

BAROSSA ASSESSMENT PANEL

Notice is hereby given that a meeting of the Barossa Assessment Panel will be held at the Council Offices, 43-51 Tanunda Road, Nuriootpa on

Tuesday, 5 March 2024, commencing at 5.00 pm

Aaron Curtis
Assessment Manager



AGENDA

Please note that due to federal copyright law restrictions, attachments associated with the proposed development are available on our website for viewing only and are locked for printing or copying

NOTE: Plans contained in this agenda are subject to Copyright Laws.

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1. WELCOME**2. ATTENDANCE****2.1 Present****2.2 Apologies****2.3 Absent****3. CONFIRMATION OF MINUTES****RECOMMENDATION**

That the minutes of the Barossa Assessment Panel meeting held on Tuesday 6 February 2024 be received and confirmed.

4. BUSINESS ARISING**5. DECLARATION OF INTEREST BY MEMBERS OF THE PANEL**

The Minister's Assessment Panel Members – Code of Conduct requires that a member of an assessment panel who has a direct or indirect personal or pecuniary interest in a matter before the assessment panel (other than an indirect interest that exists in common with a substantial class of persons):

- a. must, as soon as he or she becomes aware of his or her interest, disclose the nature and extent of the interest to the assessment panel; and
- b. must not take part in any hearings conducted by the assessment panel, or in any deliberations or decision of the assessment panel, on the matter and must be absent from the meeting when any deliberations are taking place or decision is being made.

A member of an assessment panel will be taken to have an interest in a matter if an associate of the member (within the meaning of section 3(7) of the PDI Act) has an interest in the matter.

Any member that considers that they have an interest must notify the Presiding Member and have it recorded in the minutes as to the nature and extent of the interest.

6. REPORTS – APPLICATION FOR DECISION (PLANNING, DEVELOPMENT AND INFRASTRUCTURE ACT 2016)

6.1 23034819 - Lot 101 Biscay Road Tanunda

APPLICANT:	Mark Baade of SAQ Consulting Pty Ltd on behalf of the Applicant Waveconn Operations Pty Ltd
REPRESENTORS:	Robert O'Callaghan on behalf of James March, Rockford Wines Grant Burge

APPLICATION DETAILS

PROPOSAL	Construction of a telecommunications facility including 30m monopole, antennas, equipment cabinets and fencing
APPLICANT	Waveconn Operations Pty Ltd, Mark Baade
OWNER	Biscay Road Vineyard Pty Ltd
APPLICATION NO	23034819
CERTIFICATE(S) OF TITLE	CT 5282/151
AREA	Approximately 7.7 ha
CURRENT USE	Primary Production – horticulture (viticulture)
PLANNING AND DEVELOPMENT CODE VERSION	Version 2023.17 – 23 November 2023
PLANNING AND DESIGN CODE EXTRACT LINK	Relevant Code Extract
ZONE	Rural
OVERLAYS	Character Preservation District Hazards (Bushfire – Medium Risk) Hazards (Flooding – Evidence Required) Limited Land Division Native Vegetation Prescribed Water Resources Area Water Protection Area Water Resources
APPLICATION TYPE	Performance Assessed
PUBLIC NOTIFICATION	Notified – No Sign Required
REFERRALS	Nil
PREVIOUS APPLICATIONS	960/486/2006 – Farm Implement Shed 960/942/2013 – Extension To Farm Building (Shed)
ASSESSING OFFICER	Janine Lennon, Consultant Planner
RECOMMENDATION	That Planning Consent be GRANTED subject to conditions

INTRODUCTION

The applicant seeks Development Approval for the '*Construction of a telecommunications facility including: 30 metre monopole, antennas, equipment cabinets and fencing*' at Allot 101 Biscay Road, Tanunda.

The proposed development was subject to Performance Assessment and public notification. The application was notified in accordance with Section 107 of the *Planning, Development and Infrastructure Act 2016* and received three representations.

This application is subject to a decision of the Barossa Assessment Panel (BAP) for the following reason:

- (1) Representations have been received as a result of public notification and the representors have indicated a desire to be heard in support of their representation.

No statutory referrals were applicable.

As defined in the *Planning, Development and Infrastructure Act 2016*, Part 1, 3 – Interpretation; communications networks are considered "essential infrastructure". Whilst much 'essential infrastructure' is excluded from the definition of 'Development', Schedule 4, 13 of the *Planning, Development and Infrastructure (General) Regulations 2017* states that "prescribed subscriber connection telecommunications infrastructure", such as the proposed development, is only excluded where:

- The pole does not exceed 20 metres high.
- Attachments do not exceed 2.4 metres in diameter.
- Equipment shelters/buildings do not exceed 10 sqm floor area or 3.5 metres in height.

In this instance the pole and attachments are considered 'Development', notwithstanding that the equipment cabinets meet the exclusion criteria.

The Planning and Design Code is substantially silent with regard to "essential infrastructure" and likewise the Planning and Design Code is substantially silent in respect to the provision of "telecommunication facilities" outside of urban/township areas.

The site is in a Rural Zone where essential infrastructure and/or telecommunications facilities are not listed as envisaged uses. This is a change in policy position, given that telecommunications facilities were promoted under the Barossa Development Plan within Rural Zones.

The development site is approximately 115 metres from Rifle Range Road and approximately 1.2 km from Barossa Valley Way. The slimline design of the proposed monopole and long views provided by the terrain of the Valley floor, mean that whilst the structure will be visible within the landscape, it is not expected to dominate any views.

It is considered that the proposal supports the rural uses of the land as "essential infrastructure" and will have an acceptable level of visual impact in the locality. As

such, Planning Consent is considered to be warranted, subject to recommended Conditions of Consent.

SITE AND LOCATION

The site for the proposed telecommunications facility is a regular shaped allotment with a frontage to Rifle Range Road of approximately 504 metres and a frontage to Biscay Road of approximately 152 metres. The site has a total site area of approximately 7.7 hectares.

The site is predominantly used for horticulture (viticulture) with approximately 5.9 hectares planted with vines and numerous clumps of mature native vegetation across the site, primarily following the existing watercourse. The site also contains an agricultural building, and numerous water tanks.

The site is positioned on the northern side of Rifle Range Road and the eastern side of Biscay Road and is generally surrounded by viticulture and low intensity agriculture. The land is gently undulating providing limited close vistas, generally of open farming interspersed with native trees and shrubs, and longer vistas of the Barossa Range.

The nearest township is Tanunda which is located approximately 1.5 kilometres north-west from the subject site.

Figure 1 below provides a Zone Map.

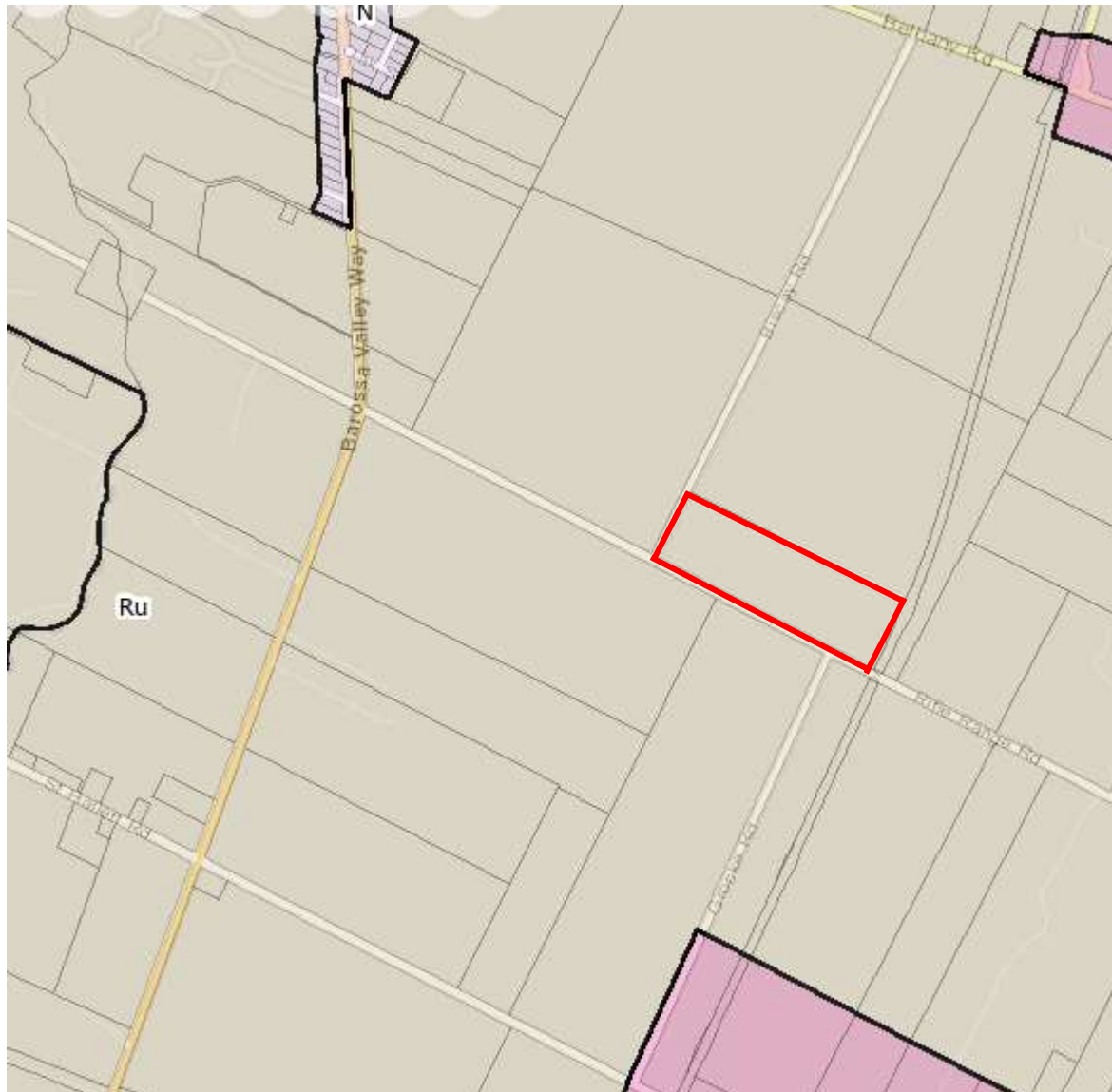


Figure 1: Zone Map – subject site marked in red

An aerial view of the site and locality are contained in **Figure 2** and **Figure 3**.

Site photos are provided in **Figure 4** to **Figure 11**.



Figure 2: Aerial – Locality, subject site in red, locality in blue



Figure 3 Aerial - Site



Figure 4: Site Photo looking south-east toward site of tower from Biscay Road



Figure 5: Site Photo looking east toward site of tower from Biscay Road



Figure 6: Site Photo looking south along railway corridor toward Rifle Range Road



Figure 7: Site Photo looking west from railway corridor toward the site



Figure 8: Site Photo looking north from railway corridor toward existing tanks



Figure 9: Site Photo looking west along Rifle Range Road



Figure 10: Site Photo looking east along Rifle Range Road toward the hills



Figure 11: Site Photo looking north-west from Rifle Range Road toward site

PROPOSAL

The application seeks development approval for the construction of a telecommunications facility including 30 metre monopole, antennas, equipment cabinets and fencing on the subject site.

The proposal contains the following elements:

- A 30 metre tall monopole and 7 metre by 11 metre compound located adjoining the boundary of the subject land, adjacent the railway corridor.
- A headframe mounted at the top of the monopole to accommodate up to nine panel antennas.
- A 6-bay equipment cabinet (dimensions 2.32 metre height x 0.75 metre diameter x 4.3 metre length) and a 4-bay equipment cabinet (dimensions 2.32 metre height x 0.75 metre diameter x 2.87 metre length), both connected to the monopole by a cable tray.
- Security fencing with double gates for access.

All cables connecting the antennas to the various trays will be internal to the monopole, except where they exit the monopole to connect to the relevant antennas. The monopole will not have any provision to allow it to be climbed and will be specifically designed to allow collocation of providers to occur.

The plans indicate the monopole will be of steel with colour not specified. The applicant advises *"The materials and finishes of the monopole and antennas are of low reflectivity, but can be painted to further blend into the landscape"*.

Attachment 1 provides a copy of the application and associated documentation.

APPLICATION TYPE

The site is located within the Rural Zone under the Planning and Design Code.

The proposed development is not listed in Tables 1-4 of the Rural Zone and therefore defaults to 'Performance Assessed' pathway under Table 3 of the Rural Zone.

PUBLIC NOTIFICATION

The application was subject to public notification in accordance with Table 5 – Procedural Matters – Notification of the Rural Zone. The proposed development in nature of a telecommunications facility is a type of development not listed in Table 5 as being exempt from notification. The proposal is not deemed to be a minor form of development.

<i>Class of Development (Column A)</i>	<i>Exceptions (Column B)</i>
<i>1. Development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.</i>	<i>None specified.</i>
<i>2. Any development involving any of the following (or of any combination of any of the following):</i>	<i>None specified.</i>

a) advertisement b) agricultural building c) air handling unit, air conditioning system or exhaust fan d) ancillary accommodation e) building work on railway land f) carport g) dwelling h) dwelling addition i) farming j) fence k) horse keeping l) internal building works m) land division n) outbuilding o) private bushfire shelter p) protective tree netting structure q) replacement building r) retaining wall s) shade sail t) solar photovoltaic panels (roof mounted) u) swimming pool or spa pool v) temporary accommodation in an area affected by bushfire w) tree damaging activity x) verandah y) water tank.	
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The table below provides details of the public notification process:

Representations:	Three representations were received as follows: • James March for Rockford Wines, Krondorf Road, Krondorf • Michael Wohlstadt for Grant Burge, Krondorf • Iain Seabrook, Arrawarra Place, Tanunda
Person wishing to be heard:	Of the three representations received, two wish to be heard as follows: • Robert O'Callaghan on behalf of James March, Rockford Wines • Grant Burge
Applicant	No late representations were received. Mark Baade of SAQ Consulting on behalf of the Applicant Waveconn Operations Pty Ltd wishes to appear to respond to representations.
Time period for Public Consultation	3 January 2024 to 23 January 2024

The table below summarises the contents of the representations and the applicant's response:

Summary of Representations

Representor/s

Applicant's Response

- | | |
|---|--|
| <ul style="list-style-type: none"> • The proposal will result in unacceptable visual impact and adversely impact character of the Barossa. | <p>The proposed facility is 1.1 kilometres from the main thoroughfare of Barossa Valley Way, with Rifle Range Road much less significant, particularly east of Grocke Road. Given the very slight stature of the proposed facility (in terms of bulk), the miniscule portion of the view occupied by it when viewing the valley floor vista (defined by Oxford as "a pleasing view"), the undulating topography that prevails in the area and the backdrop of the range. The facility will not be so intrusive that it will disturb the view to any material extent.</p> |
| <ul style="list-style-type: none"> • The proposal will be exposed to, and potentially increase flooding | <p>The risk to the facility from flooding is considered minimal.</p> |
| <ul style="list-style-type: none"> • There is a nearby airstrip to the site and its operations will be impacted by the facility | <p>There are no requirements in relation to aircraft landing areas impacting the site and proposed telecommunications tower.</p> |
| <ul style="list-style-type: none"> • The proposal will have no direct association with Primary Production | <p>Telecommunications facilities are essential infrastructure and have, since the introduction of State-wide provisions in 2000, been treated differently by both the South Australian planning system and the various courts, particularly the Environment, Resources and Development Court and the South Australian Supreme, where it has generally been involved to review the decision of the lower court.</p> <p>Essential infrastructure, by its very nature, needs to be planned and placed where it meets a particular objective. However, unlike power lines, water mains or gas lines, which can follow much more circuitous routes if necessary and are often placed underground, the wireless nature of mobile telecommunications is not the same. Facilities must be placed in the general area identified to achieve</p> |

the objectives of a particular area and must have regard for surrounding sites within the network. As stated above, in this instance the proposed facility seeks to serve the 'gap' in service between Tanunda and Rowland Flat and therefore it must be in that 'gap' – it cannot and does not need to be in Tanunda or Rowland Flat, as there are already facilities in those locations.

A copy of the representations are contained in **Attachment 2** and the applicant's response is contained in **Attachment 3**.

REFERRALS

External

Pursuant to Schedule 9 of the *Planning, Development and Infrastructure (General Regulations 2017)* and Part 9 of the Planning and Design Code, the application was not subject to any referrals.

Internal

The following internal advice has been received from staff:

Engineering Services	<i>There is no stormwater data within Council records to determine whether the area is prone to flooding, but our opinion is that the 1% AEP flow will be contained to the existing water course.</i>
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ASSESSMENT

Please refer to the following link, the Planning and Design Code extract for this proposal, dated (insert date), Version (version number):

Planning and Design Code Extract Link	Relevant Code Extract
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Seriously at Variance

Pursuant to Section 107(2)(c) of the *Planning, Development and Infrastructure Act 2016*, it is recommended that the Panel determine that the proposed development is not 'Seriously at Variance' with the relevant provisions of the Planning and Design Code.

The Planning and Design Code is substantially silent regarding "essential infrastructure" and likewise the Planning and Design Code is substantially silent regarding "telecommunication facilities" outside of urban/township areas. This is a change in policy position, given that telecommunications facilities were promoted under the Barossa Development Plan within Rural Zones.

The Rural Zone seeks to maintain the productive value of rural land for a range of primary production activities, and associated value adding, processing, warehousing and distribution should be supported, protected and maintained. The proposal will maintain the productive value of the rural land in that it will not diminish that value, and will support value adding activities such as processing, warehousing and distribution by providing telecommunications infrastructure.

Given the above, the proposal is not considered to be 'Seriously at Variance' with the provisions of the Planning and Design Code.

Character Preservation (Barossa Valley) Act 2012

Pursuant to Section 6(2) of the *Character Preservation (Barossa Valley) Act 2012*, having regard to the Objects of the Act, it is recommended that the Panel determine that the proposed development does not adversely impact the character values of the district. The character values of the district are:

- (a) *the rural and natural landscape and visual amenity of the district*
- (b) *the heritage attributes of the district*
- (c) *the built form of the townships as they relate to the district*
- (d) *the viticultural, agricultural and associated industries of the district*
- (e) *the scenic and tourism attributes of the district*

The Character Preservation District Overlay seeks to recognise, protect and enhance the special character of the Character Preservation District, this character includes the viticultural, agricultural and associated industries of the District. The proposal recognises, protects and enhances the rural associated activities of the District by providing telecommunications infrastructure.

Further discussion is contained under the Assessment section below in relation to the Character Preservation District Overlay.

Assessment

Detailed assessment of the proposal has taken place against the relevant provisions of the Planning and Design Code as quoted above. Commentary is provided below under headings:

Land Use

Rural Zone	
Desired Outcomes	
DO1	A zone supporting the economic prosperity of South Australia primarily through the production, processing, storage and distribution of primary produce, forestry and the generation of energy from renewable sources.
DO2	A zone supporting diversification of existing businesses that promote value-adding such as industry, storage and warehousing activities, the sale and consumption of primary produce, tourist development and accommodation.
Relevant Performance Outcomes/Designated Performance Features	
Land use and Intensity	
PO 1.1 The productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution is supported, protected and maintained.	DTS/DPF 1.1 Development comprises one or more of the following: a) Advertisement b) Agricultural building c) Brewery d) Carport e) Cidery f) Commercial forestry g) Dairy h) Dam i) Distillery

	j) Dwelling k) Dwelling addition l) Farming m) Horse keeping n) Horticulture o) Industry p) Intensive animal husbandry q) Low intensity animal husbandry r) Outbuilding s) Renewable energy facility t) Shop u) Small-scale ground mounted solar power facility v) Stock slaughter works w) Tourist accommodation x) Transport distribution y) Verandah z) Warehouse aa) Winery bb) Workers' accommodation
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Rural Zone Performance Outcome 1.1 seeks to maintain the productive value of rural land for a range of primary production activities, and associated value adding, processing, warehousing and distribution is supported, protected and maintained. It is considered that the proposal will maintain the productive value of the rural land by supporting value adding activities such as processing, warehousing and distribution by providing telecommunications infrastructure.

It is also noted that 'telecommunications facilities' were promoted under the Barossa Development Plan within Rural Zones. While the Planning and Design Code does not guide telecommunications facilities within such Zones in the same way, given this longstanding policy position within Development Plans, telecommunications facilities are a common and expected part of the rural landscape.

Built form and character

Built form and character	
PO 10.1 Large buildings are designed and sited to reduce impacts on scenic and rural vistas by: having substantial setbacks from boundaries and adjacent public roads using low-reflective materials and finishes that blend with the surrounding landscape being located below ridgelines.	DTS/DPF 10.1 None are applicable.

The proposal is for a telecommunications facility comprising the following elements:

- A 30 metre tall monopole and 7 metre by 11 metre compound located adjoining the boundary of the subject land, adjacent the railway corridor.
- A headframe mounted at the top of the monopole to accommodate up to nine panel antennas.
- A 6-bay equipment cabinet (dimensions 2.32 metre height x 0.75 metre diameter x 4.3 metre length) and a 4-bay equipment cabinet (dimensions 2.32 metre height

x 0.75 metre diameter x 2.87 metre length), both connected to the monopole by a cable tray.

- Security fencing with double gates for access.

The proposed tower will be sited as follows:

- approximately 115 metres from Rifle Range Road
- approximately 500 metres from Biscay Road
- approximately 1.2 km from Barossa Valley Way
- approximately 440 metres from closest dwelling (118 Nicolai Road)

Whilst the height of the proposed monopole structure is notable, the narrow diameter of the main column/shaft limits the bulk associated with the structure. In addition, the tower is setback a substantive distance from all road boundaries, such that it is not expected to be a highly notable element in the landscape.

While it will be visually discernible in the landscape, a telecommunications monopole is not considered to be an unusual element in the Barossa landscape. It is considered that it will not be visually obtrusive and its existence has a clear and important function which is considered an important offset consideration in this assessment.

Regarding the materials, the plans indicate the monopole will be of steel with colour not specified. The applicant however advises that *"The materials and finishes of the monopole and antennas are of low reflectivity, but can be painted to further blend into the landscape"*.

The proposed galvanised iron finish has a grey colour tone and is the prevailing finish of telecommunications towers and frost fans used commonly in the Barossa Valley region and is typical of the rural character. The narrow, cylindrical tower is not highly reflective, and has relatively limited surface area. It is considered that the galvanised finish shall weather and dull overtime. The proposed material and colour are considered acceptable. Should the Panel have a view that a painted finish is more appropriate, the applicant has indicated that such can be accommodated and would be most appropriately dealt with by way of Condition of Consent. The equipment cabinets can be finished in a natural tone to blend with the landscape.

In summary, it is considered that the proposed telecommunications facility is sited appropriately and will have an acceptable level of visual impact.

Character Preservation Overlay

Character Preservation District Overlay	
Desired Outcomes	
DO1	<i>Recognise, protect and enhance the special character of Character Preservation Districts.</i>
DO2	<i>The long term use of land outside of townships for primary production and associated value adding enterprises is assured and promoted.</i>
Relevant Performance Outcomes/Designated Performance Features	
Built Form and Character	
PO 2.2 <i>Development contributes to and maintains the historic identity and character of townships through appropriate:</i> a) form b) scale	DTS/DPF 2.2 <i>None are applicable.</i>

c) siting d) design e) landscaping	
Built Form and Character in the Rural Areas	
PO 3.1 <i>Preservation of existing natural features including topography, watercourses and mature trees.</i>	DTS/DPF 3.1 <i>None are applicable.</i>
PO 3.2 <i>Buildings and structures do not interrupt views of the skyline through measures including being sited below ridge lines.</i>	DTS/DPF 3.2 <i>None are applicable.</i>
PO 3.3 <i>Buildings and structures harmonise with the natural features of the landscape and reinforce the rural character through the use of muted, neutral, non-reflective landscape colours on external surfaces.</i>	DTS/DPF 3.3 <i>None are applicable</i>
PO 3.4 <i>Large buildings and structures are sited and oriented to minimise their visual bulk, particularly if close to roads or in open settings where there are no other buildings or mature trees in close proximity.</i>	DTS/DPF 3.4 <i>None are applicable.</i>
PO 3.5 <i>Buildings and structures are grouped to create compact clusters well set back from public roads.</i>	DTS/DPF 3.5 <i>None are applicable.</i>

The Character Preservation District Overlay seeks to recognise, protect and enhance the area's special character with a further remit to assure long term use of the land outside of townships for primary production activities.

The site is located within rural land approximately 1.5 kilometres south-east of the Tanunda township, that is primarily used for viticulture and broadacre farming. Local character is defined by the presence of farming activities interspersed with agricultural buildings and some dwellings. Telecommunications facilities are not an unusual visual element within the rural parts of the Barossa Valley and have typically been assessed by Councils within the district as an acceptable addition to the existing landscape.

It is always a balanced decision when assessing built form that can intrude into a landscape. In determining that the proposal accords with Overlay policies it is considered important to acknowledge that the structure has an intended purpose of essential infrastructure, and its height and design are a factor of function as well as form.

The Character Preservation District Overlay seeks to recognise, protect and enhance the special character of the Character Preservation District, this character includes the viticultural, agricultural and associated industries of the district. The proposal recognises, protects and enhances the rural associated activities of the District by providing telecommunications infrastructure for those activities.

Having regard to the Character values of the district and Overlay policies, it is considered that the proposed telecommunications facility will not detrimentally affect the special character of the district for the following reasons:

- Telecommunications facilities are not an unusual visual element within areas of rural landscape across the district.
- Whilst the height of the tower is 30 metres to the top of the monopole, the narrow diameter of the main column/shaft limits the bulk associated with the structure. It will be noticeable but is not considered highly intrusive to existing character.
- The galvanised iron finish of the telecommunications facility is not highly reflective. The grey colour will help minimise the visual impact of the structure.
- The telecommunications facility will recognise, protect and enhance the rural associated activities of the District by providing telecommunications infrastructure for those activities, which in turn helps deliver positive social and economic outcomes in the area.

Clearance from Overhead Powerlines

General Development Policies	
Clearance from Overhead Powerlines	
Desired Outcomes	
DO1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.
Relevant Performance Outcomes/Designated Performance Features	
PO 1.1 Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.	DTS/DPF 1.1 One of the following is satisfied: a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996 b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

DTS/DPF 1.1 clause has been met and therefore the related Performance Outcome 1.1 will be achieved.

Infrastructure and Renewable Energy Facilities

General Development Policies	
Infrastructure and Renewable Energy Facilities	
Desired Outcomes	
DO1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.
General	
PO 1.1 Development is located and designed to minimise hazard or nuisance to adjacent development and land uses.	DTS/DPF 1.1 None are applicable.

