (TPS 20) by introducing a WRP habitat protection special control area. This lead to a Council resolution (C1212/357) on 12 December 2012 to adopt Amendment No. 146 to TPS 20, which proposed the introduction of a WRP Habitat Protection Area.

On 30 July 2014, following assessment by the Western Australian Planning Commission (WAPC), the City received notification that Amendment No. 146 had been refused. The reasons for refusal were:

(i) The WAPC does not support provisions which would effectively 'up-code' individual development sites, beyond that which could be achieved under the prescribed R-Code. Such an approach would be contrary to the expectations of the local community and inconsistent with orderly planning.

(ii) The provisions have a primary focus on cash or planting offsets rather than mechanisms to ensure flexible application of development standards to achieve colocation of habitat trees and development on the same site.

(iii) Provision 6(b) would appear to incentivise the removal of vegetation, contrary to the intent of the provisions.

(iv) The modifications necessary to suitably amend the proposal would be time consuming, may warrant advertisement of the Amendment and as such would jeopardise the timely introduction of Scheme 21.

(v) The proposal provisions are unnecessarily complex and would be subject to misinterpretation by the community.

Each of these reasons has been taken into consideration during the drafting of this Amendment, with more detail provided in the 'Officer Comment' section of this report.

During 2016/2017, the conservation status of WRP was elevated at both State and Federal level to Critically Endangered, and this provided impetus for Council to recommence measures relating to WRP habitat protection through the Scheme.

At its meeting on 10 May 2017, the Council resolved (C1705/105):

That the Council support the formation by the CEO of a 'Western Ringtail Possum Working Group', with the membership and role of the Group to be as follows:

1. Membership - Interested Councillors and relevant staff; and

2. Role –

a) Researching and receiving briefings from stakeholders on WRP issues;

b) Forming a view on what the City's role and approach to WRP issues should be, both in terms of actions by the City itself, but also in terms of advocating for action at State and/or Federal level; and

c) Briefing and seeking Council support for the Group's findings and proposed direction.

Subsequently, the Western Ringtail Possum Working Group (WRPWG) was formed and discussions were held with key stakeholders, resulting in the development of a Directions Paper (Attachment G). The intent of this Directions Paper is to form the basis for a WRP habitat protection strategy, and relevant to this proposal, key findings of the Directions Paper included:

1. *Habitat in and around the Busselton and Dunsborough urban areas is likely to be important to the future survival of the WRP as a species.*
2. *Whilst WRP do feed on other plant species, mature WA Peppermint trees (Agonis Flexuosa) are important for providing food and shelter for WRP.*
3. *The current approach to protection and enhancement of WRP habitat, both in City of Busselton managed reserves and private land, is clearly insufficient to protect against degradation through clearing and development in a way that will critically affect the chances of WRP surviving on the Busselton-Dunsborough coastal strip.*

At its meeting on 10 April 2019, the Council resolved (C1904/068) to adopt the WRPWG Directions Paper for the purpose of community consultation. At the same meeting, Council also resolved to initiate Amendment No. 42 to the Scheme for the purpose of amending the Scheme text by inserting a new clause within 'Part 5 – Special Control Areas' that would, if approved by the WAPC, create a 'Western Ringtail Possum Habitat Protection Area'.

Proposed Amendment No. 42 was considered to be a 'complex' amendment, pursuant to r. 34 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations), because it was not addressed by any local planning strategy. As a result, regulation 37(4) required that the WAPC examine the proposal and advise if any changes to the documents were required prior to public advertising. A request to advertise proposed Amendment No. 42 was lodged with the WAPC on 26 September 2019.

This led to a lengthy period of examination by Department of Planning, Lands and Heritage (DPLH) officers, on behalf of the WAPC, whereby various changes were discussed. During this time, DPLH officers also requested that City officers draft a complementary local planning policy to provide operational detail for the implementation of the proposed Amendment. On 23 October 2020 the WAPC formally advised that Amendment No. 42 was suitable to be advertised.

During the time that DPLH were examining Amendment No. 42, the City of Busselton Local Planning Strategy 2019 (LPS) was endorsed by the WAPC (13 March 2020). Where previously it had been found that Amendment No. 42 was a 'complex' amendment because it hadn't been addressed by any local planning strategy, the LPS addresses the protection of WRP habitat as set out in the 'Relevant Plans and Policies' section below.

In part due to the change in the planning framework, and in part due to the substantial changes that have occurred to proposed Amendment No. 42 as a result of examination by DPLH, City officers believe it is prudent to discontinue with Amendment No. 42. Given that officers are in the early stages of drafting a new local planning scheme, it is apparent that Amendment No. 42 will, without any further action, simply 'fall away'. It is proposed that a new amendment, Amendment No. 49, be initiated by Council, for the purpose of public advertising. Amendment 49 responds to the current planning framework as a 'standard' amendment, and seeks to address the changes suggested during examination by DPLH.

Given that LPP XX has been prepared and also examined DPLH officers, it is also proposed that this LPP be initiated by Council and advertised concurrently with Amendment No. 49. Further details of the LPP and Amendment are outlined below.

OFFICER COMMENT

The WRP is unique to and was once widespread across much of the south west of Western Australia. Since European settlement, land clearing and other environmental changes have led to the species now being largely restricted to areas of the south and west coasts between Australind and Albany. The most important habitats are near-coastal woodlands and forests located on the southern Swan Coastal Plain between Bunbury and Dunsborough, and the WA Peppermint tree has been identified as the principle habitat and food source for WRP. In particular, the core habitat for much of the remaining WRP population is the narrow band of WA Peppermint forest that extends in a broken chain from the eastern edge of the Dunsborough urban area to the southern edge of the Bunbury urban area, as well as older parts of Bunbury, Busselton and Dunsborough urban areas.

WRP are identified as Critically Endangered under both State and Commonwealth environmental legislation. Statutory controls set out under the State and Commonwealth framework provide a reasonable level of protection for WRP and WRP habitat in rural and natural areas, as well as in areas of new urban development, from extensive clearing.

In older urban areas, including areas that are experiencing pressures for redevelopment (zoned and considered necessary for increased density residential development, or identified for urban consolidation under the *Local Planning Strategy*), much of the habitat consists of individual or small stands of WA Peppermint trees, the clearing of which can currently occur without City, State or Commonwealth approval.

Whilst the clearing of individual trees or small stands of trees in these areas may not, in any one instance, have significant impact on WRP as a species, the cumulative impact of such clearing is significant. These areas represent a large proportion of the core habitat for the WRP, and their protection and enhancement as WRP habitat has been identified as vital to ensuring the long-term survival of the species.

Key recommendations arising from both the 2009 WRP Habitat Protection Plan and the 2019 Directions Paper are the protection of WRP habitat on private land, particularly in the urban areas of Busselton and Dunsborough.

Furthermore, the broader benefit of preserving or establishing an 'urban canopy' has emerged as an important principle to be considered in urban planning. This is reflected in recent State planning documents such as *State Planning Policy 7.3 Residential Design Codes* (R-Codes) Volume Two – Apartments, and the State Administrative Tribunal decision *Kemstone Investments Pty Ltd and City of Joondalup* [2020] WASAT 115. The SAT presiding member found that the applicant had not complied with the acceptable outcome to provide adequate deep soil area for two medium trees that would, in the long term, improve urban tree canopy.

It is considered that the need to preserve the localised habitat of the Critically Endangered WRP, provides a sound basis to warrant the introduction of new Scheme controls. Additionally, the introduction of controls to preserve this habitat is consistent with the broader planning principle to preserve and expand urban tree canopy.

The two key elements of this proposal are the introduction of Amendment No. 49 (the Amendment), and the introduction of LPP XX. Each of these is discussed below.

Amendment No. 49

Through this Amendment, it is proposed to introduce a special control area (SCA) to overcome deficits in the current clearing controls.

The area included in the SCA has been based on the *Significant Impact Guidelines for the Vulnerable Western Ringtail Possum (Pseudocheirus occidentalis) in the Southern Swan Coastal Plain, Western Australia* (the Guidelines) which identifies important habitat and feeding areas, dividing the areas into the three key categories of 'Core Habitat', 'Primary Corridors' and 'Supporting Habitat'. Within the District, 'Core Habitat' and 'Primary Corridors' tend to be centralised around residential areas of Busselton and along the coast between Busselton and Dunsborough where, in most instances, there are currently no controls over the small-scale removal of vegetation.

Some areas indicated as important areas for WRP within the Guidelines have been excluded from the SCA. These include residential areas with density coding of R5 or less, and newer residential subdivisions. The reasons for exclusion are:

- Residential areas with a density coding of R5 or less are subject to existing Scheme provisions that necessitate a development application being submitted and approved prior to the clearing of vegetation.
- Newer residential subdivisions, for example Vasse, Dunsborough Lakes and Old Broadwater Farm, are generally devoid of well-established native trees on private land. If clearing approvals are required as part of the subdivision process then these are obtained from the necessary agencies. It is considered that there is no requirement at present for these areas to be included in the SCA, however this may be reviewed in the future when vegetation becomes better established.

While the WRP Habitat Protection Plan found that many species of native vegetation can provide habitat for WRP, the most significant type of WRP habitat vegetation within the District is the WA Peppermint tree (*Agonis flexuosa).* The proposed SCA aims to provide for site planning that will maximise the retention of existing mature and healthy WA Peppermint trees, and to protect the health of WA Peppermint trees on adjoining sites and road reserves.

The Amendment would require development approval for any proposed removal of WA Peppermint vegetation where:

(i) a tree has trunk diameter of 100mm or greater when measured at 1.4 metres above ground level; or

(ii) removal exceeds a canopy area of 50m² in any 12 month period; or

(iii) there is an impact on roots or canopy in a tree protection zone.

These criteria have been developed with the intention to allow the removal of small individual trees and/or pruning without requiring development approval, however it would capture the removal of a single mature tree or greater which may provide viable WRP habitat conditions. It is proposed that the maximum area of canopy cleared before a development application is required would be determined cumulative over a 12 month period. This would prevent multiple rounds of small scale clearing and/or pruning over a short period and is consistent with the timeframe set under the clearing regulations for large scale clearing.

In order to provide incentive for the retention of vegetation, the Amendment has been drafted so that some site and development requirements may be varied in accordance with the R-Codes (Volume 1) design element variations detailed in LPP XX, or for all non-residential zones in accordance with clause 4.5 of the Scheme. It should be noted that Amendment 42 was deliberately broad to allow for the variation of a range of design elements, however during their examination of the proposal DPLH officers suggested that the proposed variations to the R-Codes (Volume 1) be specified in a local planning policy. When drafting these variations, a factor considered was one of the reasons for refusal of Amendment No. 146 to TPS 20, i.e. because it proposed to effectively 'up-code' individual sites by providing density bonuses (R-Codes Volume 1, clause 5.1.1 Site area). This proposal does not include a variation to density controls, and the variations that are proposed within the LPP are discussed in further detail below.

While the protection of WRP habitat is the primary purpose of this proposal, it is acknowledged that retention of vegetation is not always possible. Therefore, the Amendment proposes that where a proponent is able to demonstrate that they are unable to retain WA Peppermint tree vegetation within the development site, they can either carry out offset planting within the site or on the adjoining road reserve. If that is not possible, a payment in lieu of offset planting may be required.

Furthermore, the Amendment also aims to support the continuing and ongoing consolidation and expansion of urban development, consistent with the *Local Planning Strategy*. This is achieved through acknowledging that sites should have the ability to be developed for the purpose for which they were created, and that there should be a partial exemption for sites that are previously undeveloped/vacant. Partial exemptions are discussed in further detail below.

Finally, the Amendment sets out the measures that may be required if development approval is granted for the removal of WRP habitat. LPP XX provides the operational detail for the implementation of these measures.

Draft Local Planning Policy XX

The operational measures that are addressed within LPP XX include variations to R-Codes (Volume 1) development requirements, partial exemptions for vacant lots, offset planting requirements, payment in lieu calculations, and additional supporting information requirements. These are discussed below under appropriate sub-headings.

<u>Variations to R-Code Development Requirements</u>

LPP XX clearly sets out the R-Codes (Volume 1) design elements and the deemed-to-comply variations that may be considered in order to facilitate the retention of WRP habitat. Part 7.3.1 of the R-Codes (Volume 1) sets out which of these design elements may be varied with local government consent; elements proposed within the LPP include 5.1.2 Street setback, 5.1.3 Lot boundary setbacks, and 5.2.1 Setbacks of garages and carports.

Part 7.3.2 of the R-Codes (Volume 1) provides that the local government may, with WAPC approval, amend other deemed-to-comply provisions by means of the local planning policy, where it can be demonstrated that the proposal:

- *is warranted due to a specific need related to that particular locality or region;*
- *is consistent with the objectives and design principles of the R-Codes; and*
- *can be properly implemented and audited by the decision-maker as part of the ongoing building approval process.*

It is proposed that the deemed-to-comply provisions of the following design elements, requiring WAPC approval, be varied in order to facilitate the retention of WRP habitat:

Design Element	R-Code Deemed-to-Comply	Proposed Deemed-to-Comply
5.3.3 Parking	C3.1 On-site car parking spaces required for a 2+ bedroom single house or grouped dwelling: 2	On-site car parking spaces required for a 2+ bedroom single house or grouped dwelling: 1
	C3.2 On-site visitor car parking spaces for grouped and multiple dwellings: 1 space for each 4 dwellings.	On-site visitor car parking spaces for grouped and multiple dwellings: 1 space for each 6 dwellings.
5.3.5 Vehicular Access	C5.1 Access to on-site car parking spaces may be provided: • where available, from a right-of-way; • from a secondary street where no right-of-way exists; • from the primary street frontage where no secondary street or right-of-way exists.	All dwellings: Access to on-site car parking spaces may be provided from a primary street where a secondary street exists.
	C5.5 Driveways for multiple and grouped dwellings where the number of dwellings is five or more, shall be: • a minimum width of 4m; and • designed to allow vehicles to pass in opposite directions at one or more points.	Grouped and multiple dwellings where the number of dwelling is five or more: • driveways may be reduced to no less than 3m, and passing bays or similar are to be provided.

As discussed at the beginning of this section, the proposed variations are warranted due to specific need related to the locality/region. The proposed variations are not profoundly different from the current standards, and therefore the consistency with objectives and design principles of the R-Codes can be assessed on a case by case basis, at the time when development applications are submitted. Should the variations be approved by the WAPC as part of this proposal, and later by the local government as part of a development application, then implementation and audit processes would be consistent with current practices.

Partial Exemption for Vacant Lots

The proposed partial exemption area will conform to the percentage of a site that is not required for open space (i.e. the developable area) as provided for in Part 5.1.4 of the R-Codes (Volume 1). It may be applied where the site of the proposal is zoned Residential and has not previously been developed, or if the site is vacant and WRP habitat vegetation exceeds the R-Code open space requirement (this latter measure allows for sites where demolition of building may occur prior to an application for a new building).

The LPP includes an appendix with an example calculation showing how the partial exemption may be applied.

Offset Planting Requirement

The LPP requires that one tree should be planted for each 20m² of canopy removed. This calculation is based on the requirements set out in Table 3.3a of Part 3.3 of the R-Codes (Volume 2), where tree provision requirements aim to improve urban tree canopy in the long term.

The LPP also specifies an indicative pot size of 35 litres. A tree of this size will be approximately 1.5m tall at the time of planting, and is readily available from local suppliers. 35 litres is generally the pot size that will be purchased by the City when carrying out street tree planting.

Furthermore, guidelines have been provided in regard to the separation distance between offset plants and between buildings. This is a proactive measure to allow for the best conditions for long-term survival of the offset plant.

Payment in Lieu Calculations

It is acknowledged that some sites may not have sufficient area to fulfil offset planting requirements, and therefore it is proposed that the balance be provided as a payment in lieu of offset planting.

A standard fee is prescribed, and an appendix to the LPP provides detail as to how the fee has been calculated. This calculation includes the actual contract and material costs, as well as administration and in-kind costs, associated with the City's 2019 street tree planting program.

This calculation demonstrates that the cost of planting one 35L tree is approximately $200. Given the proposal that one offset tree should be required per 20m² of canopy removed, it is therefore proposed that the payment in lieu amount is set at $10 per one square metre of canopy removed.

Additional Supporting Information Requirements

The primary purpose of this proposal is to retain existing WRP habitat, and therefore a mechanism is included to ensure the survival of vegetation during construction. This mechanism is proposed through a tree protection plan, whereby the applicant would identify the tree protection zone (an area isolated from construction disturbance so the tree remains healthy) and accordingly put measures in place to protect this area.

A tree protection plan template is provided as an appendix to the LPP. This template has been drafted based on information derived from *AS 4970 – 2009: Protection of trees on development sites.*

Statutory Environment

The key statutory documents relevant to this proposal are:

- *Planning and Development Act 2005 and associated Regulations*
- *Local Planning Scheme No. 21*
- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Environmental Protection Act 1986*
- *Biodiversity Conservation Act 2016*

Each is discussed below under appropriate subheadings.

***Planning and Development Act 2005* (WA) ('PD Act') and associated Regulations**

The PD Act outlines the relevant considerations when preparing and amending local planning schemes. The relevant provisions of the Act have been taken into account in preparing this Amendment.

The *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations), which came into operational effect on 19 October 2015, identify three different levels of amendments – 'basic', 'standard' and 'complex'. The resolution of the local government is to specify the level of the amendment and provide an explanation justifying this choice. This Amendment is considered to be a 'standard' amendment for the reason set out in the 'Officer Recommendation' section of this report.

Clause 4 of Part 2 of Schedule 2 – Deemed Provisions for Local Planning Schemes of the Regulations, sets out the procedure for making a local planning policy.

***Local Planning Scheme No. 21* (the Scheme)**

Under the PD Act, the clearing of vegetation generally falls within the definition of 'development' and requires approval unless specifically exempted by a planning scheme. In the City's Scheme, Part 6 sets out requirements for the development of land, and the clearing of vegetation is exempt from the requirement for development approval except where the development is located:

- in a Coastal Management, Wetland, Landscape Value, or Floodway area;
- in the Rural Residential, Conservation, Rural Landscape or Bushland Protection zones;
- on land coded R2, R2.5 or R5;
- on or over any land below the mean high water mark, or forming part of a watercourse;
- on a public road or unzoned land.

The Amendment would change the areas of land that are exempt from development approval for the clearing of vegetation.

***Environmental Protection and Biodiversity Conservation Act 1999* (Cth) ('EPBC Act')**

Under the EPBC Act, in 2018 the conservation status of the WRP was elevated from 'Endangered' to 'Critically Endangered'. The EPBC Act protects WRP habitat but is limited in its application to clearing controls which can have a "significant impact" on habitat environment. This term is not defined in the Act, however, the *Significant Impact Guidelines for the Western Ringtail Possum (Pseudocheirus occidentalis) in the Southern Swan Coastal Plain, Western Australia* (EPBC Act policy statement 3.10) does provide guidance on this matter. Most small-scale clearing in urban areas is not regulated under the EPBC Act.

***Environmental Protection Act 1986* (WA) ('EP Act') and associated Regulations**

The EP Act provides a legal framework for the State Government to protect the environment and regulate pollution. It sets out a range of different processes for doing this, including (relevant to this proposal) environmental impact assessments for planning scheme amendments and development proposals with the potential to cause significant environmental impact; as well as a permit system regulating the clearing of native vegetation. The EP Act is supplemented by a number of environmental protection policies and subsidiary pieces of legislation, including the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

The Clearing Regulations have the effect that, unless specifically exempted, a permit is required for the clearing or disruption of native vegetation (including, in many instances, regrowth or "intentionally planted vegetation"). There are no exemptions provided within identified 'Environmentally Sensitively Areas' (ESA) pursuant to the EP Act. This includes 'Conservation Category Wetlands' and the associated buffers and vegetation containing 'Threatened Ecological Communities' or 'Declared Rare Flora'. Much of the City, including most of the urban area, however, is located outside an ESA. As such, clearing may be exempt from the need to obtain a permit, for purposes that include:

- development of approved buildings;
- establishment of fences;
- collection of firewood for personal use by a landowner; or
- fire and emergency management.

With the exception of the last of these, exempted clearing includes a maximum of 1.0 hectare per year per property and, as such, permits are not required for most (usually small scale) clearing of habitat within urban areas.

***Biodiversity Conservation Act 2016* (WA, 'BC Act')**

The BC Act came into practical effect from 1 January 2019, replacing the *Wildlife Conservation Act 1950.* The BC Act introduces new provisions for important biodiversity conservation matters that were not recognised in the previous Act, such as new protections for habitat critical to the survival of a 'Threatened Species' (including habitat conservation notices). Orders necessary to use those powers, however, have not yet been developed. As such, like its predecessor, the BC Act at present "protects the animal, but not its home".

Relevant Plans and Policies

The key policies relevant to this proposal are:

- *City of Busselton Local Planning Strategy*
- *State Planning Policy 2 –Environment and Natural Resources Policy*
- *State Planning Policy 3.1 – The Residential Design Codes of WA*

Each is discussed below under appropriate subheadings.

City of Busselton Local Planning Strategy (LPS)

The LPS broadly sets out the long-term planning direction for the whole of the district, and provides the strategic rationale for decisions related to the planning and development of the district. The LPS includes the following Themes and Strategies that are applicable to the Amendment.

Theme 4 'Environment, landscape and heritage' includes the following strategy:

d) Support the long-term survival of the District's Western Ringtail Possum Population, especially the population within urban areas.

Theme 5 'Implementation and review' includes the following strategy:

d) Develop and implement integrated plans within 5 years of adoption of the strategy as follows –

(iv) A Western Ringtail Possum habitat protection strategy, which provides for the long-term protection and enhancement of habitat, whilst also supporting the consolidation and expansion of urban development.

***State Planning Policy 2: Environment and Natural Resources Policy* (SPP 2)**

SPP 2 must be given due regard by the WAPC and local government in the making of all planning decisions. SPP 2 sets out that planning schemes and decision-making should:

> *(ii) Actively seek opportunities for improved environmental outcomes including support for development which provides for environmental restoration and enhancement.*
>
> *(iii) Protect significant natural… features, including sites and features significant as habitats…*
>
> *(x) Support conservation, protection and management of native remnant vegetation where possible to enhance… biodiversity, fauna habitat, landscape, amenity values and ecosystem function.*

SPP 2, Part 5.5 Biodiversity, sets out that planning strategies, schemes and decision-making should:

> (i) Consider mechanisms to protect areas of high biodiversity and/or conservation value, including:
>
> *….*
>
> *(d) land containing Threatened Flora or Threatened Ecological Communities… or that which is habitat to Threatened Fauna.*
>
> (ii) *Seek to avoid or minimize any adverse impacts, directly or indirectly, on areas of high biodiversity or conservation value as a result of changes in land use or development.*
>
> *…*
>
> *(iv) Safeguard and enhance linkages between terrestrial aquatic habitats which have become isolated, including the re-establishment of habitat corridors.*

***State Planning Policy 7.3: Residential Design Codes* – Volumes 1 and 2 (R-Codes)**

The Scheme adopts the standards for residential development established in the Residential Design Codes of Western Australia (R-Codes) subject to the modifications specified in Clause 4.3 of the Scheme. The incentive provisions referred to in this Amendment allow for consideration of discretions to the deemed-to-comply criteria of certain design elements of Volume 1 of the R-Codes.

Financial Implications

Financial implications associated with the recommendations of this report relate to implementation of additional clearing controls, which would likely increase the City's planning assessment and enforcement workload.

Stakeholder Consultation

Consultation to Date

Following Council's initiation of Amendment No. 42, DPLH officers (representing WAPC) were required to examine the proposal. As a result, DPLH officers suggested that City officers draft a complementary local planning policy to provide operational detail for the implementation of Amendment No. 42. The information exchanged during the examination period forms the basis of Amendment No. 49 and associated LPP XX.

Proposed Consultation

If the Council resolves to initiate the Amendment and LPP XX, the relevant documentation associated with the Amendment would be referred to the Environmental Protection Authority (EPA) for consideration of the need for formal assessment under Part IV of the *Environmental Protection Act 1986*.

Should the EPA resolve that the Amendment does not require formal assessment, then the Amendment document and associated Local Planning Policy XX will be advertised concurrently and for 42 days in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015* (the advertising period required for a standard amendment).

To facilitate advertising, the following actions will be undertaken:

- Targeted emails to landowners within the proposed Special Control Area;
- A notice on the City's website, and a portal to be created using the City's *YourSay* platform for the online lodgement of submissions;
- Notices in the local newspaper and via social media; and
- Information sessions with stakeholders and the community.

At its meeting on 10 April 2019, Council also resolved (C1904/068) to adopt the *Western Ringtail Possum Working Group Directions Paper* for the purpose of community consultation. That paper would also be advertised for 42 days alongside the Amendment and LPP.

Risk Assessment

The implementation of the officer recommendation will involve initiating the Amendment and LPP XX for referral to the EPA and, upon response from the EPA, advertising for the purpose of public consultation. No risks of a medium or greater level have been identified.

Options

As an alternative to the proposed recommendation, the Council could:

1. Resolve to seek further information before making a decision.
2. Resolve to initiate the Amendment and/or LPP XX subject to identified modification(s), to be explained.
3. Resolve to decline the initiation of the Amendment and LPP XX for advertising for reasons to be identified and explained.

CONCLUSION

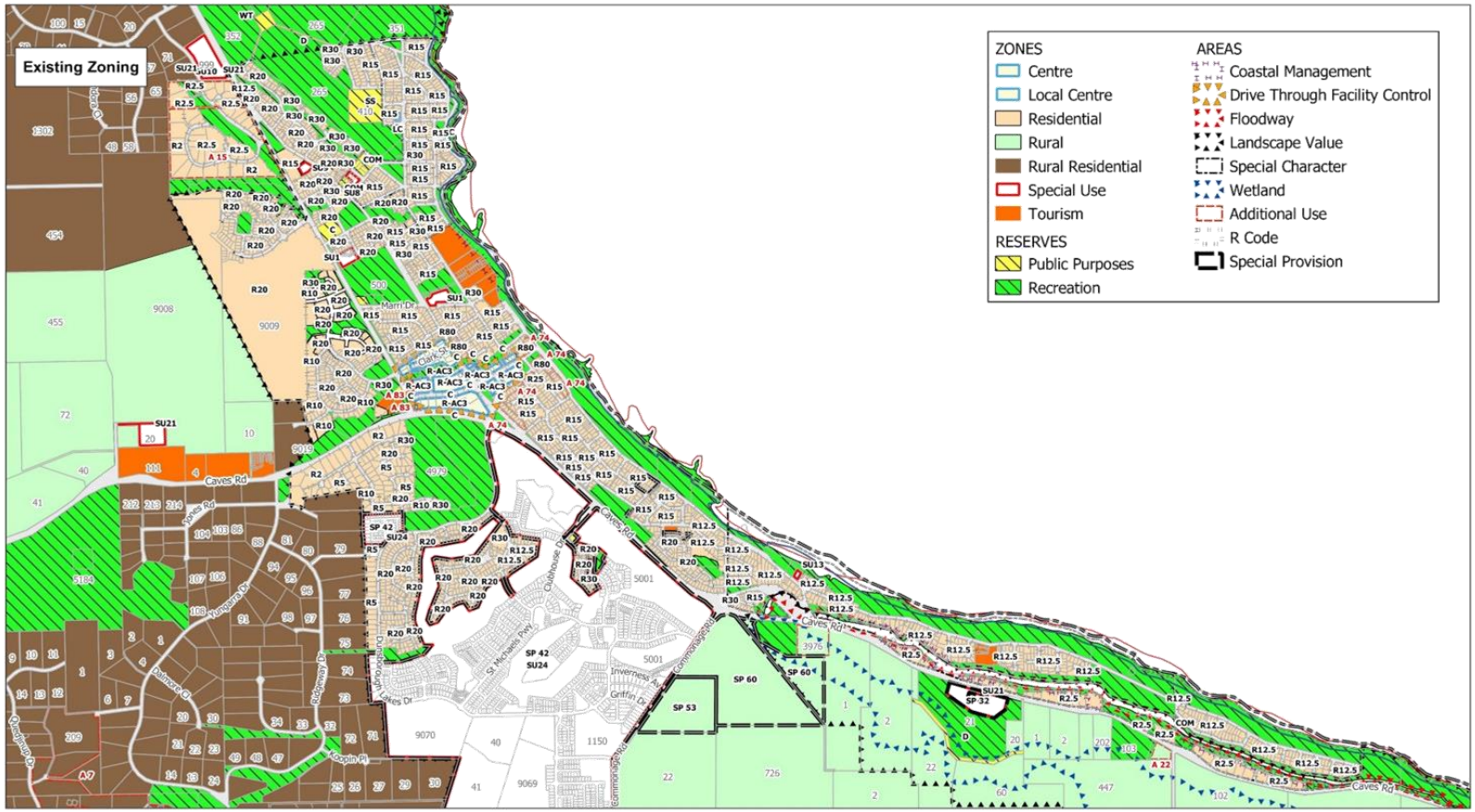
The information contained within this report confirms that the Amendment and LPP XX are an appropriate outcome consistent with the orderly and proper planning of the City of Busselton and, as such, it is recommended that the Amendment and LPP XX be initiated for public consultation.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

The implementation of the officer recommendation will include referring the Amendment to the Environmental Protection Authority, which will occur within one month of the date of the Council decision.

SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



Dunsborough

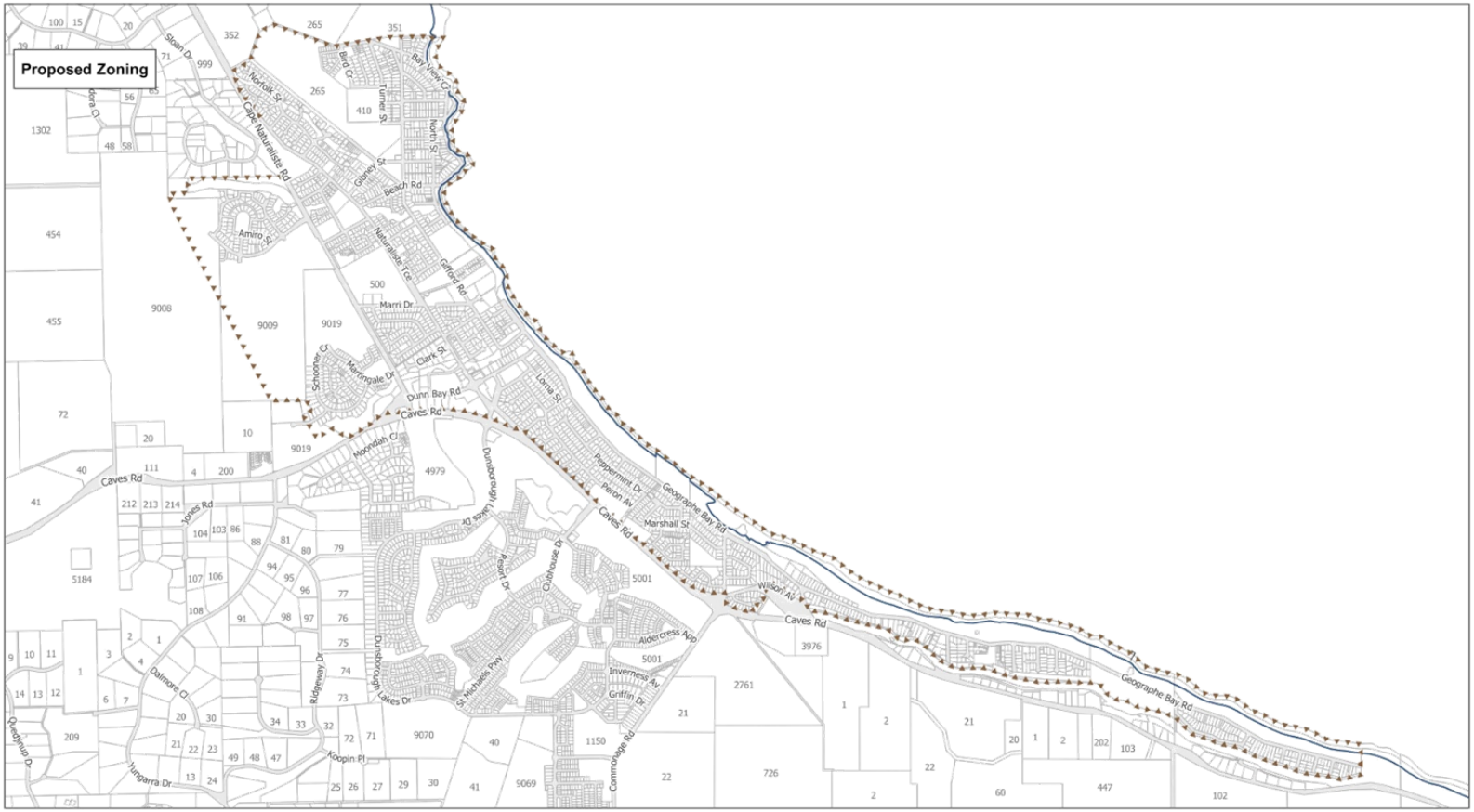
Map Produced on 10/6/2019
GIS Section, City of Busselton

Disclaimer
The City of Busselton does not guarantee that this map is without errors and accepts no responsibility for consequences of actions that rely on this map.

City of Busselton
Geographe Bay

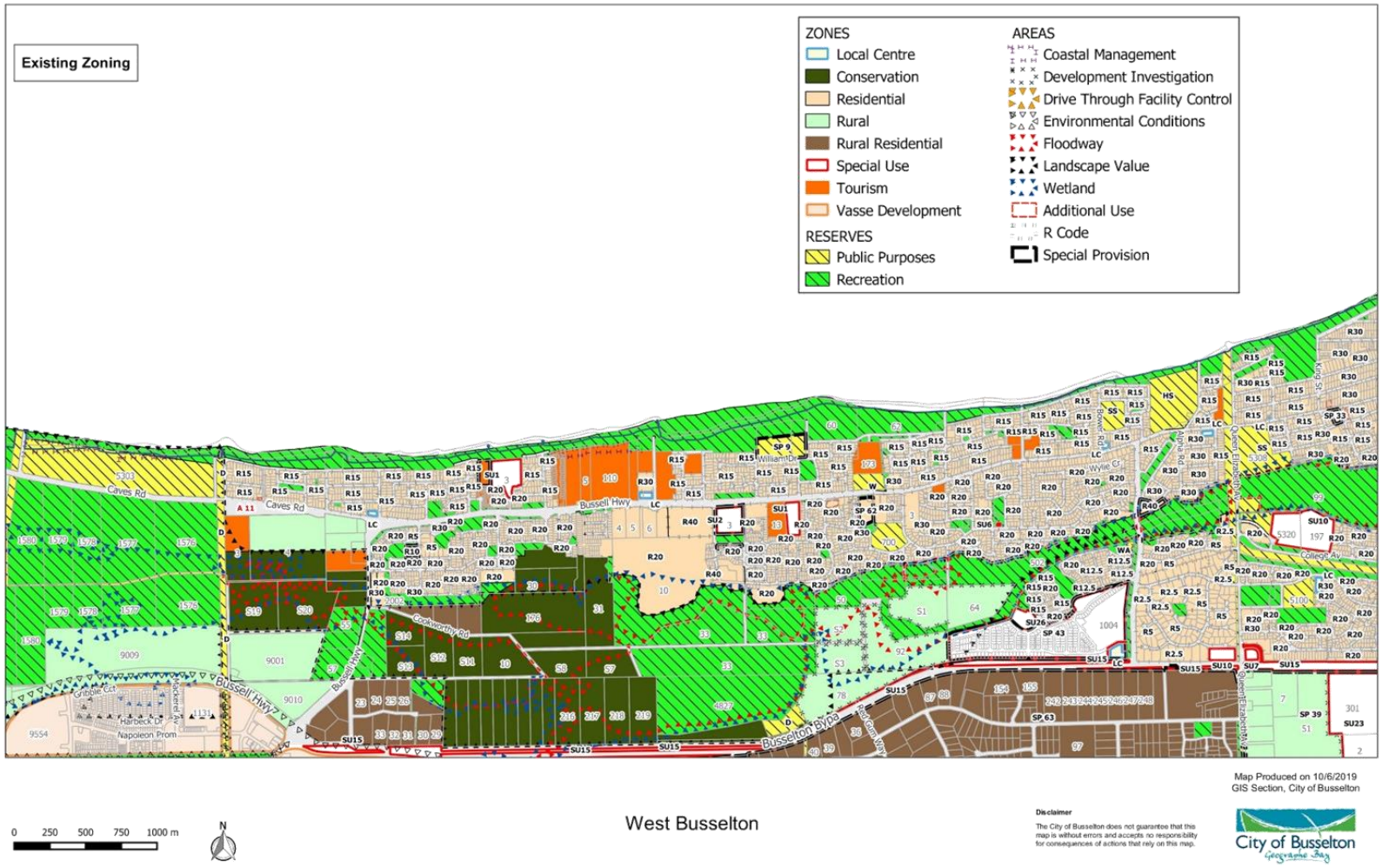
SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



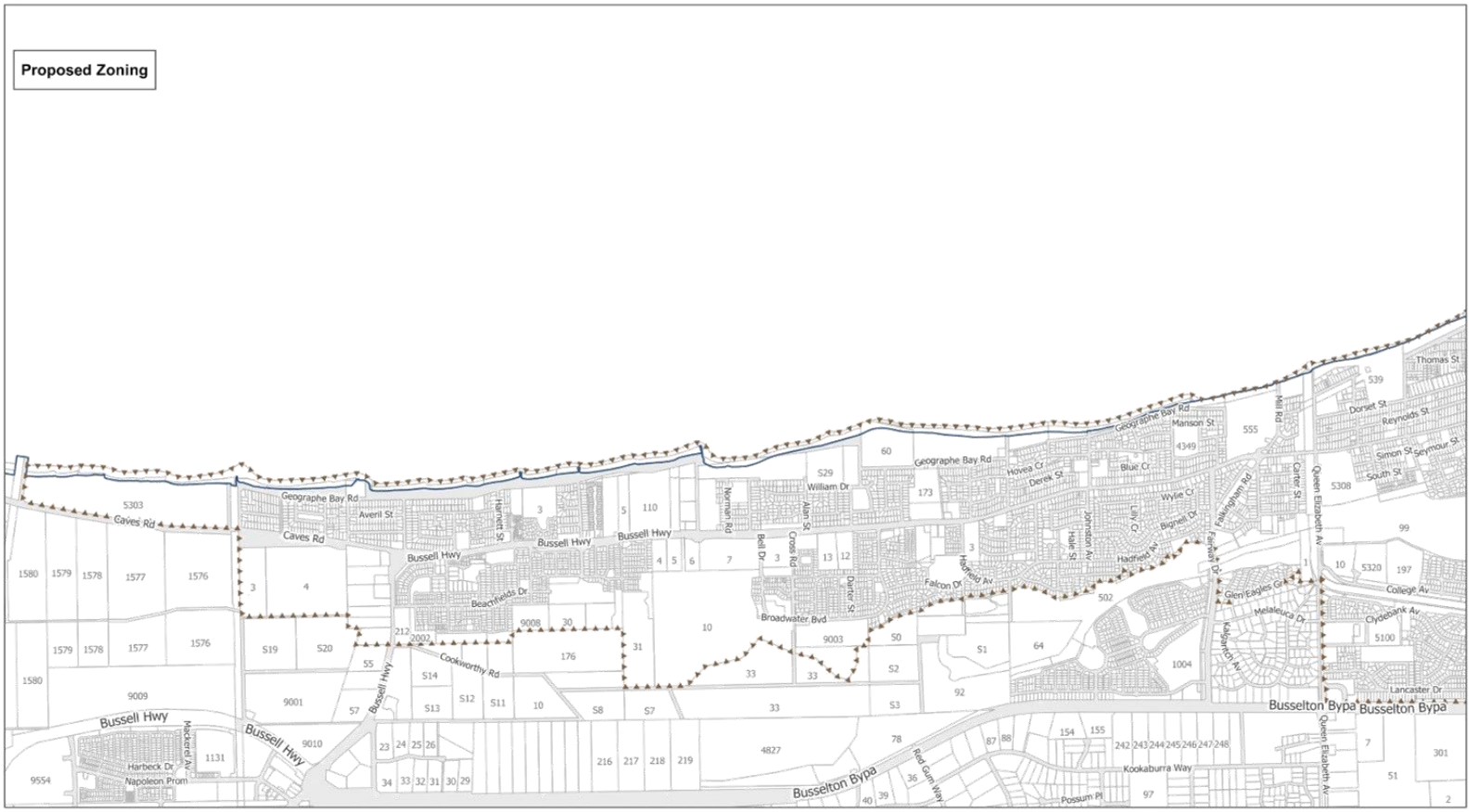
SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



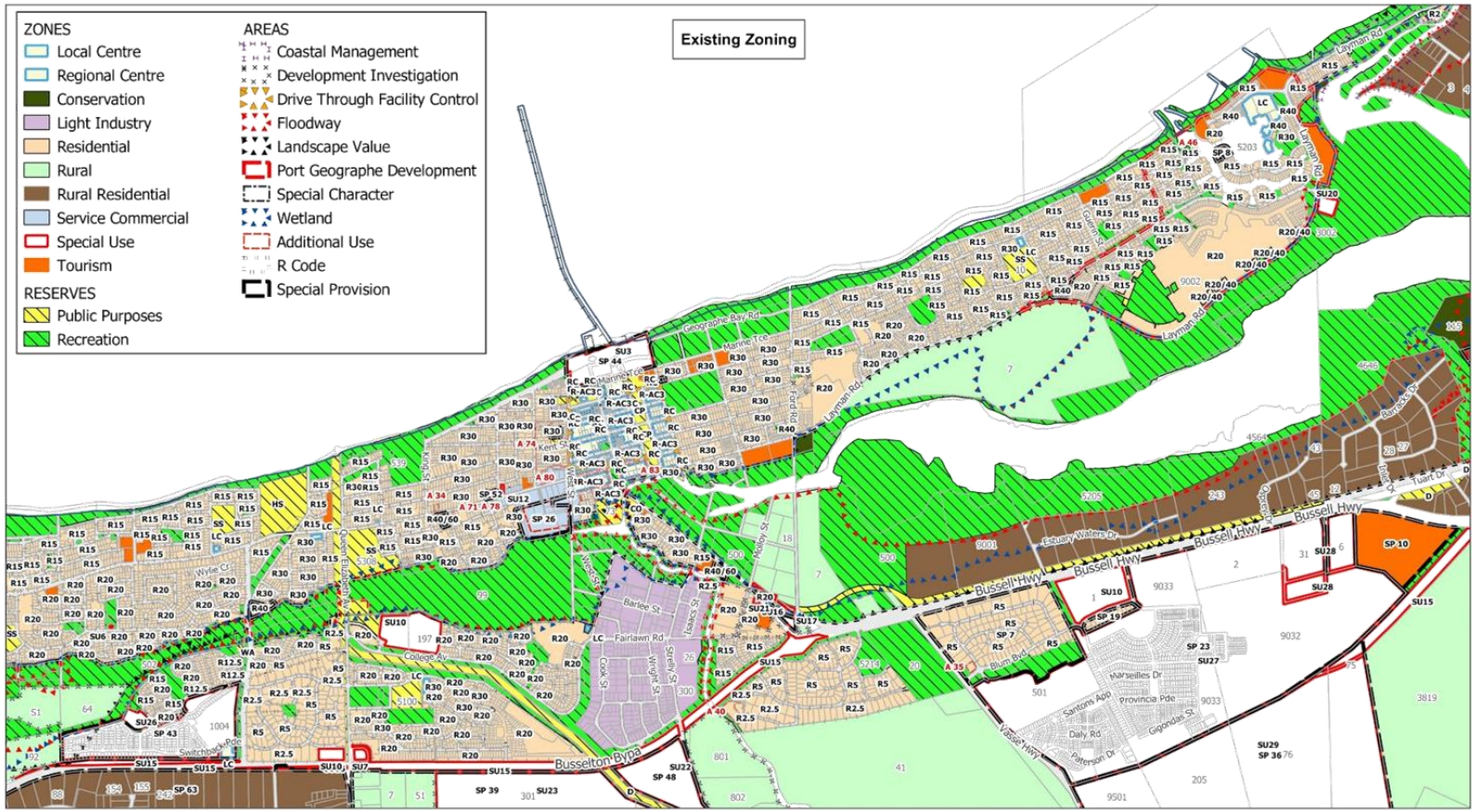
SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



East Busselton

0 250 500 750 1000 m

N

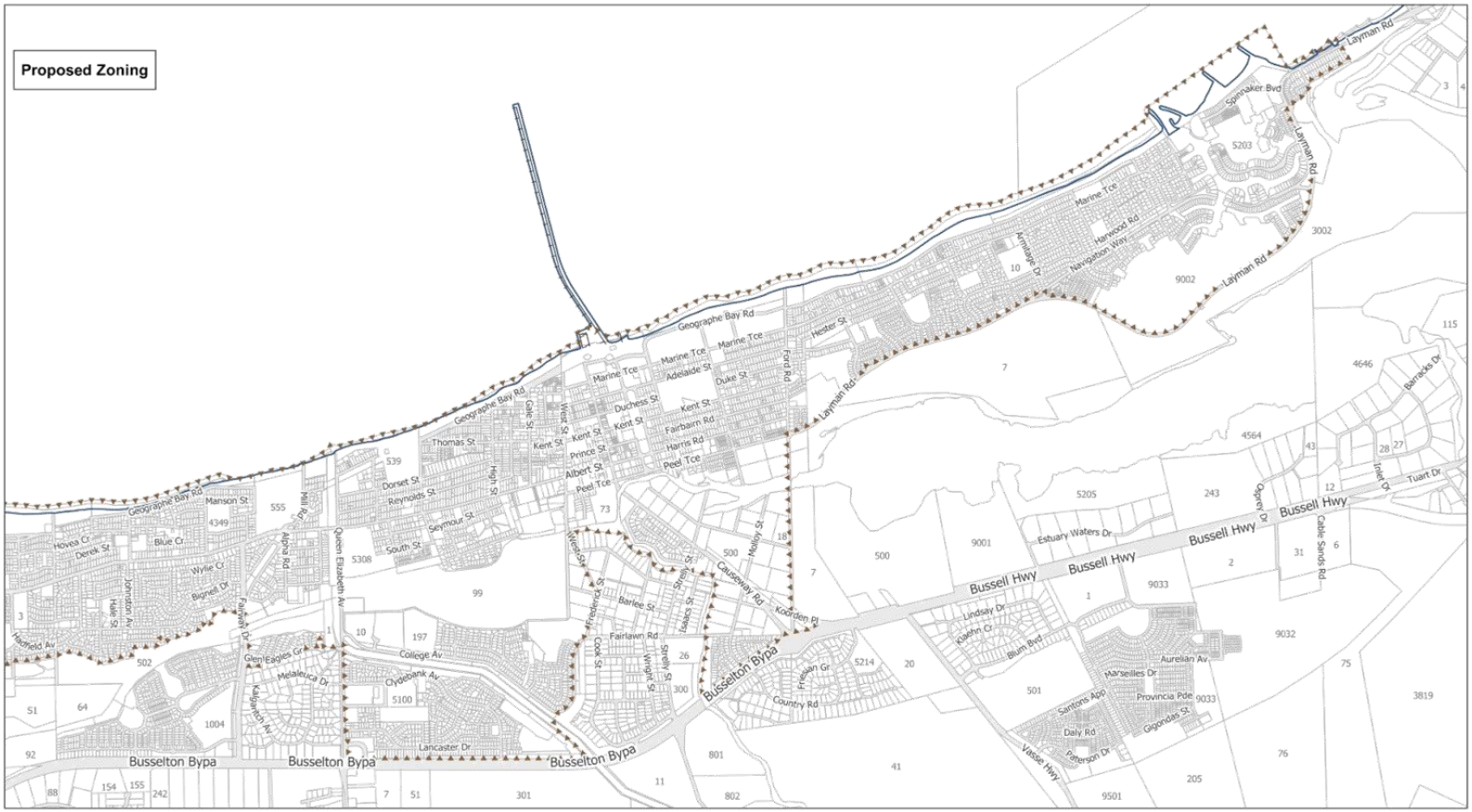
Map Produced on 10/6/2019
GIS Section, City of Busselton

Disclaimer
The City of Busselton does not guarantee that this map is without errors and accepts no responsibility for consequences of actions that rely on this map.

City of Busselton
Geographe Bay

SCHEME AMENDMENT MAP

City of Busselton
Local Planning Scheme No.21
Amendment No. 49



Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area

Version: Draft

1. Head of Power and Scope

This Policy has been adopted pursuant to *Planning and Development (Local Planning Schemes) Regulations 2015*, Schedule 2 (Deemed Provisions), Clause 4 and applies to any Removal of WA Peppermint within a "Western Ringtail Possum Habitat Protection" Special Control Area.

Where an the proposed Removal has been assessed and approved under State or Federal environmental legislation, then the provisions of the Special Control Area do not apply.

2. Purpose

The purpose of this Local Planning Policy is to:

2.1. Assist and guide the City and landowners in the protection of Western Ringtail Possum (WRP) habitat and maintenance of habitat linkages; and

2.2. Provide a framework so that the retention of WRP habitat can be given high regard in decision-making; and

2.3. Provide guidance for development within private property to encourage the retention of WRP habitat or, where not possible to retain WRP habitat, to put in place requirements that result in a net benefit to WRP habitat over the long term.

3. Interpretation

Terms should be interpreted in the same way as they would be interpreted if they were contain or within the Scheme, other than those terms defined below:

"AS 4970 – 2009" means Australian Standard *AS 4970 – 2009 Protection of Trees on Development Sites* (as amended).

"Offset Planting" means the planting of replacement WA Peppermint to offset the loss of such vegetation that has been approved for Removal.

"Policy" means this Local Planning Policy, entitled 'Western Ringtail Possum Habitat Protection Area'.

"R-Codes" means *State Planning Policy 7.3 Residential Design Codes Volume 1 (2019)* (as amended).

"Removal" means the pruning, lopping, transplanting or root removal of WA Peppermint vegetation.

"Responsible Person" means a person nominated by the applicant/owner who shall be the person responsible for the implementation of the Tree Protection Plan and the requirements contained within.

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

"Scheme" means City of Busselton Local Planning Scheme No. 21.

"Special Control Area" means the Western Ringtail Possum Habitat Protection Special Control Area, as shown on the Scheme map.

"Tree Protection Zone (TPZ)" means a specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and canopy to provide for the health and stability of a tree to be retained where it is potentially subject to damage by development.

Note 1: To determine the TPZ, see Appendix 1.

"WA Peppermint" means all vegetative parts of the tree species *Agonis flexuosa* including canopy, trunks, branches, and root system.

4. Policy Statement

This Policy has been separated in the following sections:

4.1 Hierarchy of Protection Measures.
4.2 Variations to R-Code Development Requirements.
4.3 Partial Exemption for Vacant Lots.
4.4 Offset Planting Requirements:
  a) On-site or adjoining verge planting requirements;
  b) Payment in Lieu of Offset Planting.
4.5 Additional Supporting Information Requirements.

Appendices:

Appendix 1: Determining the Tree Protection Zone and Structural Root Zone
Appendix 2: Example Calculations for a Partial Exemption to a Vacant Lot
Appendix 3: Calculation of Payment In Lieu of Offset Planting
Appendix 4: Tree Protection Plan (TPP) Template

4.1 Hierarchy of Protection Measures

In accordance with clause 5.15 of the Scheme, where the Removal of WA Peppermint on private property within the Special Control Area requires a development application, it will be assessed using the following hierarchy, on a sequential and preferential basis:

(a) Avoidance – in the first instance Removal of WA Peppermint should be avoided and should not encroach by more than 10% into a TPZ.

(b) Minimisation and retention - where it can be demonstrated to the satisfaction of the local

government that it is not possible to avoid the Removal of WA Peppermint, any development should be designed to minimise the amount of vegetation requiring Removal.

Note 2: Generally the City will not support any works within the structural root zone (SRZ) of any WA Peppermint that is to be retained. To determine the SRZ, refer to AS 4970 – 2009.

(c) Offset Planting – where it can be demonstrated to the satisfaction of the local government that it is not possible to avoid the Removal of WA Peppermint, Offset Planting will be required via a condition of development approval.

In recognition of the normal development opportunity provided for a vacant lot, a partial exemption from the requirement for Offset Planting and/or a payment in lieu of Offset Planting may be applied as per section 4.3 of this Policy.

Note 3: Where a tree's canopy extends beyond the lot boundaries, the Removal of this canopy will be calculated together with the Removal of any canopy within the development site.

4.2 Variations to R-Codes Development Requirements

In order to facilitate the retention of WA Peppermint the local government may vary the following R-Code development requirements:

Table 1: Variations to R-Code site and development requirements

Design Element	Variation
5.1.2 Street Setback **5.1.3 Lot Boundary Setbacks** **5.2.1 Setbacks of Garages and Carports**	A variation may be proposed, on a locational basis, in response to specific site conditions to address the hierarchy of protection measures at section 4.1.
5.3.3 Parking	**2 – 4 bedroom single house or grouped dwelling:** Minimum number of one (1) on-site car parking space per dwelling. **All grouped and multiple dwellings:** Minimum number of one (1) visitor car parking space for each six dwellings, or part thereof in excess of six dwellings, serviced by common access.
5.3.5 Vehicular Access	**All dwellings:** Access to on-site car parking spaces may be provided from a

	primary street where a secondary street exists. **Grouped and multiple dwellings where the number of dwellings is five or more:** Driveways may be reduced to no less than 3m, and passing bays or similar are to be provided.

Supporting information should be provided to demonstrate how the proposed variation:

(a) facilitates the retention of WA Peppermint on the site; and

(b) achieves the objectives and relevant design principle(s) of the R-Codes.

4.3 Partial Exemption for Vacant Lots

A partial exemption from the requirement for Offset Planting, conforming to the R-Codes clause 5.1.4 Open Space requirement, may be applied where:

(a) the site of the Removal is zoned Residential; and

(b) the site has not previously been developed at the time that the development is proposed; or

(c) the site is vacant and WA Peppermint exceeds the site's R-Codes Open Space requirement.

Table 2: Offset planting exemptions

R-Code	R-Codes Table 1: Open Space Requirement	Maximum % of site area that is exempt
R10	60%	40%
R15	50%	50%
R20	50%	50%
R30	45%	55%

Note 4: See Appendix 2 for an example of how to calculate a partial exemption for a vacant lot.

4.4 Offset Planting Requirement

a) On-site or adjoining verge planting requirements

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Offset Planting should occur at the site of the development or within the adjacent road reserve, and in accordance with Table 3: Offset Planting guidelines.

Table 3: Offset Planting guidelines

Offset tree species: *Agonis flexuosa* (WA Peppermint tree)	
Canopy Area Removed	**Offset Rate and Indicative Pot Size**
50m² - 70 m²	3 x 35L
For every additional 20m² of canopy removed, an additional 1 x 35L Offset Planting tree is required.	
Minimum separation between any replacement trees/retained trees	5m
Minimum separation between replacement trees and any buildings	5m
Note: Where removal of canopy is less than 50m² (approx. 7m x 7m) in a 12 month period, then no Offset Planting is required; if removal of canopy exceeds 50m² then these provisions apply to all canopy removed except where Policy section 4.3 exemptions apply.	

b) Payment in Lieu of Offset Planting

Where the Removal of WA Peppermint is approved and there is insufficient area within and adjacent to the development site to fulfil Offset Planting requirements, and pursuant to sub-clause 5.15.4 (e) (iii) of the Scheme, the local government may require that the balance be provided as a payment in lieu of Offset Planting.

A standard fee for payment in lieu of Offset Planting is set at the rate of $10 per square metre of canopy removed. The fee will be upgraded in line with the Consumer Price Index on 30 June and 30 December each year.

Table 4: Calculation rates for payment in lieu of Offset Planting

Payment in Lieu of Offset Planting	
Canopy Area Removed	**Payment Rate**
1m²	$10
5m²	$50
10m²	$100
100m²	$1,000
Notes: *1. Where there is sufficient area within or adjacent to the site, Offset Planting should be carried out.* *2. Where removal of canopy is less than 50m² (approx. 7m x 7m) in a 12 month period, then no Offset Planting or payment in lieu of Offset Planting is required; if removal of canopy exceeds 50m² then these provisions apply to all canopy removed except where Policy section 4.3 exemptions apply.*	

The contract and material costs, as well as administration and in-kind costs, associated with undertaking Offset Planting are detailed in Appendix 3.

4.5 Additional Supporting Information Requirements

(a) All applications for development approval within a 'Western Ringtail Possum Habitat Protection Area' should include a site plan which indicates:

i. the location of the development; and

ii. the location of trunks and canopy area of all WA Peppermint on the subject site and within 6m of the property boundaries; and

iii. the TPZ of all WA Peppermint within the boundary of the subject site; and

iv. any WA Peppermint that is proposed to be retained or removed, including the extent of Removal.

(b) Any application for development approval that proposes to retain WA Peppermint tree vegetation should include a Tree Protection Plan (TPP).

The TPP may be prepared by the owner of the site and/or other Responsible Person using the City's TPP template (see Appendix 4). Where development is proposed to extend into the TPZ (see Appendix 1) of WA Peppermint that is to be retained, a suitably qualified professional should prepare the TPP to demonstrate that the development will not have an adverse impact on the life and health of the tree.

5. Reference Documents

The following reference documents have been used in the preparation of this Policy:

Biodiversity Conservation Act 2016 (WA).

Biodiversity Conservation Regulations 2018 (WA).

City of Busselton. (2019). *Western Ringtail Possum Working Group Draft Directions Paper.* City of Busselton.

City of Busselton. (2019). *Local Planning Strategy.* City of Busselton.

Commonwealth of Australia. (2009). *Significant Impact Guidelines for the Vulnerable Western Ringtail Possum (Pseudocheirus occidentalis) in the Southern Swan Coastal Plain, Western Australia* (EPBC Act policy statement 3.10). Commonwealth of Australia.

Department of the Environment. (2018). *Pseudocheirus occidentalis* in Species Profile and Treats Database. Department of the Environment. Accessed 3 July 2018: http://www.environment.wa.gov.au/sprat

Department of the Environment, Water, Heritage and the Arts. (2009). *Background Paper to the EPBC Act Policy Statement 3.10: Significant Impact Guidelines for the Vulnerable Western Ringtail Possum (Pseudocheirus occidentalis) in the Southern Swan Coastal Plain, Western Australia.* Commonwealth of Australia.

Department of Parks and Wildlife. (2017). *Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan: Wildlife Management Program No. 58.* Western Australian Department of Parks and Wildlife.

Department of Planning, Lands and Heritage. (2019). *Leeuwin-Naturaliste Sub-regional Strategy.* Western Australian Planning Commission.

Environmental Protection Act 1986 (WA).

Environmental Protection and Biodiversity Conservation Act 1999 (Cth).

Minister of the Environment and Energy on behalf of Commonwealth of Australia. (2017). *Instrument Adopting a Recovery Plan.*

NGH Environmental & Ecosystems Solutions. (2009). *Habitat Protection Plan Western Ringtail Possum (version 2).* NGH Environmental.

Standards Australia. (2009). *Protection of Trees on Development Sites (Incorporating Amendment No. 1).* (AS4970 – 2009). Standards Australia.

Threatened Species Scientific Committee. (2018). *Conservation Advice* Pseudocheirus occidentalis *Western Ringtail Possum.* Department of the Environment and Energy.

6. Review Details

Review Frequency		2 yearly		
Council Adoption	**DATE**		**Resolution #**	
Previous Adoption	**DATE**		**Resolution #**	

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Appendix 1: Determining the Tree Protection Zone and Structural Root Zone

1. Tree Protection Zone (TPZ)

The TPZ is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown requiring protection. It is an area isolated from construction disturbance, so that the tree remains healthy.

The TPZ incorporates the structural root zone (see Figure 1).

The radius of the TPZ is calculated for each tree by multiplying its Trunk Diameter x 12:

Trunk Diameter (TD) = circumference of the trunk (measured at 1.4m above ground level) divided by pi (3.14)

TPZ = TD x 12

Once calculated, the radius is measured from the centre of the stem at ground level. A TPZ should a minimum of 2m.

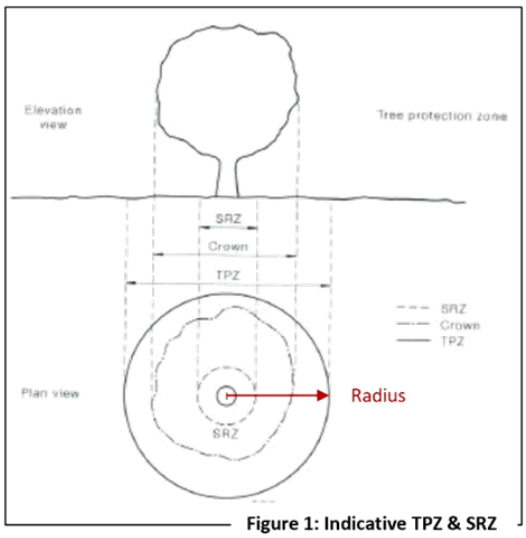


Figure 1: Indicative TPZ & SRZ

2. Structural Root Zone (SRZ)

The SRZ is the area required for tree stability. The SRZ only needs to be calculated when an encroachment into the TPZ of greater than 10% is proposed.

Generally the City will not support any works within the structural root zone (SRZ) of any WA Peppermint that is to be retained. To determine the SRZ, refer to AS 4970 – 2009.

Source: *AS 4970 – 2009 Protection of trees on development sites*, pp. 11 -14.

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Appendix 2: Example Calculations for a Partial Exemption to a Vacant Lot

Based on the images below, the following calculations provide an example of Offset Planting or payment in lieu of Offset Planting requirements that would apply to this site, 'Site X'.



Figure 2: Site X before and after clearing of WA Peppermint.

Site X general information:

Lot Area	842m²
Density coding	R15
Max. exemption	421m² (= 50% or refer to Table 3)
Total canopy area	1077.5m²
Canopy actually retained	258m²

Site X Offset Planting OR Payment in Lieu of Offset Planting calculations:

Site X – Calculating Cleared Canopy NOT Exempt:	
Total canopy area m² prior to Removal of vegetation	1077
Minus max. exemption area m²	- 421
Equals retainable canopy m²	= 656
Retainable canopy m²	656
Minus canopy actually retained m²	- 258
Equals cleared canopy m² NOT exempt	= 398

Offset Planting Requirement:	
Cleared canopy m² (not exempt)	398
Divided by 20 (refer to Table 3)	/ 20
Equals required number of Offset Planting trees	**= 20**

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area

Version: Draft

Payment in Lieu of Offset Planting Requirement:	
Cleared canopy m² (not exempt)	398
Multiplied by standard fee/m² (refer to Table 4)	x 10
Equals $ payment in lieu of Offset Planting	**= 3980**

Where there is sufficient area within or adjacent to the site, Offset Planting should be carried out. Refer to Table 3 for Offset Planting guidelines.

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Appendix 3: Indicative Calculation of Payment In Lieu of Offset Planting

The cash payment in lieu of Offset Planting of WA Peppermint shall not be less than the estimated cost to the local government of:

a) the purchase of a 35L native tree that enhances Western Ringtail Possum habitat; and

b) all associated costs to the local government, when undertaking the planting and maintenance for two years after establishment.

Contract and Material Costs:

Item	Cost
Cost of purchase – 35L tree	$60
All-inclusive costing: • Dig hole • Prepare soil with conditioner and terracotem (soil wetter) • Stake and tie tree (Price range from contractor quotations 2019 Street Tree Program: $63, $94, $113, $122. Median price: $98/tree)	$98
• Follow-up formative pruning and white oil treatment if scale present (City of Busselton Horticulture staff; $43-50/hour) • 10 minutes per operation per tree per year	$8.30
Watering: • $2.50 per watering • Fortnightly occurrence • 10 waterings for first season (December-April) if not on street verge or irrigated area within a park.	$25
Total cost per tree	$191.30

Administration and In-Kind Costs to the City of Busselton:

Action	Hours	Cost ($50/hour)
Processing of street tree applications: • Validation of applications in terms of locality, species choice, allowable number of trees • Obtain 'Dial Before You Dig' information • Desktop review of the verge where the tree planting is requested • Notify non-qualifying residents • Ordering of trees • Prepare request for quotation, advertise and select contractor • Preparation of tree schedule and induction of contractor • Manage the tree planting contract • Update database with tree planting information • Respond to residents about the program and/or their street tree application	75 hours	$3750
Per tree costs (based on 400 trees)		$9.38/tree

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

CONTRACT AND MATERIAL COST:	**$191.30**
ADMINISTRATIVE COST:	**$9.38**
TOTAL COST/TREE	**$200.68**

Standard fee for cash-in-lieu of Offset Planting: $10/m² of canopy removed.

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Appendix 4: Tree Protection Plan (TPP) Template

Property Address: _____

Property Owner Name: _____

Contact details: Ph _____ **Email** _____

Responsible Person: _____

Contact details: Ph _____ **Email** _____

The provisions within this TPP are based upon the requirements of AS 4970 – 2009: Protection of trees on development sites (as amended)

This Tree Protection Plan should be available on site at all times during the construction phase of the development and shall be communicated to all contractors.

Tree Protection Zone Calculations

A TPZ is to be calculated for all WA Peppermint to be retained within the subject site and within the adjacent road reserve.

The **Tree Protection Zone** is the principle means of protecting trees on development sites. It is an area isolated from construction disturbance so that the tree remains healthy. Development may encroach into or make variations to the standard TPZ (refer to *AS4970 - 2009* for more details).

TPZ = Trunk Diameter x 12 (refer to Appendix 1 of LPP XX)

Note 1: Trunk diameter is measured at 1.4m above ground level.

Note 2: A TPZ should not be less than 2m

	Tree Protection Zone (TPZ) radius		Tree Protection Zone (TPZ) radius
Tree 1		Tree 2	
Tree 3		Tree 4	
Tree 5		Tree 6	

Site plan

A site plan is to be attached to this TPP which indicates the following:

SITE PLAN CHECKLIST	✓
(a) Location of proposed development;	

(b)	Location of all WA Peppermint on the subject site and within 6m of the property boundaries;	
(c)	The TPZ of all WA Peppermint to be retained on site;	
(d)	Location of protective fencing to be installed (see below);	
(e)	The locations for site compounds, office, car parking, equipment, material storage, machinery, access and/or servicing of development (where applicable); and	
(f)	Location of signage to be installed identifying the TPZ (see below).	

Protective Fencing

Prior to the commencement of any works, on site protective fencing shall be installed along the TPZ of all WA Peppermint to be retained. Details of materials to be used for protective fencing are to be provided below:

Note: Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids into the protected area from construction activities.

Where protective fencing cannot be installed and other protective measures are to be used, these shall be in accordance with *AS 4970 – 2009* as detailed below:

Signage

Signage identifying the TPZ should be placed on the fencing to be installed along the TPZ and be visible from within the development site. An example sign can be found within the *AS 4970 – 2009*:

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area

Version: Draft



Agreement of Owner & Responsible Persons

Construction Phase

The following activities are not permitted within the TPZ at any time during the construction of the development:

(a) Machine excavation including trenching;
(b) Excavation for silt fencing;
(c) Cultivation;
(d) Storage;
(e) Preparation of chemicals, including preparation of cement products;
(f) Parking of vehicles and plant;
(g) Refuelling;
(h) Dumping of waste;
(i) Wash down and cleaning of equipment;
(j) Placement of fill;
(k) Lighting of fires;
(l) Soil level changes;
(m) Temporary or permanent installation of utilities and signs; and
(n) Physical damage to the tree.

Local Planning Policy No. XX
Western Ringtail Possum Habitat Protection Area
Version: Draft

Post Construction Phase

At the completion of the construction phase of the development the TPZ should be reinstated in a manner that will support the health and stability of the WA Peppermint.

By signing this TPP the Owner and Responsible Person agree to implement and comply with the provisions contained within.

_____	_____
Owner's Signature	Responsible Person's Signature
Date : _____	Date : _____

CITY OF BUSSELTON

WESTERN RINGTAIL POSSUM WORKING GROUP DIRECTIONS PAPER

By

CITY OF BUSSELTON WESTERN RINGTAIL POSSUM WORKING GROUP

March 2019

1.0 Background

The Western Ringtail Possum, *Pseudocheirus occidentalis*, is a species unique and endemic to the south west of Western Australia. Both the range and numbers of Western Ringtail Possum have reduced dramatically since European settlement, largely as a result of land clearing and other environmental change.

The Western Ringtail Possum is the fauna emblem of the City of Busselton, and is reasonably common in parts of the City, especially the older and relatively well vegetated parts of the Busselton and Dunsborough urban areas. The urban areas of Busselton and Dunsborough, in fact, form a significant proportion of the remaining 'Core' habitat for the species.

The conservation status of the Western Ringtail Possum has been upgraded in recent years from 'Vulnerable, to 'Endangered' and, last year, to 'Critically Endangered' (CE) by the State and the Commonwealth. CE is the highest conservation status before species are considered to be 'Extinct in the Wild' or 'Extinct'.

There has been a substantial amount of research undertaken into Western Ringtail Possum and their habitat, and there are a number of issues that we do not yet fully understand. Habitat in the urban areas of Busselton and Dunsborough is, however, particularly important because Western Ringtail Possum exist at substantially higher densities here than in many natural/forest environments. It is understood a key reason for that is that urban gardens and parks are well fertilised, and in particular are watered through the summer, thereby increasing the carrying capacity of the landscape and mitigating the effects of the drying climate.

The State Department of Biodiversity, Conservation and Attractions (DBCA), together with the Federal Department of the Environment and Energy, and other stakeholders (such as local government authorities, community groups and environmental NGOs), have developed a Western Ringtail Possum Recovery Plan. The success of the recovery plan is likely to depend on a broad response, involving all levels of government, multiple agencies, the community and industry. Because of the importance of habitat in the City, the City will need to be involved.

In early 2017, the Council formally recognised that further work and discussion is necessary to determine what the City's role and approach should be. The Council did that through resolving, in May 2017, to support formation of a 'Western Ringtail Possum Working Group' (WRPWG). The WRPWG was to consist of interested Councillors and relevant staff. The role of the WRPWG was identified as being –

a) Researching and receiving briefings from stakeholders on Western Ringtail Possum issues;

b) Forming a view on what the City's role and approach to Western Ringtail Possum issues should be, both in terms of actions by the City itself, but also in terms of advocating for action at State and/or Federal level; and

c) Briefing and seeking Council support for the WRPWG's findings and proposed direction.

The membership of the WRPWG is and has been as follows –

- Councillor Rob Bennett (Chair);
- Councillor Ross Paine (Deputy Chair)
- Councillor Terry Best (until October 2017);
- Councillor Coralie Tarbotton (from October 2017);
- Paul Needham (Director, Planning & Development Services);
- Greg Simpson (Coordinator, Environmental Management); and
- Will Oldfield (Senior Environmental / Natural Resource Management Officer).

The WRPWG has received briefings from representatives of the following agencies and groups in undertaking its work –

- Federal Department of the Environment and Energy;
- State Department of Biodiversity, Conservation and Attractions;
- State Department of Planning, Lands and Heritage;
- South West Catchments Council;
- GeoCatch (Geographe Catchment Council) – Western Ringtail Possum Action Group (WRAG);
- Nature Conservation Margaret River Region (formerly Cape to Cape Catchments Council);
- Busselton-Dunsborough Environment Centre;
- Busselton Naturalists' Club;
- Fostering and Assistance for Wildlife Needing Aid (FAWNA); and
- Western Ringtail Possums R'us.

The City also has a representative on the DBCA coordinated Western Ringtail Possum Recovery Team.

2.0 Key findings

The WRPWG's key findings are as follows –

1. Habitat in and around the Busselton and Dunsborough urban areas is likely to be important to the future survival of Western Ringtail Possum as a species.
2. Whilst Western Ringtail Possum do feed on other species, mature WA Peppermint trees (*Agonis flexuosa*) are important for providing food and shelter for Western Ringtail Possum.

3. The current approach to protection and enhancement of Western Ringtail Possum habitat (in City of Busselton managed reserves and private land) is clearly insufficient to be confident that it will not be significantly degraded through clearing and development in a way that will critically affect the chances of Western Ringtail Possum surviving on the Busselton – Dunsborough coastal strip.
4. Whilst many in the community appreciate and value Western Ringtail Possum in the urban environment, Western Ringtail Possum can be perceived as problematic by some residents, and their conservation status and the importance of their urban habitat is underappreciated by some in the community. For example, there would be significant conservation benefits in further community engagement, especially in relation to: dog and cat management; and approaches to garden, street and reserve vegetation management.
5. There is a lot of excellent work being done by agencies and volunteers / volunteer organisations; work which should be given greater recognition and appreciation, and which needs to continue, but the level and nature of current effort is insufficient to ensure the future survival of Western Ringtail Possum as a species.
6. There appears to be a broad understanding of the factors leading to the decline of Western Ringtail Possum, but there needs to be continued research investment, and especially further research into Western Ringtail Possum populations within the context of the diverse range of ecosystems and habitats utilised by this species.
7. The WRPWG is supportive of the Western Ringtail Possum Recovery Plan, but there is a need for greater impetus, resources and strategic focus at all levels of government to ensure the survival of Western Ringtail Possum as a species beyond the short to medium term.

3.0 Proposed direction

The WRPWG has identified a number of initiatives that, together, could significantly assist in supporting the long-term survival of the Western Ringtail Possum. Those initiatives include both actions that the City can conceivably take itself, actions that could occur in partnership with other agencies and / or groups, as well as actions that would require State and /or Federal Government leadership or support. The initiatives have been split into seven key categories, as follows –

1. Habitat protection;
2. Habitat enhancement & expansion;
3. Community engagement & education;
4. Dog, cat & feral animal management;
5. Rehabilitation & new populations
6. Research & monitoring; and
7. Governance, funding & partnerships.

A description of each category, and the initiatives possible in each, is provided below.

3.1 Habitat protection

Western Ringtail Possum habitat can be lost or degraded in a number of ways, including through clearing of vegetation, through fire management practices, as well as through climate change, especially the general drying of the climate in the south west of Western Australia in recent decades. The focus here is on vegetation clearing in urban areas.

DRAFT

There are a range of controls on clearing at present, which may be summarised as follows –

- At the local level, there are controls on the clearing of vegetation in some areas through the City's town planning scheme (*City of Busselton Local Planning Scheme No. 21)*, including in the identified Coastal Management Area, Wetland Area, Landscape Value Area, Floodway Area, or in certain low-density residential zones, but those controls do not apply in most of the urban area.
- At a State level, there are controls on the clearing of vegetation through the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, although there are significant exemptions, which could often apply to clearing of individual trees or small stands of vegetation in most of the urban area.
- At a State level, larger scale clearing and /or larger scale development can be subject of environmental review by the Environmental Protection Authority, and environmental issues can also be considered by the Western Australian Planning Commission and Minister for Planning in considering new town planning schemes, town planning scheme amendments and structure plans.
- At a State level, through the *Biodiversity Conservation Act 2016*, there are requirements to manage the process of clearing where it may affect Western Ringtail Possum, but the controls do not currently protect habitat *per se*.
- At a Federal level, clearing or other actions that may affect matters of national environmental significance, including actions that may impact on Western Ringtail Possums or their habitat, can be subject of assessment pursuant to the *Environmental Protection and Biodiversity Conservation Act 1999*. The current approach to implementation of the Act with regard to Western Ringtail Possum is set out in the *Significant impact guidelines for the vulnerable western ringtail possum (Pseudocheirus occidentalis) in the southern Swan Coastal Plain, Western Australia*. The Guidelines do provide some protection for habitat in urban areas, but not for the smallest scale clearing, and the resources that have typically been available for enforcement and the consistency of their application has been insufficient to achieve sustained change.

The City has also attempted in the past to provide for better protection of urban habitat through Amendment 146 to the City's previous town planning scheme (*Shire of Busselton District Town Planning Scheme No. 20*). Amendment 146 was not, however, ultimately supported by the Western Australian Planning Commission and Minister for Planning. In addition, the recently introduced *Biodiversity Conservation Act 2016* empowers the State Minister for Environment to make regulations that could provide additional protection for Western Ringtail Possum habitat, including urban habitat. The State's aims and direction in that regard, however, are not currently known.

It is clear that the most significant gap in terms of habitat protection is in relation to small-scale clearing in urban areas, where habitat can be progressively lost through clearing and related development through a 'death by a thousand cuts'. There would, however, appear to be opportunities to address that, either through amendment of the City's town planning scheme, appropriate regulations pursuant to the *Biodiversity Conservation Act 2016*, a combination of both, or perhaps some other mechanism.

Such mechanisms could increase habitat protection, both in terms of reducing the ability for habitat to be cleared without any approval, and also potentially in terms of what and whether clearing is in fact approved. As the City attempted to do through Amendment 146, incentives to encourage habitat

retention could also be considered – and such incentives could help to ameliorate the financial impact on individual landowners of increased restrictions on clearing.

It is nevertheless not considered reasonable or practicable to simply prohibit all clearing of Western Ringtail Possum habitat – protection of Western Ringtail Possum habitat needs to be considered in the context of other means of preserving the species, as well as needs to accommodate new infrastructure and housing to support a rapidly growing community. At present, where approval is required for clearing of habitat, there is generally a requirement to 'offset' that clearing with habitat enhancement elsewhere – commonly referred to as 'offset planting'.

Whilst clearing should nevertheless be kept to a minimum, current approaches to offset planting are not always satisfactory or optimal and could be improved. The most problematic issues with offset planting are the fact that mature vegetation cannot be effectively replaced by newly planted habitat for several decades, and the requirements for acceptable offset sites are focused on discrete, vegetated areas or reserves, and value is not placed on planting integrated into urban environments where existing habitats are being threatened

Four key opportunities have been identified to get better value out of offset planting–

- Develop a pro-active offset planting programme, which allows for recognition of offset planting undertaken prior to seeking environmental approvals, the pooling of resources, and the meeting of offset planting requirements through a 'cash-in-lieu' system;
- Increased offset ratios, as well as requiring planting of more mature stock (and working proactively with the nursery industry to ensure more mature stock is available);
- Increased recognition of offset planting integrated into urban areas to support important remnant habitat in those areas; and
- Investigation into transplanting of mature WA Peppermint trees (or other trees providing valuable habitat function) to determine if they could form part of future offset planting approaches (noting that this could be trialled using trees which have already been approved to be cleared, and where more conventional offset planting requirements are also already being applied).

Another area that may yield some benefit is looking at the development and application of the City's Bush Fire Notice ('Firebreak and Fuel Reduction Notice') by the City, pursuant to the *Bush Fires Act 1954*. The City's current notice requires that vegetation not overhang buildings, including houses and sheds, even in urban areas. That requirement has not been rigorously enforced; but was it to be rigorously enforced, it would significantly undermine the value of urban Western Ringtail Possum habitat. It is also not clear that the requirement is necessary from a bush fire hazard mitigation perspective in many parts of our urban areas.

In summary, the following initiatives are considered worthy of exploration in relation to habitat protection (with key levels of government needing to be involved identified in brackets) –

- I1: Introduce additional controls on the clearing of Western Ringtail Possum habitat in urban areas, including small-scale clearing. (Federal, State and Local)
- I2: Consider introduction of incentives to encourage retention of Western Ringtail Possum habitat in urban areas. (Federal, State and Local)
- I3: Develop a pro-active offset planting programme, which allows for recognition of offset planting undertaken prior to seeking environmental approvals, the pooling of resources,

and the meeting of offset planting requirements through a 'cash-in-lieu' system. (Federal, State and Local)

- I4: Consider increased offset planting ratios for clearing of Western Ringtail Possum habitat and planting of more mature stock (and work proactively with the nursery industry to ensure more mature stock is available). (Federal, State and Local)
- I5: Increase recognition of offset planning for clearing of Western Ringtail Possum habitat that is integrated into urban areas, rather than being focused on larger-scale planting in reserves or 'natural areas'. (Federal and State)
- I6: Investigations into transplanting of mature WA Peppermint trees to determine if they could form part of future offset planting approaches. (Local)
- I7: Review Bush Fire Notice ('Firebreak and Fuel Reduction Notice') to consider and reduce the potential impact on Western Ringtail Possum habitat, especially in areas of relatively low bush fire hazard. (Local)

3.2 Habitat enhancement & expansion

Because of climatic (i.e. the drying climate) and land tenure issues (i.e. a lack of suitable government controlled land in coastal or near-coastal locations), it is fairly difficult to enhance or expand Western Ringtail Possum habitat through the creation of new 'natural' habitat. Whether in the form of new 'natural' habitat, or through enhancing urban habitat, the long lead-time required to grow new mature WA Peppermint trees (20 years plus), also means that habitat enhancement and expansion cannot occur quickly, even where space can be found to do so.

The long lead-time required to create enhanced or expanded habitat means that it makes sense to undertake the process of doing so as quickly as possible. In simple terms, it makes sense to undertake as much planting as possible as soon as possible, so that it develops into useful habitat as soon as possible. The City does have street and park reserve planting programmes which are seeing a progressive increase in potential Western Ringtail Possum habitat, but those programmes could be substantially accelerated, including in the following ways –

- Increasing the annual budget allocation for street and reserve tree planting, potentially bringing forward to the next few years expenditure that might otherwise occur over the next couple of decades;
- Increasing the efficiency of the street tree planting programme, by planting trees on verges at higher densities (including verges where tree planting has already occurred, but at relatively low densities), and going ahead with planting of WA Peppermints unless the adjoining owner has objected (during the consultation period), rather than the current situation, where a tree is only planted where the adjoining owner has indicated their support, and has indicated their preference of tree species;
- Increasing the planting of WA Peppermint trees and understorey species in reserves that are in areas where there is good urban Western Ringtail Possum habitat, including foreshore reserves that may be suitable, and grassed areas of reserves where the grassed areas are not required for recreation purposes;
- Identifying reserves with higher quality Western Ringtail Possum habitat in rural areas, surveying for presence of Western Ringtail Possum, managing them as Western Ringtail Possum habitat and undertaking actions to link these areas. The Wadandi Track is a significant reserve that passes through a range of vegetation types and reserves that are relatively intact. There are, however, large areas reserves that are cleared and will

require a large effort to undertake meaningful revegetation to form Western Ringtail Possum habitat, and

- As has already been recommended as an initiative under 'Habitat Protection', planting of more mature stock (and working proactively with the nursery industry to ensure more mature stock is available).

Most of these potential changes to street and park tree planting programmes would also improve the aesthetics and amenity of urban areas, and ameliorate 'urban heat island' effects that will become more acute with climate change and increased density of development.

There are some further actions that are considered could assist in habitat enhancement and expansion, including –

- Further research into why some WA Peppermints grow leaves palatable to Western Ringtail Possum and others do not and, if possible, planting programmes that result in palatable trees;
- Unless there is a clear reason not to do so (such as because of perceived security/visibility or fire risk), the dense planting of understorey shrubs and sedges, to provide protective cover for Western Ringtail Possum should they come to ground, around WA Peppermint trees on reserves, and changes to management practices in relation to existing trees in reserves;
- Increased investment in 'possum crossings' to assist Western Ringtail Possum in crossing roads; and
- Encouragement and incentives for the enhancement and expansion of Western Ringtail Possum habitat on private land.

Habitat enhancement also includes the removing of barriers and impediments to Western Ringtail Possum movement. Western Ringtail Possum are less prone to predation by other animals and road kill if they can move from one tree to another without having to come to ground. Connections between habitat trees can be made with large diameter ropes, or through slightly higher boundary fences. In many older parts of the district the Western Power grid can either be fatal to possums (if wires exposed) or provide a connection between habitat trees (if insulated). The following actions could enhance Western Ringtail Possum habitat by removing impediments to movement above the ground.

- Controls/guidelines on boundary fencing to encourage fencing that Western Ringtail Possum can use to travel through the urban environment – this would generally mean fencing 2.1 metres (rather than 1.8 metres) high, or fixing of timber capping to the top of fencing to provide better grip for possum passage; to reduce the risk from dogs, and no 'possum guards' or similar on fences.
- Increase connectivity between trees with large diameter rope within City reserves;
- Work with Western Power to reduce the possibility of electrocution and facilitate Western Ringtail Possum moving between habitat trees by increasing the height of the low voltage uninsulated wires of the above ground network and increasing the clearance for habitat trees to grow underneath.

The City has also identified an area where the State may wish to focus attention in terms of strategic land acquisition, that being the land between Abbey/Vasse and Dunsborough, and between Caves Road and the future Vasse-Dunsborough Link alignment. This area is in a near-coastal location, will require land acquisition and property severance to allow for the development of the Vasse-

Dunsborough Link, has good potential access to water, being at the terminus of a number of small rivers/creeks and rural drain networks, and could be developed into a corridor linking the Busselton and Dunsborough urban areas, allowing Western Ringtail Possum gene flow between habitat areas in the Geographe Bay coastal hinterland. Predator control would need to be part of such a program as predation by foxes is a significant factor in possum mortality in rural areas.

In summary, the following initiatives are considered worthy of exploration in relation to habitat enhancement and expansion (with key levels of government needing to be involved identified in brackets) –

- I8: Increasing the annual budget allocation for street and reserve tree planting, bringing forward to the next few years expenditure that might otherwise occur over the next couple of decades. (Local)
- I9: Increasing the efficiency of the street tree planting programme, by planting trees on verges at higher densities (including verges where tree planting has already occurred, but at relatively low densities), and going ahead with planting of WA Peppermints unless the adjoining owner has objected (during the consultation period), rather than the current situation, where a tree is only planted where the adjoining owner has indicated their support, and has indicated their preference of tree and understorey species. (Local)
- I10: Increasing the planting of WA Peppermint trees in reserves that are in areas where there is good urban Western Ringtail Possum habitat, including foreshore reserves that may be suitable, and grassed areas of reserves where the grass is not required for recreation purposes. (Local)
- I11: Identifying reserves with higher quality Western Ringtail Possum habitat in rural areas, undertaking actions to improve their habitat value and link them e.g. The Wadandi Track is a very significant reserve (100m wide) that passes through a range of vegetation types and reserves that are relatively intact. This could provide a strategic habitat corridor through the landscape.
- I12: Planting of more mature stock (and work proactively with the nursery industry to ensure more mature stock is available). Note: this is in part duplication of I4. (Local)
- I13: Further research into why some WA Peppermints grow leaves palatable to Western Ringtail Possum and others do not and, if possible, planting programmes that result in palatable trees. (State)
- I14: Unless there is a clear reason not to do so (such as because of perceived security/visibility or fire risk), the dense planting of understorey shrubs and sedges, to provide protective cover for Western Ringtail Possum should they come to ground, around WA Peppermint trees on reserves, and changes to management practices in relation to existing trees in reserves. (Local)
- I15: Increased investment in 'possum crossings' to assist Western Ringtail Possum in crossing roads. (Federal, State and Local)
- I16: Encouragement and incentives for the enhancement and expansion of Western Ringtail Possum habitat on private land. (Federal, State and Local)
- I17: Controls/guidelines on boundary fencing to encourage fencing that Western Ringtail Possum can use to travel through the urban environment – this would generally mean fencing 2.1 metres (rather than 1.8 metres) high, to reduce the risk from dogs, and no 'possum guards' or similar on fences. (Local)

DRAFT

- I18: Work with Western Power to reduce the possibility of electrocution and facilitate Western Ringtail Possum moving between habitat trees by increasing the height of the low voltage uninsulated wires of the above ground network and increasing the clearance for habitat trees to grow within. (State and Local)
- I19: Land acquisition - The City has also identified an area where the State may wish to focus attention in terms of strategic land acquisition, that being the land between Abbey/Vasse and Dunsborough, and between Caves Road and the future Vasse-Dunsborough Link alignment. This area is in a near-coastal location, will require land acquisition and property severance to allow for the development of the Vasse-Dunsborough Link, has good potential access to water, being at the terminus of a number of small rivers/creeks and rural drain networks, and be developed into a corridor allowing for Western Ringtail Possum gene flow between the Busselton, Vasse and Dunsborough urban areas. There may be other strategic land acquisitions in rural and regional areas at some time in the future and the City would support these also being considered for the creation of Western Ringtail Possum habitat.

3.3 Community engagement & education

The following community engagement activities are currently occurring and should be continued. The City may consider how it can increase its support to and involvement in these activities as a means of improving community engagement and education.

- Possum night stalks are a fun and informative activity that are attractive to young families to learn more about Western Ringtail Possums and then go searching for them in one of our local parks.
- Promotion of the annual street tree planting program and provision of free street trees to residents is a means of getting more habitat trees planted and is a tangible item that residents can receive for their rates by participating in the schemes.
- Installation of possum awareness road signage has been designed to remind drivers of possum hotspots and what the animal looks like when crossing the road.
- Investigation of other traffic calming devices/techniques that will improve driver behaviour in dense Western Ringtail Possum population areas
- Installation of possum interpretive signage in high public use areas.
- Seasonal messages about possums in local and social media.
- Citizen science programs such as 'The Ringtail Tally', a monitoring exercise coordinated through Geocatch

3.3.1 Possum friendly neighbourhoods

There are a number of existing information sources and programs, such as NatureVerge, that could be drawn together into a package that promotes Possum Friendly neighbourhoods. This package could be a means of enabling people to implement the many initiatives listed in this report by promoting practical on-ground actions such as: planting of habitat vegetation, improving fences, creation of enclosures for domestic dogs and cats, preventing Western Ringtail Possum accessing roof spaces, improving the habitat value and condition of existing vegetation.

3.3.2 TV, radio and social media advertising

Community surveys have shown that the majority of the community are either indifferent or like Western Ringtail Possums. However, a small percentage of people believe that they are a pest and/or

do not believe they are Critically Endangered. There are a range of reasons why people believe these things, however, it is evident that there needs to be a continued effort to change attitudes and behaviours towards Western Ringtail Possum. Many of the events put on to encourage community understanding of the animal are mostly attended by 'the converted'. In order to reach the less engaged, and at least encourage more informed discussion with peers about the plight of the Western Ringtail Possum, a TV, radio and social media campaign could be used to deliver the message. South West Catchments Council has run a successful campaign called 'Save the Crabs' which was believed to be successful in changing behaviour about the timing and use of fertilisers around the Peel/Harvey Estuary. TV advertising could contribute to spreading of the message about Western Ringtail Possum in a number of ways, including;

- Implementing coordinated awareness and education programs with government agencies and community organisations.
- Targeting a Western Ringtail Possum awareness campaign for the southwest region.
- Running a tourism campaign through the MRBTA to promote the uniqueness of the Western Ringtail Possum within the region.

3.3.3 Summary

In summary, the following initiatives are considered worthy of exploration in relation to Community engagement and education (with key levels of government needing to be involved identified in brackets);

- I20: Continued involvement in and support for existing community engagement activities such as Possum night stalks, Geocatch Western Ringtail Possum tally, Nature Conservation Margaret River Citizen Science Western Ringtail Possum survey, promotion of the street tree planting program and free street trees to residents, installation of possum awareness road signage and possum interpretive signage in high public use areas, seasonal messages and interest articles about possums in the local newspaper and internet sites and citizen science programs. (State and Local)
- I21: Development and roll out of a Possum Friendly Neighbourhoods package that draws together existing information sources and programs and promotes practical on-ground actions that residents can take to improve Western Ringtail Possum survival. (State and Local)
- I22: TV, radio and social media helps to increase understanding and acceptance of Western Ringtail Possum in the wider community. These campaigns may be of a general information nature or serve to promote tourism or community involvement in the community awareness activities above. (State)

3.4 Dog, cat & feral animal management

Decline in Western Ringtail Possum numbers in rural areas has largely been attributed to clearing and fox predation. Foxes are an effective predator and have been known to jump up, or climb trees, to catch Western Ringtail Possum. Conditions over the past 12 months have been favourable for foxes, such that numbers have increased, and have pushed into urban areas searching for food. The City has had a marked increase in the number of reports by residents of foxes taking their chickens and there have been many more observations of predation on possums in urban parklands and natural areas. Options for fox control in urban areas are limited. The City loans cage traps as an option for residents who want to catch a fox, however, the success rate is fairly low. The most effective means is using 1080 poison but this can only be done in rural areas, and under permit. The City may have best effect

in controlling foxes by encouraging landowners in peri-urban and rural areas to undertake fox baiting programs.

Western Ringtail Possum that encounter domestic cats and dogs are often killed or severely injured. Under the existing dog and cat laws owners are required to keep their pets contained within their properties, or under their control. In public areas dogs must be restrained on a leash, except within dog exercise areas. Currently there is little the City can do to discourage dog and cat owners from allowing their dog or cat to wander. The onus for proving a cat or dog is substantially on those that are affected by the nuisance animals. Affected people often loan a cat trap, catch the offending animal on their own property and hand it to City of Busselton Rangers. Rangers then identify the animal, contact the owners and return the animal. At this point the owner is advised of their responsibilities.

The City can make its own local laws but is constrained by the State Dog and Cat Acts. However, local government can make local laws about (Cat Act 2011, Division 2 Local laws, Section 79, Clause (3) -

(e) cats creating a nuisance;

(f) specifying places where cats are prohibited absolutely; and

(g) requiring that in specified areas a portion of the premises on which a cat is kept must be enclosed in a manner capable of confining cats.

The costs and complexities of such regulations could, however, require very careful consideration.

The City can also undertake its own trapping program in public areas to try to catch reported nuisance animals.

In summary, the following initiatives are considered worthy of exploration in relation to Dog, Cat and feral animal management (with key levels of government needing to be involved identified in brackets) -

- I23: Investigate and develop a control program that encourages the control of foxes and feral cats on larger private holdings in peri-urban areas. (Local)
- I24: Expand the fox and feral cat control programs on City reserve lands and actively promote control activities to adjoining land owners. (Local)
- I25: Consider modification of Local Laws in relation to the keeping of cats that place more responsibility on the pet owner to contain their pets on their property. (Local)
- I26: Implement targeted cat ownership awareness programme to reduce cat and Western Ringtail Possum fatal interactions. (Local)

3.5 Rehabilitation & new populations

A protocol for the rehabilitation of possums (and all native fauna) found injured has been developed by the Western Ringtail Action Group, comprising local groups, DBCA and local vets. The protocol ensures injured animals can be diagnosed and put into appropriate care as quickly as possible. Local vets currently examine native animals and prescribe care requirements free of charge. Where an animal cannot be rehabilitated to a level where it can return to the wild it is euthanized, and where it can be rehabilitated they are then given to carers. Rehabilitation of injured animals can sometimes be a 24/7 activity and there are costs for consumables and equipment such as food and heat pads. It is important to recognise the voluntary effort in some way. The needs of carers are varied and many, and as such, dialogue with the groups concerned is required to determine appropriate and useful

forms of support. The following actions could help to support the work of carers, working to improve care of injured possums and success rates for possums released back into the wild.

- Liaise with agencies and care groups to determine appropriate and useful forms of support.
- Support carer training programs.
- Promote and where appropriate, facilitate collaboration between agencies and community based organisations on possum related activities such as injury care and rehabilitation.

It is not considered, however, that local government should not play a significant role with the wildlife care matters. The effectiveness of animal care in ensuring the survival of the species is also unclear.

There may also be opportunity to establish or enhance new urban habitat elsewhere in the south west

In summary, the following initiatives are considered worthy of exploration in relation to Care, captive breeding & new populations (with key levels of government needing to be involved identified in brackets);

- I27: Liaise with agencies and care groups to determine appropriate and useful forms of support. (State)

3.6 Research & monitoring

While the City is not usually responsible for undertaking research it can, for example, facilitate the use of certain spaces for the carrying out of research and actively pursue implementation of the outcomes of research. One such example of implementation of research would be to understand the issue of palatability of vegetation. The effectiveness of revegetation effort may be improved significantly if a greater proportion of the vegetation being planted is palatable to possums.

There is a growing interest in citizen science surveys, such as the Western Ringtail Possum Tally. Possums are easy to spot and very accessible. Most people in Busselton and Dunsborough can participate from home. The more people involved, the better the results from the survey. Another outcome from such programs is greater community awareness and appreciation for the animal, which is a key objective of this plan. A baseline survey and long term monitoring program of the Western Ringtail Possum population would help to determine the success or otherwise of the plan.

In summary, the following initiatives are considered worthy of exploration in relation to Research & Monitoring (with key levels of government needing to be involved identified in brackets);

- I28: Review research undertaken on palatability and support propagation of palatable species for use in vegetation programmes. (State and Local)
- I29: Support and promote citizen science possum monitoring within the community (State and Local)
- I30: Undertake a base survey of possum populations and develop a monitoring programme for the periodic long term measurement of possum populations to gauge overall success of possum recovery and enhancement. (State and Local)

3.7 Governance, funding & partnerships

The Federal Department of Environment and Energy is responsible for administration of the EPBC Act. However, there are very few resources based in WA and an inadequate number of compliance officers to assess applications and investigate reports. The change in status of the Western Ringtail Possum to

'Critically Endangered' and the consequent changes to the significant impact criteria mean there is an increased effort required to ensure developments do not impact on the species. If there are to be changes to the level of enforcement all levels of government need to be giving a consistent message, supporting one another and enforcing the newer more stringent criteria to protect the species.

Western Ringtail Possum are a Federally listed species and under the current funding arrangements through the Federal Government, funding is available for projects concerning Western Ringtail Possum. However, the funding pool is vastly inadequate for the number and value of projects put up under the National Landcare Program each year. With the assistance of the South West Catchments Council a very comprehensive application was prepared in 2017. All organisations working on Western Ringtail Possum in the Capes-Geographe region were involved. The combined value of the project was $250,000. The project was competing with other projects on native species with higher status and although it was a competitive project could not be funded. Funding from the Federal and State Government would be vital to the success of this Western Ringtail Possum plan. A wide range of activities are proposed because this issue needs to be tackled on many fronts. Everyone has a role to play in the management of Western Ringtail Possum and therefore funding of multi-faceted, multi partnered projects is important. The City has a role to play in getting this message across to our federal and state politicians to ensure projects around Western Ringtail Possum are funded in future.

There are many organisations and agencies that have influence on Western Ringtail Possum directly or indirectly, or that could have, the following are just a few. Agencies include: Western Power, Water Corporation, DBCA, Tourism, Telecommunications companies, Main Roads, Planning Department and planning authorities. Business, community groups and other organisations include; Geocatch, Nature Conservation Margaret River, South West Catchments Council, Western Ringtail Possum groups, vetinarians, tour operators, landscapers, nurseries, World Wide Fund for Nature, Australian Conservation Foundation, research institutions and Universities.

These areas of work could be very significant in terms of supporting on-ground action, community behaviour change programs, enforcement and providing incentives that are consistent with this plan.

In summary, the following initiatives are considered worthy of exploration in relation to Governance, Funding & Partnerships (with key levels of government needing to be involved identified in brackets)
-

- I31: Collaborate with other stake holders on a wide range of activities to develop robust, multi-faceted projects that are competitive for the larger funding opportunities.
- I32: Seek federal and state political support for the implementation of this Western Ringtail Possum plan and the Western Ringtail Possum Recovery Plan to ensure Western Ringtail Possum projects are funded.
- I33: Build relationships with key stakeholders in the tourism industry for the purpose of conservation, awareness and visitations.

5.59pm: At this time, Councillor Paine re-entered the meeting.

13.1 DA 20/0916 - MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOP AND TOURIST ACCOMMODATION)

STRATEGIC GOAL	2. PLACE AND SPACES Vibrant, attractive, affordable
STRATEGIC OBJECTIVE	2.3 Creative urban design that produces vibrant, mixed-use town centres and public spaces.
SUBJECT INDEX	Development Applications
BUSINESS UNIT	Development Services
REPORTING OFFICER	Senior Development Planner - Andrew Watts
AUTHORISING OFFICER	Manager, Strategic Planning - Matthew Riordan
NATURE OF DECISION	Regulatory: To determine an application/matter that directly affects a person's right and interests e.g. development applications, applications for other permits/licences, and other decisions that may be reviewable by the State Administrative Tribunal
VOTING REQUIREMENT	Simple Majority
ATTACHMENTS	Attachment A Location Plan Attachment B Development Plans Attachment C Landscape Plans Attachment D Applicant report in support of proposal Attachment E Traffic Impact Assessment Attachment F Bushfire Management Plan Attachment G Environmental Noise (Acoustic) Report Attachment H Environmental Report and Fauna Management Plan Attachment I Waste Management Plan Attachment J URBIS design review comments Attachment K Schedule of Submissions

DISCLOSURE OF INTEREST	
Date	12 May 2021
Meeting	Ordinary Council
Name/Position	Cr Kelly Hick, Deputy Mayor
Item No./Subject	Item 13.1 'DA 20/0916 - Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation)'
Type of Interest	Impartiality Interest
Nature of Interest	I am an Authorised Marriage Celebrant and the proposed development is a potential venue for weddings. I am also the owner of a tourism accommodation business Dunsborough Ridge Retreat which is located at Ocean View Drive, Quindalup.

Councillor Hick foreshadowed an alternative recommendation prior to the meeting. In accordance with the City's Standing Orders, it was moved prior to the officer recommendation, which was:

OFFICER RECOMMENDATION

That the Council determines:

A. That application DA20/0916 submitted for a 'Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation)' is considered by the Council to be generally consistent with Local Planning Scheme No. 21 and the objectives and policies of the zone within which it is located.

B. That Development Approval is issued for the proposal referred to above (A) subject to the following conditions:

General Conditions

1. The development hereby approved shall be substantially commenced within two years from the date of this decision letter.

2. The development hereby approved shall be undertaken in accordance with the signed and stamped Approved Development Plans except as may be modified by the following conditions.

Prior to Commencement of Any Works Conditions

3. The development hereby approved, or any works required to implement the development, shall not commence until the following plans or details have been submitted to the satisfaction of the City and have been approved in writing:

3.1 Drainage Management Plan.

3.2 Odour Management Plan.

3.3 Venue Management Plan.

3.4 Acoustic Report which demonstrates that all mechanical services associated with the proposed development, and any other noise source, including noise emanating from Licensed Premises, will comply with the *Environmental Protection (Noise) Regulations 1997*, must be submitted to and approved by the City.

3.5 A Noise Management Plan which shall include (but not be limited to) all recommendations specified in the Environmental Noise Report dated 9 November 2020, prepared by Gabriels Hearne Farrell in order to reduce noise disturbance to neighbours and generally comply with the *Environmental Protection (Noise) Regulations 1997.*

3.6 Lighting Management Plan consistent with the 'dark sky principles' and the requirements of Australian Standard *AS 4282—2019*, *Control of the obtrusive effects of outdoor lighting*.

3.7 A schedule of the final materials, finishes and colours. The schedule shall include details of the type of materials proposed to be used, including their colour and texture.

3.8 Details of signage, including but not limited to the design, materials and levels of illumination (where applicable).

3.9 Details of the proposed bicycle parking facilities. The details shall include, as a minimum, the location, design and materials to be used in their construction.

3.10 Details of the entry controls required at the southern crossover to Cape Naturaliste Road to ensure this crossover is only used by service vehicles exiting the site in a left-out movement only.

3.11 The southern crossover to Cape Naturaliste Road being designed and constructed to the specification and satisfaction of the City to ensure continuity for pedestrians and that it is of sufficient width to cater for left-out truck movements.

3.12 A contribution of $10,995.80 toward the cost of Road Network Upgrading in the Dunsborough precinct.

3.13 A contribution of $5,795.20 toward the cost of Dual Use Path Network Upgrading in the Dunsborough precinct.

3.14 A contribution of $32,340.00 toward the cost of community facilities in the Dunsborough precinct.

3.15 Satisfactory arrangements shall be made with the City to provide public art works within the development site. This entails compliance with the Percent for Art provisions of the City's Development Contribution Policy via appropriate works up to a minimum value of 1% of the Estimated Cost of Development ("ECD"). Where the value of on-site works is less than 1% of the ECD, a payment sufficient to bring the total contribution to 1% of the ECD is required.

3.16 A Construction Management Plan (CMP). The CMP shall address the following:

a. access to and from the site;

b. delivery of materials and equipment to the site;

c. storage of materials and equipment on the site;

d. parking arrangements for contractors and subcontractors;

e. management of construction waste; and

f. other matters likely to impact on the surrounding properties.

3.17 A Landscape Plan which shall include the following:

a. the location, number, size and species type of existing and proposed trees and shrubs, including calculations for the landscaping area;

b. any lawns to be established;

c. fencing to the northern site boundary to provide definition with the Dugalup Brook Recreation Reserve (R42673);

d. any existing landscape areas to be retained;

e. those areas to be reticulated or irrigated; and

f. verge treatments.

3.18 A Tree Protection Plan (TPP) for the mature trees to be retained on the site and adjoining road reserves as indicated on the approved site plan and for vegetation within the adjoining Recreation Reserve – R42673 (Dugalup Brook). The approved TPP shall be implemented before any of the substantive development is commenced and shall be retained throughout the development period until such time as all equipment, machinery and surplus materials have been removed from the site. Within the areas so fenced, nothing shall be stored or placed, and the ground levels shall not be altered.

3.19 Satisfactory arrangements being made with the City for an easement in accordance with sections 195 and 196 of the Land Administration Act for the benefit of the City of Busselton and the public at large is to be shown on the Deposited Plan to be registered on the Certificate of Title over a 3m wide by 13m deep section of the southeast access way (to Dunn Bay Road) to the satisfaction of the City.

3.20 Updated Bushfire Management Plan to address the following:

a. Clearly identify where a Performance Principle Solution has been used to address Bushfire Protection Criteria in place of an Acceptable Solution;

b. Following an audit of vegetation classifications and distance to vegetation, modify inputs in the BMP as necessary;

c. Confirm the Landscape Plan will comply with Schedule 1 of the *Guidelines for Planning in Bushfire Prone Areas.*

Prior to Occupation/Use of the Development Conditions

4 The development hereby approved shall not be occupied, or used, until all plans, details or works required by Condition 3 have been implemented; and the following conditions have been complied with:

4.1 Arrangements to the satisfaction of the City being entered into to provide for legal access from Cape Naturaliste Road to the development site across the 1.0m wide portion of adjoining recreation reserve (Lot 4959, R42673).

4.2 All vehicle parking, access ways, footpaths and external lighting shall be constructed in accordance with the Australian Standard for Parking Facilities - Off-Street Car Parking (AS 2890.1) and shall be developed in the form and layout depicted on the approved plans to the satisfaction of the City.

4.3 Accessible car parking and access shall be provided and designed in accordance with the Australian Standard for Parking Facilities - Off-Street Car Parking for people with disabilities (AS 2890.6).

4.4 Exterior lighting shall be provided under all awnings, in parking areas and all entry points.

4.5 Buildings within the approved development shall be constructed in accordance with the 'Architectural Requirements' specified in the Environmental Noise Report dated 9 November 2020, prepared by Gabriels Hearne Farrell.

Ongoing Conditions

5 The works undertaken to satisfy Conditions 2, 3 and 4 shall be subsequently maintained for the life of the development; and the following conditions must be complied with:

5.1 The Venue Management Plan for the development shall be implemented and maintained in accordance with the approval details.

5.2 The Noise Management Plan for the development shall be implemented and maintained in accordance with the approval details.

5.3 The southern crossover to Cape Naturaliste Road shall be provided with controlled access to be limited to use only by service vehicles exiting the site in a left-out movement only.

5.4 No roller doors or screens are permitted to be installed to the windows fronting the commercial tenancies fronting Dunn Bay Road.

5.5 All glazing to the commercial tenancies fronting Dunn Bay Road is to be clear, non-tinted glazing and shall not be subsequently obscured by alternative window treatments, signage or internal shelves.

5.6 All doors to shop premises fronting Dunn Bay Road must be kept unlocked for customer access during all hours when the subject premises are trading.

5.7 All services and service-related hardware, including antennae, satellite dishes and air conditioning units, being suitably located away from public view and/or screened to the satisfaction of the City.

5.8 Compliance with the approved Waste Management Plan.

5.9 The approved Bushfire Management Plan shall be implemented and maintained in accordance with the approval details and any recommendations therein.

5.10 Landscaping and reticulation shall be maintained in accordance with the approved Landscape Plan to the satisfaction of the City. Unless otherwise first agreed in writing, any trees or plants which, within a period of five years from first planting, are removed, die, or are assessed by the City as being seriously damaged, shall be replaced within the next available planting season with others of the same species, size and number as originally approved.

5.11 Within 6 months of the registration of an easement pursuant to Sections 195 and 196 of the *Land Administration Act 1997* over Lot 108 (no. 57) Dunn Bay Road, providing legal access to Lot 2 (no. 59) Dunn Bay Road and completion of the balance crossover on Lot 108 the relevant crossover onto Dunn Bay Road being amended to the specification and satisfaction of the City to allow for shared access to Dunn Bay Road. Within 30 days of the completion of the crossover the redundant portion of the cross over being removed and the area landscaped to the satisfaction of the City.

COUNCIL DECISION AND ALTERNATIVE RECOMMENDATION

C2105/098 Moved Councillor K Hick, seconded Councillor P Carter

That the Council determines:

A. That application DA20/0916 submitted for a 'Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation)' is considered by the Council to be generally consistent with Local Planning Scheme No. 21 and the objectives and policies of the zone within which it is located.

B. That Development Approval is issued for the proposal referred to above (A) subject to the following conditions:

General Conditions

1. The development hereby approved shall be substantially commenced within two years from the date of this decision letter.

2. The development hereby approved shall be undertaken in accordance with the signed and stamped Approved Development Plans except as may be modified by the following conditions.

Prior to Commencement of Any Works Conditions

3. The development hereby approved, or any works required to implement the development, shall not commence until the following plans or details have been submitted to the satisfaction of the City and have been approved in writing:

3.1 Drainage Management Plan, the details of which shall incorporate Water Sensitive Urban Design principles as discussed in the Western Australian Planning Commission's *Better Urban Water Management* guidelines and should ensure that surface water will be contained within the development site with no direct, unfiltered discharge to the Dugalup Brook.