Visual Amenity	
PO 2.1 The visual impact of above-ground infrastructure networks and services (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development is minimised from townships, scenic routes and public roads by: a) utilising features of the natural landscape to obscure views where practicable. b) siting development below ridgelines where practicable. c) avoiding visually sensitive and significant landscapes. d) using materials and finishes with low-reflectivity and colours that complement the surroundings. e) using existing vegetation to screen buildings. f) incorporating landscaping or landscaped mounding around the perimeter of a site and between adjacent allotments accommodating or zoned to primarily accommodate sensitive receivers.	DTS/DPF 2.1 None are applicable.
Hazard Management	
PO 4.1 Infrastructure and renewable energy facilities and ancillary development located and operated to not adversely impact maritime or air transport safety, including the operation of ports, airfields and landing strips.	DTS/DPF 4.1 None are applicable.
Telecommunications Facilities	
PO 6.1 The proliferation of telecommunications facilities in the form of towers/monopoles in any one locality is managed, where technically feasible, by co-locating a facility with other communications facilities to mitigate impacts from clutter on visual amenity.	DTS/DPF 6.1 None are applicable.
PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.	DTS/DPF 6.2 None are applicable.
PO 6.3 Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods:	DTS/DPF 6.3 None are applicable.

a) where technically feasible, incorporating the facility within an existing structure that may serve another purpose or all of the following: b) using existing buildings and landscape features to obscure or interrupt views of a facility from nearby public roads, residential areas and places of high public amenity to the extent practical without unduly hindering the effective provision of telecommunications services c) using materials and finishes that complement the environment d) screening using landscaping and vegetation, particularly for equipment shelters and huts.	
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As previously discussed, impacts upon visual amenity is an ongoing theme with the assessment of this telecommunications facility. Performance Outcome 2.1 recognises that the visual impacts of essential infrastructure should be minimised "where practicable". As previously discussed, the height of the tower and its general locality are fundamental to the service that it provides. The proposed location is 1.2 km from Barossa Valley Way (scenic route) and its use of materials and finishes with low-reflectivity will ensure that its visual impacts are minimised.

The tower will be located approximately 2.5 km from a small, private landing strip, other local towers are also located approximately 2.5 km from the same small, private landing strip, reflecting that this tower will be no closer than any other towers in the area and will therefore not pose an increased risk to the landing strip, noting that any pilot operating aircraft must have regard to visual flight rules.

As detailed in the application, there are currently no other towers in the relevant area for the applicant to use to collocate their equipment, but the proposed tower is being designed to allow others to collocate where required. The applicant has provided a rationale for the need for this facility, based upon the lack of services able to provide an acceptable level of mobile phone coverage between Rowland Flat and Tanunda.

Performance Outcome 6.3 seeks that telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by a selection of methods including using existing buildings and landscape features to obscure or interrupt views of a facility from nearby public roads to the extent practical, without unduly hindering the effective provision of telecommunications services. Given the openness and low scale built-form within the locality, this method is not practical. The use of materials and finishes that complement the environment as well as the retention of existing vines, trees and structures at lower level to screen the equipment shelters etc will be effective.

The Relevant Performance Outcomes are considered to be met.

Transport, access and parking

General Development Policies	
Transport, Access and Parking	
Desired Outcomes	
DO1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.
Relevant Performance Outcomes/Designated Performance Features	
Vehicle Access	
PO 3.1 Safe and convenient access minimises impact or interruption on the operation of public roads.	DTS/DPF 3.1 The access is: a) provided via a lawfully existing or authorised driveway or access point or an access point for which consent has been granted as part of an application for the division of land or b) not located within six metres of an intersection of two or more roads or a pedestrian activated crossing.
Vehicle parking areas	
PO 6.1 Vehicle parking areas are sited and designed to minimise impact on the operation of public roads by avoiding the use of public roads when moving from one part of a parking area to another.	DTS/DPF 6.1 Movement between vehicle parking areas within the site can occur without the need to use a public road.
PO 6.2 Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced, and the like.	DTS/DPF 6.2 None are applicable.
PO 6.3 Vehicle parking areas are designed to provide opportunity for integration and shared use of adjacent car parking areas to reduce the total extent of vehicle parking areas and access points.	DTS/DPF 6.3 None are applicable.

There will be occasional servicing needs for the telecommunications facility. There is an internal driveway running through the site that will provide access to the facility with sufficient width to allow for vehicle parking and entry/exit of vehicles in a forward direction. Relevant Performance Outcomes are considered to be met.

Other Overlays

The following Overlays have been considered in the assessment of the proposed development but are not considered to require in-depth assessment given that:

Hazards (Bushfire – Medium Risk) Overlay

The telecommunications facility will be located within an allotment which is accessible via vehicles for maintenance. There are no habitable buildings on-site.

Hazards (Flooding - Evidence Required) Overlay

Engineering Services have advised that in their opinion a 1% AEP flow will be contained to the existing water course that traverses the land where the telecommunications facility is proposed. The telecommunications facility has a minimal footprint and will not contribute to any increase in flooding impacts within the site or locality.

Limited Land Division Overlay

No division of land is proposed as part of this application.

Native Vegetation Overlay

No native vegetation is identified to be removed as part of the development. The Native Declaration form has been signed by the applicant.

Prescribed Water Resources Area Overlay

The telecommunications facility will be associated with an established vineyard area and will not impact upon the watercourse. The siting of the telecommunications facility to the watercourse is similar to that of existing shed and rainwater tanks on the site.

Water Protection Area Overlay

The proposed development does not involve any activities listed in Performance Outcome 1.1 and will not alter water use or change water supply arrangements for the existing activity.

Water Resources Overlay

The telecommunications facility will be associated with an established vineyard area and given the minimal building footprint will not result in increased surface water run-off or deposition of material in any watercourses.

CONCLUSION

The proposal comprises the construction of a telecommunications facility including: 30 metre monopole, antennas, equipment cabinets and fencing. The application was subject to 'Performance Assessment' and public notification. The application was notified in accordance with Section 107 of the *Planning, Development and Infrastructure Act 2016* with three representations received.

This report has provided a detailed assessment of the proposal against the relevant provisions of the Planning and Design Code.

The nature of the proposal is considered to be acceptable as the telecommunications facility, as essential infrastructure will support the productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution within the Rural Zone. It is also noted that telecommunications facilities are a common element in the rural landscape, and were promoted under the Barossa Development Plan within Rural Zones.

The primary assessment issues relate to visual impact. It is considered that the telecommunications facility will have an acceptable visual impact taking into account its height, slender frame, setbacks and clearly expressed functional form. Essential infrastructure is an existing built form element in the Barossa Valley landscape and while it will be visible from surrounding landscape, its visual impact is considered

to be sufficiently minimised with regard to detracting from the landscape and related special character of the area, when weighed against the essential service that it provides to the social and economic benefits of the District.

Assessment has identified that the proposed development is reasonably consistent with the Desired Outcome and Performance Outcomes of the Rural Zone and other relevant provisions of the Planning and Design Code, such that Planning Consent is considered to be warranted, subject to recommended Conditions of Consent.

RECOMMENDATION 1

Not Seriously at Variance

The Barossa Assessment Panel, having considered the application, resolves that the development proposal has sufficient merit, and is not seriously at variance with the Planning and Design Code.

RECOMMENDATION 2

Character Preservation

Pursuant to Section 6(2) of the *Character Preservation (Barossa Valley) Act 2012*, the Barossa Assessment Panel has had regard to the objects of that Act and, in determining this application, has resolved that there are potential impacts on the character values of the district, but is worthy of further consideration.

RECOMMENDATION 3

Granting of Planning Consent

The Barossa Assessment Panel, having considered the application for consent to carry out development of land and pursuant to the provisions of the *Planning, Development and Infrastructure Act 2016* resolves to GRANT Planning Consent for Application No. 23034819 by Waveconn Operations Pty Ltd to undertake the construction of a telecommunications facility including: 30 metre monopole, antennas, equipment cabinets and fencing at Lot 101 Biscay Road, Tanunda (CT 5282/151) subject to the following conditions and advisory notes:

Council Conditions

- (1) The development shall be undertaken in accordance with the endorsed plans and documentation (as amended) accompanying the application except where varied by any condition(s) listed below.
 - Locality Plan, Prepared by Waveconn, Drawing No. AS 5352-005-00
 - Site Plan, Prepared by Waveconn, Drawing No AS 5352-005-P1, Revision B-1 Dated 8 August 2023
 - Site Layout, Prepared by Waveconn, Drawing No. AS5352-005-P2, Revision B-1, Dated 8 August 2023
 - Site Elevation, Prepared by Waveconn, Drawing No AS5352-005-P3, Revision B-1, Dated 8 August 2023
 - Planning Report prepared by SAQ Consulting Pty Ltd, dated 30 November 2023
- (2) The equipment cabinets associated with the telecommunications facility shall be clad using a muted colour, such as Colorbond "Woodland Grey".

Advisory Notes

- (1) Any portion of Council's infrastructure damaged as a result of work undertaken within the development site or associated with the development shall be repaired/reinstated to Council's satisfaction at the developer's expense.
- (2) Any variation of this approved development and/or the conditions of consent will require a separate request and approval by the relevant authority. Approval of this application does not necessarily imply that future requests for variations would be approved. Any future request will be assessed by having regard to the relevant rules and requirements in force at the time any request is lodged.
- (3) The adjoining owners should be advised of the proposed work on the boundary and matters such as access to perform work, removal of fences, finished levels and retaining walls should be resolved before building work commences. This approval does not create an automatic right to access neighbouring land.
- (4) Any works associated with the development such as tree planting, tree removal, footpath renewal or construction of new vehicle entrances proposed to be undertaken within the road reserve (ie the road carriageway, verge or footpath area) requires an independent approval from Council pursuant to the *Local Government Act 1999*. Further enquiries should be directed to the Works and Engineering team on 8563 8444.
- (5) The applicant is reminded of its general environmental duty, as required by Section 25 of the *Environment Protection Act 1993*, to take all reasonable and practicable measures to ensure that the activities on the whole site including during construction, do not pollute the environment in a way which causes or may cause environmental harm.
- (6) Construction shall not take place on any Sunday or Public Holiday or after 7:00 pm or before 7:00 am on any other day, and all practicable steps must be taken during construction to minimise the impact of noise emissions on neighbouring properties.
- (7) The applicant is advised that this consent does not permit anyone to clear, remove limbs or trim native vegetation. Any proposal to clear, remove limbs or trim native vegetation will require approval or confirmation of exemption from the Native Vegetation Council. An interactive guide is available to help owners and others determine the requirements that apply under the *Native Vegetation Act 1991*, <https://www.environment.sa.gov.au/topics/native-vegetation/interactive-guide>. Any specific queries regarding the clearance, removal or trimming of native vegetation should be directed to the South Australian Native Vegetation Council.
- (8) The applicant is advised that any proposal to clear, remove limbs or trim native vegetation should be undertaken after first notifying the Native Vegetation Council of intended works.

ATTACHMENTS OR OTHER SUPPORTING REFERENCES

- Attachment 1 Application and Associated Documentation [↓](#) 
- Attachment 2 Representations Received [↓](#) 
- Attachment 3 Applicants Response to Representations [↓](#) 

Development Locations

Location 1

Location reference

LOT 101 BISCAY RD TANUNDA SA 5352

Title Ref

CT 5282/151

Plan Parcel

D19543 AL101

Additional Location Information**Council**

THE BAROSSA COUNCIL

Zone Overlays

Zones

- Rural

Sub-zones

(None)

Overlays

- Character Preservation District
- Hazards (Bushfire - Medium Risk)
- Hazards (Flooding - Evidence Required)
- Limited Land Division
- Native Vegetation
- Prescribed Water Resources Area
- Water Protection Area
- Water Resources

Variations

- Minimum Site Area (Minimum site area is 25 ha)
- Minimum Dwelling Allotment Size (Minimum dwelling allotment size is 25 ha)

Application Contacts

Applicant(s)

Stakeholder info

Waveconn Operations Pty Ltd
P O Box 50
Clayfield
QLD
4011

Contact

Stakeholder info

Mr Mark Baade

Invoice Contact

Stakeholder info

Waveconn Operations Pty Ltd
P O Box 50
Clayfield
QLD
4011

Land owners

Stakeholder info

Biscay Road Vineyard Pty Ltd ACN 618 413 808
5 HAUTEVILLE TERRACE
EASTWOOD
SA
5063

Nature Of Development

Nature of development

30m monopole, antennas, equipment cabinets, fencing

Development Details

Current Use

Vineyard

Proposed Use

Telecommunications facility

Development Cost

\$220,000.00

Proposed Development Details

30m monopole, antennas, equipment cabinets, fencing

Element Details

You have selected the following elements

Telecommunications facility - \$220,000.00

Commercial & Industrial Elements

Does the application include signage?

No

Septic/Sewer information submitted by applicant

Does this development require a septic system, i.e. septic tank and/or waste water disposal area?

No

Certificate of Title information submitted by applicant

Does the Certificate of Title (CT) have one or more constraints registered over the property?

No

Consent Details

Consent list:

- Planning Consent
- Building Consent

Have any of the required consents for this development already been granted using a different system?

No

Planning Consent

Apply Now?

Yes

Who should assess your planning consent?

Assessment panel/Assessment manager at The Barossa Council

If public notification is required for your planning consent, who would you like to erect the public notification sign on the land?

Relevant Authority

Building Consent

Do you wish to have your building consent assessed in multiple stages?

No

Apply Now?

No

Consent Order

Recommended order of consent assessments

1. Planning Consent

Do you have a pre-lodgement agreement?

No

Declarations

Electricity Declaration

In accordance with the requirements under Clause 6(1) of Schedule 8 of the Planning, Development and Infrastructure (General) Regulations 2017, the proposed development will involve the construction of a building which would, if constructed in accordance with the plans submitted, not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996.

Native Vegetation Declaration

The proposed development will not or would not, involve the clearance of Native Vegetation under the Native Vegetation Act 1991, including any clearance that may occur in connection with a relevant access point and/or driveway, and/or within 10m of a building (other than a residential building or tourist accommodation), and/or within 20m of a dwelling or addition to an existing dwelling for fire prevention and control, and/or within 50m of residential or tourist accommodation in connection with a requirement under a relevant overlay to establish an asset protection zone in a bushfire prone area.

Submission Declaration

All documents attached to this application have been uploaded with the permission of the relevant rights holders. It has been acknowledged that copies of this application and supporting documentation may be provided to interested persons in accordance with the Act and Regulations.

Documents

Document	Document Type	Date Created
AS5352- 005_Bethany West_DSL_REV_B- 1.pdf	Site Plans	23 Nov 2023 11:42 AM
Title_Details_CT_5282_151_6 (1).pdf	Certificate of Title	23 Nov 2023 11:42 AM
Waveconn Bethany West_cover letter_23Nov2023.pdf	Correspondence - General	23 Nov 2023 11:42 AM

Application Created User and Date/Time

Created User
mark.baade

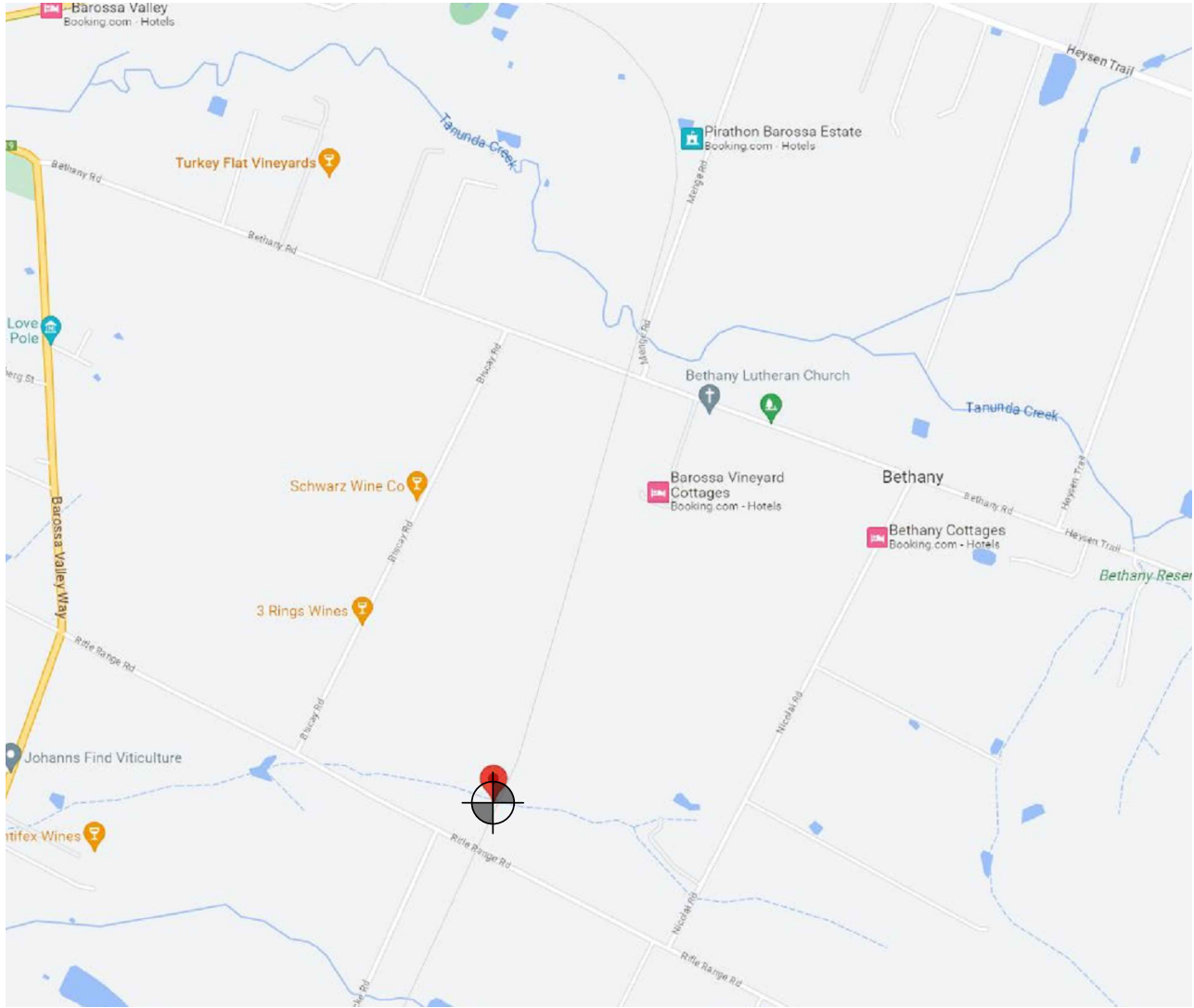
Created Date/Time
23 Nov 2023 11:42 AM

DATE OF ISSUE		11.07.2023	08.08.2023												
DRAWING PACKAGE VERSION		1	2												
GENERAL DRAWINGS															
AS5352-005-P1	DRAFT SITE PLAN	A-1	B-1												
AS5352-005-P2	DRAFT SITE SETOUT PLAN	A-1	B-1												
AS5352-005-P3	DRAFT SITE ELEVATION	A-1	B-1												

BETHANY WEST

LOT 101 BISCAV ROAD,
TANUNDA,
SA 5352

SITE ID: AS5352-005



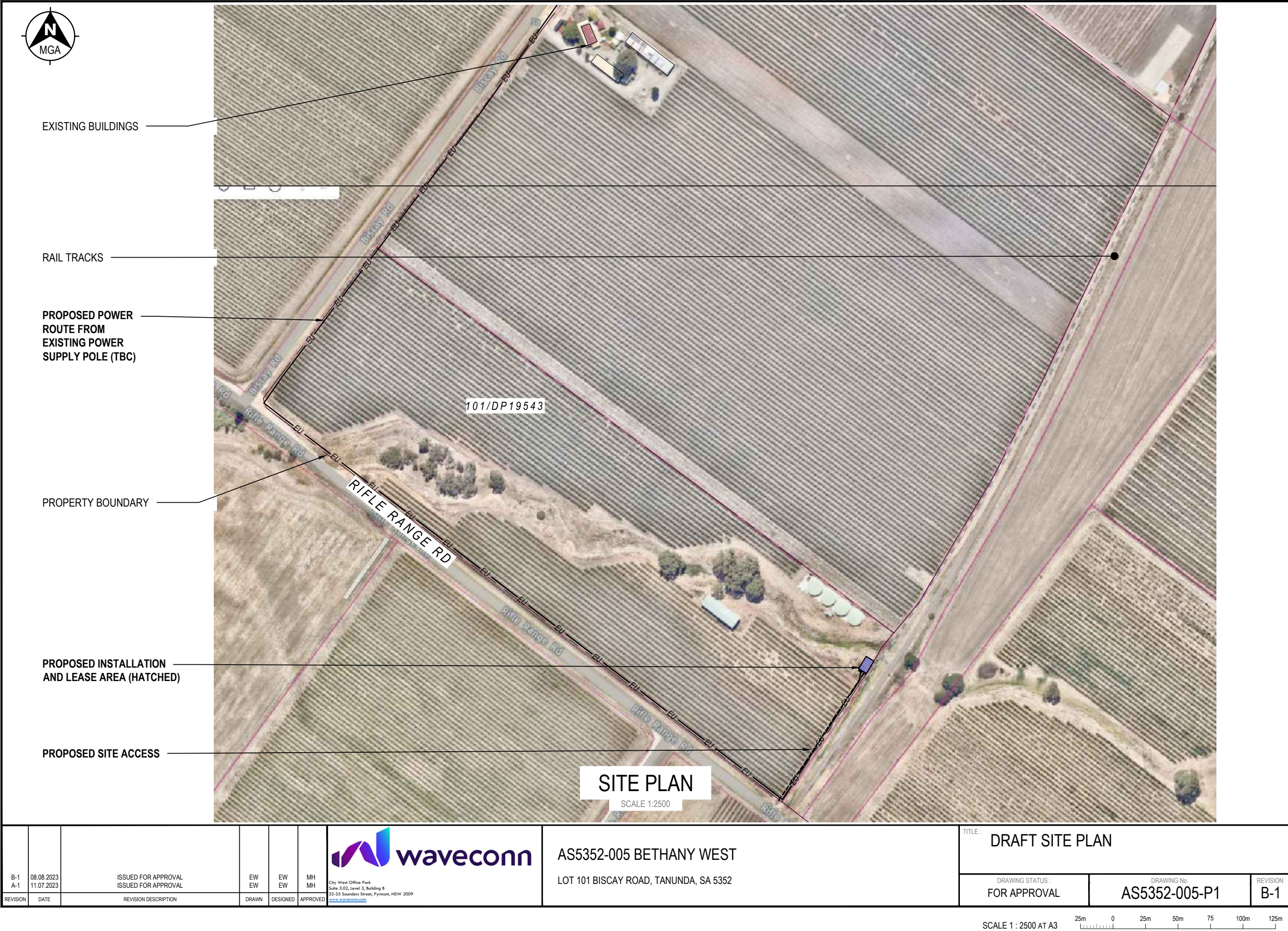
LOCALITY PLAN
NOT TO SCALE

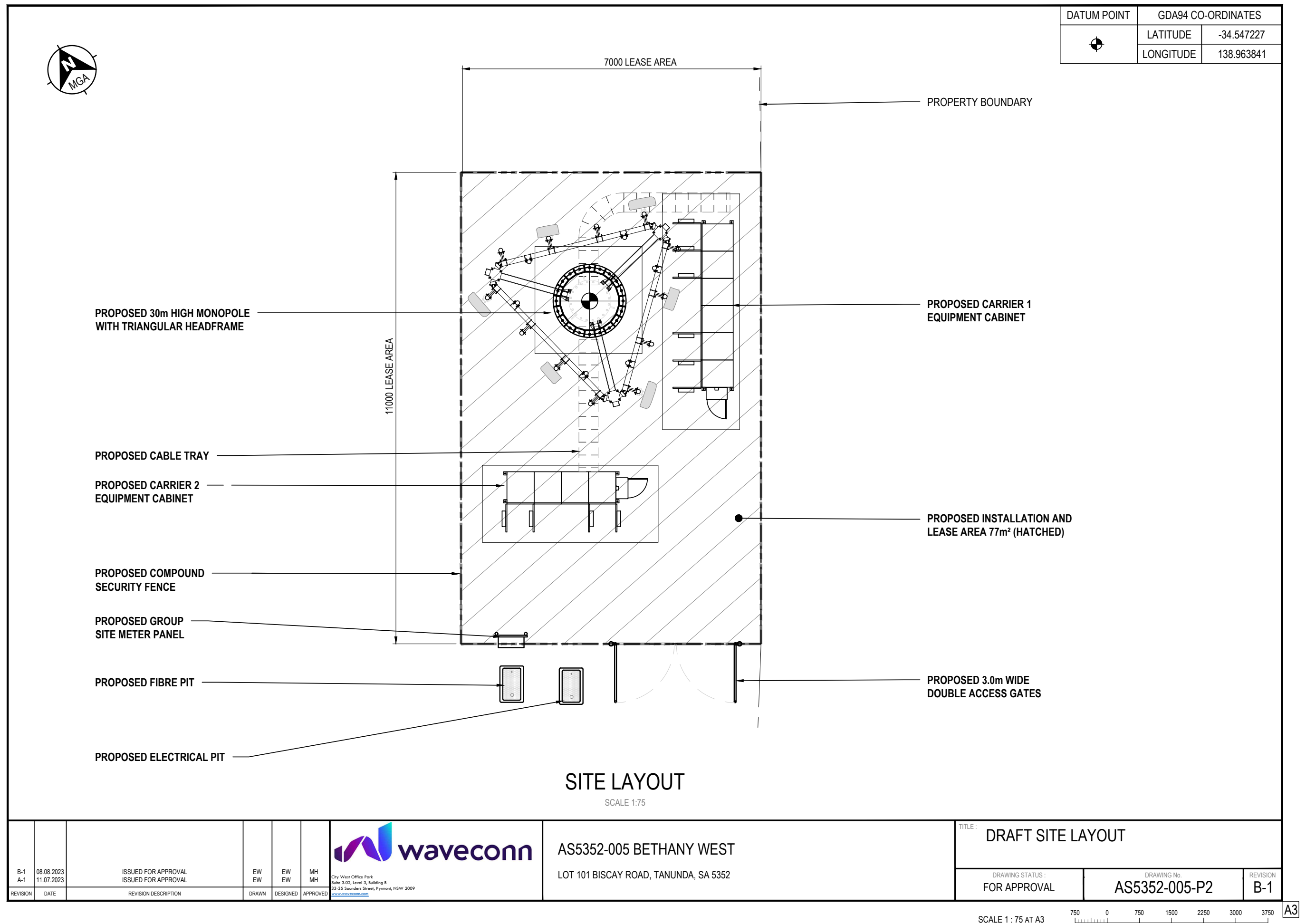


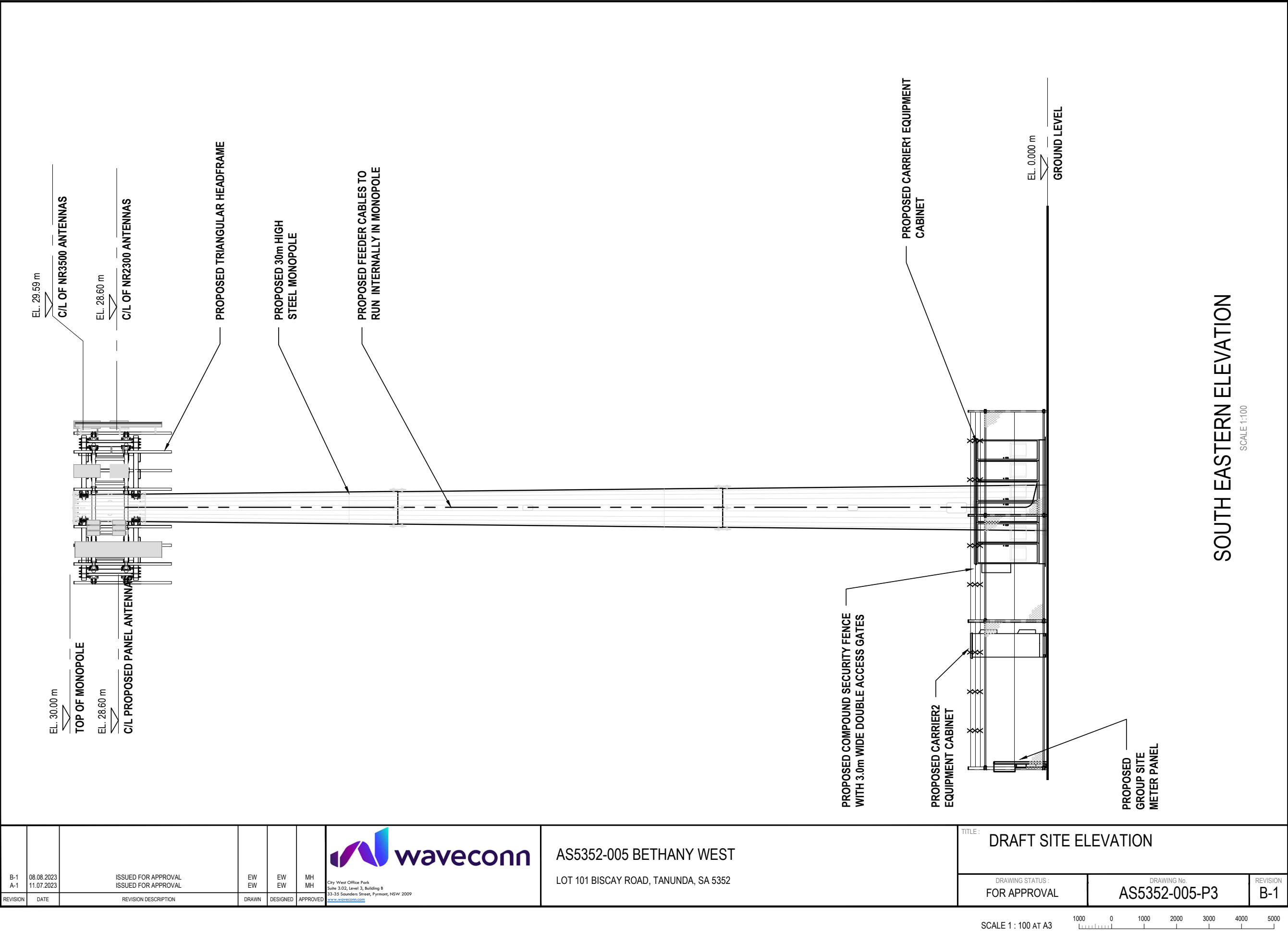
City West Office Park
Suite 3.02, Level 3, Building B
33-35 Saunders Street, Pyrmont, NSW 2009
www.waveconn.com

FOR APPROVAL

DRAWING No.
AS5352-005 - 00









Product
Date/Time
Customer Reference
Order ID

Title Details
18/05/2023 11:38AM
WC Tanunda
20230518003814

Certificate of Title

Title Reference CT 5282/151
Status CURRENT
Easement NO
Owner Number 71074162
Address for Notices POST OFFICE BOX 460, TANUNDA, SA 5352
Area 7.678ha (CALCULATED)

Estate Type

FEE SIMPLE

Registered Proprietor

BISCAY ROAD VINEYARD PTY. LTD. (ACN: 618 413 808)
OF CARE DEWINGS 5 HAUTEVILLE TERRACE EASTWOOD SA 5063

Description of Land

ALLOTMENT 101 DEPOSITED PLAN 19543
IN THE AREA NAMED TANUNDA
HUNDRED OF MOOROOROO

Last Sale Details

Dealing Reference TRANSFER (T) 12746320
Dealing Date 16/06/2017
Sale Price \$2,167,150
Sale Type MORE THAN ONE TITLE

Constraints

Encumbrances

Dealing Type	Dealing Number	Beneficiary
MORTGAGE	12746321	BENDIGO & ADELAIDE BANK LTD. (ACN: 068 049 178)

Stoppers

NIL

Valuation Numbers

Valuation Number	Status	Property Location Address
9690229005	CURRENT	Lot 101 BISCAY ROAD, TANUNDA, SA 5352

Notations

Dealings Affecting Title



Product	Title Details
Date/Time	18/05/2023 11:38AM
Customer Reference	WC Tanunda
Order ID	20230518003814

NIL

Notations on Plan

NIL

Registrar-General's Notes

NIL

Administrative Interests

NIL

Our ref: Bethany West

30 November 2023

The Barossa Council
P O Box 867
NURIOOTPA SA 5355



SAQ Consulting Pty Ltd

ABN 76 864 757 592
P O Box 50
Clayfield QLD 4011

Dear Karyn

RE: Application ID 23034819
Proposed telecommunications facility – Lot 101 Biscay Road, TANUNDA SA 5352

As previously advised, **SAQ Consulting Pty Ltd** acts on behalf of Waveconn Operations ('Waveconn') in respect of this application.

Waveconn is a licenced carrier for the purposes of the *Telecommunications Act 1997 (Cth)* and operates as an infrastructure provider or 'neutral host', whereby new facilities are sited, designed, acquired, built and maintained by Waveconn but utilised by the mobile carriers as part of their respective networks.

The proposal by Waveconn is to establish a telecommunications facility, in the form of a 30m-tall monopole and associated equipment on land at lot 101 Biscay Road, TANUNDA. The specific location is in the rear, north-eastern corner of the subject land adjacent the rail corridor, as shown on the proposal plans submitted with the application..

The subject land is located within the *Rural zone* and is a performance-assessed type of development pursuant to the Planning and Design Code and Table 3 under '*All Other Code Assessed Development*.'

A brief cover letter was provided at the time of lodgement. This letter constitutes a detailed planning statement as to the merits of the proposal to assist Council with its determination of the application.

Need for the Facility

Waveconn is proposing the facility to cater for a projected future need by the carriers in this area, which forms part of a larger strategic program across South Australia. As such, the proposal represents strategic and practical forward planning based on projected future need - an approach which, for this type of infrastructure, has generally not occurred in the past.

Waveconn uses a sophisticated algorithm that analyses existing network coverage (from Telstra, Optus and Vodafone) and the locations of existing structures. Based on that data, areas of deficiency can be identified and appropriate radio-frequency engineering solutions proposed.



However, it is critical to note that as Waveconn is an infrastructure owner and provider it will not build the structure until a carrier elects to locate on it – that is, the structure will not be speculatively built in the hope it will be collocated on. As such, there will be no impact – visual or otherwise - from the structure until there is a need for it to be constructed. To that end, Council and the community do not need to be concerned that unnecessary structures will be constructed, regardless of whether there is an approval in place. Notwithstanding, Waveconn is confident that there will be a demand for the proposed structure and seeks an approval on that basis.

Once the structure is in place, it will also be suitable and available for collocation by a second or even third carrier. This preference and preparation for collocation will also help to minimise the number of such structures in the council area and provide 'ready-made' opportunities for others to collocate when new facilities are proposed.

In terms of future requirements, it is evident there is a deficit in network coverage and capacity in the area as there are no mobile phone base stations within 2.5 kilometres of the proposed location.

Figure 1 below shows an extract from www.rfnsa.com.au, which is essentially a database of all existing (and proposed) facilities in Australia.

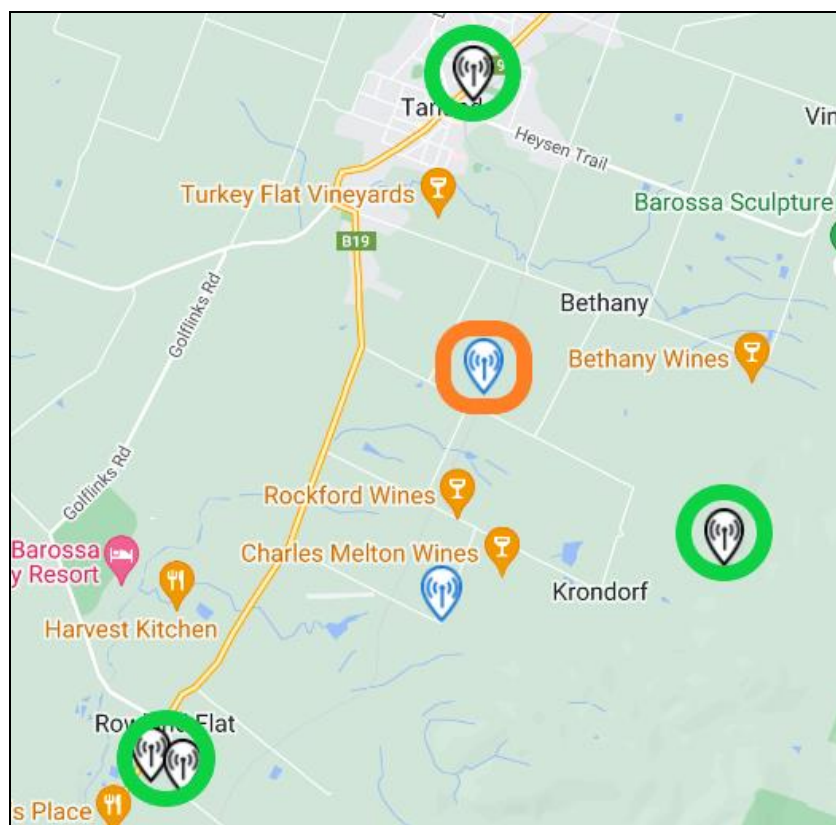


Figure 1: Proposed Location (orange square) and existing facilities in surrounding area



As indicated on the extract, the proposed facility (marked with orange square) is more than 2.5 kilometres the nearest existing facility, which is a shared Telstra/Optus facility located on Basedow Road in Tanunda. The next nearest facility is a similar distance to the south-east on Section 740 Rifle Range Road.

At such a distance it is simply not possible to adequately service the area around the proposed location (with 4G) from existing facilities and as a result, data services in particular will be unreliable with slow throughput speeds and coverage inside buildings is unlikely to be widely available. 5G services need a greater density of facilities than for 4G (due to the frequencies used) and so it is self-evident that additional facilities will be required in the future as 5G technology continues to be rolled out.

The extract also shows a proposed NBN facility (blue pin) but this facility (intended to be a 40m-tall monopole) has not been built and in any event is more than 2 kilometres from the proposed facility on Biscay Road – much too far away to provide the improvements sought.

Given the total lack of existing telecommunications infrastructure and other tall structures in the area, collocation is not an option for addressing future requirements and a new structure will be required to meet the growing need for services in the area.

In selecting a suitable location for a new facility, Waveconn has had regard to the 'precautionary principle' as set out in Appendix A of the Industry Code C564:2020 for mobile phone base station deployment.

The Proposal

The proposal is to establish a new telecommunications facility in the form of a monopole and ground-based equipment Lot 101 Biscay Road, TANUNDA. The details of the facility are shown on the plans lodged with the application.

More particularly, the proposal consists of the following elements:

- a 30-metre tall monopole and 7m x 11m compound located on the rear boundary of the subject land, near the western corner adjacent the railway line;
- a new headframe mounted at the top of the monopole to accommodate up to nine (9) panel antennas;
- a new 6-bay equipment cabinet (dimensions 2.32m H x 0.75m D x 4.3m L) and a 4-bay equipment cabinet (dimensions 2.32m H x 0.75m D x 2.87m L), both connected to the monopole by a cable tray; and
- security fencing with double gates for access.

All cables connecting the antennas to the various cable trays will be internal to the monopole, except where they exit the monopole to connect to the relevant antennas. The monopole does not have any provision to allow it to be climbed and will be specifically designed to allow for collocation to occur.



The proposed facility will comply with Australian Government regulations in relation to emission of electromagnetic energy (EME) - specifically being Australian Standard Radiation Protection Series S-1 Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in 2021.

The location will be accessed from Rifle Range Road by way of an existing track along the rear boundary. It is not necessary to remove any vegetation to access, install, operate or maintain the facility.

Subject Land

The subject land is located at the corner of Biscay Road and Rifle Range Road at Tanunda, about two kilometres south-east of the Tanunda township. Its formal description is lot 101 DP19543 with certificate of title details of 5282/151.

The land is almost perfectly rectangular in shape and about 7.5 hectares in size, with a frontage to Biscay Road of about 150 metres and to Rifle Range Road of about 500 metres. The land is the site of a vineyard and some associated farm buildings and is generally flat, apart from the land immediately adjacent the drainage which runs diagonally through the land. The are two primary areas of vegetation along the creek alignment but the site is otherwise mostly covered in vines.

The proposed facility will be located near the rear western corner, just south of the creek line, and 120 metres from Rifle Range Road.

The Locality

The locality is part of the valley floor between Tanunda and Rowland Flat, with the surrounding rural area used almost exclusively as vineyards. Barossa Valley Way and Bethany Road are both over one kilometre from the subject land, as are the settlements of Bethany and Krondorf.

The nearest dwelling to the subject proposal is more than 400 metres away and as noted above, the nearest existing mobile telecommunications facility to the subject land is located about 2.5 kilometres away.

Assessment against the Planning and Design Code

As noted above, the subject land and proposal is located in the *Rural Zone* pursuant to the Planning and Design Code. A telecommunications facility is not specifically listed in any of the tables and is therefore captured by Table 3 as '*All Other Code Assessed Development*.' The application requires public notification.

Rural Zone

The Desired Outcomes for the *Rural Horticulture Zone* is stated as:

DO 1	A zone supporting the economic prosperity of South Australia primarily through the production, processing, storage and distribution of primary produce, forestry and the generation of energy from renewable sources.
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DO 2	<i>A zone supporting diversification of existing businesses that promote value-adding such as industry, storage and warehousing activities, the sale and consumption of primary produce, tourist development and accommodation.</i>
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The proposed facility will provide additional essential infrastructure to the area and improved and value-added telecommunication services, decent access to which is to be expected in an area that conducts a significant amount of day-to-day business and is reliant on workers and other support businesses coming into the area on a daily basis.

The proposed facility and its location have no adverse impact on the continuing primary function of the area and is well set back from more sensitive land use locations.

As such, the proposed facility is an appropriate land use within the *Rural Zone*.

With respect to the zone's performance outcomes, the following comments are made:

PO1.1 – The productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution is supported, protected and maintained.

The proposed facility is not a land use listed but is one that provides essential services to the surrounding land uses and has no impact on the continuation of the primary functions of the zone or the continuing or future use of the subject land or adjoining land.

PO2.1 – Development is provided with suitable vehicle access.

Existing access will be utilised from Rifle Range Road and access to the compound location is available at all times.

PO2.2 – Buildings are generally located on flat land to avoid cut and fill and the associated visual impacts.

The subject land is almost completely flat and there is no cut and fill associated with the installation (which is well set back from the road and other uses in any event).

POs 3.1 – 9.2 – not applicable.

PO10.1 - Large buildings are designed and sited to reduce impacts on scenic and rural vistas by:

- 1. having substantial setbacks from boundaries and adjacent public roads*
- 2. using low-reflective materials and finishes that blend with the surrounding landscape*
- 3. being located below ridgelines.*

The proposed facility needs to have suitable height to work effectively, but is well set back from both road frontages and sensitive land uses in the wider area. The materials and finishes of the monopole and antennas are of low reflectivity, but can be painted to further blend into the landscape.



POs 11.1 – 15.1 – not applicable

In summary, the location selected is compatible with the provisions of the *Rural Zone* in this area as it:

- is a non-residential use compatible with the land uses in the area;
- is set well away from existing dwellings and road frontages;
- is sited to achieve the desired network outcomes, with significant improvements to service levels in the surrounding rural area; and
- provides essential infrastructure necessary for the proper and economic functioning of the surrounding area and the day-to-day activities carried out there.

Overlays

The subject land is affected by a number of overlays, as set out below:

- Character Preservation District – Not in Township
- Hazards (Bushfire – Medium Risk)
- Hazards (Flooding – evidence required)
- Limited Land Division
- Native Vegetation
- Prescribed Wells Area
- Water Protection Area
- Water Resources

Character Preservation District – Not in Township

The Desired Outcomes for this overlay are:

DO 1	<i>Recognise, protect and enhance the special character of Character Preservation Districts.</i>
DO 2	<i>The long term use of land outside of townships for primary production and associated value adding enterprises is assured and promoted.</i>

The proposed facility is located more than one kilometre from the main thoroughfares in the area of Barossa Valley Way and Bethany Road and a similar distance to the settlements of Bethany and Krondorf. The proposed facility will be sited on an unutilised part of the land and will have no impact on the on-going operation of the land as a vineyard.

In terms of the performance outcomes –

- No land division is proposed
- The proposal is not for residential development
- The location selected is not on the edge of or even near a township
- No existing structures are involved with the proposal
- There is no impact on the nearby watercourse or vegetation
- The structure is located well below the ridgeline (located further east)
- The proposed facility is already generally comprised of muted tones but can be painted to further minimise its impact



- The proposal is not for a large building and is well set back from both road frontages
- Existing access arrangements will be used and no vegetation will be removed
- There is minimal excavation and filling associated with the proposal

As such, the proposal is consistent with the desired outcomes of the overlay.

Hazards - Bushfire

The subject land and the location selected are within a 'medium risk' bushfire risk area, as is all of the surrounding valley floor land south and east of Tanunda.

With respect to bushfire risk and management, the proposed facility:

- is not a habitable building;
- results in only a minor intensification of development and/or land use on the subject land and is not located near any dwellings or other habitable buildings;
- does not result in an increase of residents or employees;
- does not involve the occupation of employees on site for any considerable amount of time; and
- does not result in an increase to the bushfire threat.

Access to the subject land for the purposes of fighting fire is already suitable and will be unchanged by the proposal. As such, there is no increased risk of bushfire as a result of the proposed facility, which will likely assist in times of bushfire given it will supply improved telecommunications services to the surrounding area.

As such, the proposal is consistent with the desired outcomes of the overlay.

Hazards – Flooding (evidence required)

The Desired Outcome for this overlay states:

DO 1	<i>Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.</i>
------	--

The subject land and the entire surrounding area is affected by this overlay, but in reality the proposed facility is not generally affected by flooding. The monopole is not impacted and the only consideration would be whether the equipment cabinets should be raised off the ground to minimise risk and is not considered necessary in this instance. The proposal is not for a habitable building and does not involve the storage of hazardous materials.

As such, the current proposal has had sufficient regard for flood risk.

Limited Land Division

No land division is required nor sought by the proposal.

Native Vegetation

No vegetation clearance is required (native or otherwise) to access, construct, operate or maintain the proposed facility.



Prescribed Wells Area

The proposed facility does not require or impact on any water resources.

Water Protection Area

The proposed facility does not require or impact on any water resources.

Water Resources

The proposed facility does not require or impact on any water resources.

Variations

The subject land is subject to two variations relating to site area and dwelling allotment size.

As such, neither variation is applicable to the subject proposal.

General Development Policies

In terms of the General Development Policies contained within the Planning and Design Code, the Infrastructure and Renewable Energy Facilities module is directly relevant.

DO 1	<i>Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.</i>
------	--

The development, design and siting of the proposed facility is consistent with the Desired Outcome in that it represents the efficient provision of infrastructure networks and services which has minimised hazard, is environmentally sensitive to the extent it can be in this landscape and has managed its visual impacts on surrounding land uses, particularly residential uses.

With respect to the relevant Performance Outcomes within the module, I note the following :

- The siting of the proposed facility has minimised visual impact on the adjacent land uses, with the nearest residential dwellings (2 of) more than 400 metres away and all other dwellings and sensitive land uses in the locality much further away. (PO1.1).
- The siting of the proposed facility balances the need for the service and the structure's impact on local amenity (PO2.1). It is set back from the main road network in the area by more than a kilometre and from the subject land's road boundaries by almost the maximum distances possible. The location does not directly abut a residential boundary;
- The proposed facility poses no threat to any aircraft operations (PO4.1);
- As set out above, no collocation options at an alternate location are available due to the general lack of infrastructure in this area, with the nearest existing mobile phone base station facility located 2.5 kilometres distant, which is too far away to achieve the desired service improvements. As such, a new structure is required and will specifically allow for collocation to occur (PO6.1);
- The panel antennas (9 of) are mounted on a headframe type that is typically used in rural areas and is appropriate in this instance (PO6.2); and



- Analysis of the locality has revealed there are no existing and suitably tall structures in the area and it is not practicable (or, in my view, necessary) for the proposed facility to serve another purpose. Instead, physical separation from other land uses and proposed setbacks will minimise the impact of the facility. The finishes of the monopole and antennas can be easily made so that they are non-reflective in nature, including by way of painting. Due to the generally flat nature of the area and the extensive use of land for vineyard, there is not a significant amount of tall vegetation in the area, but vegetation should help somewhat in screening from main roads and settlements. (PO6.3).

Importantly, the proposal will not materially interfere with the continuing use of the subject land, adjacent land or the policies and desired outcomes for the *Rural Zone*. It has minimised its impacts on surrounding land uses (and the locality generally) to an acceptable level through siting and design, particularly given the generally flat nature of the locality.

Given the salient issues relevant to the proposed facility have been dealt with extensively above, it is unlikely that any other general development modules could have a significant impact on the merits of the application.

**Conclusion**

The proposal by Waveconn is to construct a new telecommunications facility in the form of a 30m-tall monopole and associated ground-based equipment at Lot 101 Biscay Road, Tanunda. The proposed facility has been identified as being required to meet the future projected need for improved telecommunications in this area, particularly given the lack of existing telecommunications infrastructure in the area. This proposal forms part of a larger program of forward planning for future telecommunications requirements across South Australia.

There are no similar existing facilities within 2.5 kilometres of the selected location and as such there will be a requirement for an additional structure as demand for telecommunications services continues to increase.

The proposed facility is appropriately located in the *Rural Zone*, is well set back from main thoroughfares in the area, separated from sensitive land uses, does not create any land use conflicts and has minimised its visual impact to the extent it can. The location selected is already cleared of vegetation and can be accessed by existing arrangements.

Having regard to the requirements of the existing networks and the applicable policies within the Planning and Design Code, the proposed facility is located in an appropriate zone, has no material impacts on agricultural productivity, traffic or sensitive land uses and has minimised its impacts on the surrounding area to an acceptable level through its design and siting as set out above.

Importantly, the proposed facility's location and design will not have any material impact on the continuing use of the subject land or surrounding land or the achievement of the Desired Outcomes for the *Rural Zone* and is consistent with the outcomes sought by the infrastructure and telecommunications facilities policies set out in part 4 of the Planning and Design Code.

Accordingly, the proposal represents an appropriately considered and logical placement of an essential piece of telecommunications infrastructure and warrants planning consent.

Should Council require any additional information prior to making its determination, please do not hesitate to contact the undersigned.

Yours sincerely

MARK BAADE

B. Plan (Hons)

Details of Representations

Application Summary

Application ID	23034819
Proposal	Construction of a telecommunications facility including: 30m monopole, antennas, equipment cabinets and fencing
Location	LOT 101 BISCAY RD TANUNDA SA 5352

Representations

Representor 1 - Iain Seabrook

Name	Iain Seabrook
Address	
Submission Date	05/01/2024 01:47 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
Reasons The area for the proposed 30m telephone tower is in the middle of prime Barossa vineyards in a prime vista of what the Barossa is about. To proceed with this proposed tower will disturb the beautiful natural vista of the Barossa ranges . A creek also runs through that area and as stated by the proposal, a flood report had not been provided. As the creek is probably dry now, at various time it will flow and sometimes with flood activity. An airstrip resides less than a kilometre from this site with flights arriving at various times and also an aviation spectacle each year. The proposed site is not the right area for a tower of this size and height	

Attached Documents

Representations

Representor 2 - Grant Burge

Name	Grant Burge
Address	
Submission Date	22/01/2024 09:19 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons	

Attached Documents

Telecommunication-Tower-Grant-Burge-1328635.pdf



Planning Advisory Services

*27 / 19th Street, Gawler South SA 5118
Telephone (08) 8522 6999 Facsimile (08) 8522 6126
ABN 50 577 956 625
CFS Building
60 Wymouth Street, Adelaide, South Australia 5000
Telephone (08) 8410 0956*

Ref PAS Grant Burge Telecommunications tower.

Date : 18th January 2024

This is a submission in relation to Waveconn Operations Pty Ltd Application ID: 23034819 for Planning Consent for a Telecommunications Facility and is made on behalf of Grant Burge

In this submission I draw on the findings the Supreme Court judgement **Geber** for guidance on how the planning and design policies in the Rural Zone should be interpreted.

For transparency, I was active in an advice role in bringing the **Geber** matter to judicial review. Accordingly the case and its significance is well understood. Grant Burge is committed to ensuring that the hard won Geber principles are protected and followed through.

Proposal

The tower and infrastructure will be positioned on a lease area of 7 metres x 11 metres with a service access track connecting to Rifle Range Road.

The tower rises to 30 metres in height. It includes a triangular head frame with antenna and two ground mounted equipment cabinets and security fencing.

Site

To make a proper assessment of the proposal the **site** needs to be defined and understood.

With reference to the Code, **site** means:

The area of land (whether or not comprising a separate or entire allotment) on which a building is built, or proposed to be built, including the curtilage of the building, or.....

Site is a concept that has been well analysed by the Courts and it is straight forward to conclude that the proposal has its own site, and that the **Primary Use of the Land** (a term explored in the Supreme Court in the **Geber** judgement) is a Telecommunication Facility incorporating a tower with service equipment and access track.

Again with reference to **Geber**, the Telecommunications Facility is a **standalone use**, and has no relationship to primary production.

Locality

Also, to make a proper assessment of the proposal, it is essential to understand and appreciate the nature and features of the locality.

The land use and land form (and land surrounding it for some considerable direction and up to 1000 metres in most directions), is quintessential valley floor in its character.

The stand out features of the locality are:

- A relatively flat landform, and in the locality's context, a nominal slope east to west;
- A locality that benefits from a juxtaposition to the Barossa escarpment and hence gully breezes and winds that mitigate the risk of frost (and the need for frost control fans);
- Mostly no natural features such as trees and gullies (which can mitigate visual impact);

- A patchwork of vineyards and open paddocks (used for dry land commodity production, typically hay or grain and grazing);
- An absence of built form, particularly of any scale or height and where there are buildings and structures, they have a direct relationship to the locality's grape and fodder production; and
- Long uninterrupted views in all directions.



View looking West approximately 500metres from the Site which is located centre of image

There are some key messages that come from an understanding of the locality:

- Any tall structure will be seen for some considerable distance, in excess of 500 metres;
- A structure in the form of infrastructure, compared to a farm building or dwelling, will be an exotic built form in the landscape; and
- The telecommunications facility is no direct relationship to the locality's land use.

Assessment

It is useful to keep in mind the structure and purpose of the Planning and Design Code, viz:

To guide:

1. Planning (land use); and
2. Design (of buildings and structures), and in this respect I refer to:

The Planning, Development and Infrastructure Act 2016 which provides:

- that a person or body involved in the administration of the Act must have regard to, and seek to further its objects which includes the principles of good planning (Section 13);

and

- high-quality design principles as follows:

(i) development should be designed to reflect local setting and context, to have a distinctive identity that responds to the existing character of its locality, and to strike a balance between built form, infrastructure and public realm (Section 14–(c) ;

The land is in a **Rural Zone** and a with a number of **Overlays**.

The Overlay that has direct relevance to the proposal's assessment is the **Character Preservation Overlay** .

In accordance with the Code's prescription that:

If there is an inconsistency between provisions in the relevant policies for a particular development, and for the purpose of section 66(3)(b) of the Act, the following rules will apply to the extent of any inconsistency between policies:

- (a) the provisions of an overlay will prevail over all other policies applying in the particular case; and**
- (b) a sub zone policy will prevail over a zone policy or a general development policy; and**
- (c) a zone policy will prevail over a general development policy.**

Accordingly I proceed with the assessment following the Code's order and hierarchy.

Character Preservation Overlay

DO 1

Recognise, protect and enhance the special character of Character Preservation Districts.

DO 2

The long term use of land outside of townships for primary production and associated value adding enterprises is assured and promoted.

The scale of the proposal speaks for itself.

It is tall, prominent and in a location due to the landform that will be visible over a considerable distance.

Its physical features bear no relation to the CPD's special features and accordingly do not **recognise, protect and enhance the special character** (of The Character Preservation District).