3.2 Odour Management Plan, (OMP) which is to detail how odours emitted from coffee roasting and brewing activities will be managed to prevent impact on the amenity of neighbouring business and residential premises. The OMP shall include (but is not limited to) details of the following:

- **a. Roasting and brewing days and times;**
- **b. Scale of production;**
- **c. Production techniques to limit odour emission;**
- **d. Control equipment and Engineering control measures;**
- **e. Monitoring; and**
- **f. Odour complaints handling process.**

3.3 Venue Management Plan, (VMP) which is to support implementation of the Noise Management Plan and manage patrons' behaviour to mitigate impact on the amenity of neighbouring business and residential premises. The VMP shall include (but is not limited to) details of the following:

- **a. Outdoor entertainment;**
- **b. Implementation of the approved Noise Management Plan;**
- **c. Management of patrons leaving the site;**
- **d. Control of vandalism, litter and anti-social behavior;**
- **e. Complaints and conflict resolution process;**
- **f. Trading hours as follows:**
  - **i. Between 7am and 10pm, Monday to Sunday (inclusive) the maximum permissible patrons numbers in each of the food and beverage sites shall be as follows:**
    - **Within Building 1 (Brewery) – 206 patrons**
    - **Within Building 2 (Restaurant) – 181 patrons**
    - **Within Building 3 (Café) – 71 patrons**
    - **In the external areas (courtyard and decks) – 542 patrons**
  - **ii. Between 10pm and 12 midnight, Thursday to Saturday (inclusive) the maximum permissible patrons numbers in each of the food and beverage sites shall be as follows:**
    - **Within Building 1 (Brewery) – 206 patrons**
    - **Within Building 2 (Restaurant) – 181 patrons**
    - **Within Building 3 (Café) – Closed**
    - **In the external areas (courtyard and decks) – 160 patrons**
  - **iii. Between 10pm and 12 midnight, Sunday to Wednesday (inclusive) the maximum permissible patrons numbers in each of the food and beverage sites shall be as follows:**
    - **Within Building 1 (Brewery) – 206 patrons**

- **Within Building 2 (Restaurant) – 181 patrons**
- **Within Building 3 (Café) – Closed**
- **In the external areas (courtyard and decks) - Closed**

iv. All food and beverage sites including external areas are to be closed to the public between 12 midnight and 7am.

3.4 Acoustic Report which demonstrates that all mechanical services associated with the proposed development, and any other noise source, including noise emanating from Licensed Premises, will comply with the *Environmental Protection (Noise) Regulations 1997*, must be submitted to and approved by the City.

3.5 A Noise Management Plan which shall include (but not be limited to) all recommendations specified in the Environmental Noise Report dated 9 November 2020, prepared by Gabriels Hearne Farrell in order to reduce noise disturbance to neighbours and generally comply with the *Environmental Protection (Noise) Regulations 1997.*

3.6 Lighting Management Plan consistent with the 'dark sky principles' and the requirements of Australian Standard *AS 4282—2019*, *Control of the obtrusive effects of outdoor lighting*.

3.7 A schedule of the final materials, finishes and colours. The schedule shall include details of the type of materials proposed to be used, including their colour and texture.

3.8 Details of signage, including but not limited to the design, materials and levels of illumination (where applicable).

3.9 Details of the proposed bicycle parking facilities. The details shall include, as a minimum, the location, design and materials to be used in their construction.

3.10 Details of the entry controls required at the southern crossover to Cape Naturaliste Road to ensure this crossover is only used by service vehicles exiting the site in a left-out movement only.

3.11 The southern crossover to Cape Naturaliste Road being designed and constructed to the specification and satisfaction of the City to ensure continuity for pedestrians and that it is of sufficient width to cater for left-out truck movements.

3.12 A contribution of $10,995.80 toward the cost of Road Network Upgrading in the Dunsborough precinct.

3.13 A contribution of $5,795.20 toward the cost of Dual Use Path Network Upgrading in the Dunsborough precinct.

3.14 A contribution of $32,340.00 toward the cost of community facilities in the Dunsborough precinct.

3.15 Satisfactory arrangements shall be made with the City to provide public art works within the development site. This entails compliance with the Percent for Art provisions of the City's Development Contribution Policy via appropriate works up to a minimum value of 1% of the Estimated Cost of Development ("ECD"). Where the value of on-site works is less than 1% of the ECD, a payment sufficient to bring the total contribution to 1% of the ECD is required.

3.16 A Construction Management Plan (CMP). The CMP shall address the following:

a. access to and from the site;

b. delivery of materials and equipment to the site;

c. storage of materials and equipment on the site;

d. parking arrangements for contractors and subcontractors;

e. management of construction waste; and

f. other matters likely to impact on the surrounding properties.

3.17 A Landscape Plan which shall include the following:

a. the location, number, size and species type of existing and proposed trees and shrubs, including calculations for the landscaping area;

b. any lawns to be established;

c. fencing, including fencing to the northern site boundary to provide definition to and manage access through the Dugalup Brook Recreation Reserve (R42673);

d. any existing landscape areas to be retained;

e. those areas to be reticulated or irrigated; and

f. verge treatments, including any proposed footpath upgrades or extensions, and including an extension of the footpath along Cape Naturaliste Road to at least the southern proposed crossover to the site from Cape Naturaliste Road.

3.18 A Tree Protection Plan (TPP) for the mature trees to be retained on the site and adjoining road reserves as indicated on the approved site plan and for vegetation within the adjoining Recreation Reserve – R42673 (Dugalup Brook). The approved TPP shall be implemented before any of the substantive development is commenced and shall be retained throughout the development period until such time as all equipment, machinery and surplus materials have been removed from the site. Within the areas so fenced, nothing shall be stored or placed, and the ground levels shall not be altered.

3.19 Satisfactory arrangements being made with the City for an easement in accordance with sections 195 and 196 of the Land Administration Act for the benefit of the City of Busselton and the public at large is to be shown on the Deposited Plan to be registered on the Certificate of Title over a 3m wide by 13m deep section of the southeast access way (to Dunn Bay Road) to the satisfaction of the City.

3.20 Updated Bushfire Management Plan to address the following:

a. Clearly identify where a Performance Principle Solution has been used to address Bushfire Protection Criteria in place of an Acceptable Solution;

b. Following an audit of vegetation classifications and distance to vegetation, modify inputs in the BMP as necessary;

c. Confirm the Landscape Plan will comply with Schedule 1 of the *Guidelines for Planning in Bushfire Prone Areas.*

Prior to Occupation/Use of the Development Conditions

4 The development hereby approved shall not be occupied, or used, until all plans, details or works required by Condition 3 have been implemented; and the following conditions have been complied with:

4.1 Arrangements to the satisfaction of the City being entered into to provide for legal access from Cape Naturaliste Road to the development site across the 1.0m wide portion of adjoining recreation reserve (Lot 4959, R42673).

4.2 All vehicle parking, access ways, footpaths and external lighting shall be constructed in accordance with the Australian Standard for Parking Facilities - Off-Street Car Parking (AS 2890.1) and shall be developed in the form and layout depicted on the approved plans to the satisfaction of the City.

4.3 Accessible car parking and access shall be provided and designed in accordance with the Australian Standard for Parking Facilities - Off-Street Car Parking for people with disabilities (AS 2890.6).

4.4 Exterior lighting shall be provided under all awnings, in parking areas and all entry points.

4.5 Buildings within the approved development shall be constructed in accordance with the 'Architectural Requirements' specified in the Environmental Noise Report dated 9 November 2020, prepared by Gabriels Hearne Farrell.

Ongoing Conditions

5 The works undertaken to satisfy Conditions 2, 3 and 4 shall be subsequently maintained for the life of the development; and the following conditions must be complied with:

5.1 The Venue Management Plan for the development shall be implemented and maintained in accordance with the approval details.

5.2 The Noise Management Plan for the development shall be implemented and maintained in accordance with the approval details.

5.3 The southern crossover to Cape Naturaliste Road shall be provided with controlled access to be limited to use only by service vehicles exiting the site in a left-out movement only.

5.4 No roller doors or screens are permitted to be installed to the windows fronting the commercial tenancies fronting Dunn Bay Road.

5.5 All glazing to the commercial tenancies fronting Dunn Bay Road is to be clear, non-tinted glazing and shall not be subsequently obscured by alternative window treatments, signage or internal shelves.

5.6 All doors to shop premises fronting Dunn Bay Road must be kept unlocked for customer access during all hours when the subject premises are trading.

5.7 All services and service-related hardware, including antennae, satellite dishes and air conditioning units, being suitably located away from public view and/or screened to the satisfaction of the City.

5.8 Compliance with the approved Waste Management Plan.

5.9 The approved Bushfire Management Plan shall be implemented and maintained in accordance with the approval details and any recommendations therein.

5.10 Landscaping and reticulation shall be maintained in accordance with the approved Landscape Plan to the satisfaction of the City. Unless otherwise first agreed in writing, any trees or plants which, within a period of five years from first planting, are removed, die, or are assessed by the City as being seriously damaged, shall be replaced within the next available planting season with others of the same species, size and number as originally approved.

5.11 Within 6 months of the registration of an easement pursuant to Sections 195 and 196 of the *Land Administration Act 1997* over Lot 108 (no. 57) Dunn Bay Road, providing legal access to Lot 2 (no. 59) Dunn Bay Road and completion of the balance crossover on Lot 108 the relevant crossover onto Dunn Bay Road being amended to the specification and satisfaction of the City to allow for shared access to Dunn Bay Road. Within 30 days of the completion of the crossover the redundant portion of the cross over being removed and the area landscaped to the satisfaction of the City.

CARRIED 8/0

Reasons: Seeking improved detail and clarity in the articulation of conditions and measures to limit potential amenity impacts to neighbouring residential and business premises.

Enhanced detail to be contained within the conditions is particularly sought relating to:

- the proposed Venue Management Plan (in particular trading hours and proposed patron numbers during those hours and noise mitigation measures),
- Drainage Management Plan with particular conditions to protect the Dugalup Brook,
- Odour Management Plan with express conditions requiring roasting and brewing activities to be managed to prevent impact on the amenity of neighbouring business and residential premises,
- protection of access to the Dugalup Brook Recreation Reserve, and
- safety measures or treatments, including any proposed footpath upgrades or extensions.

ADDENDUM

Other than the addition of clause 3.20 in the Officer Recommendation, this report (including attachments) and its recommendations is the same as the report related to this application that Council previously considered at its Ordinary Meeting on 28 April 2021, at which time the Council resolved to defer consideration of until this Ordinary Meeting 12 May 2021.

EXECUTIVE SUMMARY

The City has received a development application for Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation) at Lot 1 (No.61) and Lot 2 (No.59) Dunn Bay Road, Dunsborough.

The application was advertised for public comment for a period of 28 days. During the consultation period, the main concerns raised related to traffic impacts, parking, noise, odour and environmental impact.

Due to the nature of the issues requiring consideration and the level of community interest, the application is being presented to Council for determination, rather than being determined by City officers acting under delegated authority.

Having considered the application, including submissions received in relation to the application, City officers consider that the application is consistent with the *City of Busselton Local Planning Scheme No. 21* and the broader, relevant planning framework.

It is therefore recommended that the application be approved, subject to appropriate conditions.

BACKGROUND

The Council is asked to consider an application for a Mixed Use Development (Brewery, Tavern, Restaurant/Cafe, Shop and Tourist Accommodation) at Lot 1 (No.61) and Lot 2 (No.59) Dunn Bay Road, Dunsborough.

Key information regarding the application is set out below:

1. **Landowner**: Eldorado Pty Ltd
2. **Applicant**: Element Advisory Pty Ltd
3. **Site area**: 8632m^2
4. **General description of the site**: Lot 1 (No.61) and Lot 2 (No.59) Dunn Bay Road are situated on the northern corner of Dunn Bay Road and Cape Naturaliste Road at the western edge of the Dunsborough Town Centre. Cape Naturaliste Road and Dunn Bay Road run along the western and southern edges of the site (respectively), Dugalup Brook recreation reserve is to the north and two vacant 'Centre' zoned lots are to the east.

   The site is predominantly flat and presently has various trees of species endemic to the area dispersed across the site. The nearest residential properties are located to the west, within the Naturaliste Heights subdivision, with the nearest dwelling approximately 60m from the sites western boundary.
5. **Current development/use:** Lot 1 (No. 61) is currently a vacant site. Lot 2 (No. 59) is occupied by Peko Peko restaurant.
6. **Brief description of proposed development:** The application seeks approval to redevelop the combined site for mixed use commercial purposes, and involves the following components:
   - a 'Brewery' producing primarily for on-site consumption and associated 'Tavern' within Building 1;
   - two 'Restaurant/Café' tenancies including a larger Restaurant style building (Building 2) anticipated to serve lunch and dinner in association with the Tavern and a smaller Café style building with small coffee roastery (Building 3) anticipated to serve breakfast and lunch only;
   - 'Tourism Accommodation' including 18 individual chalet style units at the rear of the site, adjacent to Dugalup Brook, and two self-contained short-stay apartments above the Shop tenancy;
   - a ground level 'Shop' tenancy fronting the corner of Dunn Bay Road and Cape Naturaliste Road (Building 4);

- central alfresco dining space;
- two separate car parking areas; one with a single access point from Dunn Bay Road intended to service the Tourist Accommodation units at the rear of the site as well as the food and beverage uses, with a second car park with two crossovers to Cape Naturaliste Road intended to service the retail and short-stay apartments.

7. **Applicable Zoning and Special Control Area designations:** The site is located within the Centre zone and subject to the 'Drive-Through Facility Special Control Area'.

8. **Land-use permissibility:** Several land uses are proposed as follows: 1. 'Shop' and 'Restaurant/Café' are "P" uses in the Centre zone which means that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme; 2. 'Tourist Accommodation' is a "D" use in the Centre zone meaning that the use is not permitted unless the local government has exercised its discretion by granting approval; and 3. 'Brewery' and 'Tavern' are "A" uses in the Centre zone meaning that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with Clause 64 of the Deemed Provisions.

OFFICER COMMENT

The main issues considered relevant for detailed discussion in this report are as follows:

- general considerations when making a decision on a development application;
- built form;
- parking and access;
- amenity Impacts (noise and odour);
- environmental Impacts;
- bushfire.

General considerations when making a decision on a development application

When considering a development application for any land use designated as a "D" or "A" land use under Table 2 - The Zoning Table of the Scheme, a decision-maker is required to exercise discretion when considering the development. The exercise of discretion should take into account relevant considerations as identified within Clause 67 – 'Consideration of application by government' of Schedule 2 of the Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015*. The decision-maker has an obligation to exercise statutory responsibilities appropriately and a decision is required to be based upon sound planning principles.

The Matters to be Considered which are relevant to this development application are outlined in the Statutory Environment section of this report. If an item or issue is not listed in Clause 67, it is not deemed to be a valid planning consideration and therefore is not to be given regard in the determination of a development application.

The improvement of the region, including 'economic development' is one of the broader aims of the Scheme, however, economic considerations are not listed as a matter to be considered within the Regulations. Economic considerations per se should therefore only be considered when setting the planning framework and not when making a determination on an individual development application.

Built Form

The proposal consists of three primary structures arranged around a central courtyard including: a single storey brewery and bar; single storey kitchen and dining; and two-storey retail and short stay apartment building which wraps around the south-west corner of the site with an attached single-storey café. Additionally 18 individual tourist accommodation structures are proposed at the rear of the site adjacent to Dugalup Brook. A mix of materials and finishes are proposed including timber and timber look cladding, metal cladding, local stone, slatted screens, feature paving, timber decks, decorative pergolas and a mix of rooflines.

The proposal adopts an industrial design style for the internal facing food and beverage buildings with saw-tooth style rooves that provide good height, light and ventilation to these buildings. While the industrial style does not reference any existing local aesthetic, the development sits comfortably on the site and is enhanced by the retention of many of the existing mature trees on the site. The chalet or 'tiny-house' style units proposed for short-stay accommodation at the rear of the site are an interesting design, have a very small footprint and are finished in a dark timber-look cladding which assists in making them visually recessive. Further, they are designed to sit lightly on the ground, making them able to be easily moved around, or off, the site in future if desired.

While the site could arguably accommodate a much larger 'landmark' building given its prominence at the western entry to the town centre, this is not considered essential given the lack of public open space and limited pedestrian links and activity at this end of the town centre. The two-storey built form proposed on the Cape Naturaliste Road and Dunn Bay Road corner incorporates a good mix of materials, colours and textures and provides a solid book-end to the town centre, with the desired future character for more substantial buildings able to be accommodated further into the town centre. The proposed design is considered suitable in the context of the surrounding environment and development and can generally be supported.

The need for the proposed retail tenancy on Dunn Bay Road to actively front the street is considered essential to achieve good levels of pedestrian amenity and passive surveillance and ensure that the development does not 'turn its back' on a major thoroughfare within the town centre. While this tenancy includes a recessed entry point from the street frontage, it also provides an entry from the central courtyard. It is therefore recommended that, should an approval be issued, conditions be included requiring that the entry from Dunn Bay Road be maintained and accessible whenever the shop is open, and that the glazing to this tenancy not be covered or altered in order to block views to and from the shop.

Given the scale of the proposed development, the City commissioned an independent design review of the proposal from Urbis. Urbis advised that the development is considered generally appropriate in the context of the Dunsborough town centre but raised several opportunities for minor improvements, a number of which have been incorporated into the revised site plan, including improved legibility of pedestrian access, reduction in the width of the Dunn Bay Road crossover and revisions to loading and bicycle parking arrangements. Particular concern was raised in respect of the visual permeability of the proposed acoustic wall on the western side of the courtyard, however the applicant has clarified that a significant portion of the wall is intended to be clear (acoustic glass or similar) ensuring views to and from the courtyard from Cape Naturaliste Road. It is not proposed to open this courtyard up any further as this would have negative consequences in regard to noise abatement. A copy of the Urbis design review is provided at Attachment J.

Parking, Traffic and Access

Parking

The proposal provides for a total of 80 car parking bays, including four universal access bays, across two car parks on the site. The City's Local Planning Policy No. 2.1 'Car Parking' (LPP2.1) specifies that all new development within the Dunsborough Town Centre (the 'Centre' zoned land) should provide car parking at a rate of 4 bays per 100m^2 of net lettable area (NLA) for all land uses. While this should, in principle, also apply to the Tourist Accommodation uses proposed, it is considered more appropriate to require one bay per unit given the likelihood that guests will drive to their accommodation. Based on the NLA provisions for the retail and food and beverage uses and a rate of one bay per accommodation unit, the proposed development generates a requirement for 75 car bays. The proposal provides a total of 80 car bays on site, therefore exceeds the minimum requirement specified by LPP2.1 by five bays.

While the proposed uses may generate well in excess of 80 patrons on site at any one time, the level of parking provided is considered sufficient given the likelihood of reciprocal parking with other uses in the town centre and the ability for people to easily walk and cycle to the site. The proposal also provides space for up to 65 bicycle parking bays, including seven bays within a lockable storage area for staff, which exceeds the LPP 2.1 requirement for 58 bicycle bays.

Land Use	**NLA**	**Requirement**	**Proposed**
Shop	393m^2	55	60
Restaurant/Café	469m^2		
Brewery/Tavern	505m^2		
Tourist Accommodation	20 units *or* Approx. 573.92m^2 includes units and decks	20 (one per unit) *or* 23 (approx. NLA)	20
Total:	**1367m^2 + 20 units**	**75 (per TA unit) 78 (using NLA)**	**80**

Traffic and Access

The proposal includes two separate car parking areas, one accessed from Cape Naturaliste Road and the other from Dunn Bay Road.

The car park on the Cape Naturaliste Road frontage of the development is accessed by two 9 metre wide crossovers and includes 15 car parking bays, a loading dock and bin store generally intended to be utilised by the proposed shop and upper level short-stay apartments. While the proposed northern crossover is acceptable as a full-movement access point, movements associated with the southern crossover are required to be limited due to its proximity to the turning pocket for south-bound vehicles turning left from Cape Naturaliste Road into Dunn Bay Road. This requirement was discussed with the applicant during the assessment process and it was agreed that use of the southern crossover would be limited to service vehicles exiting the site in a left-out movement only and controlled by an electronic gate or bollard system. This has been reflected in the relevant plans.

It is also noted that the access points on the Cape Naturalise Road frontage are required to cross an existing 1m wide reserve (Reserve No. 42673) under the City's management for public recreation purposes. It is unclear exactly why this reserve was created in this form (in 1982) but it is considered likely that it was intended to function as a 'spite strip' to prevent access to the site from Cape Naturaliste Road. Given that Part 4.21.1(k) of the Scheme discourages new access to sites from Dunn Bay Road however (see further detail below), it is not considered reasonable to prevent access to the site from this street frontage. The reserve type does not prevent the City from allowing access across this land and as such, it is recommended that, should an approval be granted, formal access across the reserve can be dealt with by way of a condition.

Part 4.21 of the Scheme contains provisions relating to development in the Regional Centre and Centre Zones. As referenced above, Part 4.21.1(k) of the Scheme indicates that no vehicular access to sites shall be taken from Dunn Bay Road unless there is no alternative available. The proposed development includes access to car parks from both Cape Naturaliste Road and Dunn Bay Road. While the construction of any new crossovers to Dunn Bay Road is generally discouraged to assist in improving pedestrian amenity in the town centre, there is an existing double crossover to Dunn Bay Road, associated with the 'Peko Peko' take away food business on the site, in approximately the same location as proposed for the new development. While the number of vehicle movements associated with the new development will exceed those generated by the current business, the inclusion of a crossover to Dunn Bay Road in this case is considered acceptable given the siting of the development at the western edge of the town centre where pedestrian movement is more limited than in the centre.

It is further noted that while the original application material proposed to have the crossover to Dunn Bay Road set off the eastern boundary, discussion with the applicant around future development potential on the adjacent site resulted in revisions to the plans to shift the crossover to the eastern boundary. This change provides the ability for any future development of the adjacent site to tie-in with this crossover (which could subsequently be reduced in width), preventing the potential for two crossovers on this street block of Dunn Bay Road in future. Conditions which address the need for an easement to allow shared access and the ability to require the narrowing of the driveway and crossover in future have been included in the officer recommendation.

The proposal is not expected to generate traffic levels that would negatively affect the capacity of the surrounding road network. While comments received from Main Roads WA suggest the City may wish to consider the long-term need for upgrades to Dunn Bay Road and a wider road verge in this area, the City does not believe that any such upgrades will be necessary in the foreseeable future, and additional verge width is therefore not required.

Bushfire

The potential impacts from bushfire are required to be considered as a large portion of the site is located within a designated Bushfire Prone Area. The proposed development is a vulnerable land use under State Planning Policy 3.7 because visitors and groups to the facility will be less able to respond in a bushfire emergency. Accordingly, a Bushfire Management Plan (BMP) has been prepared by an accredited Level 3 Bushfire Planning Practitioner to support the application, with the aim that the implementation of the BMP will reduce the threat to staff, the public and emergency services in the area. A Bushfire Emergency Evacuation Plan has also been developed in conjunction with the BMP.

The site is located within the Dunsborough townsite which is considered a 'built out area'. In the event of a bushfire emergency, good access and egress is required as well as ready access to an adequate water supply. There is good vehicular access to and within the property, with multiple entries and turn-around areas; scheme water is available to the site and there are two fire hydrants in the immediate vicinity.

The BMP recognises that the short stay accommodation units located adjacent to the recreation reserve containing Dugalup Brook are sited in a location exposed to BAL-FZ and as such a risk assessment has been undertaken consistent with the *Western Australian Planning Commission Position Statement: Tourism land uses in bushfire prone areas,* to identify acceptable mitigation strategies.

The proposal was referred to the Department of Fire and Emergency Services (DFES) who have raised a number of issues in respect to the BMP, seeking updates to provide clarification in respect to inputs used to determine the BAL levels that the development would be exposed to. DFES also raised that it does not support the development of vulnerable land uses at BAL-40/BAL-FZ.

Notwithstanding that DFES does not support the development of vulnerable or high-risk land uses in areas of BAL-40/BAL-FZ, officers consider that the site is located within a built out area and as such, in accordance with the WAPC Position Statement, development at BAL-40/BAL-FZ is able to be considered where supported by a suitable risk assessment. The proposal identifies that all of the development, including the tourist accommodation exposed to BAL-FZ, will be required to be built to the appropriate construction standards. Further, the risk assessment included within the BMP is considered to provide suitable mitigation measures such that officers can recommend support of the proposal, noting its location in the town centre, access to scheme water and hydrants, multiple means of access and the presence of officers on-site to assist with evacuation if required.

If approved, officers recommend that a condition be included as per the DFES recommendation that the BMP be revised to: clearly identify where a Performance Principle Solution has been used to address Bushfire Protection Criteria in place of an Acceptable Solution; provide an audit of the vegetation classifications and distances to vegetation; modify the inputs in the BMP as necessary; and amend the BMP to confirm that the Landscape Plan will comply with Schedule 1 of the *Guidelines for Planning in Bushfire Prone Areas*.

Amenity Impacts

Noise

An Environmental Noise (Acoustic) Report, prepared by Gabriels Hearne Farrell Pty Ltd, was submitted with the application. The report includes an assessment of the likely impact of the proposal on surrounding land uses, including the nearest sensitive receptors, being dwellings on nearby Martingale Drive. The report reviews the architectural requirements of the proposal, such as glazing, insulation, cladding and acoustic walls, as well as the required management actions to adequately control off-site noise impacts.

A number of submissions were received from nearby residential properties to the west indicating concerns regarding the potential noise impacts associated with the proposed venue. The application material was referred to the DWER Noise Branch as the technical experts on environmental noise matters, who provided comments (see Schedule of Submissions at Attachment K) indicating that: the technical detail in the report is reasonable; the predicted noise emissions at the nearby residential receptors seem reliable; the proposed architectural requirements are appropriate and sufficient; the noise management requirements are appropriate and effective; and that the proposed development can comply with the *Environmental Protection (Noise) Regulations 1997*.

A submission was also received relating to the adjacent vacant property to the east, which is also located within the Centre zone, indicating that the development may have a negative impact on any future residential development on that site. In this regard, while it is understood from the modelled decibel levels that there may periodically be noise exceeding the normally acceptable residential levels on this site, it is impossible to model the impact on development that has not yet occurred. It is also noted that elevated noise levels are experienced in town centres from time to time and that any future residential development of the adjoining site is likely to be required to consider 'quiet house' design in any case. Further, should it be necessary at the time, the City could also require notifications be placed on titles that advise prospective purchasers of any new residential properties in this location of the potential for amenity impacts associated with living in a vibrant town centre.

Given the Noise Branch at DWER has indicated that the proposal can satisfy the requirements of the Noise Regulations and are supportive of the proposed architectural and noise control measures, it is considered that the development can be supported in this regard. While the applicant has indicated that the proposed development could potentially accommodate up to 1,000 patrons on site, it is noted that the acoustic report indicates that impacts can be suitably managed and/or numbers restricted as appropriate dependent on the time of day, which buildings are in use and whether music is being played.

While it is considered unlikely that the premises will actually accommodate 1,000 patrons on all but the rarest of occasions, it is recommended that conditions requiring the provision, approval and on-going compliance with appropriate noise and venue management plans be included on any approval. These plans would address noise emissions from the site and how the venue is managed on an on-going basis, including but not limited to, the types of music, location of bands, operating hours, maximum patron numbers, management of patrons leaving the site and complaints resolution.

Odour

The proposal has the potential, if not appropriately managed, to result in odours emitted from proposed coffee roasting and brewing activities that may impact on the amenity of neighbouring business and nearby residential premises.

The applicant advises that the coffee roasting is anticipated to occur 2 – 3 times per week, conducted during normal business hours and that the coffee roastery will use production techniques to reduce emissions, including afterburning, a process in which the fumes emitted by coffee roasting are eliminated completely through high heat.

The application also indicates that the brewing component of the development is relatively small scale and the intention is to produce primarily for on-site consumption only. The applicant advises that the majority of brewing will only occur during normal business hours and will not occur overnight. The source of potential odour is the boiling stage of the brewing process. This is intermittent on brewing days and only for a short duration. The potential odour has been described by the applicant as:

> *"sweet/ malty/ bready, localised and not intense or sustained. It is not dissimilar to the smells of a bakery, which we note are common in urban areas as is the case in Dunsborough."*

The applicant advises that specialised rooftop products and condensers shall be fitted to flues to cool steam before it exits the single stack, resulting in the removal of almost all odour.

Given the size and type of production and the processes and timings used in the proposed roasting and brewery components, the potential for intense and continuous odour emission is considered minimal and unlikely to adversely affect residents in the vicinity. In order to ensure this is the case across the life of the facility, however, it is recommended that a condition be applied to any approval requiring an odour management plan be prepared by the applicant and approved by the City prior to commencement of use.

Environmental Impacts

The proposal was referred to the Department of Biodiversity, Conservation and Attractions (DBCA) and the DWER given the proposed removal of native vegetation on the site, potential impact on fauna and the proximity of Dugulap Brook.

Comments received from DBCA indicate that the proposal can be supported subject to: a suitable fauna management plan; fauna handlers being present during the approved removal of vegetation on site and the demolition of the existing buildings; the provision of tree protection zones during construction; and the installation of a fence or bollards to define the northern boundary in order to protect vegetation within the adjacent reserve. Conditions addressing these matters have been included in the officer recommendation.

Advice received from DWER indicates that the proposed vegetation removal is likely to be exempt from the requirement for a clearing permit under the *Environmental Protection Act 1986*.

Statutory Environment

The key statutory environment is set out in the Scheme, the *Planning and Development (Local Planning Schemes) Regulations 2015*, Schedule 2 of which is the 'Deemed Provisions', which also functionally forms part of the Scheme. The key aspects of the Scheme and Regulations relevant to consideration of the application are set out below.

Zoning

The site is zoned 'Centre'. The objectives of the 'Centre' zone are as follows:

a. to provide a genuine centre of community life, socially, culturally and economically.

b. to provide a basis for future detailed planning in accordance with the structure planning provisions of this Scheme or the Activity Centres State Planning Policy.

c. to ensure that development provides for activation of the street and public spaces, high quality design and a variety of land uses.

d. to provide for medium to high density residential development.

The proposal is generally considered to satisfy the objectives of the zone.

Land-use and permissibility

This mixed use proposal includes a number of different land uses under the Scheme.

The proposed land uses are defined as follows:

"Brewery" *means premises the subject of a producer's licence authorising the production of beer, cider or spirits granted under the Liquor Control Act 1988.*

"Restaurant/Café" *means premises primarily used for the preparation, sale and serving of food and drinks for consumption on the premises by customers for whom seating is provided, including premises that are licenced under the Liquor Control Act 1988.*

"Shop" *means premises other than a bulky goods showroom, a liquor store – large or a liquor store – small used to sell goods by retail, to hire goods, or to provide services of a personal nature, including hairdressing or beauty therapy services.*

"Tavern" *means premises the subject of a tavern licence granted under the Liquor Control Act 1988.*

"Tourist Accommodation" *means single occupancy accommodation units, which may be self-contained and may include associated central facilities for the exclusive use of guests, and includes serviced apartments.*

Shop and Restaurant/Café are "P" uses in the Centre zone.

Tourist Accommodation is a "D" uses in the Centre zone.

Brewery and Tavern are "A" uses in the Centre zone.

Consideration of application by local government

Clause 67(1) of the Deemed Provisions within the Regulations sets out 'consideration of application by local government' (formerly referenced as 'matters to be considered'). The following matters are considered to be relevant to consideration of this application:

(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;

(b) the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;

(c) any approved State planning policy;

(d) any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);

(e) any policy of the Commission;

(f) any policy of the State;

(fa) any local planning strategy for this Scheme endorsed by the Commission;

(g) any local planning policy for the Scheme area;

(l) the effect of the proposal on the cultural heritage significance of the area in which the development is located;

(m) the compatibility of the development with its setting, including —

(i) the compatibility of the development with the desired future character of its setting; and

(ii) 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;

(n) the amenity of the locality including the following —

(i) environmental impacts of the development;

(ii) the character of the locality;

(iii) social impacts of the development;

(o) the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;

(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;

(q) the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;

(r) the suitability of the land for the development taking into account the possible risk to human health or safety;

(s) the adequacy of —

(i) the proposed means of access to and egress from the site; and

(ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;

(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;

(u) the availability and adequacy for the development of the following —

(i) public transport services;

(ii) public utility services;

(iii) storage, management and collection of waste;

(iv) access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities);

(v) access by older people and people with disability;

(x) the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;

(y) any submissions received on the application;

(za) the comments or submissions received from any authority consulted under clause 66;

(zb) any other planning consideration the local government considers appropriate.

The proposal generally complies with the relevant provisions noted above.

Relevant Plans and Policies

Relevant plans and policies must be given due regard in assessing the application, but cannot and do not bind the local government in determining an application for development approval. Plans and policies considered in the assessment of the application are as follows:

Local Planning Policy 2.1 - Car Parking
Provides guidance on the City's requirements for the provision of car parking and bicycle parking facilities for new development. The proposal satisfies the minimum number of car parking and bicycle bays required by the policy.

Local Planning Policy 4.1 - Percent for Art
Identifies development that is required to provide public art as well as methods for determining the contribution and implementation. The policy applies to development with a value greater than $1,000,000 however excludes residential, extractive industry and agricultural development. A condition requiring the relevant contribution has been recommended.

Local Planning Policy 6.1 - Stormwater Management
Provides guidance on methods for achieving the safe and effective management of the quantity and quality of stormwater runoff. A condition requiring stormwater management plan has been recommended.

Local Planning Policy 6.1 - Road, Footpath and Cycle Network Upgrade Contributions
Applies to development within the policy area and requires a contribution for each tourism unit for the purposes of upgrading the distributor road network as well as upgrading the footpath and cycle network infrastructure. A condition requiring the relevant contribution has been recommended.

Financial Implications

There are no financial implications associated with the officer recommendation.

Stakeholder Consultation

Clause 64 of the Deemed Provisions sets out circumstances in which an application for development approval must be advertised, and also sets out the means by which applications may be advertised. Given the scale of the proposed development, it was considered appropriate to advertise the development application.

The purpose of public consultation is to provide an opportunity for issues associated with a proposed development to be identified by those who potentially may be affected. A development application should not be approved or refused based on the number of submissions it receives, rather all applications must be determined on the merits of the particular proposal, including consideration of any relevant planning issues raised through consultation.

The application was open for submissions from 15 January 2021 to 11 February 2021. The application was advertised in the following manner:

1. information regarding the application was posted on the City's website;
2. a portal was created using the City's *YourSay* platform for the online lodgement of submissions;
3. letters were sent to all the land owners and occupiers of properties within 200m of the development site;
4. a notice was placed in a local newspaper on 15, 22, 29 January and 5 February 2021; and
5. two signs were placed on the development site giving notice of the proposed development.

Submissions were received from a total of 47 people (noting that a number of submissions come from people sharing a household). A schedule of submissions is provided as Attachment K. The schedule identifies who submissions were received from and summarises the submissions.

The public submissions can generally be grouped as follows:

Objection

- The proposed access onto Cape Naturaliste Road will conflict with existing vehicular and pedestrian traffic, resulting in safety concerns.
- Amenity impact concerns to nearby residential development due to noise and odour.
- Removal of vegetation which supports endangered fauna.
- Insufficient parking for proposed patron numbers.
- Anti-social behaviour from intoxicated patrons.

Support

- Will add vibrancy to the town centre.
- Well-designed architecture.
- Retains a significant portion of the trees on the site.

Where issues are raised that do not relate to the relevant planning framework, they are noted but no further commentary is provided by officers. This does not necessarily suggest that the issues are not genuine issues of concern to the submitter or more broadly, but they are unfortunately not issues that can nor should be addressed in the assessment of this particular application.

In addition to the above, the application was referred to DWER (Noise and Native Vegetation Clearing), DBCA, DFES, MRWA and Department of Planning, Lands and Heritage (Aboriginal Heritage). The comments received from these authorities are included in the Schedule of Submissions.

Risk Assessment

An assessment of the potential implications of implementing the officer recommendation has been undertaken using the City's risk management framework, with risks assessed taking into account any controls already in place. The key risk to the City is considered to be the potential reputational and environmental risk that may arise if the site is not managed in a manner consistent with the conditions of approval.

Options

As an alternative to the proposed recommendation, the Council could:

1. Refuse the proposal, setting out reasons for doing so; or
2. Apply additional or different conditions.

CONCLUSION

Subject to the inclusion of relevant conditions, the proposal is considered appropriate to support and it is accordingly recommended for approval.

TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION

The applicant and those who made a submission will be advised of the Council decision within two weeks of the Council meeting.


Subject site
Dunn Bay Rd
Caves Rd
Cape Naturaliste Rd
DUNSBOROUGH
Clark St
Cyrillean Way
Leslie Pearce Ct
Moondah Ct
Glenvale Cres
Gifford Rd
Seymour Byd
Dunsborough Lakes Dr
© City of Busselton 2021
0 20 40 60 80 m
City of Busselton
Disclaimer: Every effort has been made to make the information displayed here as accurate as possible. This process is ongoing and the information is therefore ever changing and cannot be disseminated as accurate. Care must be taken not to use this information as correct or legally binding. To verify information contact the City of Busselton office.
Location Plan
13/04/2021
1:3000 @ A3L

element.

Appendix B – Architectural Plans

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

NEW MIXED USE DEVELOPMENT

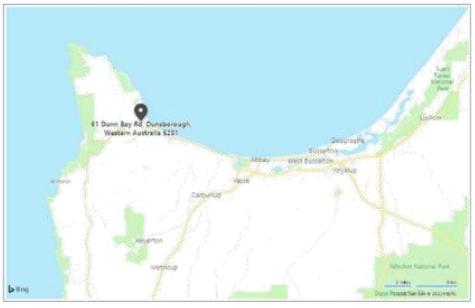
59 - 61 DUNN BAY ROAD | DUNSBOROUGH | WA

DEVELOPMENT APPLICATION ISSUE (REVISED)



DRAWING REGISTER

A0.00 COVER SHEET, REGISTER AND SITE LOCATION PLAN
A0.01 OPPORTUNITIES & CONSTRAINTS AND EXISTING PHOTO RECORD
A0.02 EXISTING FEATURE SURVEY (PREPARED BY SURVCON SURVEYING SERVICES)
A0.03 PROPOSED SITE PLAN WITH AERIAL PHOTOGRAPH INLAY
A1.00 SITE DEMOLITION PLAN
A1.01 PROPOSED SITE MASTERPLAN / ROOF PLAN
A1.02 PROPOSED SITE ELEVATIONS AND 3D MODEL PICTURES
A2.00 PROPOSED WORKS - ALL BUILDINGS
A3.00 PROPOSED WORKS - BUILDING 01
A3.01 PROPOSED WORKS - BUILDING 02
A3.02 PROPOSED WORKS - BUILDING 03
A3.03 PROPOSED WORKS - BUILDING 04
A3.04 PROPOSED WORKS - ACCOMMODATION UNITS



SUBJECT SITE | 59 - 61 DUNN BAY ROAD | DUNSBOROUGH | WA
SOURCE: BING MAPS

DEVELOPMENT APPLICATION

FINESPUN

NEW MIXED USE DEVELOPMENT

59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

337
MP
NTS

COVER PAGE, DWG REGISTER AND SITE LOCATION

A0.00 9



ABORIGINAL AND EUROPEAN HERITAGE



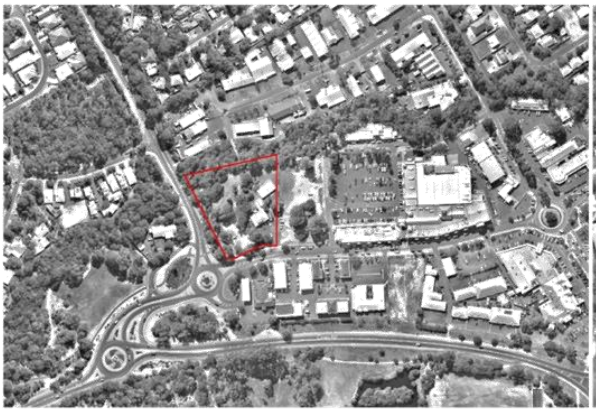
ACID SULPHATE SOIL RISK



BUSHFIRE PRONE



ENVIRONMENTAL CONSIDERATIONS



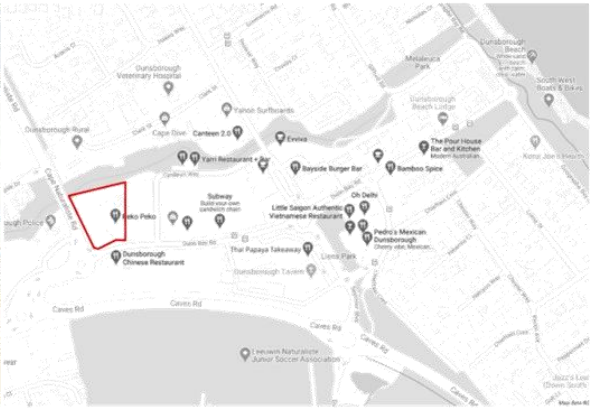
SITE LOCATION - AERIAL PHOTOGRAPHY



SITE LOCATION - VIEWS AND SITE ACCESS



SITE LOCATION - AERIAL PHOTOGRAPHY



SITE LOCATION - LOCAL INFRASTRUCTURE









SUBJECT SITE - STREET VIEWS



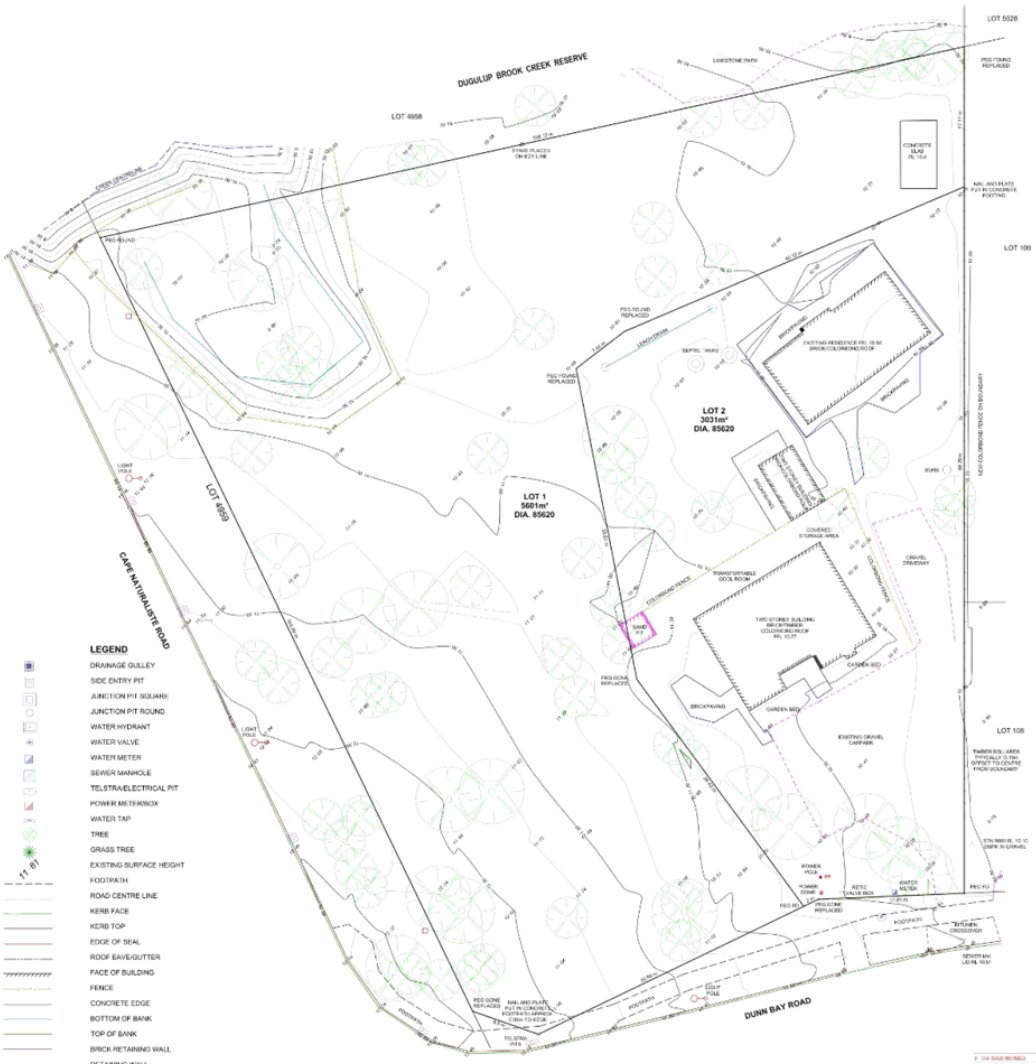




SUBJECT SITE - BRIDGE AND EXISTING CONDITIONS







Licensed Surveyors Act 1909
REGULATION 25A SURVEYOR'S CERTIFICATE

I, Michael Riddle, licensed surveyor, certify that on the 30 December 2015, I re-established the boundaries of Lot 1 and 2 on Diagram 85620 having the Certificate of Title , Volume 2042 Folio 499 and Volume 2042 Folio 500 at Dunn Bay Road Dunsborough as shown on this plan and that the survey was performed in accordance with the provisions of the *Licensed Surveyors (Guidance of Surveyors) Regulations 1961* and the *Licensed Surveyors (Transfer of Land Act 1893) regulations 1961*.

LICENSED SURVEYOR

DEVELOPMENT APPLICATION

FINESPUN

NEW MIXED USE DEVELOPMENT

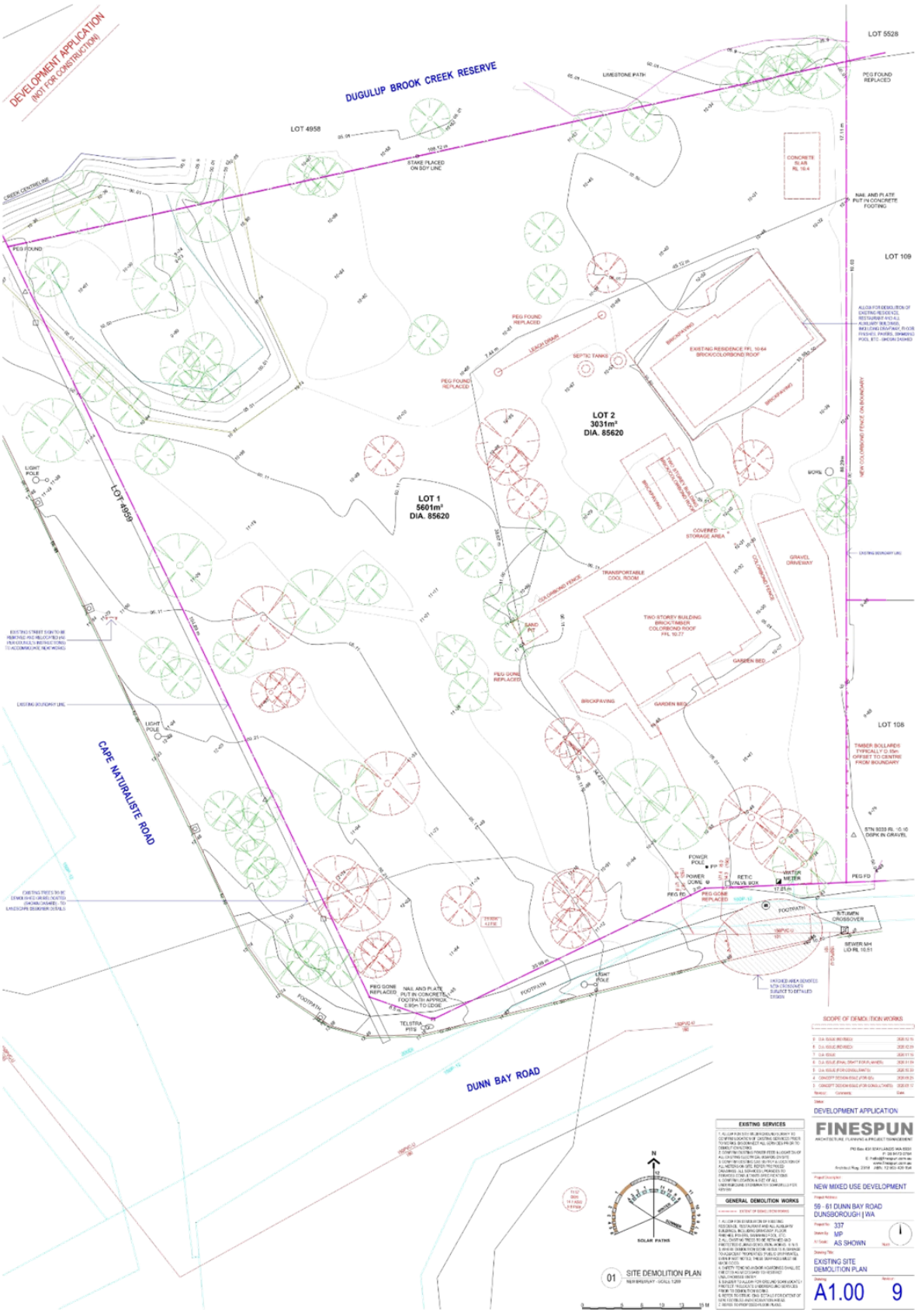
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

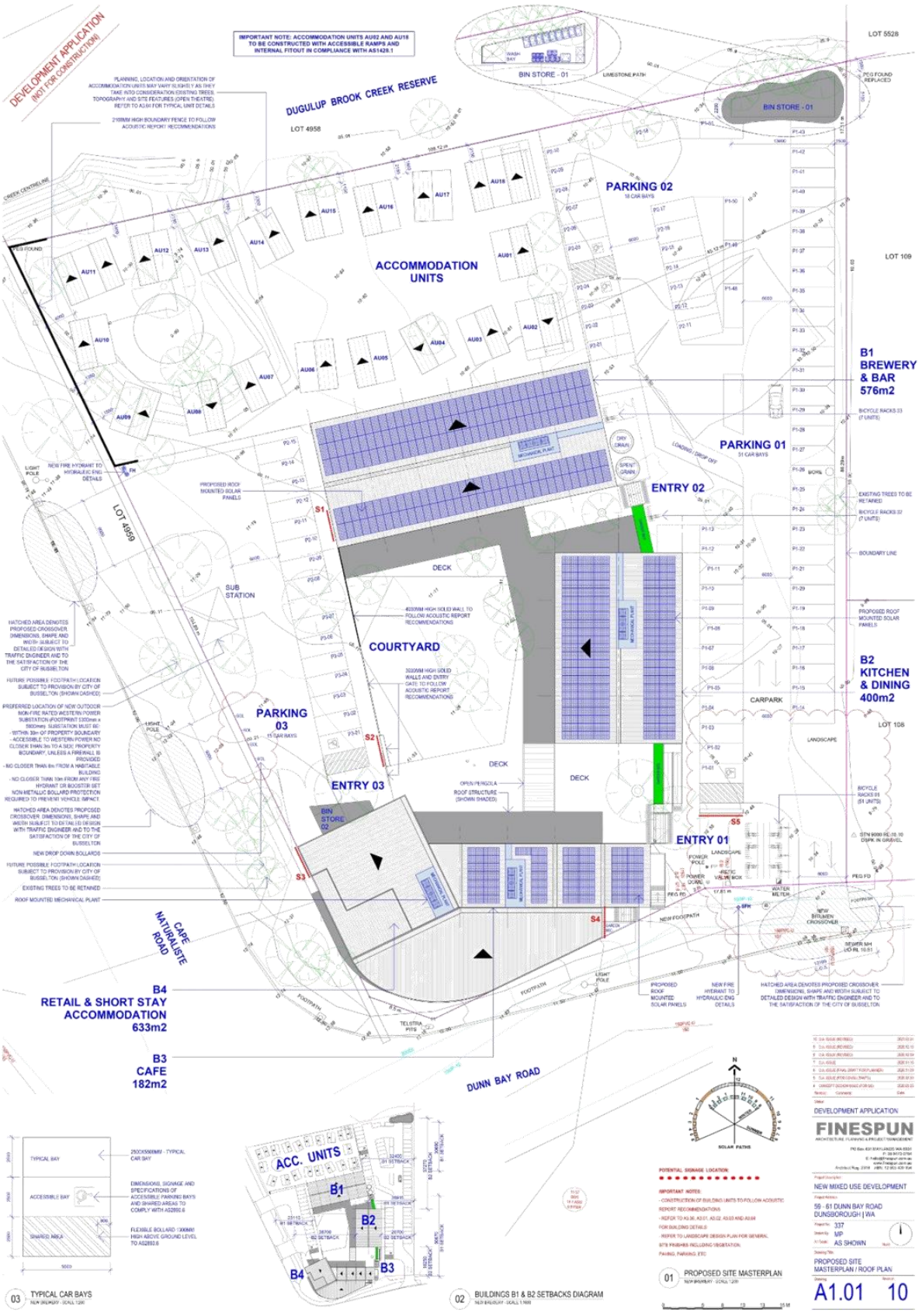
337
MP
AS SHOWN

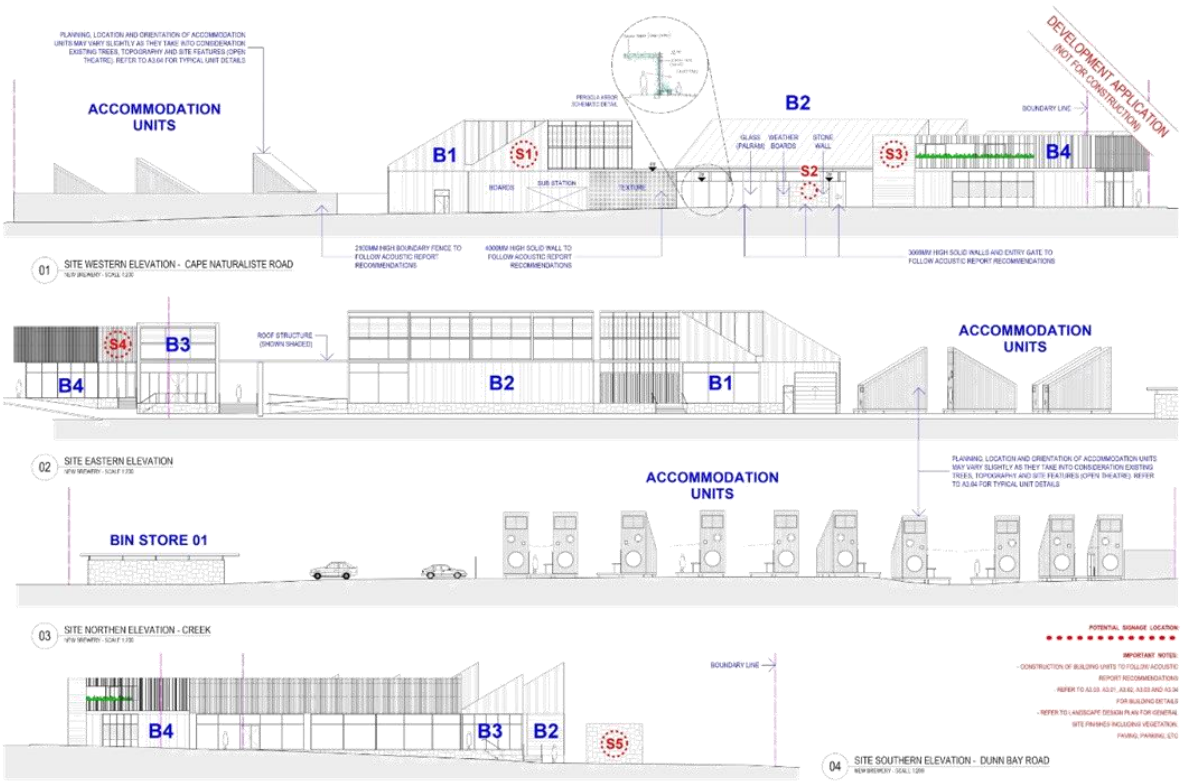
FEATURE & CONTOUR SURVEY BY
SURVCON SURVEYING SERVICES

A0.02 9


DUGULUP BROOK CREEK RESERVE
PARKING 02
ACCOMMODATION UNITS
B1 BREWERY & BAR 576m2
PARKING 01
ENTRY 02
PARKING 03
CAPE NATURALISTE ROAD
SUB STATION
DECK
COURTYARD
B2 KITCHEN & DINING 400m2
DECK
ENTRY 03
B3 - CAFE 182m2
ENTRY 01
BICYCLE RACKS 01 (01 UNITS)
B4 RETAIL & SHORT STAY 633m2
DUNN BAY ROAD
SOLAR PATHS
01 PROPOSED AERIAL VIEW SITE PLAN
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD DUNSBOROUGH | WA
337
MP
AS SHOWN
PROPOSED SITE PLAN WITH AERIAL PHOTOGRAPH INLAY
A0.03
9


DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
DUGULUP BROOK CREEK RESERVE
LOT 5526
LOT 4958
LOT 109
LOT 108
LOT 4959
LOT 2
3031m²
DIA. 85620
LOT 1
5601m²
DIA. 85620
CAPE NATURALISTE ROAD
DUNN BAY ROAD
EXISTING RESIDENCE FFL 10.64
BRICK/COLORBOND ROOF
TWO STOREY BUILDING
BRICK/TIMBER
COLORBOND ROOF
FFL 10.77
GRAVEL DRIVEWAY
COLORBOND FENCE
SEPTIC TANKS
LEACH DRAIN
TRANSPORTABLE COOL ROOM
COVERED STORAGE AREA
BRICKPAVING
GARDEN BED
SAND PIT
CONCRETE SLAB RL 10.4
FOOTPATH
BITUMEN CROSSOVER
SEWER MH
LID RL 10.51
POWER POLE
WATER METER
RETIC VALVE BOX
TELSTRA PITS
LIGHT POLE
PEG FOUND
PEG FOUND REPLACED
PEG GONE REPLACED
NAIL AND PLATE PUT IN CONCRETE FOOTPATH APPROX. 0.80m TO LEDGE
STAKE PLACED ON BOY LINE
LIMESTONE PATH
NAIL AND PLATE PUT IN CONCRETE FOOTING
TIMBER BOLLARDS TYPICALLY D. 65m OFFSET TO CENTRE FROM BOUNDARY
NEW COLORBOND FENCE ON BOUNDARY
EXISTING BOUNDARY LINE
SCOPE OF DEMOLITION WORKS
EXISTING SERVICES
GENERAL DEMOLITION WORKS
SOLAR PATHS
01 SITE DEMOLITION PLAN
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
337
MP
AS SHOWN
EXISTING SITE
DEMOLITION PLAN
A1.00
9


DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
IMPORTANT NOTE: ACCOMMODATION UNITS AU02 AND AU18 TO BE CONSTRUCTED WITH ACCESSIBLE RAMPS AND INTERNAL FITOUT IN COMPLIANCE WITH AS1428.1
DUGULUP BROOK CREEK RESERVE
LOT 4958
LOT 5526
LOT 109
LOT 108
LOT 4959
BIN STORE - 01
ACCOMMODATION UNITS
PARKING 02
18 CAR BAYS
PARKING 01
51 CAR BAYS
PARKING 03
11 CAR BAYS
ENTRY 01
ENTRY 02
ENTRY 03
COURTYARD
DECK
SUB STATION
CARPARK
LANDSCAPE
BIN STORE 02
B1
BREWERY & BAR
576m2
B2
KITCHEN & DINING
400m2
B3
CAFE
182m2
B4
RETAIL & SHORT STAY ACCOMMODATION
633m2
CAPE NATURALISTE ROAD
DUNN BAY ROAD
BOUNDARY LINE
PROPOSED ROOF MOUNTED SOLAR PANELS
EXISTING TREES TO BE RETAINED
BICYCLE RACKS 33 (7 UNITS)
BICYCLE RACKS 02 (7 UNITS)
BICYCLE RACKS 01 (54 UNITS)
NEW DROP DOWN BOLLARDS
NEW FOOTPATH
NEW BITUMEN CROSSOVER
FOOTPATH
ROOF MOUNTED MECHANICAL PLANT
S1
S2
S3
S4
S5
03 TYPICAL CAR BAYS
02 BUILDINGS B1 & B2 SETBACKS DIAGRAM
01 PROPOSED SITE MASTERPLAN
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
PROPOSED SITE MASTERPLAN / ROOF PLAN
A1.01
10







DEVELOPMENT APPLICATION

FINESPUN

NEW MIXED USE DEVELOPMENT

59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

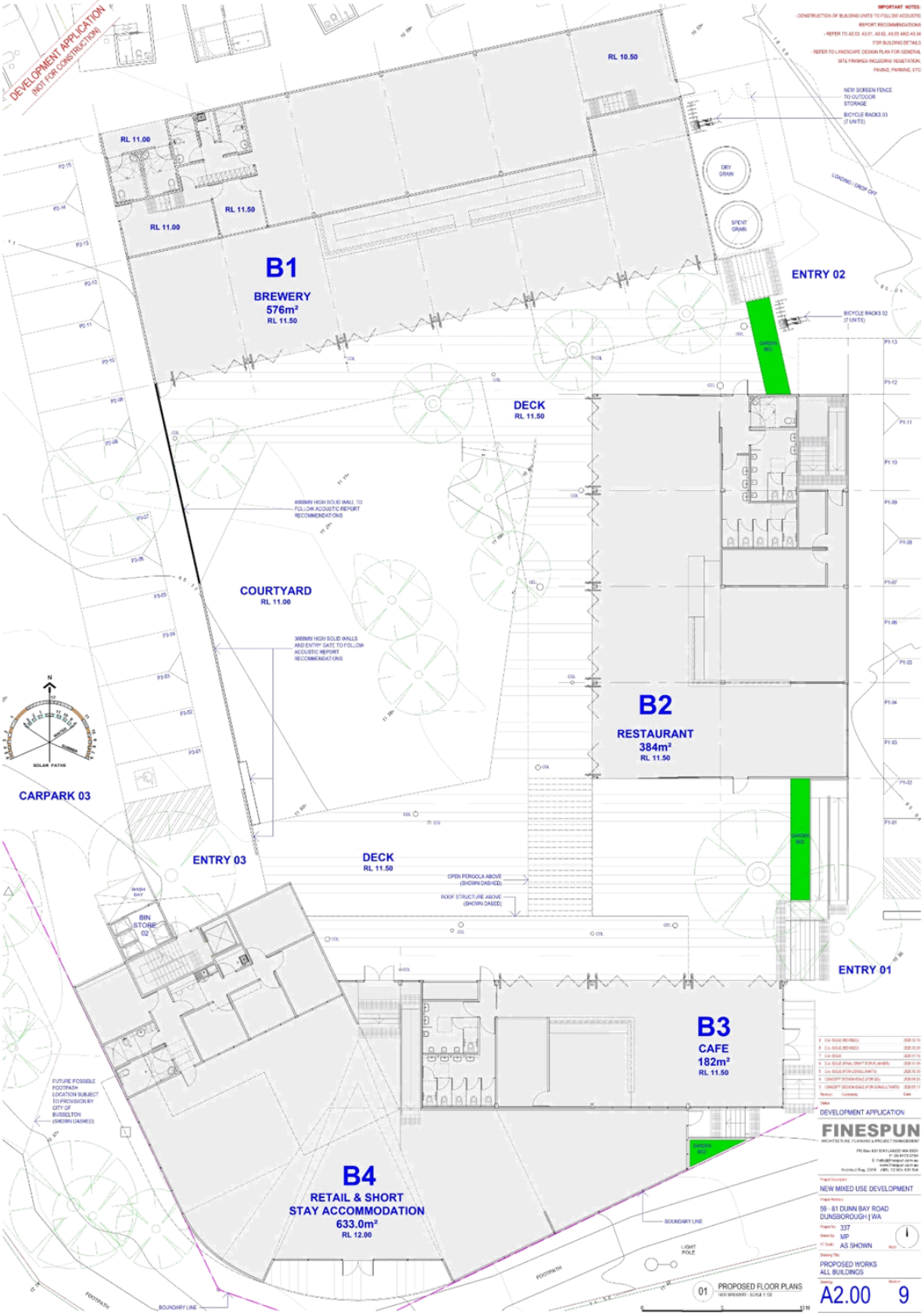
337

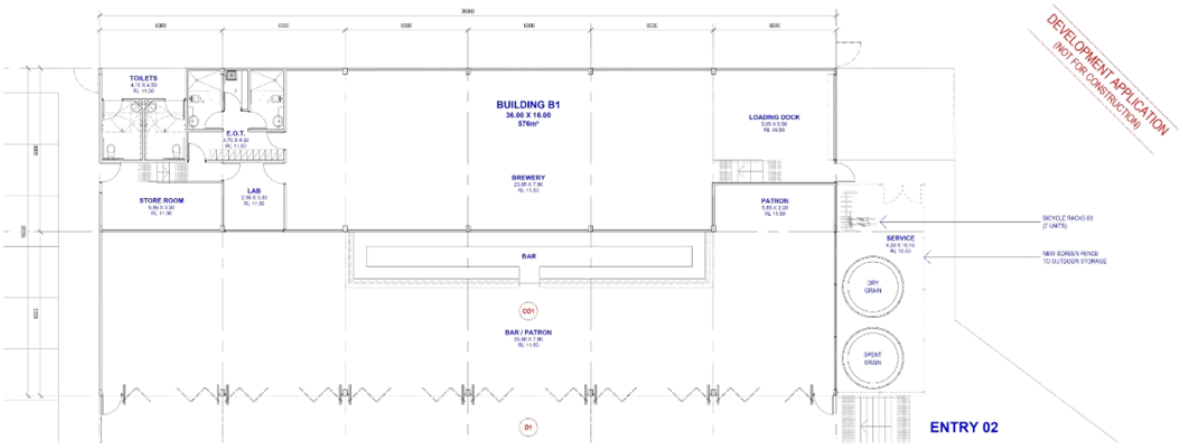
MP

AS SHOWN

PROPOSED SITE ELEVATIONS AND 3D IMAGE

A1.02 9

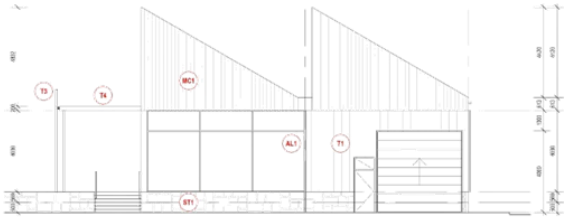

DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
RL 10.50
RL 11.00
RL 11.50
RL 11.00
B1
BREWERY
576m²
RL 11.50
ENTRY 02
DECK
RL 11.50
COURTYARD
RL 11.00
B2
RESTAURANT
384m²
RL 11.50
CARPARK 03
ENTRY 03
DECK
RL 11.50
ENTRY 01
BIN STORE 02
B3
CAFE
182m²
RL 11.50
B4
RETAIL & SHORT
STAY ACCOMMODATION
633.0m²
RL 12.00
BOUNDARY LINE
FOOTPATH
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
337
MP
AS SHOWN
PROPOSED WORKS
ALL BUILDINGS
A2.00
9
01 PROPOSED FLOOR PLANS



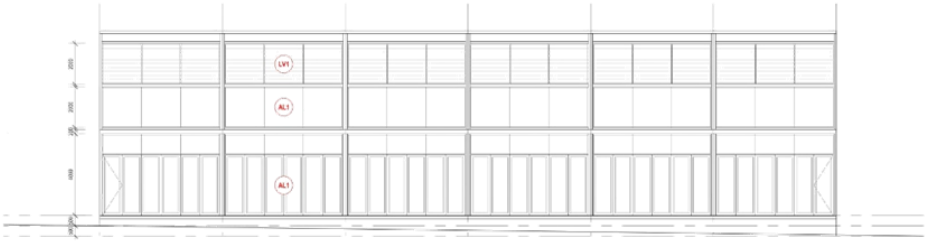
01 BUILDING 01 FLOOR PLAN



02 BUILDING 01 WESTERN ELEVATION



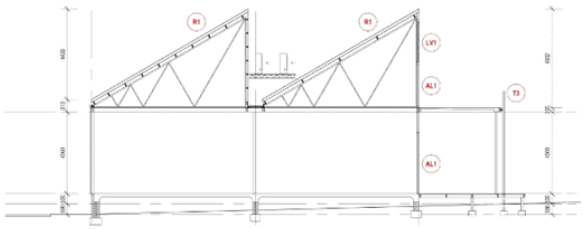
03 BUILDING 01 EASTERN ELEVATION



04 BUILDING 01 SOUTHERN ELEVATION



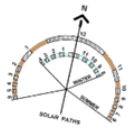
05 BUILDING 01 NORTHERN ELEVATION



06 BUILDING 01 TYPICAL CROSS SECTION

POTENTIAL SIGNAGE LOCATION

IMPORTANT NOTES:
- CONSTRUCTION OF BUILDING UNITS TO FOLLOW ACOUSTIC REPORT RECOMMENDATIONS
- REFER TO LANDSCAPE DESIGN PLAN FOR GENERAL SITE FINISHES INCLUDING VEGETATION, PAVING, PARKING, ETC



OVERALL SITE - BUILDINGS KEY PLAN



B1 - BUILDING 01 - BREWERY
B2 - BUILDING 02 - KITCHEN
B3 - BUILDING 03 - CAFE
B4 - BUILDING 04 - RETAIL/RESIDENTIAL

ACCOMMODATION UNITS - RENTAL ACCOMMODATION

8	D.A. ISSUE (REVISED)	2020.12.15
7	D.A. ISSUE (REVISED)	2020.12.09
6	D.A. ISSUE	2020.11.19
5	D.A. ISSUE (FINAL DRAFT FOR PLANNER)	2020.11.04
4	D.A. ISSUE (FOR CONSULTANTS)	2020.10.30
3	CONCEPT DESIGN ISSUE (FOR QS)	2020.09.25
2	CONCEPT DESIGN ISSUE (FOR CONSULTANTS)	2020.09.17
Number	Comments	Date

Status
DEVELOPMENT APPLICATION

FINESPUN
ARCHITECTURE, PLANNING & PROJECT MANAGEMENT

PO Box 431 BYRON BAY NSW 2481
P: 02 6172 2791
E: hello@finespun.com.au
www.finespun.com.au
ABN: 72 953 429 154
Architect Reg: 2018

Project Description
NEW MIXED USE DEVELOPMENT

Project Address
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

Project No. 337
Drawn By MP
A1 Scale AS SHOWN @ A1

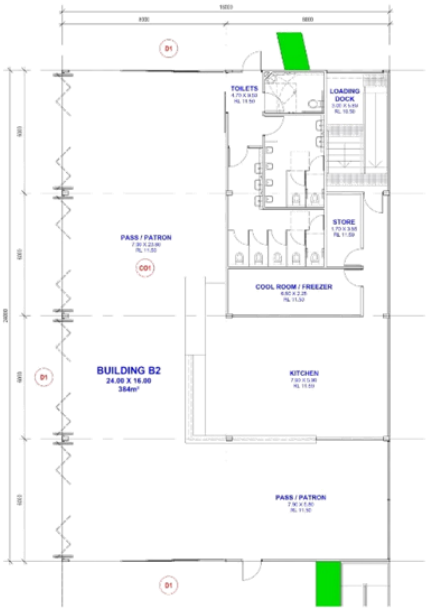
Drawing Title
PROPOSED WORKS
BUILDING 01

Drawing No. A3.00
Revision 9

EXTERIOR MATERIALS & FINISHES SCHEDULE

FLOOR
CONCRETE 'POLISHED BORAL COOGEE' CO1
WALLS
STONE 'BALI' DRY-LAID RUBBLE WALL 'DONNYBROOK SANDSTONE' ST1
PAINT FINISH 'DULUX NATURAL WHITE' P1
METAL CLADDING 'CORRUGATED CLADDING COLORBOND SURFMIST (VERTICAL)' MC1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (VERTICAL JOINTS) FINISH: 'CHARRED TIMBER' T1
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (HORIZONTAL JOINTS) FINISH: 'WEATHERED TIMBER' T2
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1
ROOF SYSTEM
ROOF 'BONDOR INSULROOF CORRO ROOF' MAXLINE ROOF 125 THICK COLORBOND SURFMIST' R1
ROOF 'CORRUGATED METAL ROOF WITH ADDITIONAL INSULATION: ZINCALUME' R2
WINDOWS / DOORS
WINDOWS / DOORS ALUMINIUM FRAME 'POWDERCOAT DULUX BLACK ACE' AL1
LOUVRES
BREEZEWAY CLEAR GLASS LOUVRES 150 WIDE BLADES LV1
EXTERIOR GROUND SURFACE
DECKING 'MILLBOARD BURNT CEDAR' D1
PERGOLA / SCREENS
POST3 - ROUGH SAWN TIMBER POWER POLES CLEAR FINISH T3
TIMBER FRAME 'DRESSED TIMBER JARRAH CLEAR FINISH T4
ROOF COVER 'EVERGRIGHT 910 POLYCARBONATE ROOF SYSTEM' PC1

IMPORTANT NOTE:
- CONSTRUCTION OF BUILDING UNITS TO FOLLOW ACOUSTIC REPORT RECOMMENDATIONS



01 BUILDING 02 FLOOR PLAN



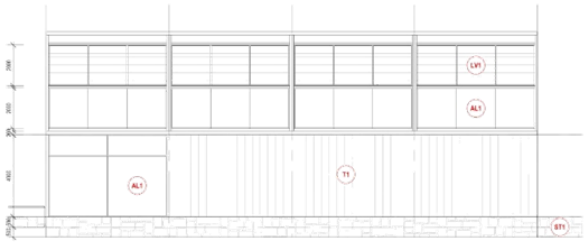
02 BUILDING 02 NORTHERN ELEVATION



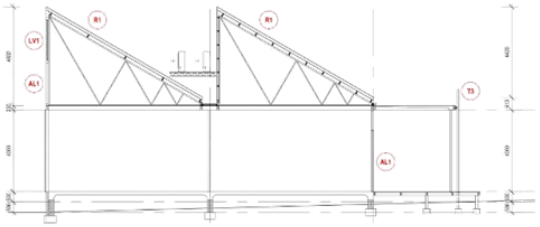
03 BUILDING 02 SOUTHERN ELEVATION



04 BUILDING 02 WESTERN ELEVATION



05 BUILDING 02 EASTERN ELEVATION

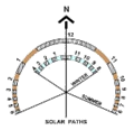


06 BUILDING 02 TYPICAL CROSS SECTION

EXTERIOR MATERIALS & FINISHES SCHEDULE

FLOOR	
CONCRETE 'POLISHED BORAL COOGEE'	CO1
WALLS	
STONE 'BALI' CHYLAID RUBBLE WALL DONNYBROOK SANDSTONE'	ST1
PAINT FINISH 'DULUX NATURAL WHITE'	P1
METAL CLADDING CORRUGATED CLADDING COLORBOND SURFMIST (VERTICAL)	MC1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (VERTICAL JOINTS) FINISH: 'CHARRED TIMBOR' (NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1	T1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (HORIZONTAL JOINTS) FINISH: 'WEATHERED TIMBOR' (NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1	T2
ROOF SYSTEM	
ROOF 'BONDOR INSULROOF CORRO ROOF MAXLINE' ROOF 125 THICK COLORBOND SURFMIST'	R1
ROOF 'CORRUGATED METAL ROOF WITH ADDITIONAL INSULATION ZINCALUME'	R2
WINDOWS / DOORS	
WINDOWS / DOORS ALUMINIUM FRAME 'POWDERCOAT DULUX BLACK ACE'	AL1
LOUVRES	
BREEZEWAY CLEAR GLASS LOUVRES 150 WIDE BLADES	LV1
EXTERIOR GROUND SURFACE	
DECKING 'MILLBOARD BURNT CEDAR'	D1
PERGOLA / SCREENS	
POST3 - ROUGH SAWN TIMBER POWER POLES CLEAR FINISH	T3
TIMBER FRAME 'DRESSED TIMBER JARRAH' CLEAR FINISH	T4
ROOF COVER 'EVERGRIGHT 910 POLYCARBONATE ROOF SYSTEM'	PC1

IMPORTANT NOTE:
- CONSTRUCTION OF BUILDING UNITS TO FOLLOW ACOUSTIC REPORT RECOMMENDATIONS



OVERALL SITE - BUILDINGS KEY PLAN



B1 - BUILDING 01 - BREWERY
B2 - BUILDING 02 - KITCHEN
B3 - BUILDING 03 - CAFE
B4 - BUILDING 04 - RETAIL/RESIDENTIAL
ACCOMMODATION UNITS - RENTAL ACCOMMODATION

8	D.A. ISSUE (REVISED)	2020.12.15
7	D.A. ISSUE (REVISED)	2020.12.09
6	D.A. ISSUE	2020.11.16
5	D.A. ISSUE (FINAL DRAFT FOR PLANNER)	2020.11.04
4	D.A. ISSUE (FOR CONSULTANTS)	2020.10.30
3	CONCEPT SECOND ISSUE (FOR CLIENT)	2020.09.25
2	CONCEPT SECOND ISSUE (FOR CONSULTANTS)	2020.09.17
1	CONCEPT SECOND ISSUE (FOR CLIENT)	2020.09.17
Revision	Comments	Date

Status
DEVELOPMENT APPLICATION

FINESPUN
ARCHITECTURE, PLANNING & PROJECT MANAGEMENT

PO Box 431 BYRON BAY NSW 2481
P: 02 6172 2791
E: hello@finespun.com.au
www.finespun.com.au
ABN: 72 603 429 154
Architect Reg: 2018

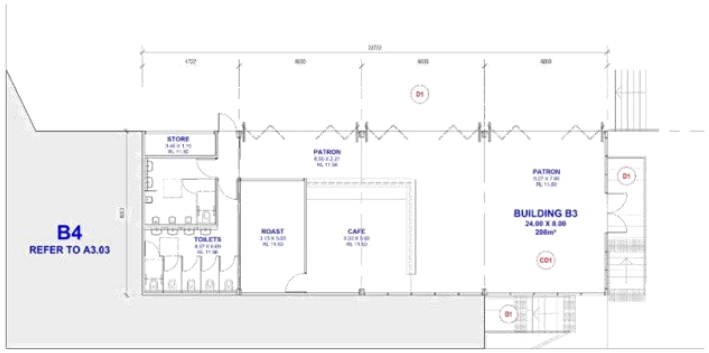
Project Description
NEW MIXED USE DEVELOPMENT

Project Address
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

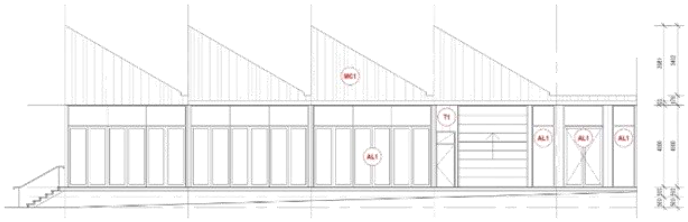
Project No	337
Drawn By	MP
A1 Scale	AS SHOWN

Drawing Title
PROPOSED WORKS
BUILDING 02

Drawing No. A3.01
Revision 9



01 BUILDING 03 FLOOR PLAN



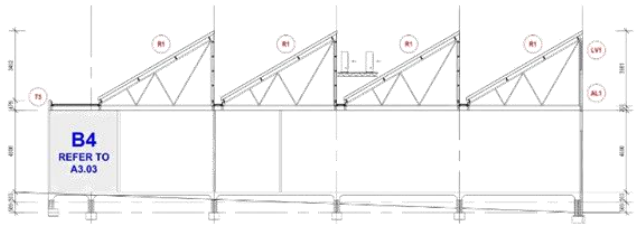
02 BUILDING 03 NORTHERN ELEVATION



03 BUILDING 03 SOUTHERN ELEVATION



04 BUILDING 03 EASTERN ELEVATION



05 BUILDING 03 TYPICAL LONG SECTION

EXTERIOR MATERIALS & FINISHES SCHEDULE

FLOOR
CONCRETE 'POLISHED BORAL COOGEE' CD1

WALLS
STONE 'BALL' CRYLAED RUBBLE WALL 'CONNYBROOK SANDSTONE' ST1
PAINT FINISH 'DULUX NATURAL WHITE' P1
METAL CLADDING 'CORRUGATED CLADDING COLORBOND SURFMIST (VERTICAL)' MC1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (VERTICAL JOINTS) FINISH: 'CHARRED TIMBER' T1
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1
TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (HORIZONTAL JOINTS) FINISH: 'WEATHERED TIMBER' T2
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1

ROOF SYSTEM
ROOF 'BONDOR INSULROOF CORRO ROOF MAXLINE ROOF 125 THICK COLORBOND SURFMIST' R1
ROOF 'CORRUGATED METAL ROOF WITH ADDITIONAL INSULATION, ZINCALUME' R2

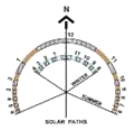
WINDOWS / DOORS
WINDOWS / DOORS 'ALUMINIUM FRAME: POWDERCOAT DULUX BLACK ACE' AL1

LOUVRES
BREEZEWAY CLEAR GLASS LOUVRES 150 WIDE BLADES LV1

EXTERIOR GROUND SURFACE
DECKING 'MILLBOARD BURNT CEDAR' D1

PERGOLA / SCREENS
POST3 - ROUGH SAWN TIMBER POWER POLES 'CLEAR FINISH' T3
TIMBER FRAME 'DRESSED TIMBER JARRAH CLEAR FINISH' T4
ROOF COVER 'EVERBRIGHT 610 POLYCARBONATE ROOF SYSTEM' PC1

IMPORTANT NOTE:
- CONSTRUCTION OF BUILDING UNITS TO FOLLOW ACOUSTIC REPORT RECOMMENDATIONS



OVERALL SITE - BUILDINGS KEY PLAN



B1 - BUILDING 01 - BREWERY
B2 - BUILDING 02 - KITCHEN
B3 - BUILDING 03 - CAFE
B4 - BUILDING 04 - RETAIL/RESIDENTIAL
ACCOMMODATION UNITS - RENTAL ACCOMMODATION

9	DA ISSUE (REVISED)	2020.12.15
8	DA ISSUE (REVISED)	2020.10.29
7	DA ISSUE	2020.07.16
6	DA ISSUE (FINAL DRAFT FOR PLANNER)	2020.11.04
5	DA ISSUE (FOR CONSULTANTS)	2020.10.22
4	CONCEPT SECOND ISSUE (FOR CONSULTANTS)	2020.09.25
3	CONCEPT SECOND ISSUE (FOR CONSULTANTS)	2020.09.17
Revision	Comments	Date

Client
DEVELOPMENT APPLICATION

FINESPUN
ARCHITECTURE, PLANNING & PROJECT MANAGEMENT

PO Box 431 BYRON BAY NSW 2481
P: 02 6172 2700
E: hello@finespun.com.au
www.finespun.com.au
ABN: 12 601 429 454
Architect Reg. 2018

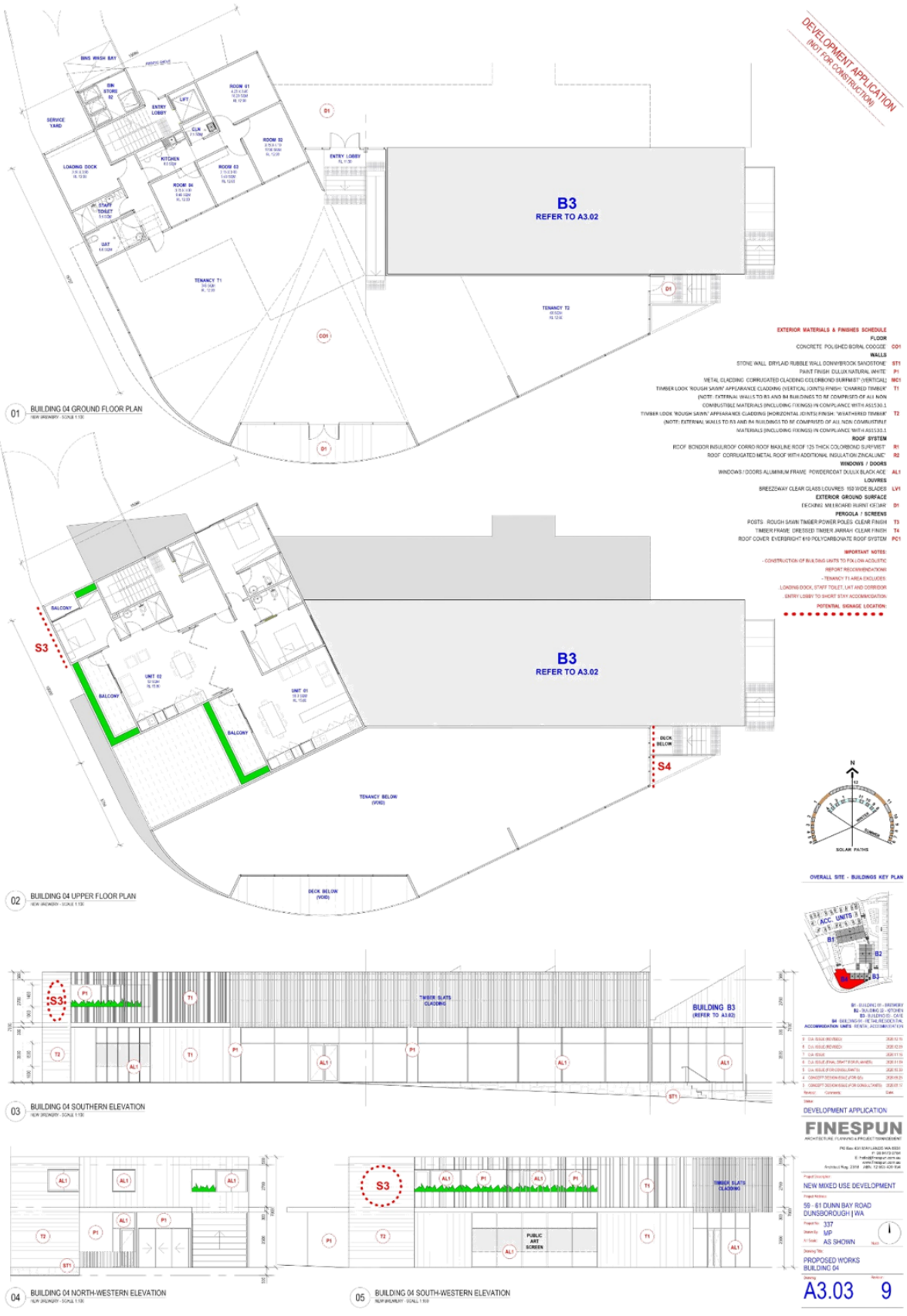
Project Description
NEW MIXED USE DEVELOPMENT

Project Address
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

Project No. 337
Drawn By MP
At Scale AS SHOWN @ A1

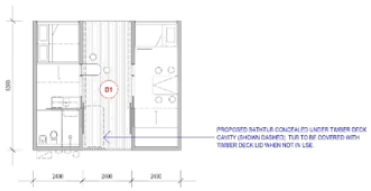
Drawing Title
PROPOSED WORKS
BUILDING 03

Drawing No. A3.02
Revision 9


DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
B3
REFER TO A3.02
01 BUILDING 04 GROUND FLOOR PLAN
B3
REFER TO A3.02
S3
S4
02 BUILDING 04 UPPER FLOOR PLAN
EXTERIOR MATERIALS & FINISHES SCHEDULE
OVERALL SITE - BUILDINGS KEY PLAN
BUILDING B3
(REFER TO A3.02)
03 BUILDING 04 SOUTHERN ELEVATION
04 BUILDING 04 NORTH-WESTERN ELEVATION
05 BUILDING 04 SOUTH-WESTERN ELEVATION
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
337
MP
AS SHOWN
PROPOSED WORKS
BUILDING 04
A3.03
9

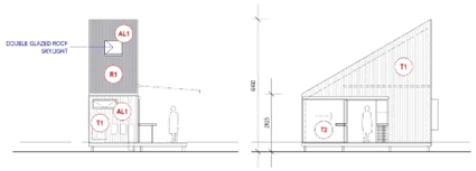


01 ACC. UNITS TYPE 01 - FLOOR PLAN



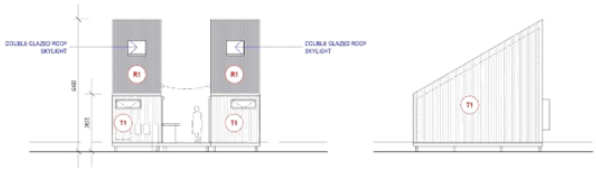
06 ACC. UNITS TYPE 02 - FLOOR PLAN

DEVELOPMENT APPLICATION (NOT FOR CONSTRUCTION)



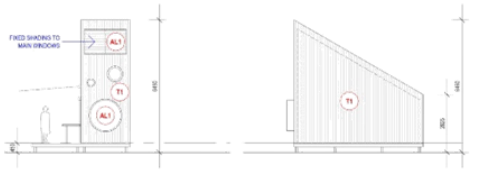
02 ACC. UNITS TYPE 01 - SOUTHERN ELEVATION

03 ACC. UNITS TYPE 01 - EASTERN ELEVATION



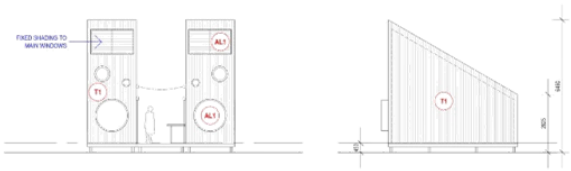
07 ACC. UNITS TYPE 02 - SOUTHERN ELEVATION

08 ACC. UNITS TYPE 02 - EASTERN ELEVATION



04 ACC. UNITS TYPE 01 - NORTHERN ELEVATION

05 ACC. UNITS TYPE 01 - WESTERN ELEVATION



09 ACC. UNITS TYPE 02 - NORTHERN ELEVATION

10 ACC. UNITS TYPE 02 - WESTERN ELEVATION

EXTERIOR MATERIALS & FINISHES SCHEDULE

FLOOR

CO1 CONCRETE POLISHED BORAL COOGEE'

WALLS

ST1 STONE WALL DRYLAID RUBBLE WALL DONNYBROOK SANDSTONE'

P1 PAINT FINISH DULUX NATURAL WHITE'

MC1 METAL CLADDING CORRUGATED CLADDING COLORBOND SURFMIST' (VERTICAL)

T1 TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (VERTICAL JOINTS) FINISH: 'CHARRED TIMBER'
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1)

T2 TIMBER LOOK 'ROUGH SAWN' APPEARANCE CLADDING (HORIZONTAL JOINTS) FINISH: 'WEATHERED TIMBER'
(NOTE: EXTERNAL WALLS TO B3 AND B4 BUILDINGS TO BE COMPRISED OF ALL NON COMBUSTIBLE MATERIALS (INCLUDING FIXINGS) IN COMPLIANCE WITH AS1530.1)

ROOF SYSTEM

R1 ROOF 'BONDOR INSULROOF CORRO ROOF 'MAXLINE' ROOF 125 THICK COLORBOND SURFMIST'

R2 ROOF CORRUGATED METAL ROOF WITH ADDITIONAL INSULATION ZINCALUME'

WINDOWS / DOORS

AL1 WINDOWS / DOORS ALUMINIUM FRAME POWDERCOAT DULUX BLACK ACE'

LOUVRES

LV1 BREEZEWAY CLEAR GLASS LOUVRES 150 WIDE BLADES

EXTERIOR GROUND SURFACE

D1 DECKING 'MILLBOARD BURNT CEDAR'

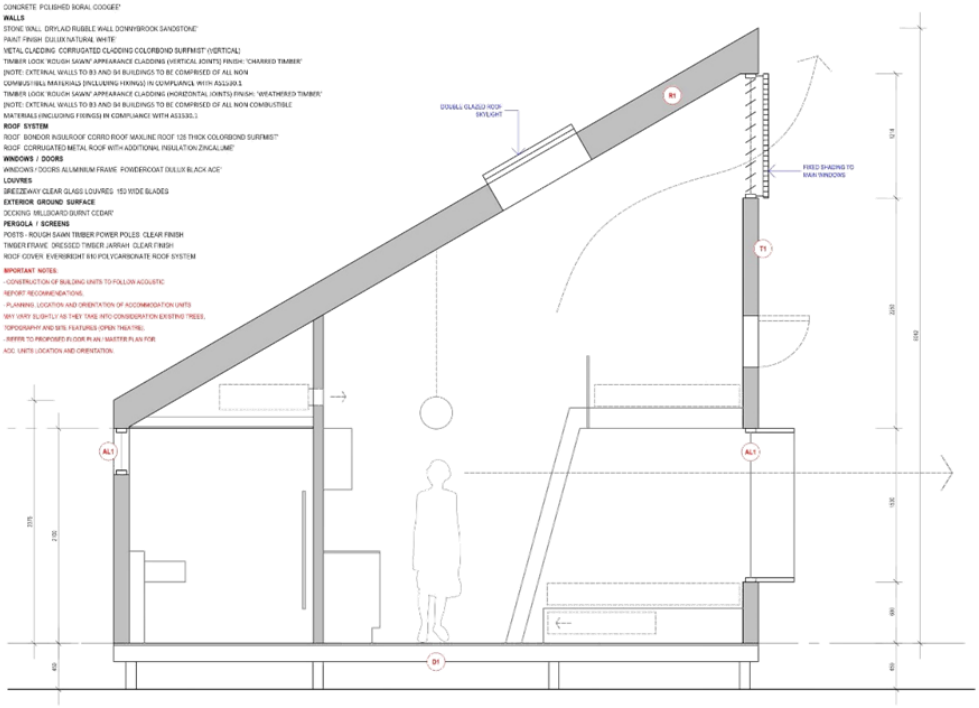
PERGOLA / SCREENS

T3 POSTS - ROUGH SAWN TIMBER POWER POLES CLEAR FINISH

T4 TIMBER FRAME DRESSED TIMBER JARRAH CLEAR FINISH

PC1 ROOF COVER EVERSBRIGHT 810 POLYCARBONATE ROOF SYSTEM

IMPORTANT NOTES:
- CONSTRUCTION OF BUILDING UNITS TO FOLLOW ACOUSTIC REPORT RECOMMENDATIONS.
- PLANNING, LOCATION AND ORIENTATION OF ACCOMMODATION UNITS MAY VARY SLIGHTLY AS THEY TAKE INTO CONSIDERATION EXISTING TREES, TOPOGRAPHY AND SITE FEATURES (OPEN THEATRE).
- REFER TO PROPOSED FLOOR PLAN / MASTER PLAN FOR ACC. UNITS LOCATION AND ORIENTATION.



11 ACC. UNITS TYPE 01 & TYPE 02 - TYPICAL SECTION

OVERALL SITE - BUILDINGS KEY PLAN



DEVELOPMENT APPLICATION

FINESPUN

NEW MIXED USE DEVELOPMENT

59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA

337

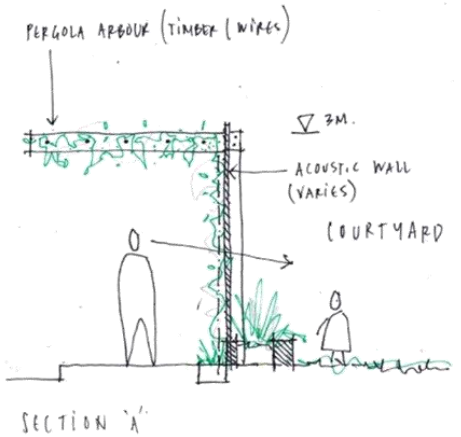
MP

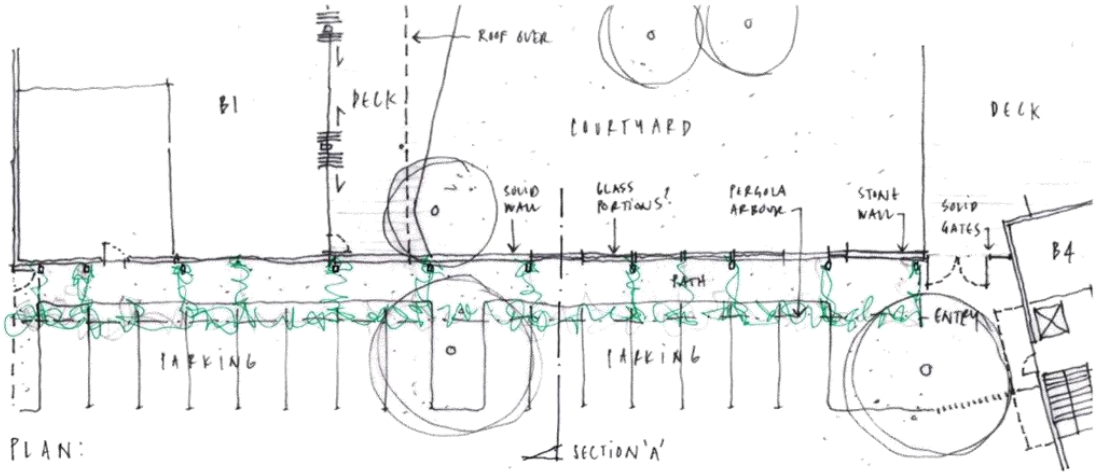
AS SHOWN

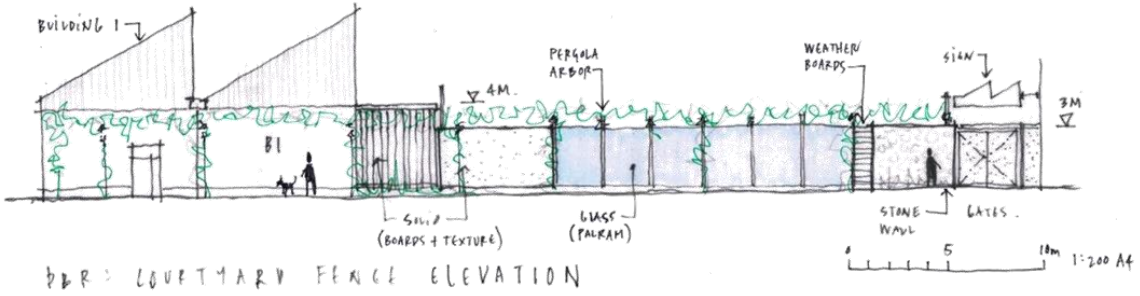
PROPOSED WORKS
ACCOMMODATION UNITS

A3.04 9




PERGOLA ARBOUR (TIMBER / WIRES)
3M.
ACOUSTIC WALL (VARIES)
COURTYARD
SECTION 'A'


ROOF OVER
B1
DECK
COURTYARD
DECK
SOLID WALL
GLASS PARTIONS
PERGOLA ARBOUR
STONE WALL
SOLID GATES
B4
PATH
ENTRY
PARKING
PARKING
PLAN:
SECTION 'A'


BUILDING 1
4M.
B1
PERGOLA ARBOR
WEATHER BOARDS
SIGN
3M
SOLID (BOARDS + TEXTURE)
GLASS (PALRAM)
STONE WALL
GATES
0
5
10m
1:200 A4
B&R: COURTYARD FENCE ELEVATION



element.

Appendix C – Landscape Plans

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation



NEW MIXED USE DEVELOPMENT - 59-61 DUNN BAY ROAD

DWG PDV01-SK01
REV C
DATE 13/11/2020
SCALE 1:250 @ A1

emerge ASSOCIATES

HARD WORKS FINISHES


FEATURE PAVING - RECYCLED BRICK


DECKING - MILLBOARD


PAVING - INSITU POURED CONCRETE


STONE STEPPING PAVERS


FEATURE WALLS - LOCAL GRANITE STONE


TERRACE WALLS - OFF FORM CONCRETE


LOCAL STONE PAVING


RAISED PLANTERS - CORTEN STEEL


INFORMAL AREA SURFACING - COMPACTED GAVEL FINES


INFORMAL PLAY AREAS

EXAMPLE IMAGES

























NEW MIXED USE DEVELOPMENT - 59-61 DUNN BAY ROAD
MATERIAL PALETTE

DWG PDV01-SK01
REV B
DATE 05/11/2020

EXAMPLE PLANTING





TREES


Agonis flexuosa (WA Peppermint)




Corymbia ficifolia



SHRUB PLANTING


Adenanthos cuneatus


Conostylis candicans


Hibertia scandens


Lomandra tanika


Dianella revoluta


Ollearia axillaris 'little smokie'


Anigozanthos manglesii


Anigozanthos flavidos 'yellow'


Myoporum parvifolium


Hemiandra pungens


Eremophila glabra


Thryptomene baeckeacea


Verticordia densifolia


Acacia saligna prostrate


Banksia nivea


Callistemon Little John


Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation
December 2020 | 19-317
element.
the art and science of place
©MIKE EDWARDS 2020

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

We acknowledge the custodians of this land, the Whadjuk Noongar and their Elders past, present and emerging. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.

Document ID: /Volumes/Graphics/2019/19-317 Lot 1 (61) and Lot 2 (59) Dunn Bay Road, Dunsborough, DD and Risk Assessment/19-317 Dunn Bay Road DA Report Folder/19-317 Dunn Bay Road DA Report.indd

Issue	Date	Status	Prepared by	Approved by
1	12.11.20	Draft	Jessica Birbeck	David Read
2	16.11.20	Final	Jessica Birbeck	David Read
3	10.12.20	Final V2	Jessica Birbeck	David Read

This report has been prepared for the exclusive use of the Client, in accordance with the agreement between the Client and Element Advisory Pty Ltd (**element**) ('Agreement').
element accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report by any person who is not a party to the Agreement or an intended recipient.
In particular, it should be noted that this report is a qualitative assessment only, based on the scope and timing of services defined by the Client and is based on information supplied by the Client and its agents.
element cannot be held accountable for information supplied by others and relied upon by **element**.
Copyright and any other Intellectual Property arising from the report and the provision of the services in accordance with the Agreement belongs exclusively to **element** unless otherwise agreed and may not be reproduced or disclosed to any person other than the Client without the express written authority of **element**.

Contents

1. Executive Summary 1
2. Introduction 3
2.1 Project Team 3
2.2 Planning Approval Required 3
3. Project Background 5
3.1 Project Vision 5
3.2 Stakeholder Engagement 9
4. Site Overview 11
4.1 Site Context 11
4.2 Subject Site 11
4.3 Environmental and Heritage Considerations 15
4.4 Recreation Reserve Closure 15
5. Design Statement 17
5.1 State Planning Policy 7.0 – Design of the Built Environment 17
6. Proposed Development 21
6.1 Development Details 21
6.2 Operation 21
6.3 Parking and Access 22
6.4 Landscaping 23
6.5 Building Materiality and Street Interface 23
7. Specialist Inputs 25
7.1 Bushfire Management 25
7.2 Traffic Impact Assessment 26
7.3 Waste Management Plan 27
7.4 Environmental Noise Report 30
7.5 Environment Assessment 31
8. Planning Framework & Assessment 33
8.1 Local Planning Strategy 33
8.2 Local Planning Scheme No.21 (LPS 21) 33
8.3 Local Planning Policy – Lots adjoining Public Open Space 37
8.4 Local Planning Policy – Car Parking 38
8.5 Local Planning Policy – Reflective Building Materials 39
8.6 Local Planning Policy – Percent for Public Art 39
8.7 Local Planning Policy – Stormwater Management 39
8.8 Local Planning Policy - Road, Footpath and Cycle Network Upgrading Contributions 39
9. Planning Merit 41
10. Conclusion 43
Appendix A – Certificate of Titles 45
Appendix B – Architectural Plans 47
Appendix C – Landscape Plans 49
Appendix D – Bushfire Management Plan 51
Appendix E – Traffic Impact Assessment 53
Appendix F – Waste Management Plan 55
Appendix G – Environmental Noise Report 57
Appendix H – Environmental Report 59
Appendix I - Fauna Management Plan 61
Appendix J – Stormwater Management Plan 63


©MIKE EDWARDS



Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

element.

1. Executive Summary

The Atzemis family (Eldorado Pty Ltd) are proud, local Western Australians who have owned Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough (the subject site) for over 20 years. On behalf of Eldorado Pty Ltd and Place Development, **element**, in association with FINESPUN Architecture and an expert consultant team, has prepared the following report in support of a proposed integrated accommodation, entertainment and leisure development located at the subject site within the City of Busselton (the City).

- The proposal represents a conscious and considered design by FINESPUN Architecture to retain the local character of Dunsborough and positively contribute to the development of the Town Centre. The proposal will consist of:
- A microbrewery and tavern;
- A restaurant;
- A café with small coffee roastery;
- A central outdoor alfresco dining space;
- Retail tenancies proposed to be occupied by local Dunsborough businesses; and
- Boutique accommodation (18 units and 2 apartments).

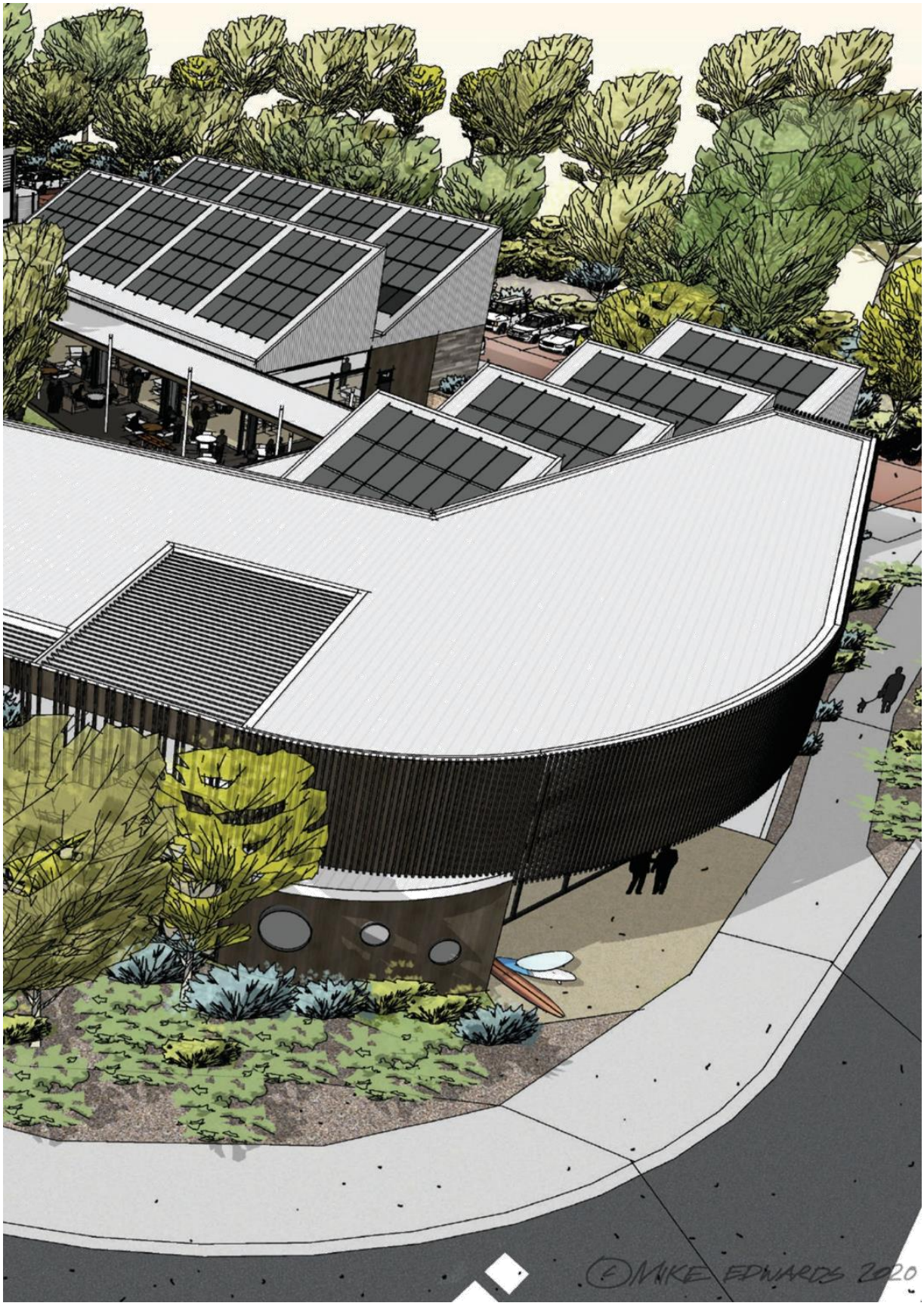
The proposal has been designed to meet the expectations of the community and the City in providing a high-quality development which will serve as an entry statement into the western end of Dunsborough Town Centre. A strong emphasis has been placed on designing a development that is cohesive to its surrounds and creates an energised and activated environment for the community.

Pursuant to the provisions of the City's Local Planning Scheme No.21 (LPS 21), the subject site is zoned 'Centre'. The proposed site layout, land use and built form have been carefully considered and guided by giving due regard to the following:

- An environmental focus with retention of many significant trees on site;
- Provision of an appropriate interface with Dugalup Brook at the northern end of the site;
- Materiality that is inspired by local character and will positively contribute to the Dunn Bay Road streetscape;
- Complementary and integrated uses which serve to create a social hub;
- Local operation and collaboration;

The proposed development is consistent with the aims, objectives and intent of the City's Local Planning Framework.




©MIKE EDWARDS 2020

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

2. Introduction

This report has been prepared by **element** on behalf of Place Development, and in association with FINESPUN Architecture, to support the proposed commercial development located at Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough (subject site), within the City of Busselton (the City).

The proposed development is seeking to deliver an architecturally designed, integrated boutique development that takes advantage of the site's location in the Dunsborough Town Centre and proximity to other nearby services and facilities.

The proposed development can be summarised as follows:

- Microbrewery and tavern;
- Restaurant;
- Café with small coffee roastery;
- Retail tenancies; and
- Boutique accommodation.

The following report provides an overview of the subject site and the proposed development, as well as an assessment of the planning merits of the proposal in the context of the statutory and policy requirements against the principles of orderly and proper planning.

2.1 Project Team

Place Development has engaged a highly qualified multidisciplinary consultant team as set out in the following table.

Table 1 – Consultant Team

Discipline	Consultant
Architect	FINESPUN Architecture
Town Planner	**element**
Transport Consultant	GTA
Acoustic Consultant	Gabriels Hearne Farrell
Landscape Architect	Emerge & Associates
Environmental Consultant	Emerge & Associates
Bushfire Consultant	Bushfire Safety
Waste Consultant	Encycle
Community Consultation	Swift Brown Fox

2.2 Planning Approval Required

The proposed development has an estimated construction cost of $7 million and is submitted for determination by the City of Busselton. The proponent has not elected to submit the proposal for determination by the Regional Joint Development Assessment Panel (JDAP).

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

3. Project Background

3.1 Project Vision

The Atzemis family (Eldorado Pty Ltd) are proud, local Western Australians who have owned the property for over 20 years. George and son, Peter, have always envisaged a conscious and considered development for the location, and by undertaking substantial research have sought an outcome that delivers the best-suited use for the local community, visitors and surrounding environment.

The development site represents a unique opportunity to improve the pedestrian experience and connection of Dunn Bay Road, and to provide greater public amenity through new food and beverage offerings and boutique accommodation. The project seeks to deliver an aspirational development that celebrates the local culture within Dunsborough's town centre and embraces the native environment.

Eldorado Pty Ltd has a demonstrated commitment to the delivery of high quality development outcomes which is evident in recent projects completed within the Perth Metropolitan Area, which includes The Adnate, Perth – Art Series Hotel.

In summary the project is envisaged to:

- Create a 'village' which promotes the South West lifestyle;
- Create a community asset and encourage community integration with a focus on 'local' South West products;
- Create a landscaped entry statement into the Dunsborough CBD and bookend Dunn Bay Road with an appropriate scale of development;
- Work within the existing landscape and the existing significant trees;
- To create interconnecting tenancies with shared indoor/outdoor spaces;
- Increase 'green space' with major landscape works as a 'usable' dominant feature of the development; and
- Enhance existing vehicular and pedestrian links into and through the site.

The proposal will improve the diversity of the overall dining offering in the Dunsborough Town Centre and is expected to have a positive impact on local business in increasing visitation to the precinct and contributing to further activation of the area during the day and night. The accommodation component will contribute to the Town's short-term accommodation needs with outstanding facilities only steps from the café, restaurants and entertainment facilities within the site and Dunsborough Town Centre.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

3.1.1 Benchmark Projects and Visioning Images









THE GROUNDS
EST. 2012





element.





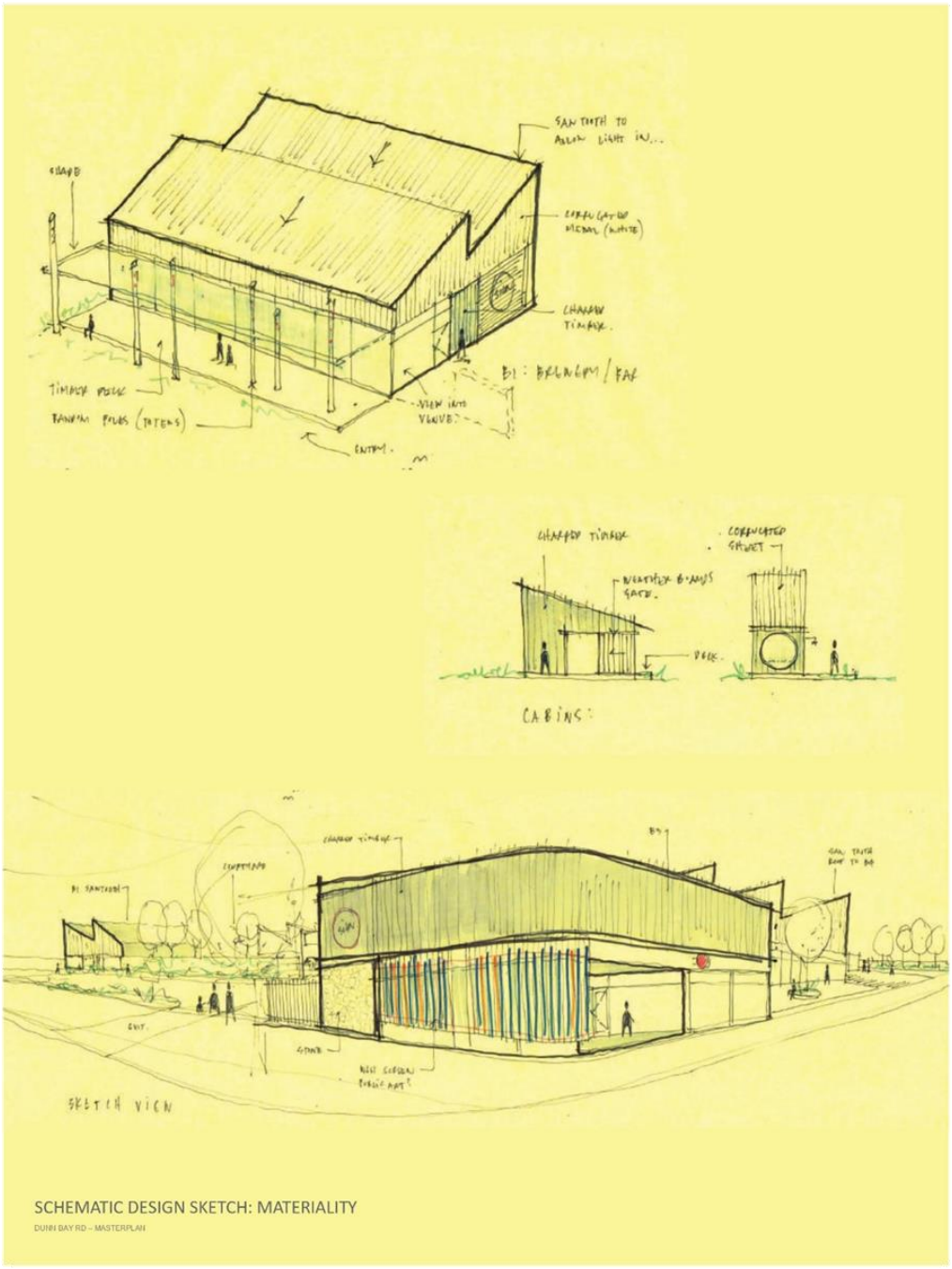






Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

3.1.2 Masterplan Process Sketches



SCHEMATIC DESIGN SKETCH: MATERIALITY
DUNN BAY RD – MASTERPLAN

3.2 Stakeholder Engagement

Swift Brown Fox was appointed by Place Development to undertake stakeholder and community engagement, prior to lodgement of the development application with the City of Busselton.

Community engagement dates back to 27 May 2020, where meetings were arranged with key community stakeholders including local custodian of the Wadandi people and longstanding businesses/brands established in Dunsborough. These included the following:

- Dunsborough Progress Association;
- Josh Whiteland - Koomal Dreaming
- Christian Fletcher
- Kinetic Suspension
- Peko Peko
- Creatures of Leisure
- Yahoo
- Soggy Bones

In this early stage of the project, the concept masterplan was presented at each meeting for feedback on use, mix and proposed built form. Feedback was resoundingly positive by all.

A range of stakeholders were then involved in further engagement which took place from 26th October 2020 and included the following local community and advocacy groups, and the City of Busselton.

- Josh Whiteland - Koomal Dreaming & Wadandi Custodian;
- Jacquie Happ, President - Dunsborough Progress Association & Cultural Development Officer at City of Busselton;
- Dunsborough Progress Association;
- Mike Archer (CEO), Grant Henley (Mayor), Paul Needham (Director of Planning), Lee Reddell (Manager Development Services), City of Busselton; and
- Luke Ward, Soggy Bones Owner.

Overall the engagement with the stakeholder and community groups has been positive and productive. The project has been stated by the community groups engaged as 'holding true to the feeling of Dunsborough' and being 'very refreshing and inspiring'.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

4. Site Overview

4.1 Site Context

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough is situated at the western end of the Dunsborough Town Centre and is bound by Cape Naturaliste Road to the west and Dunn Bay Road to the south. Directly to the north the site is Dugalup Brook and to the east is two vacant sites separating the subject site from Dunsborough Centrepoint.

The built form of existing development surrounding the site to the east within the Town Centre is typically single storey commercial development. To the west of the site is the Dunsborough Police Station, a single storey building on a relatively vegetated site.

Refer to Figure 1 - Location Plan

Refer to Figure 2 – Aerial Plan

4.2 Subject Site

The Certificate of Title details for the site are summarised in the following table. A copy of the Certificate of Titles are enclosed in Appendix A.

Refer to Appendix A – Certificate of Title

Table 2 – Certificate of Title Details

Lot	Plan	Volume/Folio	Area	Street Addres
1	85620	2042/499	5,601m^2	61 Dunn Bay Road, Dunsborough 6281
2	85620	2042/500	3,031m^2	59 Dunn Bay Road, Dunsborough 6281
4959	Reserve 42673		199m^2	Cape Naturalise Road

The site has a total land area of 8632m^2. The site is relatively level with an approximate 2m fall from south west to north east. Power, water and sewer connection is accessible to the site.

The site consists of a number of significant trees of which were extensively investigated for retention at the initial planning stages of the project. The majority of these trees have been retained and are identified on the development plans.

Vehicle access is proposed over Reserve 42673 to provide access to Cape Naturaliste Road and is discussed further within this report.

Refer to Figure 3 – Site Plan

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation



Figure 1. Location Plan

element.



Figure 2. Aerial Plan

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation



Figure 3. Site Plan

4.3 Environmental and Heritage Considerations

4.3.1 Bushfire

A desktop search of the Department of Fire and Emergency Services (DFES) Map of Bushfire Prone Areas indicates the site is within a bushfire prone area. A Bushfire Management Plan and Evacuation Management Plan has been prepared for the site and is discussed in section 7.1 of the report.

4.3.2 Acid Sulphate Soil Risk

A desktop search of Department of Water and Environmental Regulation (DWER) Acid Sulphate Soil (ASS) Risk Map, Swan Coastal Plain, indicates the subject site as having a moderate to low risk of ASS occurring within 3m of natural soil surface but having a high to moderate risk of ASS beyond 3m of natural soil surface.

Given the depth to groundwater (between 2.4 m and 3.6 m below the natural ground surface), it is unlikely that ASS will be disturbed. However, once the extent of excavation and/or dewatering has been confirmed, it will be determined if the nature of disturbance within the site meets the above criteria, and if so, further investigation of ASS will be required including the preparation of an Acid Sulfate Soils and Dewatering Management Plan (ASSDMP). An ASSDMP will guide development to ensure that potential acidification resulting from the disturbance of ASS can be mitigated through effective management.

4.3.3 Contaminated Sites

A desktop search of DWER Contaminated Sites Database indicates that the site is not identified as being contaminated.

4.3.4 Heritage

4.3.4.1 Aboriginal heritage

On request, the Department of Planning, Lands and Heritage (DPLH) undertook a review of Register of Places and Objects and the DPLH Aboriginal Heritage Database and concluded that the subject site intersects with the public boundary of Aboriginal site ID: 20764 (Caves Road Campsite) but not the boundary as administered by the DPLH. Therefore, based on the information held by the DPLH, it was advised no approvals under the Aboriginal Heritage Act 1972 (AHA) are required.

The subject site also abuts 'Other Heritage Place 21307 - Unnamed Creek (Dugalup Brook)'. A Heritage Survey has previously been undertaken which encompassed the Dugalup Brook in 2007 (Aboriginal Heritage Survey is 22964 – Dugalup Brook, Dunsborough Foreshore and Seymour Park).

The survey was prepared to support implementation of a reserve management plan and other works proposed by the City throughout the Dunsborough Town Centre, which included Dugalup Brook. The survey states it is appropriate to acknowledge the creek as a spiritually important place to the Aboriginal people and recommends it be registered as a site of religious significance in association with the generalised Waugal beliefs (now registered as an 'Other Heritage' Place). The survey proposed interpretive signage be installed which would explain the area's past Aboriginal history to the broader community. It was also suggested that Aboriginal art could become a feature of the proposed creek improvements.

Aboriginal public art is envisaged as part of the proposed development. This is further discussed under Section 8.6 of the report.

4.3.4.2 European Heritage

Searches of the Heritage Council's State Heritage Register and the City's records indicates that there are also no places of European cultural heritage significance on the Site.

4.4 Recreation Reserve Closure

Lot 4959 (Reserve 42673) is 1m wide and extends along the western boundary of Lot 1 between Cape Naturaliste Road. Under the City's Local Planning Scheme No. 21 (LPS 21), the land is reserved for 'Recreation'. The reserve is dedicated for the purposes of 'Public Recreation' with a management order to the City of Busselton.

The City and the Department of Planning, Lands and Heritage (DPLH) have advised that due to the nature of the reserve, vehicle access over the land to the proposed development in the form of a lease/license is

unable to be granted. As LPS 21 preferences an alternative access arrangement to Dunn Bay Road, it is understood the presence and access restrictions associated with the reserve are something of a legacy issue.

The development has been designed with access from Cape Naturaliste Road into a small car park and service area. The development is supported by a Traffic Impact Assessment (TIA) which has considered the design of the access and traffic associated with the carpark and servicing arrangements and deems the access to be safe and to not create any adverse impacts on the road network.

On this basis, it is formally requested the City proceeds with closure of the Recreation Reserve and incorporation of the land into the abutting road reservation. Additionally, incorporation of the reserve into the road reservation would offer additional area to provide any future pedestrian access along the eastern side of Cape Naturaliste Road.

It is additionally noted that by obtaining DPLH signature on the development application form, the Reserve does not preclude a development approval being issued with the access arrangement to be resolved prior to construction of the development.

5. Design Statement

5.1 State Planning Policy 7.0 – Design of the Built Environment

State Planning Policy 7.0 (SPP 7.0) sets out 10 design principles to promote the importance of design quality throughout the built environment in Western Australia. The policy applies to all forms of development including medium to large scale Development Applications. The policy sets out design principles which relate to; context and character, landscaping quality, built form and scale, functionality and build quality, sustainability, amenity, legibility, safety, community and aesthetics.

These principles have underpinned the design response to the mixed-use development, and how it integrates with the site, street and broader context. A detailed summary of the 10 principles is provided below:

Context and Character

Objective: Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.

- Extensive site and area analysis was undertaken to inform the design of the development. This includes incorporating local materiality and design references within the proposal. Features such as the timber clad facade treatment, Donnybrook Sandstone walls and extensive landscaping and alfresco dining space throughout the site is a homage to the distinctive character of the Dunsborough locality.
- The development site is located at the western end of the Dunsborough Town Centre. The local built form is typically a single storey scale with the area being in a current state of transition facilitated by the density and development provisions assigned to the Centre zone under LPS 21. Dunsborough Centrepoint is located less than 100m east of the site, with single storey commercial tenancies located directly adjacent on the southern side of Dunn Bay Road. Each development represents a varied materiality and built form.
- The proposal represents a significant opportunity to create an attractive entry into the Town Centre with an appropriately scaled development representative of Dunsborough's local character. The timber materiality and retention of existing mature vegetation at the south-western cover of the site within the Cape Naturaliste verge will assist to create a softened landscaped entry statement.
- The significant landscaping and integrated public space that is proposed within the centre of the site will further provide a distinctive sense of place.

Landscape Quality

Objective: Good design recognises that together landscape and buildings operate as an integrated and sustainable system, with a broader ecological context.

- A key characteristic of Dunsborough and the South West is the highly vegetated landscape. As such, a large commitment has been made to retaining many of the significant trees on site, and successfully integrating these within the development for the benefit of the community. Particular emphasis has been made for the integration of existing peppermint trees which are synonymous with the Dunsborough locality.
- Emphasising the sense of arrival is also a key objective of this proposal. This is achieved by introducing landscaping features both softscape and hardscape into the entry space to provide that sense of arrival and warmth as visitors approach the development from the east.

Built Form and Scale

Objective: Good Design ensures the massing and height of the development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the area.

- The design and mass of the development has been influenced by the established built form within the Town Centre and seeks to create an appropriate streetscape presence for this key site. The focus of the development is in providing an activated streetscape while directing activity to the centre of the site which offers amenity and protection from vehicle traffic on the adjacent roads.
- The material palette of the buildings creates a sense of character and cohesiveness of the development.

Functionality and Build Quality

Objective: Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.

- Significant investment has been made into the craftmanship of the buildings proposed as part of the design.
- FINESPUN and Place Development have worked extensively with prospective tenants to ensure functionality and operational requirements of the buildings are met. The layout of the site including the waste and servicing arrangements are key to ensuring the development's success.

Sustainability

Objective: Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.

- The development has been designed around retaining as many trees on site as possible which is a significant sustainable measure delivering positive ecological and social benefits to the community.
- 340 solar panels are proposed on the roof of buildings 1 -3 which will provide is an additional positive sustainable measure.
- Sorting of recycling will occur on site with separate collections proposed for glass, cardboard, comingled recycling, soft plastic, polystyrene and coffee husks from the roaster.
- It is proposed that spent grain from the brewing process is passed on to local farmers for feed.
- The development represents a great economic outcome for the Town with creation of new jobs and additional tourism.

Amenity

Objective: Good Design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours providing environments that are comfortable, productive and healthy.

- The development will offer significant contributions to the overall amenity of Dunn Bay Road and the Dunsborough Town Centre. The central courtyard space that is proposed will provide a communal space that can be used both in conjunction with the commercial tenancies whilst provide an informal leisure space for the community.
- The commercial land uses will add much needed vibrancy to Dunn Bay Road and will contribute to the vision intended by the City's Strategic Framework.

Legibility

Objective: Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.

- The proposal will improve the walkable environment along Dunn Bay Road. The commercial tenancies fronting the street will provide an active interface and further contribute to the pedestrian experience.

- The pedestrian and vehicle entry points into the site are clearly defined and ensure a high quality and safe pedestrian environment is maintained.
- The buildings on site have been positioned and separated to provide line of sight from the street into the central courtyard space to entice visitors into the development and also provides a clear demonstration to draw people from the centre of Dunsborough along the streets towards the site.

Safety

Objective: Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use

- The windows from the commercial tenancies facing Dunn Bay Road will assist in providing excellent passive surveillance opportunities to the street.
- The pedestrian and vehicle entry points from Dunn Bay Road into the site will be provided with suitable lighting.

Community

Objective: Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.

- The design has been centred around ensuring benefit to the community, retaining the character of Dunsborough and positively contributing to Dunn Bay Road. The central courtyard space presents the opportunity to support community interaction in conjunction with the commercial tenancies.
- The development is targeted to all demographics and will offer spaces for use throughout the day and night.

Aesthetics

Objective: Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings places that engage the senses.

- The design of the building has been premised on a detailed site analysis and understanding of Dunsborough Town Centre. This has led to a well-considered, harmonious development that that will create an inclusive community space of high amenity.
- A large focus has also been on the materiality and craftmanship of the buildings. The use of timber and incorporation of landscaping throughout the development, provides an aesthetic that will strongly contribute to the amenity of the site as well as the wider town centre environment.


©MIKE EDW


2020

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

6. Proposed Development

The proposed development has been prepared in response to a strong understanding of the site and broader context of Dunsborough Town Centre, as well as preparing a proposal that is consistent with both local and State planning frameworks where applicable.

6.1 Development Details

The details of the proposed development are summarised as follows:

- Microbrewery and tavern;
- Restaurant;
- Café with small coffee roastery;
- Retail tenancies; and
- Boutique accommodation

Refer to Appendix B – Architectural Plans

6.2 Operation

6.2.1 Operator

Dark Horse Hospitality is proposed to operate the boutique accommodation, microbrewery, café and restaurant. Dark Horse is a hospitality development and management company that specialises in the creation of unique and memorable, community-driven hospitality experiences. It currently has numerous food and beverage and accommodation projects underway in Perth and the South West and is expanding on its proven track record of strong delivery. Managing Director, Miles Hull, was also the founding General Manager of Hospitality for Little Creatures Brewing, bringing to life one of the most iconic hospitality operations and craft beer brands in Australia. Other projects include White Rabbit & Pipsqueak Cider and The Alex Hotel & Shadow Wine Bar, Northbridge and Quarter Acre Hotel, Applecross.

6.2.2 Operating hours

At this stage of the project the operating hours of the hospitality uses have not been confirmed, however the following are anticipated:

- The brewery (Building 1) will generally be open between lunch time and 10pm, and is proposed to operate to midnight for private functions on occasion.
- The restaurant (Building 2) will be open for lunch and dinner, closing prior to 10 pm (Building 2 may on occasion be used for private functions that may extend beyond 10pm); and
- The café (Building 3) will be open for breakfast and lunch, closing in the afternoon.

At this stage a maximum capacity of 1,000 patrons is envisaged at any one time which will be spread across the three hospitality buildings, with the following break-down:

- Within Building 1 – 206 patrons
- Within Building 2 – 181 patrons
- Within Building 3 – 71 patrons
- In the external areas (courtyard and decks) – 542 patrons.

6.2.3 Staff numbers

The following table presents a breakdown of the maximum staff numbers anticipated at any one time.

Table 3 – Staff Numbers

Land use	Staff numbers
Shop	1-2
Restaurant/café	7-14
Brewery/Tavern	1-2
Tourist Accommodation	1-2

Therefore, at peak periods there will be between 10-20 staff on site at any one time.

6.2.4 Brewery/Tavern

The primary objective of the brewery is to brew a range of beers for onsite consumption. The facility will house a relatively small state of the art 25Hl craft brewery and associated utilities/tankage and silos. No canning or bottling is proposed for the site, however kegging will be implemented into the brewery primarily for use within the brewery. Should the demand arise, there is potential for sale of kegs into the broader south west hospitality market.

The process of manufacturing beer, like many food manufacturing businesses, produces odour. The primary odour source from the brewing process is from the kettle in the Brew House which is generally described as a pleasant smell, however, we are aware there are a minority who dislike the odor. To combat this, the brewery can be fitted with state of the art vapour condensers, which are successful in the suppression of the brewing odour exiting the equipment.

The brewing activities on site do not result in any noise emissions of significance. There will be ventilation fans installed for the brewery operations, and these will be specified to comply with noise requirements along with all of the other mechanical plant.

6.2.5 Roastery

The small roastery proposed is incidental to the predominant café use of Building 3. The roastery area only occupies a floorspace of 17.6m^2. The roastery is located within an enclosed room which will be appropriately serviced and ventilated. The scale of the roastery will ensure there are no adverse noise emissions to neighbouring residential properties.

6.2.6 Liquor Licence

It is anticipated that a special facility liquor licence will be sought for the licencing for the entire development, being an integrated facility with a mixture of uses for the production, sale and consumption of liquor on site. Due to the nature of the development there is potential for the licencing authority to alternatively request a 'hotel' or 'tavern' licence. As such, a 'Tavern' land use is requested as part of this development application to ensure there are no issues obtaining an appropriate liquor licence. It is noted that the proposed operating hours, capacity and general operation of development shall not change should a tavern licence be required.

6.3 Parking and Access

The development proposes a main car park to the eastern side of the site, accessed by Dunn Bay Road. A total of 84 bays are accommodated within this car park. The car park also provides access for service vehicles for the brewery, restaurant and cafe. The car park is located to minimise loss of significant trees, being in place of where existing buildings are located on the site. The car park also acts as a buffer to the adjoining property to the east to ensure adequate separation from any future uses on the site. At the Dunn Bay Road street boundary, the car park is at its narrowest and buffered by landscaping and an existing tree at the front boundary.

At the western side of the site, a small car park with 15 parking bays is proposed. This car park also provides access to the service area of the retail building and 2 serviced apartments in the south-west corner of the site. This carpark has also been positioned to enable retention of trees within the property and verge. The access has been designed for full movement at the northern access and left-in left-out at the southern access.

A total of 65 bicycle bays will be provided on site. 58 of these bays are CORA Expo 7510 design and will be located towards the entry of the site from Dunn Bay Road and at one other locations within the site. A bicycle rack with 7 bays is proposed within a lockable space adjacent to the service area of the brewery.

6.4 Landscaping

A landscaping plan has been prepared by Emerge Associates and is contained within Appendix C.

As discussed within this report, a large number of existing trees are proposed to be retained and incorporated into the proposed design. A key feature of the landscaping is the central courtyard space which will provide alfresco dining and seating for the surrounding commercial tenancies. Within the courtyard, retained trees are proposed to extend through the decking, provide shading and a unique aesthetic to the space.

Feature planting is proposed at the entry of the development at Dunn Bay Road which will create an attractive entry statement for pedestrians approaching from the west and incorporate feature recycled brick paving and local stone feature walls. A separate pedestrian entry is located at the centre of the eastern carpark and provides access to the development between the brewery and restaurant. Both entries are proposed with distinct paving treatment to assist with wayfinding.

At the rear of the site, an extensive landscaped area is proposed around the accommodation units. At the centre of the units is a grassed gathering space which will comprise a landscaped terrace to take advantage of the contours of the site.

New shade trees are also proposed to be planted on site within the eastern car parking area and within the Cape Naturalise Road verge.

6.5 Building Materiality and Street Interface

The building fronting Dunn Bay Road is positioned to provide a presence to the street whilst also providing a sense of human scale. The building is setback from the street boundary to retain the existing footpath arrangement in the verge and provide sufficient width for pedestrian movement. The building is proposed with a height of 7m fronting Dunn Bay Road and features vertical timber slats, jarrah timber cladding and clear glazing. The angle of the front boundary and wide verge provides for a landscaping opportunity between the footpath and the main entry. The positioning of the building and treatment of the façades provides for an attractive interface and surveillance to Dunn Bay Road and Cape Naturaliste Road.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

7. Specialist Inputs

7.1 Bushfire Management

The proposed development is located in the bushfire prone area. A Bushfire Management and Evacuation Plan (BMEP) has been prepared by Bushfire Safety Consulting Pty Ltd in support of the proposal and is contained within Appendix D.

The proposal has been assessed against State Planning Policy No. 3.7: Planning in Bushfire Prone Areas (SPP 3.7), the Guidelines for Planning in Bushfire Prone Areas (WAPC 2017 V1.3) and the WAPC Position Statement: Tourism land uses in bushfire prone areas. As some of the short-term accommodation units (a vulnerable land use under SPP 3.7) are sited within BAL-FZ a comprehensive risk assessment has been undertaken consistent with the Position Statement to identify acceptable mitigation strategies.

As detailed within the BMEP, exposure to bushfire attack is likely from the west and to a lesser extent from the strip of vegetation near the brook north of the site. As shown by the Bushfire Contour Map within the BEMP, the key area of consideration is at the northern end of the site adjacent to Dugalup Brook. Towards the north of the site, ten accommodation cabins are exposed to BAL-FZ, eight accommodation cabins are exposed to BAL-19 and all remaining buildings including the retail, cafe, restaurant and brewery are exposed to BAL-12.5.

Acceptable solutions are proposed for two of the bushfire protection criteria, being water supply and access, and they each illustrate a means of satisfactorily meeting the corresponding performance criteria. In this respect access is readily available to the Town Centre in the event of an evacuation. It is further noted that the local fire brigade is less than 600m north of the site.

Ten short term accommodation cabins experience BAL-FZ because of their proximity to Dugulup Brook Creek Reserve. Consistent with the Position Statement: Tourism land uses in bushfire prone areas, a bushfire risk assessment is undertaken to determine and asses mitigation strategies to reduce risk to an acceptable level. In this respect, the land use planning bushfire risk mitigation strategies are comprehensively detailed in the BMP and respond to the performance criteria that fulfil the intent of the bushfire hazard management issues outlined in the Guidelines for Planning in Bushfire Prone Areas V1.3 (2017).

In summary, the proposed development can achieve the Acceptable Solutions and Performance Principles in the Guidelines for Planning in Bushfire Prone Areas V1.3 (2017). Furthermore, a comprehensive Bushfire Emergency Evacuation Plan which specifically reflects the site conditions, users' needs and circumstances is proposed to be developed with the tenants after the new leasing arrangements have been negotiated.

The BMEP has demonstrated the proposed development will fall within the acceptable level of risk.

Refer to Appendix D – Bushfire Management and Evacuation Plan

7.2 Traffic Impact Assessment

A Traffic Impact Assessment (TIA) was prepared by GTA in support of the proposal and is contained within Appendix E.

Vehicle Parking

Based on the City's Local Planning Policy No. 2.1 – Car Parking (LPP2.1) the following parking requirements are derived for the development, based on 4 bays per 100m² of Net Leasable Area (NLA) for all land uses:

Table 4 – Parking Requirements

Land use	NLA/No.	Requirement	Proposed
Shop	393m² NLA	16	62 shared bays with reciprocal parking arrangement (includes 2 ACROD Bays)
Restaurant/café	329m², 140m² NLA	19	
Brewery/Tavern	505m² NLA	20	
Tourist Accommodation	20 units	22	22 (includes 2 ACROD Bay)

It is noted the parking requirement has been rounded to the nearest whole number. The deck and alfresco areas are not for the exclusive use of the tenancies and are therefore not included in the NLA.

The proposed provision of 84 parking bays meets the statutory requirement of 77 parking bays. Additionally, the proposed parking numbers is considered appropriate for the development given the high probability of reciprocal carpark use and a high amenity for walking and cycling, especially given its central location, the accommodation on site, and the fact that people may be less likely to drive to licenced venues.

Bicycle Parking

LPP2.1 requires the following bicycle parking facilities:

Table 5 – Bicycle Parking Requirements

Land use	GFA/No.	LPP Requirement			
		Employee		Visitor	
Shop	495m²	2 per 300m² GFA	3	2 per 500m² GFA	2
Restaurant/café	384m² + 182m²	2 per 100m² GFA	11	2 per 100m² GFA	11
Brewery/Tavern	576m²	2 per 100m² GFA	12	2 per 100m² GFA	12
Tourist Accommodation	20 units	2 per 4 employees	2	2 per 8 units	5
Total			**28**		**30**

A total of 65 bicycle parking bays are proposed, exceeding the requirements under LPP 2.1. 51 of these bays are proposed to be accommodated at the entry of the development from Dunn Bay Road. It is noted that 7 bays are proposed within a lockable area (bicycle rack 3) for employee bicycle parking. It is considered due to the number of bays and location in highly visible and accessible locations these can effectively service the public and additional employees.

End of trip facilities

Table 6 below sets out the requirements under the Policy for end of trip (EOT) facilities.

Table 6 – EOT requirements

Rate	1 secure clothes locker per 1 employee bicycle parking space	Proposed	1 shower per 8 Employee/ Residential Bicycle parking spaces	Proposed
Shop	3 lockers	4	0	1
Restaurant/café	11 lockers	24	1	2
Brewery/Tavern	12 lockers		2	
Tourist Accommodation	2 lockers	0	0	0

The end of trip facilities which are proposed within building 1 (brewery) are available to all employees on site. Based on the requirements of LPP 2.1 and the maximum anticipated staff numbers, the EOT facilities proposed are acceptable.

Vehicle Access

The development will have three points of vehicle access to the site, one from Dunn Bay Road and two from Cape Naturaliste Road.

Cape Naturaliste Road will allow servicing of the two short stay apartments and retail shop, while Dunn Bay Road will allow servicing of the rear tourist accommodation, café, restaurant and brewery.

Access to the Cape Naturaliste Road carpark will be via two crossovers, the northern crossover will be proposed as a full movement crossover with Cape Naturaliste Road catering for two-way vehicle movement.

The southern access will be limited to a left-in-left-out arrangement due to the close proximity to the Cape Naturaliste Road / Dunn Bay Road roundabout. The majority of trips will likely be exiting at this crossover noting entry is required for waste and delivery vehicles to manoeuvre into the loading bay which is discussed under Section 7.3 below.

Loading Areas

The development has two separate loading areas, one in the Dunn Bay Road carpark and the other in the Cape Naturaliste Road carpark. As well as the dedicated loading areas, the development proposes two dedicated bin stores. The TIA has assessed manoeuvring for servicing and bin collection and based on a 10m rear loading refuse truck and 12.5m rigid delivery truck.

Traffic Assessment

The site is expected to generate up to 145 vehicle movements in any peak hour and 704 vehicle movements daily. Based on the above assessment it is concluded that the development will have an acceptable impact on the surrounding roads and intersections with no changes required to either the road network or geometry of intersections due to the development

Refer to Appendix E – Traffic Impact Assessment

7.3 Waste Management Plan

A Waste Management Plan (WMP) has been prepared by Encycle in support of the proposal. The WMP consists of five components being:

- Waste recycling volumes;
- Bin store location and amenity;
- Internal transfer;
- Collection and vehicle access; and
- Communication and management.

The following summary details the key components of the WMP.

Two bin stores are proposed for the development. Bin store 1 is located within 'carpark 2' in the north-eastern corner of the site and will store waste and recycling from the accommodation units, microbrewery, restaurant and the café. The second bin-store (2) to is located in 'carpark 3' accessed from Cape Naturaliste Road and stores waste and recycling from the retail tenancies and short-stay apartments above. It is noted the spent grain from the brewery will be stored in either an externally located 'spent grain' silo (for collection within 48 hours of a brew being completed) or internally in 'Nally mega-bins / Bulka bags' (for collection on the day and after the brew is processed). The used cooking oil will be located in the loading dock of building 2 (restaurant).

The following table provides a breakdown of the number of bins, size and collection frequency for each type of waste to be stored in bin store 1 (for the accommodation units, micro-brewery, restaurant and the café).

Table 7 – Bin Store 1 details

	Bin size (L)	Number of bins	Collection frequency
General waste (excluding food waste)	660	5	Daily
Commingled recycling	660	1	Daily
Food waste	120	5	Daily
Cardboard	1100	1	Every 2 days
Glass	240	5	Daily
Soft plastic	660	1	As required
Used cooking oil	400	1	As required located in loading dock building 2
Polystyrene	660	2	As required
Coffee husks / chaff from roaster	120	1	Fortnightly
Hessian bags from roastery	Flatten & stack	Allow 1m3	As required
LDPE bags (if generated)	Flatten & stack	Allow 1m3	As required

The following table details the number of bins, size and collection frequency for each type of waste to be stored in bin store 2 (for the retail tenancies and two short stay apartments).

Table 8 – Bin Store 2 details

	Bin size (L)	Number of bins	Collection frequency
General waste (excluding food waste)	660	1	Daily
Commingled recycling	660	1	Twice-weekly
Food waste	1100	1	Weekly
Cardboard	660	1	As required

With regard to waste collection and access, private service providers will undertake the commercial waste and recycling collections.

On collection days, rear-lift vehicles for general waste and the various recycling streams will enter the property from Dunn Bay Road to service bin store 1 and Cape Naturaliste Road to service bin store 2. The operatives will enter the bin stores to retrieve and service the bins.

For bin store 1, the vehicles will drive in a forwards motion through the carparking area 2 and make a right turn adjacent to bin store 1. The vehicle will then be able to perform a two-point turn to park close to the bin store. After bins have been serviced the vehicle will exit the carpark in a forward motion back onto Dunn Bay Road. Access to the grease trap will be from carpark 1, entering from Dunn Bay Road.

For bin store 2, the vehicle will enter in the entrance closest to building 4 and perform a two-point turn in the car park adjacent to bin store 2. After the bins have been serviced the vehicle will continue in a forward motion, exiting the carpark back onto Cape Naturaliste Road.

element.

Swept path analysis for vehicle ingress and egress to service both bin stores has been completed by taking into consideration the specifications of private service provider's waste collection vehicles.



Figure 4. Swept Path Analysis – refuse truck

The WMP additionally details the process for the transfer of waste from the uses on the site to the two bin store locations by staff and cleaners.

In summary, as demonstrated by the WMP, the waste generated by the development can be appropriately stored, managed and collected from the site.

Refer to Appendix F – Waste Management Plan

7.4 Environmental Noise Report

An Environmental Noise Report was prepared by Gabriels Hearne Farrell in support of the development. The assessment states that the proposed development is capable of complying with the Environmental Protection (Noise) Regulations 1997 based on implementation of recommended noise control strategies. The noise control strategies include:

- Acoustic screening on western side of the central courtyard;
- Construction specifications for Building 1 (brewery), Building 2 (restaurant), and Building 3 (café) i.e. glazing, roof and wall construction;
- Construction specifications for the short-term accommodation apartments above Building 4;
- Noise Management Requirements relating to operation of the tenancies to ensure compliance with the Regulations (closure of doors, windows and louvres, maximum patron numbers, regulation of music volume); and
- Delivery vehicle and waste collection restrictions.

Assumptions

The operating hours of the hospitality uses have not been confirmed at this stage of the project however, the following assumptions have been made with respect to the noise modelling:

- The Brewery (Building 1) will generally be open between lunch time and 10pm, and is proposed to operate to midnight for private functions on occasion.
- The restaurant (Building 2) will be open for lunch and dinner, closing prior to 10 pm (however Building 2 may be used for private functions that may extend beyond 10 pm); and
- The café (Building 3) will be open for breakfast and lunch, closing in the afternoon.

Additionally, the modelling was based on the following maximum anticipated patron numbers:

- Within Building 1 – 206 patrons
- Within Building 2 – 181 patrons
- Within Building 3 – 71 patrons
- In the external areas (courtyard and decks) – 542 patrons.

Modelling of Patron/Crowd Noise

A range of scenarios were modelled based on various operating hours of the hospitality uses, patron numbers and operating conditions (position of doors and louvers, and music volume). The modelling indicates the patron noise emissions for the proposed operations can meet the requirements of the Noise Regulations utilising noise control strategies specified above.

Mechanical Plant

At this stage of the project there is no mechanical design or equipment selections, however, compliance will be achieved with the relevant 'Assigned Levels' by implementing common place noise control strategies.

The brewing activities do not result in any noise emissions of significance. There will be ventilation fans installed for the brewery operations which will be specified to comply with the 'Assigned Levels' along with all of the other mechanical plant.

The proposed mechanical plant will be assessed prior to the lodgement for the Building Permit, in order to ensure that the selected equipment is compliant with the Environmental Protection (Noise) Regulations 1997.

Service Vehicles

Noise modelling was undertaken which considered noise transmission from delivery/service vehicles idling at the loading bay and driving through the carpark.

With respect to vehicle idling at the loading bay, the adjusted noise levels are compliant with the 'Assigned Levels', except for the night period between 10pm and 7am. It is therefore recommended that the operator only permits delivery/service vehicles between the hours of 7am and 7pm to ensure compliance.

Waste collection activities are exempt from complying with the 'Assigned Levels', provided the collection only occurs between the hours of 7 am and 7 pm Monday to Saturday, and between 9 am and 7 pm on Sundays

and Public Holidays. This is reliant on the waste collection activities being undertaken in the quietest possible manner. There is no proposal for out-of-hours waste collection.

General Noise Management Practises

In addition to the noise control previously outlined in this report, the following general noise management strategies should be implemented by the operators:

- Glass shall only be emptied into the outside bins between the hours of 7 am and 7 pm (9 am to 7 pm on Sundays).
- Management will maintain a log book for any complaints regarding noise and disturbance in the area. Any complaint received is entered into the book, with the date and time of the complaint, the staff member who received the complaint, and the action taken. The approved manager will then contact the complainant to ascertain whether the action taken is sufficient to answer the concern expressed.
- Security staff shall ensure all patrons leave the venue in a prompt and orderly fashion.

Refer to Appendix G – Environmental Noise Report

7.5 Environment Assessment

A desktop environmental assessment was undertaken by Emerge Associates, supported by a site visit, to document the environmental values within the subject site and outline management considerations relevant for the development approval process (refer Appendix H).

Flora and vegetation

A large number of existing trees will be retained as part of the proposed development of the site. In this regard, a Tree Condition Assessment, prepared by a qualified arborist and contained as an appendix to the assessment, outlines key management considerations for retaining the trees and maintaining tree health and structure as part of the proposed development. Considerations include:

- Protecting trees from development influences (compaction of soil, mechanical damage, phytotoxic chemicals (i.e. cement) and root severance), typically through the use of fencing around the outer canopy (dripline) or greater distance if feasible. This is typically called the 'tree protection zone (TPZ)';
- Minimising/preventing cut or fill within the TPZ;
- Seeking qualified guidance from an arborist where roots greater than 100mm in diameter are encountered, to determine if severance of the roots is likely to impact tree health and structure;
- Minimising/preventing storage of materials, equipment or machinery within the TPZ; and
- Pruning retained trees to remove dead branches greater than 50mm in diameter, and any other recommended works to maintain tree health and structure.

Further detailed assessment by an arborist will be required during the proposed works, to ensure tree health and structure is maintained, particularly where buildings/structures are proposed within the TPZ and/or compaction of soil or changes to infiltration are likely.

It was assessed that due to the lack of remnant native vegetation within the site, no conservation significant or priority flora or threatened or priority ecological communities are likely to occur within the site.

Fauna and fauna habitat

Based on searches of the Department of Biodiversity Conservation and Attractions (DBCA) NatureMap database and the federal Department of Agriculture Water and Environment Protected Matters database the following conservation significant fauna species were identified as potentially occurring within the site include:

- Western ring tail possum (*Pseudocheirus occidentalis*)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia naso*)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*)
- Carnaby's Cockatoo (*Calyptorhynchus latirostris*)
- Chuditch (*Dasyurus geoffroii*)
- South-western Brush tailed Phascogale (*Phascogale tapoatafa wambenger*)
- Quenda (*Isoodon fusciventer*)

The site visit undertaken by an environmental scientist from Emerge Associates on 26th October 2020 found:

- Evidence of use by western ringtail possum, including scats and two dreys. One of the dreys is located within a peppermint tree in the north-western portion of the site, while the other drey was located in a peppermint tree within the road reserve. The two peppermint trees containing the identified western ringtail possum dreys are both proposed to be retained as part of the development within the site.
- Evidence of foraging by the three black cockatoo species (Carnaby's, Baudin's and forestred- tailed), associated with the marri trees throughout the site. No trees have been specifically assessed for presence or absence of hollows suitable for use by black cockatoos, however the marri trees that have a diameter at breast height of 50cm or greater are generally found on the periphery of the site and are proposed for retention.

With regard to the other conservation significant species, chuditch is not likely to be present as the area of vegetation is not likely to be large enough. Quenda may occur within the wider area of the site, particularly in association with Dugulup Brook to the north.

A separate fauna management plan has been prepared by Emerge Associates to support the proposed development (Appendix I). Key management actions proposed to support development of the site in order to minimise harm to fauna include:

- A pre-clearing fauna inspection will be completed to identify potential fauna interactions including an inspection of trees for dreys and hollows and signs of use. This will include determining safe management of the trees proposed for retention (particularly those that contain dreys) during construction;
- A fauna trapping program will be conducted to capture and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical;
- A fauna spotter will be present during clearing to direct and manage works to avoid impacts to fauna wherever possible and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical;
- At all times correct fauna handling procedures will be applied to reduce stress on any captured animals and the translocation of native fauna will only be completed to release sites agreed under licence from Department of Biodiversity Conservation and Attractions (DBCA); and
- On completion of the pre-clearing trapping and fauna spotting program, a report summarizing the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated.

Summary

The desktop environmental assessment undertaken by Emerge Associates found that overall the potential impacts associated with the proposed development can be managed through the development approval process.

In particular, where possible, existing trees within the site are proposed to be retained as part of development and will include close involvement with an arborist to maximise opportunities for retention. This process has already been commenced through the preparation of a tree condition assessment. The management of the fauna and the associated fauna habitat values can be appropriately addressed as part of the development approval process and through the implementation of the fauna management plan. Fauna habitat will be retained or reintroduced (through the proposed landscaping) and impacts are likely to only be short-term, with the fauna species (i.e. western ringtail possum) expected to remain, or re-establish after the development of the site is completed.

8. Planning Framework & Assessment

8.1 Local Planning Strategy

The City's Local Planning Strategy (the Strategy) was endorsed by the Western Australian Planning Commission (WAPC) on 13 March 2020 to provide a strategic direction to inform the future statutory decision making within the City.

Pursuant to the draft Strategy, the subject site is identified as 'Urban Consolidation', in an existing Town Centre. The Strategy states the Dunsborough Town Centre should continue to develop into an economically, socially and culturally vibrant and vital place with increased retail floorspace.

The development is considered to meet the aspirations of the Strategy in providing a range of services and amenity appropriate for its context which will achieve vibrancy and activity in a prominent location of the Town Centre. The development comprises retail floorspace which is anticipated to be occupied by local Dunsborough businesses and will provide an active interface to Dunn Bay Road.

8.2 Local Planning Scheme No.21 (LPS 21)

The City's Local Planning Scheme No. 21 (LPS 21) is the primary statutory document guiding land use and development within the City. Pursuant to LPS 21, the subject site is zoned 'Centre' and is identified within Development Contribution Area No. 1 (DCA1) and Special Control Area 'Drive Through Facility Exclusion'. The site is allocated a residential design code of 'R-AC3'. Lot 1 is subject to Additional Use No.83 which provides for the uses of 'Service Station' and 'Motor Vehicle Wash' as 'D' discretionary uses at the site.

Refer to Figure 5 – LPS21

8.2.1 Centre Zone

The City's LPS 21 prescribes the following objectives for the Centre zone that the City will have regard to when assessing the proposed development:

a) To provide a genuine centre of community life, socially, culturally and economically;
b) To provide a basis for future detailed planning in accordance with the structure planning provisions of this Scheme or the Activity Centres State Planning Policy;
c) To ensure that development provides for activation of the street and public spaces, high quality design and a variety of land uses; and
d) To provide for medium to high density residential development.

The development has been designed to create an integrated hub of activity to the benefit of the local community and visitors. The development will provide activation and a high quality streetscape interface appropriate for the site's location. In consideration of the above, it is deemed the proposed development is consistent with Centre zone objectives set out in LPS 21.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

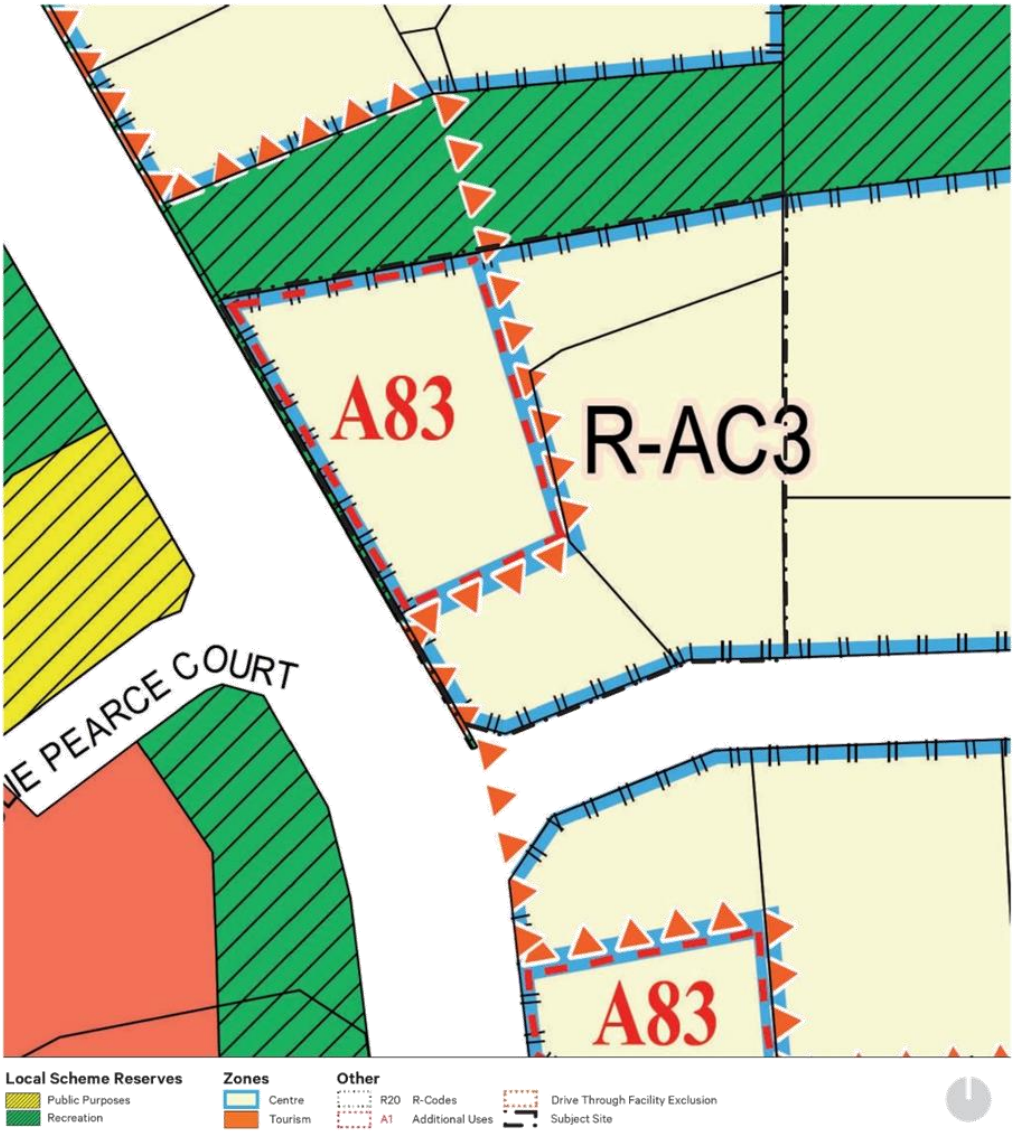


Figure 5. LPS21

8.2.2 Land Use Permissibility

Table 1 of LPS 21 sets out land use permissibility for the 'Centre' zone. The table below provides an overview of each land use and its permissibility in accordance with LPS 21.

Table 9: Land Use Permissibility Table

Land Use	Permissibility	Definition
Shop	P	means premises other than a bulky goods showroom, a liquor store – large or a liquor store – small used to sell goods by retail, to hire goods, or to provide services of a personal nature, including hairdressing or beauty therapy services.
Restaurant/café	P	means premises primarily used for the preparation, sale and serving of food and drinks for consumption on the premises by customers for whom seating is provided, including premises that are licenced under the Liquor Control Act 1988.
Brewery	A	means premises the subject of a producer's licence authorising the production of beer, cider or spirits granted under the Liquor Control Act 1988.
Tavern	A	means premises the subject of a Tavern Licence granted under the Liquor Control Act 1988.
Tourist Accommodation	D	means single occupancy accommodation units, which may be self-contained and may include associated central facilities for the exclusive use of guests, and includes serviced apartments.

Shop

The occupants of the retail tenancies have not been confirmed although are anticipated to accommodate two existing Dunsborough businesses. It is noted there is potential for one of the tenancies to occupy a surfboard shop for the retail sale of surfboards. It has been flagged that some surfboard shaping could occur in one of the rooms as a feature of the shop. The surfboard shaping would be a small component of the tenancy and would occur relatively infrequently and is therefore considered incidental to the predominant use. The remaining rooms shown on the floor plan are anticipated for storage and office/admin space for the shops.

Tourist Accommodation

Two forms of accommodation are proposed as part of the development. Two serviced apartments are proposed above the retail tenancies at the front of the site. At the rear of the site, 18 single occupancy boutique accommodation units are proposed. The units meet the definition of Tourist Accommodation under the Scheme and can be considered in the 'Centre' zone.

Restaurant/café

The café (Building No.3) proposes to accommodate a small-scale 17.6m^2 coffee roastery which roasts coffee for use and sale at the premises. The roastery is considered incidental to the Restaurant/café use and will be appropriately ventilated and serviced.

Building No.2 will also accommodate a Restaurant/café use.

Brewery / Tavern

Building 1 will be utilised for micro-brewing activities with the remainder of the building to be used as a bar for patrons. There is potential for food to be served within the bar area from adjacent restaurant. As the Brewery definition does not include consumption or sale of alcohol and food, the Tavern use class is also requested for the site.

8.2.3 Development Controls

Clause 4.21 of LPS21 outlines development provisions applicable to all new development in the Regional and Centre zones unless otherwise identified in an endorsed Activity Centre Plan.

Clause 4.21.1 sets out the following:

Requirement	Comment
No residential uses shall be permitted at ground floor fronting Queen Street and Prince Street, Busselton and Dunn Bay Road and Naturaliste Terrace, Dunsborough;	Complies. No residential uses are proposed at the ground floor fronting Dunn Bay Road.
A nil front setback is to be provided to the development, unless otherwise designated in an Activity Centre Plan, or the development is providing for an associated alfresco space within the setback;	The development proposes a nil setback to Dunn Bay Road wrapping around to Cape Naturaliste Road on the secondary street. Given the narrow verge width, angle of the front boundary and finished floor level of the buildings, the building entrances are setback slightly from the street boundary.
Buildings shall be articulated to break up perceived bulk and provide visual interest, particularly with buildings occupying a large/long site frontage;	The building is articulated along the Dunn Bay Road frontage, due to the building orientation and angle of the front lot boundary. The recessed entries additionally provide for visual interest in the façade.
At the ground floor level, developments shall address the street with a primary business entrance and a shop front façade;	The ground floor shop tenancies are proposed with a main entry fronting Dunn Bay Road and glazing to the street.
Ground floor commercial uses shall incorporate transparent glazing for 70% of all building frontages to adjacent streets;	The perimetre if buildings 3 and 4 fronting Dunn Bay Road and Cape Naturaliste road is ~70m. 54.6m of this facade is clear glazed - 78%.
Upper levels shall be designed to promote informal surveillance of the street through the use of balconies and/or large windows;	The two apartments proposed on the upper level have balconies and windows which address Cape Naturaliste Road.
A minimum ceiling height of 3.3 metres shall be achieved for the ground floor level, whilst all other floors shall achieve a minimum ceiling height of 2.7 metres;	The floor to ceiling height of the retail tenancies is 3.5m. It is noted the main floor area of the retail tenancies has a void above to a ceiling height of 6.5m.
Roller doors or screens of solid material on shop fronts will not be permitted, security measures should be located and installed internally behind the glazing line;	Roller doors and screen are not proposed.
Pedestrian shelter, through the provision of a verandah, awning or the like, shall be provided over the public footpath for the full width of the lot frontage;	Pedestrian shelter is unable to be provided due to the location of the footpath, setback and orientation of the buildings, and angle of the front boundary.
No vehicle accessways or carparking shall be provided between buildings and the street, or be visible from the street, unless required to provide access to car parking or loading areas behind buildings;	The car park on the eastern side of the lot is visible to the street. Car parking bays are setback 10m from the street boundary with a landscaped interface provided between the street boundary. Given the site has two street frontages, the location of the main car park provides for greatest concealment from the street.
No vehicular access to sites shall be taken from Queen Street, Prince Street or Kent Street (between Queen Street and Brown Street), Busselton or Dunn Bay Road or Naturaliste Terrace, Dunsborough, unless no alternative is available, in which case a single crossover width shall be no greater than 5 metres with a cumulative maximum width of 7 metres;	Vehicle access is proposed from Dunn Bay Road with a width of 6m to provide for two-way access. A Traffic Impact Assessment (TIA) has been prepared by GTA consultants to demonstrate that the location of the main vehicle access will not create an adverse impact on pedestrian movement and traffic flow in the Town Centre.
Vehicle crossovers and driveways shall be co-located wherever possible with adjoining properties;	The future use and development prospects of the adjoining property to the east is currently unknown. The proposed access and crossover arrangement is required to facilitate use of the development.

Requirement	Comment
Vehicle access to developments shall be designed in a way which minimises potential pedestrian/vehicular conflict, clearly recognising the primacy of pedestrian amenity;	The crossover to Dunn Bay Road is located to provide for adequate sightlines and provides separation and safety for pedestrians on the adjacent footbath. The proposed access to Cape Naturaliste Road does not impact on any pedestrian movements.
Multi-storey car parks shall incorporate interactive street frontages, such as shops or other uses that promote activity and where car parking levels (including undercroft levels) are visible from a street or public space, high quality architectural detailing shall be incorporated into the façade of all floors;	N/A. The development does not comprise a multi-storey car park.
General plant, such as air-conditioning, television antennas, bins, hot water storage tanks, rain water tanks, satellite dishes and the like are to be adequately concealed and screened from the street or public view;	All service areas and bin storage areas are screened from the street.
Where land is zoned 'Regional Centre' or 'Centre', and is designated a residential density coding of R-AC3 the maximum plot ratio shall be 1.5, except for where the following incentives for mixed use development apply: Where residential or short-stay accommodation uses represent more than 25% of the plot ratio area of a proposed mixed use development, the maximum allowable plot ratio area may be 2.0; or Where a development incorporates a Restaurant/Café, Tavern or other similar use that will provide for informal social interaction the maximum allowable plot ratio area for the remainder of the development may be 2.0; and The plot ratio incentives set out in sub-clauses (a) and (b) above may be combined, provided that the total plot ratio area does not exceed 3.0.	The proposed plot ratio does not exceed 1.5.
Signage and advertising shall not adversely detract from the architectural elements of the building, or visually dominate the building or the streetscape generally.	The proposed design incorporates signage on the façade of the buildings and way-finding signage throughout the site. The proposed signage is of simple, modern design intended to orientate visitors within the site.

Schedule 12 – Developer contributions

The site is located within DCA 1 – Community infrastructure. Under Schedule 12 cost contributions are calculated on the number of new lots and/or accommodation units/dwelling units proposed. As per Schedule 12 A cost contribution rate of 50% of the full dwelling/lot rate will apply to lots/units used for the purpose of tourist accommodation and "Aged Persons' Home" in any zone other than the Residential zone. It is understood the current contribution rate is $3,234 per dwelling.

8.3 Local Planning Policy – Lots adjoining Public Open Space

Local Planning Policy No.1.1 – Lots Adjoining Public Open Space (LPP 1.1) seeks to ensure new development is designed to achieve passive surveillance to areas of public open space, which in turn will offer an increased sense of safety and security for those using the public spaces. LPP 1.1 also seeks to ensure that vegetation is not affected by the close proximity of urban development.

With regard to new development, the Policy specifies that dwellings shall be designed to ensure windows and openings address the street and the public open space. The accommodation units proposed at the rear of the development site provide passive surveillance to the adjoining Dugalup Brook through major openings and permeability to outdoor recreational areas. The development is considered to provide an appropriate interface and surveillance to the reserve and will not adversely impact on the vegetation and biodiversity of the creek.

8.4 Local Planning Policy – Car Parking

Vehicle Parking

Based on the City's Local Planning Policy No. 2.1 – Car Parking (LPP2.1) the following parking requirements are derived for the development, based on 4 bays per 100m² of Net Leasable Area (NLA) for all land uses:

Table 10 – Parking Requirements

Land use	NLA/No.	Requirement	Proposed
Shop	393m² NLA	16	62 shared bays with reciprocal parking arrangement (includes 2 ACROD Bays)
Restaurant/café	329m², 140m² NLA	19	
Brewery/Tavern	505m² NLA	20	
Tourist Accommodation	20 units	22	22 (includes 2 ACROD Bay)

It is noted the parking requirement has been rounded to the nearest whole number. The deck and alfresco areas are not for the exclusive use of the tenancies and are therefore not included in the NLA.

The proposed provision of 84 parking bays meets the statutory requirement of 77 parking bays. Additionally, the proposed parking numbers is considered appropriate for the development given the high probability of reciprocal carpark use and a high amenity for walking and cycling.

Bicycle Parking

LPP2.1 requires the following bicycle parking facilities:

Table 11 – Bicycle Parking Requirements

Land use	GFA/No.	LPP Requirement			
		Employee		Visitor	
Shop	495m²	2 per 300m² GFA	3	2 per 500m² GFA	2
Restaurant/café	384m² + 182m²	2 per 100m² GFA	11	2 per 100m² GFA	11
Brewery/Tavern	576m²	2 per 100m² GFA	12	2 per 100m² GFA	12
Tourist Accommodation	20 units	2 per 4 employees	1	2 per 8 units	5
Total			**27**		**30**

A total of 65 bicycle parking bays are proposed, exceeding the requirements under LPP 2.1. 51 of these bays are proposed to be accommodated at the entry of the development from Dunn Bay Road. It is noted that 7 bays are proposed within a lockable area (bicycle rack 3) for employee bicycle parking. It is considered due to the number of bays and location in highly visible and accessible locations these can effectively service the public and employees.

End of trip facilities

The following table sets out the requirements of the Policy for EOT faciltiies

Table 12 – EOT Requirements

Rate	1 secure clothes locker per 1 employee bicycle parking space	Proposed	1 shower per 8 Employee/ Residential Bicycle parking spaces	Proposed
Shop	3 lockers	4	0	1
Restaurant/café	11 lockers	24	1	2
Brewery/Tavern	12 lockers		2	
Tourist Accommodation	2 lockers	0	0	0

The end of trip facilities which are proposed within building 1 (brewery) are available to all employees on site. Based on the requirements of LPP 2.1 and the maximum anticipated staff numbers, the EOT facilities proposed are acceptable.

8.5 Local Planning Policy – Reflective Building Materials

Local Planning Policy 3.1 – Reflective Building Materials seeks to control the use of reflective building materials to prevent specular glare and potential nuisance for neighbouring properties and to preserve the scenic and landscape character attributes of the City. The policy applies to Landscape Value Areas and Travel Route Corridors, and within Residential, Tourist, Special Purpose and Rural Residential zones. The subject site is not within these specified areas.

An exterior materials and finishes schedule is provided on the development plans. The accommodation buildings at the rear of the site are proposed to be clad in vertical jarrah timber and surfmist Colorbond. The remaining brewery, restaurant/café and retail building exterior walls feature donnybrook sandstone, vertical jarrah timber cladding, surfmist Colorbond, and painted white render with glazing orientated towards the central courtyard.

The proposed materials in their quantities will not cause significant glare or amenity impacts to neighbouring properties or the surrounding area.

8.6 Local Planning Policy – Percent for Public Art

Local Planning Policy 4.4 – Percent for Art sets out the requirements for the provision of public art as part of developments which exceed $1,000,000. In accordance with the Policy, art to the value of 1% of the estimated cost of development is to be provided.

Public art is proposed to be provided on site and incorporated within the development. Preliminary engagement has been undertaken with a local Aboriginal representative to explore indigenous art opportunities. Josh Whiteland from Koomal Dreaming has been selected by the developer as one of the potential local artists to undertake the works.

It is proposed that detailed documentation will be provided to the City for approval in accordance with the Policy requirements, following the creative development process.

8.7 Local Planning Policy – Stormwater Management

Local Planning Policy 6.1 Stormwater Management requires all stormwater up to the 20% Annual Exceedance Probability (AEP) (previously 1 in 5 Average Recurrence Interval (ARI)) to be retained on site and for $1m^3$ of storage to be provided for every $40m^2$ of impervious area. Based on the proposed impervious area, the development will require a minimum $136.2m^3$ of storage. Stormwater will be managed in accordance with the stormwater management plan prepared by Iconic Design (contained within Appendix J), and currently provides for the required volume of storage through the use of soakwells. Other water sensitive urban design features, such as permeable pavement and rain gardens, will be considered as part of detailed design. All water collected within the site will be infiltrated within the site wherever possible, and no direct discharge to Dugulup Brook to the north of the site is proposed.

8.8 Local Planning Policy - Road, Footpath and Cycle Network Upgrading Contributions

Contribution	Contribution rate	Required (for 20 units)
Footpath and cycle network upgrade	$579.52 For Tourism Units the cost is 50% the normal contribution.	$5,795.2

It is noted the site is connected to the existing local footpath network.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

9. Planning Merit

The proposed development whilst being largely consistent with the local planning framework, is a well-considered, architecturally designed proposal that will provide significant community benefits.

The key points regarding the proposed development are summarise below:

- The proposal achieves a high-quality development outcome with associated active land uses and a shared community space.
- The development aligns with the intent LPS 21, providing an outcome that is site responsive and sympathetic to the surrounding context and character.
- The design is highly compatible with its setting with respect to height, scale, bulk and arrangement of buildings on site. The materiality incorporates use of timber and feature brick reflective of the Dunsborough locality.
- The development has been designed around retaining as many trees on site as possible which is a significant sustainable measure delivering positive ecological and social benefits to the community.
- The proposed development is considered to successfully balance market demands, community needs and align with the strategic vision of the locality.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

10. Conclusion

The Atzemis family are proud, local Western Australians who have owned the subject site for over 20 years. The development has captured George and Peter's vision for the site with a conscious and considered design approach, which will deliver the best-suited uses for the local community, visitors and surrounding environment. The proposal offers significant economic benefits to Dunsborough, creating local jobs and stimulating spending in the centre.

The proposed development will provide a high quality, architecturally designed development that is appropriate to the locality and aligns with the City and community's aspirations for the Dunsborough Town Centre. Designed by FINESPUN Architecture, extensive site analysis has resulted in a contemporary development that responds to its site context, the City's streetscape vision.

The development is consistent with the Planning Framework applicable to the site and achieves the objectives of the Centre zone in creating a genuine centre of community life, socially, culturally and economically.

On the basis of the above, the proposed development is considered to be consistent with the principles of orderly and proper planning and constitutes an appropriate and desirable use for the site that both considers the current and future amenity of the area.

It is therefore respectfully requested that the City of Busselton approves the proposed development.

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

element.

Appendix A – Certificate of Titles

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

WESTERN AUSTRALIA

REGISTER NUMBER	
1/D85620	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
4	4/1/2012

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 2042 FOLIO 499

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 1 ON DIAGRAM 85620

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

ELDORADO PTY LTD OF CARE OF GOODING PARTNERS, THE QUADRANT, LEVEL 9, 1 WILLIAM STREET, PERTH

(T F930764) REGISTERED 18/7/1995

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. L799050 MORTGAGE TO BANK OF WESTERN AUSTRALIA LTD REGISTERED 2/12/2011.
2. *M109217 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 20/11/2012.

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: 2042-499 (1/D85620)
PREVIOUS TITLE: 1625-443
PROPERTY STREET ADDRESS: 61 DUNN BAY RD, DUNSBOROUGH.
LOCAL GOVERNMENT AUTHORITY: CITY OF BUSSELTON

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING M109217

LANDGATE COPY OF ORIGINAL NOT TO SCALE 03/04/2020 11:44 AM Request number: 60477773

Landgate
www.landgate.wa.gov.au

WESTERN AUSTRALIA

REGISTER NUMBER	
2/D85620	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
4	4/1/2012

VOLUME	FOLIO
2042	500

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

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 2 ON DIAGRAM 85620

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

ELDORADO PTY LTD OF CARE OF GOODING PARTNERS, THE QUADRANT, LEVEL 9, 1 WILLIAM STREET, PERTH

(T H041903) REGISTERED 4/3/1999

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. L799050 MORTGAGE TO BANK OF WESTERN AUSTRALIA LTD REGISTERED 2/12/2011.
2. *M109217 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 20/11/2012.

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: 2042-500 (2/D85620)
PREVIOUS TITLE: 1625-443
PROPERTY STREET ADDRESS: 59 DUNN BAY RD, DUNSBOROUGH.
LOCAL GOVERNMENT AUTHORITY: CITY OF BUSSELTON

NOTE 1: L803442 SECTION 138D TLA APPLIES TO CAVEAT J920191
NOTE 2: L803443 SECTION 138D TLA APPLIES TO CAVEAT G850941
NOTE 3: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING M109217

LANDGATE COPY OF ORIGINAL NOT TO SCALE 03/04/2020 11:44 AM Request number: 60477773
Landgate
www.landgate.wa.gov.au

WESTERN AUSTRALIA

REGISTER NUMBER	
4959/P13907	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	N/A

VOLUME LR3128 FOLIO 938

RECORD OF QUALIFIED CERTIFICATE OF CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997
NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 4959 ON PLAN 13907

STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)

STATUS ORDER/INTEREST: RESERVE UNDER MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: SHIRE OF BUSSELTON OF LOCKED BAG 1, BUSSELTON
(XE I854861) REGISTERED 16/4/2004

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. I854860 RESERVE 42673 FOR THE PURPOSE OF PUBLIC RECREATION REGISTERED 16/4/2004.
I854861 MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED. REGISTERED 16/4/2004.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
(3) The interests etc. shown hereon may have a different priority than shown.

----------END OF CERTIFICATE OF CROWN LAND 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:	LR3102-752 (4959/P13907)
PREVIOUS TITLE:	LR3102-752
PROPERTY STREET ADDRESS:	NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY:	CITY OF BUSSELTON
RESPONSIBLE AGENCY:	DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

END OF PAGE 1 - CONTINUED OVER

LANDGATE COPY OF ORIGINAL NOT TO SCALE 16/07/2020 03:17 PM Request number: 60792193
Landgate
www.landgate.wa.gov.au

ORIGINAL CERTIFICATE OF CROWN LAND TITLE
QUALIFIED

REGISTER NUMBER: 4959/P13907 VOLUME/FOLIO: LR3128-938 PAGE 2

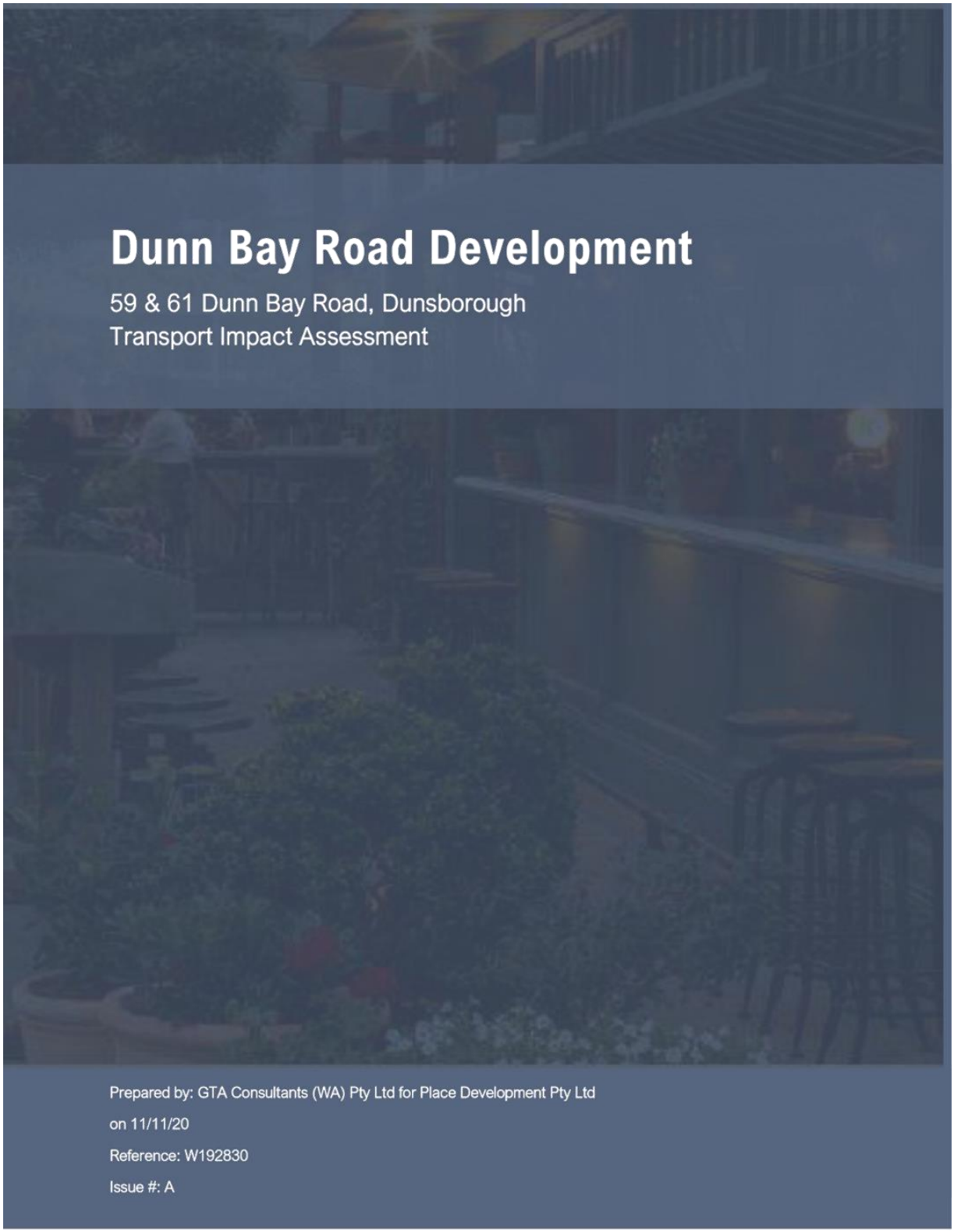
NOTE 1: A000001A CORRESPONDENCE FILE 00897-1993-01RO.

LANDGATE COPY OF ORIGINAL NOT TO SCALE 16/07/2020 03:17 PM Request number: 60792193

Landgate
www.landgate.wa.gov.au

element.

Appendix E – Traffic Impact Assessment



Dunn Bay Road Development

59 & 61 Dunn Bay Road, Dunsborough
Transport Impact Assessment

Prepared by: GTA Consultants (WA) Pty Ltd for Place Development Pty Ltd
on 11/11/20
Reference: W192830
Issue #: A

GTAconsultants

Dunn Bay Road Development

59 & 61 Dunn Bay Road, Dunsborough
Transport Impact Assessment

Client: Place Development Pty Ltd

on 11/11/20

Reference: W192830

Issue #: A

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A-Dr	04/11/2020	Draft – issue for client comment	Aaron MacNish	Tim Judd	Tim Judd	
A	11/11/2020	Final	Aaron MacNish	Tim Judd	Tim Judd	

© GTA Consultants (WA) Pty Ltd [ABN 41 143 437 174] 2019
The information contained in this document is confidential and intended solely for the use of the client for the purpose for which it has been prepared and no representation is made or is to be implied as being made to any third party. Use or copying of this document in whole or in part without the written permission of GTA Consultants constitutes an infringement of copyright. The intellectual property contained in this document remains the property of GTA Consultants.

GTA Report (NSW)

GTAconsultants
Melbourne | Sydney | Brisbane
Adelaide | Perth

CONTENTS

1. Introduction 1
1.1. Background 2
1.2. Purpose of this Report 2
1.3. References 2
2. Existing Conditions 4
2.1. Subject Site 5
2.2. Existing Movement Network 6
2.3. Existing Parking / access 10
2.4. Committed developments 10
2.5. Changes to surrounding transport networks 11
2.6. Crash History 11
3. Development Proposal 13
3.1. Land Uses 14
3.2. Vehicle Parking 14
3.3. Vehicle Access 15
3.4. Pedestrian Facilities 16
3.5. Loading Areas 17
4. Traffic Assessment 20
4.1. Current Traffic Flows 21
4.2. Vehicle Types 23
4.3. Traffic Generation and Traffic Impact 24
4.4. Trip Distribution 24
4.5. Expected Traffic Flows 25
4.6. Traffic Impact of Development 29
4.7. Level of Service Concepts 30
4.8. Traffic Impact of Development on Local Area 31
5. Conclusion 32

Appendices

A. Development Plans
B. SIDRA Intersection Results
C. Swept Path Assessment
D. WAPC Guidelines Checklist

Figures

Figure 2.1: Subject Site and its Environs 5
Figure 2.2: Land Zoning Map 5
Figure 2.3: Cape Naturaliste Road 7
Figure 2.4: Dunn Bay Road 7
Figure 2.5: Function Road Hierarchy – surrounding road network 7
Figure 2.6: Existing Path Network – 800m radius 9
Figure 2.7: Path Network – adjacent site 10
Figure 2.8: Crash Map 2015 - 2019 11
Figure 3.1: Pedestrian Links 16
Figure 3.1: Dunn Bay Road Carpark – Waste and Loading Bays 18
Figure 3.2: Cape Naturaliste Road Carpark – Waste and Loading Bays 19
Figure 4.1: Cape Naturaliste Road / Dunn Bay Road – Existing 2020 AM Peak Turn Counts 21
Figure 4.2: Cape Naturaliste Road / Dunn Bay Road – Existing 2020 PM Peak Turn Counts 21
Figure 4.3: Cape Naturaliste Road / Caves Road – Existing 2020 AM Peak Turn Counts 22
Figure 4.4: Cape Naturaliste Road / Caves Road – Existing 2020 PM Peak Turn Counts 22
Figure 4.5: Cape Naturaliste Road / Dunn Bay Road – 2020 AM Peak with Development Traffic Flows 25
Figure 4.6: Cape Naturaliste Road / Dunn Bay Road – 2020 PM Peak with Development Traffic Flows 25
Figure 4.7: Cape Naturaliste Road / Caves Road – 2020 AM Peak with Development Traffic Flows 26
Figure 4.8: Cape Naturaliste Road / Caves Road – 2020 PM Peak with Development Traffic Flows 26
Figure 4.9: Cape Naturaliste Road / Dunn Bay Road – 2030 AM Peak with Development Traffic Flows 27
Figure 4.10: Cape Naturaliste Road / Dunn Bay Road – 2030 PM Peak with Development Traffic Flows 27
Figure 4.11: Cape Naturaliste Road / Caves Road – 2030 AM Peak with Development Traffic Flows 28
Figure 4.12: Cape Naturaliste Road / Caves Road – 2030 PM Peak with Development Traffic Flows 28

Tables

Table 2.1:	Traffic counts – October 2020	8
Table 3.1:	Development Schedule	14
Table 3.2:	Vehicle Parking Requirements	14
Table 3.3:	Bicycle Parking Requirements	15
Table 4.1:	Cape Naturaliste Road / Dunn Bay Road – Existing 2020 Operating Conditions	23
Table 4.2:	Caves Road / Cape Naturaliste Road – Existing 2020 Operating Conditions	23
Table 4.3:	Traffic Generation Rate Adopted	24
Table 4.4:	Development Generated Trips	24
Table 4.5:	Cape Naturaliste Road / Dunn Bay Road – 2020 with Development Traffic Operating Conditions	29
Table 4.6:	Caves Road / Cape Naturaliste Road – 2020 with Development Traffic Operating Conditions	29
Table 4.7:	Cape Naturaliste Road / Dunn Bay Road – 2030 with Development Traffic Operating Conditions	30
Table 4.8:	Caves Road / Cape Naturaliste Road – 2030 with Development Traffic Operating Conditions	30

1. INTRODUCTION

01

INTRODUCTION

1.1. Background

A Development Approval is currently being sought for a proposed mixed use development on land located at Lot 1 and Lot 2 (59 and 61) Dunn Bay Road, Dunsborough. The proposed development incorporates a brewery, restaurant, café, retail and tourist accommodation.

GTA Consultants (GTA) were commissioned by Place Development in October to undertake a transport impact assessment of the proposed development.

The key focus for this site is to maintain a good level of pedestrian and cycling access and amenity and integrate into the existing Dunsborough town centre.

1.2. Purpose of this Report

Western Australian Planning Commission Transport Assessment Guidelines (WAPC Guidelines) provide direction on the level of assessment which is necessary to be carried out with respect to the likely traffic impact of a development proposal. Typically, any development which is expected to have a 'high' traffic impact, that is, generating more than 100 trips in the peak hour is satisfied by a TIA. Any development which is expected to generate less than 100 trips in the peak hour requires a Transport Impact Statement (TIS) to be undertaken. Both types of assessment consider the operation and layout of the site, but they differ in their assessment of external traffic impact.

In the context of this proposal, it is estimated there may be more than 100 trips generated in a given peak hour if applying 'typical' traffic generation rates. In this case a TIA is appropriate. This TIA briefly outlines the transport aspects surrounding the proposed development. The intent of a TIA, as per the WAPC Guidelines, is to provide the approving authority with sufficient transport information to confirm that the Applicant has adequately considered the transport aspects of the development and that it would not have an adverse transport impact on the surrounding area. Of particular relevance is the accessibility of the development by non-car modes, in accordance with Government's sustainable development objectives, and its integration with the surrounding area.

In accordance with the WAPC Guidelines, this TIA outlines:

- Existing transport conditions proximate to the site
- Suitability of the proposed parking provision within the site
- The adequacy of the proposed site layout
- The traffic generating characteristics of the proposed development
- The anticipated impact of the proposed development on the surrounding road network.

1.3. References

In preparing this report, reference has been made to the following:

- City of Busselton Local Planning Scheme No. 21
- WAPC Transport Assessment Guidelines for Development: Volume 4 – Individual Developments
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004

INTRODUCTION

- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- plans for the proposed development prepared by Finespun Architects
- traffic and car parking surveys undertaken by GTA Consultants as referenced in the context of this report
- various technical data as referenced in this report
- an inspection of the site and its surrounds
- other documents as nominated.

2. EXISTING CONDITIONS

02

EXISTING CONDITIONS

2.1. Subject Site

The subject site is located at Lot 1 & Lot 2 Dunn Bay Road in Dunsborough. The site of approximately 0.86ha has frontages of 105m to Cape Naturaliste Road and 60m to Dunn Bay Road.

The site is located within a "Centre" zone and is currently occupied by a restaurant.

The surrounding properties include a mix of commercial, light industry, retail and public purpose land uses.

The location of the subject site and the surrounding environs is shown in Figure 2.1, and the land zoning is shown in Figure 2.2.

Figure 2.1: Subject Site and its Environs



(PhotoMap courtesy of NearMap Pty Ltd)

Figure 2.2: Land Zoning Map



(Reproduced from City of Busselton Intramaps)

EXISTING CONDITIONS

2.2. Existing Movement Network

2.2.1. Arterial Roads

Caves Road

Caves Road functions as a secondary arterial road and is listed as a Primary Distributor under the Main Roads WA Function Road Hierarchy. It is a two-way road aligned in an east-west direction and configured in a 2-lane arrangement; 11.5 metre wide carriageway set within a 40 metre wide road reserve (approx.).

Caves Road carries approximately 5,500 vehicles per day[1].

Cape Naturaliste Road

Cape Naturaliste Road functions as a secondary arterial road and is listed as a Regional Distributor under the Main Roads WA Function Road Hierarchy. It is a two-way road aligned in a north-south direction and configured in a 2-lane arrangement; 8.5 metre wide carriageway set within a 31 metre wide road reserve (approx.).

Cape Naturaliste Road carries approximately 5,000 – 6,000 vehicles per day[2].

2.2.2. Local Roads

Other local roads within the vicinity of the site include:

Dunn Bay Road

Dunn Bay Road functions as a "main street" and is listed as a Local Distributor under the Main Roads WA Function Road Hierarchy. It is a two-way road aligned in an east-west direction and configured in a 2-lane arrangement; 8 metre wide carriageway set within a 20 metre wide road reserve (approx.). Dunn Bay Road features some on-street parking bays immediately east of the subject site as the road runs adjacent to one of the local shopping centres.

Dunn Bay Road carries approximately 4,000 vehicles per day[3].

Cape Naturalise Road and Dunn Bay Road are shown in Figure 2.3 and Figure 2.4 respectively.

The current functional road hierarchy is demonstrated in Figure 2.5.

[1] Source: Main Roads WA Traffic Map – Caves Road East of Cape Naturalist Road
[2] Source: Traffic counts commissioned by GTA Consultations October 2020.
[3] Source: Traffic counts commissioned by GTA Consultations October 2020.

EXISTING CONDITIONS

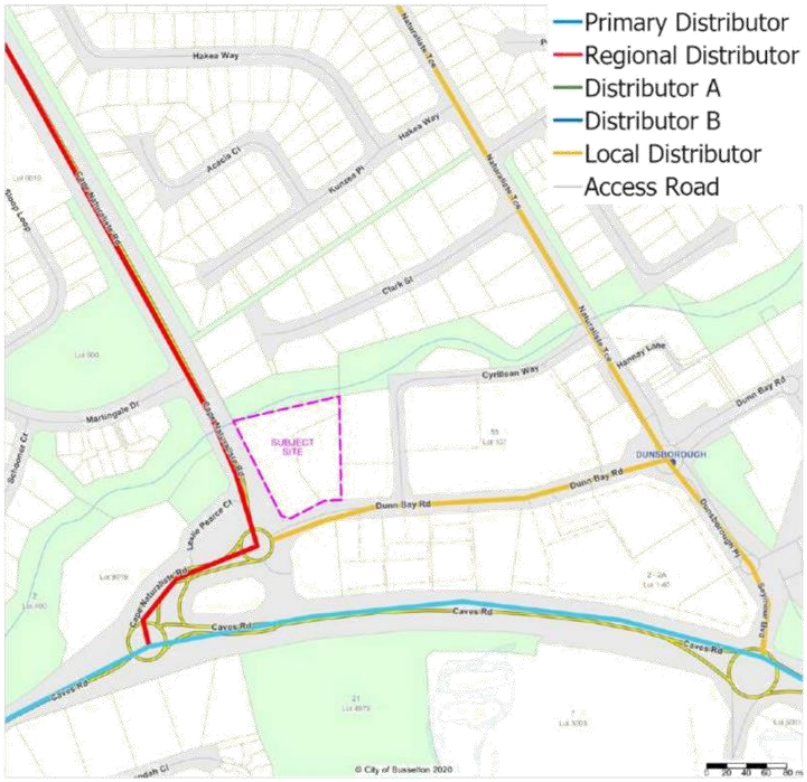
Figure 2.3: Cape Naturaliste Road



Figure 2.4: Dunn Bay Road



Figure 2.5: Function Road Hierarchy – surrounding road network


Primary Distributor
Regional Distributor
Distributor A
Distributor B
Local Distributor
Access Road
Hakea Way
Acacia Ct
Kurzea Pl
Clark St
Cyrillean Way
Dunn Bay Rd
DUNSBOROUGH
Dunsborough Hwy
Caves Rd
Leschenault Ct
Maringale Dr
Leschenault Ct
SUBJECT SITE
Lot 900
Lot 9010
Lot 9079
Lot 1480
Lot 1481
Lot 1482
Lot 1483
Lot 1484
Lot 1485
Lot 1486
Lot 1487
Lot 1488
Lot 1489
Lot 1490
Lot 1491
Lot 1492
Lot 1493
Lot 1494
Lot 1495
Lot 1496
Lot 1497
Lot 1498
Lot 1499
Lot 1500
Lot 1501
Lot 1502
Lot 1503
Lot 1504
Lot 1505
Lot 1506
Lot 1507
Lot 1508
Lot 1509
Lot 1510
Lot 1511
Lot 1512
Lot 1513
Lot 1514
Lot 1515
Lot 1516
Lot 1517
Lot 1518
Lot 1519
Lot 1520
Lot 1521
Lot 1522
Lot 1523
Lot 1524
Lot 1525
Lot 1526
Lot 1527
Lot 1528
Lot 1529
Lot 1530
Lot 1531
Lot 1532
Lot 1533
Lot 1534
Lot 1535
Lot 1536
Lot 1537
Lot 1538
Lot 1539
Lot 1540
Lot 1541
Lot 1542
Lot 1543
Lot 1544
Lot 1545
Lot 1546
Lot 1547
Lot 1548
Lot 1549
Lot 1550
Lot 1551
Lot 1552
Lot 1553
Lot 1554
Lot 1555
Lot 1556
Lot 1557
Lot 1558
Lot 1559
Lot 1560
Lot 1561
Lot 1562
Lot 1563
Lot 1564
Lot 1565
Lot 1566
Lot 1567
Lot 1568
Lot 1569
Lot 1570
Lot 1571
Lot 1572
Lot 1573
Lot 1574
Lot 1575
Lot 1576
Lot 1577
Lot 1578
Lot 1579
Lot 1580
Lot 1581
Lot 1582
Lot 1583
Lot 1584
Lot 1585
Lot 1586
Lot 1587
Lot 1588
Lot 1589
Lot 1590
Lot 1591
Lot 1592
Lot 1593
Lot 1594
Lot 1595
Lot 1596
Lot 1597
Lot 1598
Lot 1599
Lot 1600
Lot 1601
Lot 1602
Lot 1603
Lot 1604
Lot 1605
Lot 1606
Lot 1607
Lot 1608
Lot 1609
Lot 1610
Lot 1611
Lot 1612
Lot 1613
Lot 1614
Lot 1615
Lot 1616
Lot 1617
Lot 1618
Lot 1619
Lot 1620
Lot 1621
Lot 1622
Lot 1623
Lot 1624
Lot 1625
Lot 1626
Lot 1627
Lot 1628
Lot 1629
Lot 1630
Lot 1631
Lot 1632
Lot 1633
Lot 1634
Lot 1635
Lot 1636
Lot 1637
Lot 1638
Lot 1639
Lot 1640
Lot 1641
Lot 1642
Lot 1643
Lot 1644
Lot 1645
Lot 1646
Lot 1647
Lot 1648
Lot 1649
Lot 1650
Lot 1651
Lot 1652
Lot 1653
Lot 1654
Lot 1655
Lot 1656
Lot 1657
Lot 1658
Lot 1659
Lot 1660
Lot 1661
Lot 1662
Lot 1663
Lot 1664
Lot 1665
Lot 1666
Lot 1667
Lot 1668
Lot 1669
Lot 1670
Lot 1671
Lot 1672
Lot 1673
Lot 1674
Lot 1675
Lot 1676
Lot 1677
Lot 1678
Lot 1679
Lot 1680
Lot 1681
Lot 1682
Lot 1683
Lot 1684
Lot 1685
Lot 1686
Lot 1687
Lot 1688
Lot 1689
Lot 1690
Lot 1691
Lot 1692
Lot 1693
Lot 1694
Lot 1695
Lot 1696
Lot 1697
Lot 1698
Lot 1699
Lot 1700
Lot 1701
Lot 1702
Lot 1703
Lot 1704
Lot 1705
Lot 1706
Lot 1707
Lot 1708
Lot 1709
Lot 1710
Lot 1711
Lot 1712
Lot 1713
Lot 1714
Lot 1715
Lot 1716
Lot 1717
Lot 1718
Lot 1719
Lot 1720
Lot 1721
Lot 1722
Lot 1723
Lot 1724
Lot 1725
Lot 1726
Lot 1727
Lot 1728
Lot 1729
Lot 1730
Lot 1731
Lot 1732
Lot 1733
Lot 1734
Lot 1735
Lot 1736
Lot 1737
Lot 1738
Lot 1739
Lot 1740
Lot 1741
Lot 1742
Lot 1743
Lot 1744
Lot 1745
Lot 1746
Lot 1747
Lot 1748
Lot 1749
Lot 1750
Lot 1751
Lot 1752
Lot 1753
Lot 1754
Lot 1755
Lot 1756
Lot 1757
Lot 1758
Lot 1759
Lot 1760
Lot 1761
Lot 1762
Lot 1763
Lot 1764
Lot 1765
Lot 1766
Lot 1767
Lot 1768
Lot 1769
Lot 1770
Lot 1771
Lot 1772
Lot 1773
Lot 1774
Lot 1775
Lot 1776
Lot 1777
Lot 1778
Lot 1779
Lot 1780
Lot 1781
Lot 1782
Lot 1783
Lot 1784
Lot 1785
Lot 1786
Lot 1787
Lot 1788
Lot 1789
Lot 1790
Lot 1791
Lot 1792
Lot 1793
Lot 1794
Lot 1795
Lot 1796
Lot 1797
Lot 1798
Lot 1799
Lot 1800
Lot 1801
Lot 1802
Lot 1803
Lot 1804
Lot 1805
Lot 1806
Lot 1807
Lot 1808
Lot 1809
Lot 1810
Lot 1811
Lot 1812
Lot 1813
Lot 1814
Lot 1815
Lot 1816
Lot 1817
Lot 1818
Lot 1819
Lot 1820
Lot 1821
Lot 1822
Lot 1823
Lot 1824
Lot 1825
Lot 1826
Lot 1827
Lot 1828
Lot 1829
Lot 1830
Lot 1831
Lot 1832
Lot 1833
Lot 1834
Lot 1835
Lot 1836
Lot 1837
Lot 1838
Lot 1839
Lot 1840
Lot 1841
Lot 1842
Lot 1843
Lot 1844
Lot 1845
Lot 1846
Lot 1847
Lot 1848
Lot 1849
Lot 1850
Lot 1851
Lot 1852
Lot 1853
Lot 1854
Lot 1855
Lot 1856
Lot 1857
Lot 1858
Lot 1859
Lot 1860
Lot 1861
Lot 1862
Lot 1863
Lot 1864
Lot 1865
Lot 1866
Lot 1867
Lot 1868
Lot 1869
Lot 1870
Lot 1871
Lot 1872
Lot 1873
Lot 1874
Lot 1875
Lot 1876
Lot 1877
Lot 1878
Lot 1879
Lot 1880
Lot 1881
Lot 1882
Lot 1883
Lot 1884
Lot 1885
Lot 1886
Lot 1887
Lot 1888
Lot 1889
Lot 1890
Lot 1891
Lot 1892
Lot 1893
Lot 1894
Lot 1895
Lot 1896
Lot 1897
Lot 1898
Lot 1899
Lot 1900
Lot 1901
Lot 1902
Lot 1903
Lot 1904
Lot 1905
Lot 1906
Lot 1907
Lot 1908
Lot 1909
Lot 1910
Lot 1911
Lot 1912
Lot 1913
Lot 1914
Lot 1915
Lot 1916
Lot 1917
Lot 1918
Lot 1919
Lot 1920
Lot 1921
Lot 1922
Lot 1923
Lot 1924
Lot 1925
Lot 1926
Lot 1927
Lot 1928
Lot 1929
Lot 1930
Lot 1931
Lot 1932
Lot 1933
Lot 1934
Lot 1935
Lot 1936
Lot 1937
Lot 1938
Lot 1939
Lot 1940
Lot 1941
Lot 1942
Lot 1943
Lot 1944
Lot 1945
Lot 1946
Lot 1947
Lot 1948
Lot 1949
Lot 1950
Lot 1951
Lot 1952
Lot 1953
Lot 1954
Lot 1955
Lot 1956
Lot 1957
Lot 1958
Lot 1959
Lot 1960
Lot 1961
Lot 1962
Lot 1963
Lot 1964
Lot 1965
Lot 1966
Lot 1967
Lot 1968
Lot 1969
Lot 1970
Lot 1971
Lot 1972
Lot 1973
Lot 1974
Lot 1975
Lot 1976
Lot 1977
Lot 1978
Lot 1979
Lot 1980
Lot 1981
Lot 1982
Lot 1983
Lot 1984
Lot 1985
Lot 1986
Lot 1987
Lot 1988
Lot 1989
Lot 1990
Lot 1991
Lot 1992
Lot 1993
Lot 1994
Lot 1995
Lot 1996
Lot 1997
Lot 1998
Lot 1999
Lot 2000
Lot 2001
Lot 2002
Lot 2003
Lot 2004
Lot 2005
Lot 2006
Lot 2007
Lot 2008
Lot 2009
Lot 2010
Lot 2011
Lot 2012
Lot 2013
Lot 2014
Lot 2015
Lot 2016
Lot 2017
Lot 2018
Lot 2019
Lot 2020
Lot 2021
Lot 2022
Lot 2023
Lot 2024
Lot 2025
Lot 2026
Lot 2027
Lot 2028
Lot 2029
Lot 2030
Lot 2031
Lot 2032
Lot 2033
Lot 2034
Lot 2035
Lot 2036
Lot 2037
Lot 2038
Lot 2039
Lot 2040
Lot 2041
Lot 2042
Lot 2043
Lot 2044
Lot 2045
Lot 2046
Lot 2047
Lot 2048
Lot 2049
Lot 2050
Lot 2051
Lot 2052
Lot 2053
Lot 2054
Lot 2055
Lot 2056
Lot 2057
Lot 2058
Lot 2059
Lot 2060
Lot 2061
Lot 2062
Lot 2063
Lot 2064
Lot 2065
Lot 2066
Lot 2067
Lot 2068
Lot 2069
Lot 2070
Lot 2071
Lot 2072
Lot 2073
Lot 2074
Lot 2075
Lot 2076
Lot 2077
Lot 2078
Lot 2079
Lot 2080
Lot 2081
Lot 2082
Lot 2083
Lot 2084
Lot 2085
Lot 2086
Lot 2087
Lot 2088
Lot 2089
Lot 2090
Lot 2091
Lot 2092
Lot 2093
Lot 2094
Lot 2095
Lot 2096
Lot 2097
Lot 2098
Lot 2099
Lot 2100
Lot 2101
Lot 2102
Lot 2103
Lot 2104
Lot 2105
Lot 2106
Lot 2107
Lot 2108
Lot 2109
Lot 2110
Lot 2111
Lot 2112
Lot 2113
Lot 2114
Lot 2115
Lot 2116
Lot 2117
Lot 2118
Lot 2119
Lot 2120
Lot 2121
Lot 2122
Lot 2123
Lot 2124
Lot 2125
Lot 2126
Lot 2127
Lot 2128
Lot 2129
Lot 2130
Lot 2131
Lot 2132
Lot 2133
Lot 2134
Lot 2135
Lot 2136
Lot 2137
Lot 2138
Lot 2139
Lot 2140
Lot 2141
Lot 2142
Lot 2143
Lot 2144
Lot 2145
Lot 2146
Lot 2147
Lot 2148
Lot 2149
Lot 2150
Lot 2151
Lot 2152
Lot 2153
Lot 2154
Lot 2155
Lot 2156
Lot 2157
Lot 2158
Lot 2159
Lot 2160
Lot 2161
Lot 2162
Lot 2163
Lot 2164
Lot 2165
Lot 2166
Lot 2167
Lot 2168
Lot 2169
Lot 2170
Lot 2171
Lot 2172
Lot 2173
Lot 2174
Lot 2175
Lot 2176
Lot 2177
Lot 2178
Lot 2179
Lot 2180
Lot 2181
Lot 2182
Lot 2183
Lot 2184
Lot 2185
Lot 2186
Lot 2187
Lot 2188
Lot 2189
Lot 2190
Lot 2191
Lot 2192
Lot 2193
Lot 2194
Lot 2195
Lot 2196
Lot 2197
Lot 2198
Lot 2199
Lot 2200
Lot 2201
Lot 2202
Lot 2203
Lot 2204
Lot 2205
Lot 2206
Lot 2207
Lot 2208
Lot 2209
Lot 2210
Lot 2211
Lot 2212
Lot 2213
Lot 2214
Lot 2215
Lot 2216
Lot 2217
Lot 2218
Lot 2219
Lot 2220
Lot 2221
Lot 2222
Lot 2223
Lot 2224
Lot 2225
Lot 2226
Lot 2227
Lot 2228
Lot 2229
Lot 2230
Lot 2231
Lot 2232
Lot 2233
Lot 2234
Lot 2235
Lot 2236
Lot 2237
Lot 2238
Lot 2239
Lot 2240
Lot 2241
Lot 2242
Lot 2243
Lot 2244
Lot 2245
Lot 2246
Lot 2247
Lot 2248
Lot 2249
Lot 2250
Lot 2251
Lot 2252
Lot 2253
Lot 2254
Lot 2255
Lot 2256
Lot 2257
Lot 2258
Lot 2259
Lot 2260
Lot 2261
Lot 2262
Lot 2263
Lot 2264
Lot 2265
Lot 2266
Lot 2267
Lot 2268
Lot 2269
Lot 2270
Lot 2271
Lot 2272
Lot 2273
Lot 2274
Lot 2275
Lot 2276
Lot 2277
Lot 2278
Lot 2279
Lot 2280
Lot 2281
Lot 2282
Lot 2283
Lot 2284
Lot 2285
Lot 2286
Lot 2287
Lot 2288
Lot 2289
Lot 2290
Lot 2291
Lot 2292
Lot 2293
Lot 2294
Lot 2295
Lot 2296
Lot 2297
Lot 2298
Lot 2299
Lot 2300
Lot 2301
Lot 2302
Lot 2303
Lot 2304
Lot 2305
Lot 2306
Lot 2307
Lot 2308
Lot 2309
Lot 2310
Lot 2311
Lot 2312
Lot 2313
Lot 2314
Lot 2315
Lot 2316
Lot 2317
Lot 2318
Lot 2319
Lot 2320
Lot 2321
Lot 2322
Lot 2323
Lot 2324
Lot 2325
Lot 2326
Lot 2327
Lot 2328
Lot 2329
Lot 2330
Lot 2331
Lot 2332
Lot 2333
Lot 2334
Lot 2335
Lot 2336
Lot 2337
Lot 2338
Lot 2339
Lot 2340
Lot 2341
Lot 2342
Lot 2343
Lot 2344
Lot 2345
Lot 2346
Lot 2347
Lot 2348
Lot 2349
Lot 2350
Lot 2351
Lot 2352
Lot 2353
Lot 2354
Lot 2355
Lot 2356
Lot 2357
Lot 2358
Lot 2359
Lot 2360
Lot 2361
Lot 2362
Lot 2363
Lot 2364
Lot 2365
Lot 2366
Lot 2367
Lot 2368
Lot 2369
Lot 2370
Lot 2371
Lot 2372
Lot 2373
Lot 2374
Lot 2375
Lot 2376
Lot 2377
Lot 2378
Lot 2379
Lot 2380
Lot 2381
Lot 2382
Lot 2383
Lot 2384
Lot 2385
Lot 2386
Lot 2387
Lot 2388
Lot 2389
Lot 2390
Lot 2391
Lot 2392
Lot 2393
Lot 2394
Lot 2395
Lot 2396
Lot 2397
Lot 2398
Lot 2399
Lot 2400
Lot 2401
Lot 2402
Lot 2403
Lot 2404
Lot 2405
Lot 2406
Lot 2407
Lot 2408
Lot 2409
Lot 2410
Lot 2411
Lot 2412
Lot 2413
Lot 2414
Lot 2415
Lot 2416
Lot 2417
Lot 2418
Lot 2419
Lot 2420
Lot 2421
Lot 2422
Lot 2423
Lot 2424
Lot 2425
Lot 2426
Lot 2427
Lot 2428
Lot 2429
Lot 2430
Lot 2431
Lot 2432
Lot 2433
Lot 2434
Lot 2435
Lot 2436
Lot 2437
Lot 2438
Lot 2439
Lot 2440
Lot 2441
Lot 2442
Lot 2443
Lot 2444
Lot 2445
Lot 2446
Lot 2447
Lot 2448
Lot 2449
Lot 2450
Lot 2451
Lot 2452
Lot 2453
Lot 2454
Lot 2455
Lot 2456
Lot 2457
Lot 2458
Lot 2459
Lot 2460
Lot 2461
Lot 2462
Lot 2463
Lot 2464
Lot 2465
Lot 2466
Lot 2467
Lot 2468
Lot 2469
Lot 2470
Lot 2471
Lot 2472
Lot 2473
Lot 2474
Lot 2475
Lot 2476
Lot 2477
Lot 2478
Lot 2479
Lot 2480
Lot 2481
Lot 2482
Lot 2483
Lot 2484
Lot 2485
Lot 2486
Lot 2487
Lot 2488
Lot 2489
Lot 2490
Lot 2491
Lot 2492
Lot 2493
Lot 2494
Lot 2495
Lot 2496
Lot 2497
Lot 2498
Lot 2499
Lot 2500
Lot 2501
Lot 2502
Lot 2503
Lot 2504
Lot 2505
Lot 2506
Lot 2507
Lot 2508
Lot 2509
Lot 2510
Lot 2511
Lot 2512
Lot 2513
Lot 2514
Lot 2515
Lot 2516
Lot 2517
Lot 2518
Lot 2519
Lot 2520
Lot 2521
Lot 2522
Lot 2523
Lot 2524
Lot 2525
Lot 2526
Lot 2527
Lot 2528
Lot 2529
Lot 2530
Lot 2531
Lot 2532
Lot 2533
Lot 2534
Lot 2535
Lot 2536
Lot 2537
Lot 2538
Lot 2539
Lot 2540
Lot 2541
Lot 2542
Lot 2543
Lot 2544
Lot 2545
Lot 2546
Lot 2547
Lot 2548
Lot 2549
Lot 2550
Lot 2551
Lot 2552
Lot 2553
Lot 2554
Lot 2555
Lot 2556
Lot 2557
Lot 2558
Lot 2559
Lot 2560
Lot 2561
Lot 2562
Lot 2563
Lot 2564
Lot 2565
Lot 2566
Lot 2567
Lot 2568
Lot 2569
Lot 2570
Lot 2571
Lot 2572
Lot 2573
Lot 2574
Lot 2575
Lot 2576
Lot 2577
Lot 2578
Lot 2579
Lot 2580
Lot 2581
Lot 2582
Lot 2583
Lot 2584
Lot 2585
Lot 2586
Lot 2587
Lot 2588
Lot 2589
Lot 2590
Lot 2591
Lot 2592
Lot 2593
Lot 2594
Lot 2595
Lot 2596
Lot 2597
Lot 2598
Lot 2599
Lot 2600
Lot 2601
Lot 2602
Lot 2603
Lot 2604
Lot 2605
Lot 2606
Lot 2607
Lot 2608
Lot 2609
Lot 2610
Lot 2611
Lot 2612
Lot 2613
Lot 2614
Lot 2615
Lot 2616
Lot 2617
Lot 2618
Lot 2619
Lot 2620
Lot 2621
Lot 2622
Lot 2623
Lot 2624
Lot 2625
Lot 2626
Lot 2627
Lot 2628
Lot 2629
Lot 2630
Lot 2631
Lot 2632
Lot 2633
Lot 2634
Lot 2635
Lot 2636
Lot 2637
Lot 2638
Lot 2639
Lot 2640
Lot 2641
Lot 2642
Lot 2643
Lot 2644
Lot 2645
Lot 2646
Lot 2647
Lot 2648
Lot 2649
Lot 2650
Lot 2651
Lot 2652
Lot 2653
Lot 2654
Lot 2655
Lot 2656
Lot 2657
Lot 2658
Lot 2659
Lot 2660
Lot 2661
Lot 2662
Lot 2663
Lot 2664
Lot 2665
Lot 2666
Lot 2667
Lot 2668
Lot 2669
Lot 2670
Lot 2671
Lot 2672
Lot 2673
Lot 2674
Lot 2675
Lot 2676
Lot 2677
Lot 2678
Lot 2679
Lot 2680
Lot 2681
Lot 2682
Lot 2683
Lot 2684
Lot 2685
Lot 2686
Lot 2687
Lot 2688
Lot 2689
Lot 2690
Lot 2691
Lot 2692
Lot 2693
Lot 2694
Lot 2695
Lot 2696
Lot 2697
Lot 2698
Lot 2699
Lot 2700
Lot 2701
Lot 2702
Lot 2703
Lot 2704
Lot 2705
Lot 2706
Lot 2707
Lot 2708
Lot 2709
Lot 2710
Lot 2711
Lot 2712
Lot 2713
Lot 2714
Lot 2715
Lot 2716
Lot 2717
Lot 2718
Lot 2719
Lot 2720
Lot 2721
Lot 2722
Lot 2723
Lot 2724
Lot 2725
Lot 2726
Lot 2727
Lot 2728
Lot 2729
Lot 2730
Lot 2731
Lot 2732
Lot 2733
Lot 2734
Lot 2735
Lot 2736
Lot 2737
Lot 2738
Lot 2739
Lot 2740
Lot 2741
Lot 2742
Lot 2743
Lot 2744
Lot 2745
Lot 2746
Lot 2747
Lot 2748
Lot 2749
Lot 2750
Lot 2751
Lot 2752
Lot 2753
Lot 2754
Lot 2755
Lot 2756
Lot 2757
Lot 2758
Lot 2759
Lot 2760
Lot 2761
Lot 2762
Lot 2763
Lot 2764
Lot 2765
Lot 2766
Lot 2767
Lot 2768
Lot 2769
Lot 2770
Lot 2771
Lot 2772
Lot 2773
Lot 2774
Lot 2775
Lot 2776
Lot 2777
Lot 2778
Lot 2779
Lot 2780
Lot 2781
Lot 2782
Lot 2783
Lot 2784
Lot 2785
Lot 2786
Lot 2787
Lot 2788
Lot 2789
Lot 2790
Lot 2791
Lot 2792
Lot 2793
Lot 2794
Lot 2795
Lot 2796
Lot 2797
Lot 2798
Lot 2799
Lot 2800
Lot 2801
Lot 2802
Lot 2803
Lot 2804
Lot 2805
Lot 2806
Lot 2807
Lot 2808
Lot 2809
Lot 2810
Lot 2811
Lot 2812
Lot 2813
Lot 2814
Lot 2815
Lot 2816
Lot 2817
Lot 2818
Lot 2819
Lot 2820
Lot 2821
Lot 2822
Lot 2823
Lot 2824
Lot 2825
Lot 2826
Lot 2827
Lot 2828
Lot 2829
Lot 2830
Lot 2831
Lot 2832
Lot 2833
Lot 2834
Lot 2835
Lot 2836
Lot 2837
Lot 2838
Lot 2839
Lot 2840
Lot 2841
Lot 2842
Lot 2843
Lot 2844
Lot 2845
Lot 2846
Lot 2847
Lot 2848
Lot 2849
Lot 2850
Lot 2851
Lot 2852
Lot 2853
Lot 2854
Lot 2855
Lot 2856
Lot 2857
Lot 2858
Lot 2859
Lot 2860
Lot 2861
Lot 2862
Lot 2863
Lot 2864
Lot 2865
Lot 2866
Lot 2867
Lot 2868
Lot 2869
Lot 2870
Lot 2871
Lot 2872
Lot 2873
Lot 2874
Lot 2875
Lot 2876
Lot 2877
Lot 2878
Lot 2879
Lot 2880
Lot 2881
Lot 2882
Lot 2883
Lot 2884
Lot 2885
Lot 2886
Lot 2887
Lot 2888
Lot 2889
Lot 2890
Lot 2891
Lot 2892
Lot 2893
Lot 2894
Lot 2895
Lot 2896
Lot 2897
Lot 2898
Lot 2899
Lot 2900
Lot 2901
Lot 2902
Lot 2903
Lot 2904
Lot 2905
Lot 2906
Lot 2907
Lot 2908
Lot 2909
Lot 2910
Lot 2911
Lot 2912
Lot 2913
Lot 2914
Lot 2915
Lot 2916
Lot 2917
Lot 2918
Lot 2919
Lot 2920
Lot 2921
Lot 2922
Lot 2923
Lot 2924
Lot 2925
Lot 2926
Lot 2927
Lot 2928
Lot 2929
Lot 2930
Lot 2931
Lot 2932
Lot 2933
Lot 2934
Lot 2935
Lot 2936
Lot 2937
Lot 2938
Lot 2939
Lot 2940
Lot 2941
Lot 2942
Lot 2943
Lot 2944
Lot 2945
Lot 2946
Lot 2947
Lot 2948
Lot 2949
Lot 2950
Lot 2951
Lot 2952
Lot 2953
Lot 2954
Lot 2955
Lot 2956
Lot 2957
Lot 2958
Lot 2959
Lot 2960
Lot 2961
Lot 2962
Lot 2963
Lot 2964
Lot 2965
Lot 2966
Lot 2967
Lot 2968
Lot 2969
Lot 2970
Lot 2971
Lot 2972
Lot 2973
Lot 2974
Lot 2975
Lot 2976
Lot 2977
Lot 2978
Lot 2979
Lot 2980
Lot 2981
Lot 2982
Lot 2983
Lot 2984
Lot 2985
Lot 2986
Lot 2987
Lot 2988
Lot 2989
Lot 2990
Lot 2991
Lot 2992
Lot 2993
Lot 2994
Lot 2995
Lot 2996
Lot 2997
Lot 2998
Lot 2999
Lot 3000
Lot 3001
Lot 3002
Lot 3003
Lot 3004
Lot 3005
Lot 3006
Lot 3007
Lot 3008
Lot 3009
Lot 3010
Lot 3011
Lot 3012
Lot 3013
Lot 3014
Lot 3015
Lot 3016
Lot 3017
Lot 3018
Lot 3019
Lot 3020
Lot 3021
Lot 3022
Lot 3023
Lot 3024
Lot 3025
Lot 3026
Lot 3027
Lot 3028
Lot 3029
Lot 3030
Lot 3031
Lot 3032
Lot 3033
Lot 3034
Lot 3035
Lot 3036
Lot 3037
Lot 3038
Lot 3039
Lot 3040
Lot 3041
Lot 3042
Lot 3043
Lot 3044
Lot 3045
Lot 3046
Lot 3047
Lot 3048
Lot 3049
Lot 3050
Lot 3051
Lot 3052
Lot 3053
Lot 3054
Lot 3055
Lot 3056
Lot 3057
Lot 3058
Lot 3059
Lot 3060
Lot 3061
Lot 3062
Lot 3063
Lot 3064
Lot 3065
Lot 3066
Lot 3067
Lot 3068
Lot 3069
Lot 3070
Lot 3071
Lot 3072
Lot 3073
Lot 3074
Lot 3075
Lot 3076
Lot 3077
Lot 3078
Lot 3079
Lot 3080
Lot 3081
Lot 3082
Lot 3083
Lot 3084
Lot 3085
Lot 3086
Lot 3087
Lot 3088
Lot 3089
Lot 3090
Lot 3091
Lot 3092
Lot 3093
Lot 3094
Lot 3095
Lot 3096
Lot 3097
Lot 3098
Lot 3099
Lot 3100
Lot 3101
Lot 3102
Lot 3103
Lot 3104
Lot 3105
Lot 3106
Lot 3107
Lot 3108
Lot 3109
Lot 3110
Lot 3111
Lot 3112
Lot 3113
Lot 3114
Lot 3115
Lot 3116
Lot 3117
Lot 3118
Lot 3119
Lot 3120
Lot 3121
Lot 3122
Lot 3123
Lot 3124
Lot 3125
Lot 3126
Lot 3127
Lot 3128
Lot 3129
Lot 3130
Lot 3131
Lot 3132
Lot 3133
Lot 3134
Lot 3135
Lot 3136
Lot 3137
Lot 3138
Lot 3139
Lot 3140
Lot 3141
Lot 3142
Lot 3143
Lot 3144
Lot 3145
Lot 3146
Lot 3147
Lot 3148
Lot 3149
Lot 3150
Lot 3151
Lot 3152
Lot 3153
Lot 3154
Lot 3155
Lot 3156
Lot 3157
Lot 3158
Lot 3159
Lot 3160
Lot 3161
Lot 3162
Lot 3163
Lot 3164
Lot 3165
Lot 3166
Lot 3167
Lot 3168
Lot 3169
Lot 3170
Lot 3171
Lot 3172
Lot 3173
Lot 3174
Lot 3175
Lot 3176
Lot 3177
Lot 3178
Lot 3179
Lot 3180
Lot 3181
Lot 3182
Lot 3183
Lot 3184
Lot 3185
Lot 3186
Lot 3187
Lot 3188
Lot 3189
Lot 3190
Lot 3191
Lot 3192
Lot 3193
Lot 3194
Lot 3195
Lot 3196
Lot 3197
Lot 3198
Lot 3199
Lot 3200
Lot 3201
Lot 3202
Lot 3203
Lot 3204
Lot 3205
Lot 3206
Lot 3207
Lot 3208
Lot 3209
Lot 3210
Lot 3211
Lot 3212
Lot 3213
Lot 3214
Lot 3215
Lot 3216
Lot 3217
Lot 3218
Lot 3219
Lot 3220
Lot 3221
Lot 3222
Lot 3223
Lot 3224
Lot 3225
Lot 3226
Lot 3227
Lot 3228
Lot 3229
Lot 3230
Lot 3231
Lot 3232
Lot 3233
Lot 3234
Lot 3235
Lot 3236
Lot 3237
Lot 3238
Lot 3239
Lot 3240
Lot 3241
Lot 3242
Lot 3243
Lot 3244
Lot 3245
Lot 3246
Lot 3247
Lot 3248
Lot 3249
Lot 3250
Lot 3251
Lot 3252
Lot 3253
Lot 3254
Lot 3255
Lot 3256
Lot 3257
Lot 3258
Lot 3259
Lot 3260
Lot 3261
Lot 3262
Lot 3263
Lot 3264
Lot 3265
Lot 3266
Lot 3267
Lot 3268
Lot 3269
Lot 3270
Lot 3271
Lot 3272
Lot 3273
Lot 3274
Lot 3275
Lot 3276
Lot 3277
Lot 3278
Lot 3279
Lot 3280
Lot 3281
Lot 3282
Lot 3283
Lot 3284
Lot 3285
Lot 3286
Lot 3287
Lot 3288
Lot 3289
Lot 3290
Lot 3291
Lot 3292
Lot 3293
Lot 3294
Lot 3295
Lot 3296
Lot 3297
Lot 3298
Lot 3299
Lot 3300
Lot 3301
Lot 3302
Lot 3303
Lot 3304
Lot 3305
Lot 3306
Lot 3307
Lot 3308
Lot 3309
Lot 3310
Lot 3311
Lot 3312
Lot 3313
Lot 3314
Lot 3315
Lot 3316
Lot 3317
Lot 3318
Lot 3319
Lot 3320
Lot 3321
Lot 3322
Lot 3323
Lot 3324
Lot 3325
Lot 3326
Lot 3327
Lot 3328
Lot 3329
Lot 3330
Lot 3331
Lot 3332
Lot 3333
Lot 3334
Lot 3335
Lot 3336
Lot 3337
Lot 3338
Lot 3339
Lot 3340
Lot 3341
Lot 3342
Lot 3343
Lot 3344
Lot 3345
Lot 3346
Lot 3347
Lot 3348
Lot 3349
Lot 3350
Lot 3351
Lot 3352
Lot 3353
Lot 3354
Lot 3355
Lot 3356
Lot 3357
Lot 3358
Lot 3359
Lot 3360
Lot 3361
Lot 3362
Lot 3363
Lot 3364
Lot 3365
Lot 3366
Lot 3367
Lot 3368
Lot 3369
Lot 3370
Lot 3371
Lot 3372
Lot 3373
Lot 3374
Lot 3375
Lot 3376
Lot 3377
Lot 3378
Lot 3379
Lot 3380
Lot 3381
Lot 3382
Lot 3383
Lot 3384
Lot 3385
Lot 3386
Lot 3387
Lot 3388
Lot 3389
Lot 3390
Lot 3391
Lot 3392
Lot 3393
Lot 3394
Lot 3395
Lot 3396
Lot 3397
Lot 3398
Lot 3399
Lot 3400
Lot 3401
Lot 3402
Lot 3403
Lot 3404
Lot 3405
Lot 3406
Lot 3407
Lot 3408
Lot 3409
Lot 3410
Lot 3411
Lot 3412
Lot 3413
Lot 3414
Lot 3415
Lot 3416
Lot 3417
Lot 3418
Lot 3419
Lot 3420
Lot 3421
Lot 3422
Lot 3423
Lot 3424
Lot 3425
Lot 3426
Lot 3427
Lot 3428
Lot 3429
Lot 3430
Lot 3431
Lot 3432
Lot 3433
Lot 3434
Lot 3435
Lot 3436
Lot 3437
Lot 3438
Lot 3439
Lot 3440
Lot 3441
Lot 3442
Lot 3443
Lot 3444
Lot 3445
Lot 3446
Lot 3447
Lot 3448
Lot 3449
Lot 3450
Lot 3451
Lot 3452
Lot 3453
Lot 3454
Lot 3455
Lot 3456
Lot 3457
Lot 3458
Lot 3459
Lot 3460
Lot 3461
Lot 3462
Lot 3463
Lot 3464
Lot 3465
Lot 3466
Lot 3467
Lot 3468
Lot 3469
Lot 3470
Lot 3471
Lot 3472
Lot 3473
Lot 3474
Lot 3475
Lot 3476
Lot 3477
Lot 3478
Lot 3479
Lot 3480
Lot 3481
Lot 3482
Lot 3483
Lot 3484
Lot 3485
Lot 3486
Lot 3487
Lot 3488
Lot 3489
Lot 3490
Lot 3491
Lot 3492
Lot 3493
Lot 3494
Lot 3495
Lot 3496
Lot 3497
Lot 3498
Lot 3499
Lot 3500
Lot 3501
Lot 3502
Lot 3503
Lot 3504
Lot 3505
Lot 3506
Lot 3507
Lot 3508
Lot 3509
Lot 3510
Lot 3511
Lot 3512
Lot 3513
Lot 3514
Lot 3515
Lot 3516
Lot 3517
Lot 3518
Lot 3519
Lot 3520
Lot 3521
Lot 3522
Lot 3523
Lot 3524
Lot 3525
Lot 3526
Lot 3527
Lot 3528
Lot 3529
Lot 3530
Lot 3531
Lot 3532
Lot 3533
Lot 3534
Lot 3535
Lot 3536
Lot 3537
Lot 3538
Lot 3539
Lot 3540
Lot 3541
Lot 3542
Lot 3543
Lot 3544
Lot 3545
Lot 3546
Lot 3547
Lot 3548
Lot 3549
Lot 3550
Lot 3551
Lot 3552
Lot 3553
Lot 3554
Lot 3555
Lot 3556
Lot 3557
Lot 3558
Lot 3559
Lot 3560
Lot 3561
Lot 3562
Lot 3563
Lot 3564
Lot 3565
Lot 3566
Lot 3567
Lot 3568
Lot 3569
Lot 3570
Lot 3571
Lot 3572
Lot 3573
Lot 3574
Lot 3575
Lot 3576
Lot 3577
Lot 3578
Lot 3579
Lot 3580
Lot 3581
Lot 3582
Lot 3583
Lot 3584
Lot 3585
Lot 3586
Lot 3587
Lot 3588
Lot 3589
Lot 3590
Lot 3591
Lot 3592
Lot 3593
Lot 3594
Lot 3595
Lot 3596
Lot 3597
Lot 3598
Lot 3599
Lot 3600
Lot 3601
Lot 3602
Lot 3603
Lot 3604
Lot 3605
Lot 3606
Lot 3607
Lot 3608
Lot 3609
Lot 3610
Lot 3611
Lot 3612
Lot 3613
Lot 3614
Lot 3615
Lot 3616
Lot 3617
Lot 3618
Lot 3619
Lot 3620
Lot 3621
Lot 3622
Lot 3623
Lot 3624
Lot 3625
Lot 3626
Lot 3627
Lot 3628
Lot 3629
Lot 3630
Lot 3631
Lot 3632
Lot 3633
Lot 3634
Lot 3635
Lot 3636
Lot 3637
Lot 3638
Lot 3639
Lot 3640
Lot 3641
Lot 3642
Lot 3643
Lot 3644
Lot 3645
Lot 3646
Lot 3647
Lot 3648
Lot 3649
Lot 3650
Lot 3651
Lot 3652
Lot 3653
Lot 3654
Lot 3655
Lot 3656
Lot 3657
Lot 3658
Lot 3659
Lot 3660
Lot 3661
Lot 3662
Lot 3663
Lot 3664
Lot 3665
Lot 3666
Lot 3667
Lot 3668
Lot 3669
Lot 3670
Lot 3671
Lot 3672
Lot 3673
Lot 3674
Lot 3675
Lot 3676
Lot 3677
Lot 3678
Lot 3679
Lot 3680
Lot 3681
Lot 3682
Lot 3683
Lot 3684
Lot 3685
Lot 3686
Lot 3687
Lot 3688
Lot 3689
Lot 3690
Lot 3691
Lot 3692
Lot 3693
Lot 3694
Lot 3695
Lot 3696
Lot 3697
Lot 3698
Lot 3699
Lot 3700

EXISTING CONDITIONS

2.2.3. Surrounding Intersections

Intersections in the vicinity of the subject site include:

- Caves Road / Dunn Bay Road / Cape Naturaliste Road (roundabout)
- Caves Road / Cape Naturaliste Road (roundabout).