Rural Zone :

PO 1.1

The productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution is supported, protected and maintained.

PO 2.2

Buildings are generally located on flat land to minimise cut and fill and the associated visual impacts.

The Supreme Court judgment in **Geber** is instructive on how to approach and apply assessment of non rural proposals in the Rural Zone.

Whilst the **Geber** matter was in relation to a tourist resort, the judgement's reasoning has wider application.

His Honour Justice Blue had this to say:

1. Para 138 and Para 140 concludes that in relation to the *issues of construction* a proposal is contrary to PO 1.1 unless for *primary production activities* or use of the land for associated value adding, processing, warehousing or distribution.
2. Para 147. *"Moreover, treating tourist accommodation as itself primary production or primary production-related industry is inconsistent with the existence of PO 6.3. If tourist accommodation itself comprises primary production, it could not be regarded as associated with the primary use of the land because it would itself be the primary use of the land. This would entail that either PO 6.3 has no work to do or alternatively only applies when the tourist accommodation is not itself the primary use of the land. This is nonsensical."*

Although a matter that is settled by reference to the proposal having a separate site, the findings further confirms that the facility cannot claim an association with primary production, viz the association must be with primary production itself.

3. Para 148 *"When PO 1.1 and PO 6.3 are read together, it is clear that the performance outcomes do not anticipate standalone tourist accommodation as the primary use of the land but only as associated with primary use of land for primary production or primary production related industry"*.

From these findings a standalone development that is not primary production or does not have an association with primary production is at variance with PO 1.1.

4. Para 160 . *Having regard to the text, context and evident purpose of PO 1.1 and 6.3 in the Rural Zone, it is clear that the performance outcomes provide for tourist accommodation which is not standalone or the primary use of the land but rather associated with a different primary use of the land being primary production or primary production related industry. The same applies to shop and function centre.*

The same conclusion comes from Para 148, ie a standalone development, not being primary production, or with an association with primary production, is at variance with the Zone provisions.

The construction of the Rural Zone is such that as it applies to Telecommunication Facilities, the Rural Zone is not a suitable location for such structures. Further, only out of interest because it is not a decisive matter, the DPF do not list telecommunication facilities as a use that meets the Deemed-to-Satisfy Criteria / Designated Performance Feature.

General Policies

For completeness I include the Telecommunication Facilities' provisions, however with regard to the Code's hierarchy, because the assessment fails in relation to the Character Preservation Overlay and Rural Zone, they have no effective role to play in the assessment.

PO 6.1

The proliferation of telecommunications facilities in the form of towers/monopoles in any one locality is managed, where technically feasible, by co-locating a facility with other communications facilities to mitigate impacts from clutter on visual amenity.

PO 6.2

Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.

PO 6.3

Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods:

- **where technically feasible, incorporating the facility within an existing structure that may serve another purpose**
- **or all of the following:**
 - **using existing buildings and landscape features to obscure or interrupt views of a facility from nearby public roads, residential areas and places of high public amenity to the extent practical without unduly hindering the effective provision of telecommunications services**
 - **using materials and finishes that complement the environment**
 - **screening using landscaping and vegetation, particularly for equipment shelters and huts.**

Need

Given the nature of the policies, and the community need for communication services, the question arises about where a telecommunication facility might be located.

A obvious possibility is the colocation with an existing non primary production use, one example being a winery. This would also provide greater opportunity for integration into the landscape given a winery is typically, visually, defined by buildings and infrastructure.

Overall

This is an application that is at variance with the Code because:

- It is a land use that is not primary production
- Is a land use that is not associated with primary production
- Is a standalone development at variance with the Zone's policies (Performance Outcomes), and not anticipated as a land use categorised as Deemed-to-Satisfy Criteria / Designated Performance Feature for the Zone.
- The Character Preservation provisions being Desired Outcomes set out an **a general policy agenda** (refer **Geber** Para 87 And 153) which will be compromised.

On this basis the variance is serious and should not be approved (for guidance see **Geber** para 162 and in particular 164).

His Honour Judge Blue in **Geber** also remarked that authorities are dealing with policies and principles as opposed to rigid legal rules where context and evident purpose gives greater scope for interpretation but with the caveat that an authority cannot insert or or read into a Plan (or Code in this case) matters which are not there, and further, where the literal meaning of the instrument, particularly where, as in this case, a literal reading is capable of producing an intelligible result (**Paras 115,116**).

The literal meaning of the Code, clarified through Blue J's judgement, is clear. Put simply and in summary, the purpose of the Rural Zone is for primary production or those uses that have an derivative association with primary production.

If you have any question with regard to this advice or should you require further advice or information please contact me on wohlstadt@gmail.com or 0414 851 812.

Grant Burge will attend the Assessment Panel meeting to support his submission.

If you have any question with regard to this advice or should you require further advice or information please contact me on wohlstadt@gmail.com or 0414 851 812.
I trust this advice is of assistance.



Yours Faithfully

Michael Wohlstadt, RPIA, Grad Dip URP



Representations**Representor 3** - James March

Name	James March
Address	
Submission Date	23/01/2024 05:32 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
Reasons Please refer to attached document	

Attached Documents

Telecommunications-Facility-Rockford-submission-23-January-2024_RLH-1329644.pdf

R O C K F O R D



B A R O S S A

Telecommunications Facility

23 January 2024

This submission concerns Waveconn Operations Pty Ltd Application ID: 23034819 for Planning Consent for a Telecommunications Facility. It is on behalf of Tanunda Vintners Pty Ltd operating as Rockford Wines, 131 Krondorf Road, Krondorf, SA, 5352

We understand the proposal for planning consent is for a tower and infrastructure that would be positioned on a lease area of 7 metres x 11 metres with a service access track connecting to Rifle Range Road. The tower rises to 30 metres in height. It includes a triangular head frame with an antenna, two ground-mounted equipment cabinets, and security fencing.

A Telecommunications Facility incorporating a tower with service equipment of that scale will significantly harm the visual amenity of the area and the Barossa region's rural landscape. It is proposed to be constructed in a Rural Zone, which is unsuitable for such structures. It is not infrastructure directly linked to primary production, nor does it have a direct association with primary production, to assess the standalone development's merit within a Rural Zone.

Rockford Wines' founder, Robert O'Callaghan, has long campaigned to preserve and protect the rural landscape and supported the principle of primary production as a fundamental pillar of Barossa's brand. Threats to the rural landscape compromise the brand values of the Barossa region, and, therefore, we remain concerned about proposed developments that are at variance because of their significant scale, form, or inappropriate location within designated areas.

The State Government passed legislation in the form of the Character Preservation (Barossa Valley) Act 2012 to preserve and enhance the region's attractive and harmonious rural character, which is distinct from metropolitan Adelaide. Visual amenity is derived from natural features such as the expansive rural views, the undeveloped backdrop of the Barossa Range and escarpment, remnants of native vegetation, open space, rolling hills, and watercourses.

The Character Preservation District Overlay has priority to adjudicate over planning consent applications, and it, therefore, follows that the character values identified in the legislation should have a bearing on the assessment. Specifically, “the rural and natural landscape and visual amenity of the district” and “the scenic and tourism attributes of the district” take precedence. Ongoing compromises to these principles will erode the visual amenity of the rural landscape and, therefore, slowly erode the brand’s value and, in turn, the region’s long-term prosperity.

Waveconn’s assertion that their submission regarding the performance outcomes measured against the Character Preservation District Overlay is consistent with the desired outcomes of the overlay references mitigation to the visual amenity impact, saying, “the proposed facility is already generally comprised of muted tones but can be painted to further minimise its impact”. This assertion significantly underplays the impact a structure of this scale will have on the rural landscape.

We recognise the need to upgrade telecommunication services in the area and that the technology needs of the community and businesses have evolved and will continue to require investment and development. Rockford Wines does not wish to impede the necessary investment to improve services, or the commercial opportunity of individual growers affected by the proposed standalone development.

Our submission reflects a responsibility that the community, businesses, and local government must consider planning consent issues within a broader regional context. A holistic view is required to determine if there are potentially more suitable locations or whether the collective impact of multi-proposed towers across Barossa’s rural landscape will harm and compromise the region’s most valuable asset: its rural landscape and attractive visual amenity.

The proposed development application states that “there are no similar existing facilities within 2.5 kilometres of the selected location, and as such, there will be a requirement for an additional structure as demand for telecommunication services continues to increase”. Waveconn’s assertion that this facility caters to a projected future need by telecommunication carriers in this area and a more extensive program across South Australia raises additional concerns about how many more towers will be proposed across the Barossa and Eden Valley regions and their visual impact.

Given the nature of the policies and the community's need for communication services, the question arises about where a Telecommunications Facility might be located. An obvious possibility is a colocation with an existing non-primary production use. This would also provide greater opportunity for landscape integration, given that alternative is typically visually defined by buildings and infrastructure.

Waveconn has informed us that the project could also incorporate over 1 km of above-ground power lines to the site. The potential cumulative impact of additional above-ground power lines only adds to the concern about the scale of these developments.

Our concern is with the lack of a coordinated approach to the location of the proposed towers, which appears to be driven by commercial justification without fair weighting to the alternative aspect of long-term brand damage. We don't wish to undermine any individual grape grower's opportunity to seek a commercial advantage or gain.

Similar to the seemingly purely "path of least resistance" approach to the location of power lines across the rural landscape, we hope that a more balanced and accountable decision-making framework regarding the location of telecommunications infrastructure recognises the broader issue of long-term impacts on the rural landscape and its visual attractiveness.

Put simply and in summary, the purpose of the Rural Zone is for primary production or those uses that have a derivative association with primary production. Overall, this application is at variance with the Planning and Design Code (Code) because it is a land use that is not primary production and is a land use that is not associated with primary production. While the Code's position needs to be upheld to support community confidence in the planning system, the application raises many issues about the need for refinement of the Code to balance character and landscape with need. This must occur initially as a strategic assessment involving community engagement and for the Code to go through the amendment process. The alternative, as proposed by this application, is not efficient. It is also opportunistic, and no doubt will create duplication of significant out-of-character structures on important landscapes.

The rural landscape and primary production of the Barossa region are world-renowned. We have a collective responsibility to future generations to invite review and rigorous discussion about how we best preserve and enhance Barossa's attractive landscape character.

We welcome the opportunity to participate and contribute to these discussions to ensure good planning outcomes and adhere to high-quality design principles.

If you have any questions regarding this submission, please get in touch with me at [REDACTED] or [REDACTED]. A representative from Rockford Wines will attend the Assessment Panel meeting to support this submission.

Our ref: Bethany West

14 February 2024

Aaron Curtis
Manager – Development Services
The Barossa Council
P O Box 867
NURIOOTPA SA 5355



SAQ Consulting Pty Ltd
ABN 76 864 757 592
P O Box 50
Clayfield QLD 4011

Dear Aaron

RE: Application ID 23034819
Proposed telecommunications facility – Lot 101 Biscay Road, TANUNDA SA 5352

As previously advised, **SAQ Consulting Pty Ltd** acts on behalf of Waveconn Operations ('Waveconn') in respect of this application.

Waveconn is a licenced carrier for the purposes of the *Telecommunications Act 1997 (Cth)* and operates as an infrastructure provider or 'neutral host', whereby new facilities are sited, designed, acquired, built and maintained by Waveconn but utilised by the mobile carriers as part of their respective networks.

The proposal by Waveconn is to establish a telecommunications facility, in the form of a 30m-tall monopole and associated equipment on land at lot 101 Biscay Road, TANUNDA. The specific location is in the rear, north-eastern corner of the subject land adjacent the rail corridor, as shown on the proposal plans submitted with the application.

The subject land is located within the *Rural zone* and is a performance-assessed type of development pursuant to the Planning and Design Code and Table 3 under '*All Other Code Assessed Development*.'

I am receipt of three (3) representations received by Council as a result of the public notification of the proposal. All three representations object to the proposal, with the Grant Burge and Rockford submissions very similar in their arguments and wording.

With respect to the submission from Iain Seabrook, I provide the following response:

The placement of the proposed facility must have regard for the location of existing facilities, which in this instance (as shown on the map on page 2 of the planning statement) are in the Tanunda township, at the Rowland Flat settlement and on the range itself (section 740). As such, it follows that the placement of the facility must be on the valley floor to connect the existing facilities in Tanunda and Rowland Flat. Given the valley floor is characterised almost exclusively by vineyards it is simply not possible to site it away from vineyards. It is noted that the location selected is clustered with a large shed, water tanks and is alongside the rail corridor, so it cannot be described as standing alone with no built context whatsoever.



- In other words, it is not possible to serve those rural ‘gaps’ without being in the rural area and the proposed facility interconnects and with surrounding facilities and must have regard for their location – that is a fundamental basis of its operation.
- The proposed facility is 1.1 kilometres from the main thoroughfare of Barossa Valley Way, with Rifle Range Road much less significant, particularly east of Grocke Road. Given the very slight stature of the proposed facility (in terms of bulk), the miniscule portion of the view occupied by it when viewing the valley floor vista (defined by Oxford as “a pleasing view”), the undulating topography that prevails in the area and the backdrop of the range, I do not agree that the facility will be so intrusive that it will disturb the view to any material extent.
- The location selected for the proposal on the subject land is not used for vineyards and is therefore not lost to agricultural productivity.
- The risk to the facility from flooding is considered minimal and has been dealt with in the planning statement.
- There are no requirements in relation to aircraft landing areas, such as the location being referred to.

With respect to the submission on behalf of Grant Burge, much is made of the South Australian Supreme Court judgement in *Geber Super Pty Ltd v The Barossa Assessment Panel [2023] SASC 154*. However, with respect, the interpretation put forward by the submitter and the weight placed on it is, in my view, misconstrued and not properly applied to this application for several reasons.

First, telecommunications facilities are essential infrastructure and have, since the introduction of State-wide provisions in 2000, been treated differently by both the South Australian planning system and the various courts, particularly the Environment, Resources and Development Court and the South Australian Supreme, where it has generally been involved to review the decision of the lower court. Tourist accommodation, particularly at the scale proposed in Geber, is not essential infrastructure.

Essential infrastructure, by its very nature, needs to be planned and placed where it meets a particular objective. However, unlike power lines, water mains or gas lines, which can follow much more circuitous routes if necessary and are often placed underground, the wireless nature of mobile telecommunications is not the same. Facilities must be placed in the general area identified to achieve the objectives of a particular area and must have regard for surrounding sites within the network. As stated above, in this instance the proposed facility seeks to serve the ‘gap’ in service between Tanunda and Rowland Flat and therefore it must be in that ‘gap’ – it cannot and does not need to be in Tanunda or Rowland Flat, as there are already facilities in those locations.

Second, the Geber matter dealt with a substantial tourist accommodation proposal consisting of 141 rooms, six villas, function centre, restaurant, café, shops and associated facilities and described in the judgement as ‘large scale tourism accommodation’. In contrast, the proposed facility consists of a single 30m-tall structure and ground-based equipment in a compound measuring 7 metres by 11 metres. It is self-evident these are not comparable proposals.



There are no doubt many reasons why a tourist accommodation facility does not need to be placed in a rural zone, particularly when it occupies a large area, thereby impacting the landscape in an appreciable way and alienating agricultural land.

As such, to draw the sweeping conclusion, as the submitter does, that on the basis that a telecommunications facility is not associated directly with a rural use and applying the outcome in the Geber case the proposal should not be permitted, is incorrect. The two scenarios are of entirely different scales and context and the driver for the proposals are entirely different in both a practical and policy sense. Whereas a tourist accommodation facility can be placed in township or elsewhere, as set out above, locational sensitivity is much more constraining for telecommunications facilities.

In fact, the judgement in Geber makes comments and draws distinctions about scale, what remains or becomes the primary use of the land and, importantly, analyses PO6.3 which specifically calls for tourist accommodation to be associated with primary production. With the subject proposal, it occupies a very small part of the land that is not even used as vineyard, but even if it were and some vines were to clear there is no question the primary function of the land would remain a vineyard.

Further, if there was a provision stating that telecommunications facilities should be established in associated with primary production that would be the case here. But in my view it is not necessary to do so because telecommunications facilities, particularly in this form and on large allotments in rural areas, will always be a minor and subordinate use at any location.

Essential infrastructure, including telecommunications, is needed to ensure the smooth transaction of business in rural areas such as the Barossa Valley, as well as supporting tourism and visitors to the region. Rural areas are routinely identified in blackspot funding grants as these are often the areas where coverage is poorest because there are lower densities of population. Put simply, a rural area can operate without tourism accommodation, but it cannot function properly without essential infrastructure.

The Planning and Design Code, as did the Development Plan regime before it – supported time and time again by the Courts – envisages the communication needs of the community being met by the placement of appropriate infrastructure. It therefore follows that infrastructure will be required in rural areas, just as it is required in residential areas, mixed use and commercial areas, despite those zones not specifically listing telecommunications facilities as envisaged uses within the Planning and Design Code.

Accordingly, to draw the conclusion, as the submitter does, that on that basis a telecommunications facility cannot be placed in a rural zone simply because it is not a land use directly associated with rural land uses is utterly incorrect and approaching the assessment of this application on that basis is fundamentally flawed. In fact, throughout South Australia and in all states of Australia rural zones (along with industrial) are the most ‘preferred’ zones for telecommunications infrastructure. To take the approach advocated by the submitter in the rural zone would render the provision of mobile phone service and other wireless services such as NBN to rural areas almost impossible.

The submitter is also incorrect in the assertion the mere visibility of the structure is reason for its refusal. In *Telstra v Norwood Payneham & St Peters [2006] SAERDC 13*, the Court said



exactly that at paragraph 42 – “...the Plan does not contemplate a rejection of a telecommunications facility on the grounds of visual intrusiveness alone.”

In *Telstra v Holdfast Bay [2008] SAERDC 47* the Court considered whether a lower monopole height would be feasible to mitigate visual impact and given the open nature of the valley floor in this case, the comments at paragraph 66 are applicable, where the Court said “..however, not a lot more is possible, whilst fulfilling the technical needs of the appellant. For example a lower pole would not meet the technical requirements of the appellant and unless it was significantly lower, any further minimisation of visual impact would be marginal.”

It is not agreed that the proposed facility, for the reasons already set out, will be visually prominent and although able to be seen from various vantage points – as is anticipated by the Planning and Design Code - is not so large or dominant that it would diminish the strong prevailing character of the Barossa Valley and the valley floor, nor the views across it, particularly when the facility is well away from dwellings and main thoroughfares. Impacts are likely to be transitory and in any event its mere visibility is not a fatal blow, as this would render the deployment of such infrastructure impossible.

Further, it cannot be the desired of the Character Preservation District to forbid the deployment of essential infrastructure, especially where the essential infrastructure in question cannot be placed underground, requires sufficient height to operate and must have regard for its target coverage area and the location of surrounding facilities. When one considers the sheer size of the Character Preservation District such an outcome would fly in the face of both State and Commonwealth legislation and policy outcomes with respect to the community’s access to telecommunications services, including wireless data such as NBN, especially in areas outside the metropolitan area.

Finally, the Character Preservation District policies clearly do not set out to stop the building of structures, but rather put a check on the expansion of townships, pockets of residential development and other urban-type development in particular.

I note that DO2 of the overlay desires the long-term use of land outside the townships for primary production, a factor the proposed facility has no impact on. Further, no rural land is alienated and no land division is occurring and PO3.4 expressly contemplates large, bulky buildings within the overlay – and the proposed facility could not be described in those terms.

As such, I do not agree that the proposed facility is incongruous with the Character Preservation District desired outcomes and the criticism of the proposal in this regard does not bear up to scrutiny in my view. Further, the rural zone is an eminently appropriate zone for telecommunications facilities and in no way could the application be described as seriously at variance. I contend the submitter has misconstrued the intent of the Geber judgment, has applied that intent incorrectly to the subject application and as a result the conclusion reached is also incorrect.

For similar reasons, I disagree with the submission from Rockford Wines. The rural zone is most certainly suitable for a telecommunications facility both generally and when having regard for all the constraints set out above and for the reasons already set out I do not agree the Character Preservation District sets out to prevent a facility such as that proposed. With a proper reading of the overlay provisions weighted with other relevant parts of the Planning and Design Code such a conclusion cannot logically be drawn.



It is important to remember the purpose of the proposed facility, which is both improve levels of service and cater for continued growth in wireless telecommunications use. It does not follow that there will be more applications in the future but even if they are that is not a relevant consideration here, as each application is based on its merits.

It is also not the role of Council or the assessment panel to consider some other hypothetical alternative that is not before it or even broadly identified. There are many reasons why another location might not be feasible, including its unavailability, but also because the facility need may not be met. Both the ERD Court and Supreme Court have weighed in on this approach and have made it clear that whilst alternate sites are a common distraction, the focus must remain on the subject application.

As noted above, unlike other types of infrastructure that conveys water, gas, electricity or the like, which can take longer, more circuitous routes to their destination if necessary, that is not the case for wireless infrastructure and simply putting it 'somewhere else' is often not possible. As also stated, the objective of this facility is to cover the rural 'gap' between Tanunda and Rowland Flat and such an outcome can only occur by being in that 'gap'.

I trust the applicant's position on the proposed facility are clear, with the distinctions between a very large tourist accommodation proposal and the proposed facility are obvious and treated as such.

Having considered the submissions, there is nothing contained therein that would make me reconsider my position and I remain of the view the proposal is appropriate in this location and setting and should be approved.

Please advise the time and date of the Barossa Assessment Panel meeting so that I might arrange attendance.

If there are any questions, please do not hesitate to contact me.

Yours sincerely

MARK BAADE

B. Plan (Hons)

M: 0417 088 000

mark@saqconsulting.com.au

6.2 23035013 - Lot 4 Duck Ponds Road Stockwell

APPLICANT:	David Hutchison of Access Planning on behalf of the Applicant, Dorrien Estate Winery
REPRESENTORS:	Kevin Walsh, Railway Terrace Stockwell

APPLICATION DETAILS

PROPOSAL	Construction of a 160 ML irrigation dam with maximum fill of 11 metres and maximum cut of 6.5 metres
APPLICANT	Access Planning (SA) Pty Ltd
OWNER	Dorrien Estate Winery Pty Ltd
APPLICATION NO	23035013
CERTIFICATE(S) OF TITLE	CT 5229/947
AREA	40.4 ha
CURRENT USE	Primary Production, agriculture (cropping and grazing)
PLANNING AND DEVELOPMENT CODE VERSION	Version 2023.17 – 23 November 2023
PLANNING AND DESIGN CODE EXTRACT LINK	Relevant Code Extract
ZONE	Rural
OVERLAYS	Character Preservation District Hazards (Bushfire – Medium Risk) Hazards (Flooding – Evidence Required) Limited Land Division Native Vegetation Prescribed Water Resources Area Water Resources
APPLICATION TYPE	Performance Assessed
PUBLIC NOTIFICATION	Notified – No Sign Required
REFERRALS	Nil
PREVIOUS APPLICATIONS	960/729/2001 – Vineyard 960/1135/2005 – Winery (10,000 Tonne Annual Crush) and Associated Vineyard (lapsed)
ASSESSING OFFICER	Janine Lennon, Consultant Planner
RECOMMENDATION	That Planning Consent be GRANTED subject to Reserved Matters and Conditions

INTRODUCTION

The applicant seeks Development Approval for the 'Construction of a 160 ML irrigation dam, with maximum fill of 11 metres and maximum cut of 6.5 metres' at Allotment 4 Duck Ponds Road, Stockwell.

The proposed development was subject to Performance Assessment and public notification. The application was notified in accordance with Section 107 of the

Planning, Development and Infrastructure Act 2016 and four representations were received.

This application is subject to a decision of the Barossa Assessment Panel (BAP) for the following reason:

- (1) Representations have been received as a result of public notification and the representors have indicated a desire to be heard in support of their representation.

No statutory referrals were applicable, although the Department of Environment and Water was informally consulted in relation to the proposal.

The site is in a Rural Zone where a dam is an envisaged form of development.

The proposed dam will sit approximately 500 metres east of the Stockwell township and upstream of the township adjacent Stockwell Creek. The dam will be visible from locations on Duck Ponds Road and from adjoining properties primarily to the north and south with approximately 8 metres of fill for the southern wall of the dam, and 11 metres of fill for the northern wall.

It is considered that the proposal supports the primary production use of the land and will have an acceptable level of visual impact. As such, Planning Consent is warranted, subject to a recommended Reserved Matter and Conditions of Consent.

SITE AND LOCALITY

The site for the proposed dam is an irregular shaped allotment with a frontage to Duck Ponds Road of approximately 1.4 km. The site has a maximum depth of approximately 610 metres with total site area of approximately 40.4 hectares.

The site is used for agriculture (cropping and grazing) with numerous small clumps of mature native vegetation located primarily along watercourses across the site.

The site is positioned on the northern side of Duck Ponds Road and is generally surrounded by broad acre farming and low intensity agriculture on large allotments. The land is undulating, reflecting its position on the northern part of the Barossa Range. There are limited vistas generally of open fields interspersed with native trees and shrubs.

There are dwellings located on the adjoining allotments with the closest dwelling to the proposed dam being approximately 165 metres away.

The nearest township is Stockwell which is located approximately 500 metres west of the proposed dam.

Figure 1 below contains a zone map and details of the location of the site.

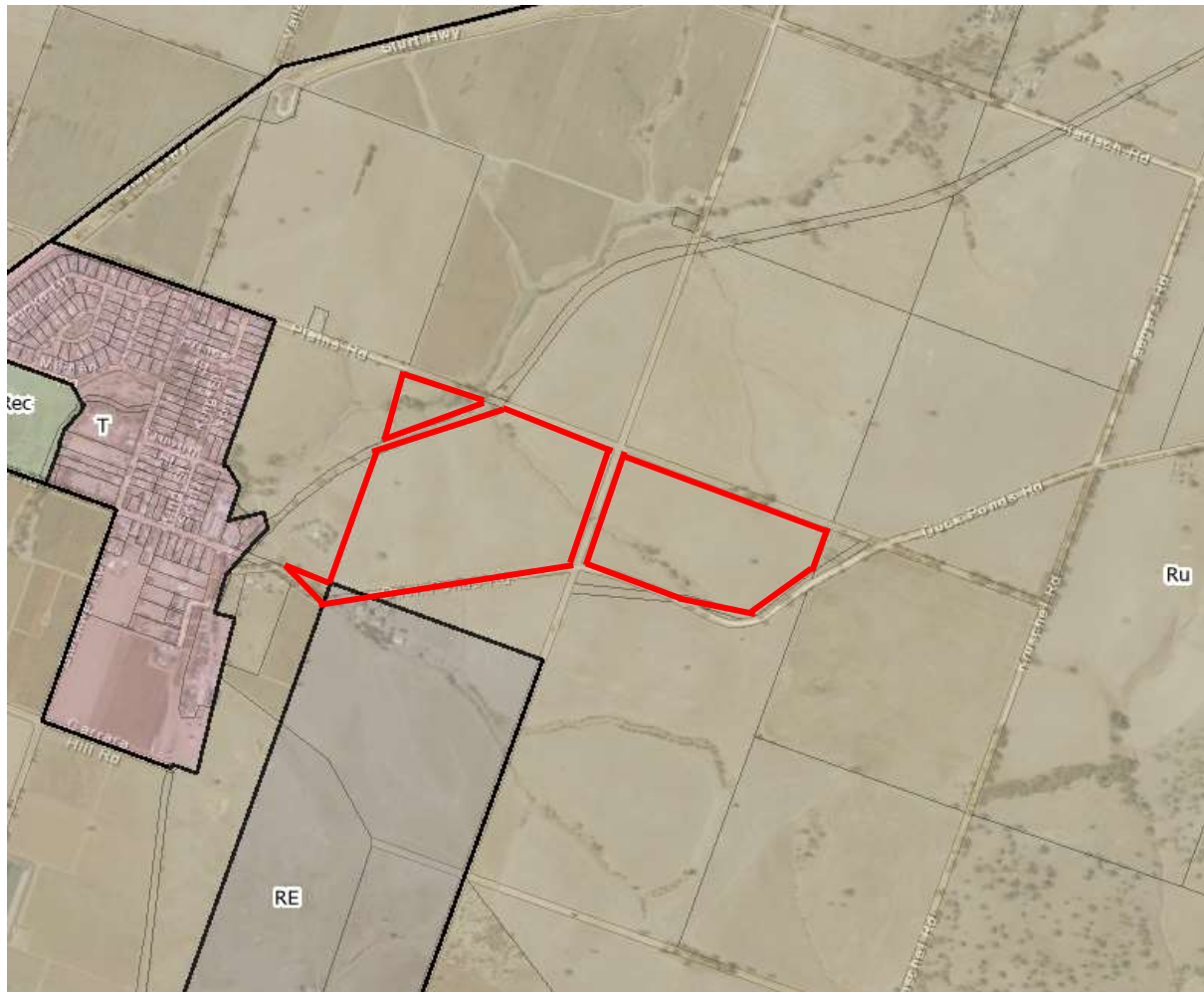


Figure 1: Zone Map and Locality

An aerial view of the site and locality are contained in **Figure 2** and **Figure 3**.