2.2.4. Traffic Volumes

GTA commissioned video surveys of the two roundabouts adjacent the development site in October 2020.

Table 2.1 shows the current traffic volumes along local road network adjacent to the development site.

Table 2.1: Traffic counts – October 2020

Road Name	AM Peak	PM Peak	Daily Traffic (estimate)
Caves Road	479	536	5,500vpd
Cape Naturaliste Road	630	470	5,000 – 6,000vpd
Dunn Bay Road	403	416	4,000

2.2.5. Intersection Operation

The intersections mentioned in section 2.2.3 were analysed in SIDRA version 8.0 to determine their current operation. The existing intersection configuration achieves an excellent level of service (LOS), being LOS A in both AM and PM peak hours. More details of this analysis are provided in chapter 4.0.

2.2.6. Existing Pedestrian / Cycling Network

The site is well serviced by the current footpath network.

There is an existing 2.0m wide concrete path along Dunn Bay Road for the entire length of the development providing pedestrian and cycling access into the town centre.

A shared path along Cape Naturaliste Road has recently been constructed from approximately 30m south of Martingale Drive to Our Lady of the Cape Primary School. This shared path also connects to a second path that runs in an east - west alignment along through along the creek to the north of the site.

A 2.5m shared path also continues south along Caves Road linking to the Cape Villas development.

EXISTING CONDITIONS

Figure 2.6: Existing Path Network – 800m radius



Source: City of Busselton Intramaps, produced by GTA Consultants October 2020

EXISTING CONDITIONS

Figure 2.7: Path Network – adjacent site



Source: City of Busselton Intramaps, produced by GTA Consultants October 2020

2.3. Existing Parking / access

Currently the site is accessed from a single 6.5m crossover on Dunn Bay Road.

There is an informal parking area (no line marking) with space for approximately 10 – 12 vehicles.

2.4. Committed developments

A review of the City of Busselton's development approval register did not show any major traffic generating developments in proximity to the subject site.

EXISTING CONDITIONS

There is an existing DA for the shopping centre just to the east of the subject site. However, the shopping centre DA is for the installation of solar panels on a covered carpark and does not have any trip generating potential.

2.5. Changes to surrounding transport networks

At the time of writing this impact assessment there are no known upcoming changes to the surrounding transport network.

2.6. Crash History

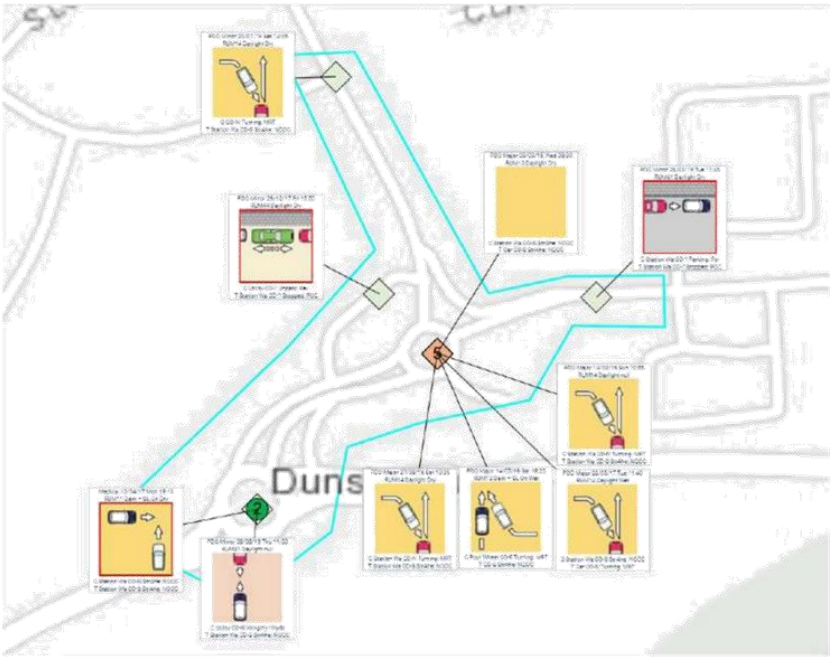
An assessment of the recent crash history has been undertaken using the Main Roads WA online Crash Map tool for the period of 01/01/2015 to 31/12/2019. The extent of the crash mapping is shown in Figure 2.8.

There appears to be an issue with drivers travelling south bound on Cape Naturaliste Road colliding with vehicles exiting the service station road travelling straight through the roundabout heading north.

There appears to be a combination of factors that could be attributing to these crashes:

- Poor sight distance through intersection due to vegetation in the central median obscuring driver vision
- High circulating vehicle speeds due to the existing roundabout configuration including relatively straight north and south approaches and very large circulating width.

Figure 2.8: Crash Map 2015 - 2019



EXISTING CONDITIONS

Traffic exiting the development onto Cape Naturaliste Road will already be travelling at slow speed on the approach to the roundabout so are unlikely to contribute to these crash types. The road authority should investigate the above sight distance concerns and consider modification of the existing roundabout design using line marking or increase concrete aprons to slow vehicle circulating speeds.

3. DEVELOPMENT PROPOSAL

03

DEVELOPMENT PROPOSAL

3.1. Land Uses

The proposal includes the land uses summarised in Table 3.1.

Table 3.1: Development Schedule

Use	Size (GFA)
Shop	495m²
Restaurant/café	384m², 182m²
Brewery	576m²
Tourist Accommodation	20 dwellings

The restaurant, brewery and café and tourist accommodation are all proposed to be run by the same operator and will share staff across the businesses. It is proposed there will be between 10 – 20 staff on site at any one time fluctuating with the peak tourist seasons.

3.2. Vehicle Parking

There is no on-street car parking proposed as part of the development, instead parking will be provided by two separate carparks with independent access from Dunn Bay Road and Cape Naturaliste Road.

The statutory parking requirements for the site have been sourced from the City of Busselton's Local Planning Policy No. 2.1 – Car Parking (LPP2.1). Under the policy the development site is wholly contained within the area defined as "Dunsborough CBD". As such all new development shall provide car parking bays on the bases of 4 bays per 100m2 of Net Leasable Area (NLA) for all land uses.

Table 3.2: Vehicle Parking Requirements

Use	Size (m² NLA)	LPP 2.1 Requirement	Development Proposal
Shop	393m2	16	62 shared bays with reciprocal parking arrangement (includes 2 ACROD Bays)
Restaurant/café	329m2, 140m2	19	
Brewery	505m2	20	
Tourist Accommodation	20 dwellings	22	22 (includes 1 ACROD Bay)

The site is expected to require between 10 – 20 employees depending on the season. Assuming each employee drives a car to site this leaves at least 64 bays available for guests and visitors to the site. The proposed development will have 7 parking bays above the statutory requirement. The proposed 84 parking bays include parking provision for staff, guests and visitors to the site. There will also be an element of parking reduction based on internal trip reduction for the development. For example, guests staying at the on-site accommodation are very likely to use the Brewery, restaurant, café and retail establishments. In addition, the peak parking times for the café / roastery is likely be to mid-morning to lunch time, a time when the brewery would be expected to have minimal demand. Conversely the evening periods of activity for the brewery will be at a time when the café requires minimal parking.

As discussed in section 2.2.6 the site is in an excellent walking / cycling catchment to the Dunsborough town centre, is it entirely plausible that there will be a substantial amount of walking and cycling trips to the site over vehicle trips, something that will be encouraged with a clear and welcome pedestrian path network

through the development and end-of-trip cycling facilities discussed further in section 3.5. LPP2.1 requires the following bicycle parking facilities shown in Table 3.3

As previously discussed, the number of staff on site is significantly less than the employee calculations based on the GFA as per the LPP 2.1. The development proposes to include seven bike racks within a secured cage and an additional 58 units throughout the site. The location of the bike storage is detailed in the development application plans in Appendix A.

End of trip facilities are provided in the hospitality building (refer B1 on development plans) and the retail building (refer B4 on the development plans). A total of 28 lockers are provided between these two buildings and three bathrooms with shower facilities.

As each of the tourist units is self-contained it is not proposed to provide separate bicycle lockers and end of trip facilities for the tourist accommodation.

Table 3.3: Bicycle Parking Requirements

Land use	GFA/No.	LPP Requirement				Proposed	
		Employee		Visitor		Employee	Visitor
Shop	505m²	2 per 300m2 GFA	3	2 per 500m2 GFA	2	2	5
Restaurant/café	384m² + 182m²	2 per 100m2 GFA	11	2 per 100m2 GFA	11	7	15
Brewery	576m²	2 per 100m2 GFA	12	2 per 100m2 GFA	12	2	15
Tourist Accommodation	20 units	2 per 4 employees	2	2 per 8 units	5	2	10
Total			28		30	20	45

3.2.1. Parking Summary

For the reasons above the amount of parking proposed is considered suitable for this development and will be supported by cycling end of trip facilities.

3.3. Vehicle Access

The development will have three points of vehicle access to the site, one from Dunn Bay Road and two from Cape Naturaliste Road.

Cape Naturaliste Road will allow servicing of the two short stay apartments and retail shop, while Dunn Bay Road will allow servicing of the tourist accommodation, café, restaurant and brewery.

Access to the Cape Naturaliste Road carpark will be via two crossovers, the northern crossover will be proposed as a full movement crossover with Cape Naturaliste Road catering for two-way vehicle movement.

The southern access will be limited to a left-in-left-out arrangement due to the close proximity to the Cape Naturaliste Road / Dunn Bay Road roundabout. The majority of trips will likely be exiting at this crossover noting entry is required for waste and delivery vehicles to manoeuvre into the loading bay which is discussed in section 3.5.

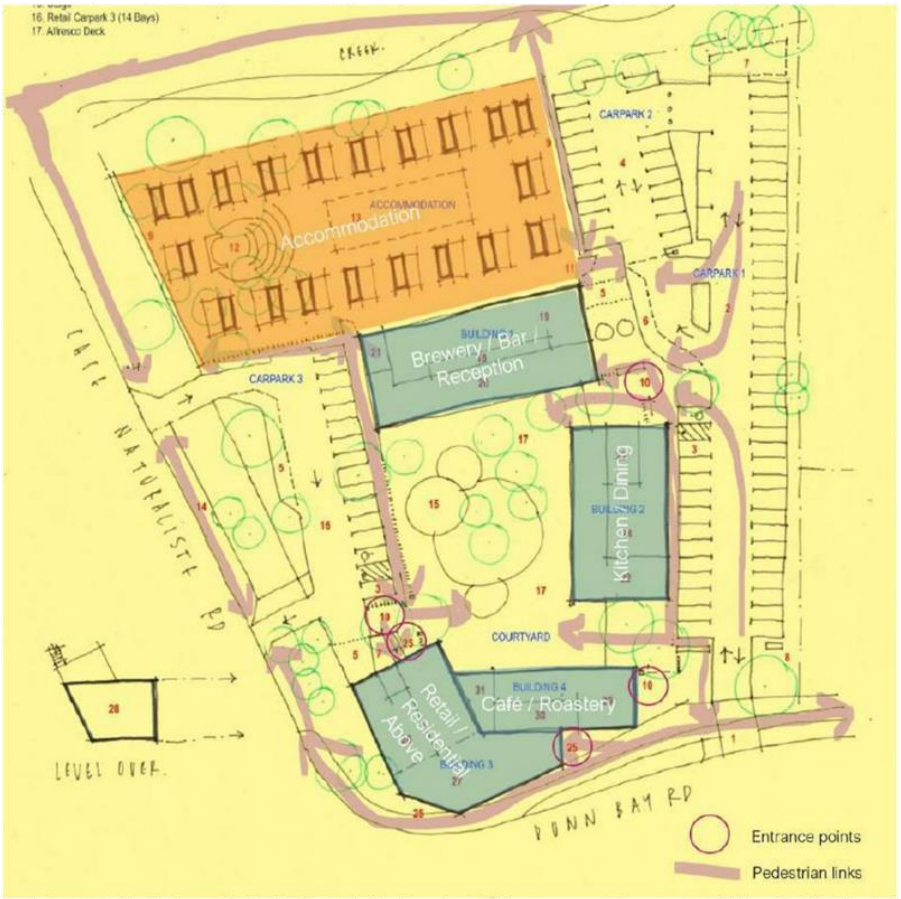
DEVELOPMENT PROPOSAL

3.4. Pedestrian Facilities

There are two important pedestrian links to maintain, connectivity along Dunn Bay Road towards the town centre and north along Cape Naturaliste Road connecting into the existing shared path.

Within the site, movement between the various venues will not require any crossing of internal roads or carparks. There will also be pedestrian access to the site from the north, west and south as shown in Figure 3.1.

Figure 3.1: Pedestrian Links



Source: Masterplan SK07 Finespun Architects, produced by GTA Consultants

3.5. Loading Areas

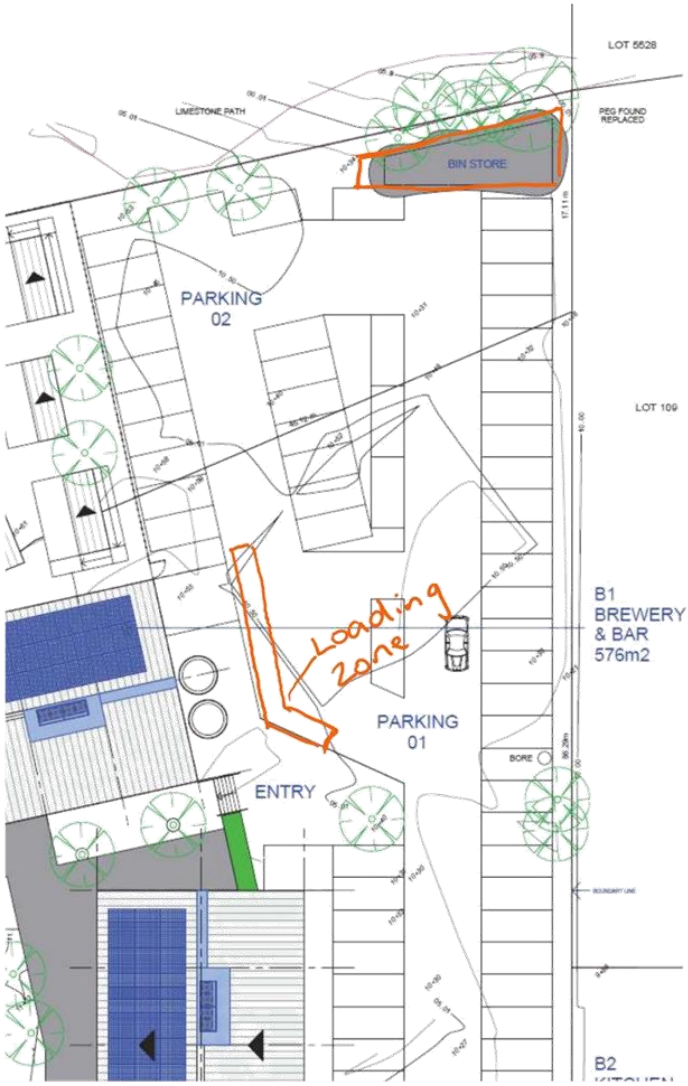
The development has two separate loading areas, one in the Dunn Bay Road carpark and the other in the Cape Naturaliste Road carpark. As well as the dedicated loading areas, the development proposes two dedicated bin stores. The loading areas and bin stores are shown in Figure 3.2 and Figure 3.3 below.

Waste and delivery vehicles enter the Dunn Bay Road carpark from a single combined crossover on Dunn Bay Road, pulling into the demarcated loading bay in forward gear and then depending on the size of the vehicle leaving via Carpark 02 or using the circulation area shown in Carpark 01. Waste vehicles continue through Carpark 02 and then undertake a short reversing manoeuvre to collect the bins located within the bin store to the north of the site.

The waste and delivery vehicles accessing the Cape Naturaliste Road carpark will need to access the site from the southern crossover and then have a short reversing manoeuvre into the loading bay / bin store area at the southern end of Carpark 03. It's important to note that this cross-over due to its proximity to the Cape Naturaliste Road / Dunn Bay Road roundabout will need to be limited to a left-in-left-out arrangement with any delivery / waste vehicles needing to come from the north along Cape Naturaliste Road.

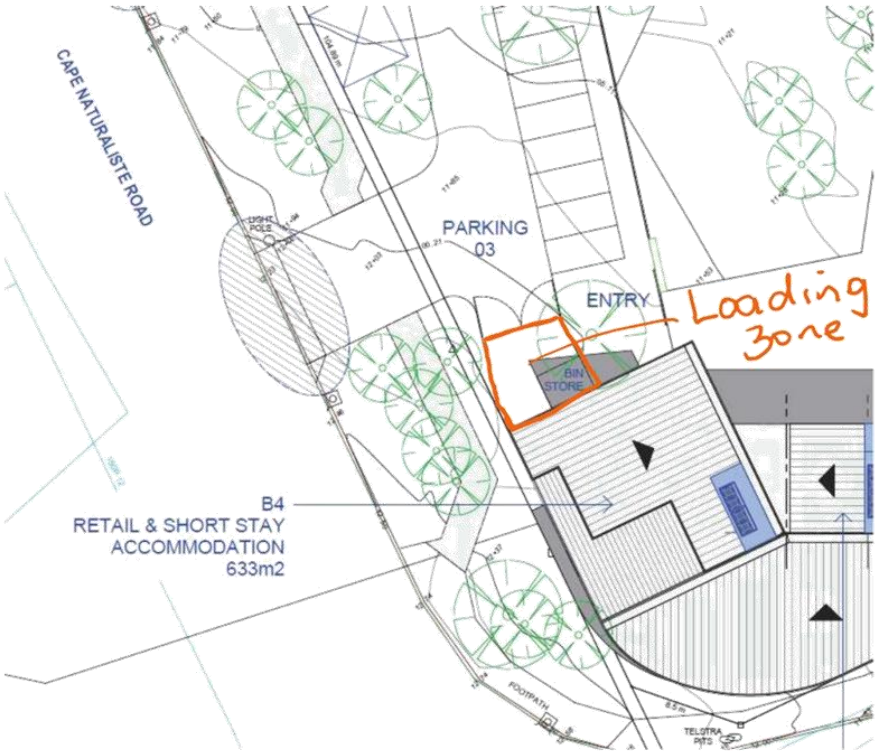
DEVELOPMENT PROPOSAL

Figure 3.2: Dunn Bay Road Carpark – Waste and Loading Bays



DEVELOPMENT PROPOSAL

Figure 3.3: Cape Naturaliste Road Carpark – Waste and Loading Bays



4. TRAFFIC ASSESSMENT

04

TRAFFIC ASSESSMENT

4.1. Current Traffic Flows

GTA commissioned traffic counts that were carried out in October 2020 to capture the operation of the two roundabouts at Caves Road / Cape Naturaliste Road and Dunn Bay Road / Cape Naturaliste Road. GTA has assessed the two intersections in SIDRA Intersection Version 8.0, Table 4.1 and Table 4.2 show that both roundabouts are currently operating well within their capacity with excellent levels of service and minimum delays / queuing.

Figure 4.1: Cape Naturaliste Road / Dunn Bay Road – Existing 2020 AM Peak Turn Counts

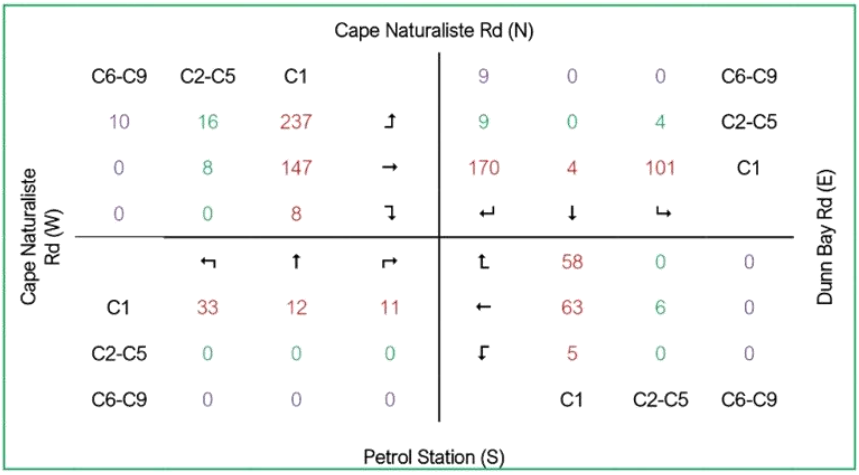
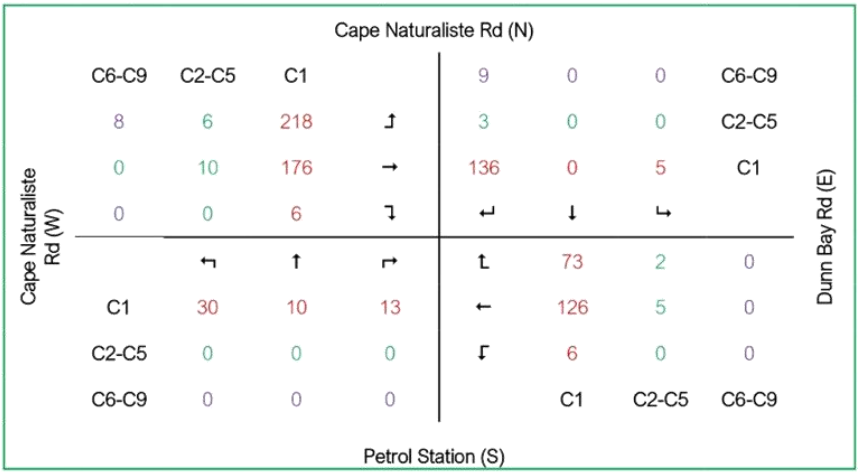


Figure 4.2: Cape Naturaliste Road / Dunn Bay Road – Existing 2020 PM Peak Turn Counts



TRAFFIC ASSESSMENT

Figure 4.3: Cape Naturaliste Road / Caves Road – Existing 2020 AM Peak Turn Counts

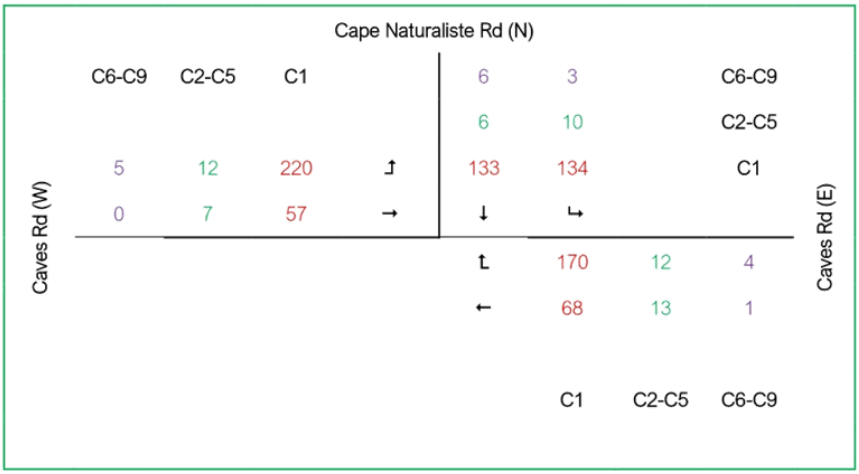


Figure 4.4: Cape Naturaliste Road / Caves Road – Existing 2020 PM Peak Turn Counts

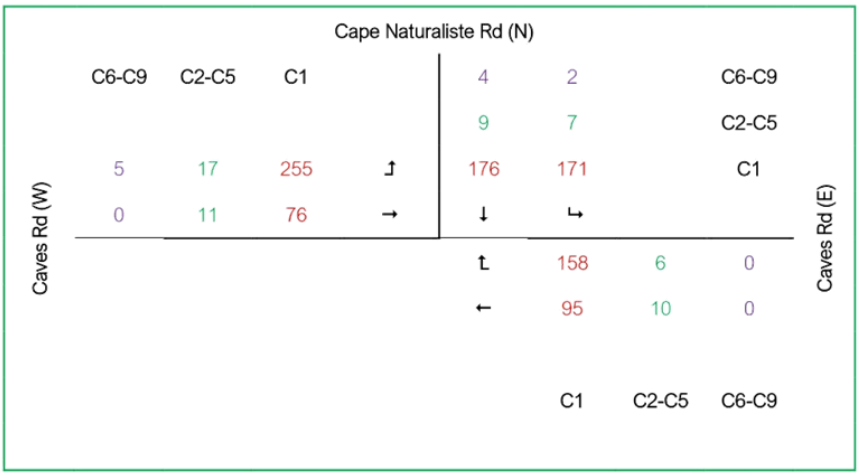


Table 4.1: Cape Naturaliste Road / Dunn Bay Road – Existing 2020 Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
BASE - 2020 AM Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station	0.05	A	4s	1m
	Dunn Bay Rd (E)	0.13	A	7s	2m
	Cape Naturaliste Rd (N)	0.26	A	8s	5m
	Cape Naturaliste Rd (W)	0.32	A	4s	7m
	Intersection	0.32	A	6s	7m
BASE - 2020 PM - Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station (S)	0.05	A	5s	1m
	Dunn Bay Rd (E)	0.19	A	7s	3m
	Cape Naturaliste Rd (N)	0.14	A	10s	3m
	Cape Naturaliste Rd (W)	0.32	A	4s	7m
	Intersection	0.32	A	6s	7m

Table 4.2: Caves Road / Cape Naturaliste Road – Existing 2020 Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
BASE - 2020 AM Caves Road / Cape Naturaliste Road	Caves Road (E)	0.22	A	8s	4m
	Caves Road (N)	0.21	A	7s	4m
	Caves Road (W)	0.25	A	4s	5m
	Intersection	0.25	A	6s	5m
BASE - 2020 PM - Caves Road / Cape Naturaliste Road	Caves Road (E)	0.22	A	8s	4m
	Caves Road (N)	0.27	A	7s	5m
	Caves Road (W)	0.29	A	4s	6m
	Intersection	0.29	A	6s	6m

4.2. Vehicle Types

There are several different types of vehicles assessed as part of the development, these vehicle types have been assessed using AutoTurn in AutoCAD with a 500mm buffer (the City of Busselton Local Planning Policy for parking only requires a 300mm buffer).

Vehicle types are as follows:

- Passenger Vehicle (B85)
- 3.4 Urban Tanker fire appliance
- 12.5m rigid delivery truck
- Rear loading refuse truck.

TRAFFIC ASSESSMENT

4.3. Traffic Generation and Traffic Impact

Trip generation for the development was based on a number of sources including the Institute of Transport Engineers and the Road and Traffic Authority (RTA). It is expected that there will be a significant amount of trips taken to the site by walking and cycling given the developments close proximity to the existing town centre. The trip generation below is vehicle trips only.

Table 4.3: Traffic Generation Rate Adopted

Land Use	Units	Daily Trip Rate	AM			PM			Source	Pass-By
			Rate	In	Out	Rate	In	Out		
Boutique Hotel	Rooms	8.17	0.53	59%	41%	0.60	51%	49%	ITE 9th Edition Hotel 310	
Brewery	100m2	0.00	-	-	-	12.21	66%	34%	ITE 9th Edition Drinking Place	
Restaurant	100m2	96.82	-	-	-	8.06	67%	33%	ITE 9th Edition Quality Restaurant 931	44%
Café	100m2	60.00	-	-	-	5.00	50%	50%	RTA Guide to Traffic Generating Development	
Retail	100m2	45.96	1.08	80%	20%	4.12	50%	50%	ITE 9th Edition Shopping Centre 820	34%
Short Stay	Rooms	8.17	0.53	59%	41%	0.60	51%	49%	ITE 9th Edition Hotel 310	

Table 4.4: Development Generated Trips

Land Use	Yield		AM		PM		Daily
			In	Out	In	Out	
Boutique Hotel	20	Rooms	6.3	4.3	6.1	5.9	163
Brewery	576	m2	0.0	0.0	46.4	23.9	-
Restaurant	400	m2	0.0	0.0	12.1	6.0	217
Café	220	m2	0.0	0.0	5.5	5.5	132
Retail	420	m2	2.4	0.6	5.7	5.7	127
Short Stay	3	Rooms	0.9	0.7	0.9	0.9	25
Staff	20	Staff	20	0	0	20	40
TOTAL			30	6	77	68	704

4.4. Trip Distribution

The trip distribution is assumed to be the same as the recorded distribution during the October surveys.

TRAFFIC ASSESSMENT

4.5. Expected Traffic Flows

Using the trip generation values in section 4.3 the intersection performance for the present day and for a period 10 years in the future (2030) are shown in Figures 4.5 – 4.12. These traffic flows have been input into SIDRA Intersection 8.0 for analysis. The results are discussed in section 4.6

Figure 4.5: Cape Naturaliste Road / Dunn Bay Road – 2020 AM Peak with Development Traffic Flows

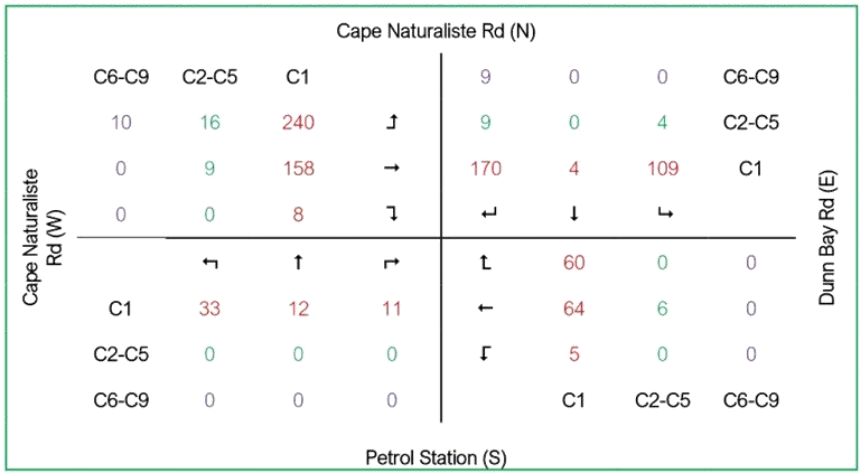
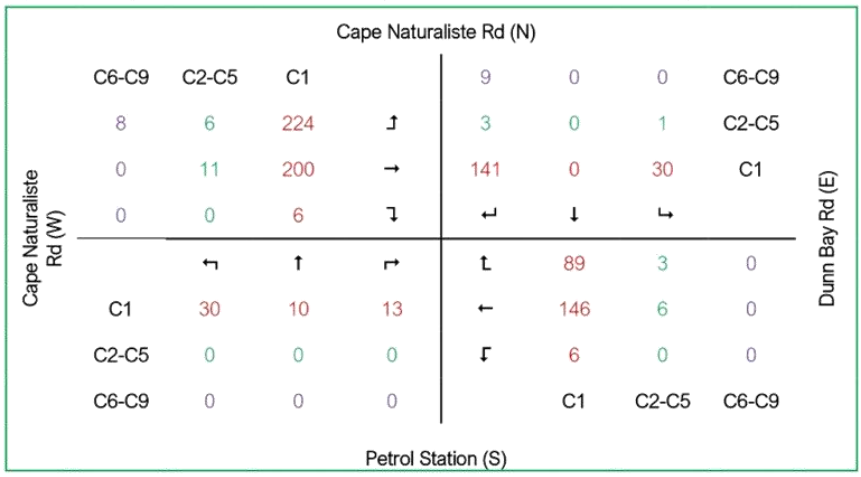


Figure 4.6: Cape Naturaliste Road / Dunn Bay Road – 2020 PM Peak with Development Traffic Flows



TRAFFIC ASSESSMENT

Figure 4.7: Cape Naturaliste Road / Caves Road – 2020 AM Peak with Development Traffic Flows

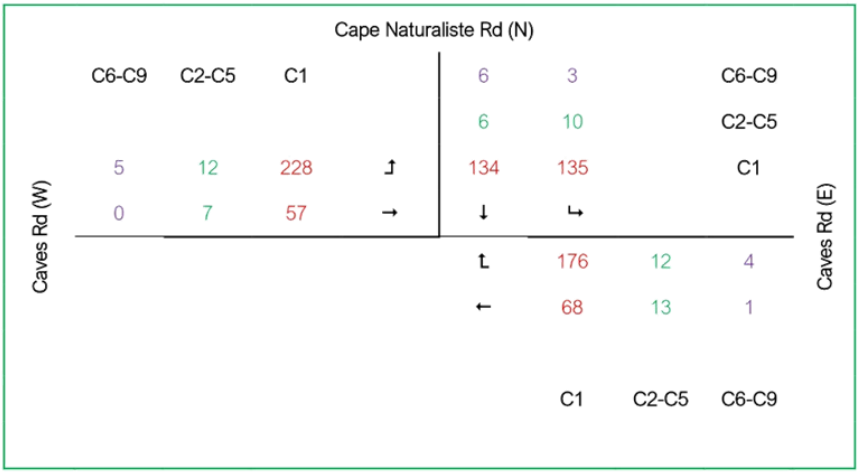
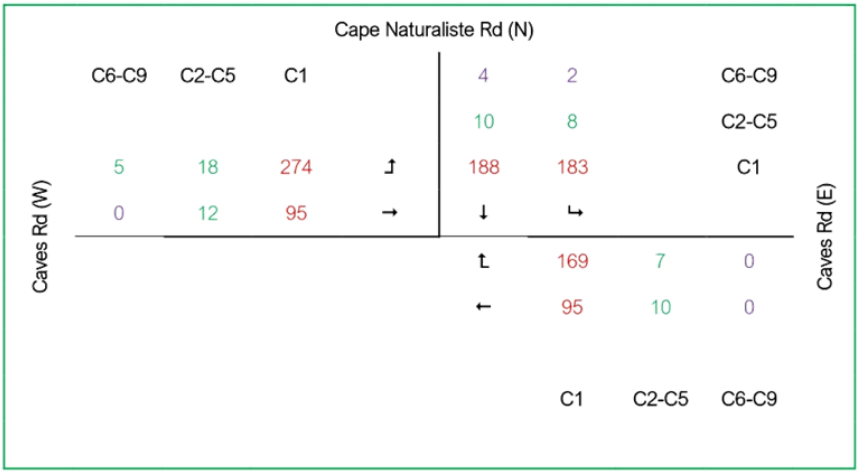


Figure 4.8: Cape Naturaliste Road / Caves Road – 2020 PM Peak with Development Traffic Flows



TRAFFIC ASSESSMENT

Figure 4.9: Cape Naturaliste Road / Dunn Bay Road – 2030 AM Peak with Development Traffic Flows

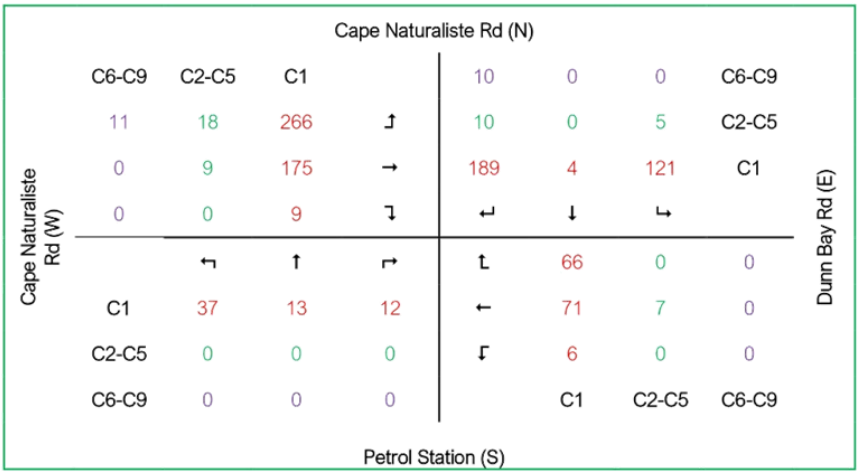
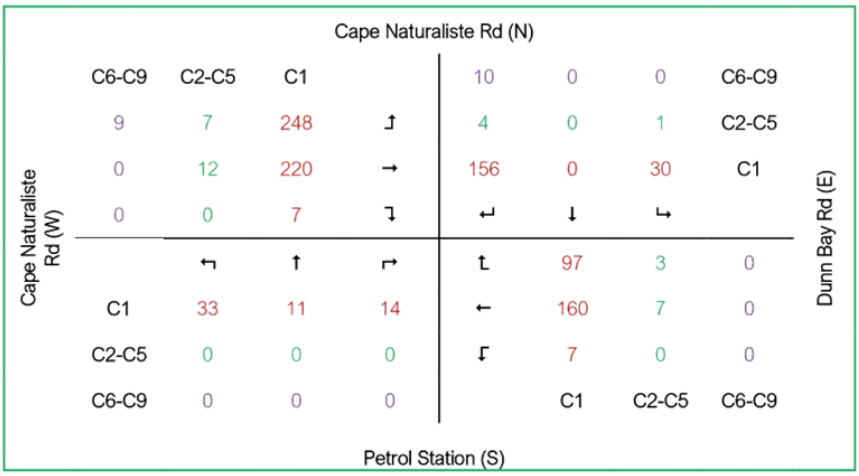


Figure 4.10:Cape Naturaliste Road / Dunn Bay Road – 2030 PM Peak with Development Traffic Flows



TRAFFIC ASSESSMENT

Figure 4.11:Cape Naturaliste Road / Caves Road – 2030 AM Peak with Development Traffic Flows

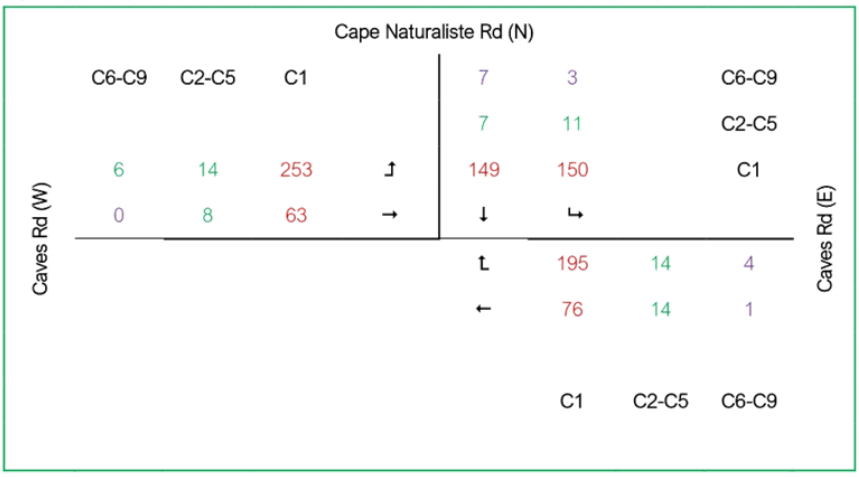
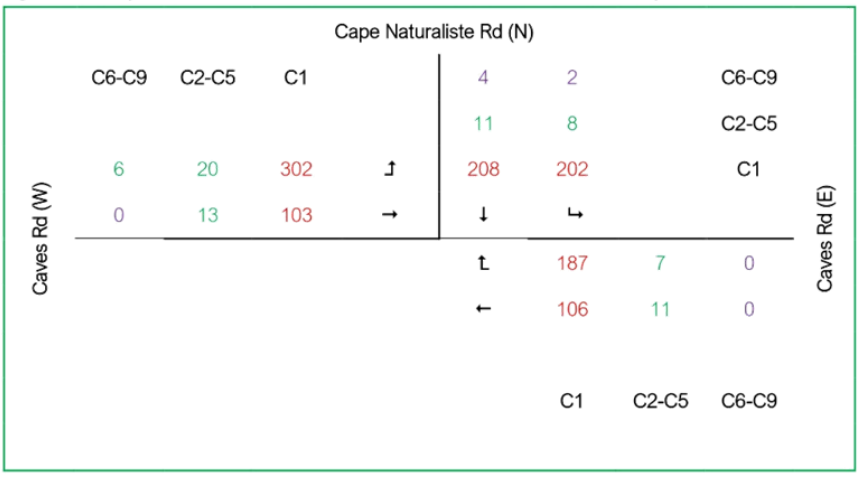


Figure 4.12:Cape Naturaliste Road / Caves Road – 2030 PM Peak with Development Traffic Flows



4.6. Traffic Impact of Development

The addition of development traffic onto the existing intersections has minimal effect on the operational performance of the intersection, after modelling the intersections in SIDRA Intersection 8.0 the intersections still deliver an excellent Level of Service A with minimal queuing and delays. This is to be expected given the configuration of the large roundabouts adjacent the site, typically these intersections are capable of carrying much higher traffic volumes than currently predicted on any of the adjacent road network.

Table 4.5: Cape Naturaliste Road / Dunn Bay Road – 2020 with Development Traffic Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
With Site - 2020 AM Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station (S)	0.05	A	4s	1m
	Dunn Bay Rd (E)	0.13	A	7s	2m
	Cape Naturaliste Rd (N)	0.27	A	8s	5m
	Cape Naturaliste Rd (W)	0.33	A	4s	7m
	Intersection	0.33	A	6s	7m
With Site - 2020 PM Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station (S)	0.05	A	5s	1m
	Dunn Bay Rd (E)	0.23	A	7s	4m
	Cape Naturaliste Rd (N)	0.17	A	9s	3m
	Cape Naturaliste Rd (W)	0.35	A	5s	8m
	Intersection	0.35	A	6s	8m

Table 4.6: Caves Road / Cape Naturaliste Road – 2020 with Development Traffic Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
With Site - 2020 AM Caves Road / Cape Naturaliste Road	Caves Road (E)	0.22	A	8s	4m
	Caves Road (N)	0.21	A	7s	4m
	Caves Road (W)	0.25	A	4s	5m
	Intersection	0.25	A	6s	5m
With Site - 2020 PM Caves Road / Cape Naturaliste Road	Caves Road (E)	0.23	A	8s	4m
	Caves Road (N)	0.29	A	7s	6m
	Caves Road (W)	0.32	A	4s	7m
	Intersection	0.32	A	6s	7m

Table 4.7: Cape Naturaliste Road / Dunn Bay Road – 2030 with Development Traffic Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
With Site - 2030 AM Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station (S)	0.06	A	5s	1m
	Dunn Bay Rd (E)	0.15	A	7s	3m
	Cape Naturaliste Rd (N)	0.30	A	8s	6m
	Cape Naturaliste Rd (W)	0.37	A	4s	8m
	Intersection	0.37	A	6s	8m
With Site - 2030 PM Cape Naturaliste Rd / Dunn Bay Rd	Petrol Station	0.06	A	5s	1m
	Dunn Bay Rd (E)	0.25	A	7s	5m
	Cape Naturaliste Rd (N)	0.19	A	10s	4m
	Cape Naturaliste Rd (W)	0.39	A	5s	9m
	Intersection	0.39	A	6s	9m

Table 4.8: Caves Road / Cape Naturaliste Road – 2030 with Development Traffic Operating Conditions

Location	Arm	DOS	LOS	Avrg Delay	95th %ile Q
With Site - 2030 AM Caves Road / Cape Naturaliste Road	Caves Road (E)	0.25	A	9s	5m
	Caves Road (N)	0.24	A	7s	5m
	Caves Road (W)	0.29	A	5s	6m
	Intersection	0.29	A	7s	6m
With Site - 2030 PM Caves Road / Cape Naturaliste Road	Caves Road (E)	0.26	A	8s	5m
	Caves Road (N)	0.33	A	7s	7m
	Caves Road (W)	0.36	A	5s	8m
	Intersection	0.36	A	6s	8m

4.7. Level of Service Concepts

The level of service concept describes the quality of traffic service in terms of six levels, designated A to F, with level of service A (LOS A) representing the best operating condition (i.e. at or close to free flow), and level of service F (LOS F) the worst (i.e. forced flow). More specifically:

- *LOS A*: Primarily free flow operations at average travel speeds, usually about 90% of the FFS (free flow speed) for the given street class. Vehicles are completely unimpeded in their ability to manoeuvre within the traffic stream. Control delay at signalised intersections is less than 10 seconds. At non-signalised movements at intersections the average control delay is less than 10 seconds;
- *LOS B*: Reasonably unimpeded operations at average travel speeds, usually about 70% of the FFS for the street class. The ability to manoeuvre within the traffic stream is only slightly restricted, and control delays at signalised intersections are between 10 and 20 seconds. At non-signalised movements at intersections the average control delay is between 10 and 15 seconds;

- *LOS C*: Stable operations; however, ability to manoeuvre and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50% of the FFS for the street class. Signalised intersection delays are between 20 and 35 seconds. At non-signalised movements at intersections the average control delay is between 15 and 25 seconds;
- *LOS D*: A range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40% of FFS. Signalised intersection delays are between 35 and 55 seconds. At non-signalised movements at intersections the average control delay is between 25 and 35 seconds;
- *LOS E:* Characterised by significant delays and average travel speeds of 33% of the FFS or less. Such operations are caused by a combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections (between 55 and 80 seconds), and inappropriate signal timing. At non-signalised movements at intersections the average control delay is between 35 and 50 seconds; and,
- *LOS F*: Characterised by urban street flow at extremely low speeds, typically 25% to 33% of the FFS. Intersection congestion is likely at critical signalised locations, with high delays (in excess of 80 seconds), high volumes, and extensive queuing. At non-signalised movements at intersections the average control delay is greater than 50 seconds.

In addition to the above:

- Average Delay: is the average of all travel time delays for vehicles through the intersection; and,
- Queue: is the queue length below which 95% of all observed queue lengths fall.
- Degree of Saturation: Ratio of the traffic flow to the capacity for that particular lane/movement

4.8. Traffic Impact of Development on Local Area

Based on the above assessment it is concluded that the development will have an acceptable impact on the surrounding roads and intersections with no changes required to either the road network or geometry of intersections due to the amendment.

5. CONCLUSION

05

CONCLUSION

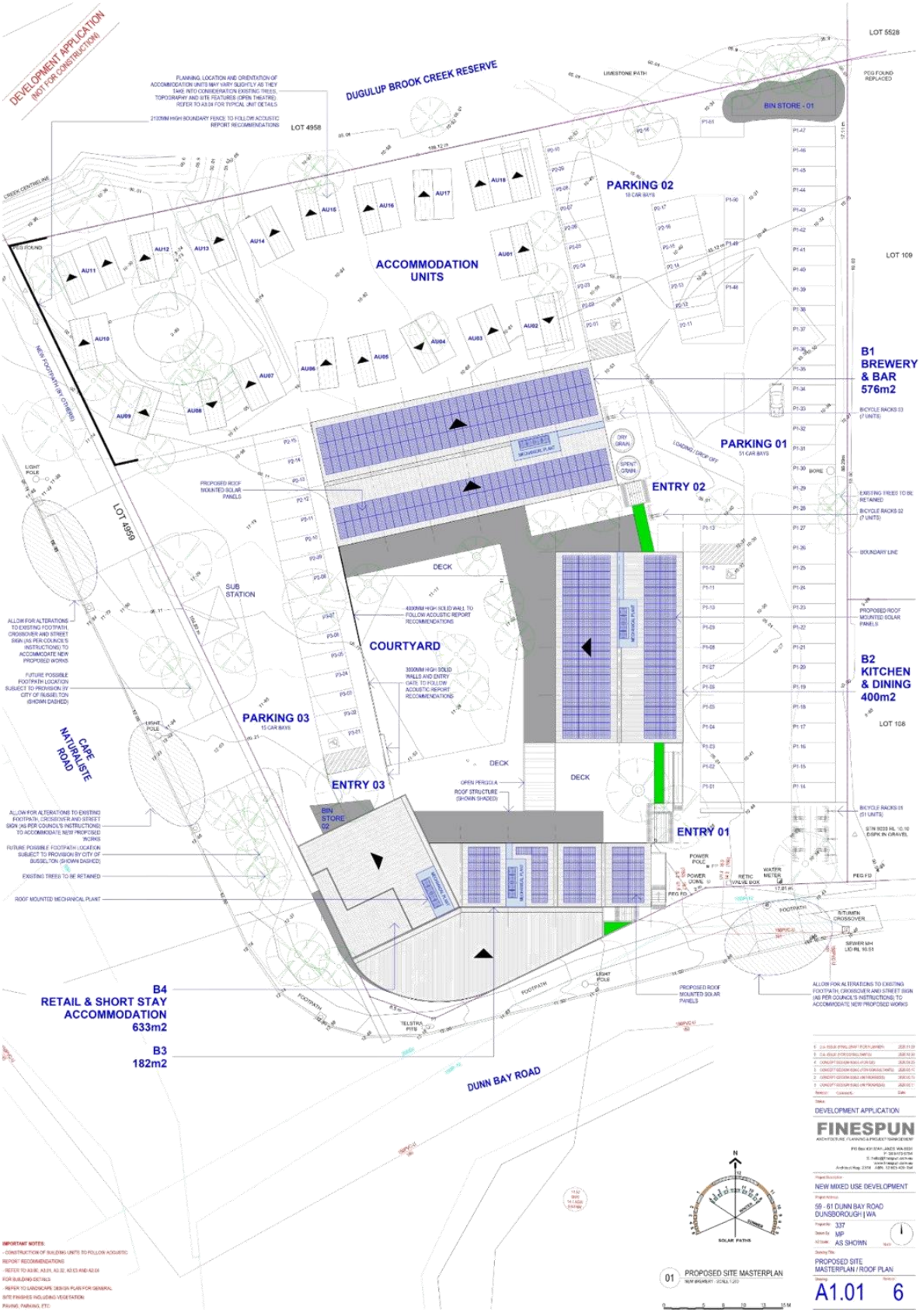
Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The site is expected to generate up to 145 and 704 vehicle movements in any peak hour and daily respectively.
2. There is adequate capacity in the surrounding road network to cater for the traffic generated by the proposed development.
3. The proposed provision of 85 parking bays against as statutory requirement of 87 parking bays is considered appropriate for the development given the high probability of reciprocal carpark use and a high amenity for walking and cycling.
4. For new access arrangements direct to a site - provision is made for all access arrangements to operate safely and efficiently into the future (at least 10yrs after full development).

APPENDIX: DEVELOPMENT PLANS

A. DEVELOPMENT PLANS

A


DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
DUGULUP BROOK CREEK RESERVE
LOT 5526
LOT 4958
LOT 4959
LOT 109
LOT 108
BIN STORE - 01
PARKING 02
18 CAR BAYS
ACCOMMODATION UNITS
AU01
AU02
AU03
AU04
AU05
AU06
AU07
AU08
AU09
AU10
AU11
AU12
AU13
AU14
AU15
AU16
AU17
AU18
B1
BREWERY
& BAR
576m2
PARKING 01
51 CAR BAYS
ENTRY 02
DECK
SUB STATION
COURTYARD
PARKING 03
15 CAR BAYS
ENTRY 03
CAPE NATURALISTE ROAD
B2
KITCHEN
& DINING
400m2
BIN STORE 02
ENTRY 01
B4
RETAIL & SHORT STAY
ACCOMMODATION
633m2
B3
182m2
DUNN BAY ROAD
PROPOSED ROOF MOUNTED SOLAR PANELS
ROOF MOUNTED MECHANICAL PLANT
EXISTING TREES TO BE RETAINED
BOUNDARY LINE
BICYCLE RACKS 03 (7 UNITS)
BICYCLE RACKS 02 (7 UNITS)
BICYCLE RACKS 01 (51 UNITS)
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
AS SHOWN
PROPOSED SITE MASTERPLAN / ROOF PLAN
A1.01
6
01 PROPOSED SITE MASTERPLAN

APPENDIX: SIDRA INTERSECTION RESULTS

B. SIDRA INTERSECTION RESULTS

B

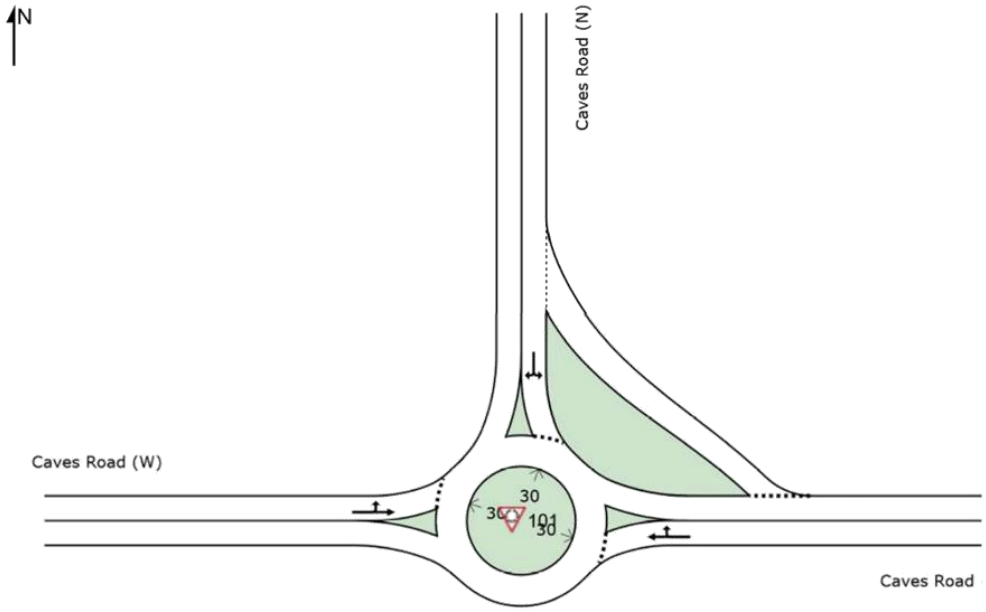
USER REPORT FOR SITE

Project: 201030sid - W192830 Dunn Bay Road - Sidra **Template: GTA Appendix Site**

Site: 101 [BASE - 2020 AM - Caves Road / Cape Naturaliste Road]

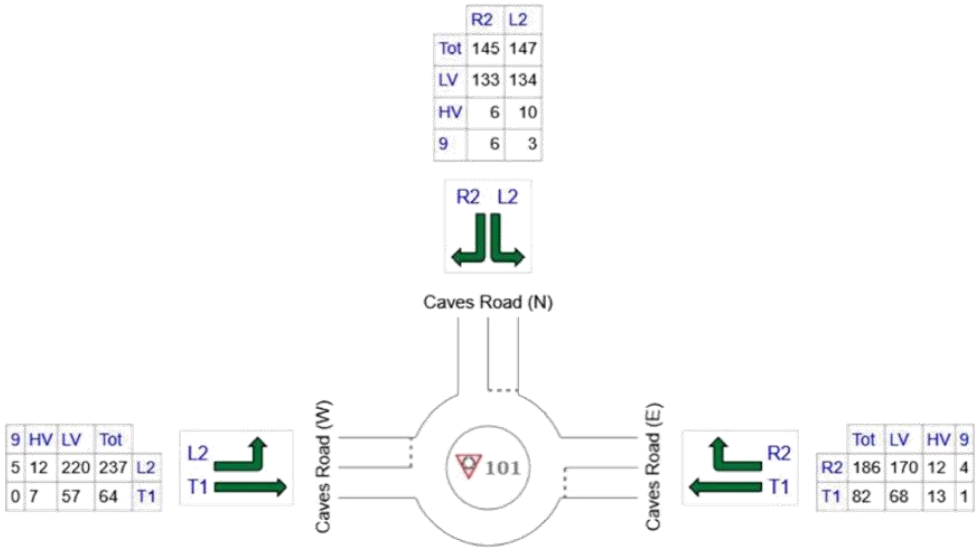
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	268	238	25	5
N: Caves Road (N)	292	267	16	9
W: Caves Road (W)	301	277	19	5
Total	861	782	60	19

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Caves Road (E)													
Lane 1[d]	282	11.2	1289	0.219	100	8.4	LOS A	1.3	10.4	Full	500	0.0	0.0
Approach	282	11.2		0.219		8.4	LOS A	1.3	10.4				
North: Caves Road (N)													
Lane 1[d]	307	8.6	1459	0.211	100	6.5	LOS A	1.3	10.5	Full	110	0.0	0.0
Approach	307	8.6		0.211		6.5	LOS A	1.3	10.5				
West: Caves Road (W)													
Lane 1[d]	317	8.0	1282	0.247	100	4.5	LOS A	1.5	12.2	Full	500	0.0	0.0
Approach	317	8.0		0.247		4.5	LOS A	1.5	12.2				
Intersection	906	9.2		0.247		6.4	LOS A	1.5	12.2				

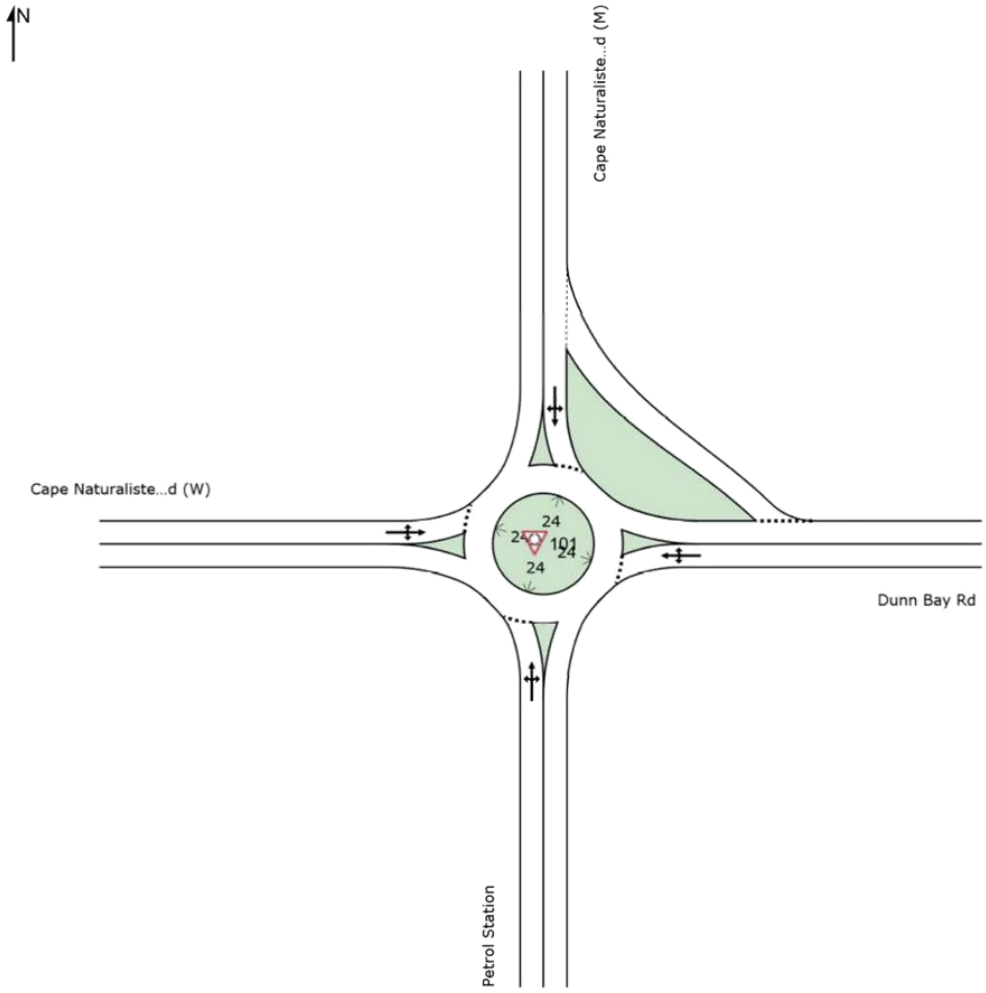
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [BASE - 2020 AM - Cape Naturaliste Rd / Dunn Bay Rd]

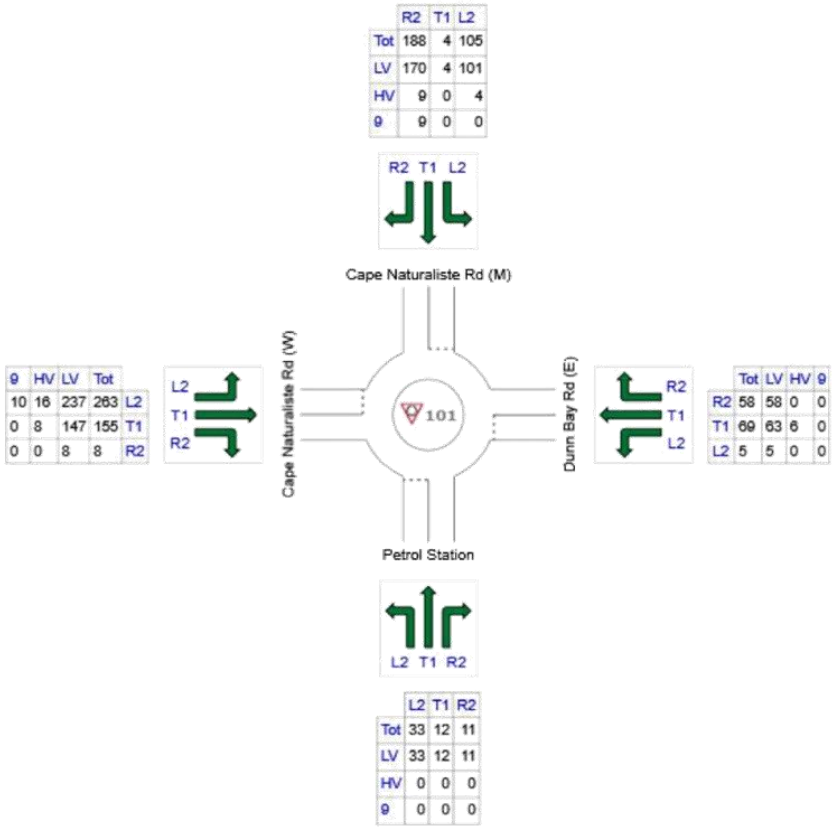
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	56	56	0	0
E: Dunn Bay Rd (E)	132	126	6	0
N: Cape Naturaliste Rd (M)	297	275	13	9
W: Cape Naturaliste Rd (W)	426	392	24	10
Total	911	849	43	19

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Petrol Station													
Lane 1[d]	59	0.0	1111	0.053	100	4.4	LOS A	0.3	2.0	Full	35	0.0	0.0
Approach	59	0.0		0.053		4.4	LOS A	0.3	2.0				
East: Dunn Bay Rd (E)													
Lane 1[d]	139	4.5	1101	0.126	100	7.2	LOS A	0.7	5.3	Full	400	0.0	0.0
Approach	139	4.5		0.126		7.2	LOS A	0.7	5.3				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	313	7.4	1222	0.256	100	8.0	LOS A	1.5	12.4	Full	500	0.0	0.0
Approach	313	7.4		0.256		8.0	LOS A	1.5	12.4				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	448	8.0	1394	0.322	100	4.3	LOS A	2.1	17.2	Full	110	0.0	0.0
Approach	448	8.0		0.322		4.3	LOS A	2.1	17.2				
Intersection	959	6.8		0.322		5.9	LOS A	2.1	17.2				

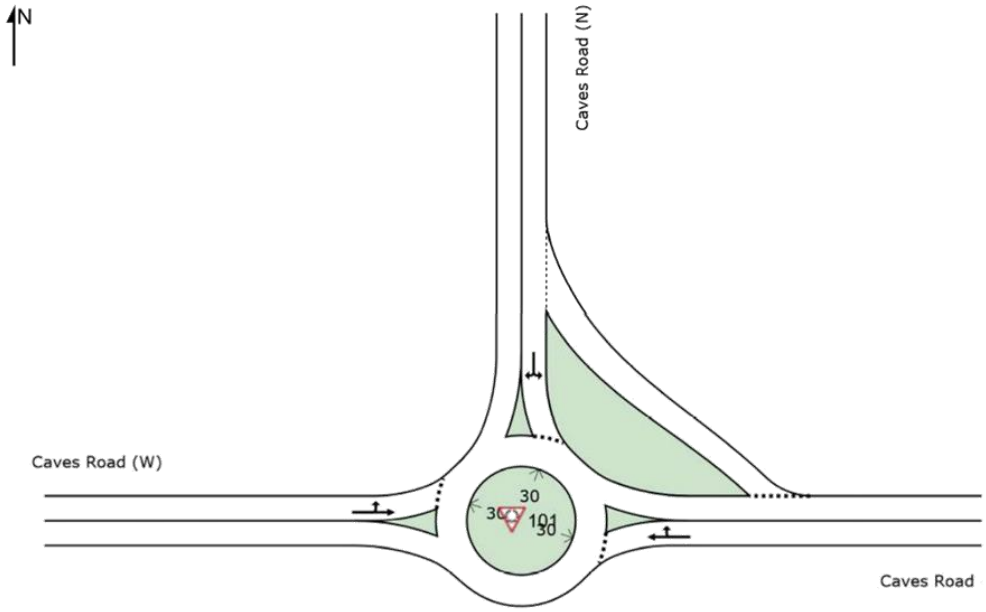
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [BASE - 2020 PM - Caves Road / Cape Naturaliste Road]

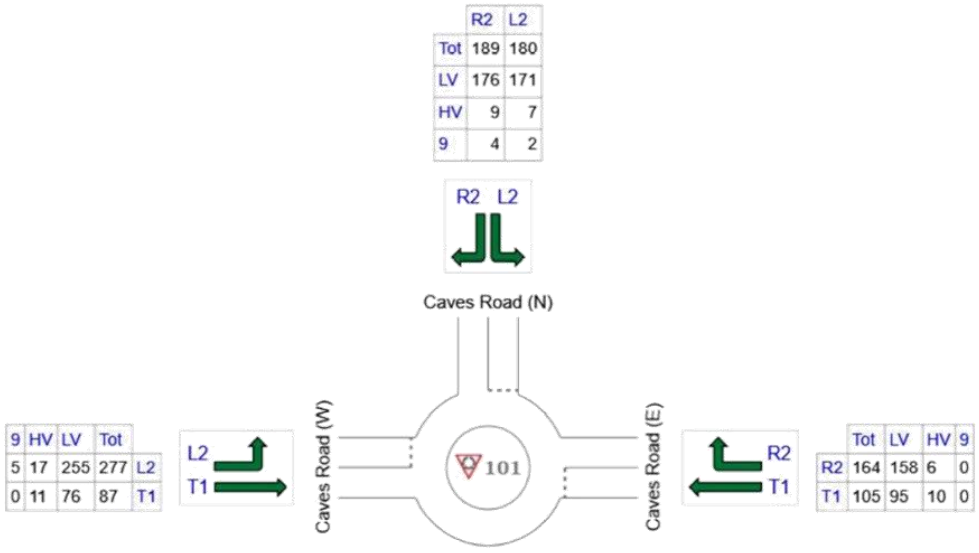
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	269	253	16	0
N: Caves Road (N)	369	347	16	6
W: Caves Road (W)	364	331	28	5
Total	1002	931	60	11

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Caves Road (E)													
Lane 1[d]	283	5.9	1280	0.221	100	8.0	LOS A	1.3	10.1	Full	500	0.0	0.0
Approach	283	5.9		0.221		8.0	LOS A	1.3	10.1				
North: Caves Road (N)													
Lane 1[d]	388	6.0	1453	0.267	100	6.7	LOS A	1.7	13.5	Full	110	0.0	0.0
Approach	388	6.0		0.267		6.7	LOS A	1.7	13.5				
West: Caves Road (W)													
Lane 1[d]	383	9.1	1321	0.290	100	4.4	LOS A	1.9	15.2	Full	500	0.0	0.0
Approach	383	9.1		0.290		4.4	LOS A	1.9	15.2				
Intersection	1055	7.1		0.290		6.2	LOS A	1.9	15.2				

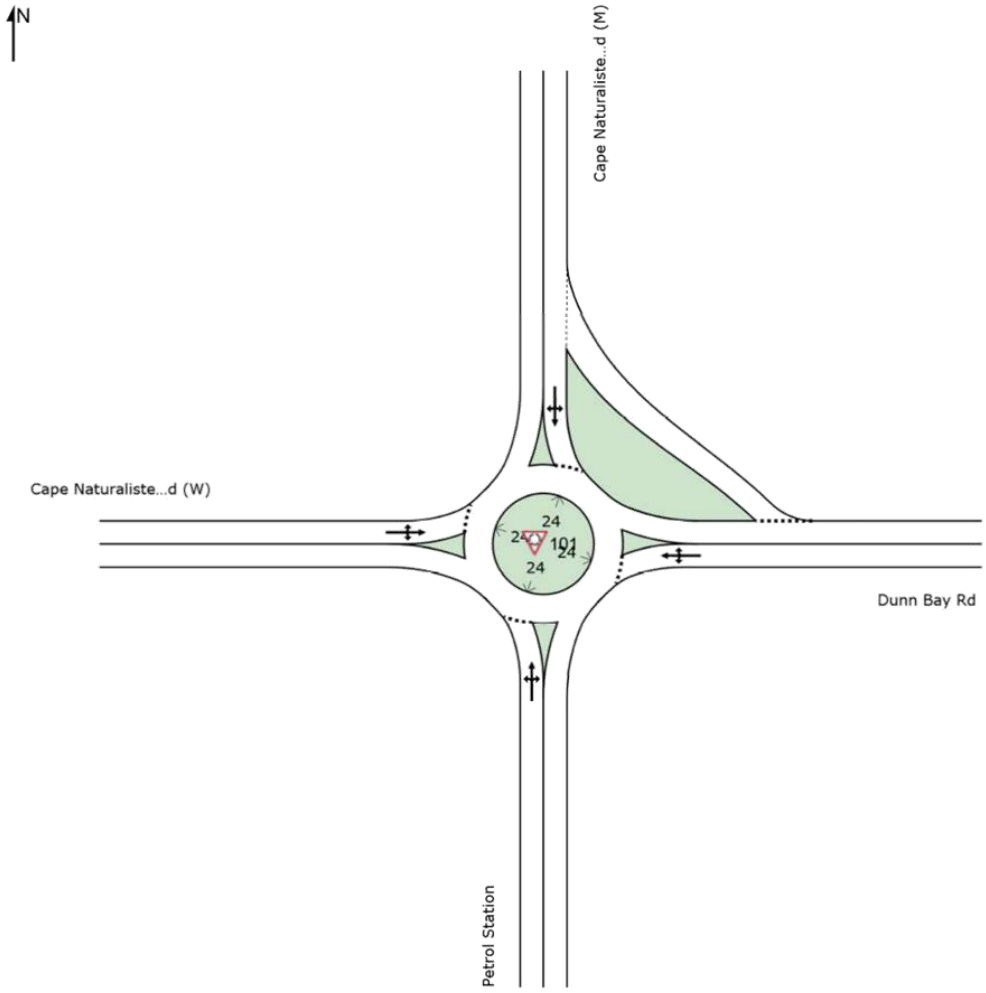
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [BASE - 2020 PM - Cape Naturaliste Rd / Dunn Bay Rd]

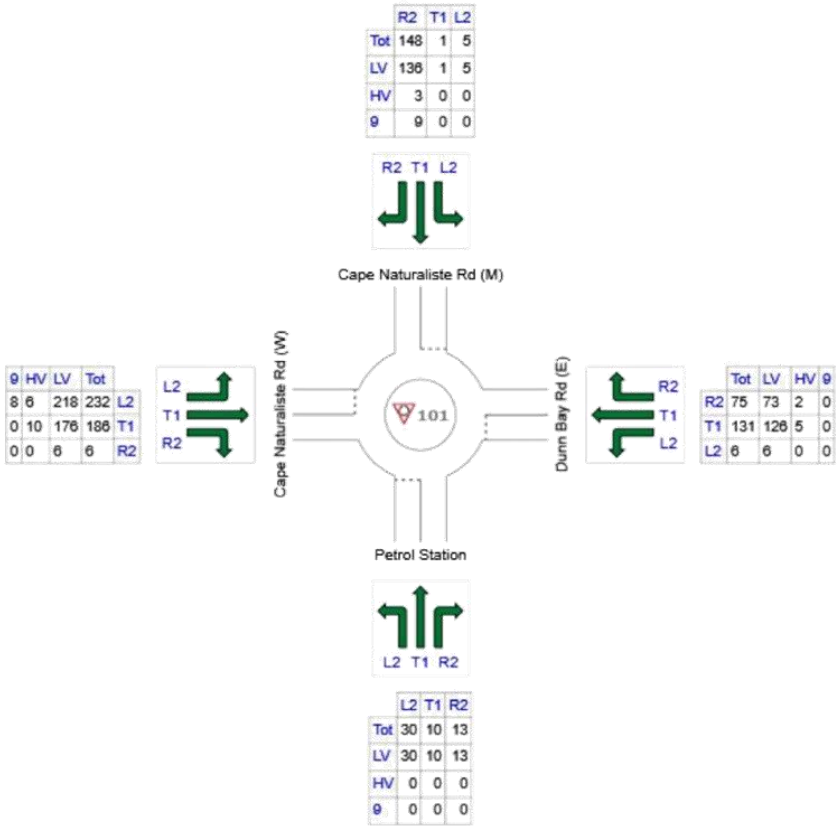
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	53	53	0	0
E: Dunn Bay Rd (E)	212	205	7	0
N: Cape Naturaliste Rd (M)	154	142	3	9
W: Cape Naturaliste Rd (W)	424	400	16	8
Total	843	800	26	17

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Petrol Station													
Lane 1[d]	56	0.0	1090	0.051	100	4.8	LOS A	0.3	2.0	Full	35	0.0	0.0
Approach	56	0.0		0.051		4.8	LOS A	0.3	2.0				
East: Dunn Bay Rd (E)													
Lane 1[d]	223	3.3	1169	0.191	100	6.6	LOS A	1.1	8.3	Full	400	0.0	0.0
Approach	223	3.3		0.191		6.6	LOS A	1.1	8.3				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	162	7.8	1150	0.141	100	9.9	LOS A	0.8	6.3	Full	500	0.0	0.0
Approach	162	7.8		0.141		9.9	LOS A	0.8	6.3				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	446	5.7	1382	0.323	100	4.4	LOS A	2.1	16.7	Full	110	0.0	0.0
Approach	446	5.7		0.323		4.4	LOS A	2.1	16.7				
Intersection	887	5.1		0.323		6.0	LOS A	2.1	16.7				

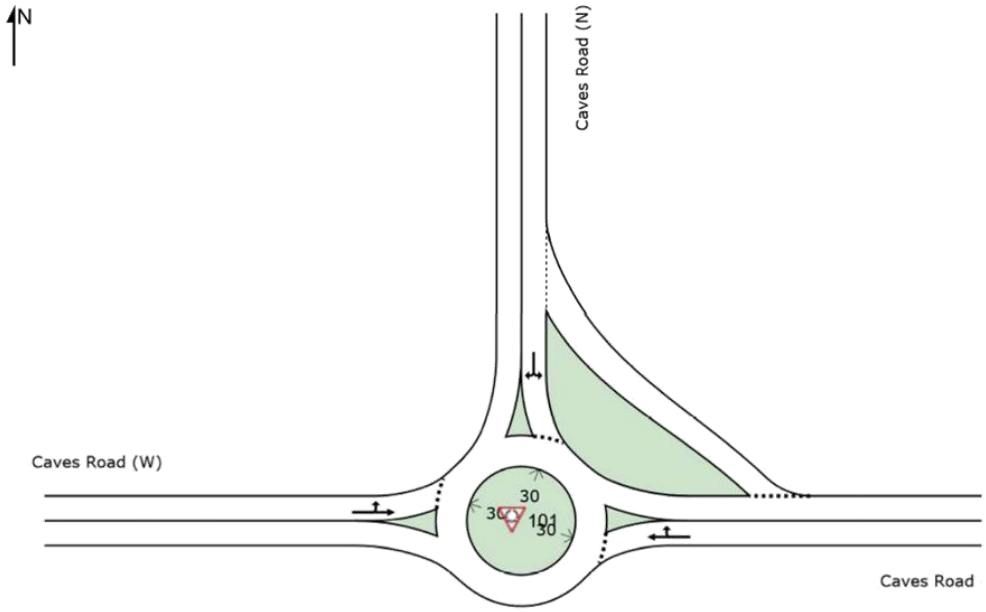
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2020 AM - Caves Road / Cape Naturaliste Road]

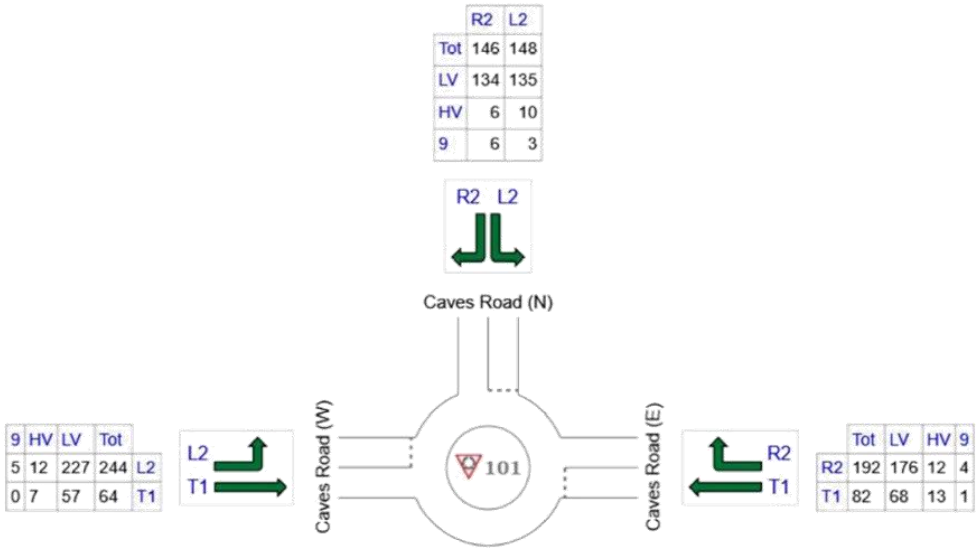
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	274	244	25	5
N: Caves Road (N)	294	269	16	9
W: Caves Road (W)	308	284	19	5
Total	876	797	60	19

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Caves Road (E)													
Lane 1[d]	288	10.9	1290	0.224	100	8.4	LOS A	1.3	10.7	Full	500	0.0	0.0
Approach	288	10.9		0.224		8.4	LOS A	1.3	10.7				
North: Caves Road (N)													
Lane 1[d]	309	8.5	1459	0.212	100	6.5	LOS A	1.3	10.6	Full	110	0.0	0.0
Approach	309	8.5		0.212		6.5	LOS A	1.3	10.6				
West: Caves Road (W)													
Lane 1[d]	324	7.8	1277	0.254	100	4.5	LOS A	1.6	12.6	Full	500	0.0	0.0
Approach	324	7.8		0.254		4.5	LOS A	1.6	12.6				
Intersection	922	9.0		0.254		6.4	LOS A	1.6	12.6				

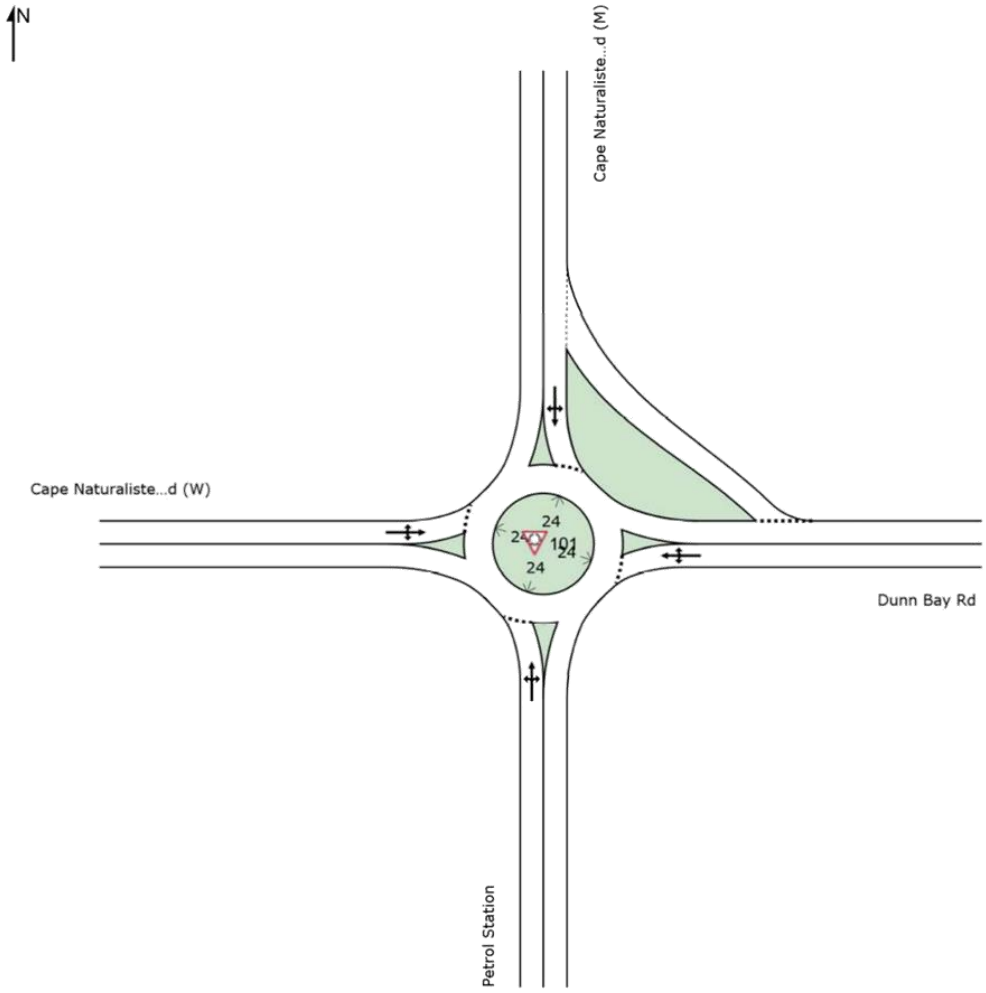
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2020 AM - Cape Naturaliste Rd / Dunn Bay Rd]

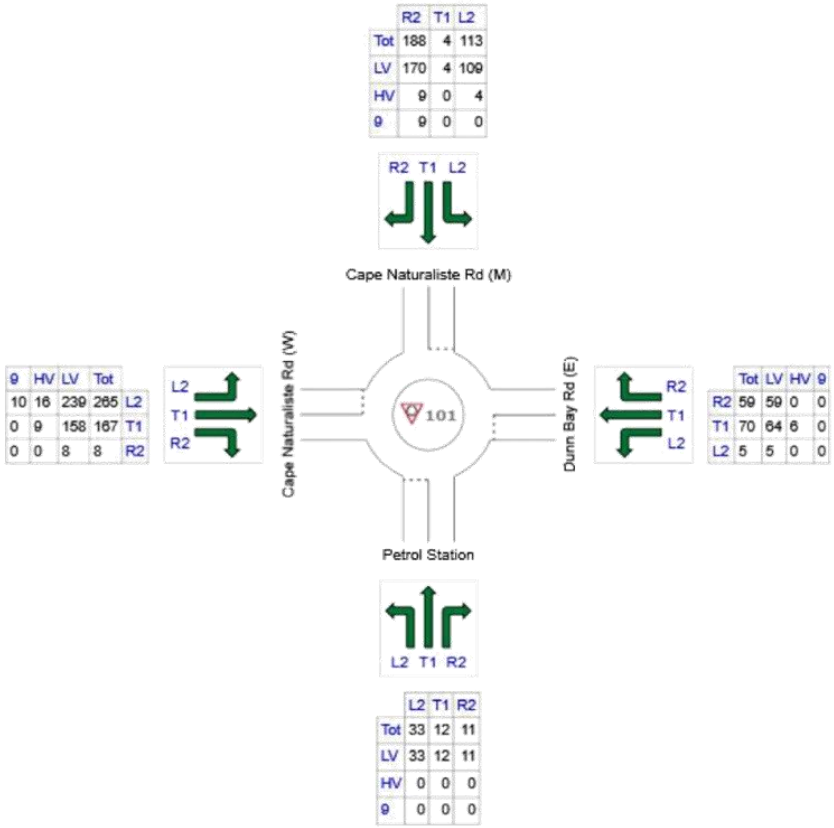
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	56	56	0	0
E: Dunn Bay Rd (E)	134	128	6	0
N: Cape Naturaliste Rd (M)	305	283	13	9
W: Cape Naturaliste Rd (W)	440	405	25	10
Total	935	872	44	19

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Petrol Station													
Lane 1[d]	59	0.0	1109	0.053	100	4.4	LOS A	0.3	2.0	Full	35	0.0	0.0
Approach	59	0.0		0.053		4.4	LOS A	0.3	2.0				
East: Dunn Bay Rd (E)													
Lane 1[d]	141	4.5	1100	0.128	100	7.2	LOS A	0.7	5.4	Full	400	0.0	0.0
Approach	141	4.5		0.128		7.2	LOS A	0.7	5.4				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	321	7.2	1209	0.266	100	8.0	LOS A	1.6	12.9	Full	500	0.0	0.0
Approach	321	7.2		0.266		8.0	LOS A	1.6	12.9				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	463	8.0	1395	0.332	100	4.3	LOS A	2.2	17.9	Full	110	0.0	0.0
Approach	463	8.0		0.332		4.3	LOS A	2.2	17.9				
Intersection	984	6.7		0.332		5.9	LOS A	2.2	17.9				

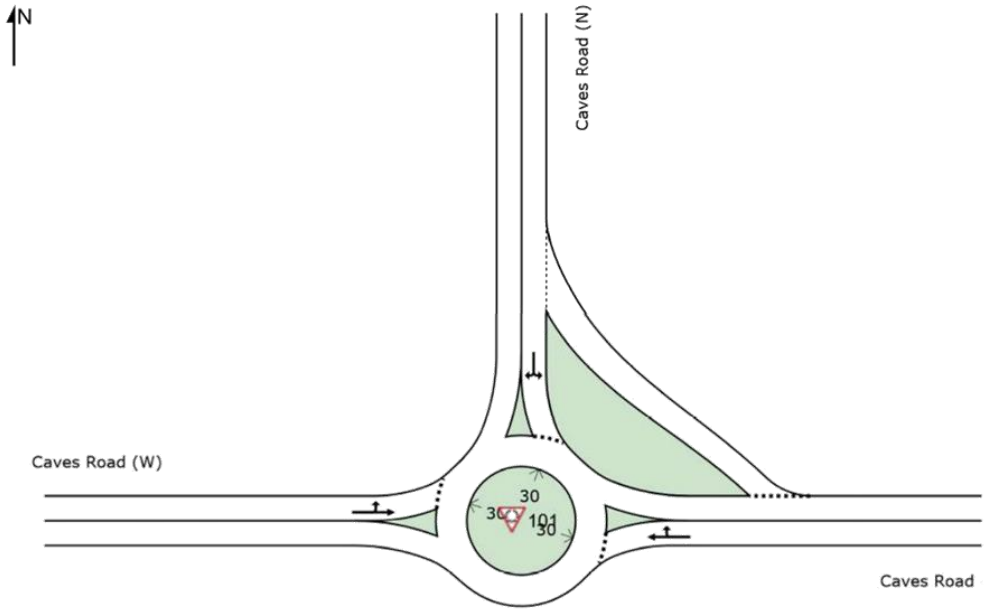
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2020 PM - Caves Road / Cape Naturaliste Road]

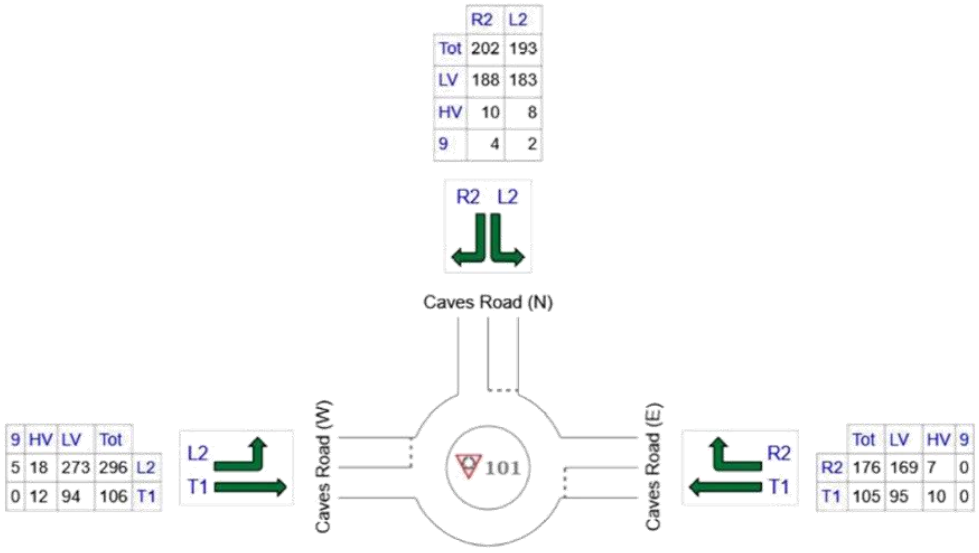
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	281	264	17	0
N: Caves Road (N)	395	371	18	6
W: Caves Road (W)	402	367	30	5
Total	1078	1002	65	11

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Caves Road (E)													
Lane 1[d]	296	6.0	1264	0.234	100	8.2	LOS A	1.4	10.9	Full	500	0.0	0.0
Approach	296	6.0		0.234		8.2	LOS A	1.4	10.9				
North: Caves Road (N)													
Lane 1[d]	416	6.1	1423	0.292	100	6.8	LOS A	1.9	15.2	Full	110	0.0	0.0
Approach	416	6.1		0.292		6.8	LOS A	1.9	15.2				
West: Caves Road (W)													
Lane 1[d]	423	8.7	1312	0.322	100	4.5	LOS A	2.2	17.4	Full	500	0.0	0.0
Approach	423	8.7		0.322		4.5	LOS A	2.2	17.4				
Intersection	1135	7.1		0.322		6.3	LOS A	2.2	17.4				

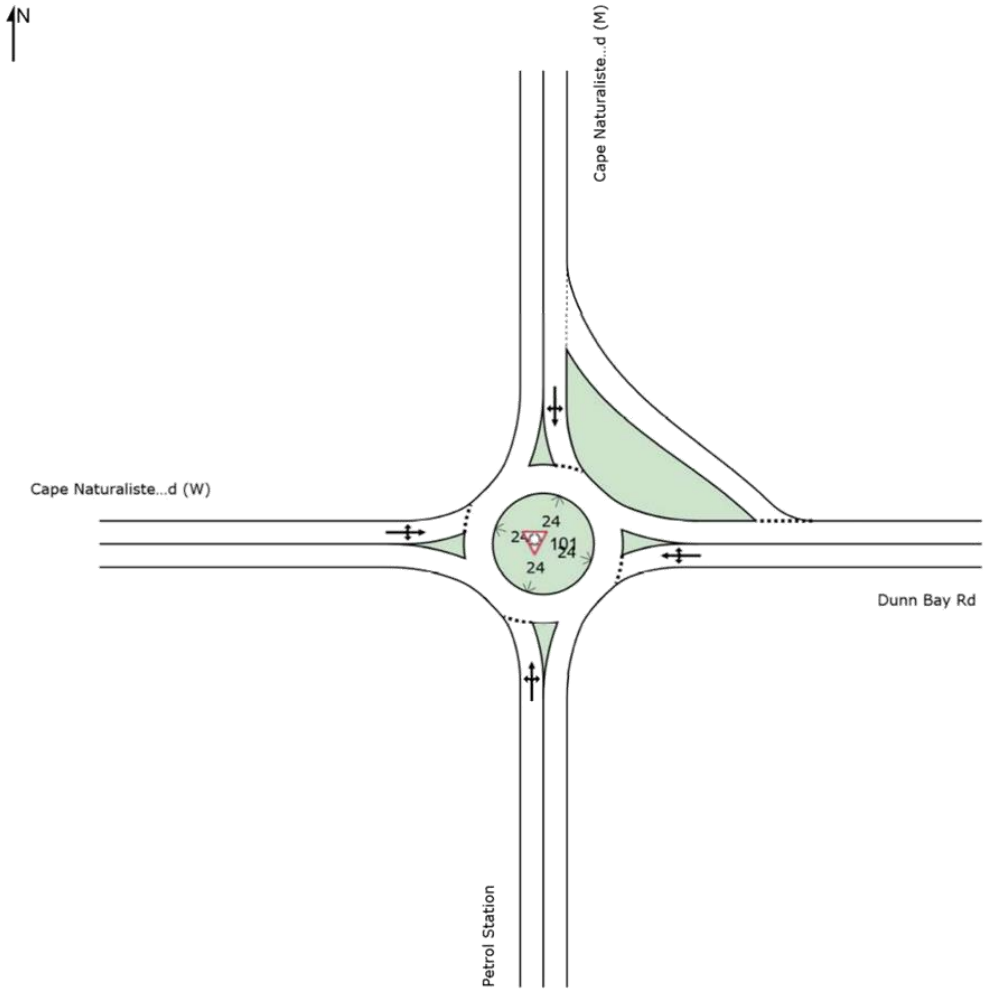
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2020 PM - Cape Naturaliste Rd / Dunn Bay Rd]

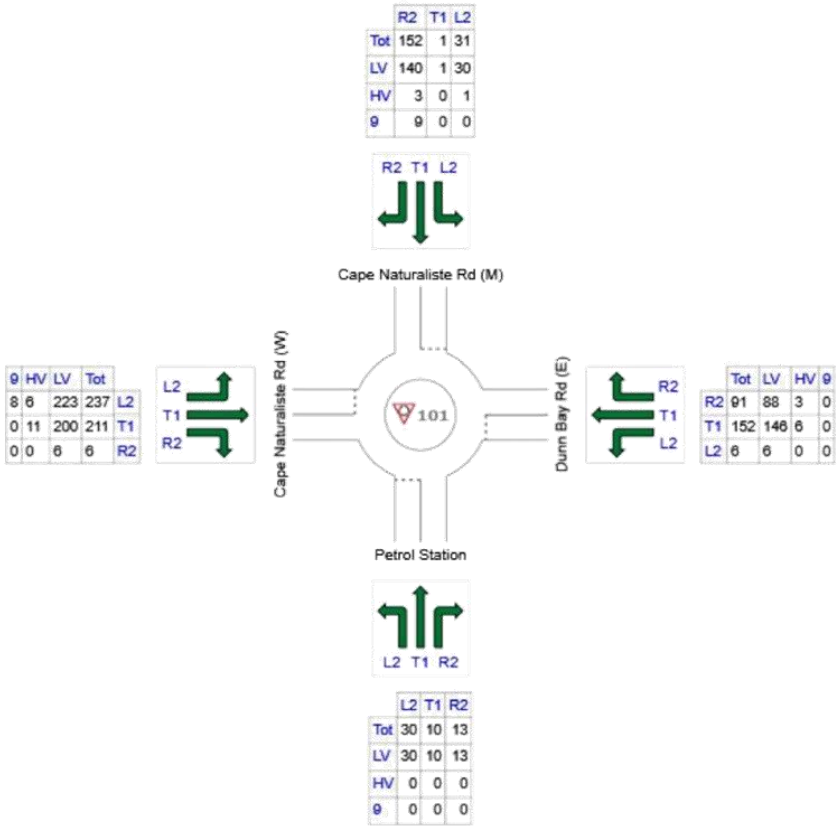
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	53	53	0	0
E: Dunn Bay Rd (E)	249	240	9	0
N: Cape Naturaliste Rd (M)	184	171	4	9
W: Cape Naturaliste Rd (W)	454	429	17	8
Total	940	893	30	17

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Petrol Station													
Lane 1[d]	56	0.0	1048	0.053	100	5.1	LOS A	0.3	2.1	Full	35	0.0	0.0
Approach	56	0.0		0.053		5.1	LOS A	0.3	2.1				
East: Dunn Bay Rd (E)													
Lane 1[d]	262	3.6	1164	0.225	100	6.7	LOS A	1.3	10.2	Full	400	0.0	0.0
Approach	262	3.6		0.225		6.7	LOS A	1.3	10.2				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	194	7.1	1130	0.171	100	9.3	LOS A	1.0	7.9	Full	500	0.0	0.0
Approach	194	7.1		0.171		9.3	LOS A	1.0	7.9				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	478	5.5	1354	0.353	100	4.5	LOS A	2.4	18.9	Full	110	0.0	0.0
Approach	478	5.5		0.353		4.5	LOS A	2.4	18.9				
Intersection	989	5.0		0.353		6.1	LOS A	2.4	18.9				

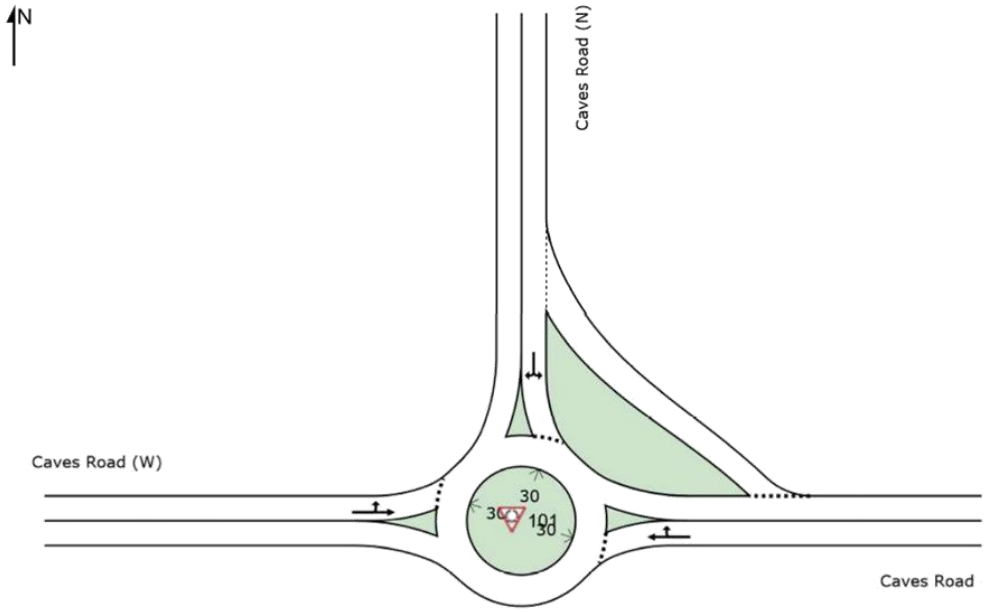
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2030 AM - Caves Road / Cape Naturaliste Road]