Site photos are provided in **Figure 4** to **Figure 16**.

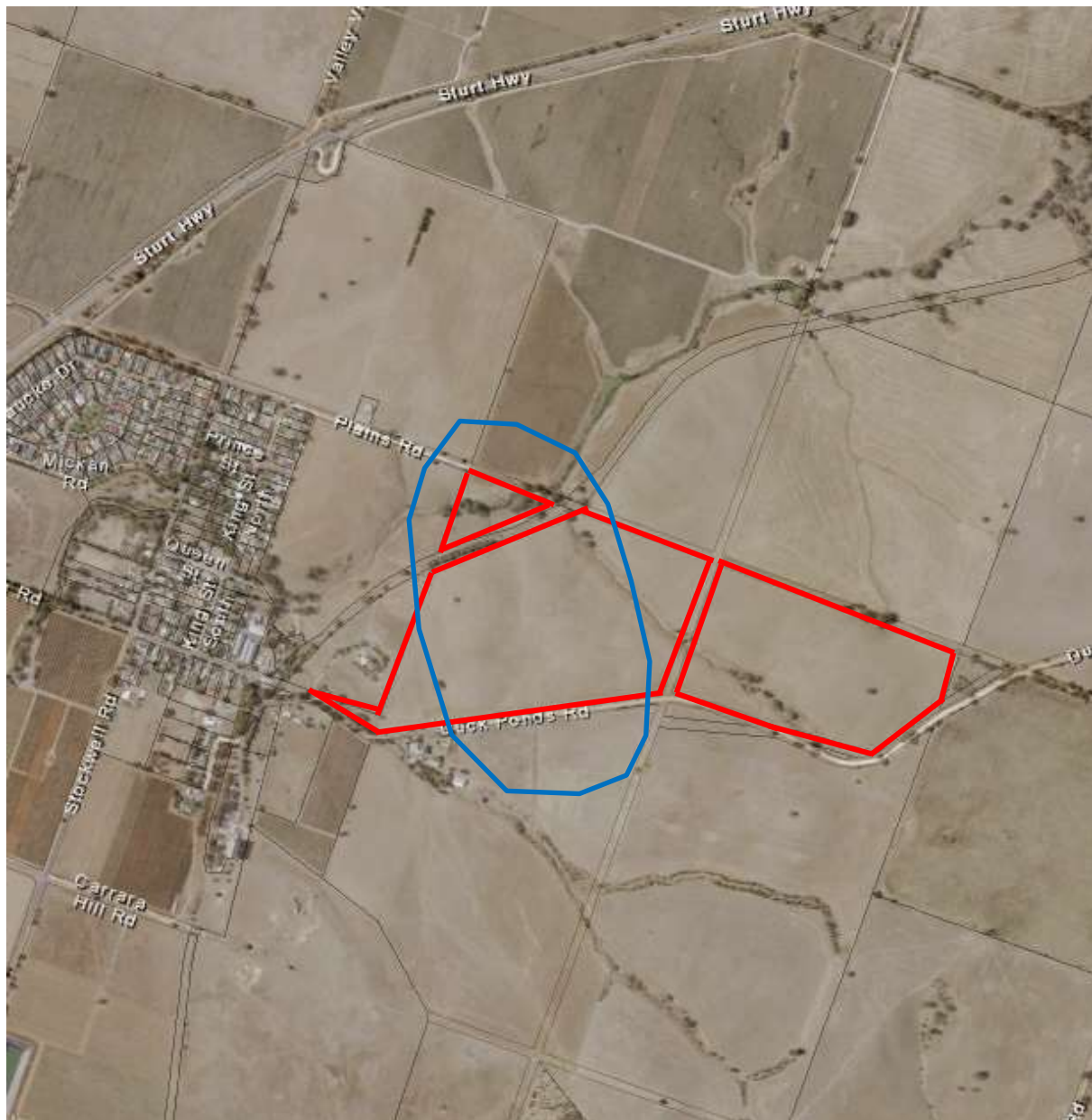


Figure 2: Aerial – Locality, subject site in red, locality in blue

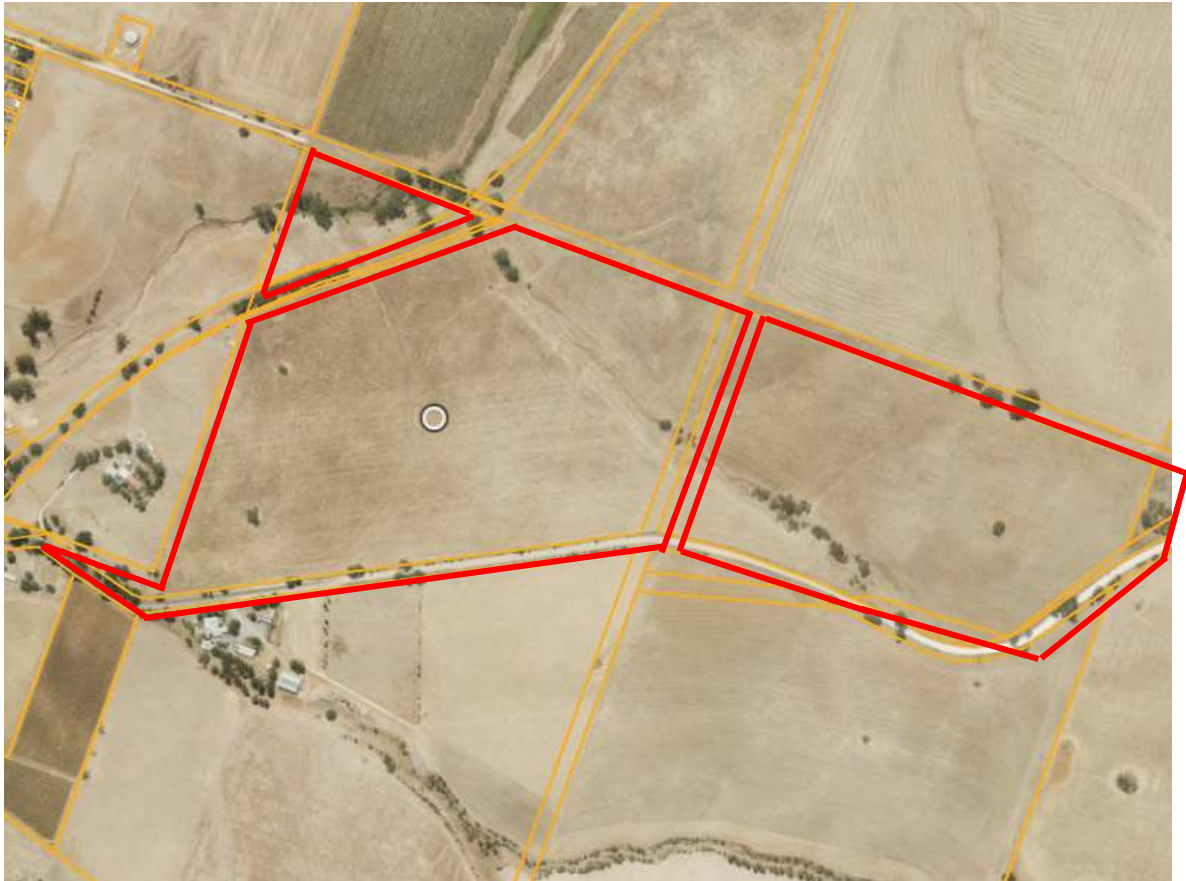


Figure 3: Aerial – Site



Figure 4: Site Photo – looking west along Duck Ponds Road adjacent site



Figure 5: Site Photo looking north-west toward site of proposed dam



Figure 6: Site Photo looking north toward site of proposed dam



Figure 7: Site Photo looking north-east toward site of proposed dam



Figure 8: Site Photo looking east along Duck Ponds Road



Figure 9: Site Photo looking south from hill to west of proposed dam within site



Figure 10: Site Photo looking south-west from site toward Stockwell township



Figure 11: Site Photo looking north-east from site toward Stockwell



Figure 12: Site Photo looking north-west from site along escarpment



Figure 13: Site Photo looking north from site



Figure 14: Site Photo looking north-east toward site of proposed dam



Figure 15: Site Photo looking east toward site of proposed dam



Figure 16: Site Photo looking south toward Duck Ponds Road from site

PROPOSAL

The application seeks development approval for the construction of an irrigation dam, components of which are as follows:

- Earth wall, turkey nest dam covered with a plastic liner.
- Maximum capacity 160 ML
- Maximum wall height 14 metres
- Maximum fill height 11 metres
- Freeboard of 600 mm to accommodate potential wave action, and/or rain event at "full" level.
- Overflow 180 mm pipe then by natural flow to Stockwell Creek
- To be filled from Barossa Infrastructure Limited (BIL) water supply
- Water to be supplied via existing infrastructure in Plains Road

Whilst viticulture is not included as a component of this proposal, the purpose of the dam is described as being intended to provide water security for future viticulture development on the subject land.

Attachment 1 provides a copy of the application and associated documentation.

APPLICATION TYPE

The site is located within the Rural Zone under the Planning and Design Code.

The proposed development is not listed in Tables 1-4 and therefore defaults to 'Performance Assessed' pathway under Table 3 of the Rural Zone.

PUBLIC NOTIFICATION

(1) The application was subject to public notification in accordance with Table 5 – Procedural Matters – Notification of the Rural Zone.

(2)

(3) The proposed development in nature of a dam is a type of development not listed in Table 5 as being exempt from public notification. The proposal is not deemed to be a minor form of development.

<i>Class of Development (Column A)</i>	<i>Exceptions (Column B)</i>
1. Development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.	a) None specified.
2. Any development involving any of the following (or of any combination of any of the following): b) a) advertisement b) agricultural building c) air handling unit, air conditioning system or exhaust fan d) ancillary accommodation e) building work on railway land f) carport	c) None specified.

g) dwelling h) dwelling addition i) farming j) fence k) horse keeping l) internal building works m) land division n) outbuilding o) private bushfire shelter p) protective tree netting structure q) replacement building r) retaining wall s) shade sail t) solar photovoltaic panels (roof mounted) u) swimming pool or spa pool v) temporary accommodation in an area affected by bushfire w) tree damaging activity x) verandah y) water tank.	
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The table below provides details of the public notification process:

Representations:	Four Representations were received as follows: • Nick Clowser • Alea Devine • Greg Schubert • Kevin Walsh
Person wishing to be heard:	Of the four representations received, one representor wishes to be heard as follows: • Kevin Walsh of Railway Terrace, Stockwell.
Applicant	No late representations were received. David Hutchison of Access Planning on behalf of the Applicant, Dorrien Estate Winery Pty Ltd, wishes to appear to respond to the representation.
Time period for Public Consultation	3 January 2024 to 23 January 2024

An aerial view showing the representors' properties is contained in **Figure 17** below.

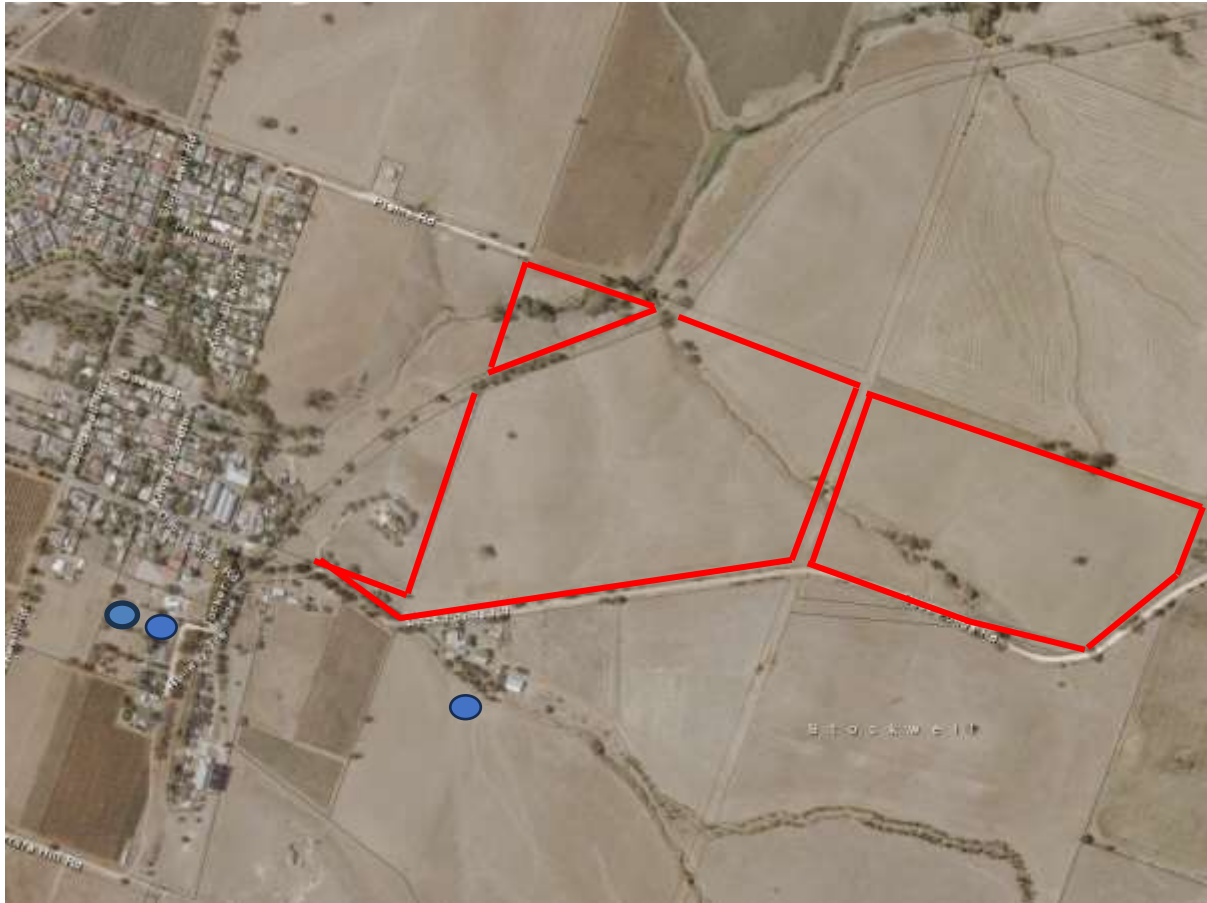


Figure 17: Blue dots indicate representors properties. Note: Two of the four representations received came from the same site

The table below summarises the contents of the representations and the applicant's response:

Summary of Representations

Representor/s

Dam failure

- Risk from catastrophic dam failure as Stockwell township is downstream.
- If dam storage area is incorrect in the Hazard Report, what else is incorrect?
- Have historic high intensity rainfall events eg 1983, 1992 and 2022 been considered in the risk assessment?
- Belief that the hazard assessment has underestimated risk and value of potential damage.
- Hazard assessment is incorrect as water flows to the south side of Duck Ponds Road affect Railway Terrace dwellings.
- The soil in this location is highly soluble and prone to erosion.

Applicant's Response

- Rainfall patterns are based on 1:100-year event.
- Dam burst modelling follows established industry guidelines.
- Rainfall in the surrounding catchment will not result in an increased risk of dam failure as it is not a catchment dam.
- Modelling has been undertaken by a qualified engineer and results reviewed by a qualified and experienced engineer.
- Development of the dam will involve the diversion of water from within the existing limited catchment around the dam which will be undertaken with erosion measures in place.

Vineyard demand

- With the oversupply of grapes, purchasing and redeveloping existing irrigated vineyards would be more prudent than creating new vineyards.
- The proposal will add additional low value grapes to an existing oversupply.
- There will be potential to result in additional frost fans close to the Stockwell township.
- No viticulture or frost fans are being proposed at this time.

Vehicle traffic

- Heavy vehicle traffic has been diverted away from Stockwell township; will this bring it back?
- Other than construction vehicles which will be required during the construction of the dam, traffic associated with the proposed development will be unchanged.

A copy of the representations are contained in **Attachment 2** and the applicant's response is contained in **Attachment 3**.

REFERRALS**External**

Pursuant to Schedule 9 of the *Planning, Development and Infrastructure (General Regulations 2017)* and Part 9 of the Planning and Design Code, the application was not subject to any referrals.

Informal discussions occurred with the Department for Environment and Water regarding whether a referral was necessary pursuant to Schedule 9. The Department advised that a turkey nest dam, to be filled with Barossa Infrastructure Ltd (BIL) water (private water supplier), is not subject to referral.

Internal

The following internal advice has been received from staff:

Engineering Services

Engineering have reviewed the report. We note that the summary of results and risk associated with the dam development. We believe a turkey nest dam has scope for better control and mitigation of risk than a naturally filled dam.

Further information and civil work design is required for the site development, which Engineering Services will need to review. A Reserved Matter is recommended.

ASSESSMENT

Please refer to the following link, the Planning and Design Code extract for this proposal, dated 23 November 2023, Version 2023.17:

Planning and Design Code Extract Link	Relevant Code Extract
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Seriously at Variance

Pursuant to Section 107(2)(c) of the *Planning, Development and Infrastructure Act 2016*, it is recommended that the Panel determine that the proposed development is not seriously at variance with the relevant provisions of the Planning and Design Code.

A dam is an envisaged form of development within the Rural Zone. The irrigation dam is intended to facilitate future horticulture/viticulture land use, subject to a future development approval. Horticulture is also an envisaged use within the Rural Zone. The proposal is therefore not considered to be Seriously at Variance with the provisions of the Planning and Design Code.

Character Preservation (Barossa Valley) Act 2012

Pursuant to Section 6(2) of the *Character Preservation (Barossa Valley) Act 2012*, having regard to the Objects of the Act, it is recommended that the Panel determine that the proposed development does not adversely impact the character values of the district. The character values of the district are:

- (a) the rural and natural landscape and visual amenity of the district
- (b) the heritage attributes of the district
- (c) the built form of the townships as they relate to the district
- (d) the viticultural, agricultural and associated industries of the district
- (e) the scenic and tourism attributes of the district

The proposal will support the viticultural, agricultural and associated industries of the district (clause (d)). The proposal will result in modification to the land form, which has potential to impact the rural and natural landscape and visual amenity of the district (clause (a)) and the scenic and tourism attributes of the district (clause (e)). The siting of the dam is such that it is not directly visible from the escarpment, with views predominantly from the north and south. The proposal is considered to have an acceptable level of visual impact, so as to preserve the rural and natural landscape and scenic and tourism attributes of the district.

Further discussion is contained under the Assessment section below in relation to the Character Preservation District Overlay.

Assessment

Detailed assessment of the proposal has taken place against the relevant provisions of the Planning and Design Code as quoted above. It is noted that a small portion of the allotment is located within the Resource Extraction Zone (approximately 1,450 sqm) but as this portion of the site is not affected by the location for the proposed dam, the assessment has not considered the provisions of this Zone.

Commentary is provided below under headings:

Land Use and Form of Development

Rural Zone	
Desired Outcomes	
DO1	A zone supporting the economic prosperity of South Australia primarily through the production, processing, storage and distribution of primary produce, forestry and the generation of energy from renewable sources.
DO2	A zone supporting diversification of existing businesses that promote value-adding such as industry, storage and warehousing activities, the sale and consumption of primary produce, tourist development and accommodation.
Relevant Performance Outcomes/Designated Performance Features	
Land use and Intensity	
PO 1.1 The productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution is supported, protected and maintained.	DTS/DPF 1.1 Development comprises one or more of the following: a) Advertisement b) Agricultural building c) Brewery d) Carport e) Cidery f) Commercial Forestry g) Dairy h) Dam i) Distillery j) Dwelling k) Dwelling addition l) Farming m) Horse keeping n) Horticulture o) Industry p) Intensive animal husbandry q) Low intensity animal husbandry r) Outbuilding s) Renewable energy facility t) Shop u) Small-scale ground mounted solar power facility v) Stock slaughter works w) Tourist accommodation x) Transport distribution y) Verandah z) Warehouse - aa) Winery - bb) Workers' accommodation

A dam is an envisaged form of development within the Rural Zone, pursuant to DTS/DPF 1.1 (h). It is therefore considered that the proposed development will satisfy Performance Outcome 1.1.

Character Preservation Overlay

Character Preservation District Overlay	
Desired Outcomes	
DO1	Recognise, protect and enhance the special character of Character Preservation Districts.

DO2	The long term use of land outside of townships for primary production and associated value adding enterprises is assured and promoted.	
Relevant Performance Outcomes/Designated Performance Features		
Built Form and Character		
PO 2.2 Development contributes to and maintains the historic identity and character of townships through appropriate: a) form b) scale c) siting d) design e) landscaping	DTS/DPF 2.2 None are applicable.	
Built Form and Character in the Rural Areas		
PO 3.1 Preservation of existing natural features including topography, watercourses and mature trees.	DTS/DPF 3.1 None are applicable.	
PO 3.2 Buildings and structures do not interrupt views of the skyline through measures including being sited below ridge lines.	DTS/DPF 3.2 None are applicable.	
PO 3.3 Buildings and structures harmonise with the natural features of the landscape and reinforce the rural character through the use of muted, neutral, non-reflective landscape colours on external surfaces.	DTS/DPF 3.3 None are applicable	
PO 3.4 Large buildings and structures are sited and oriented to minimise their visual bulk, particularly if close to roads or in open settings where there are no other buildings or mature trees in close proximity.	DTS/DPF 3.4 None are applicable.	
PO 3.5 Buildings and structures are grouped to create compact clusters well set back from public roads.	DTS/DPF 3.5 None are applicable.	
Earthworks		
PO 4.1 Excavation and filling of land is limited to that associated with: a) minimising the visual impact of buildings or structures or b) construction of water storage facilities.	DTS/DPF 4.1 Excavation and/or filling of land is: a) no greater than 1.5 metres from natural ground level b) only undertaken in order to reduce the visual impact of buildings or structures or to construct water storage facilities.	

The Character Preservation District Overlay seeks to recognise, protect and enhance the area's special character with a further remit to assure long term use of the land outside of townships for primary production activities.

The dam site is located within rural land approximately 500 metres west of the Stockwell township. The site is primarily used for agriculture (cropping and grazing). The local character is defined by the presence of farming activities interspersed with agricultural buildings, some dwellings and the township of Stockwell. Large irrigation

dams are a visual element within the northern portion of the Barossa Valley and have typically been assessed by Councils within the district as an acceptable addition to the existing landscape.

It is always a balanced decision when assessing large scale structures such as dams that can intrude into a landscape. In determining that the proposal accords with Overlay policies it is considered important to acknowledge that the dam has an intended purpose of horticulture irrigation, and its bulk and scale is a factor of its function in addition to its form.

Having regard to the Character values of the district and Overlay policies, it is considered that the proposed dam will not detrimentally affect the special character of the district for the following reasons:

- Irrigation dams are a typical component of horticulture.
- The Overlay specifically envisages higher levels of cut and/or fill for the purpose of water storage.
- Whilst the fill will be up to 11 metres high in parts, there will be limited opportunities to view the fill, with no part of the dam expected to be visible from the plains;
- The dam will support a primary production operation within the Rural Zone.

As mentioned earlier, the siting of the dam is such that it will not be directly visible from the escarpment, with views predominantly visible from the north and south. Accordingly, it is considered that the visual impact of the dam is acceptable and will preserve the rural and natural landscape and scenic

The siting of the dam is such that it is not directly visible from the escarpment, with views predominantly from the north and south. The proposal is considered to have an acceptable level of visual impact, so as to preserve the rural and natural landscape and scenic and tourism attributes of the district.

Prescribed Water Resources Area Overlay

Desired Outcomes	
DO1	<i>Sustainable water use in prescribed water resources areas maintains the health and natural flow paths of surface water, watercourses and wells.</i>
Relevant Performance Outcomes/Designated Performance Features	
PO 1.1 <i>All development, but in particular development involving any of the following:</i> <i>a) horticulture</i> <i>b) activities requiring irrigation</i> <i>c) aquaculture</i> <i>d) industry</i> <i>e) intensive animal husbandry</i> <i>f) commercial forestry</i> <i>has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed water resource areas.</i>	DTS/DPF 1.1 <i>Development satisfies either of the following:</i> <i>a) the applicant has a current water licence in which sufficient spare capacity exists to accommodate the water needs of the proposed use or</i> <i>b) the proposal does not involve the taking of water for which a licence would be required under the Landscape South Australia Act 2019.</i>

The proposed irrigation dam will be filled using water purchased from Barossa Infrastructure Ltd (BIL), which is primarily sourced from SA Water's Warren Reservoir. The Department of Environment and Water advise that they have no licensing concerns with regard to BIL supplying water to this site.

On this basis, it is considered that the proposal will satisfy Performance Outcome 1.1.

Water Resources Overlay

Desired Outcomes	
DO1	Protection of the quality of surface waters considering adverse water quality impacts associated with projected reductions in rainfall and warmer air temperatures as a result of climate change..
DO2	Maintain the conveyance function and natural flow paths of watercourses to assist in the management of flood waters and stormwater runoff.
Relevant Performance Outcomes/Designated Performance Features	
Water Catchment	
PO 1.1 Watercourses and their beds, banks, wetlands and floodplains (1% AEP flood extent) are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development avoids interfering with the existing hydrology or water regime of swamps and wetlands other than to improve the existing conditions to enhance environmental values.	DTS/DPF 1.2 None are applicable.
PO 1.3 Wetlands and low-lying areas providing habitat for native flora and fauna are not drained, except temporarily for essential management purposes to enhance environmental values.	DTS/DPF 1.3 None are applicable.
PO 1.4 Watercourses, areas of remnant native vegetation, or areas prone to erosion that are capable of natural regeneration are fenced off to limit stock access.	DTS/DPF 1.4 None are applicable.
PO 1.5 Development that increases surface water run-off includes a suitably sized strip of vegetated land on each side of a watercourse to filter runoff to: a) reduce the impacts on native aquatic ecosystems b) minimise soil loss eroding into the watercourse.	DTS/DPF 1.5 A strip of land 20 metres or more wide measured from the top of existing banks on each side of the watercourse is free from development, livestock use and revegetated with locally indigenous vegetation.
PO 1.6 Development resulting in the depositing or placing of an object or solid material in a watercourse or lake occurs only where it involves any of the following:	DTS/DPF 1.6 None are applicable.

a) the construction of an erosion control structure b) devices or structures used to extract or regulate water flowing in a watercourse c) devices used for scientific purposes d) the rehabilitation of watercourses.	
PO 1.7 Watercourses, floodplains (1% AEP flood extent) and wetlands protected and enhanced by retaining and protecting existing native vegetation.	DTS/DPF 1.7 None are applicable.
PO 1.8 Watercourses, floodplains (1% AEP flood extent) and wetlands are protected and enhanced by stabilising watercourse banks and reducing sediments and nutrients entering the watercourse.	DTS/DPF 1.8 None are applicable.
PO 1.9 Dams, water tanks and diversion drains are located and constructed to maintain the quality and quantity of flows required to meet environmental and downstream needs.	DTS/DPF 1.9 None are applicable.