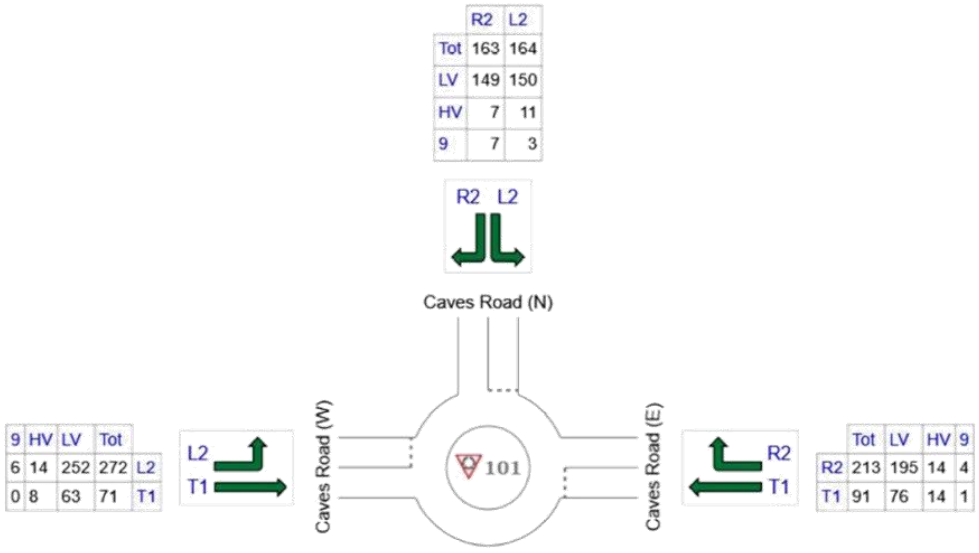
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	304	271	28	5
N: Caves Road (N)	327	299	18	10
W: Caves Road (W)	343	315	22	6
Total	974	885	68	21

Lane Use and Performance

	Demand Flows		Cap.	Deg. Satn	Lane Util.	Average Delay	Level of Service	95% Back of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	Total veh/h	HV %	veh/h	v/c	%	sec		Veh	Dist m		m	%	%
East: Caves Road (E)													
Lane 1[d]	320	10.9	1268	0.252	100	8.5	LOS A	1.5	12.5	Full	500	0.0	0.0
Approach	320	10.9		0.252		8.5	LOS A	1.5	12.5				
North: Caves Road (N)													
Lane 1[d]	344	8.6	1445	0.238	100	6.6	LOS A	1.5	12.4	Full	110	0.0	0.0
Approach	344	8.6		0.238		6.6	LOS A	1.5	12.4				
West: Caves Road (W)													
Lane 1[d]	361	8.2	1244	0.290	100	4.7	LOS A	1.9	15.0	Full	500	0.0	0.0
Approach	361	8.2		0.290		4.7	LOS A	1.9	15.0				
Intersection	1025	9.1		0.290		6.5	LOS A	1.9	15.0				

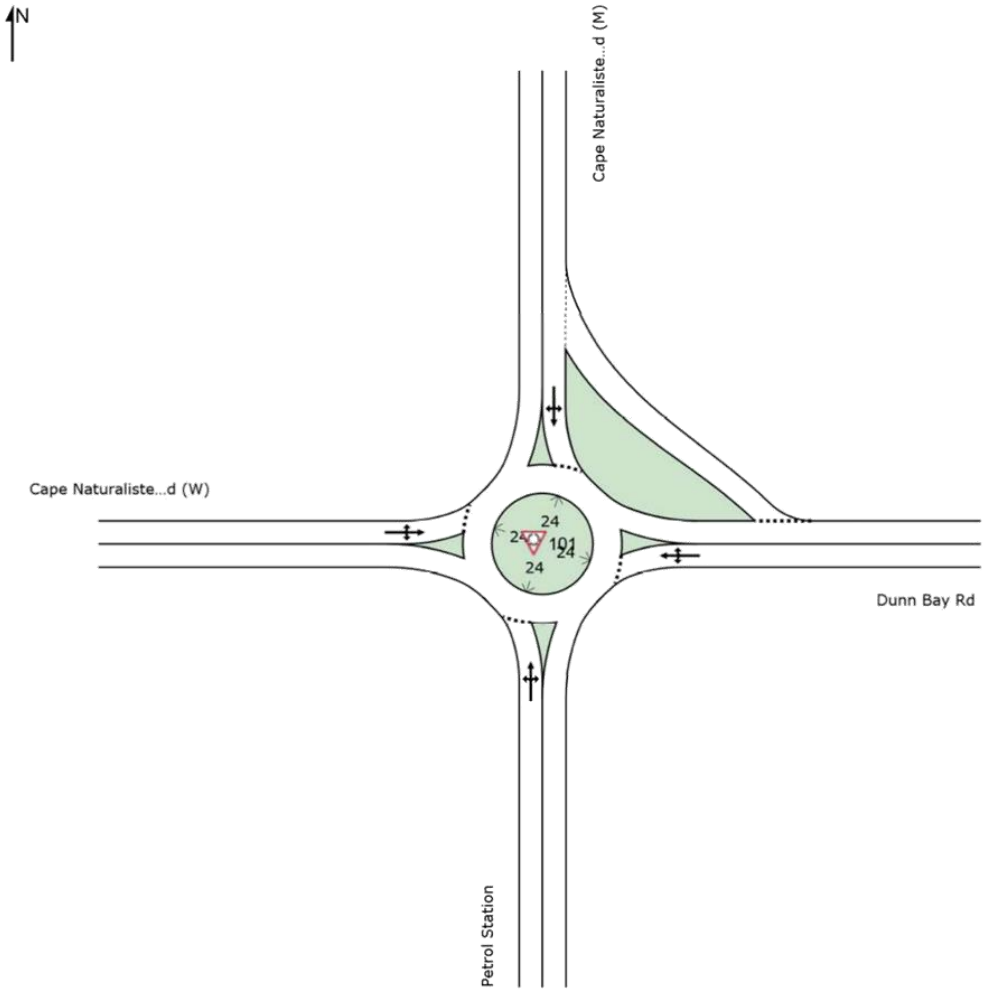
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2030 AM - Cape Naturaliste Rd / Dunn Bay Rd]

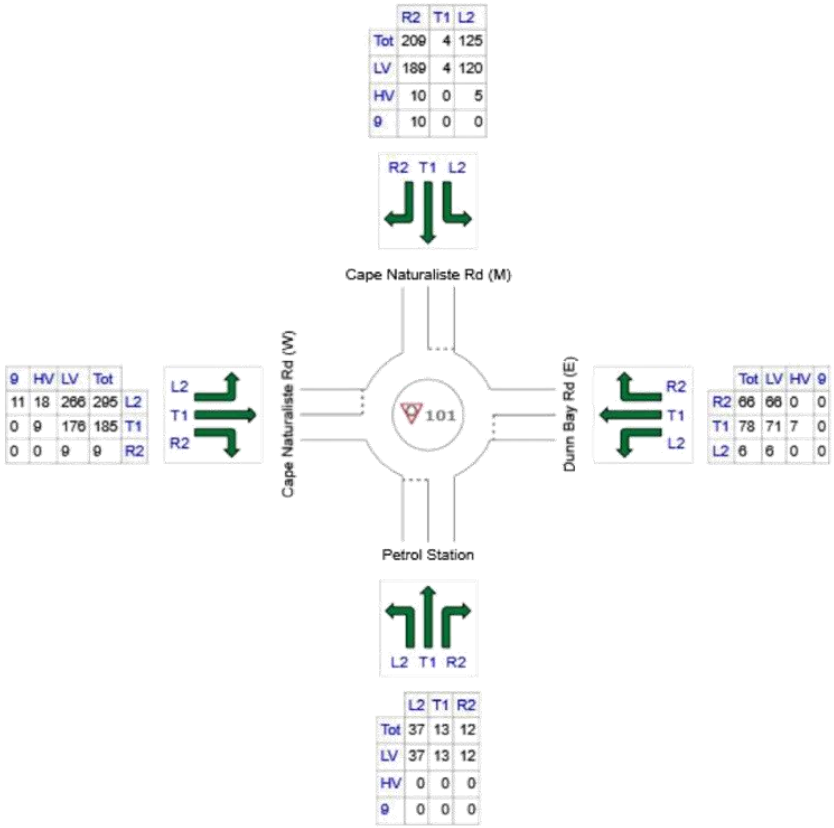
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	62	62	0	0
E: Dunn Bay Rd (E)	150	143	7	0
N: Cape Naturaliste Rd (M)	338	313	15	10
W: Cape Naturaliste Rd (W)	489	451	27	11
Total	1039	969	49	21

Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Petrol Station													
Lane 1[d]	65	0.0	1076	0.061	100	4.6	LOS A	0.3	2.4	Full	35	0.0	0.0
Approach	65	0.0		0.061		4.6	LOS A	0.3	2.4				
East: Dunn Bay Rd (E)													
Lane 1[d]	158	4.7	1075	0.147	100	7.4	LOS A	0.8	6.3	Full	400	0.0	0.0
Approach	158	4.7		0.147		7.4	LOS A	0.8	6.3				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	356	7.4	1187	0.300	100	8.1	LOS A	1.9	15.2	Full	500	0.0	0.0
Approach	356	7.4		0.300		8.1	LOS A	1.9	15.2				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	515	7.8	1384	0.372	100	4.4	LOS A	2.6	21.1	Full	110	0.0	0.0
Approach	515	7.8		0.372		4.4	LOS A	2.6	21.1				
Intersection	1094	6.7		0.372		6.1	LOS A	2.6	21.1				

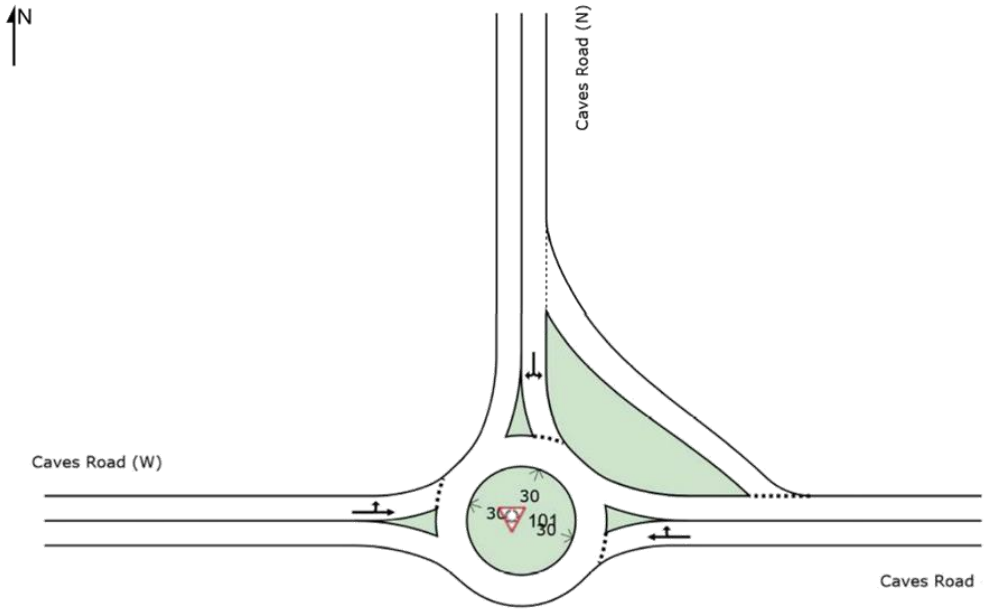
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2030 PM - Caves Road / Cape Naturaliste Road]

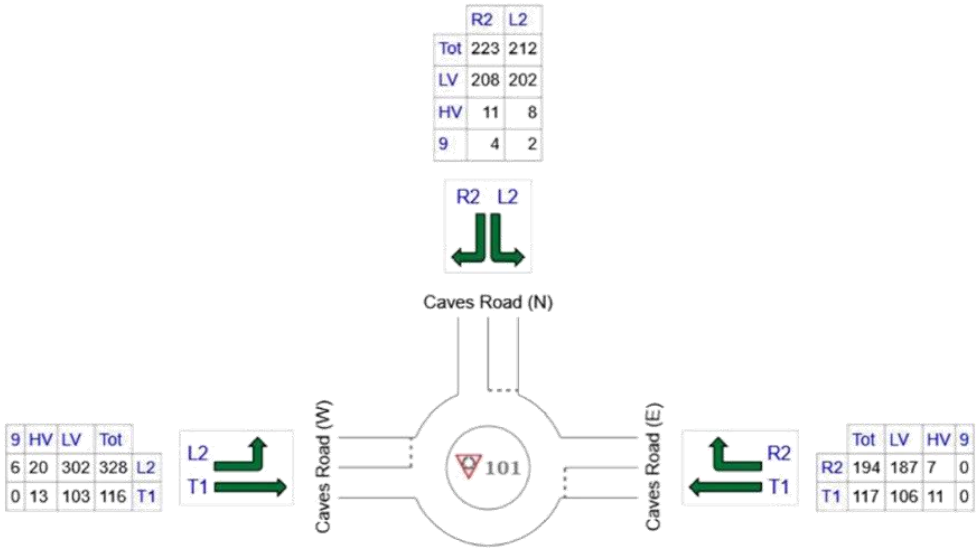
Mixed Use Development
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
E: Caves Road (E)	311	293	18	0
N: Caves Road (N)	435	410	19	6
W: Caves Road (W)	444	405	33	6
Total	1190	1108	70	12

Lane Use and Performance

	Demand Flows		Cap.	Deg. Satn	Lane Util.	Average Delay	Level of Service	95% Back of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	Total veh/h	HV %	veh/h	v/c	%	sec		Veh	Dist m		m	%	%
East: Caves Road (E)													
Lane 1[d]	327	5.8	1238	0.265	100	8.3	LOS A	1.6	12.8	Full	500	0.0	0.0
Approach	327	5.8		0.265		8.3	LOS A	1.6	12.8				
North: Caves Road (N)													
Lane 1[d]	458	5.7	1407	0.326	100	6.9	LOS A	2.2	17.7	Full	110	0.0	0.0
Approach	458	5.7		0.326		6.9	LOS A	2.2	17.7				
West: Caves Road (W)													
Lane 1[d]	467	8.8	1283	0.364	100	4.6	LOS A	2.5	20.7	Full	500	0.0	0.0
Approach	467	8.8		0.364		4.6	LOS A	2.5	20.7				
Intersection	1253	6.9		0.364		6.4	LOS A	2.5	20.7				

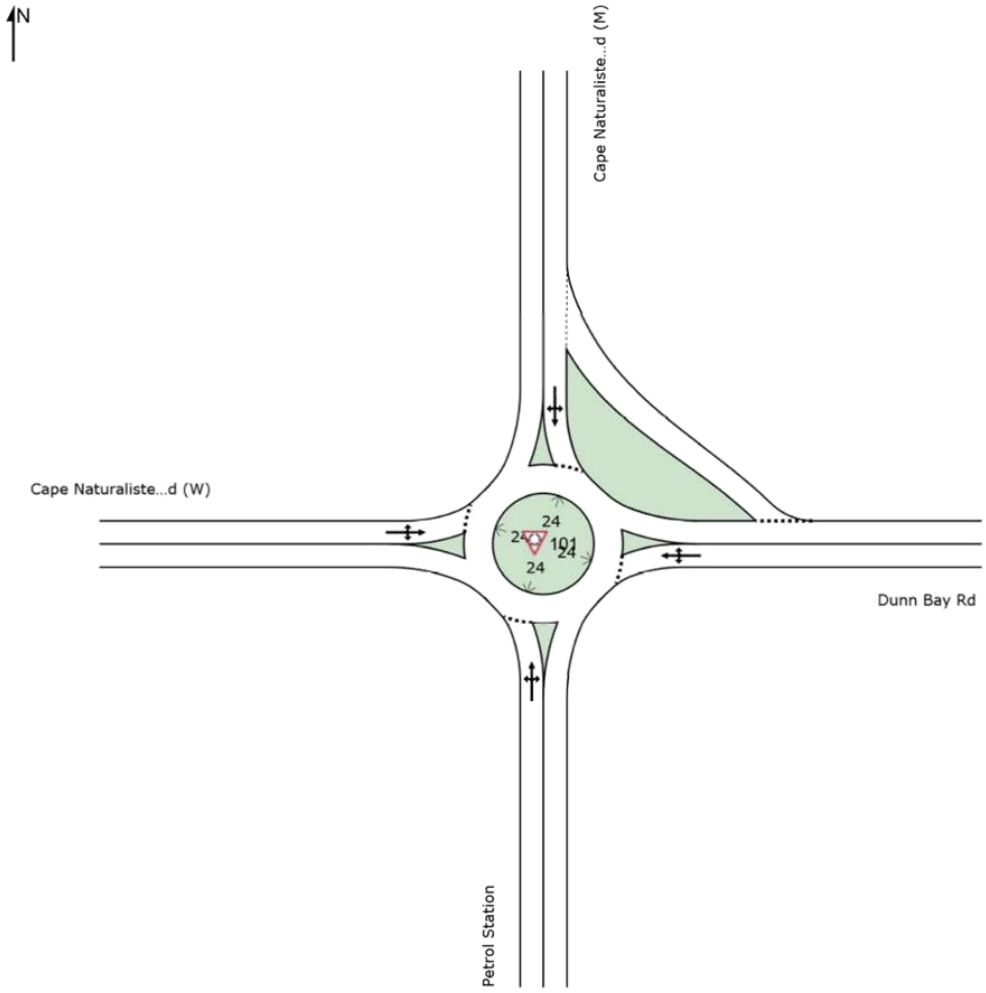
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Site: 101 [With Site - 2030 PM - Cape Naturaliste Rd / Dunn Bay Rd]

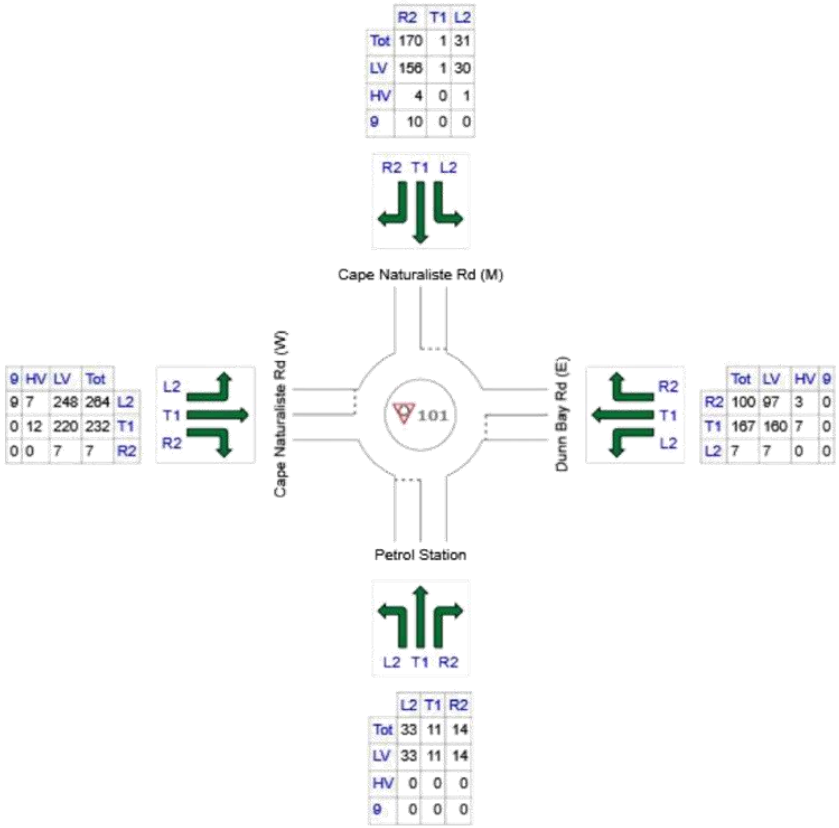
New Site
Site Category: (None)
Roundabout

Site Layout



Input Volumes

Volume Display Method: Separate



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)	C 6-9 (9)
S: Petrol Station	58	58	0	0
E: Dunn Bay Rd (E)	274	264	10	0
N: Cape Naturaliste Rd (M)	202	187	5	10
W: Cape Naturaliste Rd (W)	503	475	19	9
Total	1037	984	34	19

Lane Use and Performance

	Demand Flows		Cap.	Deg. Satn	Lane Util.	Average Delay	Level of Service	95% Back of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	Total veh/h	HV %	veh/h	v/c	%	sec		Veh	Dist m		m	%	%
South: Petrol Station													
Lane 1[d]	61	0.0	1012	0.060	100	5.3	LOS A	0.3	2.4	Full	35	0.0	0.0
Approach	61	0.0		0.060		5.3	LOS A	0.3	2.4				
East: Dunn Bay Rd (E)													
Lane 1[d]	288	3.6	1140	0.253	100	6.8	LOS A	1.6	11.8	Full	400	0.0	0.0
Approach	288	3.6		0.253		6.8	LOS A	1.6	11.8				
North: Cape Naturaliste Rd (M)													
Lane 1[d]	213	7.4	1105	0.192	100	9.5	LOS A	1.1	9.1	Full	500	0.0	0.0
Approach	213	7.4		0.192		9.5	LOS A	1.1	9.1				
West: Cape Naturaliste Rd (W)													
Lane 1[d]	529	5.6	1341	0.395	100	4.6	LOS A	2.8	22.3	Full	110	0.0	0.0
Approach	529	5.6		0.395		4.6	LOS A	2.8	22.3				
Intersection	1092	5.1		0.395		6.2	LOS A	2.8	22.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

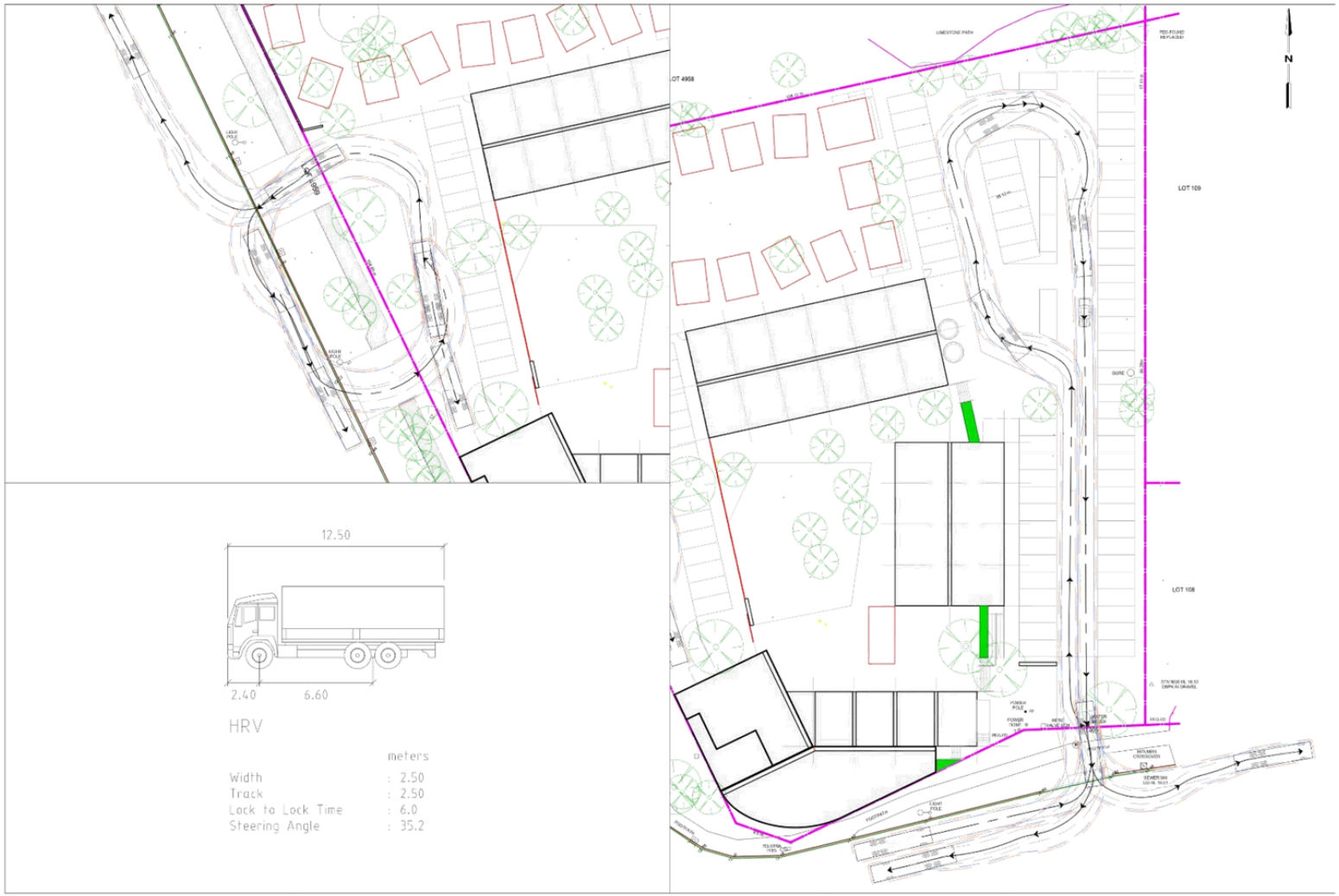
d Dominant lane on roundabout approach

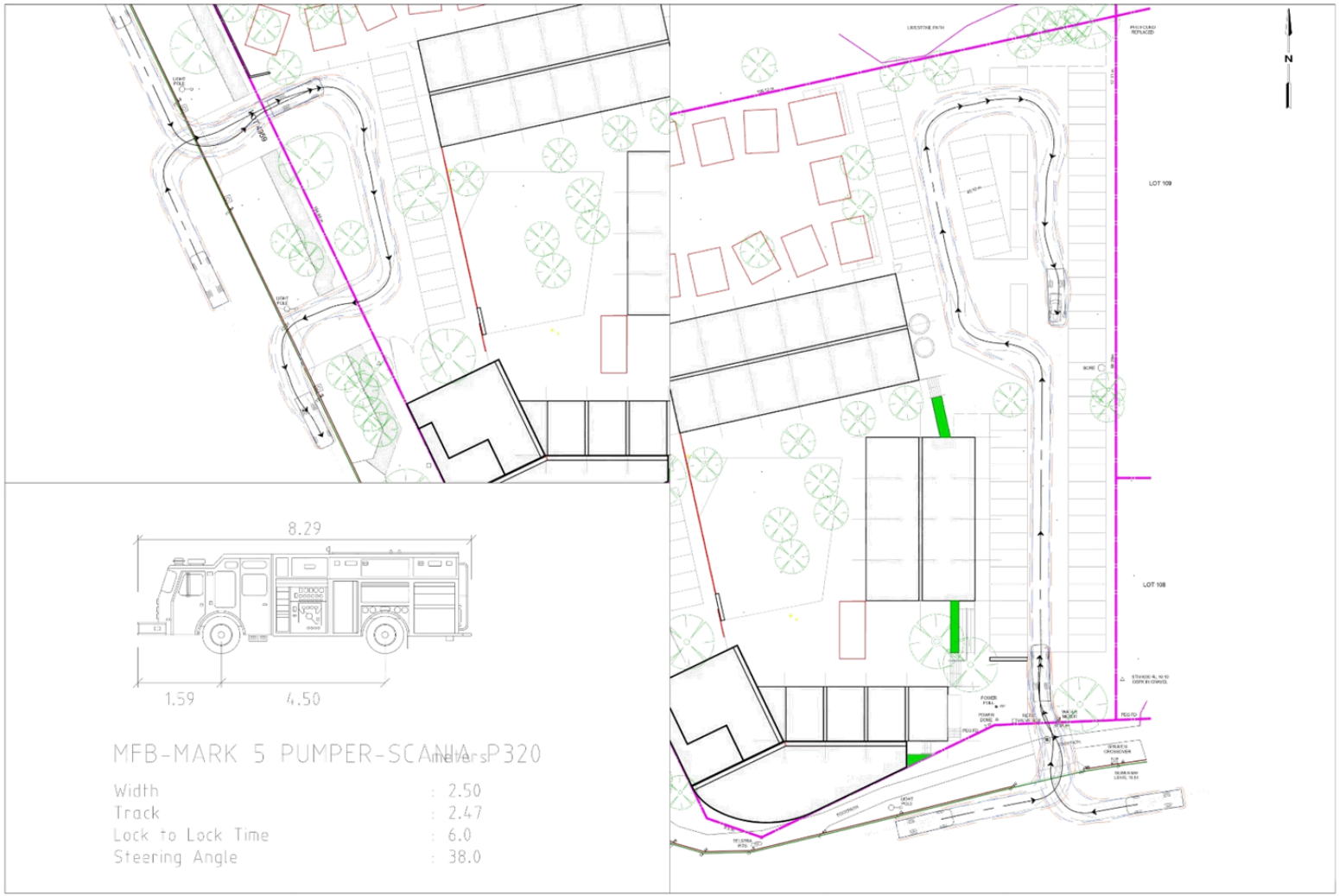
SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: GTA CONSULTANTS | Created: Wednesday, 4 November 2020 1:26:18 PM
Project: T:\W19200-19299\W192830 Dunn Bay Road, Dunsborough\Modelling\201030sid - W192830 Dunn Bay Road - Sidra.sip8

APPENDIX: SWEPT PATH ASSESSMENT

C. SWEPT PATH ASSESSMENT

C


12.50
2.40
6.60
HRV
meters
Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 35.2
N
LOT 109
LOT 108


8.29
1.59
4.50
MFB-MARK 5 PUMPER-SCANIA P320
Metres
Width : 2.50
Track : 2.47
Lock to Lock Time : 6.0
Steering Angle : 38.0
N
LOT 109
LOT 108


10.00
1.70
5.50
Refuse SITA Truck
meters
Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 35.1
N
LOT 109
LOT 108

APPENDIX: WAPC GUIDELINES CHECKLIST

D. WAPC GUIDELINES CHECKLIST

D

APPENDIX: WAPC GUIDELINES CHECKLIST

Item	Provided	Comments/Proposals
Summary		
Introduction/Background		
Name of Applicant and Consultant	✓	
Development Location and Context	✓	
Brief Description of Development Proposal	✓	
Key Issues	N/A	No key issues identified
Background Information	✓	
Existing Situation		
Existing Site Uses (If Any)	✓	Existing restaurant
Existing Parking and Demand (If Appropriate)	NA	
Existing Access Arrangements		
Existing Site Traffic		
Surrounding Land Uses	✓	
Surrounding Road Network	✓	
Traffic Management on Frontage		
Traffic Flows on Surrounding Roads (Usually AM And PM Peak Hours)	✓	
Traffic Flows at Major Intersections (Usually AM And PM Peak Hours)	✓	
Operation of Surrounding Intersections	✓	
Existing Pedestrian/Cycle Networks	✓	
Existing Public Transport Services Surrounding the Development	✓	
Crash Data	✓	
Development Proposal		
Regional Context	✓	
Proposed Land Uses	✓	
Table of Land Uses and Quantities	✓	
Access Arrangements	✓	
Parking Provision	✓	
End of Trip Facilities	✓	
Any Specific Issues	✓	
Road Network	✓	
Intersection Layouts and Controls	✓	
Pedestrian/Cycle Networks and Crossing Facilities	✓	
Public Transport Services	✓	
Integration with Surrounding Area		
Surrounding Major Trip Attractors/Generators	✓	

APPENDIX: WAPC GUIDELINES CHECKLIST

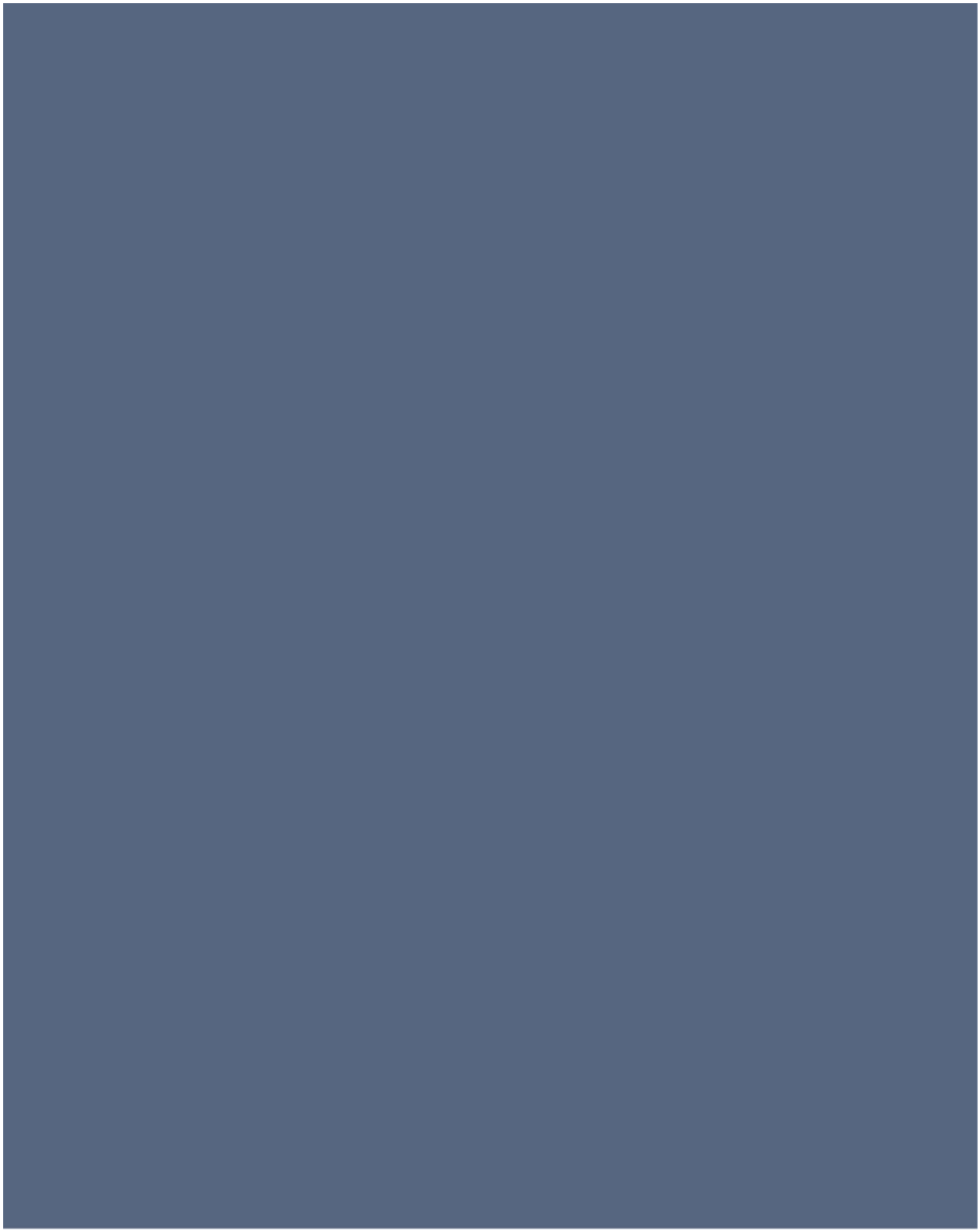
Committed Developments and Transport Proposals	✓	
Proposed Changes to Land Uses Within 1200 Metres	✓	
Travel Desire Lines from Development to These Attractors/ Generators	✓	
Adequacy of Existing Transport Networks	✓	
Deficiencies in Existing Transport Networks	✓	
Remedial Measures to Address Deficiencies	✓	
Analysis of Transport Networks	✓	
Assessment Years	✓	
Time Periods	✓	
Development Generated Traffic	✓	
Distribution of Generated Traffic	✓	
Parking Supply and Demand	✓	
Base And 'With Development' Traffic Flow	✓	
Analysis of Development Access		
Impact on Surrounding Roads	✓	
Impact on Intersections	✓	
Impact on Neighbouring Areas	✓	
Road Safety	✓	
Public Transport Access	✓	
Pedestrian Access/Amenity	✓	
Cycle Access/Amenity	✓	
Analysis of Pedestrian/Cycle Networks	NA	No detailed analysis required
Safe Walk/Cycle to School (For Residential and School Site Developments Only)	NA	Not a residential development
Traffic Management Plan (Where Appropriate)	NA	Not required
Conclusions		

Proponent's Name: Joe D'Alessandro

Company: Place Development Date: 03/11/2020

Transport Assessor's Name: Aaron MacNish

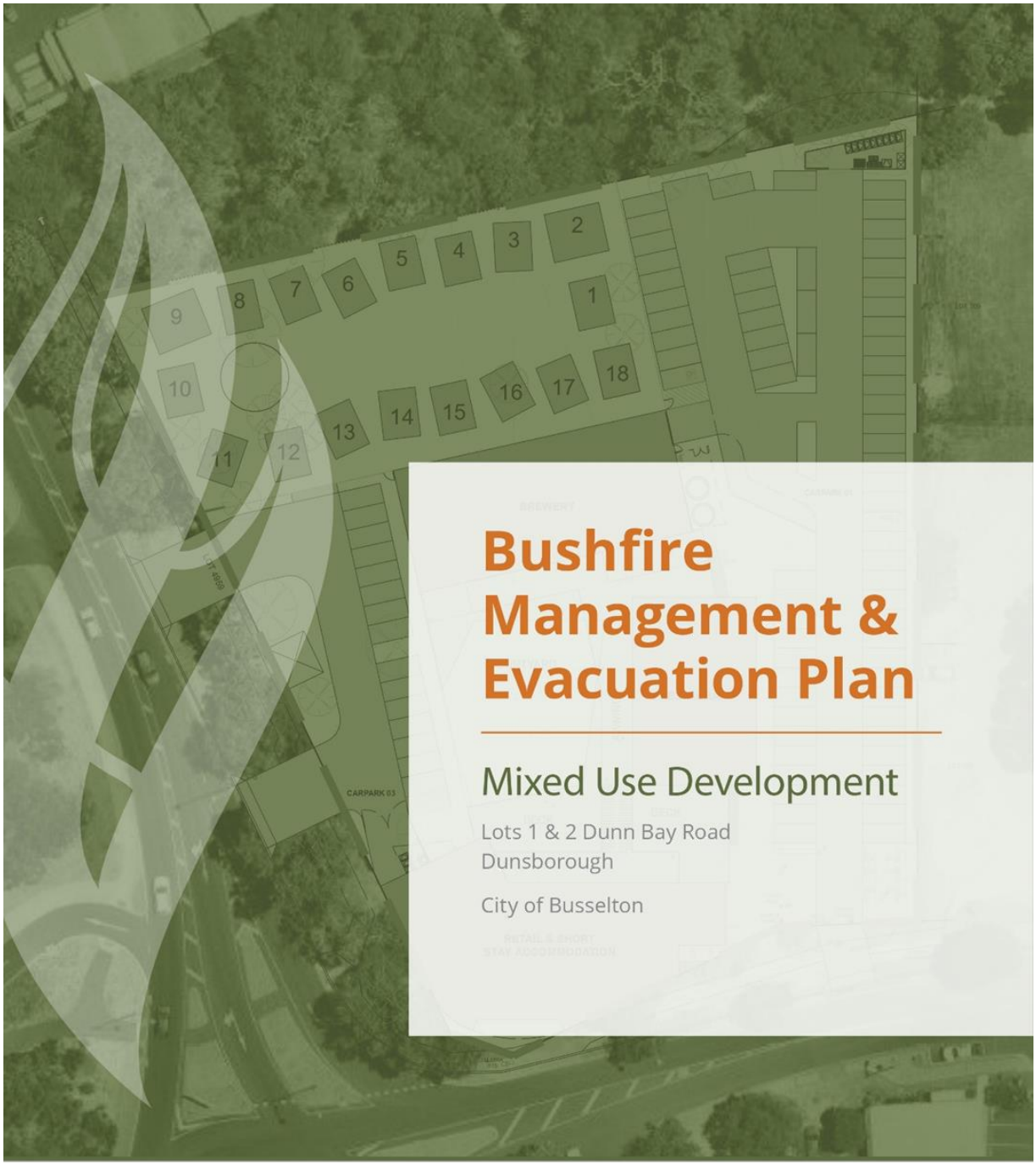
Company: GTA Consultants Date: 03/11/2020



element.

Appendix D – Bushfire Management Plan

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation



Bushfire Management & Evacuation Plan

Mixed Use Development

Lots 1 & 2 Dunn Bay Road
Dunsborough

City of Busselton

bushfiresafety CONSULTING
Science. Culture. Solutions.

Prepared For:
Place Development
11 November 2020
Version 2.0

bushfiresafetyconsulting.com.au

© 2020 Bushfire Safety Consulting Pty Ltd.

Document Information

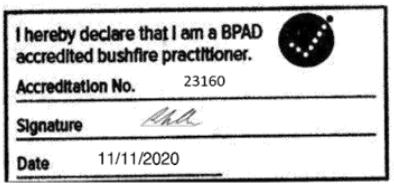
Prepared for: Place Development Pty Ltd

Project Name: Proposed Brewery, Bar, Accommodation, Café and Retail

Address: Lots 1 and 2 Dunn Bay Road, Dunsborough, WA 6281

Prepared by: Rohan Carboon

Bushfire Safety Consulting Pty Ltd





Document Control

Bushfire Management Plan – Lots 1 & 2 Dunn Bay Road, Dunsborough			
REPORT VERSION	**PURPOSE**	**AUTHOR/REVIEWER AND ACCREDITATION DETAILS**	**DATE SUBMITTED**
V1	Draft for Review	Rohan Carboon (BPAD 32160) Dr Karen Brown (BPAD 48364)	31/10/2020
V2	Final for Submission	Rohan Carboon (BPAD 32160)	11/11/2020

Front cover photo: Development Proposal

Bushfire Safety Consulting Pty Ltd
PO Box 84
STONEVILLE WA 6081

Tel: 0429 949 262
Email: hello@bushfiresafetyconsulting.com.au
Web: www.bushfiresafetyconsulting.com.au

Disclaimer:

This report has been prepared in good faith and is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, this publication is distributed on the terms and understanding that the author is not responsible for results of any actions taken based on information in this publication or for any error in or omission from this publication.

EXECUTIVE SUMMARY

This Bushfire Management and Evacuation Plan (BMEP) has been prepared to support the Development Application (DA) process at Lots 1 and 2 Dunn Bay Road, Dunsborough WA 6281. There is currently an existing house and a café restaurant on the site.

The development of the site includes plans for a brewery and bar area, boutique hotel, kitchen/dining, cafe and retail/short stay accommodation. The site is located on the Western perimeter of the main shopping precinct in Dunsborough. It is bordered by Cape Naturalist Road on the west, Dunn Bay Road on the south, Urban residential lots on the east and Dunsborough Brook Reserve on the north.

Exposure to bushfire attack is likely from the west and to a lesser extend from the strip of vegetation in the brook north of the site. A method 1 and method 2 BAL assessment has been undertaken to determine predicted radiant heat flux levels into the site and proposed landscaping considers the bushfire threat with the establishment of an Asset Protection Zone across the entire site.

The proposed development is a vulnerable land use under the State Planning Policy 3.7 because specifically new visitors and groups to the facility will be less able to respond in a bushfire emergency. A Bushfire Emergency Evacuation Plan has been developed which specifically reflects the site conditions, users' needs and circumstances. It will be reviewed and updated with the tenants after the new leasing arrangements have been negotiated and before the site is operational. The site managers are responsibility for bushfire evacuation which can occur by people moving off site either on foot or in vehicles towards the centre of Dunsborough and an area exposed to less than 2 kW/m².

In the event of a bushfire emergency, fire services require ready access to the site and to an adequate water supply. There is good vehicular access within the property with two driveway entries and two turn-around areas.

It is expected that the implementation of this BMP will reduce the threat to staff and the public and fire fighters in the area addressed by this BMP. The proposal has been assessed against the *State Planning Policy No. 3.7: Planning in Bushfire Prone Areas (SPP 3.7)* and the *Guidelines for Planning in Bushfire Prone Areas* (WAPC 2017 V1.3) and the Position Statement: Tourism land uses in bushfire prone areas.

The proposed development can achieve the Acceptable Solutions and Performance Principles in the Guidelines for Planning in Bushfire Prone Areas V1.3 (2017) for water supply and access. Some short-term accommodation cabins are sited in BAL-FZ and a comprehensive risk assessment has been undertaken consistent with the Position Statement: Tourism land uses in bushfire prone areas to identify acceptable mitigation strategies.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ii
1 PROPOSAL DETAILS 4
2 Policy and Guidelines 7
2.1 Application of SPP 3.7 7
2.2 Guidelines for Planning in Bushfire Prone Areas V1.3 (2017) 7
2.3 Position Statement: Tourism land uses in bushfire prone areas (2019) 8
3 ENVIRONMENTAL CONSIDERATIONS 10
3.1 Native Vegetation – modification and clearing 10
3.2 Re-vegetation/Landscape Plans 10
4 BUSHFIRE ASSESSMENT RESULTS 11
4.1 Assessment Inputs 11
4.1.1 Vegetation Classification 12
4.1.2 Effective Slope 23
4.2 Assessment Outputs 24
5 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES 24
6 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA 27
6.1 Compliance Table 27
6.2 Additional Management Strategies 29
7 RESPONSIBILITIES FOR BUSHFIRE MEASURES 31
8 CONCLUSION 32
8 REFERENCES 33

LIST OF TABLES

Table 1: Policy measures 7
Table 2: Summary of vegetation type and effective slope 23
Table 3: Summary of assessment outputs 24
Table 4: Compliance table 28
Table 5: Responsibility for bushfire measures 31

LIST OF FIGURES

Figure 1: Proposed Development 5
Figure 2: Site Location Plan 6
Figure 3: Bushfire Prone Areas 9
Figure 4: Vegetation Classification Map (for BAL Contour) 25
Figure 5: BAL Contour Map 26
Figure 6: Spatial Representation of Bushfire Management Strategies 30

TABLE OF APPENDICES

Appendix 1: Landscape Plan
Appendix 2: APZ standards
Appendix 3: Vehicular Access Technical Requirements and Fire Appliance Swept Paths
Appendix 4: Fire Hydrant Coverage Plan
Appendix 5: City of Busselton Firebreak and Fuel Hazard Reduction Notice
Appendix 6: Design Fire Modelling
Appendix 7: Bushfire Evacuation Plan
Appendix 8: Bushfire Risk Assessment

1 PROPOSAL DETAILS

This Bushfire Management and Evacuation Plan (BMEP) has been prepared to support the Development Application (DA) for the proposed development at Lots 1 and 2 Dunn Bay Road, Dunsborough. The development proposal includes a number of elements including:

- Removing the existing home
- Construction of a Boutique hotel;
- Construction of Brewery and Bar;
- Construction of Kitchen and Dining area;
- Construction of Café, courtyard and deck;
- Construction of Retail and Short Stay Accommodation;
- Construction of carpark to 85 car bays (includes 3 ACROD bays); and

The site is located on Dunn Bay Road in Dunsborough in the City of Busselton with the layout shown in Figure 1. The site is zoned 'Centre' under the City of Busselton local Planning Scheme 21. To the north of the site in the Dugulup Brook Creek Reserve a strip of forest vegetation 15-30 metres wide borders the site. The creek continues to the west between residential dwellings and the police station. North west of the site, a small 1.47ha bushland reserve is sited on Martindale Drive and the residential subdivision Naturalist Heights Estate is sited immediately north and west of the reserve.

The Dunsborough town centre is immediately east of the site and within comfortable walking distance (i.e. 200 metres) and a service station and retail shops are located south of Dunn Bay Road (Figure 2).

The western portion of the site is located in the declared bushfire prone area and a bushfire could impact the site from this direction although the vegetation is not continuous and a potential fire run is discontinuous and any fire spotting across the residential areas and public roads could ignite a small fire adjacent to the site.

The western portion of the site is within the declared Bushfire Prone Area of WA which reflects the distribution of vegetation and fuel loads west of the site (Figure 3).

The site is connected to scheme water and there are two entry/egress routes from the carparks to Cape Naturaliste Road and Dunn Bay Road. Internal access is provided for fire appliances to access hydrants for property defence and the internal driveways and carparks provide fire appliances access to within 25 metres of all buildings on-site. Dunn Bay Road and Cape Naturalist Road provide multiple access routes.

This BMP addresses the proposed development by providing responses to the performance criteria in the *Guidelines for Planning in Bushfire Prone Areas* V1.3 (WAPC et.al. 2017) and the Position Statement: Tourism land uses in bushfire prone areas.

If there is a bushfire within or near the site, implementing this BMEEP will reduce the threat to staff and members of the public at all the facilities at the site including buildings, property, and emergency response personnel.



Location details:	Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date:	May, 2020
Prepared by:	Bushfire Safety Consulting
Accreditation level:	Level 3 BPAD Practitioner
Accreditation number:	BPAD 23160
Accreditation expiry date:	31st January, 2021
Date aerial photo:	February 2020

FIGURE 1
PROPOSED DEVELOPMENT

0 5 10 15 20 25m
SCALE 1:500 @ A3
DATE: NOVEMBER 2020
NORTH

LEGEND:
SUBJECT LAND

SOURCE OF PHOTOGRAPHY: NEARMAP

bushfire safety CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 282
www.bushfiresafetyconsulting.com.au


CAPE NATURALISTE ROAD
CAVES
GEOGRAPHE BAY ROAD
SITE LOCATION
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accredidation expiry date: 31st January, 2021
Date aerial photo: August 2020
FIGURE 2
SITE LOCATION PLAN
SCALE 1:10 000 @ A4
DATE: OCTOBER 2020
LEGEND
SUBJECT LAND
Base mapping supplied by Nearmap & Google Maps
bushfire safety
CONSULTING
Science. Culture. Solutions.

2 Policy and Guidelines

2.1 Application of SPP 3.7

The *State Planning Policy No. 3.7: Planning in Bushfire Prone Areas (SPP 3.7)* provides the foundation for land use planning to address bushfire risk management in Western Australia. It is used to inform and guide decision makers, referral agencies and land owners / proponents to help achieve acceptable bushfire protection outcomes.

The policy contains objectives and policy measures as well as reference to the bushfire protection criteria as outlined in the Guidelines for Planning in Bushfire Prone Areas (WAPC 2017 V1.3; the Guidelines). The policy applies to this development because the western portion of the site is in the designated bushfire prone area on the WA map of bushfire prone areas (Figure 3). Vegetation in Dugulup Brook Creek Reserve is not designated as bushfire prone on the State map, however this assessment has identified there are bushfire impacts into the site from the narrow strip of vegetation in the creek reserve.

The following policy measures will need to comply with SPP 3.7:

Table 1. Policy measures

Policy Measure 6.2	The proposed development is located within a designated bushfire prone area and will have a Bushfire Hazard Level above low and a Bushfire Attack Level rating above BAL-LOW.
Policy Measure 6.5	Policy 6.5 applies meaning the proposed development will be accompanied by: - BAL Contour Plan - Building specific BAL ratings - Identification of relevant issues; and - Demonstration of compliance with the guidelines
Policy Measure 6.6	Policy Clause 6.6 applies to vulnerable land use applications. The development application proposes facilities that the public will visit and will use in large numbers. This is considered a vulnerable land use under the policy because the visitors and users of the facility will be less able to respond in a bushfire emergency. A comprehensive Bushfire Emergency Evacuation Plan which specifically reflects the site conditions, users' needs and circumstances will be developed with the tenants after the new leasing arrangements have been negotiated. The site is owned by Eldorado Pty Ltd and the Operator, Southcamp Pty Ltd will take responsibility for the bushfire evacuation.

2.2 Guidelines for Planning in Bushfire Prone Areas V1.3 (2017)

The requirements of the Department of Planning document "*Guidelines for Planning in Bushfire Prone Areas V1.3" (2017)* are accommodated within this BMEEP.

The *Guidelines for Planning in Bushfire Prone Areas V 1.3 (2017)* is intended to inform and guide decision makers, referral authorities and proponents to achieve acceptable bushfire protection outcomes, including expectations at the different stages of planning.

2.3 Position Statement: Tourism land uses in bushfire prone areas (2019)

This position statement provides guidance for tourism land uses in bushfire prone areas. It focuses on life safety and suggests that the protection of property or infrastructure may be secondary to the social and economic development of a region.

The position statement establishes that, where short term accommodation and vulnerable day uses are proposed that where buildings or structures are located in BAL-40 or BAL-FZ a risk assessment will be undertaken and an open space area identified that is exposed to less than 2kW/m² with an assumed flame temperature of 1200K.


Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020
FIGURE 3
BUSHFIRE PRONE AREAS
0 10 20 30 40 50 60 70m
NOT TO SCALE @ A3
DATE: NOVEMBER 2020
NORTH
LEGEND:
SUBJECT LAND
ASSESSMENT AREA (100m) FROM THE EXTERNAL BOUNDARY OF THE SUBJECT SITE
ASSESSMENT AREA (100m) FROM THE EXTERNAL BOUNDARY OF THE SUBJECT SITE
BUSHFIRE PRONE AREAS
SOURCE OF PHOTOGRAPHY: NEARMAP
bushfire safety CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 282
www.bushfiresafetyconsulting.com.au

3 ENVIRONMENTAL CONSIDERATIONS

There are no environmental considerations that restrict the site achieving the proposed development. There are no Geomorphic wetlands on the subject site and there is a 'Threatened and Priority Flora' area to the north of the site but nothing on the two subject lots.

3.1 Native Vegetation – modification and clearing

The site contains large mature trees which have been surveyed and a number of trees are retained on the site for environmental (habitat for ringtail possums) and amenity reasons. These have been considered in detail in the development of the landscape plan (Appendix 1) which outlines where large trees are retained within the landscaped environment.

The landscape design, plant selection and maintenance regime has thoroughly considered how to minimise and manage bushfire threat. The key design features of the landscaped areas is the use of irrigation, low groundcovers, turf and clear stemmed trees. Hardscaped areas such as paths, walls and recreation zones are located throughout to ensure vegetation is not continuous and fine fuels are reduced and can be managed and maintained in the garden beds.

The establishment and maintenance of the landscape will involve the following maintenance in perpetuity:

- Under pruning of shrubs, scrub and trees of all fine fuels (<6mm) 2 metres from ground level
- Annually removing leaf litter, accumulated fine fuels and dead plants and/or plant material.
- Keeping garden beds irrigated and turf areas mown and grass green.
- Pruning to keep clumps of trees and shrubs separated from one another.
- Removal of weeds and any naturally regenerating plants not intended to be included as part of the landscape plans.

3.2 Re-vegetation/Landscape Plans

A detailed landscape plan (Appendix 1) has been developed for the site which achieves compliance with the intent of an Asset Protection Zone (Appendix 2). The landscape will be formally developed into irrigated garden beds in the small areas that are not built our or carparking or footpaths. The irrigated and fully maintained landscape will be approved by the City of Busselton, it will be installed by the proponent and highly maintained in keeping with the amenity of the site.

The landscape plan (Appendix 1) developed by Emerge Associates and responds to the APZ requirements and intent. In a way sensitive to the environmental values of the development. The APZ standards outlined in Appendix 2 balance with the unique environmental and wildlife habitat values of the site with fuel load and fuel structure requirements.

4 BUSHFIRE ASSESSMENT RESULTS

Bushfires are common in the City of Busselton and local brigades respond to numerous bushfires in the area annually. Given the bushfire threat in the area, this BMEP plays a critical role in ensuring that the re-development of the site appropriately mitigates the risk from bushfire.

4.1 Assessment Inputs

The methodology used to assess the site is outlined in the *Guidelines for Planning in Bushfire Prone Areas V1.3 (2017).* The development layout is known, and a strategic level bushfire hazard assessment is not required. A BAL Contour map is provided in accordance with Appendix 3 of the guidelines.

Assessing bushfire threat at the site-specific level accounts for the predominant class of vegetation on the site and surrounding area for a minimum of 150m, as shown in the Vegetation Classification Map at Figure 5.

4.1.1 Vegetation Classification

The site contains woodland vegetation with mature eucalypt and peppermint trees over grass vegetation (Plot 5, photos 32-35). Some trees will be retained in the formal gardens that will be developed as part of the proposal. The small (1.47ha) bushland reserve north-west of the site contains a thick overstorey of Peppermint trees in Class A Forest vegetation (Plot 1, photos 1-3). Areas of Forest vegetation occur south of the site and south of Caves Road (Plot 1, photos 5-9).

Peppermint forest vegetation occurs in a strip of land in Dugulup Brook Creek Reserve immediately north of the site and the reserve has been actively managed to remove weeds and revegetate native species (Plot 2, photos 10-21). The corridor of forest vegetation extends along the brook to the west.

The vegetation plots on and surrounding the site and within 150 metres of the development area are found in Figure 4 with plot descriptions below.

Photo ID: 1 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 2 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 3 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

Photo ID: 4 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 5 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 6 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 7 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

Photo ID: 8 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 9 **Plot Number:** 1 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 10 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 11 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

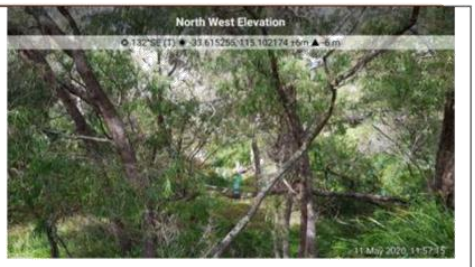
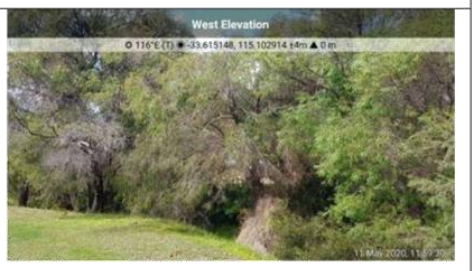
Photo ID: 12 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 13 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 14 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 15 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

Photo ID: 16 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 17 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 18 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 19 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

Photo ID: 20 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 21 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 22 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 23 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

Photo ID: 24 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 25 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 26 **Plot Number:** 2 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 27 **Plot Number:** 3 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	

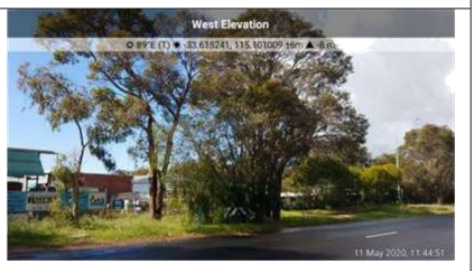
Photo ID: 28 **Plot Number:** 3 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 29 **Plot Number:** 3 **Vegetation classification or exclusion clause:** Class A Forest **Description/justification of classification:** 8 to 15m tall Eucalypt and Peppermint forest with elevated and intermediate fuel layers including significant accumulated fine fuels and canopy cover 30 to 70%.	
Photo ID: 30 **Plot Number:** 4 **Vegetation classification or exclusion clause:** Class B Woodland **Description/justification of classification:** Remnant trees in open paddock with grass fuels	
Photo ID: 31 **Plot Number:** 4 **Vegetation classification or exclusion clause:** Class B Woodland **Description/justification of classification:** Clump of remnant trees in road reserve with grass fuels	
Photo ID: 32 **Plot Number:** 5 **Vegetation classification or exclusion clause:** Post development Exclusion Clause 2.2.3.2 (e), existing Class B Woodland **Description/justification of classification:** Existing trees on-site will be either removed or landscaped in formal gardens.	

Photo ID: 33 **Plot Number:** 5 **Vegetation classification or exclusion clause:** Post development Exclusion Clause 2.2.3.2 (e), existing Class B Woodland **Description/justification of classification:** Existing trees on-site will be either removed or landscaped in formal gardens.	
Photo ID: 34 **Plot Number:** 5 **Vegetation classification or exclusion clause:** Post development Exclusion Clause 2.2.3.2 (e), existing Class B Woodland **Description/justification of classification:** Existing trees on-site will be either removed or landscaped in formal gardens.	
Photo ID: 35 **Plot Number:** 5 **Vegetation classification or exclusion clause:** Post development Exclusion Clause 2.2.3.2 (e), existing Exclusion clause 2.2.3.2(f) **Description/justification of classification:** irrigated turf around existing dwelling.	
Photo ID: 36 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Grass fuels managed on vacant lot	
Photo ID: 37 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Grass fuels managed on vacant lot used as overflow carparking	

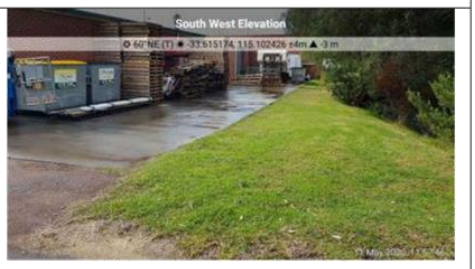
Photo ID: 38 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Post development Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Grass fuels managed on vacant lot used as overflow carparking	
Photo ID: 39 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Managed turf and garden beds surrounding police station	
Photo ID: 40 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** mowed grass vegetation and maintained in low fuel condition between the light industrial buildings and the brook.	
Photo ID: 41 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** mowed grass vegetation and maintained in low fuel condition between the light industrial buildings and the brook.	
Photo ID: 42 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Mowed and managed grass vegetation in Caves Road Reserve	

Photo ID: 43 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Mowed and managed grass vegetation in Caves Road Reserve	
Photo ID: 44 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Mowed and managed grass vegetation in Caves Road Reserve and managed park.	
Photo ID: 45 **Plot Number:** 6 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (f) **Description/justification of classification:** Mowed and managed grass vegetation in Caves Road Reserve	
Photo ID: 45 **Plot Number:** 7 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (e) **Description/justification of classification:** Non-vegetated area looking north towards the light industrial and commercial area on Clark Street	
Photo ID: 47 **Plot Number:** 7 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (e) **Description/justification of classification:** Retail and cafe shops south of the site and Dunn Bay Road.	

Photo ID: 48 **Plot Number:** 7 **Vegetation classification or exclusion clause:** Exclusion Clause 2.2.3.2 (e) **Description/justification of classification:** Large Coles supermarket carpark area east of the site	
Photo ID: 49 **Plot Number:** 8 **Vegetation classification or exclusion clause:** Class D Scrub **Description/justification of classification:** Planted scrub vegetation south-west of the site in the traffic island	
Photo ID: 50 **Plot Number:** 8 **Vegetation classification or exclusion clause:** Class D Scrub **Description/justification of classification:** Planted scrub vegetation south-west of the site in the traffic island	

4.1.2 Effective Slope

The effective slope varies between flat and downslope 5 degrees under the forest vegetation in Dugulup Brook Creek Reserve north and west of the site. Further away from the site to the north-west and south, the areas of forest vegetation have slopes that are effectively upslope relative to the sites' location.

The effective slope under areas of classified vegetation is shown in Table 2.

Table 2. Summary of vegetation type and effective slope

Plot	Applied Vegetation Classification	Effective Slope under the Classified Vegetation
1	Class A Forest	Flat / Upslope
2	Class A Forest	Downslope 0 - 5°
3	Class A Forest	Downslope 0 - 5°
4	Class B Woodland	Flat / Upslope
5	Exclusion Clause 2.2.3.2 (e)	N/A
6	Exclusion Clause 2.2.3.2 (f)	N/A
7	Exclusion Clause 2.2.3.2 (e)	N/A
8	Class D Scrub	Flat / Upslope

4.2 Assessment Outputs

A method 1 and method 2 BAL contour assessment was undertaken according to Appendix 3 of the Guidelines and the individual building results are found in Table 3 with the BAL Contour Map at Figure 6.

Table 3. Summary of assessment outputs

Building	Applied Vegetation Classification	BAL Methodology	Plot No. & Effective slope	Separation Distance to Classified Vegetation	Highest BAL Contour
Cabins 1-10	Class A Forest	Method 2 – see Appendix 6	Plot 2 Downslope 0 - 5	2-11m	BAL-FZ
Cabin 11	Class A Forest	Method 2 – see Appendix 6	Plot 3 Downslope 0 - 5	27.4m	BAL-29
Cabin 13	Class A Forest	Method 2 – see Appendix 6	Plot 2 Downslope 0 - 5	20m	BAL-29
Cabins 12 & 14-18	Class A Forest	Method 2 – see Appendix 6	Plot 2 Downslope 0 - 5	20.5m	BAL-19
Brewery and Bar	Class A Forest	Method 1	Plot 2 Downslope 0 - 5	30 m	BAL-12.5
	Class A Forest	Method 1	Plot 3 Downslope 0 - 5	53 m	BAL12.5
Restaurant Kitchen and Dining	Class A Forest	Method 1	Plot 2 Downslope 0 - 5	52.5m	BAL – 12.5
	Class A Forest	Method 1	Plot 3 Downslope 0 - 5	88.5m	BAL – 12.5
Cafe	Class D Scrub	Method 1	Plot 8 - Upslope	75m	BAL – 12.5
Retail and short Stay Accommodation	Class D Scrub	Method 1	Plot 8 - Upslope	41.5m	BAL – 12.5

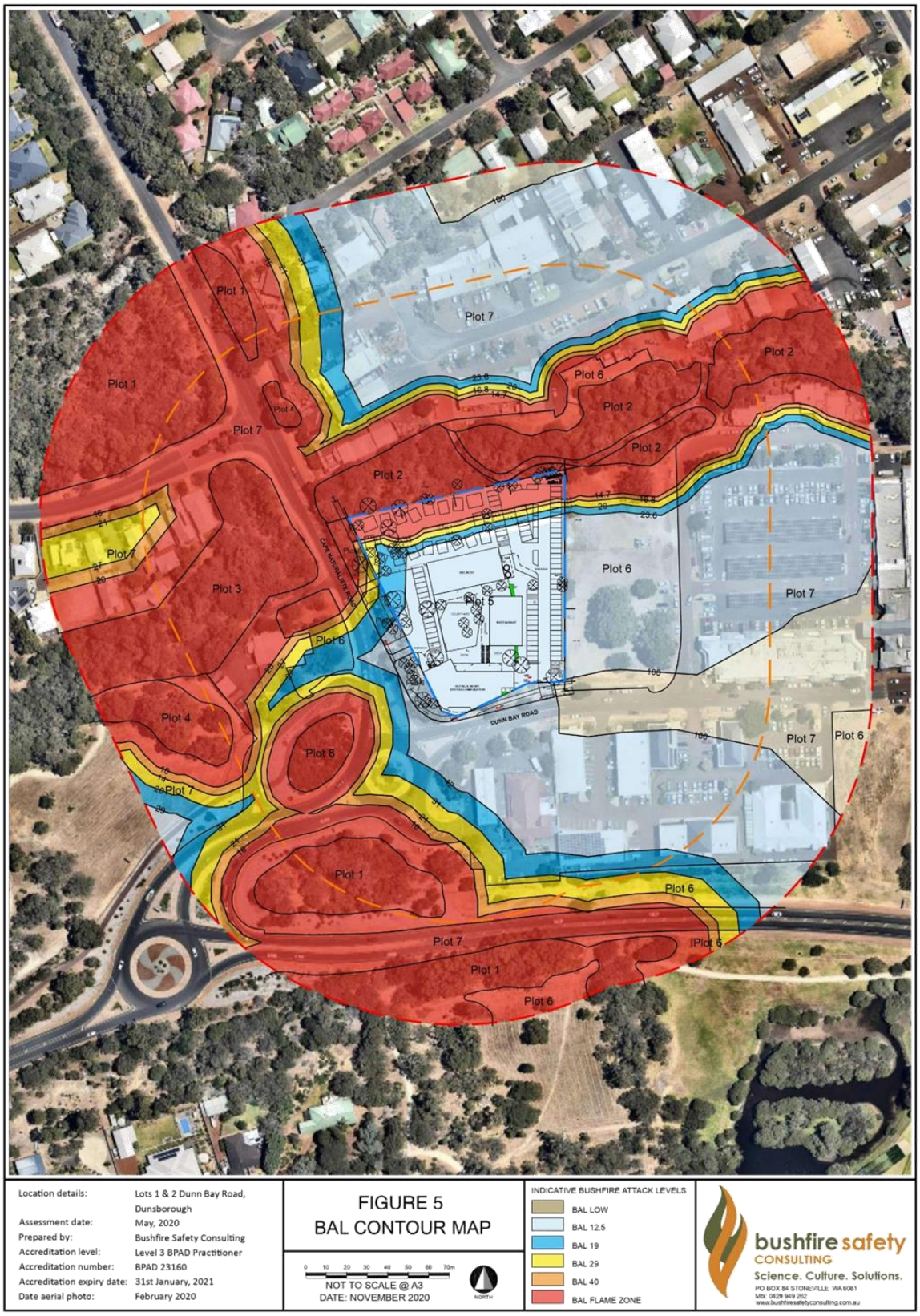
The final developed scenario is outlined in Figure 7 as a spatial representation of the bushfire management strategies.

5 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

The Class A Forest vegetation that surrounds the site is not continuous meaning an approaching bushfire is likely to break up and spot from reserve to reserve or follow along the Dugulup Brook Creek Reserve across the north of the site towards Dunsborough townsite.

Predicted levels of radiant heat and ember attack could impact the site as evident in the BAL Contour Plan (Figure 5).


Plot 1
Plot 2
Plot 3
Plot 4
Plot 5
Plot 6
Plot 7
Plot 8
PLOT 1 - CLASS A FOREST - UPSLOPE
PLOT 2 - CLASS A FOREST - AREAS FLAT AND SOME DOWNSLOPE 0-5
PLOT 3 - CLASS A FOREST - DOWNSLOPE 0-5
PLOT 4 CLASS B WOODLAND - UPSLOPE
PLOT 5 - EXCLUSION CLAUSE 2.2.3.2(e) (currently Class B Peppermint Woodland)
PLOT 6 - EXCLUSION CLAUSE 2.2.3.2(f)
PLOT 7 - EXCLUSION CLAUSE 2.2.3.2(e)
PLOT 8 - CLASS D SCRUB
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020
FIGURE 4 - VEGETATION CLASSIFICATION MAP (BAL CONTOUR MAP)
0 10 20 30 40 50 60 70m
NOT TO SCALE @ A3
DATE: NOVEMBER 2020
NORTH
LEGEND:
SUBJECT LAND
ASSESSMENT AREA (100m) FROM THE EXTERNAL BOUNDARY OF THE SUBJECT SITE
ASSESSMENT AREA (100m) FROM THE EXTERNAL BOUNDARY OF THE SUBJECT SITE
SOURCE OF PHOTOGRAPHY: NEARMAP
bushfire safety CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 282
www.bushfiresafetyconsulting.com.au


Plot 1
Plot 2
Plot 3
Plot 4
Plot 5
Plot 6
Plot 7
Plot 8
DUNN BAY ROAD
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020
FIGURE 5
BAL CONTOUR MAP
NOT TO SCALE @ A3
DATE: NOVEMBER 2020
INDICATIVE BUSHFIRE ATTACK LEVELS
BAL LOW
BAL 12.5
BAL 19
BAL 29
BAL 40
BAL FLAME ZONE
bushfire safety CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbr. 0429 949 282
www.bushfiresafetyconsulting.com.au

6 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA

6.1 Compliance Table

This report adopts an acceptable solution and performance-based system of control for each bushfire protection criteria. This methodology is consistent with Appendix 4 of the *Guidelines for Planning in Bushfire Prone Areas, Version 1.3 (2017) and the Position Statement: Tourism land uses in bushfire prone areas.* The management issues are:

- Location of the Development.
- Siting and Design of Development.
- Vehicular access.
- Water.

Acceptable solutions are proposed for two (water supply and access to the site) of the bushfire protection criteria and they each illustrate a means of satisfactorily meeting the corresponding performance criteria. Ten of the short-term accommodation cabins experience BAL-FZ because of their proximity to Dugulup Brook Creek Reserve. Consistent with the *Position Statement: Tourism land uses in bushfire prone areas;* a bushfire risk assessment is undertaken to determine and asses mitigation strategies to reduce risk to an acceptable level. To assist occupants, fire safety measures are provided to ensure occupant life safety will not be compromised in the event of bushfire. This is also in line with the guidance for tourism land uses, which are based on life safety objectives. The entire site is landscaped to meet the intent of the APZ standards.

Land use planning bushfire risk mitigation strategies are comprehensively detailed in the following sections by providing responses to the performance criteria that fulfil the intent of the bushfire hazard management issues outlined in the *Guidelines for Planning in Bushfire Prone Areas V1.3(2017).* The compliance checklist is attached as Table 4.

Table 4: Compliance Table

Bushfire Protection Criteria	Method of compliance Acceptable Solutions	Proposed bushfire management strategies
Element 1: Location	AQ1.1 Development Location	The Method 2 BAL Assessment in this report demonstrates the classified vegetation surrounding the site does have an impact. Ten accommodation cabins are exposed to BAL-FZ and a Bushfire Risk Assessment is undertaken to determine compliance with the Position Statement: Tourism land uses in bushfire prone areas. Eight accommodation cabins are exposed to BAL-19 and all remaining buildings such as the retail, cafe, restaurant and brewery are exposed to BAL-12.5
Element 2: siting and Design	A2.1 Asset Protection Zone (APZ)	The site will accommodate a highly landscaped, irrigated and managed Asset Protection Zones (APZ). The landscape plan is found in Appendix 1. The landscape, will be installed by the developer and maintained by the site managers. APZ standards are outlined in Appendix 2 have guided the development of the landscape plan (Appendix 1) The plan and checklist (Appendix 1) provide specific recommendations regarding tree removal and pruning requirements, shrub and ground fuel treatments. Ten accommodation cabins are exposed to BAL-FZ and a Bushfire Risk Assessment is undertaken to determine compliance with the Position Statement: Tourism land uses in bushfire prone areas. In the event of an approaching bushfire threatening the site, the primary action is to evacuate the site to the "sheltering area" located 200metres walk or drive directly east of the site.
Element 3: Vehicular Access	A3.1 Two access routes	The site has direct vehicular access to Dunn Bay Road and Cape Naturaliste Road. There are two carpark entrances and the surrounding public roads provides an east/west or north/south options to drive to and from the site. Therefore, there is provision for multiple access routes.
	A3.2 Public Road	Dunn Bay Road and Cape Naturaliste Road complies with minimum public road standards outlined in Appendix 2. A Transport Impact Assessment has been carried out by GTA Consultants (WA) Pty Ltd.
	A3.3 Cul-de-sac	There are no cul-de-sacs proposed.
	A3.4 Battle-axe	There are no battle-axes proposed.
	A3.5 Private drive-way longer than 50 metres	Two short driveways access the development site and carpark areas. The carpark off Cape Naturaliste Road is a loop carpark which contains a hard stand and hydrant access for fire appliances. The eastern driveway and carpark is 95

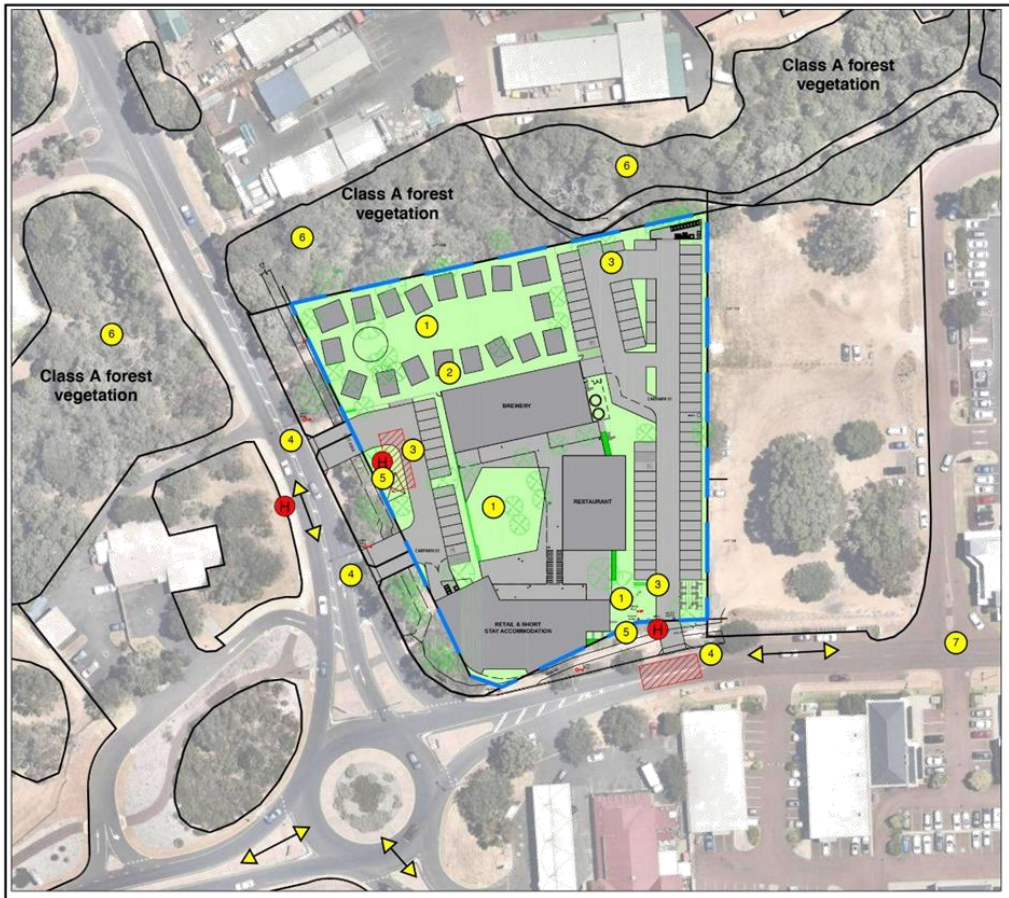
		metres long and finishes in a loop with a turnaround area designed by traffic consultants for fire appliances. GTA Consultants (WA) Pty Ltd have modelled swept paths for a slightly larger than 3.4 urban tankers and it easily negotiates both carparks, outlined in Appendix 9. Both driveways can be used to access the site in a loop, contain turnaround areas, and can comply with standards outlined in Appendix 2
	A3.6 Emergency access way	There are no emergency access ways proposed.
	A3.7 Fire Emergency access routes	Fire Appliance access to within 25 metres of all buildings on-site is achieved and there is no requirement for a Fire Service Access Route. GTA Consultants (WA) Pty Ltd have modelled swept paths for a slightly larger than 3.4 urban tankers and it easily negotiates both carparks, outlined in Appendix 9.
	A3.8 Firebreak width	The site does not require perimeter firebreaks and compliance with the current City of Busselton Firebreak and Fuel Load Notice (Appendix 5) is achieved with the landscaped outcome.
Element 4: Water	A4.1 Reticulated areas	The site is serviced by scheme water and water supply and hydrant coverage for the development has been developed by hydrological consultants 'IONIC'. A deemed to satisfy solution for hydrants and hose reels for fire compartments larger than 500mÂ² has been proposed. The fire hydrant coverage plan is found in Appendix 4 and contains hose reel and hydrant coverage to Building 1 and Building 2.
	A4.2 Non-reticulated areas	Not applicable
	A4.3 Individual lots within non-reticulated areas	Not applicable

6.2 Additional Management Strategies

The development of the site is a vulnerable land use under the State Planning Policy 3.7 because the visitors and users of the facility will be less able to respond in a bushfire emergency.

The development proposal is supported by a comprehensive Bushfire Evacuation Plan (Appendix 7) and Risk Assessment (Appendix 8). The site managers are responsible for ensuring safety of all people using the facilities during the fire weather periods when a large bushfire could occur.

A summary of management strategies is outlined in Figure 6.



Notes

1) The proposed Asset Protection Zone (APZ) includes the entire site and has been accommodated in the Landscape Plan (Appendix 1). Compliance with the intent of the APZ standards (Appendix 2) is achieved.

2) Predicted levels of radiant heat do not exceed BAL-29 on the southern row of cabins. Where the APZ is insufficient to exclude predicted levels of radiant heat on the north row of lots a risk assessment has been undertaken to demonstrate the full suite of mitigation strategies.

3) The Traffic Assessment has identified fire appliance access requirements in the carpark designs and turn-around areas including access to the hard stand areas and hydrants.

4) The carparks have three cross-overs and the surrounding public road system provides access to multiple different destinations.

5) The site is supplied with scheme water and a full analysis regarding water supply and hydrant pressure has been undertaken. Final hydrant locations are confirmed and ensure compliance with the BCA and DFES.

6) A corridor of Class A Forest vegetation occurs in Dugulup Brook Creek Reserve which could carry a small fire towards the site from a spot fire or small local ignition in the reserve.

7) The Dunsborough town centre is located 200 metres west of the site and offers a large local area where people can shelter and be exposed to less than 2kW/m2 radiant heat.

SUBJECT LAND

TWIN HEAD FIRE HYDRANT

DFES ACCESS AND HARD STAND

bushfire CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 262
www.bushfiresafetyconsulting.com.au

SCALE 1:1000 @ A3
DATE: NOVEMBER 2020

Location details:	Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date:	May, 2020
Prepared by:	Bushfire Safety Consulting
Accreditation level:	Level 3 BPAD Practitioner
Accreditation number:	BPAD 23160
Accreditation expiry date:	31st January, 2021
Date aerial photo:	February 2020

FIGURE 6 - SPATIAL REPRESENTATION OF BUSHFIRE MITIGATION STRATEGIES

7 RESPONSIBILITIES FOR BUSHFIRE MEASURES

Table 5 outlines the initial and ongoing responsibilities, actions and associated works that need to be undertaken by the Developer, City of Busselton and the site managers. The check boxes for implementation actions will be used for development clearance. A Bushfire Planning Practitioner will certify the BAL ratings are correct and necessary implementation actions have been completed.

Table 5. Responsibility for bushfire measures

DEVELOPER – PRIOR TO DA CLEARANCE		
No.	**Implementation action**	**Bushfire consultant clearance**
1	Establish the APZ according to the Landscape plan and standards outlined in this report and confirm BAL ratings.	☐

Certification by bushfire consultant

I _____, certify that at the time of inspection, the BAL ratings contained within this BMP are correct; and implementation actions 1 have been undertaken in accordance with the BMP.

Clearance by local government is recommended.

Signature: _____ Date: _____

SITE MANAGER (SOUTHCAMP PTY LTD) – ONGOING	
No.	**Management action**
2	Maintain the Asset Protection Zone (APZ) to the dimensions and standard stated in the BMP.
3	Comply with the City of Busselton on annual firebreak notice issued under s33 of the *Bush Fires Act 1954*.
4	Annually review and update the Bushfire Emergency Evacuation Plan
CITY OF BUSSELTON – ONGOING MANAGEMENT	
No.	**Management action**
5	Maintain public roads to minimum standards and ensure good access is maintained around the site.
6	Ensure compliance with the City of Busselton Firebreak and Fuel Hazard Reduction Notice

8 CONCLUSION

This Plan provides acceptable solutions and responses to the performance criteria that fulfil the intent of the bushfire hazard management issues outlined in the Guidelines for Planning in Bushfire Prone Areas (WAPC 2017 V1.3) and the Position Statement: Tourism Land Uses in bushfire prone areas

However, community bushfire safety is a shared responsibility between governments, fire agencies, communities and individuals.

The proposed development is located in the bushfire prone area (i.e. within 100 m of classified vegetation) and risk is reduced with the establishment of an APZ, water supply and hydrant and improved Fire Service Access. BAL-29 is exceeded for ten cabins and all remaining buildings are exposed to less than BAL-29. A risk assessment has been undertaken to assess the effectiveness of all mitigation strategies.

A minimum of two access options and water requirements for fire-fighting are met. A comprehensive Bushfire Emergency Evacuation Plan which specifically reflects the site conditions, users' needs and circumstances will be developed with the tenants after the new leasing arrangements have been negotiated and prior to occupation. The site is owned by Eldorado Pty Ltd and the Operator, Southcamp Pty Ltd will take responsibility for bushfire evacuation.

The proposed development will fall within the acceptable level of risk.

8 REFERENCES

DFES. (2017). *PREPARE. ACT. SURVIVE.*

http://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DES_Bushfire-Prepare_Act_Survive_Booklet.pdf

Standards Australia. 2018. Construction of buildings in bushfire-prone areas (Amendments 1-4), AS 3959-2009, Standards Australia International Ltd, Sydney.

Western Australian Planning Commission (WAPC). 2017. Guidelines for Planning in Bushfire Prone Areas. December 2017 V1.3. Western Australian Planning Commission and Department of Planning WA, Government of Western Australia.

Western Australian Planning Commission (WAPC). 2015b. State Planning Policy No. 3.7: planning in Bushfire Prone Areas (SPP3.7). December 2015. Western Australian Planning Commission and Department of Planning WA, Government of Western Australia.

APPENDICES

Appendix 1: Landscape Plan
Appendix 2: APZ standards
Appendix 3: Vehicular Access Technical Requirements and Fire Appliance Swept Paths
Appendix 4: Fire Hydrant Coverage Plan
Appendix 5: City of Busselton Firebreak and Fuel Hazard Reduction Notice
Appendix 6: Design Fire Modelling
Appendix 7: Bushfire Evacuation Plan
Appendix 8: Bushfire Risk Assessment

APPENDIX 1: Landscape Plan



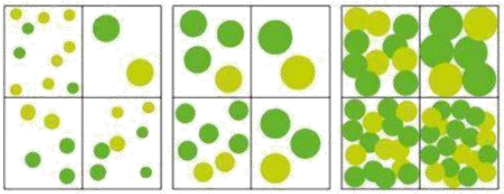
Appendix 2: APZ Standards

ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

- **Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- **Fine Fuel load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- **Trees (> 5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.

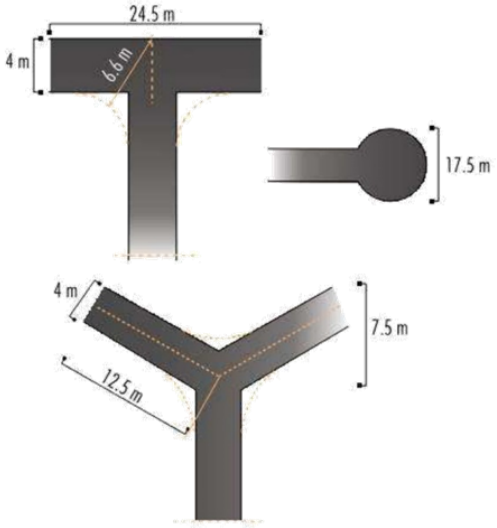
Figure 18: Tree canopy cover – ranging from 15 to 70 per cent at maturity



- **Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- **Ground covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- **Grass:** should be managed to maintain a height of 100 millimetres or less.

Appendix 3: Vehicle Access Technical Requirements & Fire Appliances Swept Paths

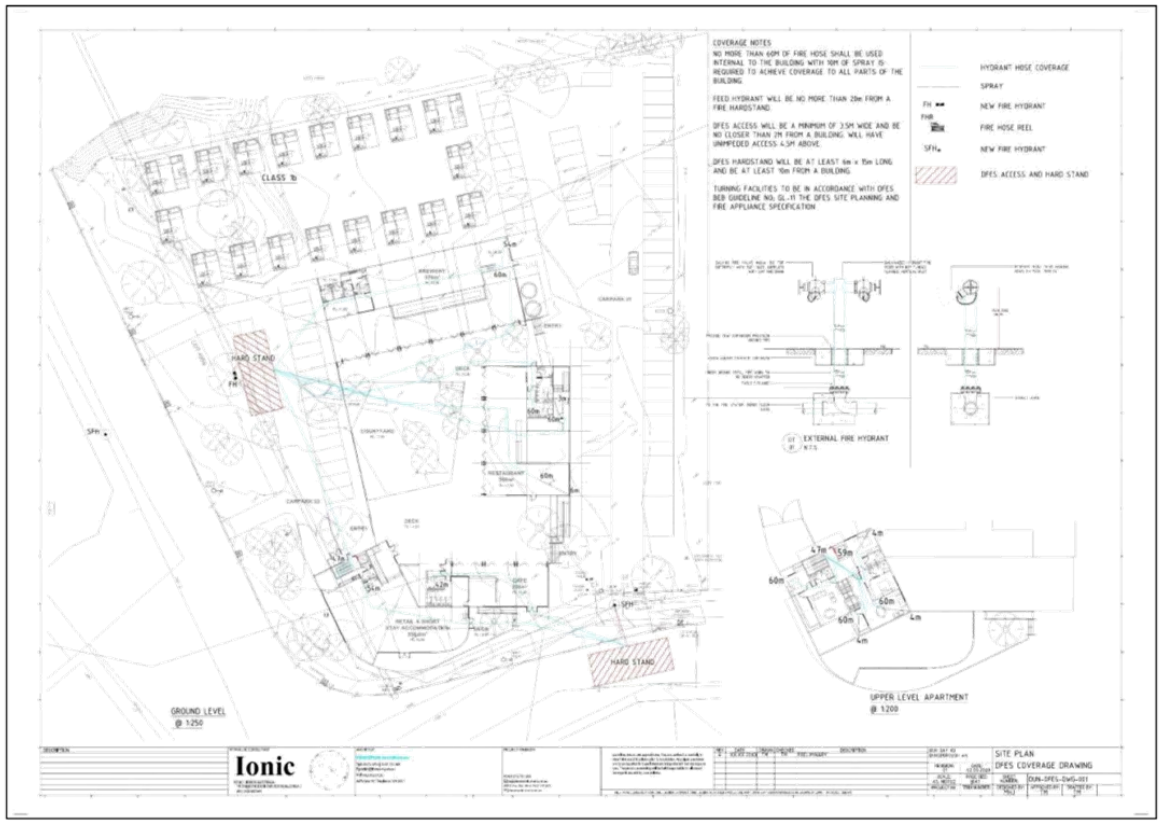
TECHNICAL REQUIREMENTS	1 Public road	2 Cul-de-sac	3 Private driveway	4 Emergency access way	5 Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 metres	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5
*Refer to E3.2 Public roads: Trafficable surface					



Minimum turn-around requirements for 3.4 fire appliances


8.29
1.59
4.50
MFB-MARK 5 PUMPER-SCANIA P320
Width : 2.50
Track : 2.47
Lock to Lock Time : 6.0
Steering Angle : 38.0

APPENDIX 4: Fire Hydrant Coverage Plan



APPENDIX 5: City of Busselton Firebreak and Fuel Hazard Reduction Notice

PERMITS TO BURN

Permits to Burn are required for the whole of the Restricted Burning Times and can only be obtained from the Fire Control Officer for your area

A list of Fire Control Officers is available on the City's website on the Fire and Emergency Services Information page

Most of our Fire Control Officers are volunteers, make sure you plan ahead if you intend to apply for a permit

A permit must be obtained before any burning takes place and the permit holder must be in possession of the permit throughout the duration of the burn.

The Fire Control Officer will require the following information prior to issuing a permit:

- The address of the property where it is proposed to conduct the burn
- Details of three able bodied persons who will be in attendance at the fire at all times whilst it is alight, including a contact phone number
- What fire-fighting equipment will be on-hand during the burn and confirmation it is in good working order
- Are there firebreaks installed at the property and can a fire appliance get access to the site of the burn
- What are the materials to be burned, are they dry, and what is the size of the proposed burn

The permit holder shall ensure all conditions of the permit, as shown on the permit, are fully complied with

Failure to obtain a permit or failure to fully comply with the conditions of a permit may result in a fine or prosecution

The hardest aspect of fire prevention is explaining to your family why you didn't undertake any!



Actions speak louder than words and actions save lives

GENERAL INFORMATION

Burning of Garden Refuse: pursuant to Section 24G(2) of the *Bush Fires Act 1954*, the burning of garden refuse is prohibited throughout the District during Prohibited Burning Times, and prohibited in Urban areas of the District during Restricted Burning Times

During Restricted Burning Times, a Permit to Burn is required for the burning of garden refuse in Rural Residential or Rural areas

Camping and/or Cooking Fires: pursuant to Section 25(1a) of the *Bush Fires Act 1954*, the lighting of fires in the open for the purpose of camping and/or cooking is prohibited throughout the District during Prohibited Burning Times

Pursuant to Section 25(1)(a) of the *Bush Fires Act 1954*, the lighting of fires in the open for the purpose of camping and/or cooking is prohibited when the Fire Danger Rating for the District is Very High or above without the written approval of the City

Fire Pits, Chimineas, and/or Braziers: pursuant to Section 25 of the *Bush Fires Act 1954*, the lighting of fire pits, Chimineas and/or braziers is prohibited during Prohibited Burning Times, and otherwise prohibited if the Fire Danger Rating for the District is Very High or above

Conditions for the Lighting and Extinguishing of Fires in the Open: when burning garden refuse; or lighting camping and/or cooking fires; or when lighting fire pits, Chimineas and/or braziers the space of ground around the site of the fire, having a radius of at least 3 metres from the site at the centre, is clear of all vegetation and other flammable materials

The person who lit the fire, or a person left in attendance at the fire as the case may be, shall completely extinguish the fire by the application of water and/or earth before that person leaves the site unattended

Further Information: for further fire safety information and resources, including current Fire Danger Ratings visit the Department of Fire and Emergency Services website www.dfes.wa.gov.au

KEY DATES

Dates may change due to seasonal fire conditions in which case details will be published in local newspapers and on the City's website

PROHIBITED BURNING TIME

1 December 2020 to 28 February 2021
(BURNING IN THE OPEN PROHIBITED)

RESTRICTED BURNING TIMES

15 October 2020 to 30 November 2020 inclusive and 1 March 2021 to 31 May 2021 inclusive
(BURNING PERMITS REQUIRED)
(Burning on Public Holidays Prohibited)

COMPLIANCE DATES

Rural Residential / Urban / Industrial Land
Compliance with this Notice must be achieved no later than 15 November 2020 and maintained until 12 May 2021

Rural Land
Compliance with this Notice must be achieved no later than 15 December 2020 and maintained until 12 May 2021

FIREBREAK INSPECTIONS AND RIGHT OF ENTRY

The City will commence its annual firebreak inspection program on 16 November 2020

Rangers are appointed as Bush Fire Control Officers under the provisions of the *Bush Fires Act 1954* (the Act) and carry out annual inspections.

Under the provisions of the Act, Bush Fire Control Officers may in the performance of their duties, enter any land or building including private property

FIREBREAK VARIATIONS

Where there are valid environmental and/or on-ground considerations which prevent full compliance with this Notice, landowners may apply to the City for a variation. A variation must be lodged in writing on a Firebreak and Fuel Hazard Reduction Variation Form which is available on the City's website. Applications for a variation must be submitted by 31 October 2020

City of Busselton
Geographe Bay

FIREBREAK AND FUEL HAZARD REDUCTION NOTICE

2020/2021 BUSH FIRE SEASON

FIRST AND FINAL NOTICE

Bush Fires Act 1954

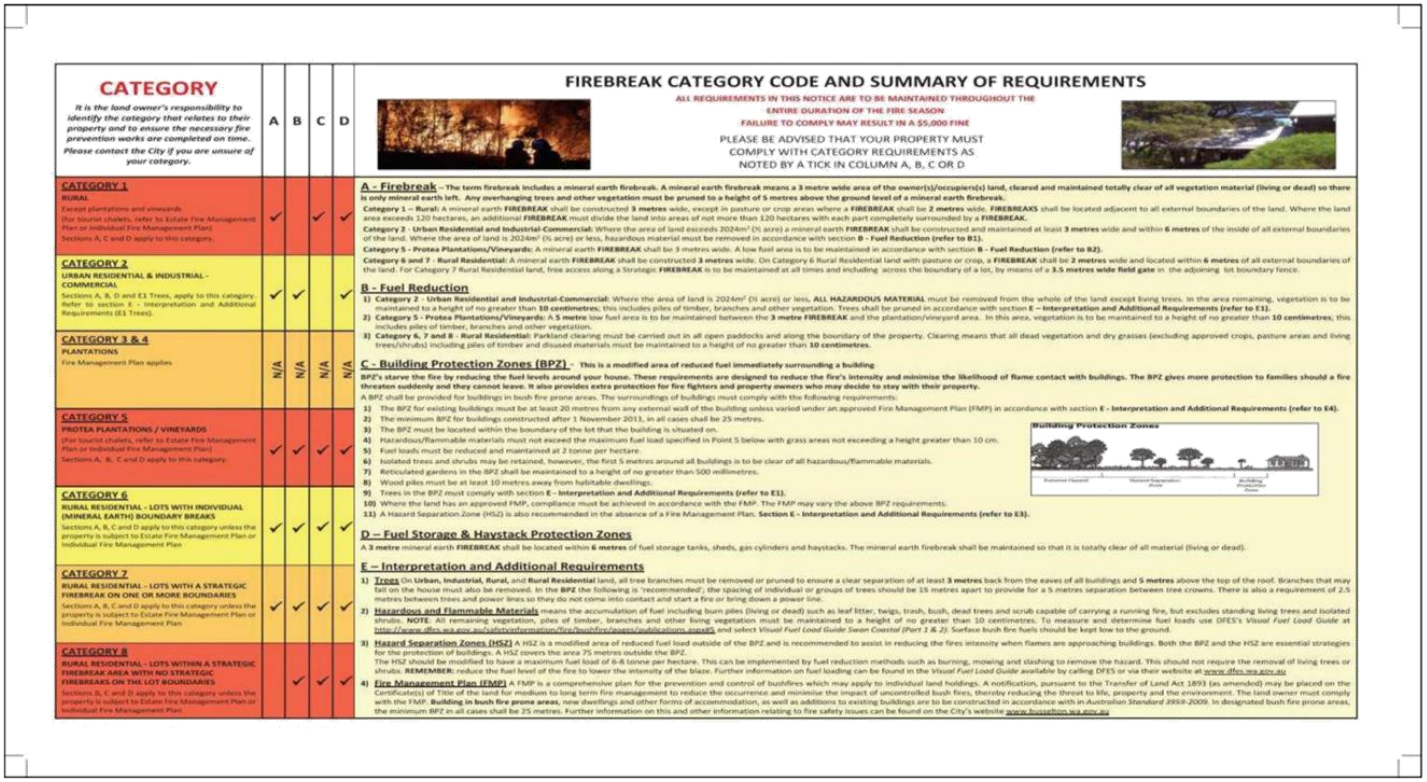
Take notice that pursuant to Part 3 Division 6 Section 33 of the *Bush Fires Act 1954*, landowner(s) or occupier(s) of land shall construct firebreaks and carry out fire prevention work in accordance with this Notice

Failure to comply with this Notice may result in a fine of up to

$5,000

Should you require assistance or clarification of the requirements of this Notice, please contact the City's Ranger and Emergency Services on 9781 0444

APPENDIX 5: City of Busselton Firebreak and Fuel Hazard Reduction Notice



CATEGORY

It is the land owner's responsibility to identify the category that relates to their property and to ensure the necessary fire prevention works are completed on time. Please contact the City if you are unsure of your category.

FIREBREAK CATEGORY CODE AND SUMMARY OF REQUIREMENTS

ALL REQUIREMENTS IN THIS NOTICE ARE TO BE MAINTAINED THROUGHOUT THE ENTIRE DURATION OF THE FIRE SEASON
FAILURE TO COMPLY MAY RESULT IN A $5,000 FINE

PLEASE BE ADVISED THAT YOUR PROPERTY MUST COMPLY WITH CATEGORY REQUIREMENTS AS NOTED BY A TICK IN COLUMN A, B, C OR D

	A	B	C	D
CATEGORY 1 RURAL Except plantations and vineyards (for tourist chalets, refer to Estate Fire Management Plan or Individual Fire Management Plan). Sections A, C and D apply to this category.	✓		✓	✓
CATEGORY 2 URBAN RESIDENTIAL & INDUSTRIAL - COMMERCIAL Sections A, B, D and E1 Trees, apply to this category. Refer to section E - Interpretation and Additional Requirements (E1 Trees).	✓	✓		✓
CATEGORY 3 & 4 PLANTATIONS Fire Management Plan applies	N/A	N/A	N/A	N/A
CATEGORY 5 PROTEA PLANTATIONS / VINEYARDS (For tourist chalets, refer to Estate Fire Management Plan or Individual Fire Management Plan) Sections A, B, C and D apply to this category.	✓	✓	✓	✓
CATEGORY 6 RURAL RESIDENTIAL - LOTS WITH INDIVIDUAL (MINERAL EARTH) BOUNDARY BREAKS Sections A, B, C and D apply to this category unless the property is subject to Estate Fire Management Plan or Individual Fire Management Plan	✓	✓	✓	✓
CATEGORY 7 RURAL RESIDENTIAL - LOTS WITH A STRATEGIC FIREBREAK ON ONE OR MORE BOUNDARIES Sections A, B, C and D apply to this category unless the property is subject to Estate Fire Management Plan or Individual Fire Management Plan	✓	✓	✓	✓
CATEGORY 8 RURAL RESIDENTIAL - LOTS WITHIN A STRATEGIC FIREBREAK AREA WITH NO STRATEGIC FIREBREAKS ON THE LOT BOUNDARIES Sections B, C and D apply to this category unless the property is subject to Estate Fire Management Plan or Individual Fire Management Plan		✓	✓	✓

A - Firebreak – The term firebreak includes a mineral earth firebreak. A mineral earth firebreak means a 3 metre wide area of the owner(s)/occupiers(s) land, cleared and maintained totally clear of all vegetation material (living or dead) so there is only mineral earth left. Any overhanging trees and other vegetation must be pruned to a height of 5 metres above the ground level of a mineral earth firebreak.

Category 1 – Rural: A mineral earth **FIREBREAK** shall be constructed **3 metres** wide, except in pasture or crop areas where a **FIREBREAK** shall be **2 metres** wide. **FIREBREAKS** shall be located adjacent to all external boundaries of the land. Where the land area exceeds 120 hectares, an additional **FIREBREAK** must divide the land into areas of not more than 120 hectares with each part completely surrounded by a **FIREBREAK.**

Category 2 - Urban Residential and Industrial-Commercial: Where the area of land exceeds 2024m² (½ acre) a mineral earth **FIREBREAK** shall be constructed and maintained at least **3 metres** wide and within **6 metres** of the inside of all external boundaries of the land. Where the area of land is 2024m² (½ acre) or less, hazardous material must be removed in accordance with section **B - Fuel Reduction (refer to B1).**

Category 5 - Protea Plantations/Vineyards: A mineral earth **FIREBREAK** shall be 3 metres wide. A low fuel area is to be maintained in accordance with section **B - Fuel Reduction (refer to B2).**

Category 6 and 7 - Rural Residential: A mineral earth **FIREBREAK** shall be constructed **3 metres** wide. On Category 6 Rural Residential land with pasture or crop, a **FIREBREAK** shall be **2 metres** wide and located within **6 metres** of all external boundaries of the land. For Category 7 Rural Residential land, free access along a Strategic **FIREBREAK** is to be maintained at all times and including across the boundary of a lot, by means of a **3.5 metres wide field gate** in the adjoining lot boundary fence.

B - Fuel Reduction

1) **Category 2 - Urban Residential and Industrial-Commercial:** Where the area of land is 2024m² (½ acre) or less, **ALL HAZARDOUS MATERIAL** must be removed from the whole of the land except living trees. In the area remaining, vegetation is to be maintained to a height of no greater than **10 centimetres**; this includes piles of timber, branches and other vegetation. Trees shall be pruned in accordance with section **E – Interpretation and Additional Requirements (refer to E1).**
2) **Category 5 - Protea Plantations/Vineyards:** A **5 metre** low fuel area is to be maintained between the **3 metre FIREBREAK** and the plantation/vineyard area. In this area, vegetation is to be maintained to a height of no greater than **10 centimetres**; this includes piles of timber, branches and other vegetation.
3) **Category 6, 7 and 8 - Rural Residential:** Parkland clearing must be carried out in all open paddocks and along the boundary of the property. Clearing means that all dead vegetation and dry grasses (excluding approved crops, pasture areas and living trees/shrubs) including piles of timber and disused materials must be maintained to a height of no greater than **10 centimetres.**

C - Building Protection Zones (BPZ) - **This is a modified area of reduced fuel immediately surrounding a building**

BPZ's starve the fire by reducing the fuel levels around your house. These requirements are designed to reduce the fire's intensity and minimise the likelihood of flame contact with buildings. The BPZ gives more protection to families should a fire threaten suddenly and they cannot leave. It also provides extra protection for fire fighters and property owners who may decide to stay with their property.

A BPZ shall be provided for buildings in bush fire prone areas. The surroundings of buildings must comply with the following requirements:

1) The BPZ for existing buildings must be at least 20 metres from any external wall of the building unless varied under an approved Fire Management Plan (FMP) in accordance with section **E - Interpretation and Additional Requirements (refer to E4).**
2) The minimum BPZ for buildings constructed after 1 November 2013, in all cases shall be 25 metres.
3) The BPZ must be located within the boundary of the lot that the building is situated on.
4) Hazardous/flammable materials must not exceed the maximum fuel load specified in Point 5 below with grass areas not exceeding a height greater than 10 cm.
5) Fuel loads must be reduced and maintained at 2 tonne per hectare.
6) Isolated trees and shrubs may be retained, however, the first 5 metres around all buildings is to be clear of all hazardous/flammable materials.
7) Reticulated gardens in the BPZ shall be maintained to a height of no greater than 500 millimetres.
8) Wood piles must be at least 10 metres away from habitable dwellings.
9) Trees in the BPZ must comply with section **E - Interpretation and Additional Requirements (refer to E1).**
10) Where the land has an approved FMP, compliance must be achieved in accordance with the FMP. The FMP may vary the above BPZ requirements.
11) A Hazard Separation Zone (HSZ) is also recommended in the absence of a Fire Management Plan. **Section E - Interpretation and Additional Requirements (refer to E3).**

D – Fuel Storage & Haystack Protection Zones

A **3 metre** mineral earth **FIREBREAK** shall be located within **6 metres** of fuel storage tanks, sheds, gas cylinders and haystacks. The mineral earth firebreak shall be maintained so that it is totally clear of all material (living or dead).

E – Interpretation and Additional Requirements

1) Trees On **Urban, Industrial, Rural,** and **Rural Residential** land, all tree branches must be removed or pruned to ensure a clear separation of at least **3 metres** back from the eaves of all buildings and **5 metres** above the top of the roof. Branches that may fall on the house must also be removed. In the **BPZ** the following is 'recommended'; the spacing of individual or groups of trees should be 15 metres apart to provide for a 5 metres separation between tree crowns. There is also a requirement of 2.5 metres between trees and power lines so they do not come into contact and start a fire or bring down a power line.
2) Hazardous and Flammable Materials means the accumulation of fuel including burn piles (living or dead) such as leaf litter, twigs, trash, bush, dead trees and scrub capable of carrying a running fire, but excludes standing living trees and isolated shrubs. **NOTE.** All remaining vegetation, piles of timber, branches and other living vegetation must be maintained to a height of no greater than 10 centimetres. To measure and determine fuel loads use DFES's *Visual Fuel Load Guide* at http://www.dfes.wa.gov.au/safetyandprevention/fire/bushfire/events/publications.asp#5 and select *Visual Fuel Load Guide Swan Coastal (Part 1 & 2).* Surface bush fire fuels should be kept low to the ground.
3) Hazard Separation Zones (HSZ) A HSZ is a modified area of reduced fuel load outside of the BPZ and is recommended to assist in reducing the fires intensity when flames are approaching buildings. Both the BPZ and the HSZ are essential strategies for the protection of buildings. A HSZ covers the area 75 metres outside the BPZ.
The HSZ should be modified to have a maximum fuel load of 6-8 tonne per hectare. This can be implemented by fuel reduction methods such as burning, mowing and slashing to remove the hazard. This should not require the removal of living trees or shrubs. **REMEMBER:** reduce the fuel level of the fire to lower the intensity of the blaze. Further information on fuel loading can be found in the *Visual Fuel Load Guide* available by calling DFES or via their website at www.dfes.wa.gov.au
4) Fire Management Plan (FMP) A FMP is a comprehensive plan for the prevention and control of bushfires which may apply to individual land holdings. A notification, pursuant to the Transfer of Land Act 1893 (as amended) may be placed on the Certificate(s) of Title of the land for medium to long term fire management to reduce the occurrence and minimise the impact of uncontrolled bush fires, thereby reducing the threat to life, property and the environment. The land owner must comply with the FMP. **Building in bush fire prone areas**, new dwellings and other forms of accommodation, as well as additions to existing buildings are to be constructed in accordance with *in Australian Standard 3959-2009.* In designated bush fire prone areas, the minimum BPZ in all cases shall be 25 metres. Further information on this and other information relating to fire safety issues can be found on the City's website www.busselton.wa.gov.au

Appendix 6: Performance Solution – Design Fires x 5

1. **AIM**

Provide a bushfire protection outcome that meets the performance requirements for the proposed development and;

- Approval under State Planning Policy No. 3.7 Planning in Bushfire Areas (2015); and
- Compliance with the Guidelines for Planning in Bushfire Prone Areas V1.3 and Australian Standard AS 3959-2018 Construction of buildings in bushfire-prone areas (Standards Australia 2018)
- Compliance with Position Statement: Tourism land uses in bushfire prone areas (2019)

2. **Objectives**

Determine the Radiant Heat Flux (RHF) exposure profile throughout the northern interface. Demonstrate that the exposure profile under specific design fire evaluation that includes:

- Class A Forest (Classified Vegetation) as default fuels loads specified in AS3959-2018
- FFDI is set at 80 as documented in AS3959-2018
- Site specific values for effective slope under classified vegetation and site slope
- Limited fire run and breadth analysis in the strip of existing vegetation on the northern perimeter of the site in the Dugulup Brook Creek Reserve.
- Site specific values for potential Fire Run and Fire Breadth based on Martin Alexander's (1985) elliptical fire growth model.

3. **Enforceable mechanism to maintain APZ within the site to the dimensions outlined in the BMEP.**

A condition of DA will be to re-assess the BAL ratings of the development and in doing so certify the internal APZ has been established and is being maintained to standards outlined in the BMEP. The planning condition and inspection to certify will ensure the APZ is established to the standards in the BMEP.

4. **Design Fires X 5**

The design fire assessment determines the level to which predicted radiant heat flux exposure (ie. BAL rating) from the strip of vegetation on the northern interface with the site impacts the chalets and other buildings. A method 1 BAL assessment has been undertaken for all other interfaces of the development.

The predicted bushfire attack is reduced by specific site factors that are different to those used in a method 1 BAL assessment in AS3959-2018. The predicted radiant heat flux received by the chalets on the northern interface is reduced by accurate assessment of site conditions and effective and site slope characteristics under the classified vegetation and between the vegetation and the site.

5. Specific Design Fire Inputs

Specific design fire inputs used to evaluate the design fires which is representative of the northern interface area. The area is listed below and detailed in tables 1-4 (provided).

Site slope analysis confirmed on-site using a forestry pro laser instrument to determine the effective slope and site slope under the Class A Forest vegetation in Dugulup Brook Creek Reserve.

Design Fire No. & Direction from site	Effective slope	Vegetation Classification	Site Slope	Surface fuel load (t/ha)	Overall fuel load (t/ha)	FFDI	Fire breadth at interface see Table 2
1 North	0 degree	Class A Forest	2 degrees	25	35	80	7.69 metres
2 North	4.4 degrees	Class A Forest	2 degrees	25	35	80	9.55 metres
3 North	0 degree	Class A Forest	2 degrees	25	35	80	12.63 metres
4 North	0 degree	Class A Forest	2 degrees	25	35	80	10.80 metres
5 North	3.6 degrees	Class A Forest	2 degrees	25	35	80	7.32 metres

Table 1: Summary of design fire Inputs

Short Fire Run Head Fire Width Calculation

Inputs				Outputs	
Fire Run Meters	FDI	Surface Fuel Load	slope	Total Fire length	Head Fire Width
21	80	1	0	21.70	7.69
26.1	80	1	0	26.97	9.55
34.5	80	1	0	35.66	12.63
29.5	80	1	0	30.49	10.80
20	80	1	0	20.67	7.32

Equation derived from :
Alexander, M. E. (1985, April). Estimating the length-to-breadth ratio of elliptical forest fire patterns. In Proc. 8th Conf. Fire and Forest Meteorology (pp. 287-304).

NOTE: Draft Only - to be used for A-Forest, B-Woodland and D-Scrub Vegetation Classifications and only for fire runs up to 100m (max)

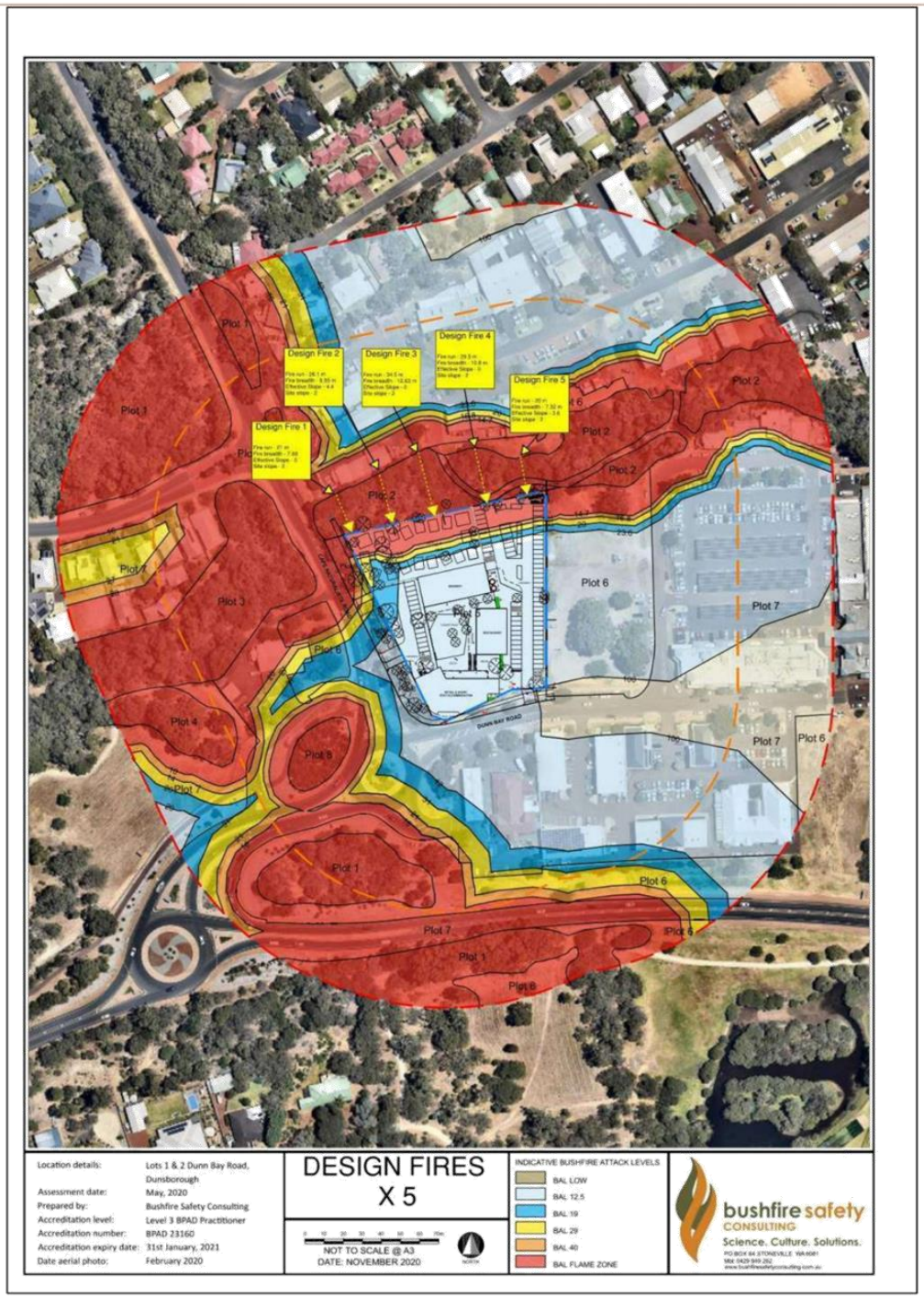
Disclaimer: *DFES will accept the use of the outputs from this draft calculator but reserve the right to withdraw its use at any time.*

Table 2: Total fire length – fire breadth analysis for the design fires

6. Methodology

- The Method 2 Approach to determine the radiant heat flux exposure and corresponding Bushfire Attack Level (BAL) is described in Appendix B Detailed method for determining the Bushfire Attack Level (BAL) – Method 2 in AS3959-2018.
- Site specific values for potential Fire Run and Fire Breadth based on Martin Alexander's (1985) elliptical fire growth model
- Site specific inputs and bushfire modelling calculations were undertaken using the software tool Bushfire Attack Level Minimum Distance Calculator (MDc) version 4.8 developed by Flamesol and the Fire Protection Association of Australia
- The Bushfire Attack Level Minimum Distance Calculator (MDc) version 4.8 is a software tool approved for use by the FPAA that implements the Method 2 bushfire behaviour and view factor calculations and heat transfer models to determine the exposure of a site to a radiant heat flux
- Elevation of Receiver is set at 6.4 metres as this is the maximum height of the proposed cabins facing the Dugulup Brook Creek Reserve. This will ensure the maximum predicted radiant heat flux (ie. BAL rating) is received by each proposed chalet.
- The design fires have been sited in 5 separate locations on the northern interfaced, to reflect a spot over ignition or single ignition in the reserve on the northern edge of the vegetation. A large landscape fire approaching the site from the north-west has a number of areas with no vegetation including roads, residential and light industrial areas and areas currently under development. Breaks in continuous vegetation very in width between 50 metres and 400 metres. A fire spotting over these breaks will not form a continuous fire front at the development edge and are likely to be individual spot fires in the narrow reserve that burn through individually and present with restricted fire widths.

A continuous fire run exits to the south-west of the site.


Design Fire 1
Design Fire 2
Design Fire 3
Design Fire 4
Design Fire 5
Plot 1
Plot 2
Plot 3
Plot 4
Plot 5
Plot 6
Plot 7
Plot 8
DUNN BAY ROAD
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020
DESIGN FIRES X 5
NOT TO SCALE @ A3
DATE: NOVEMBER 2020
INDICATIVE BUSHFIRE ATTACK LEVELS
BAL LOW
BAL 12.5
BAL 19
BAL 29
BAL 40
BAL FLAME ZONE
bushfire safety CONSULTING
Science. Culture. Solutions.

7. Results

To assist in determining the BAL outcomes for the chalets at this site, values for BAL-40, BAL-29, BAL-19 and BAL-12.5 have been determined using the same methodology.

The results of the radiant heat flux analysis are summarised below in Table 3 which incorporates the design fire inputs and outputs.

Design Fire	Length & Direction Fire run originates	Flame Width (Alexander 1985) (metres)	Vegetation Classification	Effective Slope (°)	Site Slope	FFDI	Separation - metres	BAL Rating
1	21m north	7.69 m	Class A Forest	0	2	80	12.1	BAL-40
							13.7	BAL-29
							15.9	BAL-19
							18.6	BAL-12.5
2	26.1m north	9.55 m	Class A Forest	4.4	2	80	15.8	BAL-40
							17.6	BAL-29
							20.4	BAL-19
							23.6	BAL-12.5
3	34.5m north	12.63m	Class A Forest	0	2		13.3	BAL-40
							15.4	BAL-29
							18.4	BAL-19
							22	BAL-12.5
4	29.5m north	10.80m	Class A Forest	0	2	80	12.9	BAL-40
							14.8	BAL-29
							17.6	BAL-19
							20.9	BAL-12.5
5	20m north	7.32m	Class A Forest	3.6	2	80	14.5	BAL-40
							16.1	BAL-29
							18.3	BAL-19
							21.1	BAL-12.5

Table 3: Radiant Heat Flux analysis and BAL outcomes for the Design Fires.

The predicted RHS exposure summarised in table 3 shows that a fire burning towards the site in the Dugulup Brook Creek Reserve utilising site specific inputs results in a reduced predicted radiant heat flux. The BAL Contour Plan (Figure 5) in the BMEP outlines the results.

8. Conclusion

The design fires demonstrate that the site is less exposed to predicted radiant heat flux levels on the northern interface when compared to a landscape scale bushfire. A 100m wide bushfire front cannot evolve in the strip of forest vegetation in Dugulup Brook Creek Reserve and as a large fire fragments approaching the site only spot fires can take hold and burn the short distance into the site from the north.

9. Modelling Data - Design Fires 1-5

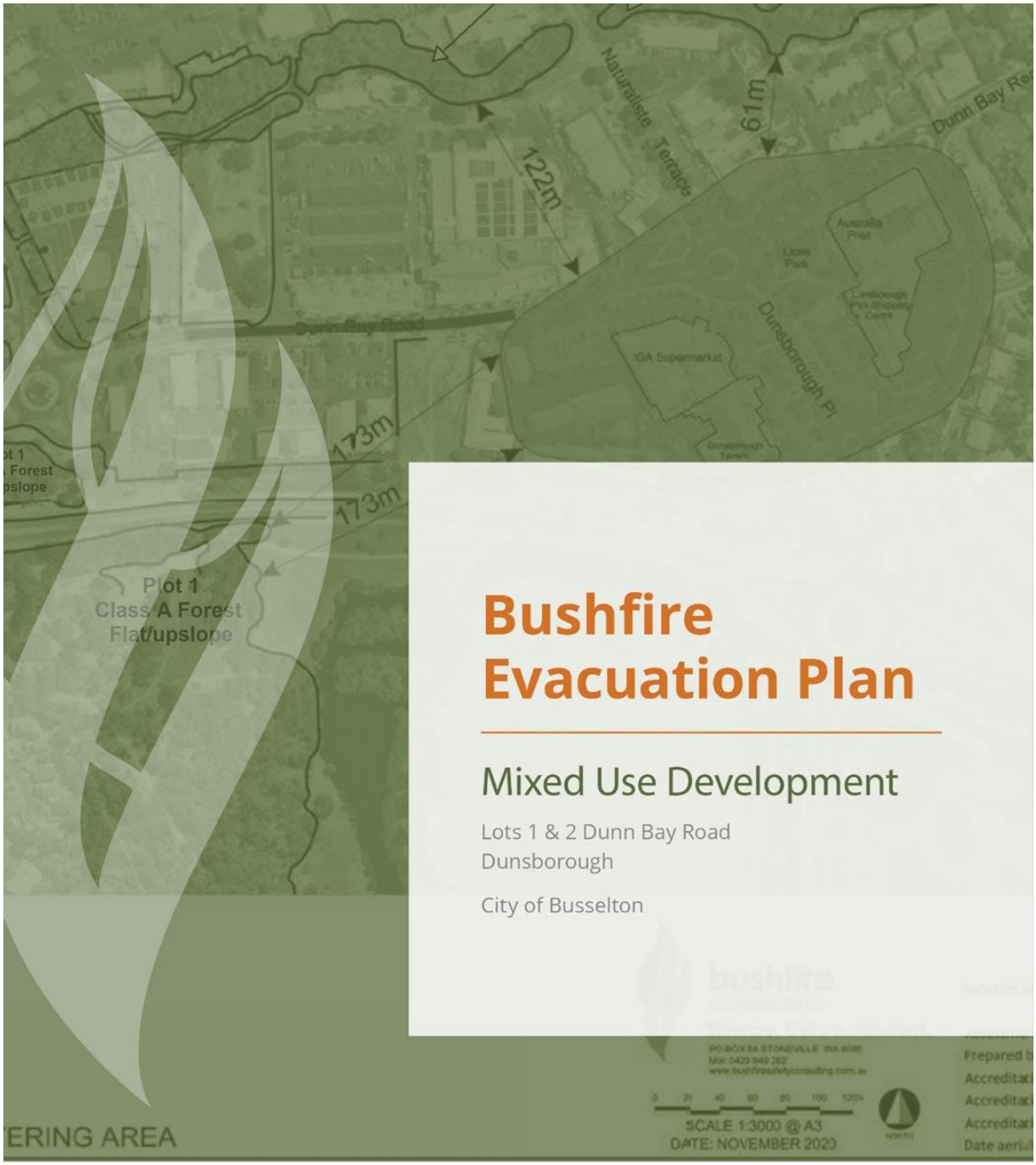












Bushfire Evacuation Plan

Mixed Use Development

Lots 1 & 2 Dunn Bay Road
Dunsborough

City of Busselton

bushfiresafety CONSULTING
Science. Culture. Solutions.

Prepared For:
Place Development
11 November 2020
Version 2.0

bushfiresafetyconsulting.com.au

Site Details

Name of Facility		Hospitality, Retail and Accommodation Village	
Address		Lots 1 and 2 Dunn Bay Road, Dunsborough	
Prepared by (Practitioner)		Rohan Carboon BPAD Level 3 – 23160 Dr Karen Brown BPAD Level 1 – 48364	
Owner/operator		Eldorado Pty Ltd	
Date	13/11/2020	**Plan Version**	2.0

Document Control

VERSION	DATE	DETAILS	UNDERTAKEN BY
V1	3/11/2020	Draft for review	Rohan Carboon BPAD Level 3 – 23160 Dr Karen Brown BPAD Level 1 – 48364
V2	13/11/2020	Final for submission	Rohan Carboon BPAD Level 3 – 23160

Emergency Management Team

TITLE	POSITION/ NAME	CONTACT DETAILS
Chief Warden	**To be confirmed prior to facility use**	**To be confirmed prior to facility use**
Area Warden	**To be confirmed prior to facility use**	**To be confirmed prior to facility use**
Area Warden	**To be confirmed prior to facility use**	**To be confirmed prior to facility use**
Area Warden	**To be confirmed prior to facility use**	**To be confirmed prior to facility use**

TABLE OF CONTENTS

1. Facility Details....3
2. Responsibilities....4
3. Emergency Contacts....6
4. Preparation....7
5. Awareness and Pre-emptive Procedures....9
6. Emergency Procedure - Location and Transport Details....10
   6.1 Evacuation....10
   6.2 Shelter in Place....10
7. Emergency Response....13
   Evacuation....13
   Shelter in Place....14
   Recovery....14

LIST OF TABLES

Table 1 - Responsibility for implementing the emergency procedures in the event of a bushfire...4
Table 2 – Emergency Contacts in the event of a bushfire....6
Table 3 – Bushfire preparedness actions to be undertaken....7
Table 4 – Bushfire awareness and pre-emptive procedures to be undertaken....9
Table 5 – Evacuation Details....10
Table 6 – Evacuation Procedure....13
Table 7 – Shelter in Place Procedure....14

LIST OF FIGURES

Figure 1 – Bushfire Emergency Site Layout Plan....11
Figure 2 – Evacuation Route Plan....12

LIST OF APPENDICES

Appendix 1: Bushfire Response Decision Making Flowchart
Appendix 2: Fire Danger Ratings and their Meanings
Appendix 3: Details of Fire Warning Levels
Appendix 4: Shelter in Place - Details to be provided to Emergency Authorities
Appendix 5: Bushfire Emergency Evacuation Plan Assessment
Appendix 6: Policy, Assessment Criteria and Design Fire Modelling – Sheltering Area

1. Facility Details

This plan has been designed to assist management to protect life in the event of a bushfire. It outlines procedures for both **evacuation** and **shelter-in-place** to enhance the protection of occupants from the threat of a bushfire.

The primary action to follow in a bushfire emergency is to **EVACUATE** if it is assessed as being safe to do so.

In the highly unlikely event that the risk associated with evacuation is assessed as being greater than the risk of sheltering on site, the alternative action to follow in a bushfire emergency will be to **SHELTER IN PLACE.**

A summary of facility details are outlined below.

Name of on-site contact person	To be confirmed prior to facility use.
Position/ role of contact person	To be confirmed prior to facility use.
Phone number of contact person	To be confirmed prior to facility use.
Type of facility	Hospitality, retail and short stay accommodation
Number of buildings	Five – Boutique Hotel, Brewery and Bar, Kitchen and Dining, Café, and Retail with short stay accommodation.
Number of employees:	To be confirmed prior to facility use. Approximately 10 to 20 staff in hospitality areas (depending on time of day), and 2 to 4 retail staff are currently planned.
Total number of occupants (users)	Maximum number of patrons in the village complex to be capped at 1000.
Number of occupants with support needs:	Children will be present under the supervision of accompanying responsible adult. Small varying numbers of disabled or elderly persons may utilize the site at times.
Description of support needs	Children will need direction and supervision from accompanying responsible adult to respond to a bushfire emergency. People with asthma may be present and require extra consideration and/ or assistance with avoiding smoke and using personal medication if required during a bushfire event. People with a disability may require extra assistance during a bushfire emergency.

2. Responsibilities

The Emergency Management Team are responsible for meeting prior to each bushfire season (1st of December, or as declared by the City of Busselton) to update and refine bushfire emergency roles and responsibilities, as well as procedures and responses to a bushfire emergency. This is a living document that should be regularly reviewed and updated so as to be accurate and well suited to the user's requirements in a bushfire emergency.

Table 1 - Responsibility for implementing the emergency procedures in the event of a bushfire.

Area of Responsibility	Name of Staff Member/s	Staff Position and Identification Item	Responsibilities	Phone Number
Chief Warden	**TBC prior to facility use**	**TBC prior to facility use** If not available, then **TBC prior to facility use**	• Monitor the Fire Danger Rating daily and if there is a fire danger rating of High or greater, ensure appropriate monitoring procedures (see Table 4). Ensure pre-emptive closure on days of Catastrophic warnings; • Should a bushfire be identified, evaluate the need to evacuate or shelter in place using Bushfire Response Decision Making Process Flowchart (Appendix 1). See Table 2 for Emergency Contact numbers; • All occupant names and mobile numbers are to be obtained by the Fire Warden to ensure they can be contacted in the event of bushfire • Initiate evacuation or shelter in place procedures as required; • Advise authorities that an evacuation or shelter in place is underway, including DFES and Police (see Table 2 for Emergency Contact numbers). Maintain communication with emergency services and all users of the facility; • Consider requirements of people with high needs, such as children, those that are less mobile, or are asthmatic; • Ensure that all occupants are accounted for and have evacuated; • Maintain contact with all occupants when off site and communicate with the emergency services of the evacuation and taking up refuge, if provided; • Details of all occupants and those with special support requirements are to be passed on to the emergency services in the event of bushfire; • After the event, ensure buildings and grounds are safe before the return of normal facility use. • Document the circumstances of the emergency, communications, processes and outcome. Review BEEP with input from EMT.	**TBC prior to facility use**

Area Warden	**TBC prior to facility use**	**TBC prior to facility use** If not available, then **TBC prior to facility use**	• Assist Chief Warden. Liaise between Chief Warden and other facility users if required; • Oversee assembly of people present to safer building when required; • Ensure all buildings are cleared and locked down in event of evacuation (see Section 7.1); • Ensure all people present are accounted for (particularly children) and follow up on any reported missing persons; • Be aware of people with mobility issues, medical conditions, or for which there is an increased risk of harm or trauma. Allocate support if required; • Maintain communication with, and update the Chief Warden with situation reports; • Provide situational information to people present; • Isolate the gas supply at the main valve if relevant and safe to do so; • Ensure windows and doors of buildings are closed. Turn off evaporative air conditioners but keep water circulating over filter elements if possible. • Turn on irrigation to wet landscaped areas. • Coordinate orderly evacuation of people present to vehicles if evacuation is initiated by Chief Warden. • Coordinate traffic flows in carpark and ensure traffic moves in an orderly fashion away from bushfire threat if required. • Ensure shelter in place actions are implemented in the unlikely event that shelter in place option is initiated by Chief Warden (see Section 7.2); • Once emergency threat or event has passed, liaise with Chief Warden and assist in facilitating return of normal facility use when instructed it is safe to do so. Contribute to debriefing.	**TBC prior to facility use**
First Aid Officer	**TBC prior to facility use**	**TBC prior to facility use** If not available, then **TBC prior to facility use**	• Retrieve first aid kit and supplies. Take to safer building - Restaurant; • Evaluate any injuries or conditions requiring first aid assistance if required; • Administer first aid if safe to do so; • Assess if those requiring further medical assistance can be evacuated safely and coordinate if so.	**TBC prior to facility use**

3. Emergency Contacts

Table 2 – Emergency Contacts in the event of a bushfire.

Name or Organisation	Office/ Contact	Contact Details
Fire, Police, Ambulance	Fire or Emergency	000
Department of Fire & Emergency Services (DFES)	Emergency Information	13 DFES (13 33 37)
Department of Fire & Emergency Services (DFES)	Contact	9395 9300
EmergencyWA	Warnings and Incidents	www.emergency.wa.gov.au
City of Busselton	Fire Control Officer	9781 0444
Local Hospital	Emergency – Busselton Hospital	9753 6000
Local Police Station	Dunsborough Police Station	9781 3030 or 131 444
SES	State Emergency Service	132 500
Water	Water Corporation	13 13 75
Gas	ATCO Gas Australia	13 13 52
Electricity	Western Power	13 13 51
Main Roads WA	Road Conditions	138 138
Other –		

4. Preparation

The bushfire season in the City of Busselton is between **1st December through to 28th February**, each year, unless extended due to seasonal conditions. Table 3 lists the bushfire preparedness actions that must be undertaken throughout the year, including ongoing, just prior, and during the bushfire season.

Table 3 – Bushfire preparedness actions to be undertaken

Actions	Frequency	Responsible Person
Ongoing		
1. All Wardens should be informed of and trained in relation to all information contained in this document; individual roles and responsibilities; access and egress routes; safer area assembly point location; and written shelter in place and evacuation procedures. **2.** Fire-fighting equipment and water supply infrastructure, including smoke detectors and hydrants, to be checked and maintained regularly according to servicing schedules. **3.** Ensure no modifications or alterations that may affect BAL ratings are made to the buildings, or structures placed within 10 metres of the buildings, without prior development approval and Bushfire Management Plan revision.	As required	**Chief Warden TBC prior to facility use**
To be completed just prior to the bushfire season each year (1st December)		
1. Practice shelter in place and initial evacuation procedures with staff, including use of communication devices and procedures, as well as EMT Identification Items. Briefing should occur prior to each such drill and a debriefing should follow any drill to discuss issues regarding the implementation of the plan. **2.** Organise Emergency Management Team meeting to review and revise details annually prior to bushfire season, including Emergency Management Team members and contact numbers, agreed roles, and numbers of emergency contacts. In addition, revision of procedures should occur annually, following any bushfire in the area, and after an evacuation drill. Ensure Evacuation Diagram is clearly displayed. **3.** Ensure Asset Protection Zone (APZ) is established and maintained according to the standards outlined in the Bushfire Management Plan, and that compliance with the City of Busselton Firebreak Notice is achieved.	Annually	**Chief Warden TBC prior to facility use**

Lots 1 & 2 Dunn Bay Road, Dunsborough – Bushfire Emergency Evacuation Plan

To be completed regularly during the bushfire season between 1st December to 28th February		
1. Ensure areas around buildings to a distance of 10 metres is free of flammable materials and that APZ is maintained to the standards outlined in the Bushfire Management Plan. Regularly remove leaf and twig materials that collect in gutters or against buildings. Ensure turf is kept well irrigated and maintained to 5cm in height. **2.** Ensure monitoring for bushfires is carried out on days with Fire Danger Rating of High or greater in accordance with Section 5 (see Table 4). **3.** Facilitate facility closure on days with Catastrophic Fire Danger Ratings.	Ongoing	**Chief Warden** **TBC** **prior to facility use**

5. Awareness and Pre-emptive Procedures

Table 4 outlines actions to be undertaken to ensure that users of the facility maintain situational awareness of a possible bushfire approaching and pre-emptive procedures. This will assist with the assessment of the bushfire situation and whether the triggers identified in the evacuation/ sheltering-in-place procedures have occurred. Appendix 2 provides more information on the Fire Danger Rating system.

Table 4 – Bushfire awareness and pre-emptive procedures to be undertaken

Actions	Predicted Fire Behaviour	Responsible Person
Days forecast Low, Moderate or High		
No specific monitoring required, but wardens and users alert for any signs of smoke.	Fire likely to be controlled, but possibly unpredictable and hard to control if windy.	**Chief Warden TBC prior to facility use**
Days forecast Very High		
1. Monitor Websites hourly; 2. Monitor ABC Radio during broadcasts at 15 minutes before and after the hour; 3. Assess for smoke by walking around the facility observing the surroundings every hour.	Hot, dry and possibly windy conditions, fire may be hard to control.	**Chief Warden TBC prior to facility use**
Days forecast Severe		
1. Monitor Websites hourly; 2. Monitor ABC Radio during broadcasts at 15 minutes before and after the hour; 3. Assess for smoke by walking around the facility observing the surroundings every half hour.	Very hot, dry and windy conditions, fire will be unpredictable, move very fast and be difficult for firefighters to bring under control. Spot fires will start and move quickly. Embers may come from many directions.	**Chief Warden TBC prior to facility use**
Days forecast Extreme and Catastrophic		
1. Monitor Websites hourly; 2. Monitor ABC Radio during broadcasts at 15 minutes before and after the hour; 3. Assess for smoke by walking around the facility observing the surroundings every 15 minutes.	Uncontrollable fire, the worst conditons possible Extremely hot, dry and windy conditions, fire will be unpredictable, move very fast and be difficult for firefighters to bring under control. Spot fires will start and move quickly. Embers may come from many directions. Buildings are not designed or built to withstand a fire in these conditions. The only safe place is away from bushfire risk areas.	**Chief Warden TBC prior to facility use**

6. Emergency Procedure - Location and Transport Details

6.1 Evacuation

Details of evacuation from the facility if required are given in Table 5. Evacuation procedure is provided in Section 7.1.

Table 5 – Evacuation Details

Designated evacuation assembly area:	Facility users to assemble in **Restaurant** if required (see Figure 1 for site layout).
Primary off-site evacuation location:	Away from bushfire prone areas, in direction away from bushfire threat, including to Dunsborough Central Shopping Centre 200m to the east, or any built up area well away (more than100m) from bushfire prone vegetation is suitable.
Secondary off-site evacuation location:	To evacuation centre as determined in consultation with City of Busselton and/ or emergency services at time of incident if required.
Primary route for evacuation:	Private vehicle transport 200 metres east along Dunn Bay Road towards Dunsborough built up areas, including Dunsborough Central Shopping Centre, Lions Park (see Figure 2).
Secondary route for evacuation:	Evacuation could occur in a northern direction along Cape Naturaliste Road, to built-up urban areas to the north of the facility, in the highly unlikely event evacuation to the east is not possible.
Primary transportation arrangements:	Facility users will generally have private vehicles at the site which can be used for evacuation purposes. Walking away from the site for the short distance of 200 metres is also a viable option for evacuation.
Secondary transportation arrangements:	Unlikely to be required. If necessary, evacuees can walk 200 metres to the east along Dunns Bay Road to leave bushfire prone areas.

6.2 Shelter in Place

The safest option during a bushfire is to evacuate early as buildings at the site are not designed to shelter people from bushfire. It is highly unlikely that facility users will need to shelter in place given the short evacuation distance away from bushfire prone areas and its proximity to built-up areas to the north, east, south-east and south-west. In the unlikely event it is safer for users to shelter in place than to evacuate, the on-site safer building to shelter in if required is the **Restaurant** building. Shelter in place procedures are outlined in Section 7.2.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
BREWERY
CARPARK 01
COURTYARD
AWNING
RESTAURANT
DECK
DECK
CARPARK 03
RETAIL & SHORT
STAY ACCOMMODATION
LOT 109
LOT 108
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020
SCALE 1:500 @ A3
DATE: NOVEMBER 2020
NORTH
LEGEND:
SUBJECT LAND
SHELTER IN PLACE BUILDING
DIRECTION FOR EVACUATION
FIRE HYDRANT
SOURCE OF PHOTOGRAPHY: NEARMAP
bushfire safety
CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 282
www.bushfiresafetyconsulting.com.au


Plot 1
Class A Forest
Flat/upslope
Plot 2
Class A Forest
Downslope 0-5
Plot 2
Class A Forest
Downslope 0-5
Naturaliste Terrace
61m
122m
Dunn Bay Road
Australia Post
Lions Park
Dunsborough Park Shopping Centre
IGA Supermarket
Dunsborough Pl
Dunsborough Tavern
Dunn Bay Road
173m
173m
Plot 1
Class A Forest
Flat/upslope
Plot 1
Class A Forest
Flat/upslope
LEGEND
SUBJECT LAND
BUSHFIRE SHELTERING AREA (exposed to < 2kW/m2)
ACCESS TO SHELTERING AREA
BUSHLAND EDGE
BUSHFIRE EVACUATION ROUTE AND SHELTERING AREA
bushfire CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 262
www.bushfiresafetyconsulting.com.au
0 20 40 60 80 100 120m
SCALE 1:3000 @ A3
DATE: NOVEMBER 2020
NORTH
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020

7. Emergency Response

The primary action to follow with an imminent bushfire threat is to **EVACUATE** if enough time and safe to do so. Shelter in place procedures during a bushfire would only occur if the risk of evacuation was greater than the risk of sheltering in place.

7.1 Evacuation

The key to a safe evacuation is evacuating well before the fire front is adjacent to the site and while evacuation routes are not threatened or have poor visibility. Table 6 shows the procedures that should be implemented if the decision to evacuate has been made.
The following are triggers for evacuation:

- Receipt of an official warning to evacuate from the emergency authorities. Details of official warning levels are provided in Appendix 3. These official warnings, however, must be assessed against the local conditions and needs of facility users before evacuation is undertaken and therefore advise should also be sought directly from emergency services if unsure.
- When it is judged by the Chief Warden, using the tools provided in this document, that a bushfire has the potential to impact the site and evacuation is safer than to shelter in place (see Appendix 1 for Bushfire Assessment Flow chart).

Table 6 – Evacuation Procedure

Action	Responsible Person/s
1. Consult with or notify emergency services of decision to evacuate and what the proposed safe route and destination will be (see Figure 2 for Evacuation Route Plan);	**Chief Warden**
2. Calmly notify facility users that a bushfire evacuation is underway;	**Area Warden/s**
3. Ensure the site is completely evacuated before the site is secured;	**Area Warden/s**
4. Evacuate to identified safer location if still assessed as being safe to do so.	**Chief Warden**

7.2 Shelter in Place

The trigger to shelter in place is an assessment by the Chief Warden, that a bushfire is likely to impact the facility and there is a risk evacuation would take too long and / or result in a higher risk to facility users wellbeing than sheltering in place. The Safer Bushfire Building in which to shelter in is the **Restaurant** building (see Figure 1). Table 7 shows the procedures that should be implemented once the decision to shelter in place has been made.

Table 7 – Shelter in Place Procedure

Action	Responsible Person/s
1. If not already consulted, advise emergency authorities of the decision to shelter in place using contact numbers in Table 2 (see Appendix 4 for details to be provided);	**Chief Warden**
2. Calmly notify facility users of the decision to shelter in place. All present to assemble in Safer Building – the Restaurant building (Figure 1);	**Area Warden/s**
3. Ensure that all facility users have moved to the safer area and are accounted for;	**Area Warden/s**
4. Close all windows and doors to buildings if safe to do so. If installed, turn off air-conditioning units but continue to run water over the filter with the fan turned off if possible;	**Area Warden/s**
5. Isolate the gas supply at the main valve if relevant and safe to do so, turn on reticulation sprinklers to wet area around safer area if possible;	**Area Warden/s**
6. Be prepared to shelter from life threatening radiant heat and falling embers when the fire front is close. Avoid inhalation of smoke as much as possible by breathing through wet fabric;	**Area Warden/s**
7. Keep alert for any embers that could start fires in immediate surrounds and extinguish as soon as possible before and after fire front has passed;	**Area Warden/s**
8. Monitor wellbeing of people present and respond as appropriate. Ensure everyone is well hydrated and as cool as possible.	**Area Warden/s**
9. Remain in building until advised by DFES or Police that the fire is no longer a threat or until evacuated off-site by Emergency Services. If building catches fire and is no longer tenable to shelter in, calmly evacuate building to open space away from burning vegetation or structures.	**Area Warden/s**

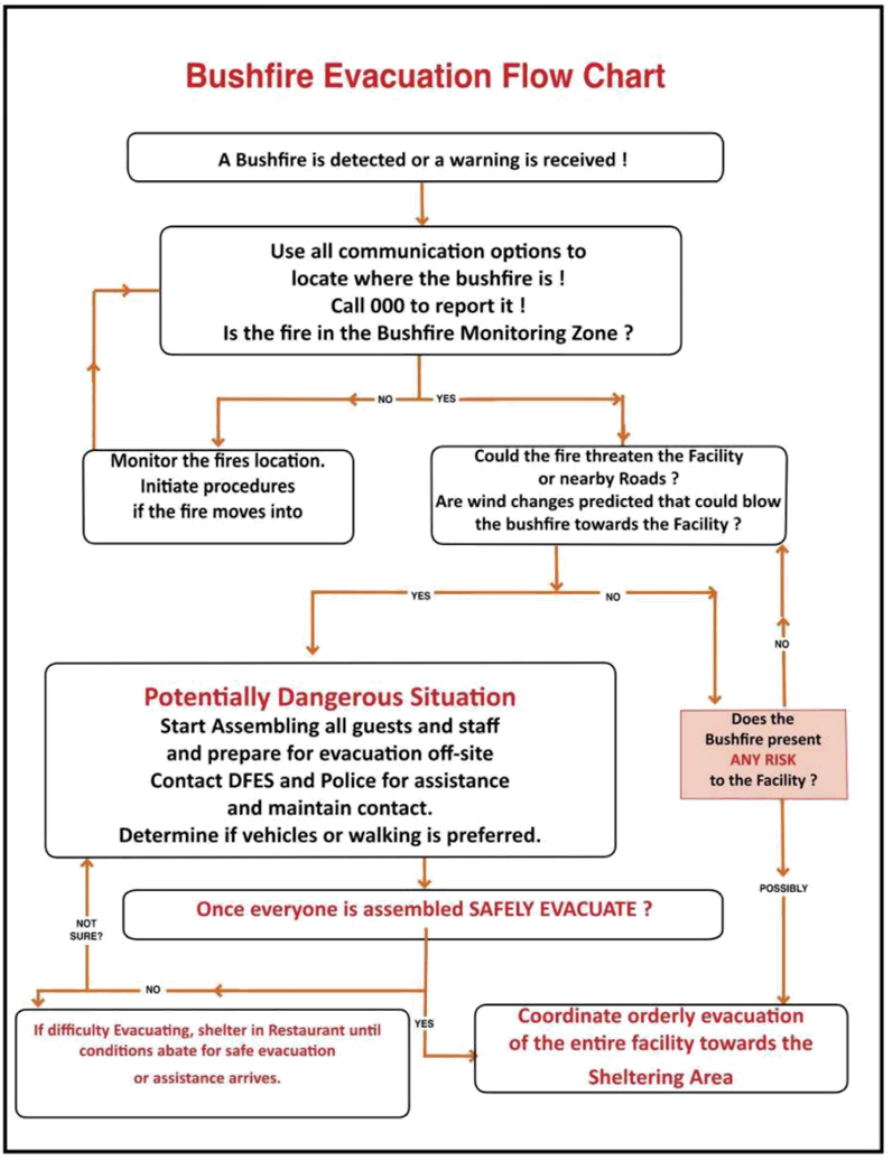
7.3 Recovery

When notified of all clear by Emergency Services, assess if there is any damage to the buildings and facilities. Do not resume use of the facilities and grounds until it is determined that it is safe to do so. Continue to monitor the buildings and grounds for any sign of fire for up to 24 hours after the bushfire incident. A review of this Bushfire Emergency Evacuation Plan, including the response of facility users, should be undertaken following any bushfire in the area and/or after an evacuation.

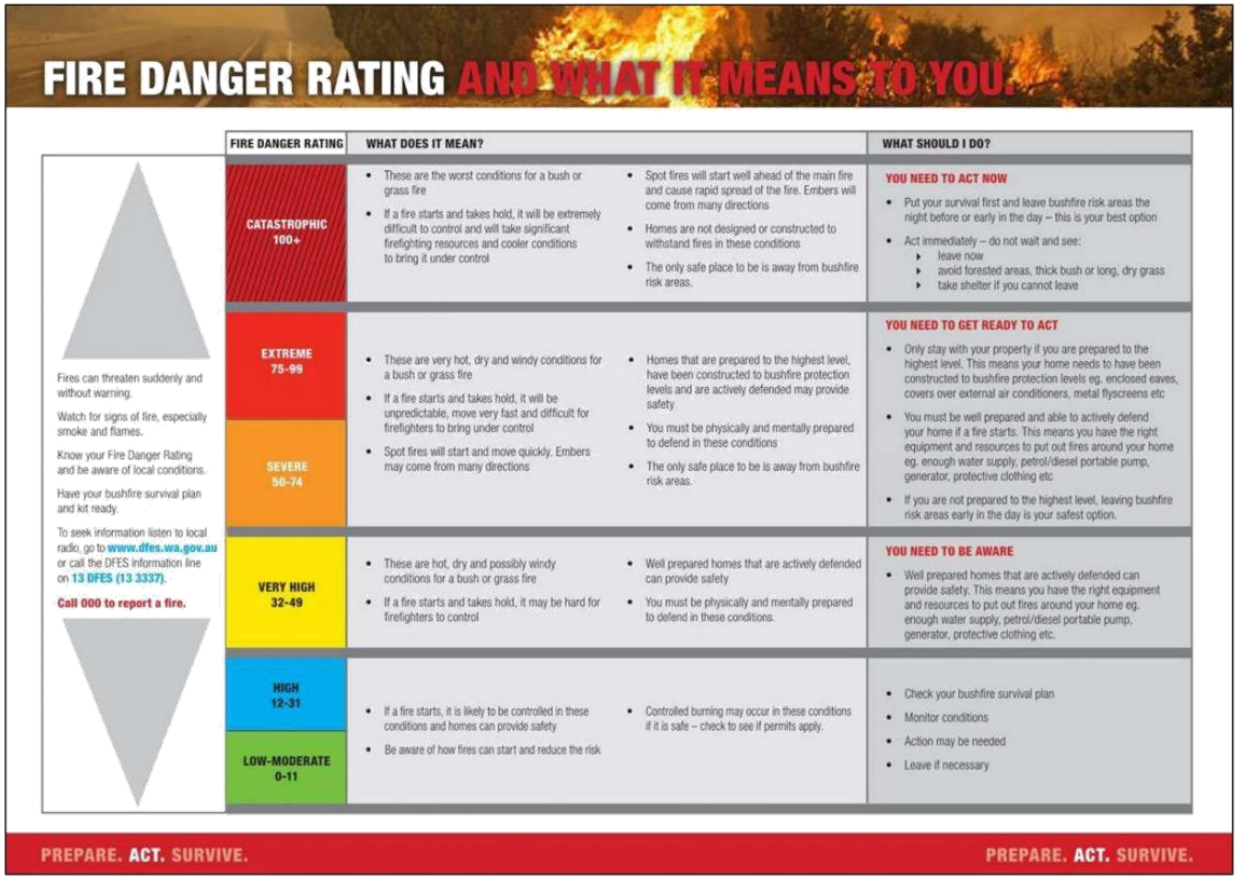
APPENDICES

Appendix 1: Bushfire Response Decision Making Flowchart
Appendix 2: Fire Danger Ratings and their Meanings
Appendix 3: Details of Fire Warning Levels
Appendix 4: Shelter in Place - Details to be provided to Emergency Authorities
Appendix 5: Bushfire Emergency Evacuation Plan Assessment
Appendix 6: Policy, Assessment Criteria and Design Fire Modelling – Sheltering Area

Appendix 1 – Bushfire Response Decision Making Flowchart



Appendix 2 – Fire Danger Ratings and their Meanings



Appendix 3: Details of Fire Warning Levels

An **ADVICE** provides information that a fire has started but there is no immediate danger, this is general information to keep people informed and up to date with developments. **An Advice warning is a trigger to assess where the fire is and its potential threat level.**

A **WATCH AND ACT** message is issued when a fire is approaching and conditions are changing, DFES recommend people need to leave their property or prepare to actively defend (DFES 2019).

An **EMERGENCY WARNING** means there is immediate danger and the fire is likely to impact the site. There is a threat to lives and buildings, it is the highest level of warning (DFES 2019). The message may start with a siren called a Standard Emergency Warning Signal.

Appendix 4: Shelter in Place - Details to be provided to emergency authorities

The following information should be provided to the emergency authorities if a decision is made to shelter in place:

1. Nature of the emergency
    a. Immediacy – Can the bushfire be seen? Distance from site?
    b. Evidence of ember attack
    c. Evidence of spot fires
2. Details of individuals sheltering:
    a. Number
    b. Condition/ state
    c. Special needs
3. Location
    a. Address
    b. Nearest cross-roads
    c. Exact location of shelter
    d. Entry point to shelter

Appendix 5: Bushfire Emergency Evacuation Plan Assessment

STEP 1 – EMERGENCY MANAGEMENT TEAM

The Emergency Management Team (EMT) will be confirmed prior to use of the facility. The Chief Warden will be responsible for;

- Ensuring staff and other occupants are educated and trained on emergency procedures;
- Ensuring all occupants are aware of the emergency procedures for the site;
- Consulting with local emergency services in relation to this Bushfire Emergency Evacuation Plan (BEEP), and;
- Regularly reviewing the BEEP to ensure it remains practical and current.

STEP 2 – FACILITY DETAILS, SITE ANALYSIS AND LOCATION CHARACTERISTICS

The BEEP will apply to facilities at Lot 1 and 2 Dunn Bay Road, Dunsborough. The facilities consist of a boutique hotel, brewery and bar, restaurant, café, retail and short stay accommodation. It is located within an area identified as bushfire prone and is surrounded predominately by low threat vegetation, as well as commercial and residential development, with small areas of Class A Forest and Class B Woodland to the north and west. A bushfire is likely to impact the site from the north, east or south.

An estimated 14 to 24 employees are expected to be present at the facility at any one time. An Emergency Management Team (EMT) will be established, and the Bushfire Emergency Evacuation Plan will be updated, prior to the facility being used. Numbers of facility users and times of occupancy will vary throughout the day and week; however, there will be a maximum of approximately 1000 patrons present at the facility at any one time.

The site is reticulated and water for fire-fighting can be sourced from hydrants installed at the facility to required standards. Access to and from the site is to the east via Dunn Bay Road, west via Caves Road, and north-west via Cape Naturaliste Road. There are two access roads and carparks with crossover to both Dunn Bay Road and Cape Naturaliste Road. The carpark and driveways will be built to standards which allow access by fire-fighting appliances. Facility users will generally access the site through private vehicles which will remain on site for evacuation purposes if required.

Further site details are found in the Bushfire Management Plan undertaken by Bushfire Safety Consulting in 2020.

STEP 3 – PRIMARY AND EMERGENCY ACTIONS

Evacuation is the process of moving people from the site to another safer location off-site. If successfully done, evacuation occurs in a calm, safe manner, away from the place of threat, to a location that will not be affected by bushfire.

Shelter in place is a process of sheltering in an identified safer building or open area on-site, away from the life threatening radiant heat caused by a bushfire. Shelter in place during a bushfire is not recommended and should only be taken as a last resort if it is not safe to evacuate.

Early evacuation and **pre-emptive evacuation** on days with FDI of Catastrophic is the appropriate primary response to a bushfire threat given;

- The site is close to built up areas consisting of commercial and residential development in non-bushfire prone areas to the east;
- Surrounding classified vegetation is in corridors and is not continuous; and,
- The evacuation access road from the site to the east does not pass through bushfire prone vegetation.

Shelter on site is unlikely to be required and is not recommended but may be necessary if there is not enough time to safely evacuate the site well before the approach of a fire. The identified safer building, surrounding facilities and APZ should be well prepared and maintained in the event this is necessary.

STEP 4 – REQUIREMENTS FOR EVACUATION AND SHELTER IN PLACE

a) Identification of off-site location for evacuation

The following questions are taken from the Western Australia Planning Commission's guide to developing a bushfire emergency evacuation plan (2019) to assess the suitability of the primary off-site evacuation location.

If there are occupants with support needs that require a similar facility to support them, is the off-site location suitable?	Facility users could require support services that require consideration.
Is the off-site location in an area away from the effects of bushfire?	Yes, away from bushfire prone vegetation and direction of bushfire threat.
Are there amenities (toilets, food, water, etc.,) available at the off-site location?	Yes
Can the off-site location accommodate the number of occupants?	Yes
Does the route to the off-site location require transport through bushfire affected areas, or areas that may be affected by an approaching bushfire?	No
Has the owner of the off-site location advised that they are happy to accommodate occupants if evacuation from a bushfire emergency occurs?	Facility users will generally evacuate to shopping or community centres in nearby built up area.

b) Determining transport to an off-site location (evacuation)

The following questions are taken from the Western Australia Planning Commission's guide to developing a bushfire emergency evacuation plan (2019) to assess the suitability of available transport to off-site evacuation locations.

Do you have your own transport for all occupants?	Yes, facility users will generally utilize private vehicles to access the site which will then remain onsite and be available for evacuation purposes. In addition, evacuees can walk 200 metres to the east along Dunns Bay Road to access off-site location if required.
Are you going to use private vehicles?	Yes, private vehicles will be parked and available onsite for evacuation.
If using private vehicles, will they be available when you need them and will there be drivers available?	Yes, facility users will be able to drive the private vehicles used to access the site with the passengers they came with.
Will there be sufficient vehicles to transport all the occupants?	Yes, private vehicles will be used by participants to access the site. These will be parked in the carpark at the facility and will be available for evacuation.
Have occupants with support needs been considered when determining transport types and necessary timing to evacuate?	Yes, any persons with support needs that are present onsite will have self-organised transport access which can be used for evacuation.
Is disabled transport required, and is this sufficient to move the number of occupants from the facility?	Evacuation transport for disabled persons will be self-organised to access the site and will be available for evacuation if required.
Do you require ambulances?	No
Is a community bus available when needed?	No, not required.
Are other means of transport available?	Evacuees can walk 200 metres to the east along Dunns Bay Road to access off-site location if required.
Do you need any other type of special transport?	No

C) Determining transport to an off-site location (evacuation)

The following questions are taken from the Western Australia Planning Commission's guide to developing a bushfire emergency evacuation plan (2019) to assess the suitability of on-site Shelter in Place building.

Is the property well maintained and kept free from a build-up of fuel and leaf litter in gutters and around buildings?	Yes, facility managers will keep buildings and surrounding landscape well maintained and free from build-up of fuel and leaf litter.
Is there a building on-site that is away from bushland and is unlikely to be impacted by bushfire?	Yes, the restaurant building is the furthest from bushland and is exposed to BAL-12.5.
Is the building constructed in a manner that minimizes bushfire attack with appropriate APZ?	Yes, restaurant building will be constructed to BAL-12.5 and be provided with appropriate APZ.
Can the building accommodate the number of occupants and visitors?	Yes
Is there ease of accessibility to the building and is it easily identifiable?	Yes, the restaurant building is fairly central to the site with multiple access points.
Is there access to amenities (toilets, food, water etc) away from the effects of a bushfire?	Yes

STEP 5 – PRIMARY AND SECONDARY EMERGENCY PROCEDURES

Primary and secondary emergency procedures were developed with the following considerations;

- Requirement to organise and co-ordinate evacuation of facility users present safely. If this is not possible, then the requirement to provide shelter in place procedures for the number of facility users present.

Emergency Procedures include those for preparation prior to potential bushfire event, monitoring to detect bushfire or required conditions for pre-emptive actions, identification of triggers to enact BEEP, emergency response both prior, during and after the fire front has passed, and finally recovery responses to be undertaken when the all clear has been given following a bushfire event.

STEP 6 – TRAINING AND EDUCATION ON EMERGENCY PROCEDURES

The Chief Warden will ensure that all staff are aware of their responsibilities within the BEEP, and are sufficiently trained to carry out their duties in the event of a bushfire. This includes preparedness, monitoring, pre-emptive and recovery tasks in addition to tasks undertaken in response to a bushfire emergency.

Appendix 6: Policy, Assessment Criteria and Design Fire Modelling – Sheltering Area

Position Statement: Tourism land uses in bushfire prone areas (2019)

This position statement provides guidance for tourism land uses in bushfire prone areas. It focuses on life safety and suggests that the protection of property or infrastructure may be secondary to the social and economic development of a region.
The position statement establishes that, for vulnerable short term accommodation and vulnerable day uses such as restaurants and cafes, brewery's and small bars where a building or open space is to function as an on-site shelter, there must be sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10kW/m^2. Where an open space area is to function as an on-site shelter there must be sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 2 kW/m^2.
The flame temperature of 1200K is to be used in all calculations.
A building used as suitable on-site shelter would need to be designed and constructed (or retrofitted) in accordance with the National Construction Code and the ACBC community shelter Handbook.
Within 200 metres of this site and with an evacuation route sited in BAL-LOW and Bushfire Hazard Rating Low, overnight and day users of the facility can evacuate to a large central area exposed to less than 2kW/m^2. See Design fire modelling below.

LIMITATIONS

Bushfire Sheltering locations do not guarantee peoples safety, but they offer improved protection if people are caught by a fire and cannot evacuate early, away from the threat, to an area that cannot be threatened.
It is important for people to understand that there are risks associated with sheltering in open spaces even when assessed to the accepted standards. The Country Fire Authority (CFA 2020) and NSW Rural Fire Service (RFS 2017) have identified the following risks that are associated with sheltering in open spaces:

- Travelling to the Bushfire Shelter Area through a fire affected landscape either on foot or in a vehicle could be inherently dangerous due to poor visibility, fire activity and potential traffic accidents on roads.
- Sheltering at a site may result in physical and / or psychological trauma.
- Extreme conditions can be experienced such as embers, heat, strong winds, fire noise, radiant heat, smoke and ash while sheltering.
- The presence of emergency services cannot be guaranteed and there may be no communications, power, water or first aid facilities.
- There may be little or no capacity to assist people with special needs.
- Parking may be limited and large numbers of vehicles may further compromise the level of protection offered.

CLIMATE AND FIRE WEATHER

Dunsborough is situated on Geographe Bay, on the south-eastern shores of the Cape Naturaliste peninsula. Like the rest of the south-west, Dunsborough experiences a temperate Mediterranean climate with warm, dry summers and cool, wet winters. It's position on the peninsula results in milder summer and winter conditions than that experienced in other areas of the south-west.

The average rainfall for Dunsborough is 798mm, with the vast majority received during the late autumn, winter and early spring months. The summer rainfall average is just 12mm. Mean max summer temperature at the nearby Cape Naturaliste weather station is 25°C, with a maximum temperature of 40.6°C recorded in January 1978 (BOM 2020). Relative humidity is relatively similar throughout the year with an average of 57.3% humidity at 3pm during summer.

Winds during the bushfire season are most often from the east in the morning, turning to the south-west in the afternoon. Average wind speed in summer is 29km/h with maximum gusts recorded up to 104km/h.

Assessment Criteria and Methodology

The methodology used to determine the predicted radiant heat flux levels at the Bushfire Shelter Location utilises the methodology developed by Douglas and Tan (2005) *Integrating Site Assessment and Performance Planning Outcomes for Bushfire Prone Areas.*
The assessment criteria used in this assessment (Table 1) was developed by the NSW Rural Fire Service and is outlined in their document "Neighbourhood Safer Places – Guidelines for the identification and inspection of Neighbourhood Safer Places in NSW".

Table 1: Relevant assessment criteria

	Performance Criteria	Acceptable Solution
Radiant Heat	Open Space is located to enhance the chance of survival for humans in attendance from the radiant heat of a bushfire.	Open Space is situated and maintained to prevent direct flame contact, material ignition and radiant heat flux levels of 2kW/m^2, or Provide 310 metres separation distance form a bushfire hazard.
Maintenance of the site and surrounding area	Area between bushfire hazard and the sheltering site is maintained to a level that ensures the radiant heat flux levels at the open space meet the Performance Criteria for radiant heat	The site and land adjacent to the site between the open space and the bush fire hazard is managed land or maintained in accordance with Asset Protection Zone Standards.

Table 2: Principles for site identification

Site Selection	The site should provide a safer place for the community.
	The community should be moving away from the bushfire hazard to access the site over short distances where possible.
	The location should reflect the community need and bushfire risk
Moving to the site	The site should not be isolated from the community
	The community should not be impeded from reaching the site in a bushfire situation
Capacity	Additional bushfire shelter areas should be sought where it is likely the site cannot accommodate those likely to use it
	Demand for use of a site reflects the community's level of bushfire preparedness

The detailed site-specific design fire calculations are outlined below.

DUNSBOROUGH - SITE ASSESSMENT

Assessment Inputs

The site assessment occurred on May 11, 2020 and concentrated over a minimum area of 200 metres surrounding the proposed development and potential sheltering area. The bushfire sheltering location was identified as the central area in Dunsborough that encompasses the Lions Park, IGA supermarket, Australia Post Office and Dunsborough Tavern. The site- specific detailed design fire modelling inputs and analysis is outlined below.

The vegetation was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the predicted radiant heat flux levels towards the sheltering area were identified.

DUNSBOROUGH - BUSHFIRE SHELTERING AREA

This open space bushfire sheltering area has been identified to provide the facility users and staff and visitors with an area that will provide improved protection of human life during the onset and passage of a bushfire. It is a location where people facing an immediate threat to their personal safety can gather and seek shelter from the impact of bushfire.
Detailed design fire modelling has been undertaken surrounding the facility with site specific variables analysed to identify an area that is situated (and can be maintained) to achieve radiant heat flux levels of 2kW/m^2 and less. This sheltering area has been assessed against the criteria (Table 3) and provides a backup plan to be utilised if the safe and early evacuation off site, away from bushfire threat and Dunsborough townsite, cannot be implemented.

Table 3: Sheltering Area assessment outcomes against the criteria

Location	Central location in Dunsborough between the IGA supermarket and Post Office with Lions Park in the centre as outlined in the figure	
Size	4.4 ha	
Access	Centrally located, easily accessible to facility users and staff on the sealed public road directly east of the facility.	
Assessment Criteria – (from NSW RFS 2017)		
	Performance Criteria	**Acceptable Solution**
Radiant Heat	Open Space is located to enhance the chance of survival for humans in attendance from the radiant heat of a bushfire.	The open space is situated and maintained to prevent direct flame contact, material ignition and radiant heat flux levels of 2kW/m^2. The site contains a landscaped park in a shopping precinct
Maintenance of the site and surrounding area	Area between bushfire hazard and the sheltering site is maintained to a level that ensures the radiant heat flux levels at the open space meet the Performance Criteria for radiant heat	This zone was assessed in existing condition and is managed in a low threat condition consistent with vegetation classifications exclusion clause 2.2.3.2(f) (manage parkland) and Exclusion Clause 2.2.3.2(e) - unvegetated in AS3959-2018.
Principles for Site Identification		
Site Selection	The site should provide a safer place for the community.	The area is the centre of the Dunsborough community so is the safest area within the community. Radiant heat flux modelling confirms this.
	The community should be moving away from the bushfire hazard to access the site over short distances where possible.	Site users, staff and other residents and tourists within the community can move towards the middle of Dunsborough townsite away from surrounding bushfire threat.
	The location should reflect the community need and bushfire risk	The site will reflect the facilities users needs comprehensively, it is nearby, easily accessible, and could provide a suitable location for the broader Dunsborough community.
Moving to the site	The site should not be isolated from the community	The site is located in the centre of the Dunsborough townsite.
	The community should not be impeded from reaching the site in a bushfire situation	It is within walking distance (200 metres) or a short vehicle journey for all facility users.
Capacity	Additional bushfire shelter areas should be sought where it is likely the site cannot accommodate those likely to use it	There is no requirement for another site to be identified for users of this facility. It is accessible and permanent
	Demand for use of a site reflects the community's level of bushfire preparedness	Community bushfire preparedness was not assessed as part of this project. Community consultation would assist.


Plot 1
Class A Forest
Flat/upslope
Plot 2
Class A Forest
Downslope 0-5
Plot 2
Class A Forest
Downslope 0-5
Naturaliste Terrace
61m
122m
Dunn Bay Road
Australia Post
Lions Park
Dunsborough Park Shopping Centre
IGA Supermarket
Dunsborough Pl
Dunsborough Tavern
Dunn Bay Road
Plot 1
Class A Forest
Flat/upslope
173m
173m
Plot 1
Class A Forest
Flat/upslope
LEGEND
SUBJECT LAND
BUSHFIRE SHELTERING AREA (exposed to < 2kW/m2)
ACCESS TO SHELTERING AREA
BUSHLAND EDGE
BUSHFIRE EVACUATION ROUTE AND SHELTERING AREA
bushfire CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 262
www.bushfiresafetyconsulting.com.au
0 20 40 60 80 100 120m
SCALE 1:3000 @ A3
DATE: NOVEMBER 2020
NORTH
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020

Design Fire Modelling

AIM

Provide a bushfire protection outcome that meets the performance requirements of proposed safer sheltering areas at the site and enable;

- Approval under State Planning Policy No. 3.7 Planning in Bushfire Areas V1.3 (2017);
- Compliance with the Performance Principles in the Guidelines for Planning in Bushfire Prone Areas V1.3 (December 2017) and Australian Standard AS 3959-2018 Construction of buildings in bushfire-prone areas (Standards Australia 2018); and
- Compliance with the Performance Principles in the Position Statement: Tourism land uses in bushfire prone areas (WAPC 2019).

Objectives

Demonstrate the Radiant Heat Flux (RHF) exposure profile is a contour of < 2kW/m ^{2}.
Demonstrate the exposure profile under specific design fire evaluation that applies:

- Classified vegetation default fuels loads specified in AS3959-2018 after analysis of relevant published fuel accumulation data;
- Flame temperature at 1200K as a conservative level to assess life safety priorities;
- FDI of 120 used instead of fire weather analysis of the weather data Cape Naturaliste weather station (11km from site) from 1999 through to 2020 because more conservative value.
- Cape Naturalist weather station to determine a 1:200 FDI return period consistent with the Bushfire Verification Method GV5 for buildings (and by extension open areas) that operate as a public bushfire sheltering areas which has an Importance level of 4 (Table V2.7.2 Annual Probability or Exceedance (APE) for design bushfire actions) (ABCB 2018);
- Site specific values for effective slope under classified vegetation and site slope.

Design Fire Assessment to determine <2kW/m²

The approach used to assess the Bushfire Shelter Location applies the methodology developed by Douglas and Tan (2005) *Integrating Site Assessment and Performance Planning Outcomes for Bushfire Prone Areas.*
The extent of exposure of people sheltering from bushfire attack is primarily related to their proximity to the fire front, fire severity/ fuel characteristics, fire weather, topography and shielding (by natural features or man-made barriers). The design fire assessments determine the level to which predicted radiant heat flux exposure from surrounding areas impacts on the proposed sheltering area.
The predicted bushfire attack levels is assessed by considering specific site factors that vary from those used in a method 1 BAL assessment in AS3959-2018. The predicted radiant heat flux received on the identified sites from surrounding areas is determined by a specific and accurate assessment of site and effective slope characteristics, fire weather and fuel load analysis.

Specific Design Fire Inputs

Specific design fire inputs used to evaluate all design fires surrounding each sheltering location are listed below.

- Site slope and effective slope analysis using a Forestry Pro digital field instrument to determine the slope under the classified vegetation, and between the sheltering areas and the vegetation;
- Flame temperature set at 1200K to reflect life safety priorities;
- Default Fire Danger Index of 120 used which is RFS standard for Neighbourhood Safer Places and at this site significantly exceeds the FDI of 54.8 which was determined by Generalised Extreme Value (GEV) and regression analyses to determine the FFDI return period of 1:200 years for the Cape Naturalist Weather Station;
- Elevation of receiver is set default metres to ensure maximum values are obtained;
- Vegetation classes and fuel loads set as default AS3959 inputs.

Methodology

The Method 2 Approach to determine the radiant heat flux exposure is described in Appendix B 'Detailed method for determining the Bushfire Attack Level (BAL) – Method 2 in AS3959-2018'. Site specific inputs and bushfire modelling calculations were undertaken using the software tool Bushfire Attack Level calculator (BALc) version 4.8 developed for FPAA by Flamesol.

The Bushfire Attack Level calculator (BALc) version 4.8 is a software tool approved for use by the FPAA that implements the Method 2 bushfire behaviour and view factor calculations, and heat transfer models to determine the exposure of a site to a radiant heat flux.

Fire Weather Analysis for Developing Alternative Design Bushfire conditions

Dunsborough is located 11 kms from the Cape Naturalist weather station and data from 199-2020 was accessed including Temperate (T), relative humidity (RH) and wind speed (WS) at 3pm, as well as the daily Forest Drought Factor (DF), to calculate daily FFDI values.
Maximum yearly FFDI values were used to determine the 1 in 200 year maximum FFDI based on the Generalised Extreme Value (GEV) analysis method (Douglas et al 2014). The data from this weather station should provide the most accurate data to determine alternative design fire conditions for Dunsborough due to its close proximity. Daily weather station data was assessed to determine the maximum yearly FFDI at 3pm in the afternoon. The dataset covers 22 years from 1999 to 2020.
The NSW RFS Neighbourhood Safer Places methodology uses a Fire Danger Index of 120 (Catastrophic) AS3959-2018 policy. Based on the generally applied standard the FFDI value for this location is 80 based on AS3959 for bushfire building standards.

Methodology

The extreme value analysis was undertaken using 22 years data of the highest FFDI values for the Cape Naturaliste weather station (Table 4).

Table 4: Maximum yearly FFDI at 3pm records for last 22years at Cape Naturaliste Weather Station

Year	No.	Return Period Calc	Return Period	FFDI Max
2010	1	22	22	39.5
2007	2	11	11	39.1
2016	3	7.33333333333333	7.33	36.4
2015	4	5.5	5.5	33.9
2005	5	4.4	4.4	32.4
2011	6	3.66666666666667	3.67	32.1
2004	7	3.14285714285714	3.14	32
2009	8	2.75	2.75	31.3
2012	9	2.44444444444444	2.44	31.2
2019	10	2.2	2.2	30.3
2020	11	2	2	30.3
2002	12	1.83333333333333	1.83	29.1
2006	13	1.69230769230769	1.69	27.4
2013	14	1.57142857142857	1.57	26.6
2003	15	1.46666666666667	1.47	26.5
2001	16	1.375	1.38	26.1
2018	17	1.29411764705882	1.29	26.1
2014	18	1.22222222222222	1.22	25.3
1999	19	1.15789473684211	1.16	25.1
2008	20	1.1	1.1	24.8
2000	21	1.04761904761905	1.05	24.6
2017	22	1	1	20.1

Results for 22 years of data

The data (Table 4) were used to generate a GEV analysis of a return period of 1:200 years which has been identified as appropriate in determining fire weather inputs to an alternative method for the identification of places for community bushfire sheltering areas.

Figure 1 outlines the log-linear plots of FFDI vs return period R for the Cape Naturaliste weather station. The plots were then subject to a formatted trend line using the log-linear function as expressed in Douglas et.al (2014) as : $y = a\ln R+b$, where b is the intersect with the one year recurrence or return period and the equation can be used to extrapolate return periods beyond the data period.



Figure 1 – Log-linear plot of FFDI and Return Period (R) – last 22 years of data

The GEV and regression analyses were applied to the data from the Cape Naturaliste weather station and the results are presented in Table 4. Also included in Table 4 are the FFDI values corresponding to 1:200 return period.

The correlation co-efficient R^2 of 0.9217 exceeds 0.9 indicating the statistical analysis is very good. This provides a high level of confidence to obtain FFDI of return periods beyond the data collection period (Douglas et.al 2014).
Using the equation y = alnR+b in Douglas et.al.(2014) for the log linear graph (Figure 2) to determine the 1:200 year return period, the extrapolated results are:

Y = 5.724 ln(200) + 24.473
FFDI = 54.8

Highest maximum FFDI on record is 39.5 which occurred in 2010. Generalised Extreme Value (GEV) analysis of data determined that a return value of 1:200 years gives a maximum FFDI of 54.8 (Figure 1 and Table 5).

Table 5: Results of GEV and regression analysis and FFDI value based on a 1:200 return period for last 22 years data.

a	b	r^2	FFDI R=1:200
5.724	24.473	0.9217	54.8

Vegetation and Fuel load analysis for Developing Alternative Design Bushfire Conditions

The deemed to satisfy tables and default fuel loads in AS3959-2018 provide a simple method to determine predicted radiant heat flux levels on sheltering areas or structures. None of the research reviewed applied higher fuel loads to the vegetation types found around the site compared to the default fuel loads for corresponding vegetation classifications in AS3959-2018.

Design Fire Modelling

This assessment determined the site specific FFDI based on the Generalised Extreme Value (GEV) modelling found in Douglas et.al (2014). The 1:200 year return period for 22 years of data from the Cape Naturaliste weather station was determined as FDI 54.8. To ensure life safety, conservative values were modelled so an FFDI of 120 was adopted in this assessment. This is more than double to determine 1 in 200 year FFDI for the area.
Published fuel load data on the specific vegetation classes in the area were limited hence the default fuel loads were input into the view factor model to determine the predicted radiant heat flux exposures. The view factor and radiant heat flux level calculations and outcomes including diagrams of each design fire are contained below.

Design Fire modelling

Design Fire	Direction of fire run	Vegetation type	Default AS3959 Fuel Load (t/ha)		Slope (°)		Separation (m)	Flame Temp.	FDI	Elevation of receiver	Flame Width (m)	Flame length (m)	Radiant Heat Flux
			surface	overall	Effective	Site							
1	South-west	Class A Forest	25	35	-1.5	0	173 m	1200K	120	Default	100m	25.29m	1.97 kW/m^2
2	North	Class A Forest	25	35	5	0	122 m	1200K	120	Default	30m – restricted in creek	37.24m	1.97 kW/m^2
3	North-east	Class A Forest	25	35	5	0	61 m	1200K	120	Default	6.3m – short fire run of 15 metres (Alexander 2010)	37.24m	1.97 kW/m^2

10.1 Design Fire Model Calculations – Design Fires 1, 2 and 3








Design Fire 2
Class A Forest
Effective slope - Downslope 5
Site Slope - 0
Fire width - 30 metres
Design Fire 3
Class A Forest
Effective slope - Downslope 5
Fire run - 17 metres
fire Breadth - 6.3 metres
Site Slope - 0
Plot 1
Class A Forest
Flat/upslope
Plot 2
Class A Forest
Downslope 0-5
Naturaliste Terrace
Dunn Bay Road
61m
122m
Australia Post
Lions Park
Dunsborough Park Shopping Centre
IGA Supermarket
Dunsborough Pl
Dunsborough Tavern
No classified Vegetation within 300 metres
173m
173m
Plot 1
Class A Forest
Flat/upslope
Design Fire 1
Class A Forest
Effective slope - Upslope 1.5
Site Slope - 0
Fire width - 100 metres
LEGEND
SUBJECT LAND
BUSHFIRE SHELTERING AREA (exposed to < 2kW/m2)
ACCESS TO SHELTERING AREA
BUSHLAND EDGE
Design Fires
bushfire CONSULTING
Science. Culture. Solutions.
PO BOX 84 STONEVILLE WA 6081
Mbl: 0429 949 262
www.bushfiresafetyconsulting.com.au
SCALE 1:3000 @ A3
DATE: NOVEMBER 2020
NORTH
Location details: Lots 1 & 2 Dunn Bay Road, Dunsborough
Assessment date: May, 2020
Prepared by: Bushfire Safety Consulting
Accreditation level: Level 3 BPAD Practitioner
Accreditation number: BPAD 23160
Accreditation expiry date: 31st January, 2021
Date aerial photo: February 2020

APPENDIX 8: Bushfire Risk Assessment

Site Details

Name of Facility		Hospitality, Retail and Accommodation Village	
Address		Lots 1 and 2 Dunn Bay Road, Dunsborough	
Prepared by (Practitioner)		Rohan Carboon BPAD Level 3 – 23160	
Owner/operator		Eldorado Pty Ltd	
Date	13/11/2020	**Plan Version**	1.0

Document Control

VERSION	DATE	DETAILS	UNDERTAKEN BY
V1	13/11/2020	Draft for review	Rohan Carboon BPAD Level 3 – 23160

Contents

1. Methodology 3
2. Part A Calculating Risk 3
2.1 Likelihood Level 3
2.2 Fire Weather Analysis to determine 1 in 100 year fire weather event 3
2.3 Methodology 4
2.4 Results for 22 years of data 4
2.5 Risk Consequence Rating 5
2.6 Comparison between FFDI 80 and Flame Temperature 1090K and FFDI 50.83 and flame Temperature 1200K. 6
3. Level of Risk 7
4. Part B Risk Management and Treatment Measures 7
4.1 Risk Treatment Measures 8
4.2 Identifying Those Risk Treatment Measures 8
Category 1 – Asset Protection Zone - category value 20 points 8
Category 2 – Building Construction - category value 10 points 9
Category 3 – Access and Egress - category value 20 points 9
Category 4 – Built Form Design and Layout - category value 10 points 10
Category 5 – Water Supply and Fire fighting Infrastructure - category value 10 points 10
Category 6 – Other Bushfire Protection Measures - category value 10 points 10
Category 7 – Facility Operations - category value 20 points 11
5. Part C: Calculation of Risk Treatment Score 11
5.1 Likelihood Adjustment 12
6. Risk Treatment Acceptability 12
7. Conclusion 12

1. Methodology

The methodology adopted in this assessment has been supported by the Department of Planning, Lands and Heritage and the quasi-quantitative risk assessment methodology (Draft Risk Methodology) has been developed to assist bushfire practitioners to derive risk likelihood and consequence ratings required for non-compliant tourism developments, pursuant to State Planning Policy 3.7 and the Guidelines for Planning in Bushfire Prone Areas.

The following methodology provides a framework for considering semi-quantitative assessment of bushfire risk for certain tourism activities in bushfire prone areas. Where risk can be reasonably treated or mitigated to a level where it can be considered 'acceptable' or 'tolerable', then the development may be considered suitable from a bushfire risk perspective. These treatments need to be assessed for the level of risk reduction and to determine residual risk and acceptability.

The risk assessment is related to the selected "design bushfire event" which is the subject of a careful risk identification process.

2. Part A Calculating Risk

2.1 Likelihood Level

The level of probability to likelihood ratings is determined using a GEV statistical approach (Douglas et.al. 2014) based on the long term daily historic fire weather data captured at the nearest Bureau of Meteorology weather station which is Cape Naturaliste Weather Station sited only 11 kms from the development site.

The risk assessment is based upon the probability of fire weather.

Table 1 in the Draft "A Quasi-Quantitative Risk Assessment Approach for Tourism Developments" assigns a 1 in 100 year fire weather event as appropriate for Tourist Cabin style developments. The probability of this fire weather event is 1% AEP and results in a likelihood level of "Not Likely".

2.2 Fire Weather Analysis to determine 1 in 100 year fire weather event

Dunsborough is located 11 kms from the Cape Naturalist weather station and data from 1999-2020 was accessed including Temperate (T), relative humidity (RH) and wind speed (WS) at 3pm, as well as the daily Forest Drought Factor (DF), to calculate daily FFDI values.

Maximum yearly FFDI values were used to determine the 1 in 100 year maximum FFDI based on the Generalised Extreme Value (GEV) analysis method (Douglas et al 2014).

The data from this weather station should provide the most accurate data to determine alternative design fire conditions for Dunsborough due to its close proximity. Daily weather station data was assessed to determine the maximum yearly FFDI at 3pm in the afternoon. The dataset covers 22 years from 1999 to 2020.

2.3 Methodology

The extreme value analysis was undertaken using 22 years data of the highest FFDI values for the Cape Naturaliste weather station (Table 1).

Table 1: Maximum yearly FFDI at 3pm records for last 22years at Cape Naturaliste Weather Station

Year	No.	Return Period Calc	Return Period	FFDI Max
2010	1	22	22	39.5
2007	2	11	11	39.1
2016	3	7.33333333333333	7.33	36.4
2015	4	5.5	5.5	33.9
2005	5	4.4	4.4	32.4
2011	6	3.66666666666667	3.67	32.1
2004	7	3.14285714285714	3.14	32
2009	8	2.75	2.75	31.3
2012	9	2.44444444444444	2.44	31.2
2019	10	2.2	2.2	30.3
2020	11	2	2	30.3
2002	12	1.83333333333333	1.83	29.1
2006	13	1.69230769230769	1.69	27.4
2013	14	1.57142857142857	1.57	26.6
2003	15	1.46666666666667	1.47	26.5
2001	16	1.375	1.38	26.1
2018	17	1.29411764705882	1.29	26.1
2014	18	1.22222222222222	1.22	25.3
1999	19	1.15789473684211	1.16	25.1
2008	20	1.1	1.1	24.8
2000	21	1.04761904761905	1.05	24.6
2017	22	1	1	20.1

2.4 Results for 22 years of data

The data (Table 1) were used to generate a GEV analysis of a return period of 1:100 years which has been identified as appropriate in determining fire weather inputs to determine the risk likelihood and probability assessment of Tourist Cabin Land uses.

Figure 1 outlines the log-linear plots of FFDI vs return period R for the Cape Naturaliste weather station. The plots were then subject to a formatted trend line using the log-linear function as expressed in Douglas et.al (2014) as : y = alnR+b, where b is the intersect with the one year recurrence or return period and the equation can be used to extrapolate return periods beyond the data period.

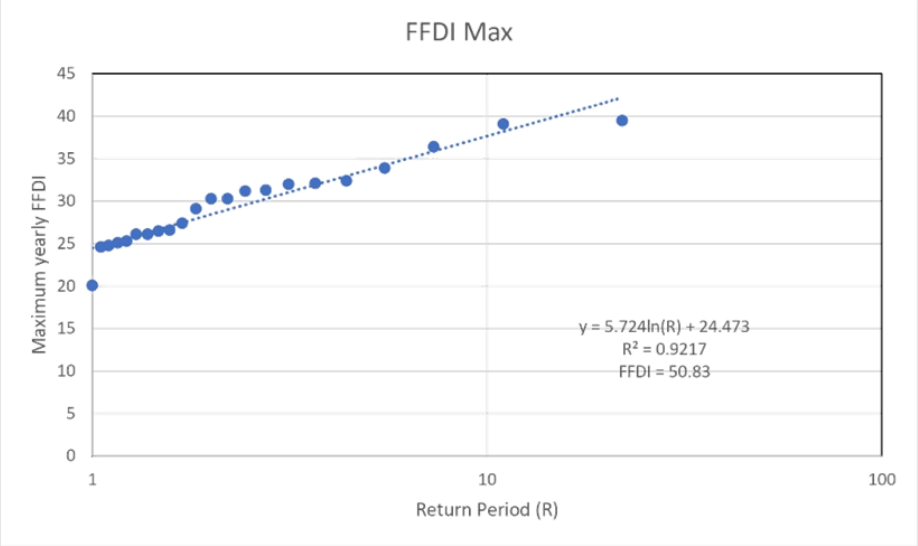


Figure 1 – Log-linear plot of FFDI and Return Period (R) – last 22 years of data

The GEV and regression analyses were applied to the data from the Cape Naturaliste weather station and the results are presented in Table 1.

The correlation co-efficient R^2 of 0.9217 exceeds 0.9 indicating the statistical analysis is very good. This provides a high level of confidence to obtain FFDI of return periods beyond the data collection period (Douglas et.al 2014).

Using the equation y = alnR+b in Douglas et.al.(2014) for the log linear graph (Figure 2) to determine the 1:100 year return period, the extrapolated results are:

Y = 5.724 ln(100) + 24.473

FFDI = 50.83

Highest maximum FFDI on record is 39.5 which occurred in 2010. Generalised Extreme Value (GEV) analysis of data determined that a return value of 1:100 years gives a maximum FFDI of 55.83. Figure 1 and Table 2).

Table 2: Results of GEV and regression analysis and FFDI value based on a 1:100 return period for last 22 years data.

a	b	r^2	FFDI R=1:100
5.724	24.473	0.9217	50.83

2.5 Risk Consequence Rating

The risk consequence score is calculated having regard to the fit for purpose risk consequence criteria for tourism-related land uses, which consider both exposure and vulnerability to articulate the nature of the consequence. Built form exposure is an important consideration for a risk to life perspective in terms of its ability to withstand bushfire attack to shelter its occupants

This development site is uniquely positioned in that the tourist cabins exposed to BAL-FZ will not have to shelter people as the site is immediately adjacent to a large open space in the middle of

Dunsborough within 200 metres and primary bushfire mitigation strategy is to evacuate the entire site early before a bushfire impact. However the cabins will in addition achieve compliance with AS3959 standards and therefore the built form exceeds an expected 1 in 50 year event by complying with a FDI of 80 when a 1 in 100 year event is predicted to be significantly reduced as FFDI of 50.83.

2.6 Comparison between FFDI 80 and Flame Temperature 1090K and FFDI 50.83 and flame Temperature 1200K.

An example comparison was undertaken on Cabin 11 which is exposed to BAL-29 on the western side of the development. It is sited 28 metres from Plot 3 Class A Forest with effective downslope of 5 degrees. The comparison of exposure outcomes to the building when using FFDI 80 and flame temperature of 1090 °K with the 1 in 100 year FFDI and a flame temperature of 1200°K. There is minimal difference between the predicted levels of radiant heart flux and BAL Ratings as outlined in Table 3 and Figure 2.

Table 3: Comparison between FDI 80 and AS3959 default outcomes with design fire life safety 1 in 100 year FDI and Flame temp of 1200°K

Cabin 11 – Method 1 Assessment		Cabin 11 – Method 2 Assessment	
Setback distance	28 metres	Setback distance	28 metres
Effective slope	5 degrees	Effective slope	5 degrees
Site slope	0 degrees	Site slope	0 degrees
Flame Temperature	1090°K	Flame Temperature	1200°K
AS3959 assigned FFDI	80	1 in 100 yr FFDI	50.83
Predicted Radiant Heat Flux	**28.53 kW/m²**	Predicted Radiant Heat Flux	**28.73 kW/m²**
BAL rating	**BAL-29**	BAL Rating	**BAL-29**



Figure 2 – Modelling Data

The appropriate risk consequence table was selected and is summarised below.

Consequence Level	Exposure Criteria	Vulnerability Criteria
Catastrophic	10 of the total 18 cabins are exposed to flame contact and a radiant heat flux exceeding 40Kw/m².	• Very little separation from the hazard source exposes buildings to flame contact and extreme radiant heat flux • AS3959 construction will not be sufficient to withstand the extent of flame contact and / or radiant heat flux • Building loss and/or extensive damage is highly likely and offsite evacuation necessary • Occupants within buildings will not be safe.

3. Level of Risk

A risk level score can be identified using the risk matrix in table 4 of the Draft Risk Methodology. Using the risk matrix below the Likelihood Level of "Not Likely" is assessed against the Consequence Level which is Catastrophic which results in a Risk Level score of 'High' which attracts 80 points.

Risk Criteria	Low	Minor	Moderate	Major	Catastrophic
Almost Certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Not Likely	Low	Medium	Medium	High	High (80)
Unlikely	Insignificant	Low	Medium	Medium	High
Extremely Unlikely	Insignificant	Insignificant	Low	Medium	Medium

Table 5 in the Draft Risk Methodology outlines a Level of Risk of High results in significant treatment to mitigate the level of risk and risk to life is possible and risk to property is likely. Part B of the Draft Risk Methodology is undertaken to identify a comprehensive suite of risk treatments commensurate to reduce the risk to a Low or Very Low Level.

4. Part B Risk Management and Treatment Measures

This section evaluates the options for reducing the consequences of a bushfire event. It does not alter the likelihood of an event occurring.

Category values are established which effectively cap the weighting of risk treatment measures within each category. All categories together total 100 points as a maximum. This approach seeks to balance a range of risk treatment which avoids the reliance on any one category of measures.

4.1 Risk Treatment Measures

The following suite of potential risk treatment measures are identified, divided into categories which may form an appropriate risk treatment response to the identified level of risk. The methodology involves selecting the applicable risk treatment measures from each category and accumulate the points score for each category. Risk Treatments are to follow a hierarchy of controls in which risks are to be prioritised into:

- Avoidance of the risk
- Engineering solutions (construction)
- Mitigation of risk (ignition and fuel management on-site)
- Managed operationally (site closures and refuges or safe points); and
- Response arrangements during an event (emergency plans and firefighting)

4.2 Identifying Those Risk Treatment Measures

The risk assessment process factors in all relevant bushfire risk reduction, management and treatment measures which are intended to be applied to mitigate and manage the risk of bushfire to a proposed tourism related land use/facility.

Category 1 – Asset Protection Zone - category value 20 points

The site contains a landscape plan and has irrigated and highly managed landscape features and garden beds.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
APZ is provided throughout the site, 10 or 18 cabins are exposed to BAL-FZ, 2 cabins BAL—29 and 6 cabins to BAL-19. The other 3 main buildings on-site are the Brewery, Restaurant and the Retail and short stay accommodation building. All three buildings are exposed to BAL-12.5. In addition to this, the entire site is less than 1 has in size and only 20% of the entire site is vegetated. Most of the site is built form, carparks, footpaths and buildings. The site is immediately adjacent to centre of Dunsborough townsite. The siting of the facility means in effect a connected APZ extends from the site towards the centre of Dunsborough in area designed as BAL-LOW and Bushfire Hazard Rating LOW. There is no bushfire threat between the site and the sheltering area.	10	10 cabins have insufficient separation or APZ from bushfire hazard and are exposed to BAL-FZ from a short fire run in the adjacent brook. All other buildings have sufficient APZ to achieved BAL-29 and lower. The site is adjacent to the urban built environment of Dunsborough townsite	✓
Total Points Score	10		

Category 2 – Building Construction - category value 10 points

All buildings on-site will comply with AS3959 standards and the fire weather analysis has confirmed this is also appropriate to the design fire weather scenario for a 1 in 100 year fire weather event.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Build Form
Construction to AS3959 standards is achieved for all buildings	5	Construction to AS3959 standards is achieved for all buildings which is appropriate for buildings for both building standard and the design fire 1 in 100 year event due to the low FFDI rating. It also ensures the buildings will resist ignition for the time period where users can evacuate the building and move towards a safer location nearby	✓
Total Points Score	5		

Category 3 – Access and Egress - category value 20 points

The site has been designed with driveways and carpark areas that allow full access for a 3.4 fire appliance. A swept path analysis has been undertaken to confirm fire appliance access throughout the site and permit access into the site, adjacent to hydrants, access to turn around areas and off the site to the existing public road system.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
More than one vehicle access/egress point is provided in two way, sealed condition and travel distances less than 200 metres are achieved	10	Fire appliance access is achieved to within 25 metres of all buildings.	✓
Single evacuation route along Dunn Bay road towards the centre of Dunsborough is provided and does not traverse any areas of bushfire hazard in areas of BAL-LOW and Low Bushfire Hazard Rating.	3	Evacuation off site to the sheltering area is always available, it cannot be threatened by flames or life threatening radiant heat. Ember attack and smoke impacts are the only issue	✓
All roads are through roads and no dead end roads or cul-de-sacs are proposed.	3	Surrounding public roads are all established and provide access to all directions.	✓
The capacity of the on-site and surrounding road network is capable or supporting evacuation processes, either in leaving early or in an emergency, in conveying persons to a safe location.		Internal and external access ways have capacity to ensure all occupants can evacuate early and reach the safer destination.	✓
Total Points Score	19		

Category 4 – Built Form Design and Layout - category value 10 points

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
Any outdoor on-site shelter area is sufficiently separated from the hazard source to avoid radiant heat flux exposure exceeding 2kW/m².	2	A detailed design fire analysis has been undertaken as outlined in the Evacuation plan that assesses the impacts of a 1 in 200 year event to determine the FDI of 54.8. However to ensure precautionary principle is applied, the FDI of 120 was applied as per RFS neighbourhood safer places standards and a large area in the middle of Dunsborough was identified as a sheltering area.	✓
Total Points Score	2		

Category 5 – Water Supply and Fire fighting Infrastructure - category value 10 points

Access is provided to a reliable water source, hydrants and hose coverage has been assessed to comply with minimum standards to aid in emergency suppression and building defence.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
Fire fighting infrastructure such as (but not limited to) training of staff, hydrants (flows and pressures meet minimum standards), pumps and high pressure hoses which can reach all external facades of the building and appropriate fire brigade fittings to static supplies is provided	6	A full analysis has been undertaken and a site specific hydrant and hose coverage solution is proposed for the entire development.	✓
Total Points Score	6		

Category 6 – Other Bushfire Protection Measures - category value 10 points

The site has been designed with a formal landscape plan that will be highly managed and maintained to both benefit the retention of important habitat trees for ringtail possums and low fuel loads for bushfire protection purposes.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
Landscape management practices are identified across the site to manage fuel loads and balance ecological values	2	Mature trees are retained on-site for ringtail possum habitat and this is balanced with bushfire risk measures to ensure fuel lads are maintained in a low condition	✓
Total Points Score	2		

Category 7 – Facility Operations - category value 20 points

Facility management is an important aspect of bushfire risk mitigation at the site. The facility will operate to limit risk exposure to ensure life safety. A Bushfire Evacuation Plan has been developed which will be reviewed prior to the facility starting operations.

Category table and points score

Risk Treatment Measure	Treatment Points	Relevance of Measure	Applicability Vehicular Access
The facility is managed by a permanent caretaker enabling swift emergency action trained in the emergency plan and fire fighting capacity	5	These are the arrangements at the site.	✓
The facility has a constrained APZ, but is within 100m of a formalised evacuation network which is protected by an APZ to shelter occupants as a last resort refuge in an emergency	3	The site is immediately adjacent to the developed and built area of Dunsborough townsite and the evacuation network starts at the facility boundary. The sheltering area is 200 metres from the facility and the evacuation route is full sited within a BAL-LOW area and its also exposed for a Low Bushfire Hazard Rating for the full distance.	✓
Total Points Score	8		

5. Part C: Calculation of Risk Treatment Score

This section is used to evaluate the effectiveness of the risk treatment options identified and applied above. This is achieved by recording and applying the relevant scores achieved and adjusting the consequence aspects of the risk assessment in Part A.

The total score is derived by:

a) Totalling the score for each category as per methodology adopted and concluding a risk treatment score out of 100;
b) Adjusting the likelihood for landscape fire risk; and
c) The risk treatment score calculated below is used to determine the level of risk treatment acceptability.

Category	Total Points Scored	Cap applied
Asset Protection Zone	10/20	No
Building Construction	5/10	No
Access Egress and Evacuation	19/20	No
Built Form, design and Layout	2/10	No
Water Supply and fire fighting infrastructure	6/10	No
Other Bushfire Protection Measures	2/10	No
Facility Operations	8/20	No
Total Points Scored	**52/100**	

5.1 Likelihood Adjustment

The likelihood aspects of this Risk Assessment are to be adjusted for the chances of landscape fire risk. Landscape fires can be assessed against the fire weather conditions, fuel characteristics, fire run and fragmentation of landscape fuels.

Variables	
FFDI – 1 in 100 year event	50.83
Fire run – potential	There is no fire runs possible from the north (except spotting into the crook vegetation), east due to the Dunsborough townsite and south Due to built environment and fuel loads over 100 metres from the site. Fire runs towards the site are restricted to the north-west where potentially an 11km fire run could occur however fuel lads are fragmented the closer to town a fire progresses. A fire from this direction would have to spot over a residential subdivision 200 metres to the north-west and spot into a small 1ha reserve then spot again into Dugulup Brook Creek Reserve which is 20-30 metres in width. A fire run from the south-west could occur for 7 kms and as it approaches the site it would be restricted to the Dugulup Brook Creek Reserve and therefore only be 30 metres in width. This would occur west of the site and west of Cape Naturaliste Road on the northern side of the police station.

The following matrix assist in considering landscape scale fire risks based on fire weather calculated and provides an adverse score:

Vegetation type	Fire run / Fragmentation	FFDI - 50
Class A Forest	Fragmented in final 300 metres towards the site	LOW (0)

6. Risk Treatment Acceptability

The level of acceptable risk is related to the extent to which treatment scores can lower the consequence rating. The required reduction in treatment is adjusted for the overall risk determined. The following table provides the basis of risk consequences adjustment arising from the Part B assessment process. Thus, the risk treatment score of 52 is achieved due to the landscape fire assessment resulting in a fragmented fire run in the last 300 metres towards the site.

Risk Treatment Score	Risk Treatment Acceptability	Description
52 Average	Insufficient to treat Extreme, High or Medium Risk	Qualitative assessment and liaison with Authorities is required to determine whether risk treatments satisfactorily mitigate the level of risk

7. Conclusion

This assessment has followed the methodology outlined in the Draft "A Quasi-Quantitative Risk Assessment Approach for Tourism Developments". The outcome reached requires more liaison with Authorities. The methodology didn't appear to fully consider the value in the site being adjacent to a townsite which offered a very large area with no fuels and a significant sheltering site within a short distance of the site. The site is also controlled and managed and the evacuation planning is substantial and can ensure all people are removed from the site prior to any bushfire impact. Of all the buildings on-site, a total of 11 cabins are exposed to BAL-FZ and all buildings will comply to AS3959 standards. The cabins exposed to BAL-FZ are not required to provide any sheltering capacity for guests under any bushfire scenario. Early evacuation will ensure this doesn't occur on the small site.

element.

Appendix G – Environmental Noise Report

GABRIELS HEARNE FARRELL

ENVIRONMENTAL NOISE DA REPORT

MIXED USE DEVELOPMENT
59-61 DUNN BAY RD, DUNSBOROUGH

9th November 2020



For

PLACE DEVELOPMENT
PO BOX 280
WEST PERTH WA 6872

UNIT 3 / 2 HARDY STREET, SOUTH PERTH 6151 TEL: 9474 5966 EMAIL: reception@gabriels.net.au
GABRIELS HEARNE FARRELL PTY LTD ACN 608 956 734 ATF THE GHF UNIT TRUST

CONTENTS **PAGE**

1. INTRODUCTION 4
2. PROJECT BACKGROUND 4
3. NOISE LEVEL CRITERIA 6
4. NOISE MODELLING PROCEDURE 7
5. MODELLING OF PATRON/CROWD NOISE 9
6. MODELLING OF LIVE ENTERTAINMENT WITHIN THE COURTYARD 11
7. MODELLING OF AMPLIFIED MUSIC BREAK-OUT FROM THE BUILDINGS 13
8. MECHANICAL PLANT 14
9. NOISE EMISSIONS FROM SERVICE VEHICLES 15
10. GENERAL NOISE MANAGEMENT PRACTICES 16
11. CONCLUSION 16

ATTACHMENTS

- APPENDIX A - Noise Contour Plans

Report Version	Author	Comment	Date
2	Benjamin Farrell	Minor edits requested by planner	9th November 2020

Gabriels Hearne Farrell Pty Ltd is a Member Firm of the Association of Australian Acoustical Consultants. The report author is a full member of the Australian Acoustical Society.

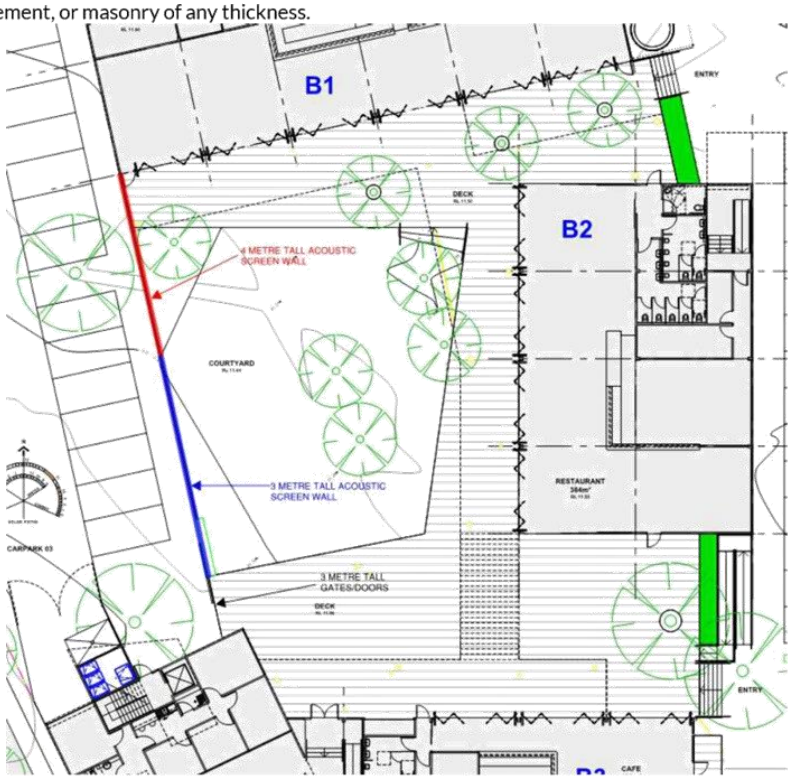
Disclaimer – The information contain within this report is solely for the use of the client identified on the cover page. The report is based on a specific scope as agreed between Gabriels Hearne Farrell Pty Ltd and the client. Gabriels Hearne Farrell accepts no liability where this report is used by any third party who may rely upon this document. This report must only be reproduced in full.

EXECUTIVE SUMMARY

Gabriels Hearne Farrell Pty Ltd have undertaken an environmental noise assessment for the proposed mixed-use development at 59-61 Dunn Bay Rd in Dunsborough. The assessment suggests that the proposed development is capable of complying with the Environmental Protection (Noise) Regulations 1997. Compliance is reliant on implementation on the following noise control strategies:

ARCHITECTURAL REQUIREMENTS

Acoustic screening on western side of courtyard
4 metre and 3 metre high acoustic screening is required on the western side of the courtyard, in accordance with the image below. The acoustic screening shall be 'solid' without gaps or slots, and must be constructed of a material with a minimum density of 10 kg/m^3 (eg 6 mm glass, 12 mm Perspex, 18 mm plywood, 1.2 mm steel, 9 mm fibre-cement, or masonry of any thickness.



Architectural construction of Building 1 (brewery), Building 2 (restaurant), and Building 3 (café)

Glazing – External Bi-fold doors to be a minimum of 6.38 mm laminated glass. The Breezeway operable glass louvres are to be a minimum of 6 mm toughened glass.

Roof construction – Bondor roof panels or Colorbond sheeting with Anticon 80 insulation installed to the underside.

'Ceiling' above the Bar – An acoustically absorbent 'ceiling' shall be provided within the Brewery, Restaurant, and Café. The selected acoustically absorbent ceiling shall be specified to achieve a Noise Reduction Coefficient (NRC) of 0.75 or greater. Examples include:

- 25 mm Autex Quietspace Panels (or similar product) installed to the underside of the Bondor panels;
- Perforated timber ceiling (minimum 18% perforation factor) with 75 mm glasswool insulation over.

- Perforated metal (eg Stramit Acoustic Panel) with 75 mm glasswool insulation over.

External walls – External cladding as per the architectural drawings + 90 mm R2.5 glasswool batts between the studs, and 13 mm plasterboard (or 18 mm plywood) internal lining.

Building envelope construction of Unit 01 in Building 4 to control noise intrusion from the hospitality uses

External glazing on north façade of Bed Room of Unit 01 – Glazing system (inclusive of glass, framing, and seals) to achieve a minimum sound reduction of $R_w + C_{tr}$ 38. This can be achieved by acoustic double glazing consisting of 10.38 mm laminated glass + minimum 40 mm air-space + 6.38 mm laminated glass.

External glazing on the east façade of Unit 01 – Glazing system (inclusive of glass, framing, and seals) to achieve a minimum sound reduction of $R_w + C_{tr}$ 32. This may be achievable with single 10.38 mm laminated glass in a well sealed awning window.

External walls on the north and east facades of Unit 01 – External timber cladding + minimum 90 mm framing with 90 mm glasswool batts + 2 layers of 13 mm plasterboard.

Roof/ceiling construction – Colorbond roofing with Anticon 55 insulation + suspended 13 mm plasterboard ceiling with minimum 90 mm glasswool insulation over.

NOISE MANAGEMENT REQUIREMENTS

1) The live entertainment within the courtyard (eg acoustic dous and trios) shall be positioned in the north-west corner of the courtyard, with the speakers facing south-east. The speaker volume shall be limited to achieve a volume of no more than L_{eq} 68 dB(A) at 10 metres from the front of the speakers. The live entertainment in the courtyard shall not be permitted at night after 10 pm;
2) All external windows, doors, and louvres of Building 1 (brewery) and Building 2 (restaurant) shall be kept closed when the amplified music within these spaces is louder than background music (73 dB(A) before 10 pm and 68 dB(A) after 10 pm);
3) With the external bi-folds doors, windows, and louvres of Building 1 closed, the maximum permissible music volume within the space is as follows:
    - 86 dB(A) prior to 10 pm; and,
    - 81 dB(A) after 10 pm.
4) With the external bi-folds doors, windows, and louvres of Building 2 closed, the maximum permissible music volume within the space is as follows:
    - 88 dB(A) prior to 10 pm; and,
    - 83 dB(A) after 10 pm.
5) When Building 1 is used after 10 pm, the high-level breezeway louvres will need to be kept closed in order to control patron noise emissions;
6) When Building 1 is used after 10 pm the maximum permissible patron numbers within the courtyard and deck areas outside of Building 1 is 160;
7) The entry gate(s) on the west side of the courtyard shall be in a closed position at all hours, except for between 7 am and 7 pm, Monday to Saturday, and except for short periods as people enter and exit the venue;
8) Delivery vehicles not permitted on site between 10 pm and 7 am (and 9 am on Sundays and Public Holidays).
9) Waste Collection vehicles only permitted on site between 7 am and 7 pm, Monday to Saturday.
10) Glass shall only be emptied into the outside bins between the hours of 7 am and 7 pm (9 am to 7 pm on Sundays).
11) Management will maintain a log book for any complaints regarding noise and disturbance in the area. Any complaint received is entered into the book, with the date and time of the complaint, the staff member who received the complaint, and the action taken. The approved manager will then contact the complainant to ascertain whether the action taken is sufficient to answer the concern expressed; and,
12) Security staff shall ensure all patrons leave the venue in a prompt and orderly fashion.

1. INTRODUCTION

Gabriels Hearne Farrell Pty Ltd was commissioned to undertake modelling of the potential environmental noise emissions from the proposed mixed-use development at 59-61 Dunn Bay Rd, Dunsborough.

The purpose of the assessment was to ensure that the proposed development has the capability of complying with the Environmental Protection (Noise) Regulations 1997, at the Development Approval stage. The assessment considers noise emissions from patrons within the external and internal areas, amplified music associated with the hospitality uses, noise emissions from the mechanical services, and noise associated with service vehicles.

2. PROJECT BACKGROUND

The proposed site for the mixed-use development is located on the corner of Dunn Bay Rd and Cape Naturaliste Rd in Dunsborough (No. 59 and 61 Dunn Bay Rd). The site context is illustrated in Figure 1 below.



Figure 1

The site is predominately surrounded by commercial land-uses. The lots immediately east of the site (corner of Dunn Bay Rd and Cyrillean Way) have been undeveloped for a number of years. The nearest noise sensitive premises are the existing residences located on Martingdale Drive, approximately 70 metres to the west. There are residences on Kunzai Place, over 100 metres to the north. There are also residences on large properties to the south of Caves Rd, on Moondah Close. To the west of the site is the Dunsborough Police Station.

The proposed mixed-use development is illustrated in Figure 2. The development includes a Boutique Hotel on the northern side of the site, consisting of a series of accommodation units. Building 1 is a Brewery, Building 2 is a Restaurant, and Building 3 is a Café. Building 4, which is located on the south-west corner of the site consists of retail and ground level, and two short-stay apartments (Class 3) on the first floor.



Figure 2 – Site plan

The majority of the carparking for the development is located on the eastern side of the site, access off Dunn Bay Rd. There is also a small carpark accessed of Cape Naturaliste Road.

At this early stage of the project the operating hours of the hospitality uses are unknown, but the following assumptions have been made:

- The Brewery (Building 1) will generally be open between lunch time and 10 pm, and may operate until midnight (eg private functions);
- The restaurant (Building 2) will be open for lunch and dinner, closing prior to 10 pm (however Building 2 may be used for private functions that may extend beyond 10 pm; and,
- The café will be open for breakfast and lunch, closing in the afternoon.

At this stage the proponent is envisaging a total of 1,000 patrons spread across the three hospitality buildings, with the following break-down:

- Within Building 1 – 206 patrons
- Within Building 2 – 181 patrons
- Within Building 3 – 71 patrons
- In the external areas (courtyard and decks) – 542 patrons.

3. NOISE LEVEL CRITERIA

In Western Australia, noise transmission from one property to another is governed by the Environmental Protection (Noise) Regulations 1997. These regulations establish 'Assigned Levels' which are the noise levels that cannot be exceeded at surrounding premises.

Please note that given that the short-stay accommodation (the boutique units to the north and the two apartments in Building 4) is located on the same lot(s) as the hospitality uses, the noise transmission from the hospitality uses to the short-stay accommodation technically does not need to comply with the Environmental Protection (Noise) Regulations 1997. However, it is our recommendation that the short-stay accommodation incorporate 'quiet house' principles such that the noise levels within the accommodation are compliant with the *Design Sound Levels* of Australian Standard 2107:2016 in order to maintain amenity for the occupants.

3.1 'Assigned Levels' for the residences on Martingdale Drive

The 'Assigned Levels' for the residences on Martingdale Drive are provided in Table 1. The 'Assigned Levels' are based on a total *influencing factor* of 2 dB. This *influencing factor* is derived from there being commercial land-uses within 12% of the 100 m circle and 18% of the 450 m circle.

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		L_{A10}	L_{A1}	$L_{A\,max}$
Noise Sensitive Premises: highly sensitive area (eg within 15 metres of a house)	7 am to 7 pm Monday to Saturday	**47**	57	67
	9 am to 7 pm Sunday and public holidays	**42**	52	67
	7 pm to 10 pm all days	**42**	52	57
	10 pm to 7 am Monday to Saturday and 10 pm to 9 am on Sundays and public holidays	**37**	47	57

Table 1– Assigned Levels for the residences on Martingdale Drive

The above 'Assigned Levels' also apply to the residences on Kunzea Place.

GABRIELS HEARNE FARRELL PTY LTD
UNIT 3/2 HARDY ST SOUTH PERTH WA 6151 PH – (08) 9474 5966

3.2 'Assigned Levels' for the residences on Moondah Close

The 'Assigned Levels' for the residences on Moondah Close are provided in Table 2. The 'Assigned Levels' are based on a total *influencing factor* of 1 dB. This *influencing factor* is derived from there being commercial land-uses within 18% of the 450 m circle.

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		L_{A10}	L_{A1}	$L_{A\,max}$
Noise Sensitive Premises: highly sensitive area (eg within 15 metres of a house)	7 am to 7 pm Monday to Saturday	**46**	56	66
	9 am to 7 pm Sunday and public holidays	**41**	51	66
	7 pm to 10 pm all days	**41**	51	56
	10 pm to 7 am Monday to Saturday and 10 pm to 9 am on Sundays and public holidays	**36**	46	56

Table 2– Assigned Levels for the residences on Moondah Close

3.3 'Assigned Levels' for the commercial premises

The 'Assigned Levels' for commercial premises is provided in Table 3 below:

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		L_{A10}	L_{A1}	$L_{A\,max}$
Commercial premises	All hours	**60**	75	80

Table 3 – Assigned Levels for commercial premises

3.4 Noise Character

Regulation 7(b) requires that the noise emission must be 'free' of annoying characteristics, namely tonality (eg whining, droning), modulation (like a siren), and impulsiveness (eg thumping). Where noise emissions do exhibit the above noise characteristics, an adjustment is made to the measured/calculated noise level (in accordance with Regulation 9):

- *Tonality* 5 dB is added to the measured/calculated level
- *Modulation* 5 dB is added to the measured/calculated level
- *Impulsiveness* 10 dB is added to the measured/calculated level
- *Amplified music* 10 dB is added to the measured/calculated level where impulsiveness is not present.

4. NOISE MODELLING PROCEDURE

The potential noise emissions from the proposed development has been modelled using the *SoundPLAN 8.2* software with the *Concawe* algorithm. This software allows the input of topographical data, building heights and forms, meteorological conditions, and noise source data. The software produces noise contour plans, indicating the predicted noise level over a given area.

Note – the output noise levels from *SoundPLAN* are base noise levels not including adjustment for 'noise character'.

4.1 Meteorological Conditions

The meteorological conditions used for the noise modelling is outlined below. These are considered the worst-case for noise propagation, and are taken from the document titled *EPA Guidance for the Assessment of Environmental Factors – No.8 Environmental Noise.*

	Day	Night
Temperature	20°C	15°C
Relative Humidity	50%	50%
Wind	4 m/s in all directions simultaneously	3 m/s in all directions simultaneously
Pasquil Stability Class	E	F

Table 4 – Meteorological conditions

4.2 Topography

The topography of the land was input into the noise model based on the 1 metre contour data available on the City of Bunbury Intramaps.

4.3 Building envelope construction

Figure 3 illustrates the height of the acoustic screening that will be incorporated on the western side of the hospitality uses, in order to reduce noise transmission to the residences on Martingdale Drive. This acoustic screening will be 'solid' without gaps or slots, and will be constructed of materials with a minimum density of 10 kg/m^2 such as 6 mm glass, 12 mm Perspex, 6 mm fibre-cement, 18 mm timber, 1.2mm steel, or masonry/concrete/stone at any thickness. Figure 3 also illustrates the extent of patio/verandahs consisting of Everbright sheeting or similar.

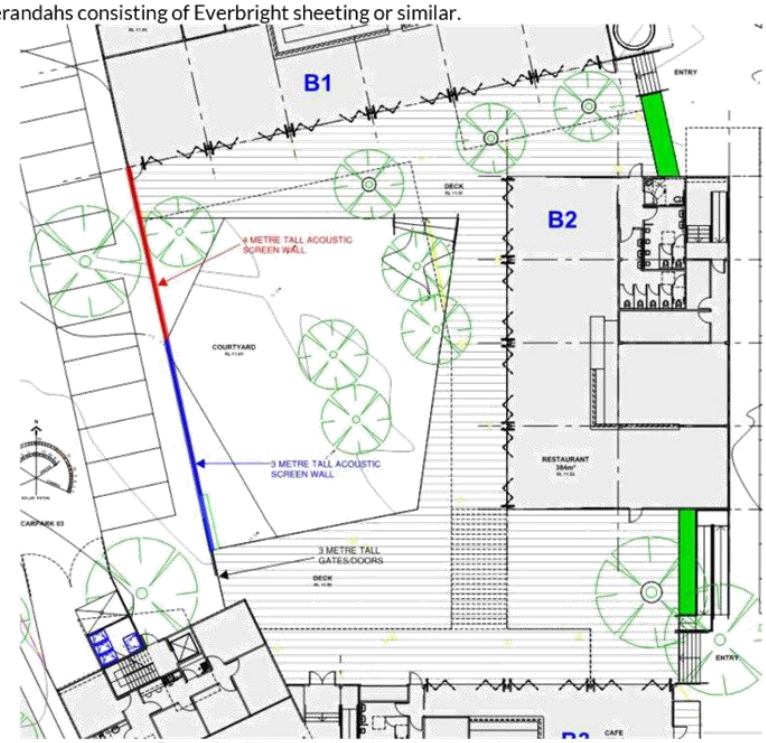


Figure 3 – Acoustic screening of courtyard and deck areas

Note – the boundary fencing on the western and southern side of the accommodation units has been modelled as 2100 mm tall. The noise model has not included any fencing on the northern side of the accommodation units.

In relation to the three hospitality buildings, the noise modelling has been based on the following building envelope construction:

Glazing – External Bi-fold doors to be a minimum of 6.38 mm laminated glass. The Breezeway operable glass louvres are to be a minimum of 6 mm toughened glass.

Roof construction – Bondor roof panels or Colorbond sheeting with Anticon 80 insulation installed to the underside.

'Ceiling' above the Bar – An acoustically absorbent 'ceiling' shall be provided within the Brewery, Restaurant, and Café. The selected acoustically absorbent ceiling shall be specified to achieve a Noise Reduction Coefficient (NRC) of 0.75 or greater. Examples include:

- 25 mm Autex Quietspace Panels (or similar product) installed to the underside of the Bondor panels;
- Perforated timber ceiling (minimum 18% perforation factor) with 75 mm glasswool insulation over.
- Perforated metal (eg Stramit Acoustic Panel) with 75 mm glasswool insulation over.

External walls – External cladding as per the architectural drawings + 90 mm R2.5 glasswool batts between the studs, and 13 mm plasterboard (or 18 mm plywood) internal lining.

5. MODELLING OF PATRON/CROWD NOISE

5.1 Modelling assumptions

Scenario 1A demonstrates the potential noise transmission from patrons (ie crowd noise), based on the following assumptions:

- Patron numbers as outlined in Section 2 of this report;
- All of the external bi-fold doors and Breezeway louvres in an open position (Building 1, Building 2, and Building 3);
- A reverberant Sound Pressure Level of 82 dB(A) within the Brewery (patron noise with low level background music);
- A reverberant Sound Pressure Level of 80 dB(A) within the Restaurant (patron noise with low level background music);
- A reverberant Sound Pressure Level of 75 dB(A) within the café (patron noise);
- A sound pressure level of 66 dB(A)/m^2 for the courtyard and deck areas, resulting in a total Sound Power Level of 97 dB(A) for the external patrons;
- Gate/doors on the western side of the hospitality courtyard in a CLOSED position.