The dam is to be located within a saddle landform, with both sides of the saddle catchment ultimately feeding into Stockwell Creek. The dam has been designed to contain not only its intended storage but also a 1% AEP flood event as well as any wave action resulting from inclement weather, thereby mitigating the potential to produce flood flows in a significant weather event. No watercourses are to be modified with the construction of the proposed dam.

The proposal is considered to satisfy the above-mentioned Performance Outcomes.

Clearance from Overhead Powerlines

General Development Policies	
Clearance from Overhead Powerlines	
Desired Outcomes	
DO1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.
Relevant Performance Outcomes/Designated Performance Features	
PO 1.1 Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.	DTS/DPF 1.1 One of the following is satisfied: a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996 b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

DTS/DPF 1.1 clause has been met and therefore the related Performance Outcome 1.1 will be achieved.

Vehicular access

Rural Zone	
Relevant Performance Outcomes/Designated Performance Features	
Siting and Design	
PO 2.1 Development is provided with suitable vehicle access.	DTS/DPF 2.1 Development is serviced by an all-weather trafficable public road.
General Development Policies	
Transport, Access and Parking	
Desired Outcomes	
DO1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.
Relevant Performance Outcomes/Designated Performance Features	
Vehicle Access	
PO 3.1 Safe and convenient access minimises impact or interruption on the operation of public roads.	DTS/DPF 3.1 The access is: a) provided via a lawfully existing or authorised driveway or access point or an access point for which consent has been granted as part of an application for the division of land or b) not located within six metres of an intersection of two or more roads or a pedestrian activated crossing.

Vehicle access to the site is gained via farm gates adjacent Duck Ponds Road, approximately 350 metres from the edge of the Stockwell township. This road is unsealed but is all-weather formed and is suitable to serve access for construction and ongoing management.

Other Overlays

The following Overlays have been considered in the assessment of the proposed development but are not considered to be applicable to the proposal given that:

Hazards (Bushfire – Medium Risk) Overlay

There are no habitable buildings on-site.

Hazards (Flooding - Evidence Required) Overlay

There are no water courses that traverse the land where the dam is proposed.

Limited Land Division Overlay

No division of land is proposed as part of this application.

Native Vegetation Overlay

No native vegetation is identified to be removed as part of the development. The Native Declaration form has been signed by the applicant.

CONCLUSION

The proposal comprises the '*Construction of a 160ML irrigation dam, with max fill of 11 metres and max cut of 6.5 metres*'. The application was subject to 'Performance Assessment' and public notification. The application was notified in accordance with Section 107 of the *Planning, Development and Infrastructure Act 2016* and four representations were received, one of which has requested to be heard.

This report has provided a detailed assessment of the proposal against the relevant provisions of the Planning and Design Code.

The nature of the proposal is acceptable as an envisaged use within the Rural Zone.

The primary assessment issues relate to visual impact. It is considered that the dam will have an acceptable visual impact taking into account its purpose and function, that such structures are anticipated within the Character Preservation District for water storage purposes and that it is sited within a saddle that has limited visual impact beyond its immediate locality. While the dam will be visible from some locations (predominantly north and south), its visual impact will not sufficiently be detracting on the landscape and related special character of the District.

A key concern for representors was the failure risk of the dam. The applicant has provided extensive submission as to how the dam will be constructed and maintained. This matter is principally a matter for Building Consent but Council's Engineering Services staff have requested that further civil and structural engineering design take place, prior to grant of Development Approval.

Assessment has identified that the proposed development is reasonably consistent with the Desired Outcome and Performance Outcomes of the Rural Zone and other relevant provisions of the Planning and Design Code, such that Planning Consent is warranted, subject to a Reserved Matter and recommended Conditions of Consent.

RECOMMENDATION 1

Seriously at Variance

The Barossa Assessment Panel, having considered the application, resolves that the development proposal has sufficient merit, and is not seriously at variance with the Planning and Design Code.

RECOMMENDATION 2

Character Preservation

Pursuant to Section 6(2) of the *Character Preservation (Barossa Valley) Act 2012*, the Barossa Assessment Panel has had regard to the objects of that Act and, in resolving to grant Planning Consent, will further the Objects of that Act.

RECOMMENDATION 3

Granting of Planning Consent

The Barossa Assessment Panel, having considered the application for consent to carry out development of land and pursuant to the provisions of the *Planning, Development and Infrastructure Act 2016* resolves to GRANT Planning Consent for Application No. 23035013 by Access Planning (SA) Pty Ltd to undertake the

Construction of a 160 ML irrigation dam, with maximum fill of 11 metres and max cut of 6.5 metres at Lot 4 Duck Ponds Road Stockwell (CT 5229/947) subject to the following Reserved Matter, Conditions and advisory notes:

Reserved Matters

Pursuant to Section 102(3) of the *Planning, Development and Infrastructure Act 2016*, the Relevant Authority reserves its decision in relation to the following matter:

- (1) Full civil and structural engineering design.

Council Conditions

- (1) The development shall be undertaken in accordance with the endorsed plans and documentation (as amended) accompanying the application except where varied by any condition(s) listed below.
- Locality Plan, Prepared by Pinion Advisory dated 30 October 2023, Drawing No 17000-DA001
 - Pre Development Plan, Prepared by Pinion Advisory dated 30 October 2023
 - Post Development Plan, Prepared by Pinion Advisory, dated 30 October 2023
 - Sections Sheet, Prepared by Pinion Advisory, dated 30 October 2023
 - Photos Sheet, Prepared by Pinion Advisory, dated 30 October 2023
 - Planning Report prepared by Access Planning dated 2 January 2024
 - Dam Hazard and Consequence Category Assessment, Old Salem Dam, Prepared by Pinnacle Advisory dated November 2023
- (2) The capacity of the storage dam shall not exceed 160 ML.
- (3) The dam and all associated works (including the spillway, the overflow channel) shall be designed by and constructed under the supervision of a suitably qualified and experienced engineer.
- (4) The dam walls shall be constructed in accordance with sound engineering specifications and practice, being capable at all times of retaining the designed capacity.
- (5) The spillway shall be designed to pass safely an estimated 1 in 100 year average recurrence interval flood. The spillway shall be constructed from non-erodible materials such as reinforced concrete and/or rock-filled gabion mattresses, to the satisfaction of the Relevant Authority.
- (6) The overflow channel shall be constructed to carry safely any water from the spillway to the watercourse adjacent to the dam, to the satisfaction of the Relevant Authority.
- (7) The overflow channel shall:
- (a) be constructed from materials that shall result in the provision of a stabilised waterway; and
 - (b) enter the watercourse adjacent to the dam in such a manner so as not to cause erosion of the watercourse.

- (8) That all earth constructed surfaces shall be compacted, grassed or similar and ground cover established, to minimise erosion and run-off, to the satisfaction of the Relevant Authority.
- (9) Prior to the filling/use of the dam authorised herein, a certificate verifying adequacy of construction in accordance with the approved design shall be supplied to Council by a suitably qualified engineering professional, to the reasonable satisfaction of the Relevant Authority.

Advisory Notes

- (1) Any portion of Council's infrastructure damaged as a result of work undertaken within the development site or associated with the development shall be repaired/reinstated to Council's satisfaction at the developer's expense.
- (2) Any variation of this approved development and/or the conditions of consent will require a separate request and approval by the relevant authority. Approval of this application does not necessarily imply that future requests for variations would be approved. Any future request will be assessed by having regard to the relevant rules and requirements in force at the time any request is lodged.
- (3) The applicant is reminded of its general environmental duty, as required by Section 25 of the Environment Protection Act 1993, to take all reasonable and practicable measures to ensure that the activities on the whole site including during construction, do not pollute the environment in a way which causes or may cause environmental harm.
- (4) Construction shall not take place on any Sunday or Public Holiday or after 7.00 pm or before 7.00 am on any other day, and all practicable steps must be taken during construction to minimise the impact of noise emissions on neighbouring properties.
- (5) The applicant is advised that this consent does not permit anyone to clear, remove limbs or trim native vegetation. Any proposal to clear, remove limbs or trim native vegetation will require approval or confirmation of exemption from the Native Vegetation Council. An interactive guide is available to help owners and others determine the requirements that apply under the *Native Vegetation Act 1991*, <https://www.environment.sa.gov.au/topics/native-vegetation/interactive-guide>. Any specific queries regarding the clearance, removal or trimming of native vegetation should be directed to the South Australian Native Vegetation Council.
- (6) Any noise generating activity undertaken at the site must be undertaken in accordance with the provisions of the Environment Protection (Noise) Policy 2007, and such that any resulting noise is not considered a nuisance, to the satisfaction of Council, including any existing infrastructure.
- (7) You are advised that construction or alteration of any footpath, kerb, gutter or crossover on Council land will require a permit, under the *Local Government Act 1999* from Council's Works and Engineering Services. It is

illegal to undertake work on Council land without permission. If the existing entranceway (driveway cross-over) is to be removed it must be re-instated with kerb and gutter, including appropriate restoration of the footpath and verge, to Council's standard specification. Please contact Council's Works and Engineering Services to confirm the required standards. Driveway cross-overs which affect a pedestrian footpath should maintain the level of the footpath or be consistent with the proposed footpath levels in instances where the footpath has not been constructed. When final Development Approval is applied for this should be shown on the plans. Please note that construction is to be in accordance with the *Disability Discrimination Act* and relevant Australian Standards. Further enquiries should be directed to the Works and Engineering team on 8563 8444.

ATTACHMENTS OR OTHER SUPPORTING REFERENCES

- Attachment 1 Application and Associated Documentation [↓](#) 
- Attachment 2 Representations Received [↓](#) 
- Attachment 3 Applicants Response to Representations [↓](#) 

Development Locations

Location 1

Location reference

LOT 4 DUCK PONDS RD STOCKWELL SA 5355

Title Ref

CT 5229/947

Plan Parcel

D40747 QP14

Additional Location Information**Council**

THE BAROSSA COUNCIL

Location 2

Location reference

LOT 4 DUCK PONDS RD STOCKWELL SA 5355

Title Ref

CT 5229/947

Plan Parcel

D40747 QP4

Additional Location Information**Council**

THE BAROSSA COUNCIL

Location 3

Location reference

LOT 4 DUCK PONDS RD STOCKWELL SA 5355

Title Ref

CT 5229/947

Plan Parcel

D40747 QP5

Additional Location Information**Council**

THE BAROSSA COUNCIL

Location 4

Location reference

LOT 4 DUCK PONDS RD STOCKWELL SA 5355

Title Ref

CT 5229/947

Plan Parcel

D40747 QP8

Additional Location Information**Council**

THE BAROSSA COUNCIL

Zone Overlays**Zones**

- Rural
- Resource Extraction

Sub-zones

(None)

Overlays

- Character Preservation District
- Hazards (Bushfire - Medium Risk)
- Hazards (Flooding - Evidence Required)
- Limited Land Division
- Native Vegetation
- Prescribed Water Resources Area
- Water Resources

Variations

- Minimum Site Area (Minimum site area is 25 ha)
- Minimum Site Area (Minimum site area is 32 ha)
- Minimum Dwelling Allotment Size (Minimum dwelling allotment size is 25 ha)
- Minimum Dwelling Allotment Size (Minimum dwelling allotment size is 60 ha)

Application Contacts**Applicant(s)****Stakeholder info**

Access Planning (SA) Pty Ltd
PO Box 39
Plympton
SA
5038

Contact**Stakeholder info**

Access Planning (SA) Pty Ltd
PO Box 39
Plympton
SA
5038

Invoice Contact**Stakeholder info**

Access Planning (SA) Pty Ltd
PO Box 39
Plympton

SA
5038

Land owners

Stakeholder info

Dorrien Estate Winery Pty Ltd
PO Box 442
Tanunda
SA
5352

Nature Of Development

Nature of development

Earth Bank Dam

Development Details

Current Use

Broadacre farming

Proposed Use

Dam

Development Cost

\$1,200,000.00

Proposed Development Details

Earth Bank Dam

Element Details

You have selected the following elements

Other - Rural - \$1,200,000.00

- Dam

Septic/Sewer information submitted by applicant

Does this development require a septic system, i.e. septic tank and/or waste water disposal area?

No

Certificate of Title information submitted by applicant

Does the Certificate of Title (CT) have one or more constraints registered over the property?

No

Consent Details

Consent list:

- Planning Consent
- Building Consent

Have any of the required consents for this development already been granted using a different system?

No

Planning Consent

Apply Now?

Yes

Who should assess your planning consent?

Assessment panel/Assessment manager at The Barossa Council

If public notification is required for your planning consent, who would you like to erect the public notification sign on the land?

Relevant Authority

Building Consent

Do you wish to have your building consent assessed in multiple stages?

No

Apply Now?

No

Consent Order

Recommended order of consent assessments

1. Planning Consent

Do you have a pre-lodgement agreement?

No

Declarations

Electricity Declaration

In accordance with the requirements under Clause 6(1) of Schedule 8 of the Planning, Development and Infrastructure (General) Regulations 2017, the proposed development will involve the construction of a building which would, if constructed in accordance with the plans submitted, not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996.

Native Vegetation Declaration

The proposed development will not or would not, involve the clearance of Native Vegetation under the Native Vegetation Act 1991, including any clearance that may occur in connection with a relevant access point and/or driveway, and/or within 10m of a building (other than a residential building or tourist accommodation), and/or within 20m of a dwelling or addition to an existing dwelling for fire prevention and control, and/or within 50m of residential or tourist accommodation in connection with a requirement under a relevant overlay to establish an asset protection zone in a bushfire prone area.

Submission Declaration

All documents attached to this application have been uploaded with the permission of the relevant rights holders. It has been acknowledged that copies of this application and supporting documentation may be provided to interested persons in accordance with the Act and Regulations.

Documents

Document	Document Type	Date Created
17000- PA DAM ASSESSMENT REPORT.pdf	Technical Report - Other	24 Nov 2023 1:32 PM
17000- OLD SALEM - DA.pdf	Site Plans	24 Nov 2023 1:32 PM
Register_Search_CT 5229 947 5.pdf	Certificate of Title	24 Nov 2023 1:32 PM

Application Created User and Date/Time

Created User

e pn.hutchinsd@sa.gov.au

PINNACLE DRINKS OLD SALEM DAM

DRAWING LIST		
DWG No.	REV	DWG TITLE
17000-DA000	01	HEADER SHEET
17000-DA001	01	LOCALITY PLAN
17000-DA002	01	PRE DEVELOPMENT PLAN
17000-DA003	01	POST DEVELOPMENT PLAN
17000-DA004	01	SECTIONS SHEET
17000-DA005	01	PHOTOS SHEET

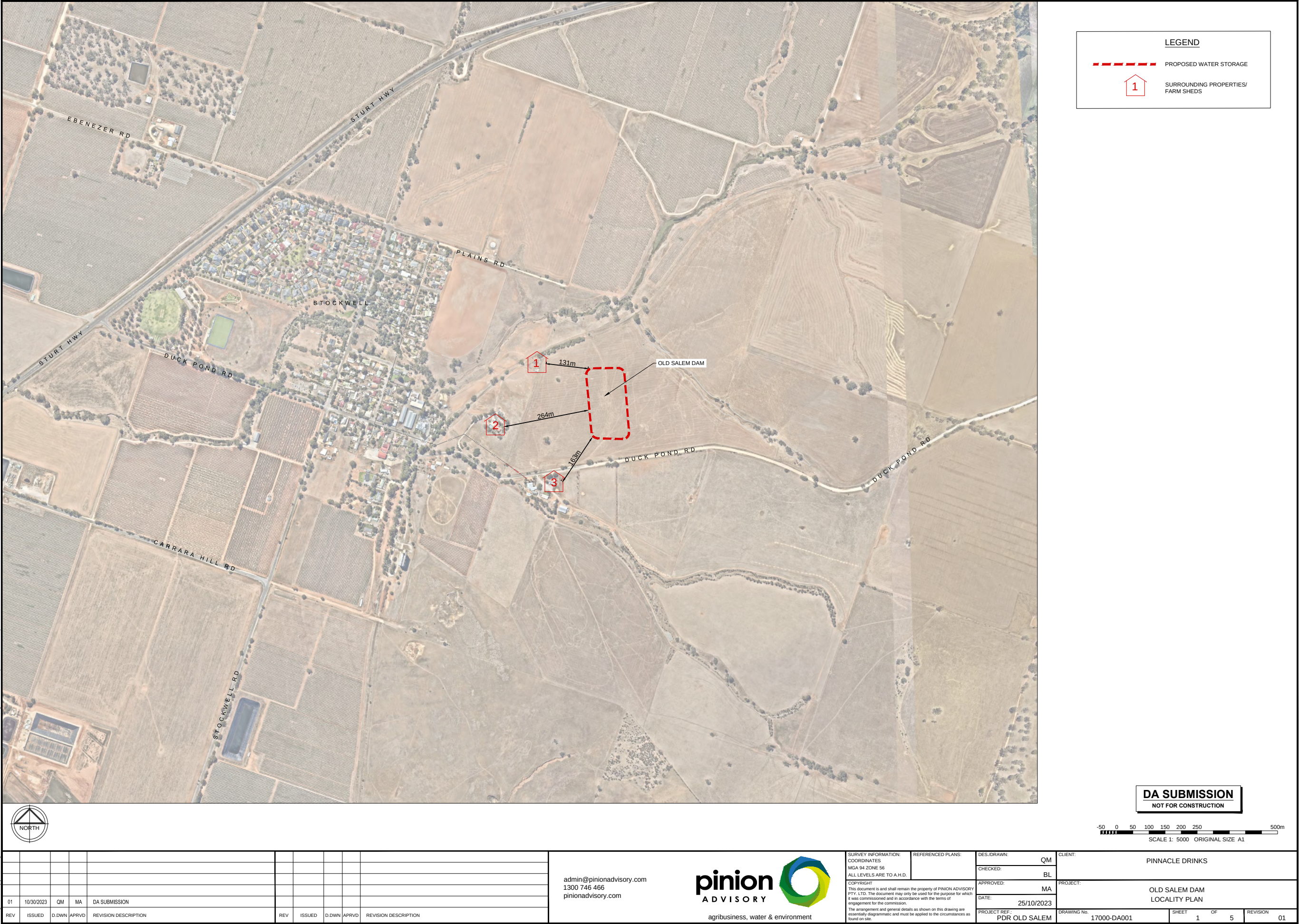
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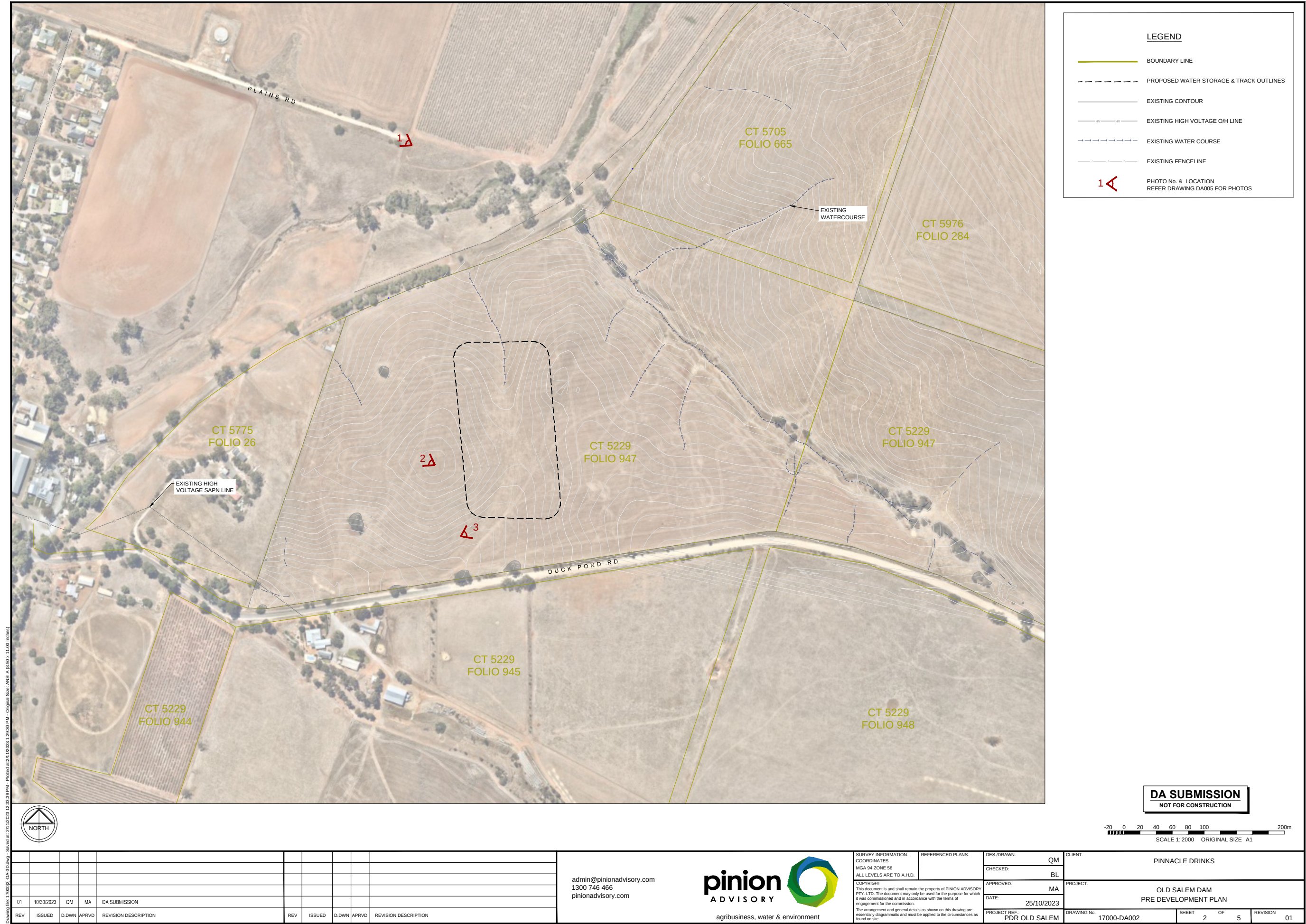
admin@pinionadvisory.com
1300 746 466
pinionadvisory.com

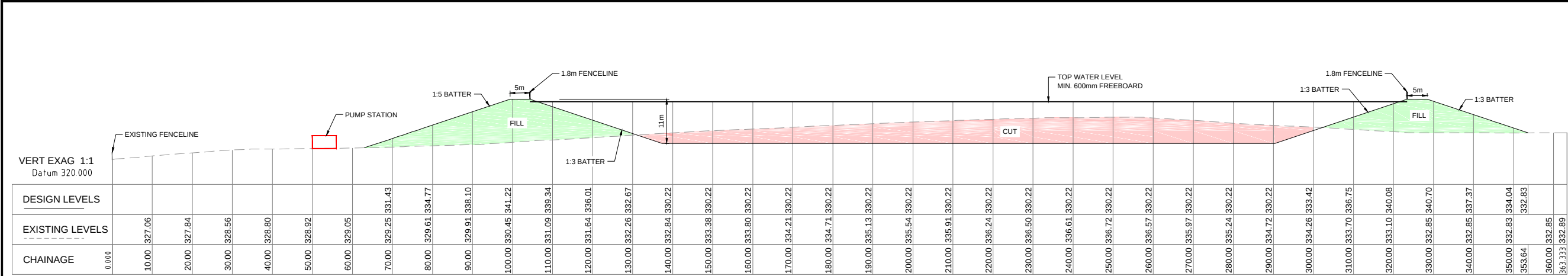


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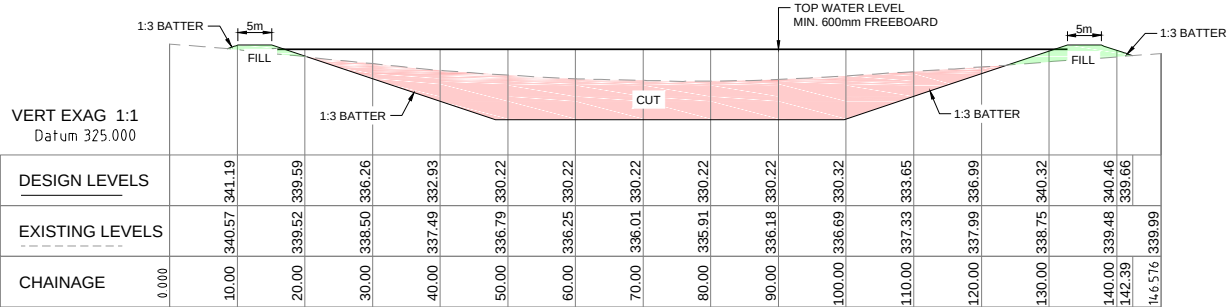
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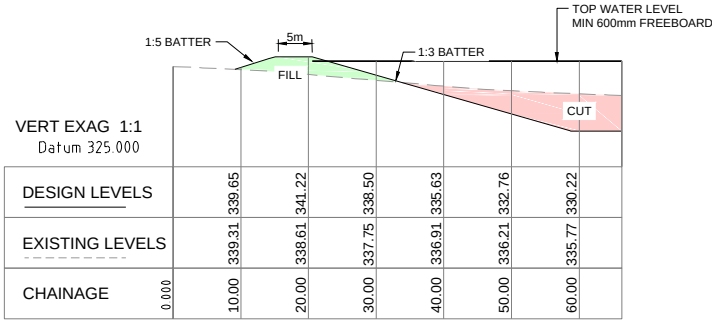




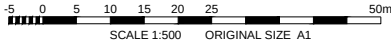
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SECTION "B"
SCALE 1:250 @ A1



SECTION "C"
SCALE 1:250 @ A1



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2nd January 2024

Ref: 9597Cnclrept.

The Chief Executive Officer
The Barossa Council
PO Box 867,
Nuriootpa SA 5355

Access Planning (SA) Pty Ltd
ABN 57 089 702 241
PO Box 39
Plympton SA 5038
Telephone 0418 832 334
dhutchison@accessplanning.com.au
www.accessplanning.com.au

Attention Ms. Janine Lennon

Dear Janine

Re **PROPOSED DAM DUCK PONDS ROAD - PIECE 5 DEPOSITED PLAN 40747
STOCKWELL**

1.0 INTRODUCTION

A development application has been prepared on behalf of the applicant Pinnacle Drinks to construct a new 160 ML storage dam on the subject land.

The subject land is primarily located in the Rural zone, although a small section of the southwestern corner of the land falls with the Resource Extraction zone.

The following Overlays apply to the property.

- Character Preservation District (Not In Township)
- Hazards (Bushfire - Medium Risk)
- Hazards (Flooding - Evidence Required)
- Limited Land Division
- Native Vegetation
- Prescribed Water Resources Area
- Water Resources

A dam is a consent use in both zones but is an envisaged land use in the Rural zone. It is subject to development approval as it involves the construction of a levee bank greater than 3.0 metres in height,

This report outlines the context of the proposed development including background information and project benefits. It also provides the following:

- An analysis of the nature of the development
- A description of the subject land and locality.
- A description of the proposed works on the subject land.
- An assessment of the development against the relevant provisions of the Code.