The spectrums utilised for the noise sources are provided in Table 5.

Frequency (Hz)	63	125	250	500	1k	2k	4k	dB(A)
Patrons within the courtyard and deck areas Total Sound Power Level	76.4	77.4	87.4	94.4	93.4	86.4	92.4	**97**
Internal SPL within Brewery	69	78	77	80	78	74	69	**82**
Internal SPL within Restaurant	67	76	75	78	76	72	67	**80**
Internal SPL within Cafe	62	71	70	73	71	67	62	**75**

Table 5 – Patron noise levels

5.2 Scenario 1A noise modelling results (patron noise emissions, with west entry gate in a closed position)

Given that all three hospitality buildings will be in use on Sundays and evenings, the most applicable 'Assigned Level' is L_{10} 42 dB(A) at the Martingdale Drive residences (and L_{10} 41 dB(A) at the residences on Moondah Close).

The results of the noise modelling of the patron noise emissions are illustrated in Appendix A. This scenario was based on the western entry gate being in a closed position. The noise contours are generated at 1.5 metres above ground level, as per all of the modelled scenarios.

The results indicate that the patron noise emissions will comply with the relevant 'Assigned Levels', including on Sundays and evenings between 7 pm and 10 pm. The results are summarised in Table 6 below.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level'	Compliance
Martingdale Drive residences	L_{10} 42 dB(A)	L_{10} 42 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 39 dB(A)	L_{10} 39 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 28 dB(A)	L_{10} 28 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 32 dB(A)	L_{10} 32 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 53 dB(A)	L_{10} 53 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 56 dB(A)	L_{10} 56 dB(A)	L_{10} 60 dB(A)	YES

Table 6 – Scenario 1A results

Patron noise at distance is not known to exhibit annoying characteristics, therefore the penalties for tonality, impulsiveness, and modulation do not apply.

Note – The highest predicted noise level at the accommodation units is L_{10} 38 dB(A). Although the 'Assigned Levels' do not apply at this location, the predicted noise level is compliant with the 'Assigned Levels'.

5.2.1 *Noise intrusion into the short-stay accommodation*

The noise transmission from the hospitality uses to the short-stay accommodation is not required to comply with the Environmental Protection (Noise) Regulations 1997 given that:

- The short-stay accommodation and the hospitality uses are located on the same lot; and,
- The short-stay accommodation will be operated by the same entity as the hospitality components. The short-stay accommodation will not be strata-titled apartments.

However, in order to maintain amenity for the occupants of the short-stay accommodation on the first floor of Building 4, the intention is to achieve internal noise levels that are compliant with the *Design Sound Levels* of Australian Standard 2107:2016. This standard establishes the following relevant *Design Sound Levels*:

- Hotels and Motels in suburbs or near minor roads – sleeping areas L_{eq} 30 to 35 dB(A)

Octave band noise intrusion calculations have determined the required building envelope construction for controlling patron noise intrusion such that a noise level of 30 dB(A) is achieved within Unit 1. However, further assessment indicates that the live entertainment within the courtyard is the determining factor for the building envelope construction. Please refer to Section 6.1 for further information. This is because music has more low-frequency (63 to 125 Hz) sound energy than crowd noise and therefore is more difficult to attenuate.

5.3 Scenario 1B noise modelling results (western entry gates in an open position)

Scenario 1B was conducted as per Scenario 1A, except with the entry gates on the western side of the courtyard in an OPEN position. The results are presented as a noise contour plan in Appendix A. The modelling indicates that with the gate open the noise transmission to the Martingdale Drive residences by 1 dB. The resultant noise level slightly exceeds the 'Assigned Level' on Sundays and during the evening period (7 pm and 10 pm) on all days. This indicates that in order to fully comply with the 'Assigned Levels', the western entry gates shall only be left open during the following time periods (however can be open for the short periods as individual groups of people enter and exit the venue):

- Monday to Saturday, between 7 am and 7 pm.

5.4 Scenario 1C noise modelling results (patron noise emissions at night after 10 pm)

It is possible that the Brewery may operate after 10 pm at night in the following situations:

- Brewery (Building 1) used for private functions such as weddings; or,
- The Brewery operator may choose to trade until midnight on certain days.

Scenario 1C was modelled to demonstrate that the patron noise associated with Building 1 is capable of complying with the 'Assigned Levels' after 10 pm. Scenario 1C was based on the following inputs:

- Brewery at full capacity;
- External bi-fold doors in an OPEN position;
- Breezeway louvres in a CLOSED position;
- 160 patrons located in the courtyard/deck outside of the brewery building.

The Scenario 1C noise contours are provided in Appendix A. The noise modelling results demonstrate that the noise emission to the residences will comply with the night time (after 10 pm) Assigned Level. The results are summarised in Table 7 below:

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level'	Compliance
Martingdale Drive residences	L_{10} 36 dB(A)	L_{10} 36 dB(A)	L_{10} 37 dB(A)	YES
Moondah Close residences	L_{10} 36 dB(A)	L_{10} 36 dB(A)	L_{10} 36 dB(A)	YES
Kunzea Place residences	L_{10} 21 dB(A)	L_{10} 21 dB(A)	L_{10} 37 dB(A)	YES
16 Sloop Loop	L_{10} 19 dB(A)	L_{10} 19 dB(A)	L_{10} 36 dB(A)	YES
Most effected commercial premises	L_{10} 45 dB(A)	L_{10} 45 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 54 dB(A)	L_{10} 54 dB(A)	L_{10} 60 dB(A)	YES

Table 7 – Scenario 1C results

Patron noise at distance is not known to exhibit annoying characteristics, therefore the penalties for tonality, impulsiveness, and modulation do not apply.

6. MODELLING OF LIVE ENTERTAINMENT WITHIN THE COURTYARD (SCENARIO 2A)

It is common for breweries and wineries to occasionally have live entertainment in their outdoor area, in the form of an acoustic duo or trio (ie amplified singing, amplified guitar(s), etc). Noise modelling has been undertaken to determine the maximum permissible volume for the speakers used by the entertainers whilst maintaining compliance with the 'Assigned Levels'.

The proponent has advised that the location for the duo/trio entertainment is in the north-west corner of the courtyard, with the speakers facing south-east. For the purpose of our assessment we have assumed a speaker on each side of the 'stage'. It has also been assumed that the live entertainment within the courtyard will not occur after 10 pm at night.

A point receiver was positioned within the noise model at 10 metres from the speakers as a calibration point. The Scenario 2A modelling indicates that the speakers must be limited to a volume of no greater than 68 dB(A) at 10 metres from the front of the speakers in order to comply with the 'Assigned Levels' inclusive of Sundays and the evening periods (7 pm to 10 pm). The Scenario 2A modelling results are summarised in Table 8.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level'	Compliance
Martingdale Drive residences	L_{10} 32 dB(A)	L_{10} 42 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 21 dB(A)	L_{10} 31 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 16 dB(A)	L_{10} 26 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 14 dB(A)	L_{10} 24 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 46 dB(A)	L_{10} 56 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 46 dB(A)	L_{10} 56 dB(A)	L_{10} 60 dB(A)	YES

Table 8 – Scenario 2A results

Includes +10dB penalty due to the emissions being music, as per Regulation 9(3)(b).

It is recommended that the operator purchase a sound level meter such that the music volume can be monitored and calibrated as required. Furthermore, any contract between the operator and entertainer's shall include a clause stating that the music volume shall not exceed 68 dB(A) at 10 metres from the front of the speakers.

6.1 Noise intrusion into the Building 4 short-stay accommodation

As established in earlier in this report, the noise transmission from the hospitality uses (including courtyard entertainment) to the short-stay accommodation (the boutique accommodation units, and the two units within Building 4) is not required to comply with the Environmental Protection (Noise) Regulations 1997, given that :

- The short-stay accommodation and the hospitality uses are located on the same lot; and,
- The short-stay accommodation will be operated by the same entity as the hospitality components. The short-stay accommodation will not be strata-titled apartments.

As discussed in Section 5.2.1, in order to maintain amenity for the occupants of the short-stay accommodation on the first floor of Building 4, the intention is to achieve internal noise levels that are compliant with the *Design Sound Levels* of Australian Standard 2107:2016. This standard establishes the following relevant *Design Sound Levels*:

- Hotels and Motels in suburbs or near minor roads – sleeping areas L_{eq} 30 to 35 dB(A)

Given that music contains tonal characteristics, it is our view that an internal noise level of L_{eq} 25 dB(A) would be more appropriate for the two units within Building 4.

The Scenario 2A noise modelling indicates that the courtyard entertainment may result in noise levels of 55 dB(A) at the outside of the Bed Room window on the north façade of Unit 01, and 53 dB(A) at the outside of the windows on the east façade of Unit 01. Octave-band noise intrusion calculations have been undertaken to determine the minimum required building envelope construction for Unit 01 in order to attenuate the courtyard entertainment music down to 25 dB(A). The minimum building envelope performance shall be as follows:

External glazing on north façade of Bed Room of Unit 01 – Glazing system (inclusive of glass, framing, and seals) to achieve a minimum sound reduction of $R_w + C_{tr}$ 38. This can be achieved by acoustic double glazing consisting of 10.38 mm laminated glass + minimum 40 mm air-space + 6.38 mm laminated glass.

External glazing on the east façade of Unit 01 – Glazing system (inclusive of glass, framing, and seals) to achieve a minimum sound reduction of $R_w + C_{tr}$ 32. This may be achievable with single 10.38 mm laminated glass in a well sealed awning window.

External walls on the north and east facades of Unit 01 – External timber cladding + minimum 90 mm framing with 90 mm glasswool batts + 2 layers of 13 mm plasterboard.

Roof/ceiling construction – Colorbond roofing with Anticon 55 insulation + suspended 13 mm plasterboard ceiling with minimum 90 mm glasswool insulation over.

NOTE - If the above building envelope construction is implemented, then the patron noise modelled in Scenario 1A will be attenuated to the following noise levels within Unit 01 of Building 4:

- L_{eq} 20 dB(A) within the northern Bed Room; and,
- L_{eq} 26 dB(A) within the southern Bed Room and Living Area of Unit 01.

These resultant noise levels are compliant with the *Design Sound Level* established in AS 2107:2016.

GABRIELS HEARNE FARRELL PTY LTD
UNIT 3/2 HARDY ST SOUTH PERTH WA 6151 PH – (08) 9474 5966

7. MODELLING OF AMPLIFIED MUSIC BREAK-OUT FROM THE BUILDINGS

A series of modelling scenarios have been undertaken to determine the maximum permissible volume for amplified music within Building 1 (brewery) and Building 2 (Restaurant).

7.1 Scenario 2B – Loud amplified music within Building 1 (Brewery)

It is noted that the brewery may be used for private functions such as weddings. These functions may include DJ Entertainment or the like, at a volume louder than background music.

Scenario 2B demonstrates the potential noise break-out from Building 1, based on the following factors:

- Amplified music volume of 85 dB(A) within the building, which is not uncommon in a wedding; and,
- The external bi-folds doors and breezeway louvres in a CLOSED position. Please refer to Section 7.3 of this report for the permissible music volume when the bi-fold doors and breezeway louvres are open.

A summary of the Scenario 2B results are provided in Table 9.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level' prior to 10 pm	Compliance
Martingdale Drive residences	L_{10} 31 dB(A)	L_{10} 41 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 26 dB(A)	L_{10} 36 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 23 dB(A)	L_{10} 33 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 21 dB(A)	L_{10} 31 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 39 dB(A)	L_{10} 49 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 44 dB(A)	L_{10} 54 dB(A)	L_{10} 60 dB(A)	YES

Table 9 – Scenario 2B results

Includes +10dB penalty due to the emissions being music, as per Regulation 9(3)(b).

Based on the above results, the loud amplified music within the brewery (Building 1) will need to be limited as follows, when the external doors and windows are closed:

- Music volume to be 86 dB(A) or less before 10 pm; and,
- Music volume to be 81 dB(A) or less after 10 pm.

If the proponent would like to permit louder music volumes within Building 1, then consideration would need to be given to upgrading the sound reduction of the roof construction.

7.2 Scenario 2C – Loud amplified music within Building 2 (Restaurant)

Although the restaurant will close prior to 10 pm each night, it is possible that the operator may wish to allow the space to be used for private functions after 10 pm. As such, Scenario 2C was undertaken to determine the maximum permissible music volume within Building 2, when the external doors, louvres, and windows are CLOSED. The noise modelling was based on an amplified music volume of 85 dB(A).

A summary of the Scenario 2C results are provided in Table 10.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level' prior to 10 pm	Compliance
Martingdale Drive residences	L_{10} 29 dB(A)	L_{10} 39 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 25 dB(A)	L_{10} 35 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 19 dB(A)	L_{10} 29 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 17 dB(A)	L_{10} 27 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 36 dB(A)	L_{10} 46 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 36 dB(A)	L_{10} 46 dB(A)	L_{10} 60 dB(A)	YES

Table 10 – Scenario 2C results

Includes +10dB penalty due to the emissions being music, as per Regulation 9(3)(b).

Based on the above results, the loud amplified music within the restaurant (Building 2) will need to be limited as follows, when the external doors and windows are closed:

- Music volume to be 88 dB(A) or less before 10 pm; and,
- Music volume to be 83 dB(A) or less after 10 pm.

7.3 Scenario 2D – Background music within Building 1 and 2 whilst doors and louvres are open

The Scenario 2D noise contour plan in Appendix A demonstrates the potential break-out of background music within Building 1 and 2, when the external bi-fold doors and breezeway louvres are OPEN. The noise modelling was based on an amplified music volume of 73 dB(A) within the brewery and restaurant.

A summary of the Scenario 2D results are provided in Table 11.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level' prior to 10 pm	Compliance
Martingdale Drive residences	L_{10} 32 dB(A)	L_{10} 42 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 31 dB(A)	L_{10} 41 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 22 dB(A)	L_{10} 32 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 23 dB(A)	L_{10} 33 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 44 dB(A)	L_{10} 54 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 50 dB(A)	L_{10} 60 dB(A)	L_{10} 60 dB(A)	YES

Table 11 – Scenario 2D results

Includes +10dB penalty due to the emissions being music, as per Regulation 9(3)(b).

This confirms compliance with the 'Assigned Levels' up until 10 pm. After 10 pm, the background music shall be limited to 68 dB(A) inside Building 1 and 2 when the bi-fold doors and louvres are OPEN.

8. MECHANICAL PLANT

At this early stage of the project it is not possible to assess the noise emissions from the mechanical plant given that there is currently no mechanical design or equipment selections. However, compliance will be achieved with the relevant 'Assigned Levels' by implementing common place noise control strategies, including:

- Selection of the quietest condensing units and evaporative coolers, incorporating variable speed drives;
- Selection of quiet refrigeration units which incorporate variable speed drives to achieve lower night noise emissions;
- Selection of quiet Kitchen Exhaust Fans, or potentially selection of in-line fans with discharge attenuators if necessary;

- Positioning of mechanical plant in locations where line-of-sight between the equipment and the residences is obstructed, or provision of acoustic screening where necessary.

The proposed mechanical plant will be assessed prior to the lodgement for the Building Permit, in order to ensure that the selected equipment is compliant with the Environmental Protection (Noise) Regulations 1997.

NOTE – We have been advised that the brewing activities themselves do not result in any noise emissions of significance. There will be ventilation fans installed for the brewery operations, and these will be specified to comply with the 'Assigned Levels' along with all of the other mechanical plant.

9. NOISE EMISSIONS FROM SERVICE VEHICLES

9.1 Delivery/service vehicles

The proponent has advised that the largest service/delivery vehicles will be medium rigid trucks (9 metres length). Noise modelling has been undertaken to predict the potential noise emissions from a delivery vehicle idling near the loading bay and driving through the carpark. The Sound Power Level of a typical rigid truck is provided in Table 12.

Frequency (Hz)	63	125	250	500	1k	2k	4k	dB(A)
Rigid truck Sound Power Level	93	91	89	89	89	86	79	**93**

Table 12 – Sound Power Level of a rigid truck

9.1.1 *Scenario 3A – Delivery/service vehicle idling at the loading bay*

Simulation 3A demonstrates the potential noise transmission from a delivery/service vehicle idling within or near the loading bay. Please note that the modelling has not included any boundary fencing along the eastern or southern boundaries.

A summary of the Scenario 3A results is provide in Table 13.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{10} #	Relevant 'Assigned Level' prior to 10 pm	Compliance
Martingdale Drive residences	L_{10} 26 dB(A)	L_{10} 31 dB(A)	L_{10} 42 dB(A)	YES
Moondah Close residences	L_{10} 17 dB(A)	L_{10} 22 dB(A)	L_{10} 41 dB(A)	YES
Kunzea Place residences	L_{10} 34 dB(A)	L_{10} 39 dB(A)	L_{10} 42 dB(A)	YES
16 Sloop Loop	L_{10} 23 dB(A)	L_{10} 28 dB(A)	L_{10} 41 dB(A)	YES
Most effected commercial premises	L_{10} 49 dB(A)	L_{10} 54 dB(A)	L_{10} 60 dB(A)	YES
Vacant lot to the east	L_{10} 55 dB(A)	L_{10} 60 dB(A)	L_{10} 60 dB(A)	YES

Table 13 – Scenario 3A results

Includes +5 dB penalty for 'tonality'

The adjusted noise levels are compliant with the 'Assigned Levels', except for the night period between 10 pm and 7 am.

The noise transmission from the delivery/service vehicles to the accommodation units are not governed by the EPNR given that they are located on the same lot. However, given that the predicted noise level to the nearest unit is L_{10} 63 dB(A), it is recommended that the operator only permits delivery/service vehicles between the hours of 7 am and 7 pm.

9.1.2 *Scenario 3B – Delivery vehicle driving through the carpark*

The noise from a delivery/service vehicle driving through a carpark need only comply with the L_{max} 'Assigned Levels' given the very short duration that the noise is present. For the purpose of the noise modelling the truck driving slowly has been positioned at the worst-case scenario location, being the northern end of the carpark. The results are presented on the attached Scenario 3B noise contour plan, with a summary provided below.

Noise receiver location (highest noise level)	Predicted noise level L_{10}	Adjusted noise level L_{max} #	Relevant 'Assigned Level' prior to 10 pm	Compliance
Martingdale Drive residences	L_{max} 37 dB(A)	L_{max} 37 dB(A)	L_{max} 57 dB(A)	YES
Moondah Close residences	L_{max} 18 dB(A)	L_{max} 18 dB(A)	L_{max} 56 dB(A)	YES
Kunzea Place residences	L_{max} 39 dB(A)	L_{max} 39 dB(A)	L_{max} 57 dB(A)	YES
16 Sloop Loop	L_{max} 34 dB(A)	L_{max} 34 dB(A)	L_{max} 56 dB(A)	YES
Most effected commercial premises	L_{max} 54 dB(A)	L_{max} 54 dB(A)	L_{max} 80 dB(A)	YES
Vacant lot to the east	L_{max} 62 dB(A)	L_{max} 62 dB(A)	L_{max} 80 dB(A)	YES

Table 14 – Scenario 3b results

Tonality does not apply given that the noise is present for less than 10% of the time.

The predicted noise emissions from a delivery/service vehicle driving through the carpark is compliant with the relevant 'Assigned Levels'.

9.2 Waste collection vehicles

Regulation 14A of the Environmental Protection (Noise) Regulations 1997 addresses the noise emissions associated with waste collection. Fundamentally, waste collection activities are exempt from complying with the 'Assigned Levels', provided the collection only occurs between the hours of 7 am and 7 pm Monday to Saturday, and between 9 am and 7 pm on Sundays and Public Holidays. This is reliant on the waste collection activities being undertaken in the quietest possible manner.

We understand that at this stage there is no proposal for out-of-hours waste collection.

10. GENERAL NOISE MANAGEMENT PRACTICES

In addition to the noise control previously outlined in this report, the following general noise management strategies should be implemented by the operators:

- Glass shall only be emptied into the outside bins between the hours of 7 am and 7 pm (9 am to 7 pm on Sundays).
- Management will maintain a log book for any complaints regarding noise and disturbance in the area. Any complaint received is entered into the book, with the date and time of the complaint, the staff member who received the complaint, and the action taken. The approved manager will then contact the complainant to ascertain whether the action taken is sufficient to answer the concern expressed.
- Security staff shall ensure all patrons leave the venue in a prompt and orderly fashion.

11. CONCLUSION

The potential noise emissions from the proposed mixed-use development at 59-61 Dunn Bay Road, Dunsborough, has been assessed. The noise modelling indicates that the proposed development has the capability of complying with the Environmental Protection (Noise) Regulations 1997.

Compliance with the aforementioned regulations is reliant on a combination of adequate building envelope construction and also noise management practices. These requirements have been established within this report for the purpose of the Development Application.

A revised acoustic report will be necessary at the Building Permit stage which includes an assessment of the selected mechanical plant, and also takes into account any design changes that may influence the environmental noise emissions.

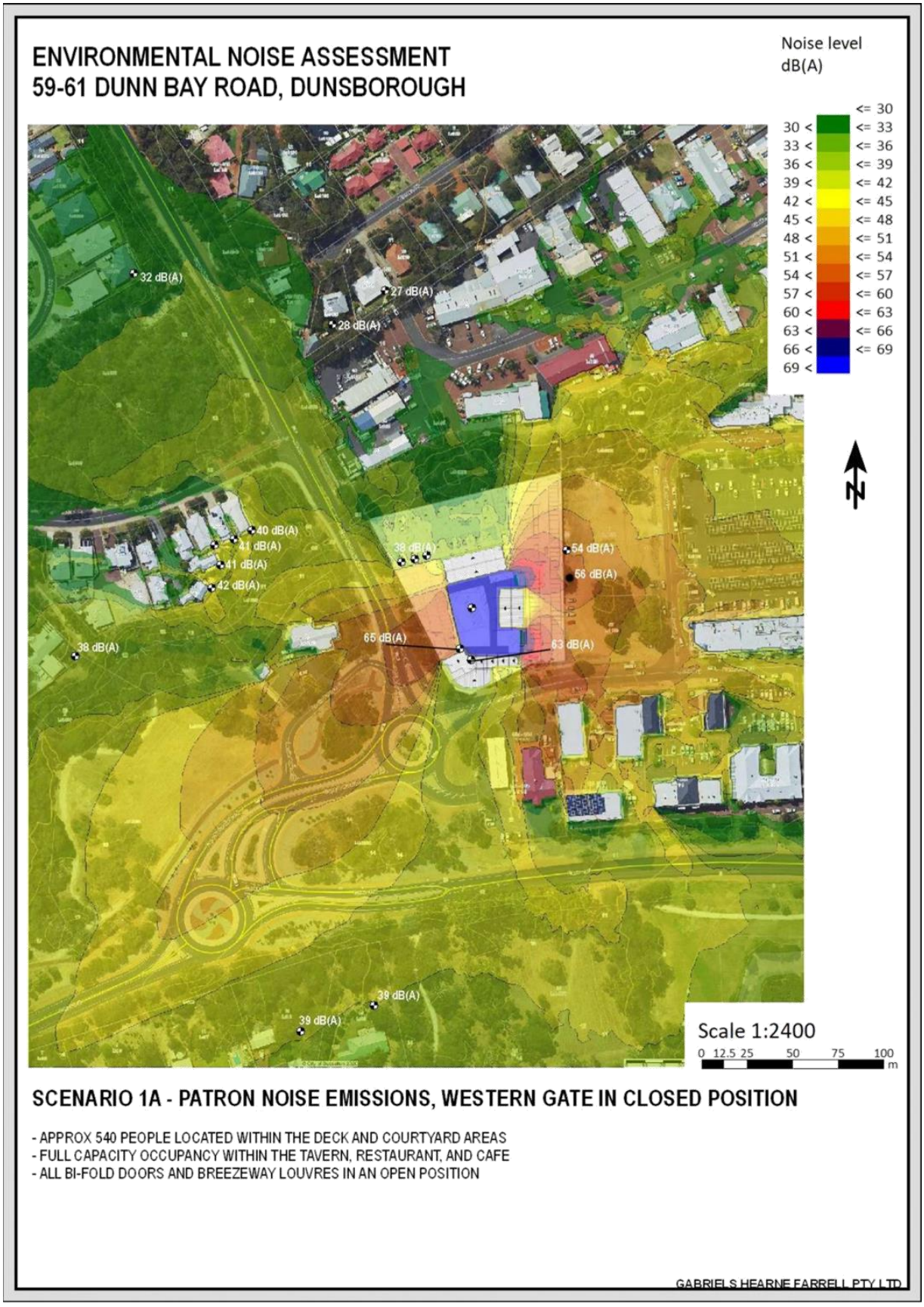
Regards,

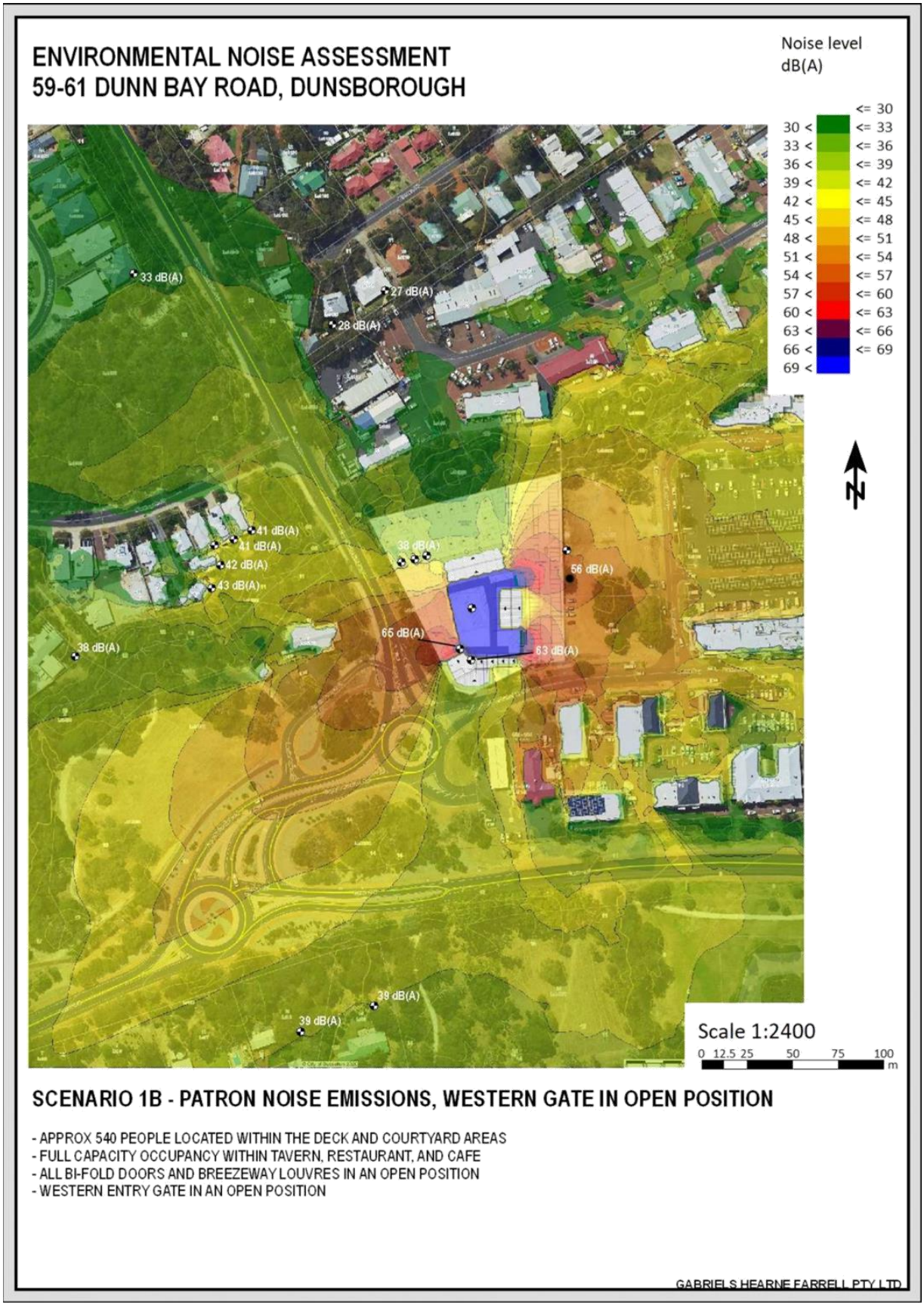
Benjamin Farrell
Director M.A.A.S.

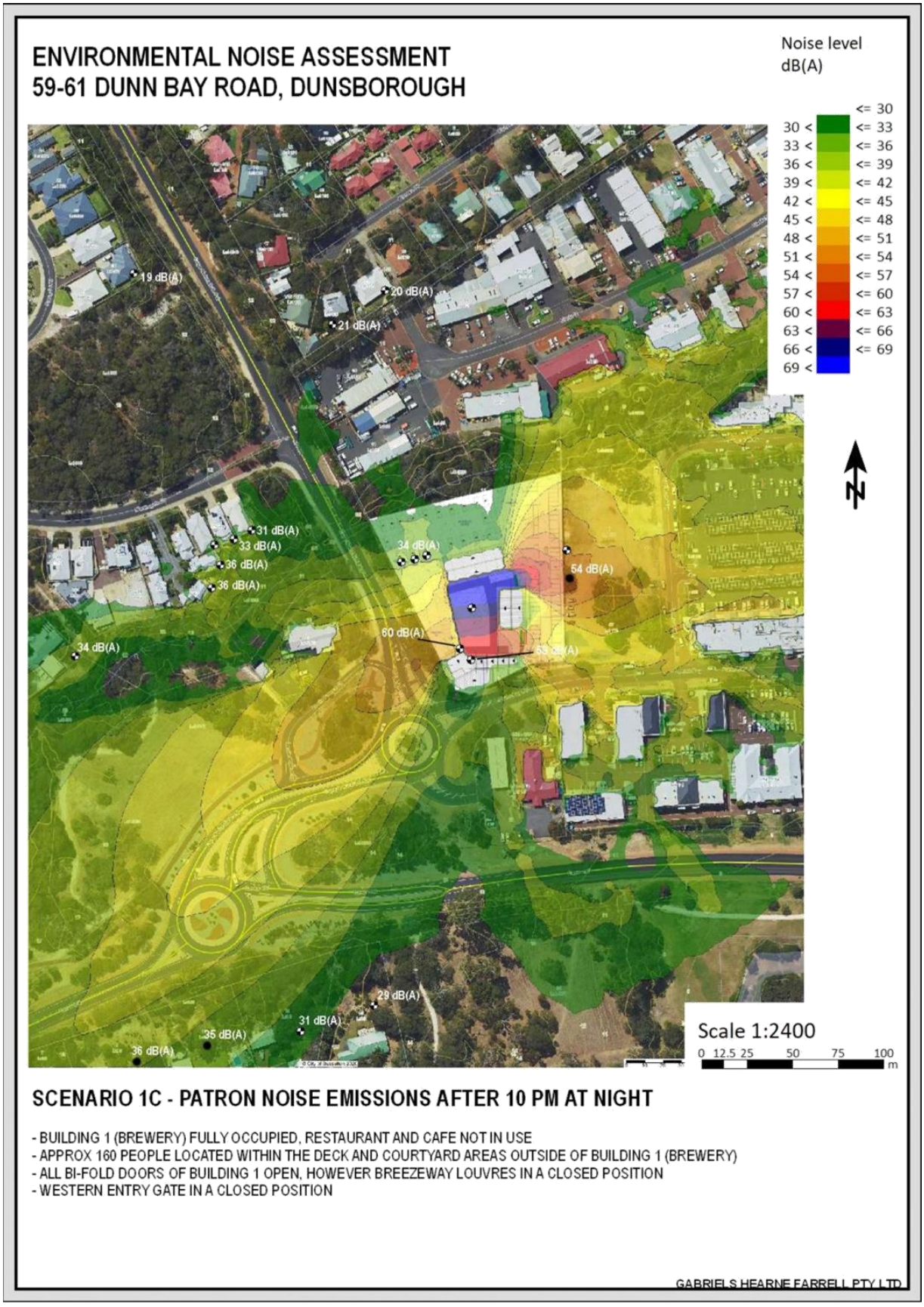


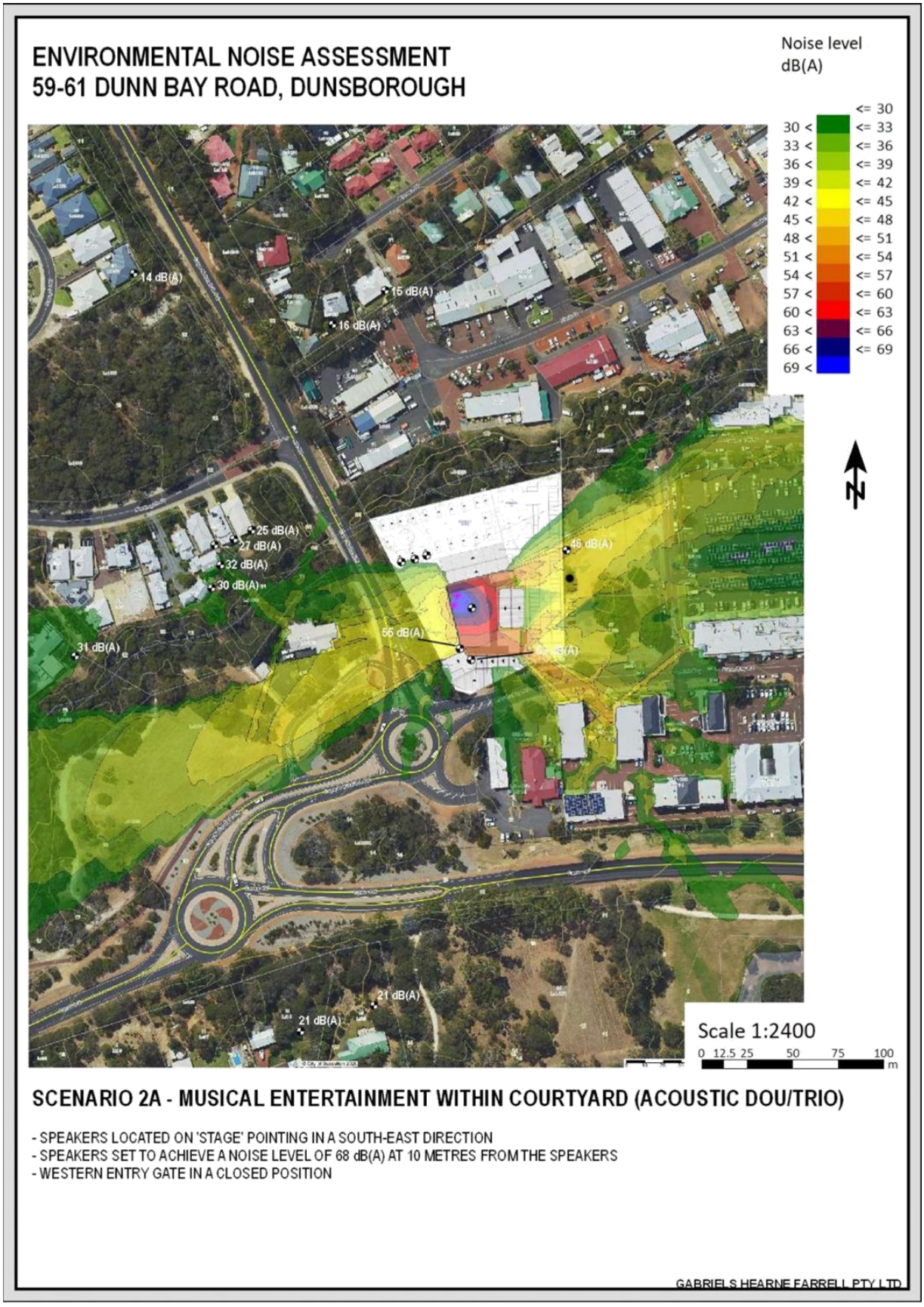
GABRIELS HEARNE FARRELL PTY LTD
Member Firm - Association of Australian Acoustical Consultants
Ph: (08) 9474 5966 Mob: 0439 470 862 www.gabriels.net.au
E: ben@gabriels.net.au

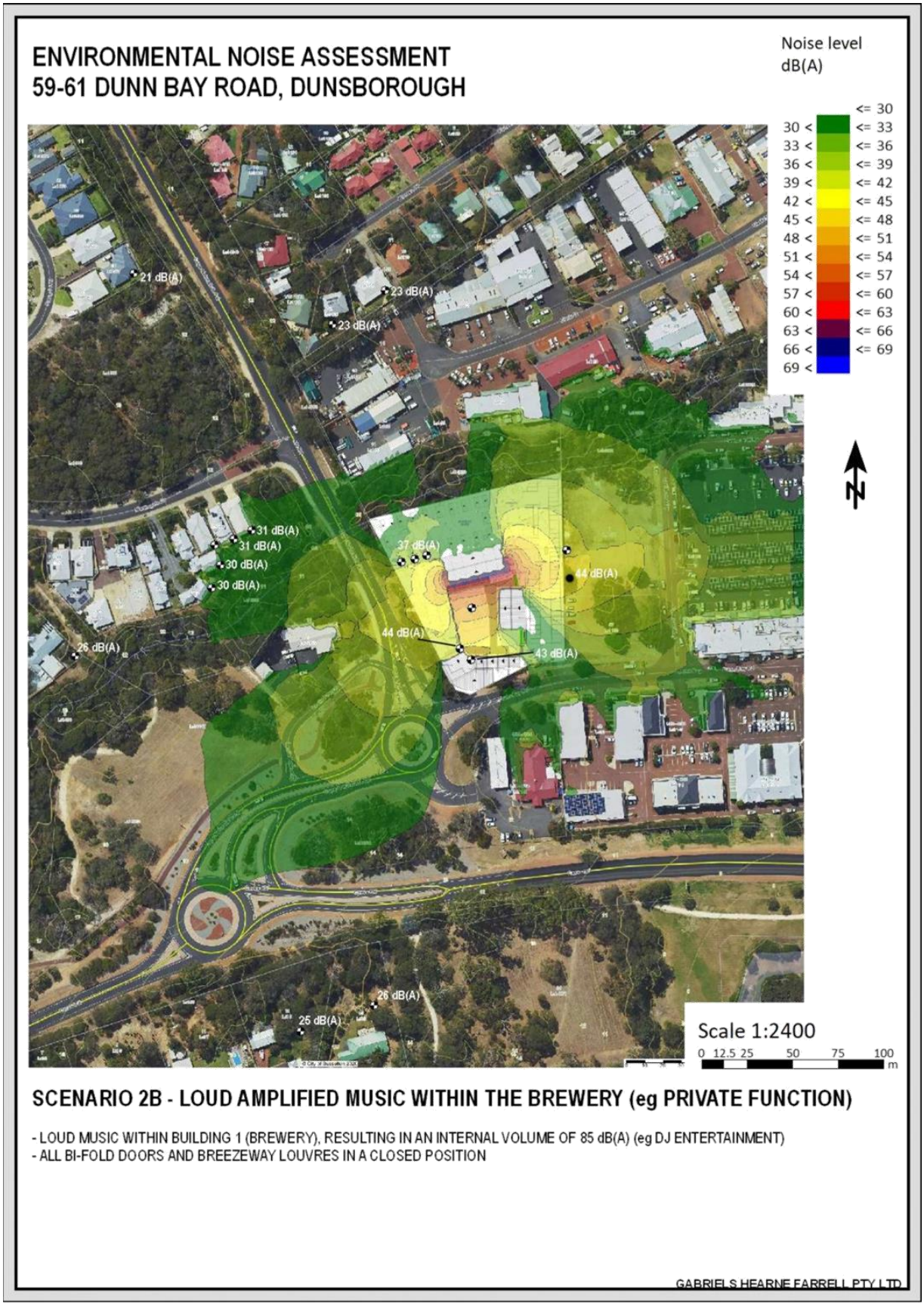
ATTACHMENTS
- APPENDIX A - Noise Contour Plans

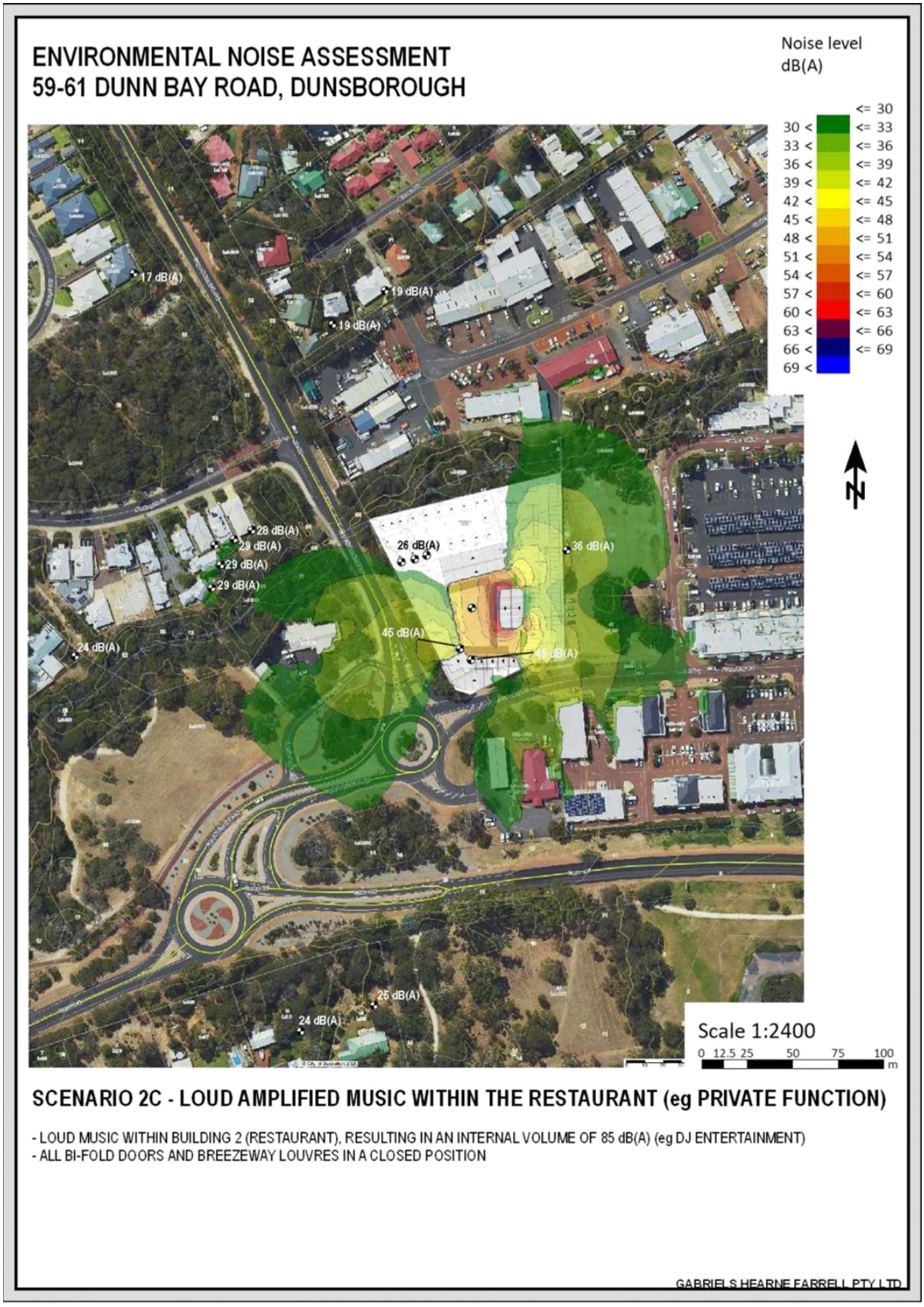

ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
32 dB(A)
27 dB(A)
28 dB(A)
40 dB(A)
41 dB(A)
41 dB(A)
42 dB(A)
38 dB(A)
38 dB(A)
54 dB(A)
56 dB(A)
65 dB(A)
63 dB(A)
39 dB(A)
39 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100 m
SCENARIO 1A - PATRON NOISE EMISSIONS, WESTERN GATE IN CLOSED POSITION
- APPROX 540 PEOPLE LOCATED WITHIN THE DECK AND COURTYARD AREAS
- FULL CAPACITY OCCUPANCY WITHIN THE TAVERN, RESTAURANT, AND CAFE
- ALL BI-FOLD DOORS AND BREEZEWAY LOUVRES IN AN OPEN POSITION
GABRIELS HEARNE FARRELL PTY LTD

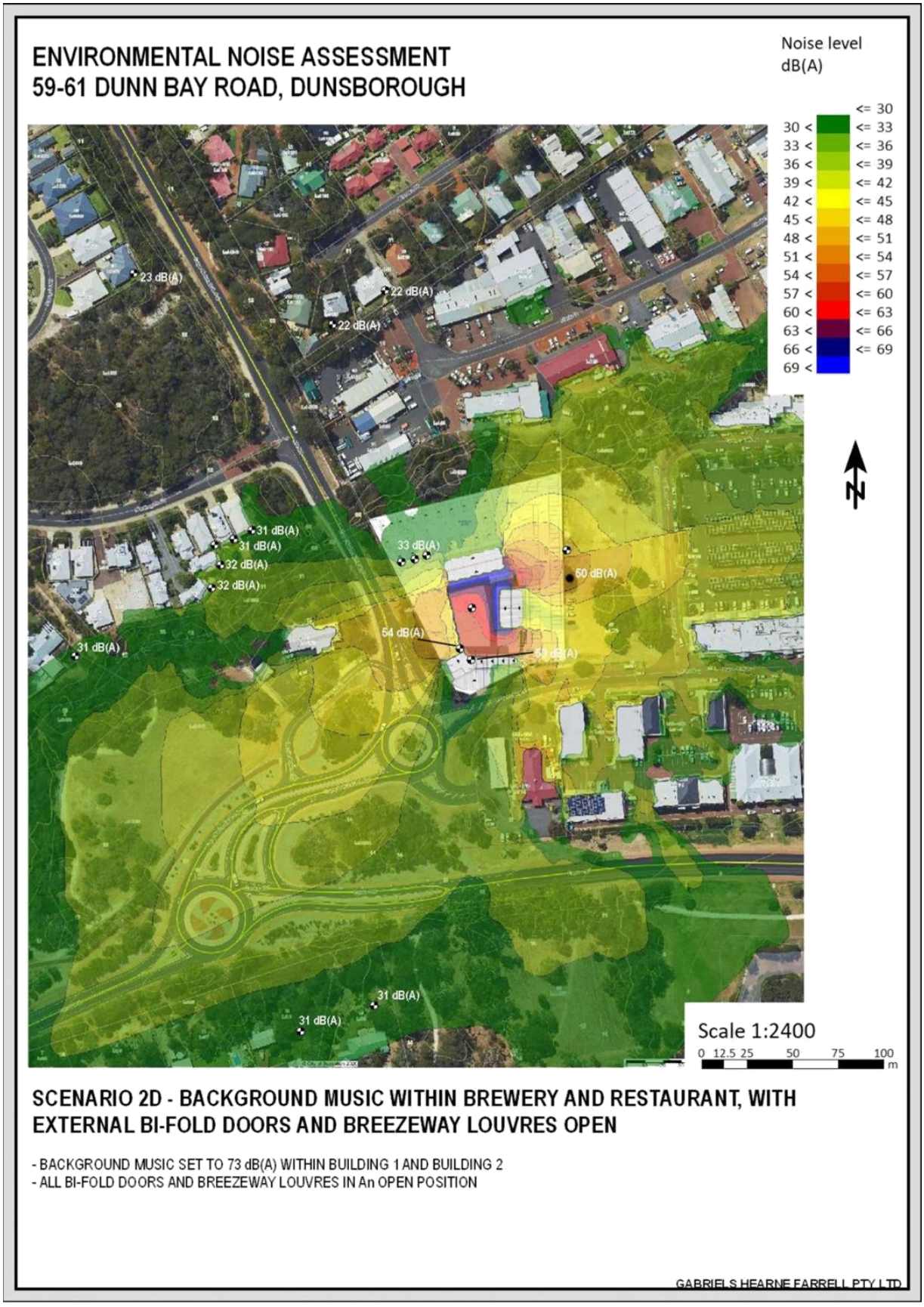

ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level
dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
33 dB(A)
27 dB(A)
28 dB(A)
41 dB(A)
41 dB(A)
42 dB(A)
43 dB(A)
38 dB(A)
56 dB(A)
65 dB(A)
63 dB(A)
38 dB(A)
39 dB(A)
39 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100
m
SCENARIO 1B - PATRON NOISE EMISSIONS, WESTERN GATE IN OPEN POSITION
- APPROX 540 PEOPLE LOCATED WITHIN THE DECK AND COURTYARD AREAS
- FULL CAPACITY OCCUPANCY WITHIN TAVERN, RESTAURANT, AND CAFE
- ALL BI-FOLD DOORS AND BREEZEWAY LOUVRES IN AN OPEN POSITION
- WESTERN ENTRY GATE IN AN OPEN POSITION
GABRIELS HEARNE FARRELL PTY LTD

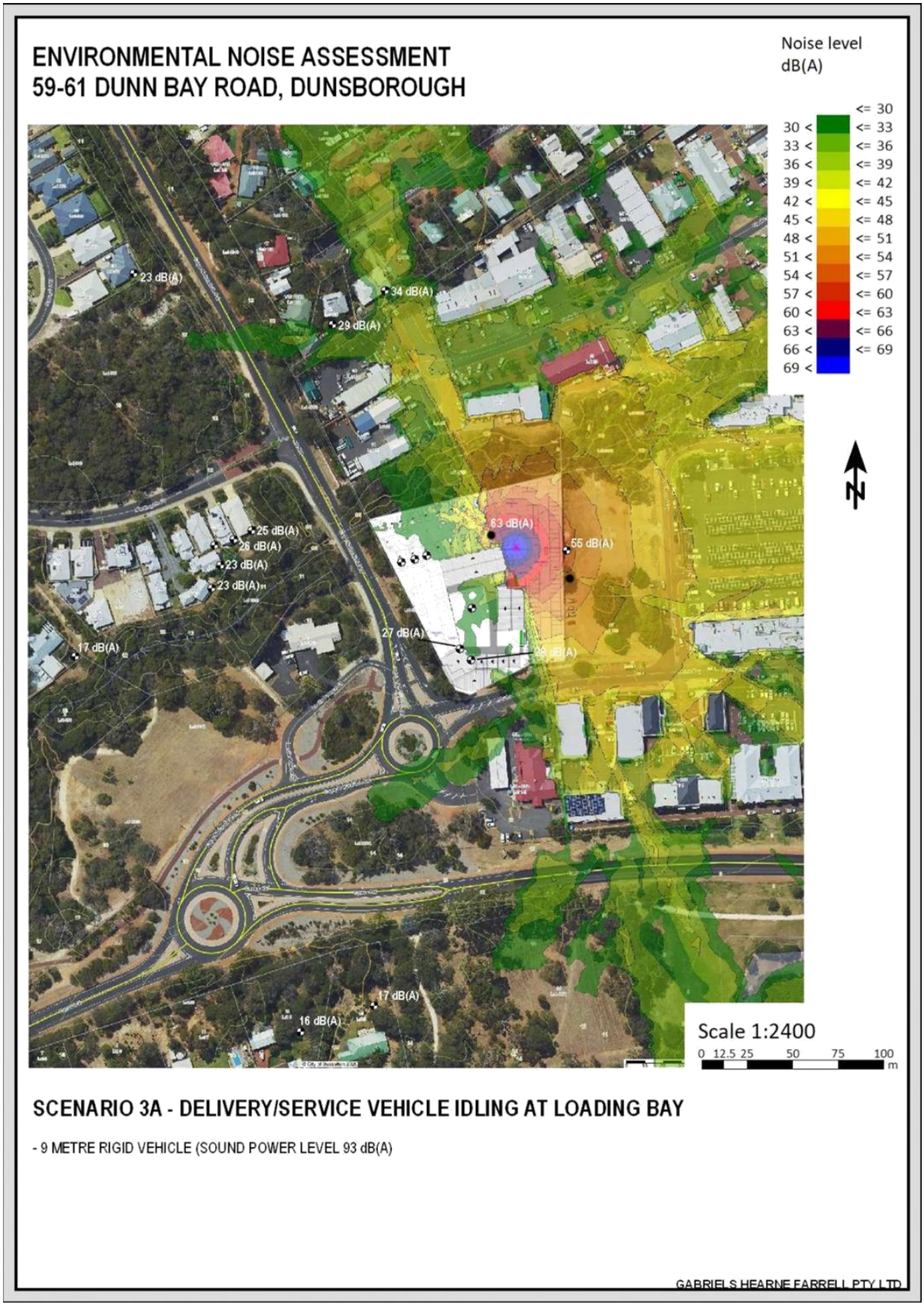

ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level
dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
19 dB(A)
20 dB(A)
21 dB(A)
31 dB(A)
33 dB(A)
36 dB(A)
36 dB(A)
34 dB(A)
54 dB(A)
60 dB(A)
34 dB(A)
29 dB(A)
31 dB(A)
35 dB(A)
36 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100
m
SCENARIO 1C - PATRON NOISE EMISSIONS AFTER 10 PM AT NIGHT
- BUILDING 1 (BREWERY) FULLY OCCUPIED, RESTAURANT AND CAFE NOT IN USE
- APPROX 160 PEOPLE LOCATED WITHIN THE DECK AND COURTYARD AREAS OUTSIDE OF BUILDING 1 (BREWERY)
- ALL BI-FOLD DOORS OF BUILDING 1 OPEN, HOWEVER BREEZEWAY LOUVRES IN A CLOSED POSITION
- WESTERN ENTRY GATE IN A CLOSED POSITION
GABRIELS HEARNE FARRELL PTY LTD

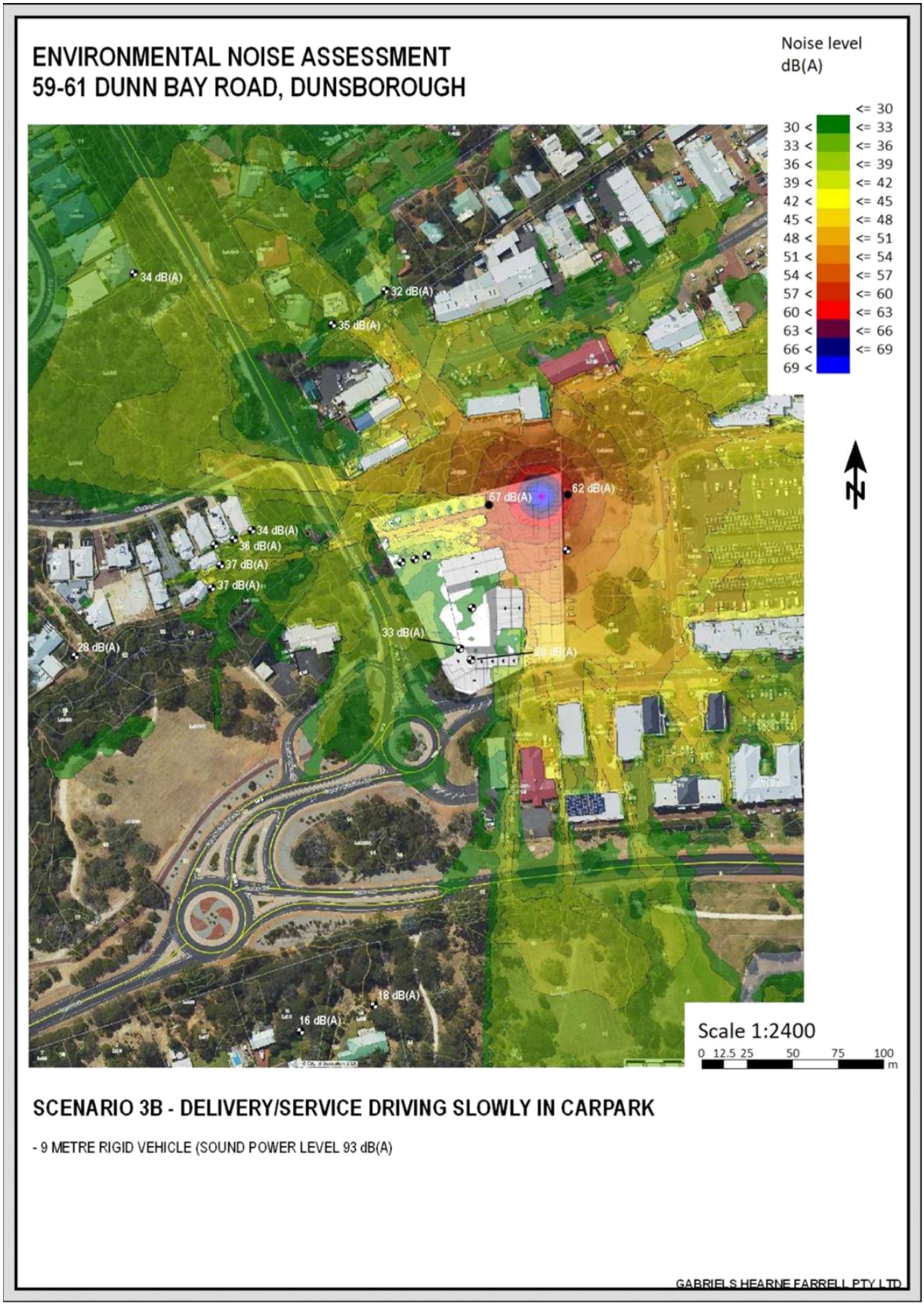

ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
14 dB(A)
15 dB(A)
16 dB(A)
25 dB(A)
27 dB(A)
32 dB(A)
30 dB(A)
31 dB(A)
46 dB(A)
56 dB(A)
21 dB(A)
21 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100 m
SCENARIO 2A - MUSICAL ENTERTAINMENT WITHIN COURTYARD (ACOUSTIC DOU/TRIO)
- SPEAKERS LOCATED ON 'STAGE' POINTING IN A SOUTH-EAST DIRECTION
- SPEAKERS SET TO ACHIEVE A NOISE LEVEL OF 68 dB(A) AT 10 METRES FROM THE SPEAKERS
- WESTERN ENTRY GATE IN A CLOSED POSITION
GABRIELS HEARNE FARRELL PTY LTD


ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
21 dB(A)
23 dB(A)
23 dB(A)
31 dB(A)
31 dB(A)
30 dB(A)
30 dB(A)
37 dB(A)
44 dB(A)
44 dB(A)
43 dB(A)
26 dB(A)
26 dB(A)
25 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100 m
SCENARIO 2B - LOUD AMPLIFIED MUSIC WITHIN THE BREWERY (eg PRIVATE FUNCTION)
- LOUD MUSIC WITHIN BUILDING 1 (BREWERY), RESULTING IN AN INTERNAL VOLUME OF 85 dB(A) (eg DJ ENTERTAINMENT)
- ALL BI-FOLD DOORS AND BREEZEWAY LOUVRES IN A CLOSED POSITION
GABRIELS HEARNE FARRELL PTY LTD


ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
17 dB(A)
19 dB(A)
19 dB(A)
28 dB(A)
29 dB(A)
29 dB(A)
29 dB(A)
26 dB(A)
36 dB(A)
45 dB(A)
45 dB(A)
24 dB(A)
25 dB(A)
24 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100 m
SCENARIO 2C - LOUD AMPLIFIED MUSIC WITHIN THE RESTAURANT (eg PRIVATE FUNCTION)
- LOUD MUSIC WITHIN BUILDING 2 (RESTAURANT), RESULTING IN AN INTERNAL VOLUME OF 85 dB(A) (eg DJ ENTERTAINMENT)
- ALL BI-FOLD DOORS AND BREEZEWAY LOUVRES IN A CLOSED POSITION
GABRIELS HEARNE FARRELL PTY LTD


ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level
dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
23 dB(A)
22 dB(A)
22 dB(A)
31 dB(A)
31 dB(A)
32 dB(A)
32 dB(A)
31 dB(A)
33 dB(A)
60 dB(A)
54 dB(A)
31 dB(A)
31 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100
m
SCENARIO 2D - BACKGROUND MUSIC WITHIN BREWERY AND RESTAURANT, WITH EXTERNAL BI-FOLD DOORS AND BREEZEWAY LOUVRES OPEN
- BACKGROUND MUSIC SET TO 73 dB(A) WITHIN BUILDING 1 AND BUILDING 2
- ALL BI-FOLD DOORS AND BREEZEWAY LOUVRES IN An OPEN POSITION
GABRIELS HEARNE FARRELL PTY LTD


ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level
dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
23 dB(A)
34 dB(A)
29 dB(A)
25 dB(A)
26 dB(A)
23 dB(A)
23 dB(A)
63 dB(A)
55 dB(A)
17 dB(A)
27 dB(A)
26 dB(A)
17 dB(A)
16 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100
m
SCENARIO 3A - DELIVERY/SERVICE VEHICLE IDLING AT LOADING BAY
- 9 METRE RIGID VEHICLE (SOUND POWER LEVEL 93 dB(A)
GABRIELS HEARNE FARRELL PTY LTD


ENVIRONMENTAL NOISE ASSESSMENT
59-61 DUNN BAY ROAD, DUNSBOROUGH
Noise level dB(A)
<= 30
30 < <= 33
33 < <= 36
36 < <= 39
39 < <= 42
42 < <= 45
45 < <= 48
48 < <= 51
51 < <= 54
54 < <= 57
57 < <= 60
60 < <= 63
63 < <= 66
66 < <= 69
34 dB(A)
32 dB(A)
35 dB(A)
57 dB(A)
62 dB(A)
34 dB(A)
36 dB(A)
37 dB(A)
37 dB(A)
28 dB(A)
33 dB(A)
18 dB(A)
16 dB(A)
N
Scale 1:2400
0 12.5 25 50 75 100 m
SCENARIO 3B - DELIVERY/SERVICE DRIVING SLOWLY IN CARPARK
- 9 METRE RIGID VEHICLE (SOUND POWER LEVEL 93 dB(A)
GABRIELS HEARNE FARRELL PTY LTD

SW Office
Unit 6, 14 Fearn Avenue
PO Box 1129
Margaret River
Western Australia 6285

P +61 8 9758 8159
emergeassociates.com.au

Emerge Environmental Services Pty Ltd ABN 57144772510 trading as Emerge Associates

Document Reference: EP20-138(01)—001 KK

Emerge contact: Kirsten Knox

5 November 2020

Attention: Eldorado Pty Ltd ATF Eldorado Trust
C/- Joe D'Alessandro
Place Development
PO Box 280
West Perth, WA 6872

Delivered by email to: joe@placedevelopment.com.au

Dear Joe

DESKTOP ENVIRONMENTAL ASSESSMENT TO SUPPORT MIXED USE DEVELOPMENT – LOT 1 AND 2 (NO. 59 AND 61) DUNN BAY ROAD, DUNSBOROUGH

1 BACKGROUND

Emerge Associates have been engaged by Eldorado Pty Ltd ATF Eldorado Trust (the proponent) to undertake a desktop environmental assessment, supported by a site visit, to document the environmental values within the site and outline management considerations relevant for the development approval process.

The proponent is proposing to redevelop Lot 1 and 2 (no. 59 and 61) Dunn Bay Road, Dunsborough (herein referred to 'the site') as a brewery/restaurant with short stay boutique accommodation and other mixed (supporting) uses. The site is generally shown in **Plate 1** below, and is approximately 0.86 ha in size. It is located within the City of Busselton and is bounded by Cape Naturaliste Road to the west, Dunn Bay Road to the south, a waterway/drainage reserve (Dugulup Brook) to the north and existing mixed-use development to the east.

The site is zoned 'centre' under the City of Busselton Local Planning Scheme (LPS) No. 21 and contains an existing restaurant.

This letter report documents the findings from the desktop environmental assessment and outlines how relevant environmental values can be managed as part of the proposed development of the site.

2 PROPOSED DEVELOPMENT

The existing buildings are proposed to be demolished as part of the redevelopment of the site. The proposed development will include:

- Up to 17 short stay boutique accommodation units, located adjacent to the northern boundary of the site.
- Restaurant, with kitchen and dining
- Brewery and bar

- Retail and additional short stay accommodation, including a café.
- Carparking within the eastern and western portions of the site.
- Landscaping throughout the site, including the retention and integration of existing trees where possible.

The proposed development layout is provided in **Attachment A**.



Plate 1: General indication of the site (shown in 'blue' coloured outline) location

3 DESKTOP ASSESSMENT AND MANAGEMENT REQUIREMENTS

In order to understand the environmental values within or nearby to the site and consider appropriate management responses, Emerge Associates have reviewed a range of information sources including local and regional reports, databases and mapping as well as a site visit by an environmental scientist on the 26th October to confirm the findings of the desktop review.

Other site-specific investigations that have been undertaken for the site and considered as part of this assessment include:

- *Tree Condition Assessment 59-61 Dunn Bay Road Dunsborough* (Arbor Guy 2020)
- *Bushfire Management Plan* (Bushfire Safety Consulting 2020)
- *Landscape Concept Plan Dunn Bay Road Mixed Use Development* (Emerge Associates 2020)
- *Fauna Management Plan* (Emerge Associates 2020)
- *Report on Geotechnical Study Proposed Mixed Use Development 56-61 Dunn Bay Road, Dunsborough* (Galt Geotechnics 2020)

Table 1 provides a summary of the environmental features/values that have been considered as well as an outline of management considerations/requirements that will be relevant for the proposed development. Key management requirements for the future development are further discussed in **Section 4**.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough

Environmental value	Description of value	Management considerations
Topography	The site is generally flat, with elevation ranging from approximately 12 m Australian Height Datum (m AHD) in the southern and central portion of the site to approximately 10 m AHD in the northern portion of the site. The north-western portion of the site contains a small depression	No specific management considerations. The proposed development intends to minimise any change in the existing natural topography, particularly with regard to reducing the requirement for fill. This is to maximise the retention of trees within the site. Where trees are proposed to be retained, consideration will need to be given to how this can be achieved whilst also managing any change in topography. This is considered further below.
Landform and soils	The regional soil-landform mapping prepared by the Department of Primary Industries and Regional Development (DPIRD) indicates the site is located within the Spearwood System which can be described as "*sand dunes and plains with yellow deep sands and yellow/brown shallow sands.*". Mapping provided by the DPIRD indicates that the surficial geology within and surrounding the site is associated with the Ludlow flats phase, which can be described as "*as flats and very low dunes with deep yellow brown siliceous sands over limestone*". The geotechnical study (Galt Geotechnics 2020) indicates that the site is underlain by the following geological units: • Alluvium over the northern half, described as "*Clayey Sandy SILT – pale brown, angular to rounded sand; low cohesion, of alluvial origin*"; and • Beach deposits over the southern half, described as "*Silty SAND – brown to yellow grey, fine to medium grained quartz sand with variable silt content*".	No specific management considerations.
Acid sulphate soils	Acid sulfate soils (ASS) is the name commonly given to naturally occurring soils and sediment containing iron sulphide (iron pyrite) materials. In their natural state, ASS are generally present in waterlogged and/or anoxic conditions and do not present any risk to the environment. ASS can pose issues when oxidised, producing sulphuric acid, which can present a range of risks for the surrounding environment, infrastructure and human health. The Department of Water and Environment Regulation (DWER) provides broad-scale mapping indicating areas of potential ASS risk (DWER 2018). A review of the DWER mapping indicates that the entire site is classified as having a 'moderate to low' risk of ASS occurring within 3 m of the natural soil surface.	The specific detail of the depth and location of underground services and the quantity of soil disturbance is still to be determined. However, in accordance with DWER's guideline *Identification and investigation of acid sulfate soils and acidic landscapes* (DER 2015), sites identified as 'Class 2 – moderate to low risk of ASS occurring within 3 m of the natural soil surface' (i.e. this site) will require further ASS investigation if the nature of disturbance within the site works require: • Works involving lowering of the watertable (temporary or permanent) • Earthworks extending to beyond 3 m below the natural ground surface • Works within 500 m of wetlands ASS can be managed as a condition of development approval, in accordance with typical urban development requirements. Given the depth to groundwater (discussed below), it is unlikely that ASS will be disturbed. However, once the extent of excavation and/or dewatering has been confirmed, it will be determined if the nature of disturbance within the site meets the above criteria, and if so, further investigation of ASS will be required including the preparation of an Acid Sulfate Soils and Dewatering Management Plan (ASSDMP). An ASSDMP will guide development to ensure that potential acidification resulting from the disturbance of ASS can be mitigated through effective management.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Flora and vegetation	<u>Regional vegetation values</u> Native vegetation can be described and mapped at different scales or units in order to illustrate general patterns in its distribution. At a continental scale the *Interim Biogeographic Regionalisation of Australia* (IBRA) divides the Swan Coastal Plain into two floristic subregions, the Perth Plateau and the Dandaragan Plateau (Environment Australia 2000). The site is located within the Perth subregion of the Swan Coastal Plain, which is characterised as mainly containing *Banksia* low woodland on leached sands with *Melaleuca* swamps where ill-drained; and woodland of *Eucalyptus gomphocephala* (tuart), *E. marginata* (jarrah) and *Corymbia calophylla* (marri) on less leached soils (Beard 1990). At a regional scale, vegetation complex mapping undertaken by Heddle *et al.* (1980) and *Webb et al* (2016) maps the: • Western and central portion of the site as occurring with the 'Karrakatta – Central and South' vegetation complex. This complex is described as *'predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species, Agonis flexuosa (Peppermint) is co-dominant south of the Capel River'*. • Eastern portion of the site the site as occurring within the 'Cokelup' vegetation complex. The Cokelup complex is described as 'closed-scrub/woodland of *Melaleuca* species over sedges and annually renewed herbs on inundated clay flats. Fringing open forest of *Eucalyptus rudis*, *Corymbia calophylla*, *Banksia littoralis*, *Eucalyptus gomphocephala*.' <u>Site specific vegetation values</u> No site-specific flora and vegetation survey has been completed for the site, however a site walkover was undertaken by an environmental scientist from Emerge Associates on 26th October 2020, to understand the vegetation values present within the site. The site has been historically cleared of native vegetation, since prior to 1970 based on a review of available aerial photography (Landgate 2019), and over subsequent years overstorey species have regrown or been replanted. It is considered to be 'parkland cleared' and contains a mix of endemic, native and non-native tree species (including *Agonis flexuosa* (peppermint), *Corymbia calophylla* (marri), *Hesperocyparis macrocarpa* (Monteray cypress) and *Eucalyptus cornata* (yates)) over paddock grasses and weeds, as well as planted gardens around the existing restaurant/dwelling. Examples of vegetation identified within the site are provided in **Attachment B.** The trees present within the site are detailed further within the Tree Condition Assessment (Arbor Guy 2020) provided in **Attachment C**. Due to the lack of remnant native vegetation within the site, no conservation significant or priority flora or threatened or priority ecological communities are likely to occur within the site.	A Landscape Concept Plan (Emerge Associates 2020) has been prepared for the site and outlines the proposed design approach, including retention of existing trees, and landscape planting using a mix of native and non-native species as well as turfed areas and hardscape/boardwalk features throughout the site. It is proposed that existing trees will be retained where possible as part of the proposed development of the site. The *Tree Condition Assessment* (Arbor Guy 2020) outlines key management considerations for retaining the trees and maintaining tree health and structure as part of the proposed development. Considerations include: • Protecting trees from development influences (compaction of soil, mechanical damage, phytotoxic chemicals (i.e. cement) and root severance), typically through the use of fencing around the outer canopy (dripline) or greater distance if feasible. This is typically called the 'tree protection zone (TPZ)'. • Minimising/preventing cut or fill within the TPZ. • Seeking qualified guidance from an arborist where roots greater than 100 mm in diameter are encountered, to determine if severance of the roots is likely to impact tree health and structure. • Minimising/preventing storage of materials, equipment or machinery within the TPZ. • Pruning retained trees to remove dead branches greater than 50 mm in diameter, and any other recommended works to maintain tree health and structure. Further detailed assessment by an arborist will be required during the proposed works, to ensure tree health and structure is maintained, particularly where buildings/structures are proposed within the TPZ and/or compaction of soil or changes to infiltration are likely. It will also be important that as part of any works within the site, potential impacts on the nearby reserve (to the north of the site) are avoided, particularly disturbance to any existing vegetation. The protection and retention of vegetation can be managed through the standard development approval process. This will include preparation of detailed landscape design and can be addressed as a condition of development approval.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Fauna and fauna habitat	Potential fauna values To understand the extent of significant fauna species that are likely to occur within the local area, searches were undertaken of the Department of Biodiversity Conservation and Attractions (DBCA) *NatureMap* database (DBCA 2020b) and the federal Department of Agriculture Water and Environment (DAWE) *Protected Matters* database (DAWE 2020). It is important to note that these searches do not take into account the types and condition of fauna habitat occurring on the site, but are based on the proximity of the site to known occurrence of significant species. The conservation significant fauna species identified as potentially occurring within the site include: • Western ringtail possum (*Pseudocheirus occidentalis*) • Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia naso*) • Baudin's Cockatoo (*Calyptorhynchus baudinii*) • Carnaby's Cockatoo (*Calyptorhynchus latirostris*) • Chuditch (*Dasyurus geoffroii)* • South-western Brush tailed Phascogale (*Phascogale tapoatafa wambenger*) • Quenda (*Isoodon fusciventer*) Site specific fauna values No site-specific fauna surveys have been completed for the site, however the site walkover undertaken by an environmental scientist from Emerge Associates on 26th October 2020 considered the potential presence of fauna habitat, including reviewing vegetation values and looking for signs of usage by fauna, and in particular conservation significant species. The site walkover found: • Evidence of use by western ringtail possum, including scats and two dreys. One of the dreys is located within a peppermint tree in the north-western portion of the site, while the other drey was located in a peppermint tree within the road reserve. The general location of the dreys has been shown in **Plate 2**. Examples of the scats observed within the site is provided in **Attachment B**. • Evidence of foraging by the three black cockatoo species (Carnaby's, Baudin's and forest red-tailed), associated with the marri trees throughout the site. Black cockatoo habitat trees (native eucalypt tree with a diameter at breast height of ≥50 cm or ≥30 cm for *Eucalyptus wandoo* (wandoo) and *Eucalyptus salmonophloia* (salmon gum)) were recorded within the site, and are generally associated with *Corymbia calophylla* (marri) trees. This is based on the tree condition assessment (Arbor Guy 2020) which noted diameter at breast height of the trees within the site. No trees have been specifically assessed for presence or absence of hollows suitable for use by black cockatoos, however the marri trees that have a diameter at breast height of 50 cm or greater are generally found on the periphery of the site and are proposed for retention. Examples of the foraging observed within the site is provided in **Attachment B**. .	Management of fauna will be a relevant consideration for the proposed development, particularly with regard to the presence of western ringtail possum within the site and potential disturbance that may occur to this species, as well as other bids and ground-dwelling mammals. The two peppermint trees containing the identified western ringtail possum dreys are both proposed to be retained as part of the development within the site. A separate fauna management plan (Emerge Associates 2020) has been prepared to support the proposed development. Key management actions proposed to support development of the site in order to minimise harm to fauna include: • A pre-clearing fauna inspection will be completed to identify potential fauna interactions including an inspection of trees for dreys and hollows and signs of use. This will include determining safe management of the trees proposed for retention (particularly those that contain dreys) during construction. • A fauna trapping program will be conducted to capture and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical. • A fauna spotter will be present during clearing to direct and manage works to avoid impacts to fauna wherever possible and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical. • At all times correct fauna handling procedures will be applied to reduce stress on any captured animals and the translocation of native fauna will only be completed to release sites agreed under licence from Department of Biodiversity Conservation and Attractions (DBCA). • On completion of the pre-clearing trapping and fauna spotting program, a report summarising the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated. The management of the fauna and the associated fauna habitat values can be appropriately managed through the development approval process and through the implementation of the fauna management plan (Emerge Associates 2020). Fauna habitat will be retained or reintroduced (through the proposed landscaping) and impacts are likely to only be short-term, with the fauna species (i.e. western ringtail possum) expected to remain, or re-establish after the development of the site is completed.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Fauna and fauna habitat *(continued from above)*	 ***Plate 2: Red dots indicate general location of the western ringtail possum dreys observed within or nearby to the site.*** With regard to the other conservation significant species, chuditch is not likely to be present as the area of vegetation is not likely to be large enough. Quenda may occur within the wider area of the site, particularly in association with Dugulup Brook to the north. This species tends to favour areas of dense groundcover vegetation which provide cover from predators. Groundcover vegetation within the site is extremely limited and it is therefore considered unlikely that quenda would utilise the site	
Ecological linkages	Ecological linkages are linear landscape elements that allow the movement of fauna, flora and genetic material between areas of remnant habitat. The movement of fauna and the exchange of genetic material between vegetation remnants improve the viability of those remnants by allowing greater access to breeding partners and food sources, refuge from disturbances such as fire and maintenance of genetic diversity of plant communities and populations. Ecological linkages are ideally continuous or near-continuous as the more fractured a linkage is, the less ease flora and fauna have in moving within the corridor (Alan Tingay and Associates 1998). The South West Biodiversity Project have identified and mapped regional ecological linkages in the south west of Western Australia (Molloy *et al.* 2009). Regional ecological linkage no. 65 is mapped adjacent to the western boundary of the site and is associated with areas of native vegetation connected along Cape Naturaliste Road and Caves Road.	No specific management is required. Where possible, it is recommended that existing trees should be retained and protected and connection to the reserve to the north of the site be enhanced. Detailed landscape design can be addressed as a condition of development approval.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Environmentally sensitive areas (ESA)	'Environmentally sensitive areas' (ESAs) are prescribed under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* and have been identified to protect native vegetation values of areas surrounding significant, threatened or scheduled flora, vegetation communities or ecosystems. Exemptions under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* do not apply within ESAs. However, exemptions under Schedule 6 of the *Environmental Protection Act 1986* (EP Act) still apply. Based upon a review of the *Clearing Regulations – Environmentally Sensitive Areas* dataset (DWER 2017) the site is not identified as an ESA.	Where native vegetation is proposed to be removed, this should be undertaken in accordance with a valid exemption or a clearing permit. The proposed development is likely to be exempt from requiring a clearing permit in accordance with Regulation 5 (lawful construction of a building or other structure) of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*.
Groundwater	Information on the regional groundwater resources obtained from the DWER *Water Register* (DWER 2020a) indicates that the site is found within the Busselton-Capel groundwater area and is underlain by the combined Leeuwin Surficial/Fractured Rock aquifer. Limited regional groundwater level information is available and no site-specific groundwater monitoring has been undertaken to date. The geotechnical study (Galt Geotechnics 2020) identified groundwater between 2.4 m and 3.6 m below the natural ground surface, with the separation to groundwater greatest in the southern portion of the site. No groundwater quality data is available for the site.	The City of Busselton have developed the *Engineering and Works Services Standards and Specifications* which requires finished floor levels to be at least 1.2 m above the maximum groundwater level or the controlled groundwater level. Based on the outlined depth to groundwater, this can be satisfied. Detailed engineering design will confirm the specifics of the proposed approach and can be addressed as a condition of development approval. Management of water quality is considered below.
Surface water	The site is located in the Busselton Coast catchment area, and Dunsborough Coast sub-catchment, as identified through the DWER *Hydrographic Catchments* dataset (DWER 2018). No waterways are identified within the site based on available mapping. However, Dugulup Brook is located immediately adjacent to the northern boundary of the site and drains eastwards, towards Geographe Bay. This is shown in ***Plate 3.***	<u>Surface water/stormwater</u> Management of stormwater is an important consideration, to ensure groundwater and surface water quality are managed appropriately, and to also minimise potential for flooding. The City of Busselton Local Planning Policy 6.1 *Stormwater Management* (2014) requires all stormwater up to the 20 % Annual Exceedance Probability (AEP) (previously 1 in 5 Average Recurrence Interval (ARI)) to be retained on site and for 1 m^3 of storage to be provided for every 40 m^2 of impervious area. Based on the proposed impervious area, the development will require a minimum 136.2 m^3 of storage. Stormwater will be managed in accordance with the stormwater management plan prepared by Iconic Design (2020), which has been provided separately, and currently provides for the required volume of storage through the use of soakwells. Other water sensitive urban design features, such as permeable pavement and rain gardens, will be considered as part of detailed design. All water collected within the site will be infiltrated within the site wherever possible, and no direct discharge to Dugulup Brook to the north of the site is proposed. Detailed engineering and/or landscape design will confirm the specifics of the proposed approach and can be addressed as a condition of development approval. Continued below.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (Continued)

Environmental value	Description of value	Management considerations
Surface water (*continued from above*)	 ***Plate 3:*** *Dugulup Brook located immediately north of the site.*	Continued from above. <u>Wastewater</u> Currently, wastewater within the site is managed and disposed onsite. The proposed development will include connection to the reticulated sewer network and therefore the onsite treatment and disposal of wastewater will not be required, and instead will be decommissioned as part of the development of the site.
Wetlands	Wetlands are areas which are permanently, seasonally or intermittently waterlogged or inundated with water. Naturally occurring wetland features are common across the Swan Coastal Plain and Leeuwin-Naturaliste Ridge areas and can contain fresh or salty water, which may be flowing or still. Wetlands can be further categorised based on their hydrological characteristics and physical structure. A review of the *Geomorphic Wetlands on the Swan Coastal Plain* dataset (DBCA 2020a) and the *Geomorphic Wetlands Leeuwin Naturaliste Ridge and Donnybrook to Nannup* (unreviewed) dataset (DBCA 2018) indicates the site is not identified as a wetland. No wetland features have been mapped within 300 m of the site.	No wetland features have been identified within the site. Accordingly, no specific management is required.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Public drinking source areas	Public Drinking Water Source Areas (PDWSAs) are proclaimed by the DWER to protect identified drinking water sources, including surface water and groundwater sources (DoW 2009). They are proclaimed under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909* or the *Country Areas Water Supply Act 1947* as Water Reserves, Catchment Areas or Underground Water Pollution Control Areas. PDWSAs provide the population with the majority of its drinking water supplies and can be vulnerable to contamination from a range of land uses. Once an area is identified as a PDWSA, consideration needs to be given to the intended land use and associated activities to ensure that they are appropriate in meeting the water protection quality objectives of the area. The site is not located within a proclaimed PDWSA.	No PDWSA's have been identified within the site. Accordingly, no specific management is required.
Historic and existing land uses	Based on a review of publicly available historic aerial imagery (Landgate 2019), the entire site was largely historically cleared of native vegetation prior to 1970. Since 1970, trees appear to have been planted or regrown sporadically within the site. A number of buildings were constructed within the eastern portion of the site sometime prior to 2001 and is currently used as a restaurant.	No specific management is required.
Potential site contamination	A review of the Department of Water and Environmental Regulation (DWER 2020b) *Contaminated Sites Database* indicates that the site is not identified publicly as a registered contaminated site pursuant to the *Contaminated Sites Act 2003*, nor are other registered sites located nearby. In addition, a review of the Department of Defence *Unexploded Ordnance (UXO) Mapping Application* (DoD 2020) indicates that the site is not identified as being at risk of having UXO within the site.	No specific management is required.
Surrounding land uses	The site is located on the western edge of the Dunsborough town centre, on the corner of two main roads, namely Dunn Bay Road and Cape Naturaliste Road. The general location is characterised by areas of residential development to and retained remnant vegetation to the north and west, and commercial development (retail, restaurants, supermarkets, petrol station) to the east and south.	There are no land uses identified surrounding the site, such as industrial or agricultural, that would be incompatible with the proposed future development within the site. Potential noise impacts associated with the proposed development, both to nearby residential areas and from Cape Naturaliste Road and Caves Road, have been addressed separately as part of the development application within the *Environmental Noise Assessment* prepared by Gabriels Hearne Farrell (2020).
Bushfire hazards	The majority of the site and surrounding areas have been identified as bushfire prone under the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2019). The identification of a site within an area declared as bushfire prone necessitates that further assessment of the determined bushfire risk of the proposed development is to be undertaken in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959) (Standards Australia 2018), *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7) (WAPC 2015) and the *Guidelines for Planning in Bushfire Prone Areas Version 1.3* (the Guidelines) (WAPC and DFES 2017). This has been addressed through the preparation of a *Bushfire Management Plan* (Bushfire Safety Consulting 2020).	From an environmental management perspective, management of bushfire risk can sometimes be at variance to the retention and protection of environmental values, as it often requires modification of vegetation, particularly where intact native vegetation is present which can contain high fuel loads. The proposed retention of some of the existing trees as part of the asset protection zone (APZ) has been considered within the *Bushfire Management Plan* (Bushfire Safety Consulting 2020). The proposed landscape concept (Emerge Associates 2020), which identified the retention of a number of existing trees as well as planting of additional landscape areas, was considered as part of the *Bushfire Management Plan* (Bushfire Safety Consulting 2020). The design was considered compatible with managing bushfire risk and includes irrigation and long-term management of fuel loads within the site. No modification of intact remnant vegetation within the reserve to the north of the site is proposed, although some pruning of overhead branches may be required but would be managed in consultation with the City of Busselton.

Table 1: Summary of environmental values and management considerations for Lot 1 and 2 Dunn Bay (no. 59 and 61) Dunn Bay Road, Dunsborough (continued)

Environmental value	Description of value	Management considerations
Visual amenity	The site is located within a 'Development Investigation Area' within the *Statement of Planning Policy 6.1 Leeuwin Naturaliste Ridge Policy* (SPP 6.1) (WAPC 1998). Under this policy, Dunsborough is identified as a principle centre and will cater for residential, large-scale commercial and other urban development. SPP 6.1 provides a strategic planning framework for the sustainable development, conservation and land and resource management for the Leeuwin-Naturaliste area over the next 30 years. It applies to the coastal strip stretching from nearshore waters of Cape Naturaliste to Cape Leeuwin and inland to Bussell Highway and the eastern extent of town sites along the highway. The policy identifies seven generic land use related topics for which statements of intent and policies have been adopted. The seven topics identify the main land use planning issues which impact on the area. Of relevance to the site is 'settlement hierarchy', which identified the principle centres (Dunsborough, Margaret River and Augusta) and their associated development investigation areas as the primary areas where population growth will be accommodated. Short stay accommodation and tourist facilities are supported in these areas, and should integrate and enhance the existing character.	It will be important that the proposed development integrates and enhances the existing character of Dunsborough, which is based on the town centre location. The key views of the site will be from Cape Naturaliste Road immediately to the west of the site and Dunn Bay Road immediately to the south of the site. The proposed development will minimise visual impacts on the existing town centre through: • The scale and form of the development, which includes a mix of buildings that are integrated with landscape and open areas. • Retention of existing trees, maintaining the existing tree canopy and connection to Dugulup Brook. • Provision of landscaped areas, using a mix of native and non-native species (similar to the existing planting palette within Dunsborough) and including a path network that integrates with the existing areas. • Use of building and plant colour palettes that blend with the surrounding landscape. Visual amenity can be appropriately managed as a condition of development approval, and in accordance with the requirements of SPP 6.1 and the City of Busselton.

4 MANAGEMENT OF RELEVANT ENVIRONMENTAL VALUES

Based on the desktop environmental assessment, the key management considerations relevant for the proposed development include:

- **Acid sulphate soils**. If works require the water table to be lowered (temporary or permanent) or earthworks to extend 3 m below the natural ground surface, further investigation of ASS will be required including the preparation of an Acid Sulfate Soils and Dewatering Management Plan (ASSDMP). An ASSDMP will guide development to ensure that potential acidification resulting from the disturbance of ASS can be mitigated through effective management and can be addressed as a condition of approval.
- **Vegetation, and in particular existing trees**. Retention of existing trees where possible, and in particular protecting and maintaining tree health and structure during construction and development, will require careful consideration. Further detailed arborist assessment will be required to support this process and can be addressed as part of detailed design and implementation process.
- **Fauna, and in particular western ringtail possums**. A fauna management plan has been prepared for the site to support the proposed development and outlines a requirement for a pre-clearing survey and trapping program, as well as a fauna specialist being present during clearing. Potential impacts on fauna can be managed as a condition of approval.
- **Stormwater.** Management of stormwater in accordance with water sensitive urban design principles will need to be addressed as part of detailed engineering and landscape design and includes maximising the infiltration of stormwater generated within the site up to the 20% AEP event. This can be addressed as part of detailed design and implementation process. Direct discharge to Dugulup Brook to the north of the site should be avoided.
- **Visual amenity, and addressing SPP 6.1**. The site is identified within a 'principle centre' under SPP 6.1, which recognises that short stay accommodation and tourist facilities can be supported in these areas. As detailed design is progressed, the development will need to ensure it will integrate and enhance the existing character of the town centre.

5 SUMMARY AND CLOSING

The desktop environmental assessment undertaken by Emerge Associates found that overall the potential impacts associated with the proposed development can be managed through the development approval process.

In particular, where possible, existing trees within the site are proposed to be retained as part of development, and will include close involvement with an arborist to maximise opportunities for retention. This process has already been commenced through the preparation of a tree condition assessment (Arbor Guy 2020). The management of the fauna and the associated fauna habitat values can be appropriately addressed as part of the development approval process and through the implementation of the fauna management plan (Emerge Associates 2020). Fauna habitat will be retained or reintroduced (through the proposed landscaping) and impacts are likely to only be short-term, with the fauna species (i.e. western ringtail possum) expected to remain, or re-establish after the development of the site is completed.

Should you have any queries or concerns regarding any of the above please do not hesitate to contact the undersigned directly on 9758 8159.

Yours sincerely
Emerge Associates



Kirsten Knox
SENIOR ENVIRONMENTAL CONSULTANT

cc: None.

Encl: Attachment A: Proposed development layout (Finespun 2020)
Attachment B: Site photos
Attachment C: Tree condition assessment (Arbor Guy 2020)

6 REFERENCES

6.1 General references

Arbor Guy 2020, *Tree Condition Assessment 59-61 Dunn Bay Road, Dunsborough*, West Busselton

Bushfire Safety Consulting 2020, *Bushfire Management Plan Mixed Use Development Lots 1 & 2 Dunn Bay Road, Dunsborough*, Stoneville

City of Busselton 2014, *Local Planning Policy 6.1 Stormwater Management*, Busselton WA

Department of Environment Regulation (DER) 2015, *Identification and investigation of acid sulfate soils and acidic landscapes*, Perth.

Department of Water (DoW) 2009, *Water Quality Protection Note No. 75. Proclaimed public drinking water source areas*, Government of Western Australia, Perth.

Environment Australia 2000, *Revision of the Interim Biogeographic Regionalisation for Australia (IBRA) and Development of Version 5.1 - Summary Report*, Department of Environment and Heritage.

Galt Geotechnics 2020, *Report on Geotechnical Study Proposed Mixed Use Development 56-61 Dunn Bay Road, Dunsborough*, Osbourne Park

Heddle, E. M., Loneragan, O. W. and Havel, J. J. 1980, *'Vegetation Complexes of the Darling System Western Australia'*, in Department of Conservation and Environment (ed.), Atlas of Natural Resources Darling System Western Australia, Perth.

Hill, A. L., Semeniuk, C. A., Semeniuk, V. and Del Marco, A. 1996, *Wetlands of the Swan Coastal Plain: Volume 2A - Wetland Mapping, Classification and Evaluation*, Water and Rivers Commission and the Department of Environmental Protection, Perth.

Keighery, B. 1994, Bushland Plant Survey: *A guide to plant community survey for the community*, Wildflower Society of WA (Inc), Nedlands.

Keighery, B. J., Keighery, G. J., Longman, V. M. and Clarke, K. A. 2012, *Weed and Native Flora Data for the Swan Coastal Plain*, Departments of Environmental Protection and Conservation and Land Management, Western Australia.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. 2009, *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Standards Australia 2018, *AS 3959:2018 Construction of buildings in bushfire-prone areas*, Sydney.

Western Australian Planning Commission (WAPC) 2003, *Statement of Planning Policy 6.1 Leeuwin-Naturaliste Ridge Policy*, Perth.

Western Australian Planning Commission (WAPC) 2007, *Visual Landscape Planning in Western Australia - a manual for evaluation, assessment, siting and design*, Perth.

Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*, Perth.

Western Australian Planning Commission and Department of Fire and Emergency Services (WAPC and DFES) 2017, *Guidelines for Planning in Bushfire Prone Areas Version 1.3*, Western Australia. December 2017.

6.2 Online references

Department of Biodiversity, Conservation and Attractions (DBCA) 2020a, *Geomorphic Wetlands of the Swan Coastal Plain*, viewed October 2020, <https://catalogue.data.wa.gov.au/dataset/geomorphic-wetlands-swan-coastal-plain>.

Department of Biodiversity, Conservation and Attractions (DBCA) 2020b, *NatureMap*, viewed October 2020, <https://naturemap.dbca.wa.gov.au/>.

Department of Agriculture, Water and the Environment (DAWE) 2020, Protected Matters Search Tool, viewed October 2020, < http://www.environment.gov.au/webgis-framework/apps/pmst/pmst.jsf>.

Department of Water and Environmental Regulation (DWER) 2020a, Water Register, viewed October 2020 < https://maps.water.wa.gov.au/#/webmap/register>.

Department of Water Environment Regulation (DWER) 2020b, *Contaminated Sites Database*, viewed October 2020, <https://dow.maps.arcgis.com/apps/webappviewer/index.html?id=c2ecb74291ae4da2ac32c441819c6d47>.

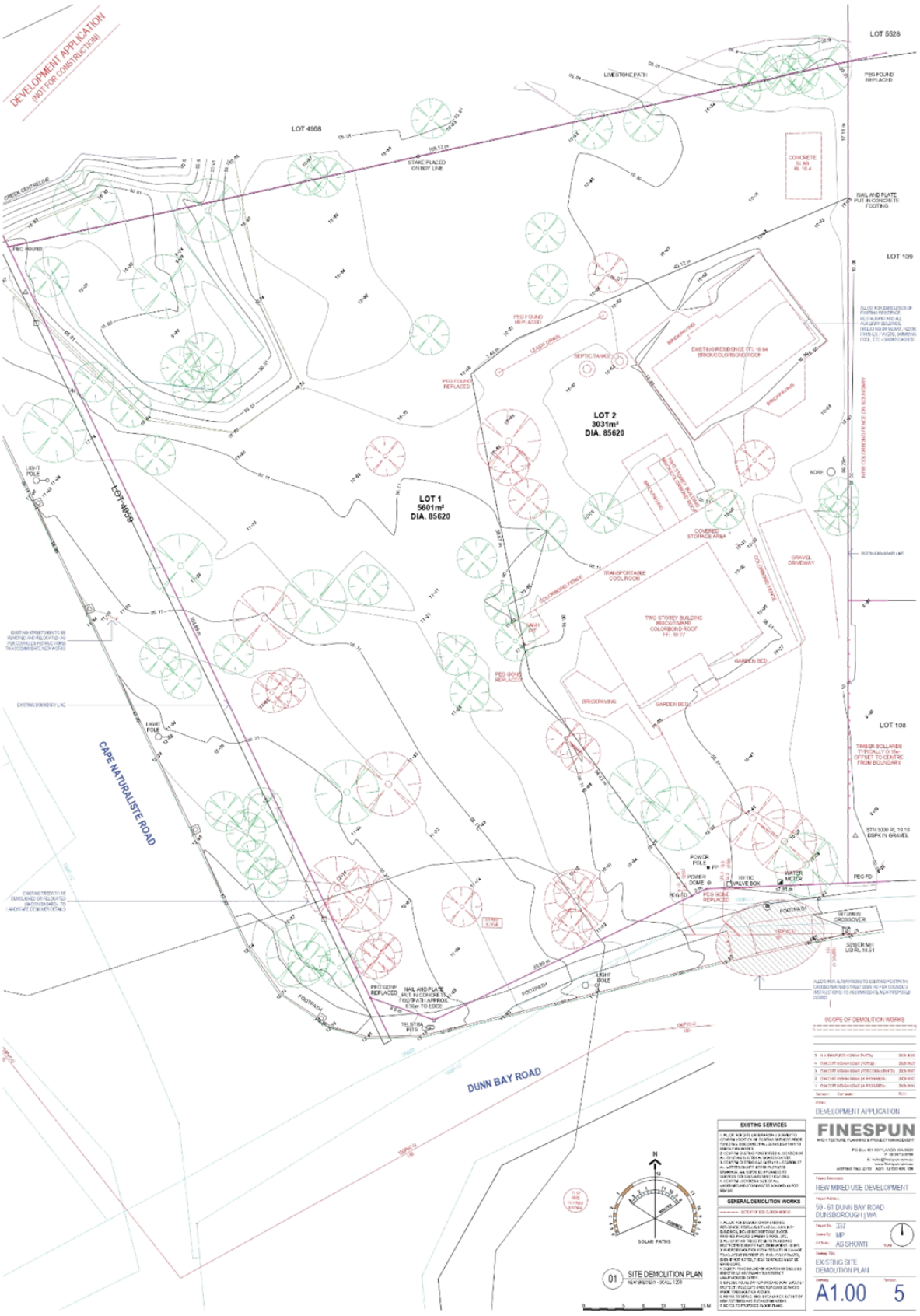
Landgate 2019, *Locate V5- Slip,* viewed October 2020, https://maps.slip.wa.gov.au/landgate/locate/.

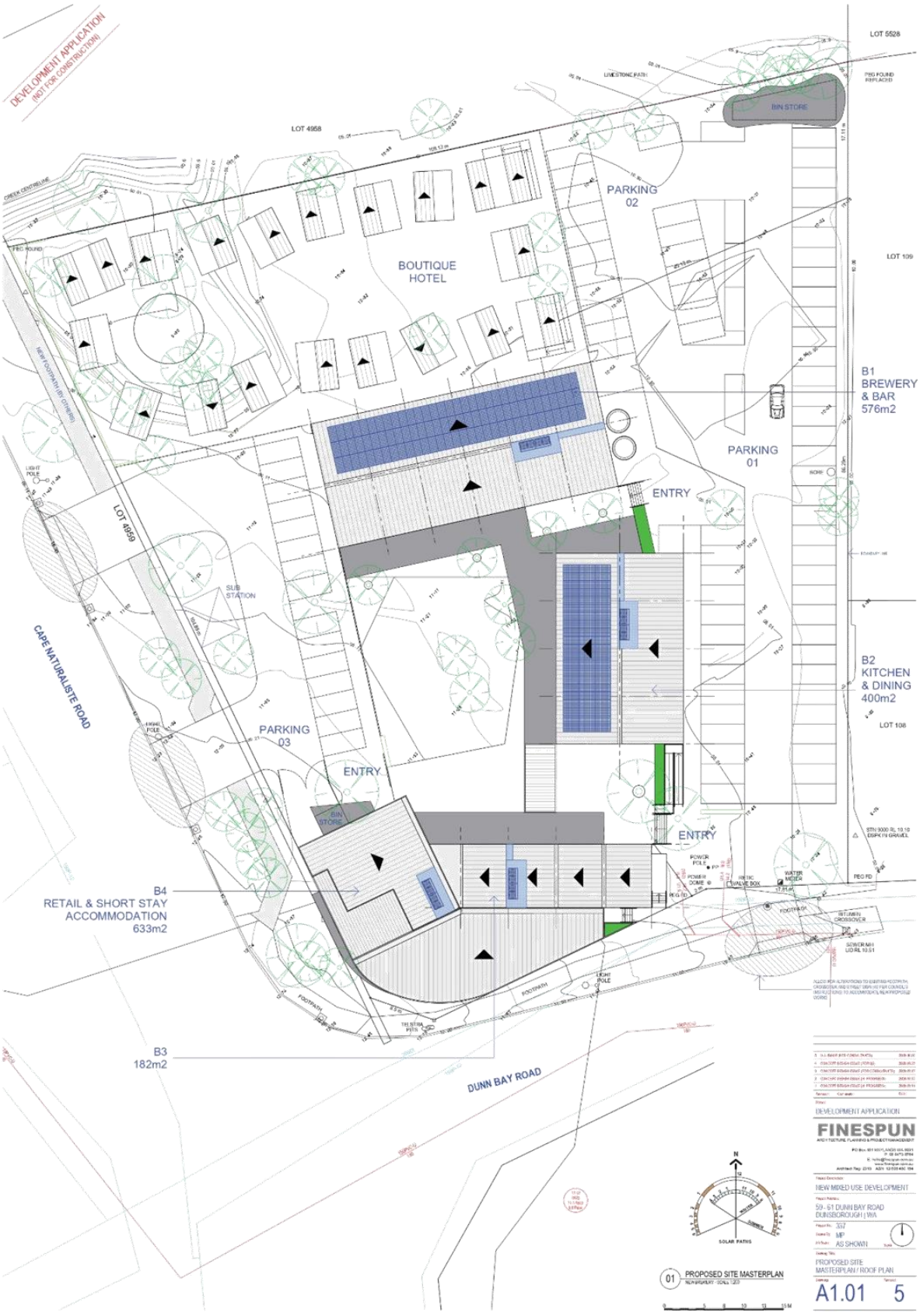
Office of Bushfire Risk management (OBRM) 2019, *Map of Bush Fire Prone Areas*, viewed October 2020, <https://maps.slip.wa.gov.au/landgate/bushfireprone/>

Attachment A

Proposed Development Layout (Finespun 2020)


FEATURE AND CONTOUR SURVEY
LOTS 1 AND 2 ON DIAGRAM 85620,
DUNN BAY ROAD, DUNSBOROUGH.
Survcon
SURVEYING SERVICES
PO Box 365
Dunsborough
WA 6281
Australia
Tel: (08) 9756 7719
Fax: (08) 9756 8000
mail@survcon.com.au
www.survcon.com.au
Scale 1:250
Datum AHD
Drawn MR
Surveyor MR
Date 30/12/15
Job No. 7431
Drawing 7431_SS
Revision A
FILES
CCAD : 7431_SS
ACAD : 7431_PLOT
A1
ORIG
Rev.
Description
Date
Checked
SCALEBAR - 1 : 250@A1
0
10
20
LOT 1
560m²
DIA. 85620
LOT 2
303m²
DIA. 85620
LOT 4959
LOT 4958
LOT 5628
LOT 109
LOT 108
CAPE NATURALISTE ROAD
DUNN BAY ROAD
LEGEND
DRAINAGE GULLEY
SIDE ENTRY PIT
JUNCTION PIT SQUARE
JUNCTION PIT ROUND
WATER HYDRANT
WATER VALVE
WATER METER
SEWER MANHOLE
TELSTRA/ELECTRICAL PIT
POWER METER/BOX
WATER TAP
TREE
GRASS TREE
EXISTING SURFACE HEIGHT
FOOTPATH
ROAD CENTRE LINE
KERB FACE
KERB TOP
EDGE OF SEAL
ROOF EAVE/GUTTER
FACE OF BUILDING
FENCE
CONCRETE EDGE
BOTTOM OF BANK
TOP OF BANK
BRICK RETAINING WALL
RETAINING WALL
WATER MAIN
SEWER MAIN
GAS MAIN
UNDERGROUND ELECTRICITY LINE
OVERHEAD POWER LINE
POWER POLE
POWER DOME
STAY WIRE ANCHOR
Licensed Surveyors Act 1909
REGULATION 25A SURVEYOR'S CERTIFICATE
I, Michael Riddle, licensed surveyor, certify that on the 30 December 2015, I re-established the boundaries of Lot 1 and 2 on Diagram 85620 having the Certificate of Title , Volume 2042 Folio 500 at Dunn Bay Road Dunsborough as shown on this plan and that the survey was performed in accordance with the provisions of the Licensed Surveyors (Guidance of Surveyors) Regulations 1961 and the Licensed Surveyors (Transfer of Land Act 1893) regulations 1961.
LICENSED SURVEYOR
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
337
MP
AS SHOWN
FEATURE & CONTOUR SURVEY BY
SURVCON SURVEYING SERVICES
A0.02
5


DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
LOT 5526
LOT 4958
LOT 109
LOT 108
LOT 4959
LOT 2
3031m²
DIA. 85620
LOT 1
5601m²
DIA. 85620
CAPE NATURALISTE ROAD
DUNN BAY ROAD
EXISTING RESIDENCE (FL 10.64
BRICK/COLORBOND ROOF
TWO STOREY BUILDING
BRICK/TIMBER
COLORBOND ROOF
FFL 10.77
TRANSPORTABLE
COOL ROOM
COVERED
STORAGE AREA
GRAVEL
DRIVEWAY
GARDEN BED
BRICKPAVING
SEPTIC TANK
LEACH DRAIN
CONCRETE
SLAB
RL 10.4
NAIL AND PLATE
PUT IN CONCRETE
FOOTING
TIMBER BOLLARDS
TYPICALLY 0.1m
OFFSET TO CENTRE
FROM BOUNDARY
STN 9000 RL 10.10
ESPK IN GRAVEL
POWER
POLE
WATER
METER
VALVE BOX
BITUMEN
CROSSOVER
SEWER MH
LID RL 10.51
LIGHT
POLE
FOOTPATH
PEG FOUND
PEG FOUND
REPLACED
PEG GONE
REPLACED
NAIL AND PLATE
PUT IN CONCRETE
FOOTPATH APPROX
0.1m TO EDGE
TRI STRIA
PITS
STAKE PLACED
ON BOY LINE
LIMESTONE PATH
CREEK CENTRELINE
EXISTING BOUNDARY LINE
SCOPE OF DEMOLITION WORKS
EXISTING SERVICES
GENERAL DEMOLITION WORKS
SOLAR PATHS
01 SITE DEMOLITION PLAN
DEVELOPMENT APPLICATION
FINESPUN
ARCHITECTURE, PLANNING & PROJECT MANAGEMENT
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
337
MP
AS SHOWN
EXISTING SITE
DEMOLITION PLAN
A1.00
5

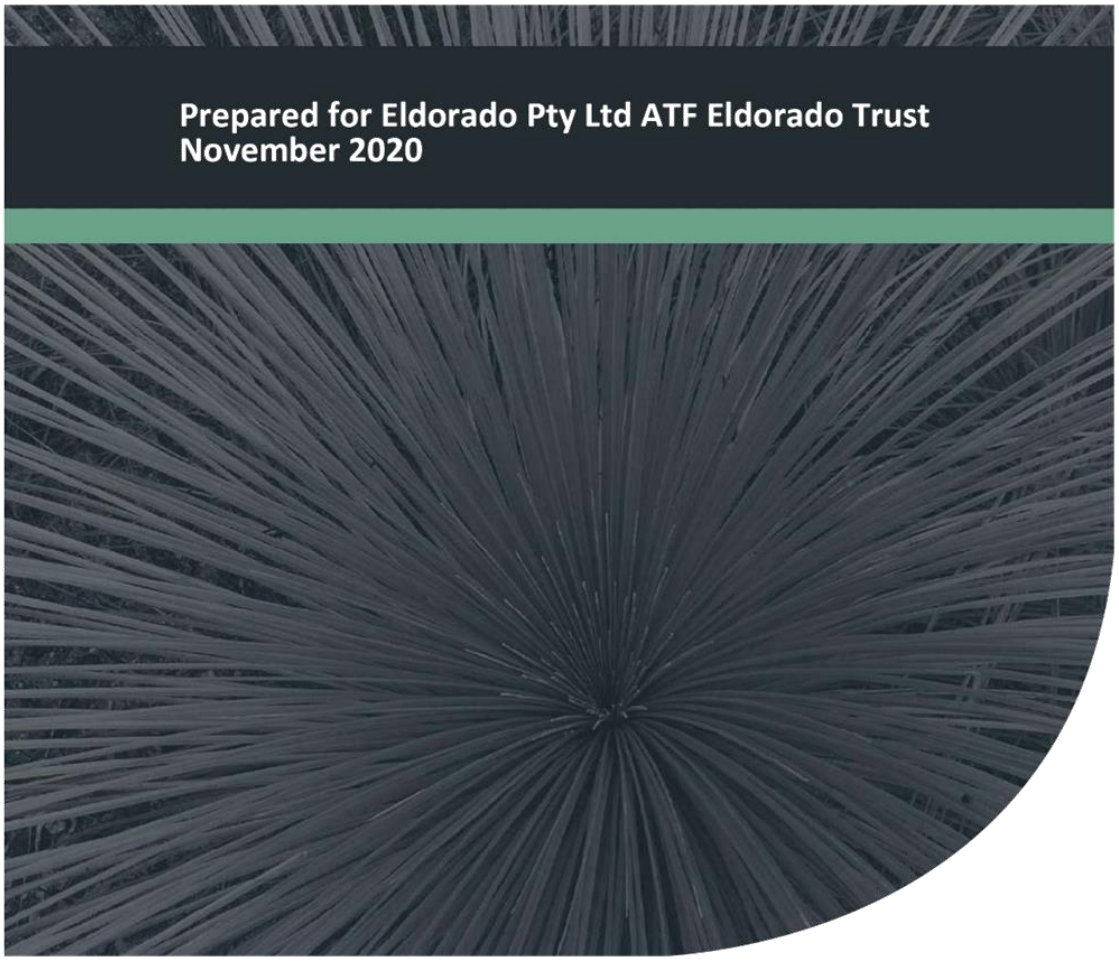

DEVELOPMENT APPLICATION
(NOT FOR CONSTRUCTION)
LOT 5526
LOT 4958
LOT 109
LOT 4959
LOT 108
BIN STORE
PARKING 02
BOUTIQUE HOTEL
B1
BREWERY & BAR
576m2
PARKING 01
ENTRY
SUB STATION
CAPE NATURALISTE ROAD
B2
KITCHEN & DINING
400m2
PARKING 03
ENTRY
BIN STORE
ENTRY
B4
RETAIL & SHORT STAY ACCOMMODATION
633m2
B3
182m2
DUNN BAY ROAD
SOLAR PATHS
01 PROPOSED SITE MASTERPLAN
DEVELOPMENT APPLICATION
FINESPUN
NEW MIXED USE DEVELOPMENT
59 - 61 DUNN BAY ROAD
DUNSBOROUGH | WA
AS SHOWN
PROPOSED SITE MASTERPLAN / ROOF PLAN
A1.01
5

emerge ASSOCIATES
Integrated Science & Design

Fauna Management Plan

Lots 1 and 2 Dunn Bay Road, Dunsborough

Project No: EP20-138(02)



Document Control

Doc name:	Fauna Management Plan Lots 1 and 2 Dunn Bay Road, Dunsborough				
Doc no.:	EP20-138(02)—002 KK				
Version	Date	Author		Reviewer	
1	November 2020	Kirsten Knox	KK	Kirsten Knox	KK
	Report prepared for client review				

© 2020 Emerge Associates All Rights Reserved. Copyright in the whole and every part of this document belongs to Emerge Associates and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Emerge Associates.