2.0 THE PROPOSED DEVELOPMENT

The dam has been more than adequately described in the submissions prepared by Pinion Advisory which form part of the suite of information and plans lodged in support of the development.



The development can however be summarised as follows:

- Earth wall – Turkey Nest Dam constructed from compacted low permeability material and covered with a plastic liner (HDPE).
- Capacity 160ML
- Maximum wall height 14m.
- Maximum fill height 11m.
- Freeboard 600mm to accommodate a 0.25m wave action (calculated using Hawksley's formula) and 0.15 m rainfall inflow (168 h 1 in 100 ARI as per ANCOLD guidelines).
- Overflow 180mm pipe then by natural flow to Stockwell Creek. Flow rate at 18L per second.
- Sited on an undefined shallow drainage line with water to be retained in the dam.
- Will be filled with non-drinking water supplied by Barossa Limited Infrastructure (BLI). BLI's source water is a blend of stormwater catchment, Murray River water and treated wastewater from the Barossa Council area.
- Water will be supplied to the dam from infrastructure located in Plains Road on the northern side of Stockwell Creek (subject to a separate application).
- A small pump shed is to be located at the base of the dam (subject to a separate application).
- Natural flows from the land to the diverted around the dam by a swale drain to Stockwell Creek, as per the natural flows on the land.

Construction

As evidenced by other dams on nearby properties, the local soil is suitable for dam construction. It has been assumed that no rock will be encountered, and the design of the storage has been completed on this basis. If rock is encountered, it will be removed without blasting. Further geotechnical investigation and selection will minimise permeability of the internal clay liner and confirm slope stability of the embankments.

Topsoil will be stripped and stockpiled within the property. The most suitable topsoil and subsoil material will be used to cover the external batters to protect the constructed clay embankment from erosion and drying/cracking.

All excavated material will need moisture to reach the right condition for compaction. Water will be sourced from nearby resources for construction water. This water will also be available for dust suppression.

The embankments will be constructed by the movement and compaction of material won on site. Some material will be compacted in situ, and some brought from elsewhere on-site.

Care will be taken in design and construction phases to balance cut and fill so there is no need to cart earth to or from site.

Development is proposed over the winter months to minimise the likelihood of dust.

The dam is intended to provide water security for future viticulture development on the subject land.



2.1 Project Benefits

Key benefits that will be achieved from the project are:

2.1.1 Economic

- Increase the available storage of irrigation water for future vineyards.
- Nett increase in vineyard production in excess of what could be achieved on the subject land without access to water.
- Facilitate further investment and job creation in viticulture in the region to leverage the established markets of Pinnacle Drinks.

2.2.2 Environmental

- Provide additional storage for and use of recycled water generated in the locality.
- Reduced reliance on River Murray sourced water.
- Prevention of wastewater entering the environment.

2.2.3 Social

- The development is in keeping with the character of the rural area it is located within.
- The site has been selected to minimise visual impact on neighbours or travelling public.
- The site has been selected to maximise the future use of productive land.
- Security of water for and the development of future vineyards will ensure the long-term viability and employment for workers within the wine industry.

3.0 SUBJECT LAND AND LOCALITY

3.1 Subject Land

The subject land is identified in Certificate of Title Volume 5229, Folio 947. It comprises piece 5 of one of 4 pieces of land which together make up all of the land comprised in one allotment as identified in Deposited Plan 40747.

The Certificate of Title is contained attachment 1 to this report.

The land has a frontage to Duck Ponds Road of some 645m, to an un-named and undeveloped road reserve to the east of 313m, to the old rail corridor of some 345m and to the west, to an adjoining property of some 386m, all enclosing an area of approximately 23.5ha.

The subject land is shown in Figure 1 below.

The land is undulating with a general fall to the north with shallow and undefined waterways sited centrally on the land and adjacent to Duck Ponds Road, with a more defined water way cutting across the north-eastern corner of the land, these are identified by the blue lines on the aerial image above.

The land has been cropped in the past and other than a few scattered trees is devoid of native vegetation and structures.

Access to the land is from Duck Ponds Road, a well-maintained gravel road with sufficient width to accommodate two traffic.



Figure 1: The subject land

3.2 The Locality

The wider locality is shown in the Figure 2 below. Much of the land can be similarly described as the subject land, as comprising undulating terrain cut by intermittent waterways and given over to a combination of broadacre farming and horticulture in the nature of vineyards.

Land to the immediate south of the property is located in a Resource Extraction zone, although there is no evidence of the land being mined or quarried at present. This land accommodates a farmhouse and sheds sited adjacent to Duck Ponds Road. There is house also sited on the land to immediate west of the property.

The small township of Stockwell sits some 300m to the west of the subject land and the old rail reserve runs along the eastern margins of the Township, then loops to the east along the southern edge of Stockwell Creek.

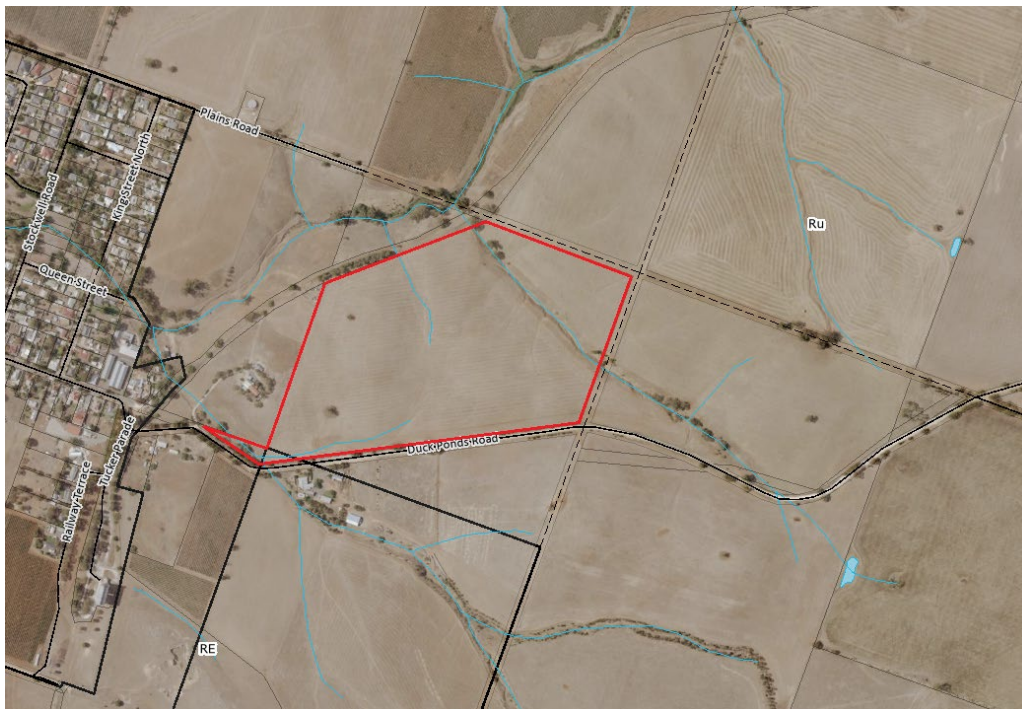


Figure 2: The subject land, zoning and locality

5.0 PLANNING ASSESSMENT

The subject land is located within a Rural and Resource Extraction Zone. I have not canvassed the relevant provisions of the latter zone as it applies only to a very small section of the land in the south-western corner of the property (refer zoning information in Figure 2 above).

That said, the relevant provisions for the Resource Extraction Zone provide that land not in use for resource extraction can be used for a range of low-intensity activities that maintain access to future resources. Nominated uses include farming, horse keeping and horticulture. (Resource Extraction Zone PO/ DTS/DPF 1.3). To the extent that is relevant a dam is an ancillary use to each of the three low impact land uses, and, moreover, the proposed dam is located outside of the Resource Extraction Zone.

A dam is a consent use in the Resource Extraction Zone, so the fact that the part of the land falls within this zone does not alter the manner in which the application must be processed.

The land is also subject to assessment against the following overlays.

Character Preservation District - Not In Township

The Character Preservation District Overlay seeks to recognise, protect and enhance the special character of Character Preservation Districts.

Hazards (Bushfire - Medium Risk)

The Hazards (Bushfire - Medium Risk) Overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and



impact of bushfires on life and property and facilitating access for emergency service vehicles.

Hazards (Flooding - Evidence Required)

The Hazards (Flooding - Evidence Required) Overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.

Limited Land Division

The Limited Land Division Overlay seeks to limit fragmentation of land to avoid undermining primary production.

Native Vegetation

The Native Vegetation Overlay seeks to protect, retain and restore areas of native vegetation.

Prescribed Water Resources Area

The Prescribed Water Resources Area Overlay seeks to ensure the sustainable use of water in prescribed water resource areas.

Water Resources

The Water Resources Overlay seeks to protect the quality of surface waters in South Australia.

I have not assessed each of the relevant overlays above and in particular note that the development is not affected by any of the policies in the Bushfire, Limited Land Division and Native Vegetation Overlays.

The relevant Code provisions are reproduced in Attachment 2.

5.1 Rural Zone

In recognising the need for productive rural land to be preserved for a range of primary production activities the Code nominates a dam as an envisaged land (Rural Zone PO/ DTS/DPF 1.1). The dam is intended as a precursor to the future development of the land for horticulture, which is also an envisaged land use, and as such the development accords with the primary intent of the zone.

Access to the land for construction purposes is via Duck Ponds Road, which is a wide, well-maintained, all-weather gravel road used for a wide range of vehicular traffic including heavy commercial vehicles associated with primary production activities undertaken in the area.

Vehicles used for construction purposes will be delivered to the land and will stay on the property until construction is completed, after which they will be removed. Some daily domestic traffic will result from workers attending the site but once completed the development will not require access by heavy vehicles. Vehicle movement required for the development would be similar to the type of traffic that would otherwise be associated with the use of the land for its existing use for cropping, with seasonal access for heavy vehicles (harvesters, tractors, grain trucks and the like). The development thus accords with PO/ DTS/DPF 2.1.



5.2 Character Preservation District Overlay

DO 1

Recognise, protect and enhance the special character of Character Preservation Districts.

DO 2

The long term use of land outside of townships for primary production and associated value adding enterprises is assured and promoted.

PO 2.1

Development occurring at the edge of townships is sympathetic to the rural landscape and reinforces a clear transition between townships and rural landscape through measures including:

- a) being of a low scale**
- b) orientating residential development towards the rural area**
- c) ensuring visual separation from the rural area through landscaping and road reserves.**

PO 3.1

Preservation of existing natural features including topography, watercourses and mature trees.

PO 4.1

Excavation and filling of land is limited to that associated with:

- b) construction of water storage facilities.**

DTS/DPF 4.1

Excavation and/or filling of land is:

- a) no greater than 1.5 metres from natural ground level**
- b) only undertaken in order to reduce the visual impact of buildings or structures or to construct water storage facilities.**

Large dams are not a particularly obvious feature of the rural character of the locality although there are numerous small turkey nest dams scattered across the landscape, most of which are similarly sited as the proposed development at the head of shallow valleys rather than across streams. The proposed dam is nestled in a shallow valley with intermittent views across it from a relatively short section of Duck Ponds Road. Views from this vantage point will be largely across the grassed batter slope of the southern face of the dam and the water held in the dam. Views of the dam and in particular the dam wall are also available from Plains Road, which is a dead-end road terminating some 300m to the north-west of the dam. Views from this vantage point will be of the grassed earthen wall of the dam, which will blend into the background of the rising land either side of the dam. The dam is otherwise reasonably well hidden from view by the undulating topography of the land in the locality.

It is noted that the extent to the earth wall will involve excavation and filling well in excess of 1.5m. I do not consider that to be unusual for the construction of even a small dam in the locality and consider the restriction on excavation and filling is more applicable to the siting of buildings and structures than to features such as dams.

5.3 Hazards (Flooding - Evidence Required) Overlay

DO 1 Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.



A detailed flood hazard assessment of the dam has been undertaken and forms part of the application documents. The assessment is based on a worst-case scenario involving a full dam and catastrophic failure of the northern wall of the dam releasing high volumes of water over a short period of time, with the majority of water in dam lost in the first 30 minutes of a breach (refer Figure 2 in the Dam Assessment report). The report assigns a significant risk downstream in the event of a catastrophic failure of the dam walls.

Clearly it is in the interest of the applicant to ensure that the dam is maintained to a proper extent to ensure that failure of the walls does not occur. To this end, and to minimise the likelihood of dam wall failure there will be an emergency release valve on the outlet pipe of the dam. This will have the ability to release water at a controlled rate in the case of the dam needing to be emptied rapidly to prevent a wall failure.

The dam will be offline with a piped inlet from the BIL supply which will control the rate at which the dam is filled. The inlet will be valved to enable isolation when the dam is full. The dam is designed with a 0.6m freeboard which accommodates a 0.25m wave action and 0.15 m rainfall inflow (168 h 1 in 100 ARI as per ANCOLD guidelines). The 180 mm overflow pipe is designed to accommodate unabated inflow at 18 L/s (with no pumped outflow).

Proper maintenance of the dam is essential to ensure its continued effectiveness and safety and to this end regular monthly inspections are proposed and any required repairs, and upgrades will be undertaken by the applicant to ensure the integrity of the dam walls.

Further, the risk is also minimised by the fact that the dam has a limited upstream catchment and is primarily filled by pumped water, as such high-volume storm events are unlikely to contribute to high water input into the dam that might then contribute to failure of the dam walls.

It has been recommended that an Operations, Maintenance and Surveillance (OMS) Manual be prepared in accordance with ANCOLD, 2003 prior to the dam being commissioned. The manual should include but not necessarily be limited to the following:

- Design intent
- Operations and inspections
- Water management procedures
- Criteria of mechanical and electrical works
- Dam surveillance
- Maintenance and on-going works

Operational Management Plans with the OMS document should specifically highlight all designer requirements for operation and response actions which must be met to ensure the ongoing safety of the dam.

5.4 Prescribed Water Resources Area and Water Resources Overlays

Prescribed Water Resources Area Overlay

DO 1

Sustainable water use in prescribed water resources areas maintains the health and natural flow paths of surface water, watercourses and wells.

**PO 1.2**

Development comprising the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment as well as downstream users.

Water Resources Overlay**DO 1**

Protection of the quality of surface waters considering adverse water quality impacts associated with projected reductions in rainfall and warmer air temperatures as a result of climate change.

DO 2

Maintain the conveyance function and natural flow paths of watercourses to assist in the management of flood waters and stormwater runoff.

PO 1.9

Dams, water tanks and diversion drains are located and constructed to maintain the quality and quantity of flows required to meet environmental and downstream needs.

(see also General development Policies, Design PO 5.1)

The proposed dam is predominantly a storage dam for water sourced outside of the local environment. It impacts only a very small catchment and is sited in a shallow valley with no discernible water course. A shallow swale is proposed on the eastern side of the dam to divert local flows from the land to the east of the dam to Stockwell Creek. Only very limited amounts of run-off from within the land will be collected in the dam and as such its impact on downstream flows is thus likely to be minimal.

Water quality is maintained by BIL with the water being tested on a regular basis to ensure its suitability for a range of uses. As a pumped storage with very limited natural inflow, water levels can be maintained to ensure that water is not disposed of outside of the dam, although even if, in the rare event water escapes into the natural environment, the quality of water is suitable for disposal into Stockwell Creek.

5.5 General Development Policies**Interface between Land Uses****DO 1**

Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

As noted above the proposed use is a benign development with limited visual impact on adjoining land uses, noting in particular the location of the dwelling on the adjoining land to immediate south of the subject land. It is a use that will co-exist with the potential for land to the south to be used for extractive Industry purposes, it produces no noise or ongoing traffic impacts aside from those that will occur during construction.

6.0 CONCLUSION

The proposed development to build a 160ML storage dam for the supply of water for the future development of viticulture on the subject land will have a minimal impact on the natural features of the land and sites easily within the rolling hills of the locality.



The foregoing assessment against the relevant provisions of the SA Planning and Design Code identifies the development as an envisaged use in the Rural Zone and a use entirely suitable to and appropriately sited on the subject land. I have concluded from the assessment that the development is not seriously at variance with, and in fact is substantially in accordance with the relevant provisions of the Code and as such warrants the favourable consideration of the Development Assessment Panel.

Should you require further information please contact me on 0418832334 or by email and dhutchison@accessplanning.com.au.

Yours sincerely

A handwritten signature in blue ink, which appears to read "D Hutchison". The signature is written in a cursive, flowing style.

David Hutchison BA, Grad Dip, PIA, CPP
Access Planning (SA) Pty Ltd



**Attachment 1
Certificate of Title**



Product Register Search (CT 5229/947)
Date/Time 06/11/2023 12:53PM
Customer Reference
Order ID 20231106005112

REAL PROPERTY ACT, 1886



South Australia

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5229 Folio 947

Parent Title(s) CT 2707/4, CT 4140/630, CT 4140/631
Creating Dealing(s) RTD 7772295
Title Issued 24/11/1994 Edition 5 Edition Issued 11/09/2013

Estate Type

FEE SIMPLE

Registered Proprietor

DORRIEN ESTATE WINERY PTY. LTD. (ACN: 003 775 139)
OF PO BOX 442 TANUNDA SA 5352

Description of Land

ALLOTMENT COMPRISING PIECES 4, 5, 8 AND 14 DEPOSITED PLAN 40747
IN THE AREA NAMED STOCKWELL
HUNDREDS OF BELVIDERE AND MOOROOROO

Easements

NIL

Schedule of Dealings

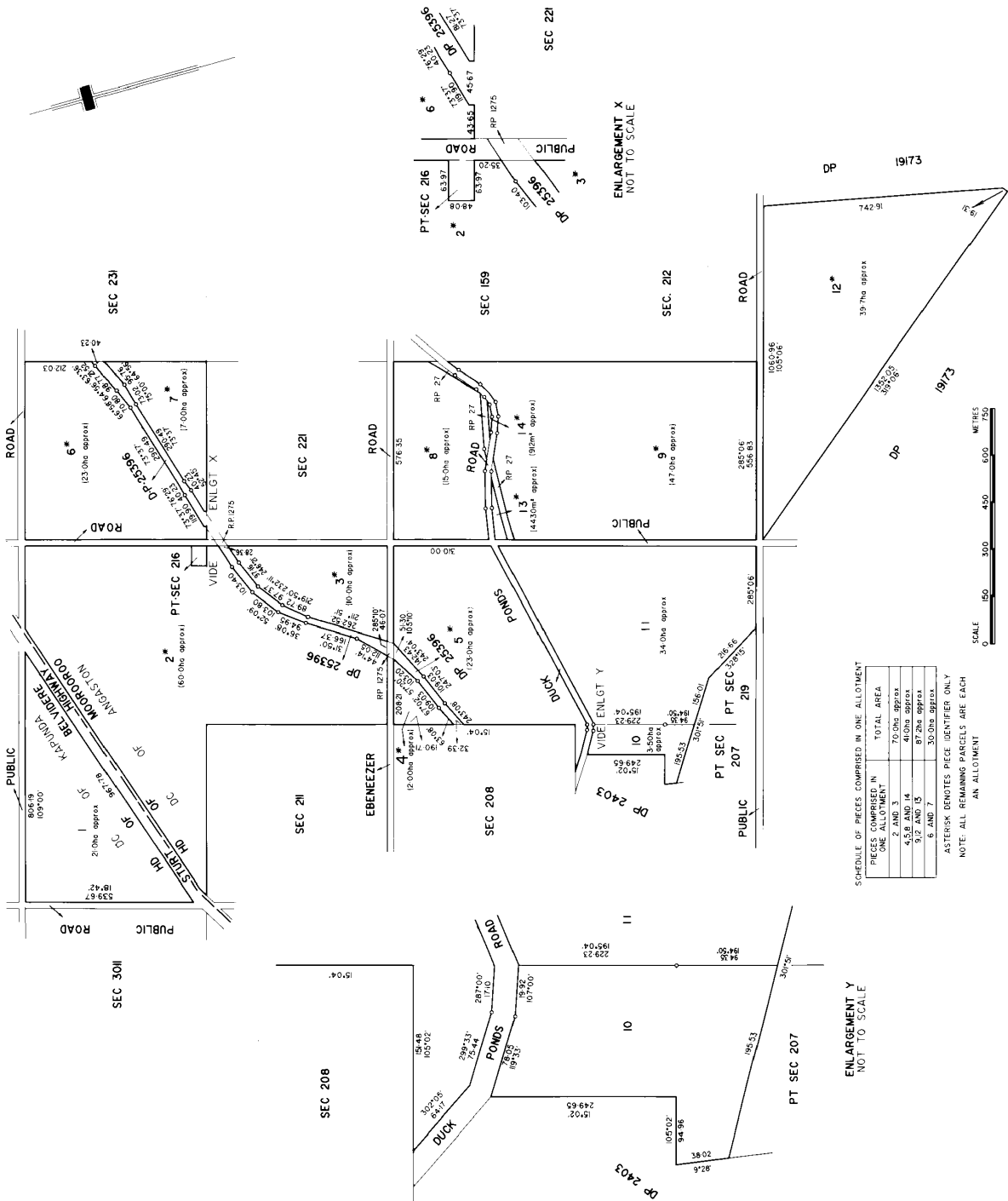
NIL

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL



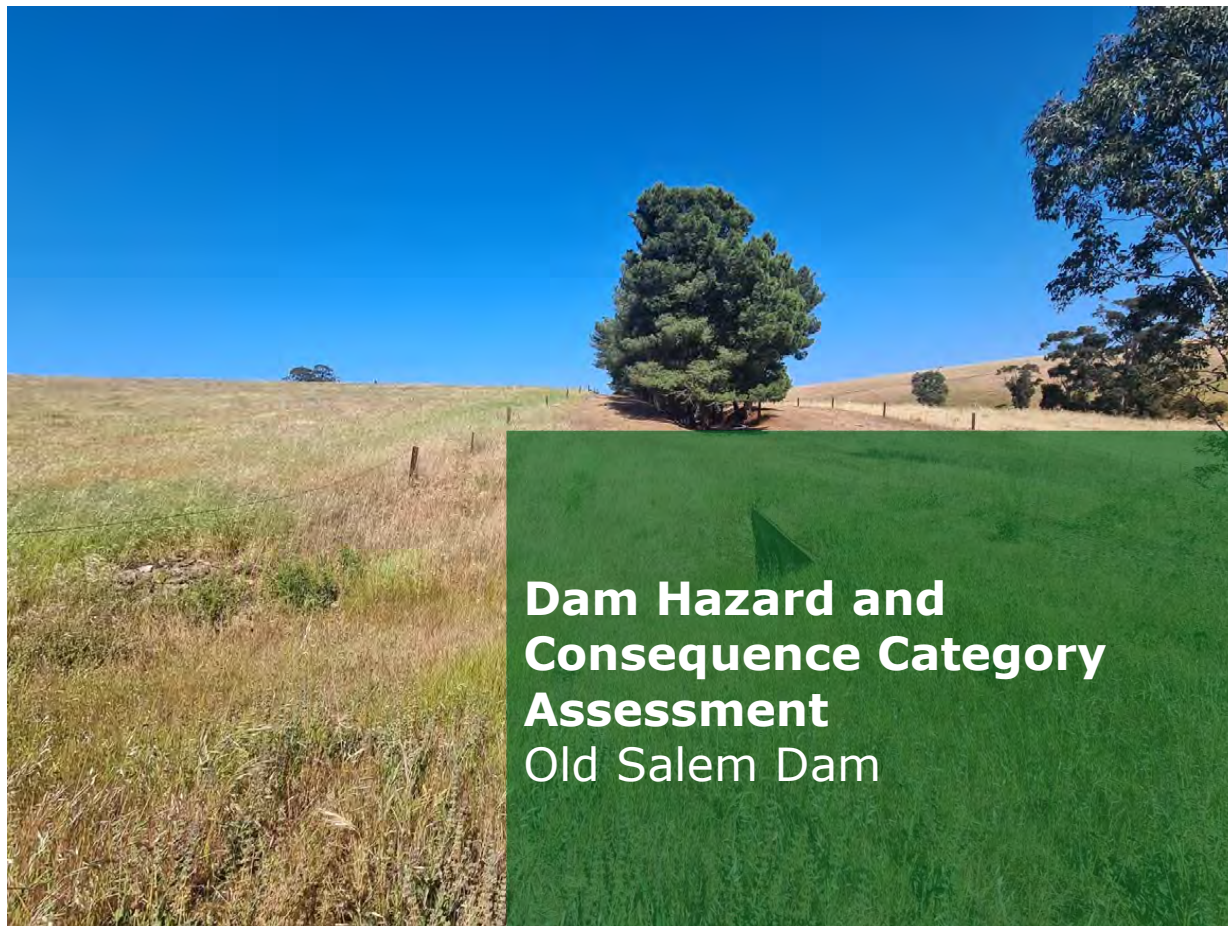
Product Register Search (CT 5229/947)
Date/Time 06/11/2023 12:53PM
Customer Reference
Order ID 20231106005112



SCHEDULE OF PICES COMPRISED IN ONE ALLOTMENT

PIECES COMPRISED IN ONE ALLOTMENT	TOTAL AREA
2 AND 3	70.0ha approx
4, 5, 6 AND 14	41.0ha approx
9, 12 AND 15	87.2ha approx
6 AND 7	30.0ha approx

ASTERSK DENOTES PICE IDENTIFIER ONLY
NOTE: ALL REMAINING PARCELS ARE EACH AN ALLOTMENT



PINNACLE DRINKS

OLD SALEM DAM

November 2023



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Prepared by Pinion Advisory**for/on behalf of****PINNACLE DRINKS****Project manager** **M. Allen****Consultant(s)** Q Mirzavand**Document status**

Date	Version History	Author(s)	Reviewer(s)
06/11/2023	DA Submission	QM	BL, MA & LM

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Glossaries

The following glossaries contain definitions for some technical terms found in this report.

Glossary of terms related to consequence category assessment.

Term	Definition
Competence class	In undertaking Consequence Category Assessments for dams, the Water Management (Safety of Dams) Regulations 2015 specify the competence class required by a person. Competence class is either Class 3, Class 2, Class 1, Expert Team, or unclassified.
Flood assessment (initial-level and comprehensive-level)	Analysis of the physical impact of a flood. Level of detail can be initial , which implies use of general assumptions to estimate impacted area, depth, and duration as according to guidelines. Level of detail can be comprehensive , which implies that a hydraulic modelling software is used to simulate floodwaters and produce flood maps.
Sunny-day failure	A flood assessment which assumes that dam failure is caused by conditions unrelated to heavy rainfall. Further explanation is provided in section 2.3.3.
Rainy-day failure	A flood assessment which assumes that dam failure is caused by conditions related to heavy rainfall and natural flooding. Further explanation is provided in section 2.3.3.
Population at risk (PAR)	The number of people considered to be on location of an impacted site. This number assumes that no action is taken to evacuate.
Potential for loss-of-life (PLL)	Product of PAR and how hazardous an impact is at a particular site. Represents the expected number of deaths calculated through a probability analysis. Factors such as water hazard, warning time, and evacuation efforts are included.
Total PAR/PLL	Combined total of weighted PAR/PLL from all locations impacted by an event such as a dam failure.
Incremental PAR/PLL	Total PAR/PLL caused by dam failure alone; total PAR/PLL minus natural flooding PAR/PLL. Incremental PAR/PLL is a key factor which is used to determine a dam consequence category. In many dam failure scenarios (sunny-day failures) incremental PAR/PLL will equal total PAR/PLL.
Damage severity	Categorisation of damage severity of a dam failure in terms of financial, business, environmental and social impacts. Categories and their qualifiers are defined in ANCOLD guidelines.
Consequence category (CONCAT)	A hazard classification assigned to dams in Australia which describes the expected negative results of a reasonable worse-case dam breach. Does not consider the precise likelihood of such a breach nor the structural integrity of the dam.