Executive Summary

Eldorado Pty Ltd ATF Eldorado Trust (the proponent) is proposing to redevelop Lots 1 and 2 (no. 59 and 61) Dunn Bay Road, Dunsborough (herein referred to as 'the site') as a brewery/restaurant with short stay boutique accommodation and other mixed (supporting) uses. The site is approximately 0.86 ha in size and is located within the City of Busselton. It is bounded by Cape Naturaliste Road to the west, Dunn Bay Road to the south, a waterway/drainage reserve to the north and existing mixed-use development to the east.

The site is zoned 'centre' under the City of Busselton Local Planning Scheme (LPS) No. 21 and contains an existing restaurant.

The site comprises cleared areas with scattered native and non-native trees. This landscape has some value as fauna habitat in particular for birds and arboreal fauna (such as western ringtail possum). However, the potential for ground-dwelling fauna to utilise the site is lower due to the lack of understory vegetation.

This fauna management plan (FMP) provides overarching guidance for the management of fauna during development to minimise adverse impacts on fauna if clearing of habitat is undertaken.

The following management actions will be undertaken prior to and during clearing under this plan as outlined below:

- A pre-clearing fauna inspection will be completed to identify potential fauna interactions including an inspection of trees for dreys and hollows and signs of use.
- A fauna trapping program will be conducted to capture and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical.
- A fauna spotter will be present during clearing to direct and manage works to avoid impacts to fauna wherever possible and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is practical.
- At all times correct fauna handling procedures will be applied to reduce stress on any captured animals and the translocation of native fauna will only be completed to release sites agreed under licence from Department of Biodiversity Conservation and Attractions (DBCA).

On completion of the pre-clearing trapping and fauna spotting program, a report summarising the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated.

This page has been left blank intentionally.

Table of Contents

1 Introduction 1
1.1 Project background 1
1.2 Purpose and scope of work 2
2 Background information 3
2.1 Fauna habitat 3
2.2 Western ringtail possum 3
2.3 Black cockatoos 4
2.4 Other fauna species of conservation significance 5
2.5 Potential impacts 5
3 Methods 6
3.1 Personnel 6
3.2 Timing 6
3.3 Prior to clearing 6
3.3.1 License application 6
3.3.2 Pre-clearing survey 6
3.3.3 Fauna trapping and translocation 6
3.3.3.1 Western ringtail possum 6
3.3.3.2 Other fauna species 7
3.3.4 Tree retention 8
3.4 During clearing 8
3.4.1 Clearing spotting 8
3.5 After clearing 9
3.6 During construction 9
4 Implementation 10
5 References 13

List of Tables

Table 1: Fauna management actions and responsibilities to support clearing and construction 11

List of Plates

Plate 1: General indication of the site location (shown in 'blue' coloured outline) 1
Plate 2: Red dots indicate general location of the western ringtail possum dreys observed within or nearby to the site. 4
Plate 3: Foraging evidence by Baudin's cockatoo and/or Carnaby's cockatoo within/nearby to the site. 5

Appendices

Appendix A

Demolition Plan and Site Masterplan (Finespun 2020)

Abbreviation Tables

Table A1: Abbreviations – Organisations

Organisations	
DBCA	Department of Biodiversity, Conservation and Attractions

Table A2: Abbreviations – General terms

General terms	
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
P5	Priority 5

Table A3: Abbreviations –Legislation

Legislation	
BC Act	Biodiversity Conservation Act
EPBC Act	Environmental Protection and Biodiversity Conservation Act

Table A4: Abbreviations – units of measurement

Units of measurement	
cm	Centimetre
ha	Hectare

1 Introduction

1.1 Project background

Eldorado Pty Ltd ATF Eldorado Trust (the proponent) is proposing to redevelop Lots 1 and 2 (no. 59 and 61) Dunn Bay Road, Dunsborough (herein referred to as 'the site') as a brewery/restaurant with short stay boutique accommodation and other mixed (supporting) uses. The site is generally shown in **Plate 1** below, and is approximately 0.86 ha in size. It is located within the City of Busselton and is bounded by Cape Naturaliste Road to the west, Dunn Bay Road to the south, a waterway/drainage reserve (associated with Dugulup Brook) to the north and existing mixed-use development to the east.

The site is zoned 'centre' under the City of Busselton Local Planning Scheme (LPS) No. 21 and contains an existing restaurant.



Plate 1: General indication of the site location (shown in 'blue' coloured outline)

1.2 Purpose and scope of work

Emerge Associates (Emerge) were engaged by Eldorado Pty Ltd ATF Eldorado Trust to prepare a fauna management plan (FMP) to support the proposed demolition and construction activities within the site.

The purpose of this FMP is to provide overarching guidance for the management of fauna during clearing and construction works to minimise adverse impacts on fauna if clearing of habitat is undertaken. At a minimum the FMP aims to ensure that all works will be undertaken in line with the *Animal Welfare Act 2002* and other relevant legislation.

The management actions and methods outlined will be applied within the site prior to and during clearing works. This plan is to be implemented by the proponent or its agents during development works.

2 Background information

2.1 Fauna habitat

No flora and vegetation or fauna surveys have been undertaken within the site, however a site visit was undertaken by an experienced environmental scientist to understand the values present.

The site has been historically cleared of native vegetation, since prior to 1970 based on a review of available aerial photography (Landgate 2019), and over subsequent years overstorey species have regrown or been replanted. It is considered to be 'parkland cleared' and contains a mix of endemic, native and non-native tree species (including *Agonis flexuosa* (peppermint), *Corymbia calophylla* (marri), *Hesperocyparis macrocarpa* (Monteray cypress) and *Eucalyptus cornata* (yates)) over paddock grasses and weeds, as well as planted gardens around the existing restaurant/dwelling.

Native and non-native trees may provide habitat to a range of birds and arboreal fauna species, including western ringtail possum and threatened species of black cockatoos which are discussed further in **Section 2.2** and **2.3** below. Evidence of use by both species was observed during the site visit.

Overall, given the degraded condition and fragmented nature of vegetation, the site has low biodiversity values and impacts on fauna in general will be non-existent or negligible, but will require management.

2.2 Western ringtail possum

Evidence of use by *Pseudocheirus occidentalis* (western ringtail possum), which is listed as threatened under the *Environment Protection and Biodiversity Conservation Act* (EPBC Act), was identified during the site visit and includes scats and two dreys. One of the dreys is located within an *Agonis flexuosa* (peppermint) tree in the north-western portion of the site, while the other drey was located in a peppermint tree within the road reserve. The general location of the dreys has been shown in **Plate 2**. Both trees identified within the site or nearby are currently proposed to be retained as part of the development of the site.

It should be noted that human structures (i.e. houses/sheds), forks in trees, subtle cavities in tree trunks, fallen hollow logs, rabbit burrows and dense ground cover are also used by western ringtail possums for daytime refuge (to varying degrees) and therefore observations of dreys only provide a guide to western ringtail possum habitat use/quality as other opportunities for daytime refuge may exist. Other possible daytime refuge will need to be considered as part of any development works.

Almost all vegetation present within the site can be considered habitat of some type for the western ringtail possum and therefore may be used either continuously or at various times for refuge, foraging and/or dispersal. The quality is however highly variable depending on factors such as plant species, structure (i.e. the presence of a midstorey component (which is largely missing)) and canopy connectivity. Much of the native vegetation within the site has been historically removed, with areas remaining generally fragmented.



Plate 2: Red dots indicate general location of the western ringtail possum dreys observed within or nearby to the site.

2.3 Black cockatoos

Three species of black cockatoo listed as threatened under the EPBC Act, namely *Calyptorhynchus baudinii* (Baudin's cockatoo), *Calyptorhynchus latirostris* (Carnaby's cockatoo) and *Calyptorhynchus banksii naso* (forest-red tailed black cockatoo) have the potential to occur in the site and the wider area based on available desktop information.

As outlined previously, no specific fauna surveys have been undertaken within the site. Black cockatoo habitat trees (native eucalypt tree with a diameter at breast height of ≥50 cm or ≥30 cm for *Eucalyptus wandoo* (wandoo) and *Eucalyptus salmonophloia* (salmon gum)) were recorded within the site, and are generally associated with *Corymbia calophylla* (marri) trees found within the site. This is based on the tree condition assessment (Arbor Guy 2020) which noted diameter at breast height of the trees within the site. No trees have been specifically assessed for presence or absence of hollows suitable for use by black cockatoos, however the marri trees that have a diameter at breast height of 50 cm or greater are generally found on the periphery of the site and are proposed for retention.

Large trees within the site also have the potential to provide roosting habitat for black cockatoos, but no evidence of roosting was observed during the site visit (but the site visit was not completed at dusk). Additionally, some of the tree species present could provide a foraging resource for black cockatoos, in particular *Corymbia calophylla* (marri) and *Agonis flexuosa* (peppermint). Foraging evidence of Baudin's and/or Carnaby's cockatoo was observed within the site by Emerge Associates and is shown in **Plate 3**.



Plate 3: Foraging evidence by Baudin's cockatoo and/or Carnaby's cockatoo within/nearby to the site.

2.4 Other fauna species of conservation significance

Priority four (P4) species *Isoodon fusciventer* (quenda) may occur within the wider area of the site, particularly in association with Dugulup Brook to the north. This species tends to favour areas of dense groundcover vegetation which provide cover from predators. Groundcover vegetation within the site is extremely limited and it is therefore considered unlikely that quenda would utilise the site. Given that quenda may occur in habitat nearby, namely Dugulup Brook, they may have limited potential to opportunistically occur in the site as transient visitors.

2.5 Potential impacts

Development will result in selective ground disturbance and clearing. Where possible/safe, approximately 40 trees are proposed to be retained within the site, including the trees containing the western ringtail possum dreys. For further information regarding trees proposed for retention and removal please refer to **Appendix A**. The specific trees that will be retained and removed will be confirmed as part of detailed design and based on arborist advice.

Ground disturbance and clearing of vegetation within the site has the potential to directly impact upon birds, arboreal fauna species and ground dwelling fauna species and their habitat.

The methods outlined in **Section 3** and **Section 4** aim to avoid or minimise impacts to fauna through trapping and translocation prior to clearing and fauna spotting and translocation during clearing.

3 Methods

3.1 Personnel

The fauna management actions outlined in this plan will be undertaken by a suitably qualified zoologist or environmental scientist with knowledge of the site.

3.2 Timing

Timeframes for fauna management actions and construction works will be subject to development approval and will need to be confirmed as part of the works program.

In order to minimise the risk of disturbing active bird nests, where possible clearing will generally be undertaken outside of the main bird breeding season (spring). A fauna trapping and relocation program will occur one week prior to ground disturbance and clearing of vegetation.

3.3 Prior to clearing

3.3.1 License application

A *Regulation 28 licence (Fauna taking (relocation) licence)* will be gained from the Department of Biodiversity Conservation and Attractions (DBCA) pursuant to the *Biodiversity Conservation Act 2016* (and associated regulations) prior to implementing the proposed actions.

3.3.2 Pre-clearing survey

A pre-clearing fauna survey and habitat inspection will be undertaken by an experienced zoologist/environmental scientist to determine habitat most likely to be utilised by native fauna and recent evidence of native fauna. In particular, the site will be searched for signs of recent use by native arboreal vertebrate fauna such as western ringtail possum and native ground-dwelling vertebrate fauna such as quenda.

All trees will be inspected for dreys and hollows suitable for use by any native vertebrate fauna species and examined for signs of current use. If dreys or hollows are observed to be currently in use for breeding by native vertebrate fauna, clearing should be delayed until the young have left the nest, if possible. Alternatively, a 10 m 'tree protection zone' will be established around these tree(s) until the young have left the hollow. The tree protection zone will be clearly marked and no machinery will enter.

3.3.3 Fauna trapping and translocation

3.3.3.1 Western ringtail possum

Given the nearby location of Dugulup Brook (directly adjacent to the site and within 100 m of identified dreys), where possums are identified as using trees proposed for removal, displacement will occur. Displacement is moving animals to nearby trees within the range of the animal but outside the clearing area.

Displacement of western ringtail possums will take place in the week prior to clearing, and may be undertaken progressive with clearing (depending on timing and progression of clearing). Key stages in the displacement approach will be:

- Completing daytime survey of trees marked for removal and relocating dreys and possums. Unoccupied dreys will be removed. Dreys in good condition and that can be removed intact will be installed in nearby (as close as practical) trees outside the clearing area. Locations of animals (which will usually be in dreys) will be recorded.
- Completing evening head-torching to locate western ringtail possums. During the evening search, dreys will be removed where possible (possums will be active so dreys should be unoccupied) and relocated to trees outside the clearing area. Food lures, such as apple/peanut paste, will be used to encourage animals to move out of and stay out of the clearing area. The lures will be placed in trees outside the clearing area and near dreys that have been moved.
- If the above does not result in animals staying outside the clearing area, cage traps will be set in the tree (wired to more or less horizontal branches and baited with apple/peanut paste) to capture animals. Animals would then be released that evening or the next day (possibly the next evening) outside the clearing area.

On the morning of clearing, trees within the clearing area will be checked for any possums that may have returned. If a possum is present in a tree that is to be cleared, the following will be undertaken:

- Try to remove it in daylight (hand-capture with a pole-net or using the pole technique to encourage it to move into a nearby 'safe' tree); or
- Leave that tree and attempt to trap/remove the animal the next night.

3.3.3.2 Other fauna species

Fauna traps for ground dwelling native vertebrate species will be deployed. The fauna species and habitat to be targeted for trapping will be determined during the pre-clearing fauna survey and may include species such as quenda. The locations of traps will be determined by an experienced zoologist with knowledge of the site according to assessment of suitable habitat.

The potential to shelter traps from public view is limited and the loss or vandalism of traps is a concern. To mitigate this risk a smaller number of traps will initially be deployed in areas where they are sheltered from public view. Should native fauna be caught, the number of traps may be increased.

The trapping program will consist of the following (where identified as required as part of the pre-clearing survey):

- A combination of traps such as cage traps, large Elliott traps, pit traps and funnel traps, dependent on the potential habitat present.
- The number of cage and Elliott traps utilised will be dependent on the location and extent of habitat considered likely to support animals suited to these traps but a maximum of 20 will be deployed.
- If the pre-clearing survey/inspection determines that native fauna such as reptiles and/or amphibians may occur in the site up to 5 pit traps with associated drift fencing and funnel traps may also deployed.

- The traps will be left open for minimum of five nights.
- Traps will be baited with "universal bait" (peanut butter, rolled oats and sardines).
- Traps will be checked within three hours of sunrise every morning.
- If conservation significant fauna are consistently caught in the traps, trapping will be extended for longer, until numbers reduce.
- Other fauna encountered opportunistically will be captured if possible.

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (DBCA 2017; DBCA 2018). Any native vertebrate fauna captured will be handled appropriately and translocated to a suitable location as specified in the *Fauna taking (relocation) licence* for this FMP.

3.3.4 Tree retention

Any trees identified for retention will be clearly marked and protected to avoid unintended removal or damage in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by a qualified arborist.

3.4 During clearing

3.4.1 Clearing spotting

Clearing will be based on removal of individual trees, with a large number of trees proposed to be retained around the proposed buildings. Clearing will generally be completed as a single front and enable fauna to move towards Dugulup Brook.

An experienced zoologist with knowledge of the site will be present as a fauna spotter during clearing of vegetation. This role will involve active searching for vertebrate fauna in areas to be cleared and areas just cleared. This searching will aim to identify the presence of bird or marsupial species in trees and more common ground dwelling fauna species, such as small mammals, lizards and snakes. If encountered, these animals will be assisted to disperse to nearby vegetation, if appropriate, or translocated.

A post-clearing assessment will be undertaken of any trees with hollows identified. Once felled, hollows will be inspected by the fauna spotter and any vertebrate fauna within the hollow will be removed and translocated appropriately.

Should injured fauna be encountered, the severity of injuries will be assessed by a zoologist. If the zoologist considers that an injured native animal has a reasonable chance of being satisfactorily rehabilitated, it will be transferred to a registered DBCA wildlife carer. Where the zoologist considers that injured fauna are unlikely to be satisfactorily rehabilitated, they will be humanely euthanised.

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (DBCA 2017; DBCA 2018). Any native vertebrate fauna captured during clearing will be handled appropriately and translocated to an appropriate location as specified in the *Fauna taking (relocation) licence* for this FMP.

3.5 After clearing

On completion of the pre-clearing trapping and fauna spotting program, a report summarising the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated.

3.6 During construction

Any fauna observed during construction will be allowed to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, an appropriate fauna specialist will be engaged, or DBCA WildCare Helpline will be called (08 9474 9055).

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (DBCA 2019) (or as updated). Any native vertebrate fauna captured during construction will be handled appropriately and translocated to an appropriate location as specified in the *Fauna taking (relocation) licence* for this FMP.

4 Implementation

The implementation of this FMP will primarily be the responsibility of the proponent. All contractors engaged to undertake works within the site will be required to adhere to this plan.

The key fauna management actions and associated responsibilities are provided in **Table 1** below.

Table 1: Fauna management actions and responsibilities to support clearing and construction

No.	Timing	Management action	Location	Responsibility	Status/Monitoring
1	At all times	1A. No pets, traps or firearms permitted on site.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		1B. Fauna shall not be fed or intentionally harmed.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		1C. The works area to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		1D. Where present, ensure vehicle access gates are secured	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		1E. Artificial illumination for construction activities to be minimised at all times	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
2	Prior to clearing	2A. Obtain Regulation 28 licence *(Fauna taking (relocation))* from DBCA.	All areas	Fauna specialist	To review before clearing commences.
		2B. Mark all trees identified for retention with coloured flagging tape to avoid incidental clearing or damage.	All areas	Civil contractor	To review before clearing commences.
		2C. Undertake a pre-clearing survey to identify potential fauna habitat, including hollow trees, dreys etc.	All areas	Fauna specialist	To review before clearing commences.
		2D. Inspection of dreys and tree hollows identified within the site. Should any hollows be in use by native vertebrate fauna species, clearing will be delayed until the young have left the hollow, if possible. Alternatively, a 10 metre (m) 'tree protection zone' will be established around these tree(s) until the young have left the hollow. The tree protection zone will be clearly marked and no machinery will enter.	All areas	Fauna specialist	To review before clearing commences.
		2E. Implementation of a fauna displacement/trapping program for at least five nights prior to clearing. Translocation of any native vertebrate fauna captured to an appropriate location as specified in the *Fauna taking (relocation) licence* for this FMP. This includes relocation of possum dreys to nearby trees not proposed for removal. Application of correct fauna handling procedures to reduce stress on any captured animals.	All areas	Fauna specialist	To review before clearing commences.

Table 1: Fauna management actions and responsibilities to support clearing and construction (continued)

No.	Timing	Management action	Location	Responsibility	Status/Monitoring
3	During clearing	3A. Clearing shall be limited to trees identified for removal.	All areas	Civil contractor	To be reviewed daily during clearing activities.
		3B. Use of a fauna spotter during clearing, particularly during clearing of all large trees with hollows. Translocation of any native vertebrate fauna captured during clearing to an appropriate location as specified in the *Fauna taking (relocation) licence* for this FMP. Application of correct fauna handling procedures to reduce stress on any captured animals.	All areas	Fauna specialist	To be reviewed daily during clearing activities.
		3C. Undertaking of clearing outside of the main bird breeding season (spring) where possible, and in stages along one front to allow fauna to move from clearing area into adjacent habitat (i.e. Dugulup Brook).	All areas	Civil contractor	To be reviewed daily during clearing activities.
		3D. Trees that have been identified as supporting western ringtail possum dreys (or other suitable daytime refuge) will be 'bumped gently" with a machine prior to felling. The operator and zoologist will wait and observe the tree for a short time. If no possum appears to be present then the tree shall be pushed over slowly to minimise risk of injury to the animal.	All areas	Civil contractor	To be reviewed daily during clearing activities.
		3E. Undertaking of a post-clearing assessment of any trees with hollows.	All areas	Fauna specialist	To be reviewed after clearing activities.
		3F. Fallen trees that contained possum dreys shall be mulched the day they are fallen, or moved at least 50 m from where they were fallen to prevent animals re-entering	All areas	Civil contractor	To be reviewed daily during clearing activities.
4	After clearing	4A. On completion of the pre-clearing trapping and fauna spotting program, a report summarising the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated.	Not applicable	Fauna specialist	To be prepared upon completion of relocation program
5	During construction	5A. Allow all observed fauna during construction to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, engage an appropriate fauna specialist or call DBCA WildCare Helpline (08 9474 9055).	All areas	Civil/ landscape contractor	To be reviewed daily during construction activities.

5 References

Arbor Guy 2020, *Tree Condition Assessment 59-61 Dunn Bay Road, Dunsborough*, West Busselton

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Animal Handling and Restraint using Soft Containment*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Hand Capture of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Hand Restraint of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Humane Killing of Animals under Field Conditions*, Perth, WA.

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Transport and Temporary Holding of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Cage Traps for Live Capture of Terrestrial Vertebrates*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Dry Pitfall Trapping for Vertebrates and Invertebrates*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Funnel Trapping for Terrestrial Fauna*, Perth, WA

Emerge Associates 2020, *Desktop Environmental Assessment to Support Mixed Use Development – Lot 1 and 2 (no. 59 and 61) Dunn Bay Road, Dunsborough*, unpublished letter report, Margaret River

Landgate 2019, *Locate V5- Slip,* viewed October 2020, https://maps.slip.wa.gov.au/landgate/locate/.

National Health and Medical Research Council 2013, *Australian code for the care and use of animals for scientific purposes, 8th edition*, Canberra, ACT

Standards Australia 2009, *AS 4970-2009 Protection of trees on development sites* Sydney.

This page has been left blank intentionally.

element.

Appendix F – Waste Management Plan

Lot 1 (No. 61) and Lot 2 (No. 59) Dunn Bay Road, Dunsborough
Commercial Development - Microbrewery, Restaurant, Café, Retail & Tourist Accommodation

encycle consulting

waste less, achieve more

59 & 61 Dunn Bay Rd, Dunsborough

Waste Management Plan

6 November 2020

Project No. 20-1086

Rev_2

Place Development

encycle consulting

waste less, achieve more

Encycle Consulting Pty Ltd
ABN 41 129 141 484

Level 1, 76 Roberts St
Osborne Park WA 6017
PO Box 6044
East Perth WA 6892

t: +61 8 9444 7668

gbusby@encycle.com.au
www.encycle.com.au

Version	Drafted	Reviewed	Revisions	Date issued
Rev_0 (Draft)	G Busby	J Campbell	Draft	5 November 2020
Rev_1	G Busby	J Campbell	Final	6 November 2020
Rev_2	G Busby	J Campbell	section 2.1 - updated NLA	6 November 2020

Copyright

All intellectual property rights and copyright associated with Encycle Consulting services and publications shall remain vested in and the property of Encycle Consulting. Advice and material contained within this document may be used exclusively by the Company named as the recipient of this work solely for use as specified in this document. Reproduction, publication or distribution of this work without prior written permission from Encycle Consulting is strictly prohibited.

Disclaimer

While steps have been taken to ensure the accuracy of this document, Encycle Consulting cannot accept responsibility or be held liable to any person for any loss or damage arising out of or in connection with this information being accurate, incomplete or misleading.

Table of contents

Glossary of terms and acronyms **4**

1 Introduction **5**

1.1 Context 5

1.2 Key components of the WMP 5

2 Estimated waste and recycling volumes **6**

2.1 Operational waste generation 6

2.2 Processing waste generation 7

2.3 Number and type of bins required for development 8

3 Bin store locations and amenity **10**

3.1 Bin store locations 10

3.2 Bin store amenity 12

4 Internal transfer **13**

4.1 Transfer of waste from boutique hotel accommodation units 13

4.2 Transfer of waste from building 1 (brewery and bar), building 2 (kitchen and dining) and building 3 (coffee roastery/café) 13

4.3 Transfer of waste from building 4 (retail & short stay accommodation apartments) 13

5 Collection and vehicle access **14**

6 Ongoing communication and management **16**

6.1 Management 16

6.2 Communication 16

Glossary of terms and acronyms

Coffee husks / chaff	The outer layer of the coffee bean that breaks away and gets removed during the roasting process.
Commingled recycling	Common recyclables, mostly packaging; such as glass, plastics, aluminium, steel, liquid paper board (milk cartons). Commingled recycling may include paper but often, and particularly in offices, paper and cardboard are collected separately.
General waste	Material that is intended for disposal to landfill (or in some States, incineration), normally what remains after the recyclables have been collected separately.
#4 LDPE	This is a type of lower-melting plastic that plastic bags and some stretch wrap are made of
MGB	Mobile Garbage Bin – A wheeled bin with a lid often used for kerbside collection of waste or recyclables. (Often called a 'wheelie bin').
MRB	Mobile Recycling Bin – A wheeled bin ("wheelie" bin) with a lid often used for kerbside collection of recyclables (similar to an MGB). Generally have a different colour body and/or lid to MGBs.
Recyclable	Material that can be collected separately from the general waste and sent for recycling. The precise definition will vary, depending upon location (i.e. systems exist for the recycling of some materials in some areas and not in others).
Recycling	Where a material or product undergoes a form of processing to produce a feedstock suitable for the manufacture of new products.
Reuse	The transfer of a product to another user, with no major dismantling or processing required. The term "reuse" can also be applied in circumstances where an otherwise disposable item is replaced by a more durable item hence avoiding the creation of waste (e.g. using a ceramic coffee mug in place of disposable cups)

1 Introduction

This Waste Management Plan (WMP) has been prepared for Place Development, on behalf of their Client, Eldorado Pty Ltd for the 59 & 61 Dunn Bay Rd, Dunsborough project. The project includes development of 18 boutique accommodation units and four commercial buildings consisting of:

- Building 1: Bar and micro-brewery
- Building 2: Kitchen/dining
- Building 3: Coffee roastery & café;and
- Building 4: Retail and 2 short stay apartments on the upper level

This WMP has been prepared based on the following information:

- Architectural plans provided by Finespun Architects (30 October & 4 November 2020)
- Correspondence with Mark Wong, Manager Fleet and Waste Services, City of Busselton regarding council waste management requirements on 12 October 2020
- City of Busselton 'Waste Collection Policy' current version date: 02 June 2020
- City of Busselton 'Waste Local Law 2016' version date: 10 June 2019
- WALGA Multi-Dwelling Development Waste Management Plan Guidelines (2018)
- City of Sydney Policy for Waste Management in New Developments (2005

1.1 Context

For efficient and effective waste management, the collection and centralisation of waste and recyclables has been carefully considered at the building design phase. Key factors to consider at the design phase include:

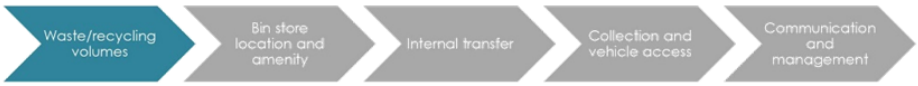
- The volumes of waste and recyclables likely to be generated during operation
- Size of bin storage area
- Safety for all operatives involved in waste management
- Access to bins and storage areas from within the buildings, trucks for waste collection
- Local council requirements
- Amenity (odours and noise)
- The ongoing management of waste and recycling services

1.2 Key components of the WMP

This WMP consists of five core components as follows:



2 Estimated waste and recycling volumes



2.1 Operational waste generation

The waste generation rates from the WALGA Multi-Dwelling Development Waste Management Plan Guidelines (2018) and the City of Sydney waste generation rates have been used as a basis for estimating waste generation quantities for this development. Encycle's experience and knowledge has also been used to calculate individual waste and recycling streams.

For the two short stay apartments (both 2 bedroom apartments) located above Building 4 the following rates have been applied:

No. of bedrooms	No of units	Waste requirement	Recycling requirement
2 bedroom	1	160 L/unit/week	80 L/unit/fortnight

For the retail, food & beverage and boutique accommodation units, the City of Sydney Policy for Waste Management in New Developments (2005) have been used in addition to Encycle's experience and knowledge[1]. Specifically, the generation rates used are presented below. City of Sydney waste generation rates do not include a breakdown of material streams included in the 'recycling' stream. The final column presents Encycle Consulting's in-house estimate of the material streams present in the recycling stream based on our working experience of operational buildings in WA.

Premises type	Nett lettable area/beds	Waste generation rate	Recycling generation rate	Percentage breakdown of recycling stream by material
Building 4: Retail >100m²	393 m²	0.5 L /1m²/day	0.5 L /1m²/day	50% cardboard 25% commingled 25% soft plastics
Building 2: Kitchen/dining	329 m²	6.7 L /1m²/day	1.3 L /1m²/day	50% cardboard 40% commingled 2% soft plastics 20% cooking oil 20% of waste is organics 100% glass (in addition)
Boutique accommodation units	18 beds	5 L /bed/day	2 L /bed/day	50% cardboard 40 % commingled 100% glass 10% soft plastics
Building 1: bar only (not brewery)	383 m²	0.5 L /1m²/day	0.5 L /1m²/day	50% cardboard 40 % commingled 100% glass 10% soft plastics

[1] Where no generation rate is provided by City of Sydney, Encycle have formulated generation rates based on experience of working with operational buildings in the local area and drawn from other relevant audit information

Premises type	Nett lettable area/beds	Waste generation rate	Recycling generation rate	Percentage breakdown of recycling stream by material
Building 3: Café	140 m²	3 L /1m²/day	2 L /1m²/day	50% cardboard 40% commingled 2% soft plastics 20% cooking oil 20% of waste is organics 100% glass (in addition if licensed)

2.2 Processing waste generation

Micro-brewery

The Masterplan outlines development of a micro-brewery located in Building 1 (and identified as location 19). There are no current plans for bottling or canning activities but there is some potential distribution of kegs to local markets pending demand. Consequently, there will be no generation of packaging waste from bottling / canning activities and the predominant solid waste stream will be the generation of 'spent' grains from the brewing process.

To estimate volumes of 'spent grains', we have applied our previous project experience of Waste Management Plans for granted development approval application for micro-breweries, and our knowledge of collection and processing options for organic wastes in the south west region. A conservative approach has been taken to the estimation of 'spent grain' 2 m³ from each brew.

There are two options for the management of 'spent grains' from the brewery as follows:

Brewery - Option 1:

A custom made storage silo (see Appendix A) will be constructed and installed and will store 'spent grains' until collection. Once the brew is complete, spent grain can be delivered via a mechanical process (i.e. a motorised auger) housed inside a steel tube directly into the spent grain silo. From the silo, spent grains are pumped via a similar auger pipe (trunk) into a 'top load' grain truck. Refer Appendix A for proposed equipment and collection vehicles. Spent grains are to be collected within 48 hours of brew completion from the spent grain silo and transported to local farms for animal feed.

Brewery - Option 2:

The second option is to store 'spent grain' waste following the brew in 'Nally mega-bin' or 'bulka bags' for collection on the completion of the brew. The bins or bags can be stored in Building 1 following the brew and will then need to be moved for collection by a fork-lift or similar equipment from the loading dock. Equipment will also be required to either unload the grains into a grain truck or load the bins / bags onto a 'flatbed' truck for transport to local farms for animal feed. Space for 2 x 'Nally mega-bin' or bulka bags of 1 m³ is provided for in Building 1.

Roastery

The Masterplan includes development of a coffee roastery located in Building 3. The roastery will service the café and it is assumed it will also service the brewery and restaurant. Processing waste generation rates have been estimated based on a 'busy' café servicing peak

seasonality demand and supplying roasted beans to the café, brewery and restaurant. The main waste generation streams from the roastery will include:

- Coffee husks / chaff
- Hessian bags / burlap sacks (generally coffee is packaged in 60 Kgs hessian bags)
- Possibly plastic LDPE bags (could be used inside hessian bags)

2.3 Number and type of bins required for development

The waste from the development is to be stored as follows:

- Bin store 1: located in carpark 2, stores waste and recycling from boutique accommodation units, bar (building 1), kitchen/dining (building 2) and coffee roastery/café (building 3)
- Bin store 2: located in carpark 3, stores waste and recycling from the retail and short stay apartments located above (building 4)
- The spent grain from the brewery will be stored in either an externally located 'spent grain' silo (for collection within 48 hours of a brew being completed) or internally in 'Nally mega-bins / Bulka bags' (for collection on the day and after the brew is processed).
- The used cooking oil will be located in the loading dock of building 2.

The number of bins to be stored in the two bin stores are set out in Table 1 and Table 2.

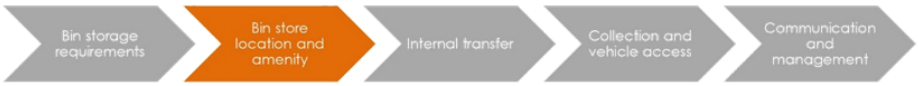
Table 1: Number of bins to be stored in bin store 1 (carpark 2) for boutique accommodation units, buildings 1, 2 and 3

	Bin size (L)	Number of bins	Collection frequency
General waste (excluding food waste)	660	5	Daily
Commingled recycling	660	1	Daily
Food waste	120	5	Daily
Cardboard	1100	1	Every 2 days
Glass	240	5	Daily
Soft plastic	660	1	As required
Used cooking oil	400	1	As required located in loading dock building 2
Polystyrene	660	2	As required
Coffee husks / chaff from roaster	120	1	Fortnightly
Hessian bags from roastery	Flatten & stack	Allow 1 m^3	As required
LDPE bags (if generated)	Flatten & stack	Allow 1 m^3	As required

Table 2: Number of bins to be stored in bin store 2 (carpark 3) for building 4 and short stay apartments

	Bin size (L)	Number of bins	Collection frequency
General waste	660	1	Daily
Commingled recycling	660	1	Twice-weekly
Cardboard	1100	1	Weekly
Soft plastic	660	1	As required

3 Bin store locations and amenity



3.1 Bin store locations

The building will have two bin stores to allow for the separate storage and collection of waste and recycling from the various buildings within the development (refer Figure 1);

1. Bin store 1: Boutique accommodation units, brewery/bar, kitchen/dining, coffee roaster/cafe (Buildings 1, 2 and 3)
2. Bin store 2: Retail and short stay apartments (Building 4)

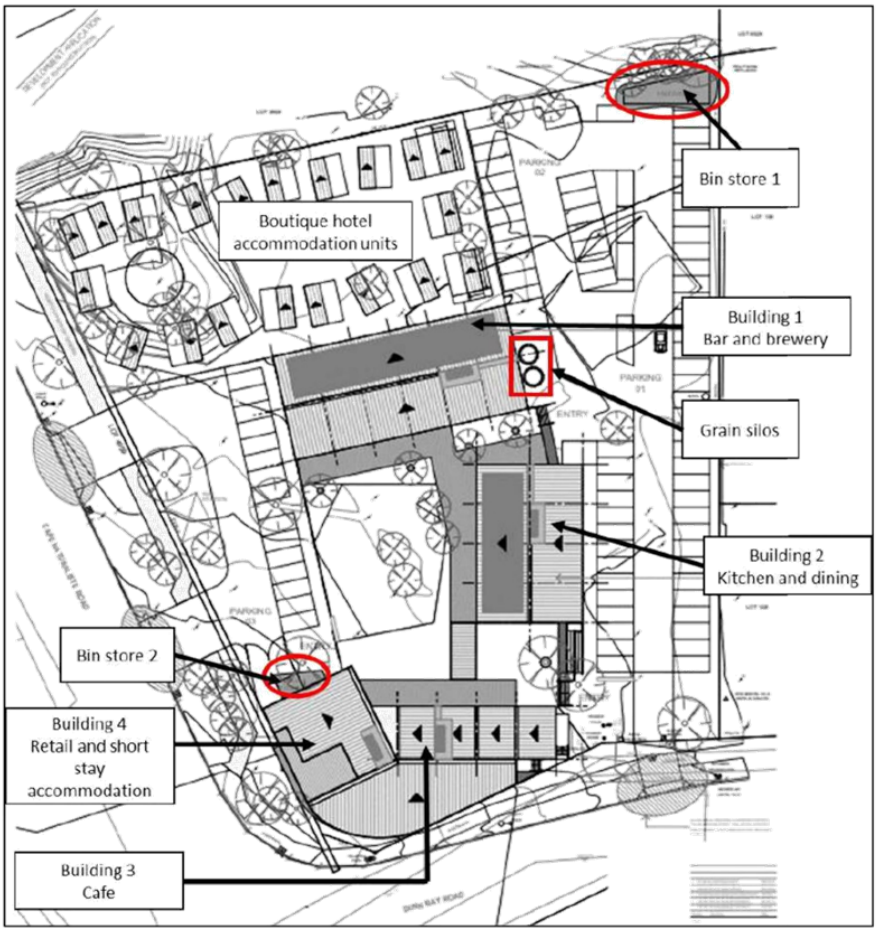


Figure 1: Site plan showing the location of the two bin stores

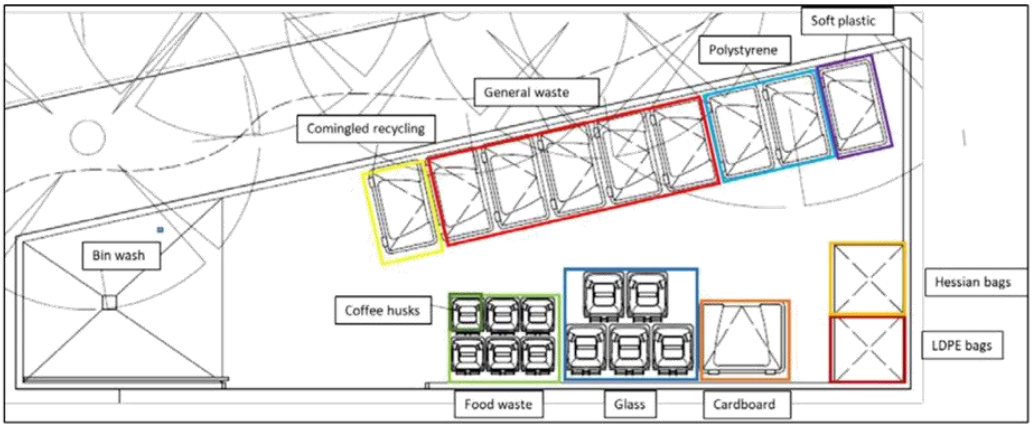


Figure 2: Layout of bins in bin store 1

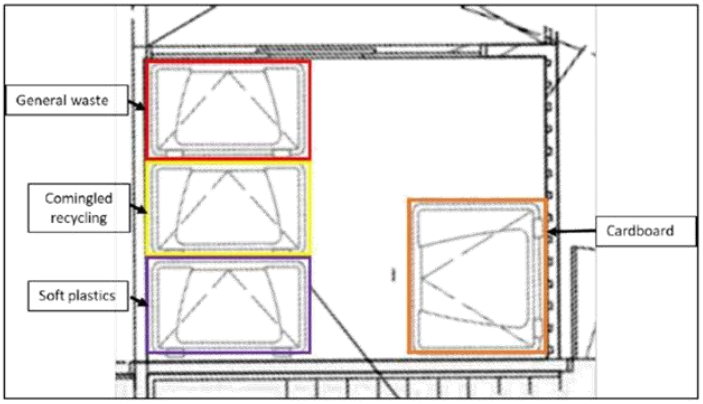
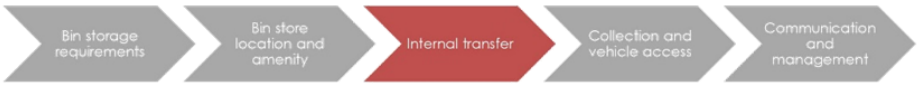


Figure 3: Layout of bins in bin store 2

3.2 Bin store amenity

Bin Transfer	
Aisle door and lift width:	All doors, corridors and lifts on the transfer routes are designed for the largest bin to fit through.
General health and safety:	Waste systems are designed to ensure that bins (particularly when full) are not required to be moved over any significant distances, up/down steep ramps (grade of slope <1:20) and definitely avoid stairs or other potential hazards.
	Manual handling of waste in garbage bags is excluded from the waste management systems where possible.
Bin store	
Washing bins and waste storage area:	Impermeable floors grading to an industrial floor waste (including a charged 'water-trap' connected to sewer or an approved septic system), with a hose cock to enable bins and /or the enclosure to be washed out. 100 mm floor waste gully to waste outlet. Both hot and cold water will be available.
Bin store walls and ceilings:	All internal walls in bin stores will be constructed with non-absorbent materials (solid and impervious) to enable easy cleaning. Ceilings will be finished with a smooth faced, non-absorbent material capable of being easily cleaned. Walls and ceilings will be finished or painted in a light colour.
Ventilation and odour:	The design of bin stores will provide for adequate separate ventilation (spaces between walls and roof).
Doors:	Ventilated roller doors will be specified both internally and externally to enable bins to be easily wheeled into and out of the bin stores.
Vermin:	Doors to the bin stores will be installed to mitigate access by vermin
Lighting:	Bin stores will be provided with artificial lighting, sensor or switch controlled both internal/external to the rooms.
Noise:	Noise is to be minimised to prevent disruption to occupants or neighbours.
Fully Enclosed:	The bin stores will be fully enclosed and only be accessible by occupants, cleaning staff, tenancy staff and the waste service provider.
Aesthetics:	The bin stores will be consistent with the overall aesthetics of the development.
Signage:	Visual aids and signage will be provided to ensure that the area works as intended.

4 Internal transfer



4.1 Transfer of waste from boutique hotel accommodation units

Housekeepers / cleaners will transfer bins from each of the boutique accommodation units to the bin store using trolleys or will transfer empty bins from the bin store to the cabins as part of the housekeeping process. Housekeepers will use safely marked out service pathways to transfer waste and recyclables from the units to bin store 1 within the car parking area 2.

4.2 Transfer of waste from building 1 (brewery and bar), building 2 (kitchen and dining) and building 3 (coffee roastery/café)

Staff from Buildings 1, 2 and 3 will manually transfer waste and recyclables via safely marked out service pathways to bin store 1. They will use 'back of house' areas where appropriate. They will transfer waste and recycling to bin store 1 located in car parking area 2.

4.3 Transfer of waste from building 4 (retail & short stay accommodation apartments)

Staff from the retail tenancies and cleaners from the short stay apartments will manually transfer waste and recyclables via safely marked out service pathways to bin store 2. They will use back of house areas where appropriate. They will transfer waste and recycling to bin store 2 located in car parking area 3.

5 Collection and vehicle access



Private service providers will undertake the commercial waste and recycling collections.

On collection days, rear-lift vehicles for general waste and the various recycling streams will enter the property from Dunn Bay Road to service bin store 1 and Cape Naturaliste Road to service bin store 2 (refer Figure 4). The operatives will enter the bin stores to retrieve and service the bins.

For bin store 1, the vehicles will drive in a forwards motion through the carparking area 2 and make a right turn adjacent to bin store 1. The vehicle will then be able to perform a two point turn to park close to the bin store. After bins have been serviced the vehicle will exit the carpark in a forward motion back onto Dunn Bay Road.

For bin store 2, the vehicle will enter in the entrance closest to building 4 and perform a two point turn in car parking are 3 to park adjacent to bin store 2. After the bins have been serviced the vehicle will continue in a forward motion, exiting the carpark back onto Cape Naturaliste Road.

Access to the grease trap will be from carpark 1, entering from Dunn Bay Road.

Swept path analysis for vehicle ingress and egress to service both bin stores has been completed by taking into consideration the specifications of private service provider's waste collection vehicles (see Figure 4).



Figure 4: Swept path analysis showing access for waste collection vehicles to service bin stores 1 (RHS) and 2 (LHS)

6 Ongoing communication and management



6.1 Management

The operator of the boutique accommodation unit and Buildings 1 to 3 will be responsible for overseeing the waste management systems in bin store 1. The tenant of building 4 will be responsible for overseeing the waste management systems in bin store 2. The operator and tenant will be trained and informed about their responsibility to work closely with the private service providers regarding the schedules for collection of the various waste and recycling streams and for maintaining the bin stores in a clean and tidy condition at all times,ensuring bins are washed regularly.

6.2 Communication

The operator and tenant will be made aware through a building users guide (or equivalent) of the waste and recycling systems and how they should be used. An Operational Waste Management Plan suitable for presenting to all users of the buildings, including how the plan could be developed and implemented during both the initial occupation and ongoing management of the buildings will be developed to assist in the communication and smooth operation of the waste management systems.

The operator and tenant will be responsible for the continuing education of staff on correct segregation of waste and recyclables within the buildings.

Appendix A Equipment for brewery 'spent grains'

Spent Grain Silos

Tired of messing with totes or carts to store your spent grain? Having a spent grain silo will eliminate the headaches associated with spent grain storage. Looking for another source of income for your brewery? Many breweries are able to sell their spent grain when they ship it in truckload quantities. Paul Mueller Company can help you determine the best location, size, and discharge method for your brewery.



FEATURES

- Elevated and non-elevated designs
- Insulated and heated designs available
- Custom discharge options for maximum flexibility





'Spent grain' silo auger



Example of grain truck

URBIS

LOT 1 (NO.61) AND LOT 2 (NO.59) DUNN BAY ROAD – DESIGN PEER REVIEW

9th December 2020

PROPOSAL SUMMARY

Urbis has been engaged by the City of Busselton to peer review the proposed development at Lot 1 (no61) and Lot 2 (no. 59(Dunn Bay Road. The plan set reviewed for the City of Busselton is titled ***Lot 1 (no61) and Lot 2 (no. 59(Dunn Bay Road, Dunsborough*** and dated **November 2020**. The development approval was prepared by Element PTY Ltd.

The proposal comprises a Microbrewery, Restaurant, Café, Retail and Tourist Accommodation located across 2 lots on the corner of Dunn Bay Road and Cape Naturaliste Road.

The plan consists of three primary structures arranged around a central courtyard including:

- Brewery and Bar (576sqm).
- Kitchen and Dining (400sqm)
- Retail and Short Stay Accommodation (633sqm) and Café (182sqm)

Additionally, 18 boutique accommodation structures are located north of the Brewery.

The following provides a general summary of the Urbis review of the development application, followed by a separate assessment matrix of the proposal against design elements. The design principles identified in State Planning Policy 7 Design of the Built Environment as gazetted on the 24 May 2019 have been used as the assessment framework.

SUMMARY COMMENTS

- The retention of vegetation across the site is to be commended and provides points of interest within the site and helps to connect the site to its context as the transition between the town centre and the surrounding bush.
- The enclosure of the central courtyard with the 3- 4m high acoustic wall strongly diminishes the attractiveness of the courtyard layout. The benefit of this approach is to create an engaging public/private space at the entry to town that is highly visible from the street. Without this feature visible the approach become introspective and secluded. Ensuring this courtyard is visible and accessible from the street is fundamental to the success of a courtyard based layout in this location.
- The scale and massing of the structures is generally suitable to the site and its prominence to both Dunn Bay and Cape Naturaliste Roads. However, the corner element does not present a defining feature to the street and should better recognise this as a landmark/ gateway entry to the town centre.
- The retail edge of Building B4 does little to engage with the street. This appears to be a result of focusing the attention of the key structures on the site internally. This may work if this internal space is open and inviting and is accessible from the street edge. However, in its current format, the entry to the retail tenancies gets lost within the building form.
- The inclusion of tenancies above the retail tenancies at Building B4 are a welcome addition and offer the opportunity for passive surveillance. However, the access and egress to these units is not ideal and is in conflict with servicing to the retail premises. This entry location might be better located along the street edge offering additional activation to the street.

URBIS

- The addition of footpaths around the site is in keeping with an improved pedestrian and cycle network however these do not translate into clearly legible movement network through the site. Entry points to the central courtyard either do not connect to the street, connect to surrounding movement networks such as Dugalup Brook, or are not emphasised as the primary access to the site.
- Servicing and access to the buildings needs further resolution as there are conflicts between entry points and loading bays. Specially, the location of the loading bay adjacent to Cape Naturaliste Road needs further detail on how this will be adequately screened from this prominent entry point.

Overall, the inclusion of a 3-4m high impermeable acoustic wall undermines the fundamental courtyard layout of the site and makes it difficult to provide a suitable design response in this format. To keep this format the resolution of enclosed courtyard and being able to open the site up to the street, visually at a minimum and physically as a preference, is key to aligning with the design principles of SPP7. There are other limited items identified in the review that require further consideration and resolution, but these are subset to the overarching issue noted above.

ASSESSMENT MATRIX

The following matrix identifies feedback on the plan against the design principles established in Schedule 1 of ***SPP7 Design of the Built Environment***. A design assessment of the proposal has been provided against each of the principles along with specific commentary where relevant. This has been broken down into compliance, review, design opportunities and note.

- Compliance means that the design is in alignment with the design principles.
- Review identifies specific items that should be reviewed or require additional discussion with the proponent to resolve or explain.
- Design opportunities are items that may improve the design but are not seen as critical.
- Note identifies items that may require further investigation by the City.

Design Principle	Explanation	Compliance	Comment
Context and Character	Good design response to and enhances the distinctive characteristics of a local area contributing to a sense of place	Complies	The site is located at the entry to the town centre and as such deserves a unique treatment in keeping with this prominent location. This site also denotes a transition between the bush and the town. The proposal integrating vegetation between the built form provides a blend of town centre with the bush in keeping with the context. The open nature of the built structures with the inclusion of breezeways, bifold doors, louvered window treatments, pergolas and other features that promote an indoor/outdoor interface are in keeping with the casual and informal character of Dunsborough Town Centre. Proposed materials include steel, wood and stone. These are appropriate materials to the site and offer a point of difference from the tilt up slabs and brick veneer utilised along parts of Dunn Bay Road.
		Review	As a key entry point into the town this site should signal an open and inviting response to the street. A courtyard layout typically provides a public/ private interface that would be

URBIS

Design Principle	Explanation	Compliance	Comment
			appropriate for this location. However, due to the 3-4m high acoustic wall facing Cape Naturaliste Road this becomes a closed interface and does not offer opportunity for views into the site and limits opportunity to engage with the town context. With the closed courtyard, the internal facing nature of this structure does not offer a welcoming environment in keeping with its context.
		Design Opportunity	Dunn Bay Road is the primary retail street for the Town. This street interface promotes an active and interactive edge along its length. The proposal currently shows a windowed edge to the street along the southern boundary. This facade rises eastward to accommodate a change in topography. The footpath in the Dunn Bay Road reserve is separated from the built edge but would be better located directly adjacent to the building and built edge.
		Note	The industrial style of the main structures, whilst not inappropriate, doesn't align with any particular local aesthetic. The benefits of this approach are the flexible nature of this typology to accommodate a range of future uses, passive temperature control and the ability to modularise the structures and adapt around existing vegetation. The boutique units offer an alternate accommodation approach that isn't currently available in the town centre and also the ability to work with the site around existing and retained vegetation. The plans note that the location of these boutique units will work around existing vegetation.
Landscape Quality	Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context	Complies	The proposal promotes the retention of vegetation within the site and utilises the vegetation as an asset. The proposal also works with the topography of the site utilising decking to address level changes provide seating arrangements around retained vegetation.
		Design Opportunity	The site sits adjacent to Dugalup Brook offering a unique interface opportunity. However, it is unclear how the site will interface with this edge condition. This would benefit from a natural approach to fencing that offers a direct interface with the brook. Further detail on this interface should be requested through the approval process.

URBIS

Design Principle	Explanation	Compliance	Comment
Built Form and Scale	Good design provides development with massing and height that is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.	Complies	The size and scale of the proposal is generally in accordance with the existing character and context of the site and location. The buildings layout in working around existing vegetation across the site speaks to the bushland character of the context and contributes to the sense of place. The scale of the proposed development is such that the tree canopy should be visible from the street edges and the town centre offering a transition between the urban town centre and the bush on the periphery.
		Review	Dunn Bay Road kinks to the south adjacent to the site and highlights the southern edge of the site as a prominent element in this view corridor. This is currently marked by established trees on the corner. These will largely be removed as part of this proposal, however the structure replacing them does not have the same prominent in this view corridor This structure should serve as a gateway entry into the town centre and as a prominent marker for access from the west. Whilst the low scale nature of the development is suitable for most of the site there is an opportunity to highlight the corner structure (B4) with additional height or treatment to signify this gateway point.
Functionality and Build Quality	Good design meets the needs of the users efficiently and effectively, balancing functional requirements to deliver optimum benefit and performing well over the full life cycle	Complies	The proposed land uses of café, brewery, restaurant and retail provide an appropriate bookend to Dunn Bay Road and offer a diversity of land uses that will draw people from the town centre, helping to activate the western end of town. The proposed structures are of a scale and form to accommodate a range of uses over time. In the case of the boutique units they appear to be lightweight in nature and capable of being moved or relocated with minimal impact to the site and the retained vegetation.
		Review	The bin store location and servicing access associate with Building B4 is highly visible from Cape Naturaliste Road and is not an appropriate interface for a gateway entry into town. There is limited detail on how this area will be screened from view but it appears there will be a set of double gates to provide access. The location of the Building B4 accommodation access is also directly adjacent to this bin store and servicing access. This will create an unpleasant interface for tenants of these units.

URBIS

Design Principle	Explanation	Compliance	Comment
			This bin store also sits adjacent to Entry 3 from the Cape Naturaliste parking area and is not an ideal interface/ entry to the courtyard and does not promote pedestrian flow through the courtyard.
		Review	The proposal indicates a 5.9 x 5.3m transformer/ substation along Cape Naturaliste Road. This substation is located central to a prominent edge. It is understood that there is limited control over the location and appearance of these but this has not been incorporated into the design. At minimum, a landscape treatment should be devised to minimise the visual impact of this infrastructure.
		Review	Loading bay access to Building B2 requires vehicle movement across Entry 2. No dedicated linework has been indicated here to control this delivery movement and there is potential conflict with patrons as well as the indicated bike racks adjacent to the entry. Clear access to this loading bay should be identified.
		Note	It is assumed delivery access to the Café in B3 will be made via the tavern or kitchen site as there is no clear access from the Loading Bay on Cape Naturaliste Road. The only external ramp identified is located at Entry 1 a good distance south of the indicated loading/ drop off zone.
		Note	Water/ power and other servicing meters and pits have not been identified on the submitted plans. These should be consolidated into the structures where possible and out of the line of sight of public facing facades.
Sustainability	Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.	Complies	The site generally works with existing topography, utilising decking and the existing ground plane to maintain the natural landscape and retain existing vegetation on site. The structures provide opportunity to open up to the elements and take advantage of passive heating and cooling. The proposed structures on site are simple and adaptable and may be suitable for a range of different functions over time.
		Design Opportunity	Cross ventilation through the buildings will be limited by the enclosed central courtyard. Opening the courtyard to the street will assist in providing cross ventilation.

URBIS

Design Principle	Explanation	Compliance	Comment
			The orientation of buildings B3 and B4 do not offer opportunities for cross breeze to access the central courtyard.
		Note	The proposal includes 340 Solar Panels on rooftops to offset energy costs. This is expected to generate a significant amount of energy however, battery and other peripheral hardware to capitalise on this infrastructure this has not been indicated on the plans. It should also be noted that solar panels are most efficient with a northern orientation. Due to some of the sawtooth rooftops orientation this is not possible to achieve. This is offset by the fact that the panels are better integrated into the rooftop and present less visual impediment in their proposed format.
Amenity	Good design optimises internal and external amenity for occupants, visitors and neighbours. Contributing to living and working environments that are comfortable and productive.	Complies	The site provides a good mix of use and well arranged spaces to provide for future tenants. The level of activation that this site will provide will be of a benefit to the town centre and provide necessary vitality to the western end of Dunn Bay Road. The boutique units will offer a different type of accommodation and amenity currently not present in town. The retention of the trees maintains a high level of amenity within the site.
		Design Opportunity	The Kitchen Building B2 and associated activity is largely focused internally. There is opportunity to provide additional windows along the short southern edge of this structure facing Dunn Bay Road to provide additional activation, interest and views to and from the public realm
		Review	The central courtyard presents as an internalised space and offers limited interaction with the surrounding context. The proposed 3-4 m high acoustic wall along the western edge of the courtyard closes this area off from view from the street and closes the view to the street for patrons. The materials of this wall have not been provided but renders indicate a stone or rendered stone wall with pergola fronting Cape Naturalise Road. Whilst this may present well, it will undermine the fundamental benefit of the street interaction
		Review	The south western elevation includes a large public art screen located on the corner of Dunn Bay Road and Cape Naturaliste Road. Whilst public art is generally welcomed, this is one of

URBIS

Design Principle	Explanation	Compliance	Comment
			the primary entrances into the town centre and deserves additional activation and engagement along the ground plane.
		Note	The interface of the short stay accommodation and a microbrewery does not seem compatible. Although from a noise perspective it is noted that this complies as they are on the same site there is likely to be some conflict between these user groups.
		Note	The internal layout of Building B4 is unclear in the plans. There appears to be an entry lobby to the north and south of the buildings. It is unclear as to which is the primary entrance. It should be made clear that the entry from Dunn Bay road is the primary entry and should be treated as such.
Legibility	Good design results in buildings and places that are legible, with clear connections and memorable elements to help people find their way around.	Complies	The proposal illustrates a footpath connection around the site and includes a continuation of the footpath connection on Cape Naturaliste Road to connect this site into the surrounding pedestrian and cycle network. The proposal provides good use of materials to denotate important entry points to the site. The development utilises Building B3 to provide a terminating view from the centre of town down Dunn Bay Road. This structure presents an open and inviting façade on its eastern elevation and will be a point of interest to draw patrons down Dunn Bay Road. It is important that this view line remain open and unimpeded and the edge of this building is activated.
		Review	The vehicle access point at Dunn Bay Road is noted at 10 metres in width. The width of this driveway should be reduced where pedestrian crossings will occur to minimise interface between pedestrians and vehicles.
		Review	Vehicle access along Cape Naturaliste Road includes two driveway entry points measuring at 9m each to access 15 car bays. A future footpath is shown within the adjacent road reserve connecting into the town centre pedestrian network. The width of the driveways should be reduced here to better facilitate pedestrian movement. Ideally a single vehicle access/ egress point would be preferred or the required parking consolidated with the entry off Dunn Bay Road.

URBIS

Design Principle	Explanation	Compliance	Comment
			The traffic impact assessment does not discuss the opportunity for a one way system that may assist in reducing the width of the driveways.
		Review	Pedestrian access through the site needs further resolution. Connections into the site from the street via entry points have been identified by recycled brick. However, from Cape Naturaliste there is no direct connection to Entry 3 which is located behind the bin storage for Building B4. Pedestrian and cycle arrivals from this direction will have to navigate crossing two large driveway entry without clearly marked pedestrian access points. From Dunn Bay Road the brick denoted Entry 1 connects to the end of the car park but does not engage with the adjacent road reserve. As the primary entry into the site from the Town Centre this access point should be made clear. This entire entry point could be oriented further towards the Dunn Bay Road to help engage with street. There are limited visual clues that this is the primary entry to the site.
		Review	The proposal has limited interaction with Dunn Bay Road providing one clear frontage and access into the building on the corner. This edge should be activated and engaging to encourage movement along this street edge. Apart from an inset deck the structure itself does little to engage with the street and denote this entry point.
		Design Opportunity	The Dugalup Brook runs along the northern edge of the site. No clear pedestrian or cycle access has been provided to this movement network. This may transition to an important movement corridor in the future and the site would benefit from a clear access from this frontage into the site.
		Note	No awnings have been proposed along Dunn Bay Road adjacent to the street edge. Whilst this provides a cleaner building line, this offers little protection to pedestrians.
		Note	The site plan notes a range of servicing infrastructure around Entry 1 including power pole and dome, retic valve box and water meter. It is unclear if these items will be removed or consolidated as part of this proposal. This will be

URBIS

Design Principle	Explanation	Compliance	Comment
			important to resolve as the primary entry into the site.
Safety	Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.	Complies	The proposal helps to activate the western end of town providing a destination and encouraging pedestrian movement. The inclusion of accommodation on the second floor of Building 2 B2 provides some passive surveillance of the surrounding public realm and the inclusion of balconies facing Cape Naturaliste Road will assist in this.
		Review	The proposal includes a number of activation opportunities on the perimeter of the site, however the level of interaction with the street is limited. No views of the street are offered from the site to the surrounding public realm from the brewery, kitchen and boutique accommodation.
		Review	The location of Entry 3 is hidden behind the bin storage for Building B4. This is not visible from the street. This same conflict is noted for the entry to the units in Building B4.
Community	Good design responds to local community needs as well as the wider social context, providing buildings and spaces that support a diverse range of people and facilitate social interaction.	Complies	The industrial nature of the buildings offer flexibility to adapt and change to other uses over time. The diverse mix of uses will serve as an attractor for locals and visitors and provide an additional point of interest to the town centre.
		Review	The proposal does not offer any public or public/ private spaces. The courtyard which should serve as an inviting and attractive feature is hidden internally and has no direct interface with the public realm.
Aesthetics	Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.	Complies	The proposal has outlined a good process of engagement with the local community and local merchants and suppliers. The internal qualities of the courtyard with a deck built around trees has the potential to provide an attractive and engaging space. The indicated choice of materials including the timber cladding, sandstone dry wall and corrugated colourbond roofing provides a suitable palette for the location.
		Review	The use of the sawtooth structure enables a high roof line and an open and engaging façade.

URBIS

Design Principle	Explanation	Compliance	Comment
			However, the community benefit of this approach is only experienced on the eastern end of Building B3 as it faces down Dunn Bay Road. The Retail roofline on the corner presents as a low and monolithic slab and provides little variation across its length. The curve and cladding for this length needs further elements to break up the façade and denote points of interest such as the entry point.
		Review	The ground floor of Building B4 has an awning that extends arounds the corner. The projection of this awning appears to be around a metre in width. Its role and function here is unclear as it does not provide pedestrian shelter or protect any entry points below.
		Note	The indicative renders show a planted pergola along the length of the acoustic wall facing Cape Naturaliste Road. Posts or indications of this feature are not shown on the site or landscaping plan. A similar feature would be recommended to minimise the impact of this acoustic wall, however an alternate approach to a visually impenetrable acoustic wall would be preferred. If there is to be a pergola in this location the impact on pedestrian movement on this edge should be considered.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

No.	NAME & ADDRESS	Nature of Submission	Comment
AGENCY SUBMISSIONS			
1.	Department of Fire and Emergency Services – Landuse Planning	• DFES acknowledges that an existing house (to be demolished) and a café restaurant currently exists on the subject site and the development application seeks to introduce a boutique hotel, brewery and bar, kitchen and dining area, café and short term accommodation. • However, as the City have considered this to be a tourism activity and required planning approval, the change to a vulnerable land use would constitute an intensification of development and trigger application of SPP 3.7. • In line with the State Core Objective of Emergency Risk Management - *People: protect lives and wellbeing of persons*, DFES has assessed this proposal against SPP 3.7 and the Guidelines. DFES acknowledges this proposal falls within the scope of the Western Australian Planning Commission's *Position Statement: Tourism land uses in bushfire prone areas* (the Statement). The decision maker can consider the policy intent of the Statement, particularly regarding the primacy of life. • The proposed development will be required to be referred to DFES' Built Environment Branch for assessment at the building approval stage. • The BMP has identified aspects of the development that do not comply with the Acceptable Solutions contained in the Guidelines. Where a proposal cannot comply with the Acceptable Solution(s) a Performance Principle-Based Solution must be proposed and labelled as such. • Query some of the vegetation classification and distance to vegetation inputs used to determine BAL ratings. The	Noted. The City recognises that the proposal is a vulnerable landuse in the form of tourism development. Notwithstanding that DFES does not support the development of vulnerable or high-risk land uses in areas of BAL-40/BAL-FZ, the City considers that the site is located within an area that is considered to be a built out area and as such development at BAL-40 – BAL-FZ is approvable. The proposal identifies that all of the development including tourist accommodation that exposed to BAL-FZ will be required to be built to the appropriate construction standards. If approved, as per the DFES recommendation, prior to commencement of the development officers recommend that the BMP be updated by the Bushfire Planning Practitioner to clearly identify where a Performance Principle Solution has been used to address Bushfire Protection Criteria in place of an Acceptable Solution and it is recommended that as per the DFES recommendations the Practitioner should undertake an audit of the vegetation classifications and distances to vegetation modify the inputs in the BMP as necessary. The BMP to be amended to confirm that the Landscape Plan will comply with Schedule 1 of the Guidelines.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		inputs in the BMP should be audited by the Bushfire Practitioner. • The Landscape Plan in Appendix 1 of the BMP identifies future management of the Cape Naturaliste Road reservation immediately abutting the site to a low threat status. The decision maker to be satisfied with the vegetation exclusions and vegetation management proposed. • It is unclear in the BMP that the Landscape Plan (BMP Appendix 1) can achieve compliance with Schedule 1: Standards for Asset Protection Zones contained in the Guidelines (BMP Appendix 2). This includes the separation of vegetation from buildings particularly given the retention of mature trees for ringtail possum habitat. The BMP is ambiguous in the language used to confirm whether compliance with the acceptable solution A2.1. DFES recommends the BMP is amended to confirm that the Landscape Plan will comply with Schedule 1 of the Guidelines. • The Bushfire Risk Assessment at pages 9 and 12 states that *"Construction to AS3959 standards is achieved for all buildings..."* "...all buildings will comply to AS3959 standards." While it is noted that the bushfire construction provisions of the Building Code of Australia do not apply to Class 4 to Class 9 buildings and that an existing café restaurant is proposed to be retained, DFES supports this measure. • The BAL ratings cannot be validated for the reason(s) outlined in the above table. The Policy does not support development within BAL-40/BAL-FZ. Off-site evacuation or sheltering in the	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		nominated safer building as a last resort is not supported as a suitable Performance Principle-Based Solution. DFES recommend the design is revised to provide adequate hazard separation and ensure no buildings designated for short stay accommodation are located in areas of BAL-40/BAL-FZ. A perimeter road would assist in the provision of separation from the hazard and improve the ability for emergency services personnel to undertake firefighting and emergency management activities within Dugulup Brook Creek Reserve. It has not been sufficiently demonstrated that the Landscape Plan achieves compliance with Schedule 1: Standards for Asset Protection Zones contained in the Guidelines. • Subdivision and development applications for vulnerable or high-risk land uses in areas of BAL-40/BAL-FZ will not be supported unless they comply with policy measure Clause 6.7.2 of SPP 3.7. The proposal is not considered to meet the definition of unavoidable development.	
2.	Department of Biodiversity, Conservation and Attractions	<u>Fauna Management</u> Western ringtail possums (WRP) are listed as critically endangered under the *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.* WRP have been recorded within the proposed development site. The application's Table 1 Environmental Value-Fauna and Fauna Habitat (Emerge Associates 2020) - states that a fauna management plan has been prepared. A copy of the fauna management plan was not forwarded to DBCA with the	Noted. The applicant has prepared a Fauna Management Plan which appears to be consistent with the advice given by DBCA. The provision of tree protection zones during construction and the installation of a fence to define the northern boundary in order to protect vegetation within the adjacent reserve have been included in the conditions in the officer recommendation.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		application. DBCA recommends that the fauna management plan is prepared in consultation with DBCA. DBCA notes that a fauna trapping and relocation program is proposed. DBCA advises that the fauna management plan should include a range of measures to manage threatened fauna species. Fauna spotters should be present on-site prior to, and during vegetation clearing works and demolition works. The fauna spotter must hold a section 40 ministerial authorisation to take or disturb threatened fauna under the BC Act. The fauna spotter should provide a post-clearing report to DBCA swlanduseplanning@dbca.wa.gov.au that includes the numbers of adult or juvenile western ringtail possums observed, taken or disturbed, any injuries or fatalities, and the location of the fauna after clearing occurred. Please note that WRP can reside in roof spaces and therefore a fauna spotter with a section 40 authorisation may also be required for the demolition of buildings within the site. <u>Vegetation retention</u> The Mixed-Use Development plan (Emerge Associates Rev C 13 November 2020) depicts trees to the retained and removed. The plan's legend indicates that some trees are in poor health and may be removed and therefore the final number of retained trees has not yet been determined. There should be no impacts to the vegetation along Dugulup Brook reserve on the site's northern boundary as this forms an important fauna corridor. When vegetation clearing occurs, all trees to be retained should be clearly marked and protected to ensure there is no accidental damage or removal during development.	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		DBCA supports the Emerge Associates tree management options outlined in Table 1 Environmental Value – Flora and Vegetation - including the use of fencing along tree drip-lines and minimizing cut or fill within tree protection zones. In addition, a map of the retained trees should be included within the approved fire management plan to minimize accidental clearing/damage when fire management is undertaken. Western Australian (WA) Peppermint trees (*Agonis flexuosa*) are preferred habitat for the critically endangered WRP. The landscape shrub planting list could include WA Peppermint trees to enhance habitat for threatened WRP. <u>General comments</u> The Dugulup Brook is adjacent to the site's northern boundary. The drainage management plan should ensure that surface water will be contained within the site with no direct, unfiltered discharge to the Dugulup Brook. It is suggested that consideration be given to installing fencing or bollards along the northern boundary to define the Dugulup Brook reserve area and protect WRP habitat trees and riparian vegetation.	
3.	Department of Water and Environment and Regulation (Noise Branch)	1. The proposed architectural requirements, such as noise walls on western side of courtyard, the architectural construction of buildings for brewery, restaurant and café, and building envelope construction of Unit 1 in retail and short stay accommodation building, are considered appropriate and sufficient. 2. The proposed noise management requirements, such as locating the live entertainment to the northwest corner of the courtyard, closing the external windows, doors and louvres of the brewery and restaurant buildings when the amplified	Noted. The environmental noise assessment report is considered reasonably accurate, however officer recommend conditions relating to acoustics of proposed mechanical equipment installations and requirement of preparation of a Noise Management Plan for the implementation of the recommendations in the environmental noise assessment report.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		music with these buildings is louder than background music; limit the music volume within brewery and restaurant buildings, limit the number of patron within the courtyard and deck areas outside the brewery building when this building is used after 10pm etc., are all appropriate and effective. Note that while DJ music levels can be effectively controlled this would be more difficult if the source was live music. 3. Noise criteria quoted for the noise impact and compliance assessment seem correct. 4. Methodology of the noise modelling, including the topographical and meteorological inputs, building envelopes; modelling assumptions, sound power levels quoted for various scenarios and at various venues, seem reasonable and acceptable. 5. The predicted noise emission levels at the four neighbouring residential receptors and the most effected neighbouring commercial premises for various scenarios seem reliable. 6. GHF stated that the noise transmission from the hospitality uses to the shortstay accommodation is not required to comply with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations), because they are located on the same lot and will be operated by the same entity. While this statement is correct, it should be noted that if the short-stay accommodation component is separated from the hospitality component in future, noise compliance at the accommodation site will become a problem. In summary, ENB would agree that the proposed development has the capability of complying with the Noise Regulations.	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

4.	Department of Water and Environment and Regulation (Environmental Regulation)	The Department has identified that the DA20/0916 - Mixed Use Development has the potential for impact on environment and/or water resource values and/or management. Key issues and recommendations are provided below and these matters should be addressed: • Issue: Clearing of native vegetation. o Advice: Based on the information provided it is likely that this proposal is exempt from the requirement for a clearing permit under Regulation 5, Item 1 – Clearing to construct a building of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (the Clearing Regulations), as described in the Departments 'A Guide to the Exemptions and Regulations for Clearing Native Vegetation'. • Issue: Located in a sewerage sensitive area (e. land that drains to and is within two kilometres of the following coastal embayments) o Advice: Proposal to comply with the Government Sewerage Policy 2019, for sewerage sensitive areas and management of trade waste. • Issue: Proposed operation could be categorised as Prescribed Premises. Advice: Based on the information provided the proposal does not seem to meet the requirement for a Prescribed Premises.	Noted.
5.	Department of Planning Lands and Heritage (Aboriginal Heritage)	A review of the Register of Places and Objects as well as the DPLH Aboriginal Heritage Database and the information provided by the City of Busselton concludes that the proposed	Noted.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		work is within the public boundary of Registered Aboriginal Site ID 20764 (Caves Road Campsite) but not within the boundary as administered by DPLH. For reported Aboriginal heritage places where there is restricted information, the actual location of the place is not publically available, as such, a larger dithered boundary is represented on the publically accessible DPLH Aboriginal Heritage Inquiry System. Therefore based on the information held by DPLH no approvals under the *Aboriginal Heritage Act 1972* are required.	
6.	Department of Planning Lands and Heritage (State Lands) 140 William Street Perth	Submission is neither in support nor objection, but information only. Future tenure of Lot 4959 (spite strip) will need to be resolved prior to access being available to Lot 1 on to Cape Naturaliste Rd. Options include LGA request Lot 4959 is amalgamated into the road reserve or it amalgamated into the adjoining holders at a value determined by the VGO. Partial removal of spite strip maybe considered. Support for removal of Lot 4959 is required by the City and Land Use Planning Division of DPLH. Other approvals may also be required.	Noted. A condition of approval is recommended for arrangements to be entered into prior to commencement of the development to address legal access across Reserve 42673. This will require liaison between the landowner, City and relevant sections of DPLH.
7.	Main Roads WA	It is noted that the road verge for Dunn Bay Road is very narrow near the existing roundabout which will limit future opportunities for upgrading Dunn Bay Road. Dunn Bay Road is the major access road for the Dunsborough Town Centre with increasing new development and resultant increasing traffic demands.	Noted. Officers have recommended conditions for the southern crossover to Cape Naturaliste Road to be a controlled access crossover for left out service vehicles only.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		It is recommended that the Shire ensure that adequate road reserve/ verge is provided to accommodate location of services, dual use paths and possible future upgrading of Dunn Bay Road. It is considered that the proposed development setback/ road verge to Dunn Bay Road should be increased to provide a minimum verge / reserve width of approximately 5 metres. Main Roads will be able to assist the Shire with a concept for future upgrading along Dunn Bay Road if required. The proposed development plan indicates two driveway crossovers to Cape Naturaliste Road. The proposed southern driveway crossover is located within the left turn slip lane for the roundabout / intersection which will create potential for traffic conflicts. It is recommended that the southern driveway crossover be modified/ realigned to allow for left out only into the left turn slip lane. Alternatively, it is considered that the proposed southern driveway crossover could be deleted. Also the existing pedestrian crossing on the south side of Dunn Bay Road will need to be relocated to the west to avoid conflict with the proposed new driveway access crossover for the development to Dunn Bay Road. Further, the Shire should ensure proposed driveway access to Dunn Bay Road is designed to include appropriate turning radius for the required design vehicles.	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

PUBLIC SUBMISSIONS			
1.	G & W Killian Dunsborough	We recently received your letter seeking comment on the proposed development as above. Prior to making any submission I would like to get clarification on a couple of things please. In past correspondence from the City of Busselton and per the Dunsborough Town Centre Conceptual Plan forwarded to ratepayers in October 2020, it appears that an extension of Clark St to Cape Naturaliste Rd has been gazetted and also a roadway/pedestrian way from Cyrillean Way to Clark St has been considered. Will these extensions take place? This will have a bearing on our thoughts regarding the mixed development proposal.	Advice to the submitter has been provided that the connection of Clark Street to Cape Naturaliste Road has not been gazetted. The connection of Clark Street to Cape Naturaliste Road is an officer recommendation in both the Local Commercial Planning Strategy (LCPS) and the Dunsborough Town Centre Conceptual Plan, although neither of these are formal planning documents. Through multiple rounds of community engagement (including two recent rounds in late 2020), this proposed connection has been supported by members of the Dunsborough community. It is likely that the connection will be recommended by City officers for inclusion in the forthcoming draft Dunsborough Precinct Structure Plan (DPSP). The draft will, however, need to be endorsed by Council prior to advertising; and will then be subject to a period of community and agency consultation. This may lead to modifications, which again will need Council endorsement, and the final decision will come from the WA Planning Commission. If approved, the DPSP will not provide a formal mechanism to require the connection (which would involve the rezoning of private land via an Amendment to the Local Planning Scheme), however it will provide a basis to undertake the necessary Scheme amendment.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

			Therefore while this is something that officers and the community (from previous consultation) supports, it isn't a fait accompli, and may still be a lengthy process. In regard to a connection between Clark Street and Cyrillean Way, again this was an officer recommendation in the LCPS and there is an existing Public Access Way. It may be that further upgrades are considered, however this 'movement' component of the DPSP has yet to be considered.
2.	P Tyrell D Tyrell R Colvin L Sproule P Harris L Smith J & J Nuttman L Bottaglia V Lepidi M Lepidi P Goddard D Sienkewitz J Harper C White	Submission from various residents of Naturaliste Heights. In general, the proposal appears to be well considered but concerned that if identified issues are not dealt with at the beginning then a long-term solution becomes very difficult to implement and retrospective alternatives would be a compromise solution. We are willing to engage with the Developer to achieve a suitable outcome The Submission addresses concerns regarding: - <u>Community Consultation process</u> The Applicant's Community Consultant (CC) listed stakeholders with whom they engaged. No residents of Naturaliste Heights have received any correspondence from the CC and the Applicant has not made any attempt to inform themselves of likely concerns and how those concerns can be addressed and / or mitigated.	Noted. Noted. Noted. Noted. The applicants community consultation processes was not a requirement of the City nor has the reported outcomes a relevant consideration in the City's planning assessment of the proposal. The City has undertaken public consultation as required by the Local Planning Scheme a result of which is this submission.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

	J White	Cross overs to Cape Naturaliste Road Cars leaving the existing CNR & Dunn Bay Rd round-a-bout and heading north along CNR are doing 60kph and are potentially confronted with vehicles turning right into the northern most cross over. The short distance between the existing round-a-bout and the proposed cross over will increase congestion and possible cueing of cars which will further contribute to the possibility of accidents. Importantly, residents from Naturaliste Heights, many with young children in tow and quite a few elderly residents, cross CNR to walk into town. In summary, the proposed crossovers will: - • exacerbate vehicular congestion and potential for accidents; and • compromise the safely of residents from Naturaliste Heights walking into the CBD. **Suggested Option** • Restrict ingress/egress to service vehicles only; • Narrow the width of both cross overs; and • Make them left in left out	Noted. Officers have recommended conditions for the southern crossover to Cape Naturaliste Road to be a controlled access crossover for left out service vehicles only.
		Aesthetics With a height of 6460mm the accommodation units will protrude 4360mm above the proposed 2100mm sound attenuation screen fence. The AU are quite severe in their design and not aesthetically pleasing. A softer more appealing aesthetic from CNR should be considered. **Suggested Option**	Noted. The City is comfortable with the proposed architectural design of the accommodation units which complies with height and other requirements specified for the zone by the Scheme.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		Alter the elevation by lowering the pitch so the maximum height is 4500mm (this still allows ventilation and bed to a loft area). <u>Parking</u> The Applicant states: - *Based on the City's Local Planning Policy No. 2.1 – Car Parking (LPP2.1) the following parking requirements are derived for the development, based on 4 bays per 100m2 of Net Leasable Area (NLA) for all land uses:* *Table 4 – Parking Requirements* *Land use NLA/No. Requirement Proposed* *Shop 393m2 NLA 16 62 shared bays with reciprocal parking* *Restaurant/café 329m2, 140m2 NLA 19 arrangement (includes 2 ACROD Bays)* *Brewery/Tavern 505m2 NLA 20* *Tourist Accomm. 20 units 22 22 (includes 2 ACROD Bay)* *It is noted the parking requirement has been rounded to the nearest whole number. The deck and alfresco areas are not for the exclusive use of the tenancies and are therefore not included in the NLA.* The Applicant also states: - ***At this stage** a maximum capacity of 1,000 patrons is envisaged at any one time which will be spread across* *the three hospitality buildings, with the following break-down:* • *Within Building 1 – 206 patrons*	Noted. The proposal provides for a total of 80 car parking bays, including four universal access bays, across two car parks on the site. The City's Local Planning Policy No. 2.1 'Car Parking' (LPP2.1) specifies that all new development within the Dunsborough Town Centre (the 'Centre' zoned land) should provide car parking at a rate of 4 bays per 100m2 of net lettable area (NLA) for all land uses. While this should, in principle, also apply to the Tourist Accommodation uses proposed, it considered more appropriate to require one bay per unit given the likelihood that guests will drive to their accommodation. Based on the NLA provisions for the retail and food and beverage uses and a rate of one bay per accommodation unit, the proposed development generates a requirement for 75 car bays. The proposal provides a total of 80 car bays on site, meaning the proposal exceeds the minimum requirement specified by LPP2.1. The level of parking provided is considered sufficient given the likelihood of reciprocal parking with other uses in the town centre and the ability for people to easily walk and cycle to the site. The proposal also provides space for up to 65 bicycle parking bays, including seven bays within a lockable storage area for staff, which exceeds the LPP 2.1 requirement for 58 bicycle bays.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		• *Within Building 2 – 181 patrons* • *Within Building 3 – 71 patrons* • *In the external areas (courtyard and decks) – 542 patrons.* ***Issues*** In its report, the Applicant refers to the number of patrons ***at this stage*** which suggests the likelihood of further patrons as the population of Dunsborough increases. In excess of 50% of the patronage (542) is allocated to the courtyard and deck but because these areas are not exclusive no parking has been allowed. This logic is for the benefit of the Applicant and allows them to provide a larger development footprint. We suggest the courtyard and deck is exclusive to the development and should be included within the area for which parking is required, particularly given that these areas accommodate the highest proportion of the patrons. *Of serious concern is the high likelihood of patrons parking in neighbouring residential streets due to insufficient on-site parking. This will bring with it an element of undesirable anti-social behaviour and this problem will ultimately revert to the City to resolve.* *The likelihood of this occurring is known because it already occurs with patrons of the Dunsborough Tavern parking in Martingale Drive. The extent of this is tolerable (so far) but it has the potential to become a much bigger problem if it is not addressed up front.* **Suggested Solution** The Applicant should be required to reduce the scale of the development to provide a realistic ratio of on-site parking to	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		the areas allocated for use by patrons (including the alfresco / deck /courtyard areas). Our understanding is that this approach is common when calculating the parking required for restaurants. <u>Operating Hours</u> The Applicant's Report states: - *At this stage of the project the operating hours of the hospitality uses have not been confirmed, however the following are anticipated:* *• The brewery (Building 1) will generally be open between lunch time and 10pm, and is proposed to operate to midnight for private functions on occasion.* *• The restaurant (Building 2) will be open for lunch and dinner, closing prior to 10 pm (Building 2 may on occasion be used for private functions that may extend beyond 10pm); and* *• The café (Building 3) will be open for breakfast and lunch, closing in the afternoon.* ***Issues*** The Applicant refers to ***and is proposed to operate to midnight for private functions on occasion***. Weddings (let alone other events) are big business in Dunsborough & surrounds amongst permanent residents and tourists alike. The number of private functions is likely to increase as the population of Dunsborough increases. *On occasion* is very broad and could very quickly become 5, 6 or 7 nights per week. The operator is a commercial enterprise in the business of providing services that encourage increased turnover from the sale of food and beverage. It is reasonable to assume they will do all that is commercially possible to increase their turnover, including hosting private functions as often as possible. **Suggested Solution**	Noted. It is recommended however that conditions requiring the provision, approval and on-going compliance with appropriate noise and venue management plans, which can address noise emissions from the site and how the venue is managed on an on-going basis, including operating hours, maximum patron numbers, management of patrons leaving the site etc, be included should an approval be issued.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		Limit the time available for private functions to Friday & Saturday night to no later than 12 midnight. <u>Bush Fire Management issues</u> The Applicant reports: - *Ten short term accommodation cabins experience BAL-FZ because of their proximity to Dugulup Brook Creek Reserve.* *The land use planning bushfire risk mitigation strategies are comprehensively detailed in the BMP and respond to the performance criteria that fulfil the intent of the bushfire hazard management issues outlined in the Guidelines for Planning in Bushfire Prone Areas V1.3 (2017).* However, the BMP does not address the potential increased likelihood of fire in the Dugalup Brook Reserve due to activities of those occupying the AU. Due to the proximity of the AU to a heavy fuel load, activity such as a discarded cigarette butt is potentially catastrophic. **Suggested Option** Increase the setback of the AU to *create minimal impact on the environment* and mitigate the potential for fire by maximising the distance of tourist activity from potential fuel sources. <u>Environmental impact on Dugalup Brook and Fauna</u> ***The DUNSBOROUGH STRUCTURE PLAN – AUGUST 1990*** *The Dunsborough Structure Plan emphasizes preserving the important environmental landscape elements, notably the*	Noted. The potential impacts from bushfire are required to be considered as a large portion of the site is located within a designated Bushfire Prone Area. The proposed development is a vulnerable land use under State Planning Policy 3.7 because visitors and groups to the facility will be less able to respond in a bushfire emergency. Accordingly a Bushfire Management Plan (BMP) has been prepared by an accredited Level 3 Bushfire Planning Practitioner to support the Development Application. State Planning Policy 3.7 and the associated *Guidelines for Planning in Bushfire Prone Areas* do not require assessment of the likelihood of a proposed development to increase the risk of a fire starting due to patron activity. It is not considered that the risk of a fire caused by patrons of tourist accommodation located near to the to the reserve i.e. by discarded cigarette butt is any greater than the risk from recreational use of the reserve by residents and visitors to the area who may use the existing formalised walking path that traverses through the reserve. Noted. The proposal was referred to the Department of Biodiversity, Conservation and Attractions (DBCA)

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		mature trees, wetlands and creeks, which define Dunsborough: "The high aesthetic value of the environment is a significant feature of Dunsborough providing a scenic setting for urban development but also providing a constraint in that development should create minimal impact on the environment. Insensitive building design and siting will see the essential quality of Dunsborough compromised. It is important that natural or appropriately modified creek-lines and associated vegetation and wetlands are protected as important landscape elements" (DPUD, 1990:6). ***Native Fauna*** *During the current condition mapping, five western ringtail possum (Pseudocheirus occidentalis) dreys were found within the reserve.* ***Four of the dreys were located near the Cape Naturaliste Road end of the reserve*** *where the overstorey is predominantly peppermint trees. The western ringtail possum is listed as a Schedule 1 species ('Fauna that is rare or likely to become extinct') under the Western Australian Wildlife Conservation Act (1950), and is a trigger species under the Commonwealth Environment Protection and Biodiversity Conservation Act (1999), listed as 'vulnerable'.* <u>Noise</u> Results of the Applicant's Environmental Noise Report confirm compliance based on noise contours at 1.5m above ground level. The report also states: *# Patron noise at distance is not known to exhibit annoying characteristics, therefore the penalties for tonality, impulsiveness, and modulation do not apply.* **Suggested Solution**	and the DWER relating to the proposed removal of vegetation on the site, potential impact on fauna and the proximity to Dugulap Brook. Comments received from DBCA indicate that the proposal can be supported subject to: a suitable fauna management plan; fauna handlers being present during removal of vegetation on site and the demolition of the existing buildings; the provision of tree protection zones during construction; and the installation of a fence or bollards to define the northern boundary in order to protect vegetation within the adjacent reserve. Conditions addressing these matters have been included in the officer recommendation. Noted. The application material was referred to the Noise Branch of the Department of Water and Environmental Regulation who provided commentary indicating that the technical detail in the report is reasonable, the predicted noise emissions at the nearby residential receptors seem reliable, the proposed architectural requirements are appropriate

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		• Peer review of the Noise report to verify the correctness of assumptions and outcomes in the Applicant's Noise Report; • Reverse the location of B2 and the Alfresco / Deck area. In doing so the noise from over 50% of the patrons coupled with noise from live entertainment (music has more low-frequency (63 to 125 Hz) sound energy than crowd noise and therefore is more difficult to attenuate) will be directed to the CBD rather than residents of Naturaliste Heights. Additionally, the Alfresco / Deck area will benefit from: o exposure to the winter sun; o the 3m & 4m high acoustic screen walls may be able to be reduced in height. <u>Odour</u> The Applicant has not provided any report(s) on the odour that will be emitted from activities at the Brewery or coffee brewing premises. **Suggestion** The Applicant be required to engage a suitably qualified Consultant to assess the extent / impact of odours from on-site activities.	and sufficient, the noise management requirements are appropriate and effective and that the proposed development can comply with the Noise Regulations. Discussion on the design of the development has previously been had with the applicant and it is clear that the developments proponents wish for the DA to be assessed as presented to the City. Noted. It is agreed that the proposal has the potential, if not appropriately managed, to result in odours emitted from coffee roasting and brewing activities that may impact on the amenity of neighbouring business and residential premises. It is recommended that a condition be applied requiring an odour management plan be prepared by the applicant and approved by the City prior to commencement of use.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

3.	Planning Solutions (on behalf of Dunsborough townsite landowner DCSC Pty Ltd)	On behalf of our client, we provide the following comment on the advertised application. **Noise and amenity** The Environmental Noise DA Report included with the development application call the adjoining site *"vacant lot to the east."* The Report appears to designate the adjoining site as a 'commercial' premises, which assumes there are no residential apartments or other noise sensitive premises on the adjoining site. As a result, the Report assumes a much higher threshold for noise from the proposed development received at the adjoining site. We submit the Environmental Noise DA Report should be amended to classify the adjoining site as if it were a noise sensitive premises for the reasons which follow. The owners of the adjoining site have commenced discussions with the City for a mixed use development incorporating residential apartments on upper levels; a form of development consistent with the City of Busselton Local Planning Scheme No.21 (**Scheme**) objectives for the Centre zone: *d) To provide for medium to high density residential development.* The adjoining site is designated a density code of R-AC3 under the Scheme which supports six-storey apartment buildings on the adjoining site. Clause 67 of the deemed provisions of the Scheme requires the following matters to be given due regard when considering an application for development approval: *(m) 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*	Noted. Noted. While it is understood from the modelled decibel levels in the noise assessment report that there may be noise exceeding the normally acceptable residential levels to this site, it is impossible to model the impact on a development that does not exist and the preparation of the submitted application and noise report was well advanced prior to any discussions with the adjoining landowners representatives about future development of their site. It is also noted that elevated noise levels are often experienced in town centres and that any future residential development of that site is likely to be required to consider quiet house design in any case. Further, should it be necessary at the time, the City could also require notifications to Titles advising purchasers of the potential for amenity impacts associated with living in a vibrant town centre.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development; *(n) the amenity of the locality including the following —* *(i) environmental impacts of the development;* *(ii) the character of the locality;* *(iii) social impacts of the development;* Compliance with the *Environmental Protection (Noise) Regulations 1997* does not necessarily mean that noise does not constitute an adverse impact on the amenity of the locality, or that a development is compatible with its setting. In this respect, given the planning framework clearly contemplates residential in a mixed use configuration on the adjoining site, the City must not approve the application until it is satisfied the development will not be detrimental to the amenity of future residential development on the adjoining site. This is particularly important given the owner has started pre-lodgement consultations for obtaining approval for a mixed-use development on the adjoining site. It would be inconsistent with orderly and proper planning to disregard the future and likely land uses contemplated on the adjoining site under the applicable planning framework. We submit the Environmental Noise DA Report must be modified to model the impact of noise on future residential on the adjoining property, and the Report is resubmitted to the City. We also request the modified Report is provided to us for further review.	

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		Shared vehicle access to Dunn Bay Road The application proposes a vehicle crossover to Dunn Bay Road near to the common boundary with the adjoining site. Adjoining the subject site are car parking bays and bicycle racks. Clause 4.21.1 of the Scheme requires: *l) vehicle crossovers and driveways shall be co-located wherever possible with adjoining properties;* The owners of the development site and the owners of the adjoining site have been in discussions, and are amenable to a joint access arrangement subject to detail design. A shared driveway / crossover would have the benefit of minimising the number of driveways and crossovers to Dunn Bay Road, thereby minimising the potential for pedestrian/vehicular conflict – which is a requirement under clause 4.21.1(m) of the Scheme. We submit the development should be subject to a condition requiring the parties to enter into a shared access agreement.	Noted. While the original application material proposed to have the crossover to Dunn Bay Road set off the eastern boundary, discussion with the applicant around future development potential on the adjacent site resulted in revisions to the plans to shift the crossover to the eastern boundary. This change provides the ability for any future development of the adjacent site to tie-in with this crossover (which could subsequently be reduced in width), preventing the potential for two crossovers on this street block of Dunn Bay Road in future. Conditions which address the need for an easement to allow shared access and/or the need to narrow the width of the driveway and crossover in future have been included in the officer recommendation.
4.	K Anstee Dunsborough	Dunsborough is already well served by bars/ restaurants and shops. There is no case for yet more in a town that is already under significant pressure from additional tourists, traffic and anti-social behaviour.	Noted. Level of existing supply of business types is not a statutory planning consideration. Traffic impact considerations are discussed in Officer Comments above and in agenda report. Condition included for venue management plan which is to address such matters as anti-social behaviour.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

5.	K Hall Dunsborough	Objection. Does not fit in with the aesthetics of Dunsborough. We lived in Mandurah in the 1990 and saw the rampant change and dynamics of the town change in our belief for the worse. Once this application has been accepted it then becomes open slather similar to the Gold coast, the town centre is not big enough to accommodate a huge increase in population.	Noted. While the industrial style does not reference any existing local aesthetic, it is considered that the development sits comfortably on the site and is enhanced by the retention of many of the existing mature trees on the site. The zoning of the site allows for consideration and approval of the proposed landuses.
6.	J Gladwingrove Dunsborough	Objection Too much on the site. Need to save a good proportion of those beautiful old trees.	Noted. It is considered that the development sits comfortably on the site and is enhanced by the retention of many of the existing mature trees on the site.
7.	L Sheen	Support, with some concerns raised. Terrace-style housing along the creek line, facing north, is ideal. NOT short stay which I feel is incompatible with entertainment facilities so close by. Permanent residences or long term rentals provide security for the area, reduce car use, and provide life to the urban setting. I would seriously argue that acoustics would be critical - the open deck area could be noisy with events and music. The existing pub tavern noise is already an issue from my house, even though I have double glazing and good insulation and the venue is twice the distance that this development is from residential property in my otherwise quiet street. This development will also suffer noise from the roundabout,	Noted. The proposed short stay accommodation is an approvable landuse under the Scheme for the zoning of the property. The application material was referred to the Noise Branch of the Department of Water and Environmental Regulation who provided commentary indicating that the technical detail in the report is reasonable, the predicted noise emissions at the nearby residential receptors seem reliable, the proposed architectural requirements are appropriate

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		requiring special attention in terms of materials roofing cladding and fenestration, for residential of any kind. Otherwise I am happy to see most of the inclusions in the proposal, even if not all. The design is quite an interesting addition to central town.	and sufficient, the noise management requirements are appropriate and effective and that the proposed development can comply with the Noise Regulations
8.	O Lodge Dunsborough	Support Dunsborough is lacking in this mixed use development. There is a huge lack of short stay accommodation of this type in the town centre. The brewery and retail segments will also bring tourist and economic growth to the town as well as create a hub for the community and tourist to come together and enjoy all that Dunsborough has to offer.	Noted.
9.	A Sargent Yallingup	Object. Dunsborough already has cafes, coffee roasting, shops, pubs & restaurants very close to the proposed development. It is unnecessary to duplicate existing services that are in the immediate vicinity of the proposed development. We don't need massive infrastructure that makes Dunsborough like any other tourist town. We need a point of difference and an opportunity to further develop a sense of community rather than just being focused on a few people 'getting rich'. Rather than supporting local business this massive development is likely to marginalise existing family businesses. Progress is not measured in dollars.	Noted. Level of existing supply of business types is not a statutory planning consideration. The zoning of the site allows for consideration and approval of the proposed landuses.
10.	N Day Dunsborough	Support.	Noted.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		A well-considered use of a mostly vacant block at one of the main entrances to Dunsborough.	
11.	K Bossong South Perth	Support. It's exactly what Dunsborough needs. The tourists will keep coming and the town needs to adapt to this.	Noted.
12.	J Happ Anniebrook	Support. It has a low impact use and keeps many of the trees. It looks like there has been a lot thought out into it and there is plenty of parking available. No buildings in Dunsborough should be allowed to do cash in lieu a so many people need parking.	Noted.
13.	G Ahern-Malloy Quindalup	Object. Concern regarding this proposal and the number of parking bays being supplied. It concerns me greatly that there is proposed a Brewery/Tavern, Restaurant, Cafe, Shops, 18 accommodation units & 2 serviced apartments with only 84 parking bays for patrons, shoppers, people staying and staff. Clancy's down the road appears to have easily have more than 80 cars parked in their bottom carpark on busy days in summer and they also have another area higher up that accommodates more patrons and staff. They do not have shops, accommodation or a café. We own Units 1,2 & 3 on 56 Dunn Bay Road which is very close to this development. We provided 31 parking bays (along with Loading Bays) as required by the council. We have 6 retail outlets only. It is a concern how anyone can justify that 84 parking bays is enough for this development especially in a town like Dunsborough where parking is a major problem already I town. Can you please advise us how the Busselton Shire works out how many parking bays should be provided on this development? We are	Noted. The City's Local Planning Policy No. 2.1 'Car Parking' (LPP2.1) specifies that all new development within the Dunsborough Town Centre (the 'Centre' zoned land) should provide car parking at a rate of 4 bays per 100m2 of net lettable area (NLA) for all land uses. It should be noted that the definition of NLA does not include alfresco dining areas. The proposal the proposed development generates a requirement for 75 car bays , however provides for a total of 80 car parking bays, including four universal access bays, across two car parks on the site. The level of parking provided is considered sufficient given the likelihood of reciprocal parking with other uses in the town centre and the ability for people to easily walk and cycle to the site.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		concerned that patrons will use our parking bays especially over the busy summer tourist season because they cannot access any parking at this venue.	
14.	T Sands South Perth (on bahlf of G Giacci)	Support. Good for the town.	Noted.
15.	J Lindquist Dunsborouogh	Support. I like the modern aesthetic appearance of the development particularly as they intend to retain many of the trees on the Lots. It will enhance the area and offer significant modern amenities which is badly needed in our Township.	Noted.
16.	L Ward Yallingup	Support. A beautiful block that can be transformed into something this town is screaming for. A hub that will reflect the township in a positive way and bring everyone together	Noted.
17.	I and I Clifton Dunborough	Object. Not enough parking space for this development. The traffic congestion in town is already unmanageable with the service station opposite during tourist peak season. Brewery or Tavern with ample parking maybe but no more accommodation in the town centre.	Noted. Refer to previous comments above in respect to parking and traffic and comments included in officer agenda report.
18.	M Vollprecht Dunsborough	Support. The current building and area looks run down and it would be awesome to have it fixed for the town.	Noted.
19.	D, S, S, A and Dragovic City Beach	Support. I support the proposal for the following reasons:	Noted.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

	(4 identical submissions from 1 household)	- The development will significantly contribute to the amenity of Dunn Bay Road and the Dunsborough Town Centre. - The new venue will provide an iconic community hub for both day and night time activities and the perfect mix of retail and hospitality venues. - The proposal enhances the aesthetic of Dunsborough and will complement the current developments along Dunn Bay Road. I especially support the use of materials such as timber and extensive landscaping throughout the development. - I love that many of the site's significant trees will be preserved. - I also welcome the new venue for local business. I support this level of investment in the Dunsborough town centre and look forward to the project commencing as soon as possible.	
20.	J White Dunsborough	Support. I feel the proposed brewery/cafe accommodation will enhance the entrance to this side of town. At the moment it is just vacant bush and does not add any appeal to the town. As Dunsborough is only gaining in popularity as a tourist town as well as a great place to reside, extra facilities would be a benefit. Support the proposal however have reservations regarding traffic impacts.	Noted. Refer to previous comments above regarding traffic impacts.
21.	D Clark Dunsborough	Support. The proposed development is 2 stories with open spaces and landscaping improving the amenity of the area and providing a new attraction for the town. I also note the use of natural materials enhancing the towns appearance. Dunsborough is a	Noted.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		tourist town and it is in the long term interest of the local economy to promote projects that are place making and promote the coastal tourist town experience.	
22.	A Butler Dunsborough	Support. The developers engaged and consulted with local community groups which was seen as very positive and I believe it would be a major architectural enhancement to the town and cohesive to its surroundings. The preservation of a number of trees on the site is a plus. Only issue I see is the entry and exits on Cape Naturaliste Road are very close to the roundabout and there could potentially be traffic congestion around this area especially around school drop off and pick up.	Noted.
23.	A Lupton Dunsborough	Support. We do not have a decent family tavern in town.	Noted.
24.	M Webster Dunsborough	Support. This is an example of a well considered development that will contribute to the town and community. It has a sensible human scale (2 stories) and footprint with generous landscaping and open space within and around the development. It's creating a place and a destination at the entry of town that encourages you in to play and explore. It has a healthy palette of natural materials and an eco-friendly orientation. Much more in keeping with the character of the town than other recent proposals along the foreshore. A development that will give something to the town rather than take.	Noted.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

25.	V Lepidi Dunsborough	Object. In essence we are not against the proposal, but do not want Dunsborough to become the gold coast. Where are the facilities to support locals? There are more apartments in planning now further up the ridge line at the cost of the Duglaup again. Concerned with multiple road access on to Cape Naturaliste Rd near the major artery road into town right opposite housing estate and road crossings for pedestrians? Mr Peter Tyrrell has made a submission on behalf of Naturaliste Heights residents, which we support, so please refer to his submission. Below is a few of my own other issues. 1) Access and parking I'm not sure if the designers have even been here during the summer months you can NOT turn or enter the roundabout, the 2 entry ways will have no hope of exiting the property. For the supposed number of patrons either renting or visiting premises there isn't enough car parking per customer. This will impact the residents and the roads around with congestion and illegal street parking. 2) Dugalup Brook. DCALC have worked hard with the limited help and funds to make it a corridor for threatened ringtail possums and other delicate species such as bandicoot and phascogales. The tress and supporting undergrowth can be deemed as a fire hazard, thus normally resulting in not so legal thinning or clearing. The landscape plan shows close proximity to the boundary by these apartments, How is this achieved due to the nature of the fire risk rating without compromising the integrity of the bush corridors on a reserve? Not to mention that these marsupials will no doubt try and make homes or use	Noted. Refer to previous comments against submissions above.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		the roofs as highways: due to the proximity to the reserve vegetation resulting in baiting/deaths and bad rap for the possums and again the illegal clearing. Stormwater runoff from paved areas: noted that there will be a water sensitive urban designed gardens but ultimately car park run off and drainage will fall into Dugalup Brook. This brook hardly manages to capture the rubbish, hydro carbons and other pollutants with the few detention basins downstream. Rubbish in general the site cannot when full cope for amenities, rubbish, people and parking where do you think it will all impact the most: the brook and the streets surrounding the venues.	
26.	P Thomas Dunsborough	Object. There has been no consultation with the residents of Naturaliste Heights. The time frame needs to be extended. I am concerned that the ingress and egress from Martingale Drive will be badly compromised especially in the event of a bushfire and generally with traffic flow coming off the roundabouts. Why this town needs another coffee shop or restaurant when the ones here find it hard to survive is questionable. There are many other issues regarding noise and planning that need to be addressed.	Noted. Refer to previous comments against submissions above.
27	B Green Dunsborough	Object. Don't support AS IS. Could be smaller, more insulated. – noise is directed out of town to Naturaliste Heights. The area acts like a natural amphitheatre already and it is loud enough dealing with shows at the pub. Assumption of no issue is misplaced - they never asked NH residents. - traffic access says one blue arrow in on drawings off Cape Naturaliste Rd but there are 2, very close to roundabout. -	Noted. Refer to comments against the issues raised in previous submissions above.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		capacity is stated as near 1000 people. Where do these people come from... drive? Where do they park? What security will be provided? - ridiculous to say central area is not part of development / private. It must be considered for parking requirements, noise, and security. - too many units too close against the creek. Where is the flood level?? - where is rubbish to be kept? Will it be visual / odour / fly pollution to Naturaliste Heights / Clarke St residents walking into/ from town/ at businesses? - what prevents access of unit renters to creek to protect it from traffic erosion? Reduce fire risk? - extended hours should be restricted to Friday/ Saturday nights only. Town has working residents, elderly and kids. We are not all on holidays to cope with lack of sleep.	
28.	T Sharp Dunsborough	Support. I support the proposal with some major reservations: 1. The landscape plans are rather imprecise in regard to the trees that will be retained. Some trees appears to be missing or mislocated. It should be a requirement that all trees to be retained are physically marked to avoid confusion. Some of the trees are very old and it would be unfortunate to lose them due to confusion. 2. It is unfortunate the developer and the city could not work together to acquire the land adjacent to the police station for additional community parking, rather than have a second parking lot on the west side of the development. This would free up that land for more productive use (or vegetation	Noted. Refer to comments against the issues raised in previous submissions above.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		retention) and give the community additional parking spaces. 3. The application seems to underplay the risk of offensive smells. There is residential housing within 100m of the development. It says the brewery "can be fitted" with state of the art filtering equipment. This should be mandatory and tests should be carried out at locations of similar size to check effectiveness. To say that it is "generally" described as a "pleasant smell" may not be satisfactory to those who will have to live with it daily. We know from existing experience in Dunsborough that coffee roasting smells can be offensive to some. The proponent seems to be underplaying the potential to create offense and more information should be provided on the filtering system being used and, again, tests carried out. 4. There appears to be little thought given to the interface with Dugulup Brook. With holiday accommodation directly adjacent to the brook this would appear to be dangerous for children and the environment. Is fencing proposed and if so, if what type?	
29.	V Prentice Dunsborough	Object. I do not support a micro brewery so close to a residential area and in the Dunsborough town centre. The smell is not appropriate for residents and the town centre. I do not believe that any measures will be able to be taken to totally prevent all smells. The developer cannot guarantee no smells and the level of smell becomes very subjective. Nearby residents workers and shoppers in town should not have to deal with any smell. I am concerned about the trees which will be removed. There is no plan showing the current trees and the trees which be	Noted. Refer to comments above against odour and vegetation retention. The application was referred to Aboriginal Heritage section of Department of Planning Lands and Heritage, with advice provided that "..no approvals under the *Aboriginal Heritage Act 1972* are required."

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		retained. The well established trees should not be destroyed. I am concerned about any negative impact on Dugulug Brook. I don't think a technical answer should be provided in relation to the issue of Aboriginal heritage. It appears the depression on the plan would have been a creek and may well have had aboriginal significance.	
30.	B Jarvis Dunsborough	Object. I think that a working Brewery in the CBD will be offensive. Of note is that the site has some of the oldest Agonis flexuosa trees in the world, some would be over 500 years old. Although some are very damaged and probably at the end of their life most are very healthy and should be preserved at all costs. The plans I have seen do not clearly distinguish the trees to be preserved and the Council should be "ON SITE" when the demolition takes place to avoid any "ACCIDENTS" or "MISUNDERSTANDINGS" that will never be able to be undone.	Noted. Refer to comments against the issues raised in previous submissions above.
31.	G Walker Dunsborough	Object. I am not against the proposal per se, however believe there are issues for consideration in relation to traffic management, noise, potential odours and damage to the fragile environment abutting Dugalup Creek. If I understand correctly, the property is entitled to ingress and egress for traffic off Cape Naturaliste Road - in a very tight space between Dun Bay Road round about and Martingale Drive... however, does this entitlement relate to historical data about the traffic which uses that section of the Road? Prior to Council approved developments at Naturaliste Heights and Cape Rise (both of which are currently being expanded). Has	Noted. Refer to comments against the issues raised in previous submissions above.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

		there been a recent traffic study which encompasses both peak and off peak use as well as different times of day - for example when children are travelling to and from school. It is already quite difficult to enter Cape Naturaliste Road from Martingale Drive and this is only going to become more so as further development takes place. Has there been any discussion regarding the management of traffic included in the proposal for this development? What planning has taken place to ensure and encourage walkability from developments on the Naturaliste Heights side of Cape Naturaliste Road and to discourage increased traffic problems? Parking is already a problem in the township during tourism season - how will this be managed? Safety and quiet enjoyment of property for residents and visitors alike must be ensured.	
32.	R Stubbs Dunsborough	Object. I am of the opinion that it will degrade the area with back packer type accommodation and is not required --given the accommodation already in the town e.g. hotel , back packer resort ,,beach resorts, air b and b, plus holiday units and housing within 2 kilometres of the site. In the immediate area are bars and a hotel within 500 meters of the development. It Is very much a back packer accommodation in the middle of Dunsborough and the proposed units will also require excessive parking and traffic congestion. The other concern I have is the loss of mature trees .Lets not down grade our town for a quick development	Noted. Refer to comments against the issues raised in previous submissions above.

SUMMARY OF SUBMISSIONS – DA20/0916

PROPOSAL: MIXED USE DEVELOPMENT (BREWERY, TAVERN, RESTAURANT/CAFE, SHOPS AND TOURIST ACCOMMODATION)
OFFICER: ANDREW WATTS

33.	M King	Object. Concerned with parking and traffic flow. This is the 4th application for development relating to Dunn Bay Road (including the proposed Beach Cafe. In all 3 prior applications, car parking criteria has not been met and two receiving cash in lieu payments. This proposal has stated there is a maximum capacity of 1000 patrons, plus 18 accommodation units offering only a total of 84 car vehicle spaces! I notice that in two development applications, twice a notation has appeared, that many patrons will access by foot and bicycle, and in this case regarding parking "given the high probability of reciprocal carpark use". Unfortunately many locals do not live within walking distance and in busy times it's difficult to get a car park to do food shopping. In 2018 we attended a "Your Say Forum & Workshop" promoted by The COB. Some of the concerns and feedback then from residents were Parking, Traffic flow, Building height and Cash in lieu payments. What plans do the COB have to remedy the already shortage of parking and poor traffic flow in busy times when to date none of the proposed developments have commenced? We feel the COB may engage with residents but they certainly aren't listening or acting on their concerns.	Noted. Refer to comments against the issues raised in previous submissions above.

18. MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

19. URGENT BUSINESS

Nil

20. CONFIDENTIAL REPORTS

Nil

21. CLOSURE

The Presiding Member closed the meeting at 6.01pm.

THESE MINUTES CONSISTING OF PAGES 1 TO 552 WERE CONFIRMED AS A TRUE AND CORRECT RECORD ON WEDNESDAY, 26 MAY 2021.

DATE: 26 May 2021 PRESIDING MEMBER: _____