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Glossary of terms relating to 2D hydraulic modelling.

Term	Definition
2D hydraulic model	A model which allows for water to travel in any direction over a surface rather than just through a predefined channel/path.
Catchment	Area of land surfaces on which rainfall lands on and contributes runoff to a discharge point or stream.
Computational cell	In 2D hydraulic modelling, is the finite element within a larger hydraulic mesh. Boundary elevations are used to calculate flow between neighbouring cells.
Courant	In 2D hydraulic modelling, is a number that refers to the ratio of water velocity to cell size. A courant number of 1 should not be exceeded in most cases to ensure model accuracy.
Digital elevation model (DEM)	A software file which contains detailed elevation data, similar to satellite imagery except where each pixel refers to the elevation of that point.
Equation sets	Sets of equations used in 2D hydraulic modelling. Some sets (SWE-ELM) take momentum into account but take a long time to simulate. Other sets (diffusion wave) disregard momentum to speed up simulation times. The high velocities and surges associated with dam failure models require momentum equations for accurate results.
GPS RTK	Global positioning system using real-time kinematics: a type of GPS technology that uses live correction data to obtain a position as accurate as within 10 mm, typically within 50mm.
Manning's n	A roughness coefficient used in hydraulic calculations which represents the friction applied on water flow by a particular surface. Lower values refer to less resistant surface types which allow for less restricted and faster flowrates.
Normal depth	In a shallow sloping channel, is the depth at which a particular flowrate will naturally tend to flow at depending on the slope of the channel bed (denoted by S).
ML	Megalitre; equal to 1 million litres or 1000 cubic metres.

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Executive summary

At the request of PINNACLE DRINKS, Pinion Advisory has conducted a dam consequence category assessment for a proposed earth wall irrigation dam named 'Old Salem', located on Duck Ponds Rd, Stockwell.

The purpose of a dam consequence category assessment is to assess and categorise the estimated damages and loss of life in the event of a dam breach. This assessment does not assess the structural integrity of the dam nor the likelihood of a failure. This assessment aligns with ANCOLD guidelines and has been implemented in various states. Given the proximity of Old Salem dam to Stockwell township, it's crucial to comprehend the associated risks. National and state standards have been consistently applied in this evaluation, with reference to ANCOLD as appropriate.

The consequence category for Old Salem dam was calculated using a comprehensive-level flood assessment using HEC-RAS hydraulic modelling software to understand the impacts most precisely at downstream locations. Both a PAR (population at risk) and a PLL (potential for loss-of-life) assessment was performed to thoroughly assess the consequence category. This report outlines the procedure and detailed results obtained by modelling a reasonable worst case dam failure scenario. Results will include a calculated PAR, a calculated PLL, an estimated severity of damages.

Through both a PAR assessment and a PLL assessment, the proposed ANCOLD consequence category of Old Salem Dam is **SIGNIFICANT**. Which has been determined by the PAR assessment.

This document should be read in conjunction with the development application for Old Salem Dam.

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1 Old Salem Dam location and details

1.1 Location and downstream sites

Old Salem Dam has a proposed FSL capacity of 160 ML and at Duck Ponds Rd, Stockwell. Sites downstream of wall include:

- Dock Ponds Road
- Stockwell Hotel
- Stockwell Road
- Sturt Highway

Site visit photos taken at the dam and downstream sites are attached as **Appendix A**.



Figure 1: Old Salem Dam location

1.2 Dam details

General pertinent design details for Old Salem dam are listed in Table 1.

Table 1: Old Salem Dam pertinent details

Feature	Proposed dam details
Name	Old Salem
Location	E 321962, N 6187960
Dam type	Earth wall
Proposed Construction date	Winter 2024
Maximum wall height	14 m
Dam crest elevation	341.2
Full-supply level (FSL)	340.6
Overflow pipe size	180 mm
Total freeboard	0.6 m
Total capacity	160 ML
Dam crest length	640 m
Dam crest width	5 m
dam wall batters	3H:1V
Storage area	2.5 km ²

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2 Comprehensive dam-break modelling

A 2-dimensional hydraulic modelling software named HEC-RAS (version 6.4.1), was used to simulate the flooding impacts of a dam failure.

2.1 Input data

The model incorporated data as outlined in Table 2.

Table 2: HEC-RAS 2D model data

Data	Purpose	Source
Digital elevation model (DEM)	Hydraulic model terrain with 0.5 m resolution.	<i>Geoscience Australia</i> 2018 LiDAR obtained from <i>Elvis</i> ¹ .
GPS-RTK survey data	Verify DEM offset and specific features.	Site visit on 17 October 2023.
Global Manning's coefficient of $n = 0.005$	Roughness coefficient for typical terrain (grass and light vegetation)	-
Dam stage-storage curve	Impacts the hydrograph of the dam breach	Estimated from dam model in CAD.

2.2 Limitations and assumptions

The following limitations exist in 2D hydraulic modelling in HEC-RAS:

- Infiltration of floodwater into the ground is not modelled effectively allowing floodwaters to continue flowing downstream indefinitely. This mimics a fully saturated floodplain prior to the dam break occurring.
- Culverts must be manually included in the model from survey data. Many culverts have no significant impact on peak floodwater levels and often get blocked from debris. Culverts less than 800 mm in diameter are ignored and assumed blocked.
- Water body water elevations are recorded as ground elevation in digital elevation, inaccurately under-representing the depths of drains and rivers.
- Dam breach size progression is estimated using an empirical formula.
- Temporal inaccuracies can exist in digital elevation (such as road crest elevations that have changes since road works). Significant features are verified during survey when possible.

¹ Elevation and Depth – Foundation Spatial Data: <https://elevation.fsd.org.au/>

2.3 Model failure scenario

A reasonable worst-case break scenario was established as the dam failure model initiation point. A worst-case scenario consists of the maximum dam volume (spilling volume), most hazardous failure mode, and most damaging breach site.

2.3.1 Initial reservoir volume

Modelling was carried out on a full storage, with total volume of 160 ML.

2.3.2 Breach site

Only the northern and southern walls were modelled in response to the topography of the proposed site. The northern and southern walls will be constructed using fill, while the eastern and western walls will utilize the natural valley of the site. The northern wall will have piping within the embankment, making it more likely for breaching.

2.3.3 Failure mode

The following table describes the failure mode.

Table 3: Failure mode

Failure	
Failure mechanism	Piping (wall leak expelling material)
Risk factors	Faulty earth wall design or construction; high soil permeability/hydraulic gradient. Can also be caused by earthquake.
Spontaneity	Anytime. Can occur spontaneously without being detected.
Risk impact	Smaller flood volumes. Flooding occurs spontaneously with minimal warning.

2.4 Hydraulic model run parameters.

Model run parameters adopted for the HEC-RAS project are outlined in Table 4.

Table 4: HEC-RAS model parameters.

Parameter	Adopted value
Model duration	180 mins
Modelled length	2km
Nominal computation cell size	4.0m
Default manning's coefficient	0.035
Adaptive time-step	10sec
Equation set	SWE-ELM
Breach parameter calculator	Froehlich (2008) ²
Failure method	Piping for both walls
Initial dam stage	341.2 m AHD
Initial dam volume	160 ML
Breach final bottom width ²	8 m
Breach side slopes ²	0.7
Breach formation time ²	16.8 mins
Breach formation progression	Half-sinewave
Breach weir coefficient	1.44

² Froehlich, David. (2008). Embankment Dam Breach Parameters and Their Uncertainties. Journal of Hydraulic Engineering-ASCE - J HYDRAUL ENG-ASCE. 134. 10.1061/(ASCE)0733-9429(2008)134:12(1708).

3 Comprehensive model results

A series of model iterations to improve accuracy and test sensitivity eventually resulted in a final flood model to be used as the comprehensive flood model for hazard assessment.

3.1 Dam breach hydrograph

Using the dam breach parameters obtained from the 'Froehlich (2008)' parameter calculator, the modelled dam presented a breach hydrograph as shown in Figure 2. Peak flow reaches 132m³/s at approximately 15 minutes after breach progression begins.

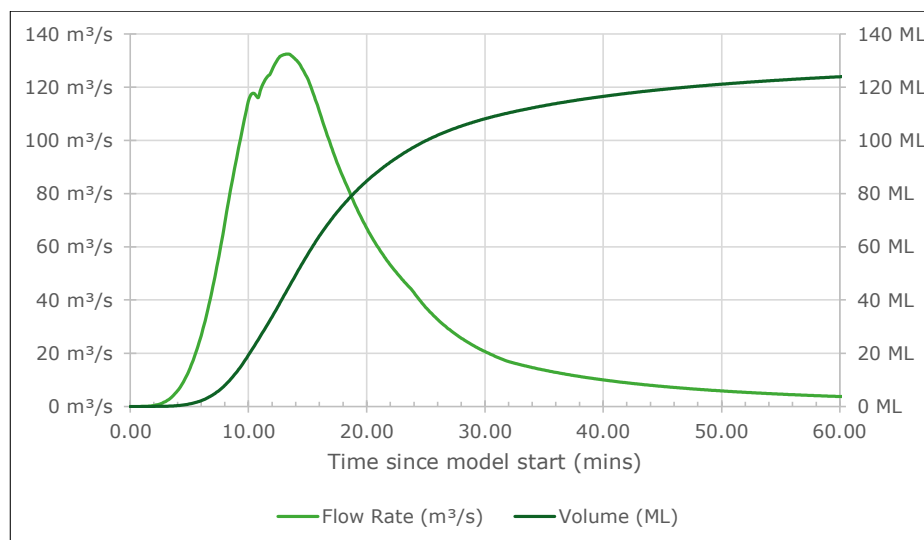


Figure 2: Dam break hydrograph-Southern Wall

It should be noted that this hydrograph is highly dependent on the nature of the breach and the stage of the reservoir at the time. Such parameters are highly variable and impossible to predict. The breach progression parameters produced using the 'Froehlich (2008)' parameter calculator are an estimation based on a large meta-analysis of 74 historical earth wall dam breaches.

3.2 Mapping results

From the inputs and setup described previously, HEC-RAS produced flood maps for the modelled dam breach. These flood maps are considered comprehensive flood maps as they show the water depth, velocity, and depth×velocity (hazard product) at all locations. A flood map is stored for every 10 seconds of simulation time, however additional flood maps can be generated which represent the maximum occurring flood statistics within the inundation area. These 'maximum' flood maps are not a snapshot of the flood at a point in time, but instead show the maximum impact of the flood at all locations regardless of when these impacts occur.

A complete map showing maximum depth is attached to this report as **Appendix C**.

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3.3 Flood hazard mapping

The combination of the maximum depth, maximum velocity, and maximum hazard product flood maps is utilised to measure the approximate level of hazard impacted upon areas within the inundation zone. The key in the following diagram is used as a guide to help discern whether the level of impact is significant enough to include or exclude a potential PAR. This is done by classifying present peak flooding into one of six categories: H1 to H6.

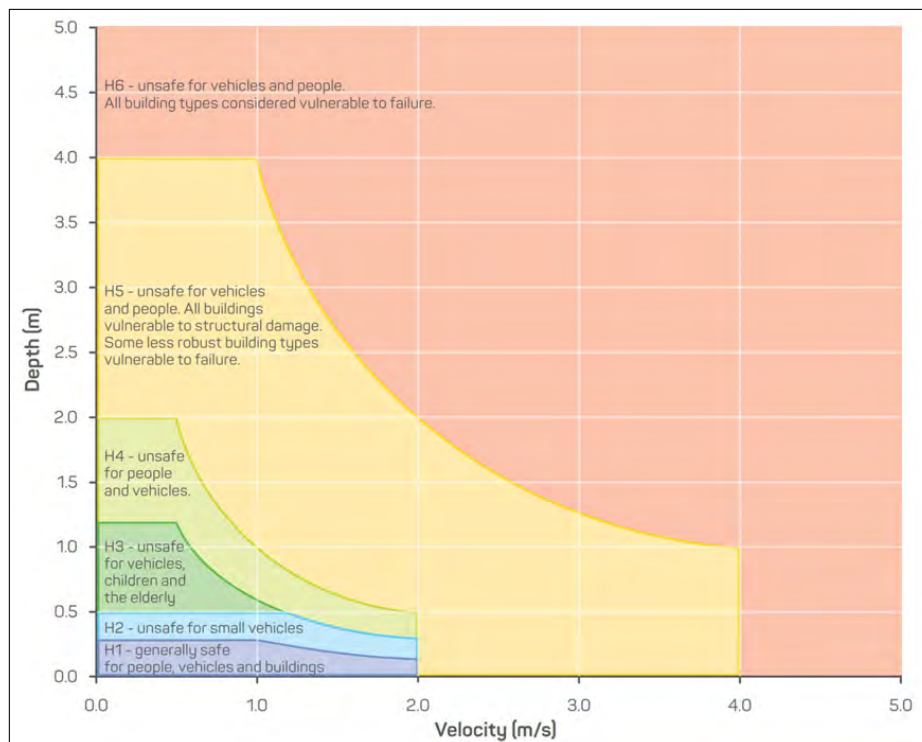


Figure 3: General flood hazard vulnerability curves³

Extra consideration to line of sight and local risks is used to determine when H1 and H2 may still pose a hazard to traffic in scenarios where vehicles may aquaplane on shallow water depths. A complete map showing maximum depth is attached to this report as **Appendix D**.

³ Australian Disaster Resilience Guideline 7-3: Flood Hazard (AIDR 2017).

4 Hazard assessment

This section provides details for the identification of hazard sites, and calculation of population at risk and potential loss-of-life estimates.

4.1 Hazard site identification

Hazard mapping was used to identify non-excludable sites as contributions to PAR. This was done by comparing the hazard category of the site with the expected type of population (i.e., general population pedestrians, able-bodied adult pedestrians, vehicles). Floods on roads where vehicles are likely to hit shallow water at significant speed are still considered an aquaplaning hazard even if they don't qualify as a vehicle instability hazard. The identified hazard sites are given below.

Table 5: Hazard identification

Site	Population type	Hazard level	Included
Duck Ponds Road	General vehicles	H3	Yes
Stockwell Road	General vehicles	H5	Yes
Stockwell Hotel	General pedestrians	H1	No
20-22 Stockwell Road	General pedestrians	H2	No
2-15 Duck Ponds Road	General pedestrians	H1	No
2,4 Queen Street	General pedestrians	H1	No
2-7,9,11 King Street	General pedestrians	H1	No
1-11 Stockwell Road	General pedestrians	H1	No

4.2 Methods for assigning PAR and PLL

Methods endorsed by ANCOLD are utilised to provide consistent and best estimates for both PAR and PLL at populated hazard sites.

4.2.1 PAR and PLL at roads

For public roads with vehicular traffic, the *Flooded Cars*⁴ method developed by J. Campbell et. al. is implemented using a consistent and repeatable approach. The *Flooded Cars* assessment is supplemented with road traffic statistics, a sight distance survey, and a calculation of emergency stopping distance⁵ to estimate both a PAR and PLL for the road site. ANCOLD specifies the *Flooded Cars* assessment to determine this risk, this assessment is a probability analysis based on historical data.

4.3 Site PARs and PLLs

Summaries of the PAR and PLL assessments for each included hazard sites.

4.3.1 Duck Ponds Road, Stockwell Road

No direct data was available for calculating the AADT of Roads, conservative high estimation of 4000 AADT was used. A *Flooded Cars* assessment was conducted to calculate PAR and PLL and is attached as **Appendix E**.

4.4 Site inundation and hazard statistics summary

From the *Flooded Car assessment*, a total PAR and PLL for all sites combined is provided below.

Table 6: Total PAR and PLL

Site	PAR	PLL
Duck Ponds Road	0.9	0.007
Stockwell Road	0.4	0.002
Total	1.3	0.009

⁴ J. Campbell, G. Parker, P. Southcott, M. Wallis (2013). *Flooded cars: Estimating the consequences to itinerants exposed to dambreak floods on roads*. ANCOLD.

⁵ AustRoads (2021). *Guide to Road Design Part 3: Geometric Design, Ch. 5.3 Stopping Sight Distance (SSD)*. AustRoads.

5 Severity of damage and loss

The severity of damages and losses are based on categories defined in ANCOLD's *Guidelines on the Consequence Categories for Dams*. Each sub-category has definition of damage severity which range from minor to catastrophic. The final damage severity of the dam failure is the rating given to the single highest rated sub-category. In most cases, the qualifier for damage severity is clear. However, in disputable cases, reasonable and safe assumptions have been made in the process of assigning damage severity levels.

For this assessment, the highest specified damaged severity level across all categories was determined to be **MEDIUM**.

5.1 Total infrastructure cost

Infrastructure damage was determined to have severity level of **MINOR**, with infrastructure costs considered less than \$10 million to replace.

Table 7: Infrastructure damage costs ANCOLD severity level

Impact Type	Qualifier	Severity Level
Total infrastructure costs	< \$10M	MINOR

5.2 Impact on dam owners' business

For the impact on the dam's owner's business, the maximum severity level was **MEDIUM**.

Table 8: Impact on dam owners' business ANCOLD severity levels

Impact Type	Qualifier	Severity Level
Importance to the business	<i>Restrictions needed during peak days and peak hours</i>	MEDIUM
Effects on owner's services	<i>Reduced services are possible with reasonable restrictions</i>	MEDIUM
Effect on continuing credibility	<i>Severe widespread reaction</i>	MEDIUM
Community and political reaction	<i>Severe widespread reaction</i>	MEDIUM
Impact on financial viability	<i>Able to absorb in 1 financial year</i>	MINOR
Value of water in storage	<i>Can be absorbed in 1 financial year</i>	MINOR

5.3 Health and social impact

For health and social impact, the maximum severity level was **MINOR**.

Table 9: Health and social impact ANCOLD severity levels

Impact Type	Qualifier	Severity Level
Human health	< 100 people affected	MINOR
Loss of community services	< 100 people affected	MINOR
Cost of emergency management	< 1000 person-days	MINOR
Dislocation of people	< 100 people affected	MINOR
Dislocation of businesses	Able to absorb in 1 financial year	MINOR
Employment affected	< 100 jobs lost	MINOR
Loss of heritage	Local facility	MINOR
Loss of recreation facility	Local facility	MINOR

5.4 Environmental impact

For environmental impact, the maximum severity level was **MEDIUM**.

Table 10: Environmental impact ANCOLD severity levels

Impact Type	Qualifier	Severity Level
Area of impact	< 1km ²	MINOR
Duration of impact	< 1 year	MINOR
Stock and fauna	Discharge would contaminate water supplies used by stock and fauna. Health impacts not expected.	MEDIUM
Ecosystems	Discharge would have short term impacts on ecosystems with natural recovery expected after one wet season. Remediation possible.	MEDIUM
Rare and endangered species	Species exist but minimal damage expected. Recovery within one year.	MINOR

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6 ANCOLD consequence category assessment

A consequence category assessment has been undertaken in accordance with these national and state standards:

- *Guidelines on the Consequence Categories for Dams*. ANCOLD, October 2012.

Given that the flood assessment is comprehensive level, the ANCOLD consequence category can be calculated using the PAR or PLL method.

6.1 Downstream CONCAT assessment

Downstream dams which would potentially be subject to a cascade failure limit the minimum consequence category determination. As this dam is an offline turkey's nest dam there exists no dam downstream which would be considered a cascade failure risk. Therefore, this failure mode has been excluded from this assessment.

6.2 PAR CONCAT assessment

Based on a total incremental PAR of 1.3, and a 'MEDIUM' severity of damage and loss, ANCOLD proposes a Consequence Category of **SIGNIFICANT** for Old Salem Dam.

Table 11: Old Salem Dam consequence category based on PAR.

Population at Risk	Severity of Damage and Loss			
	Minor	Medium	Major	Catastrophic
<1	Very Low	Low	Significant	High C
≥1 to ≤10	Significant	Significant	High C	High B
>10 to ≤100	High C	High C	High B	High A
>100 to ≤1000		High B	High A	Extreme
>1000			Extreme	Extreme

6.3 PLL CONCAT assessment

Based on a total incremental PLL of 0.009, and a 'MEDIUM' severity of damage and loss, ANCOLD proposes a Consequence Category of LOW for Old Salem Dam.

Table 12: Old Salem Dam consequence category based on PLL.

Potential Loss-of-Life	Severity of Damage and Loss			
	Minor	Medium	Major	Catastrophic
<0.1	Very Low	Low	Significant	High C
≥0.1 to ≤1	Significant	Significant	High C	High B
>1 to ≤5		High C	High B	High A
>5 to ≤50		High A	High A	Extreme
>50			Extreme	Extreme

6.4 Final assignment and justification

Through both a PAR assessment and a PLL assessment, the proposed ANCOLD consequence category of Old Salem Dam is **SIGNIFICANT**.

6.5 Summary of results

The summary of results for the ANCOLD consequence category assessment of Old Salem Dam.

Table 13: Summary of Old Salem Dam consequence category assessment results.

Assessment criteria	Old Salem Dam
Damage severity level	MEDIUM
Total incremental PAR	1.3
Total incremental PLL	0.009
PAR assessment CONCAT	SIGNIFICANT
PLL assessment CONCAT	LOW
Downstream assessment CONCAT	None
Assessment nominated	PAR

APPENDIX A. SITE PHOTOS

Figure A- 1: Northern wall of Old Salem dam



Figure A- 2: Culvert under discontinued railway connecting to northern watercourse

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Figure A- 3: Northern wall flow path towards Stockwell



Figure A- 4: View of proposed Old Salem dam from Plains Rd

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Figure A- 5: Proposed Old Salem dam site view towards Duck Ponds Rd



Figure A- 6: Stormwater culvert under Stockwell Rd.

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Figure A- 7: Culvert directing flow from Ducks Ponds Rd to watercourse

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APPENDIX B. OVERFLOW DESIGN

Old Salem is a proposed earth-fill turkey's nest dam with a controlled fill from BIL's water network. To reduce the risk of overtopping the dam, a piped overflow has been design. To ensure the overflow and freeboard (height between full water level and crest of dam) is sized sufficiently, a combination of wave height, flooding from rainfall and 'uncontrolled' fill into the dam were assessed.

WAVE HEIGHT

To ensure the freeboard is adequately sized for wave action caused by prevailing winds, the wave height can be calculated by Hawksley's formula:

$$H = 0.0138(F)^{0.5}$$

Where the H is wave height measured in meters and F is the fetch distance over the longest exposed water surface. The minimum depth for wave action is 0.25m.

RAINFALL

To estimate the amount of water that open storage can flood from rainfall, as per ANCOLD guidelines an average rainfall intensity of 1% AEP and a duration equivalent to a 168-hour (week-long) rainfall event was assessed. This information was sourced from SILO- Long Paddock as the closest available data for Stockwell.

'UNCONTROLLED' FILL

Due to filling regime and on-going visual checks and routine maintenance around the dam, it's unlikely that the in-fill will go unchecked longer than a week. Therefore, the volume will be accumulated by a peak day fill over a week.

Table 14: Overflow parameters

Item	Old Salem Dam	Volume
Hawksley's wave height	0.25 m	-
Rainfall 1% AEP event 168 hrs	0.15 m	3.3 ML
'Uncontrolled' fill @ 1 ML/day	0.274 m	7.0 ML
Total	0.674 m	10.8 ML

The resultant wave height is less than the proposed 0.6 m freeboard, so there will be no overtopping due to wave action. Plastic (HDPE) liner will be installed which will protect the embankments from erosion.

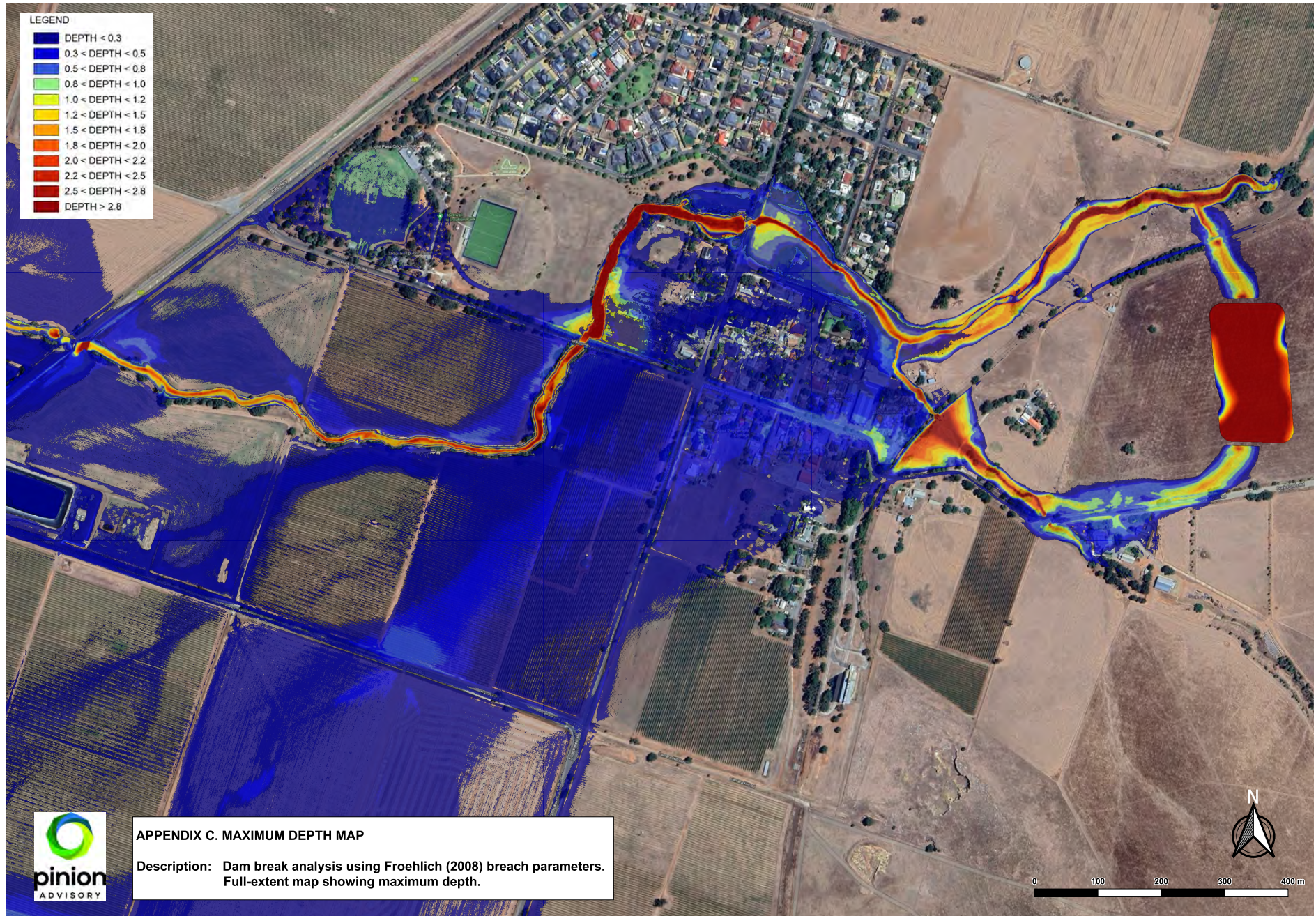
An outflow of 17.9 L/s over the week is needed to drain the 'uncontrolled' fill and rainfall to full water level. A 180 mm diameter vertical outlet with an operating hydraulic head of 120 mm (required water above drain to maintain full flow) has been implemented within the design.

APPENDIX C. MAXIMUM-DEPTH MAP

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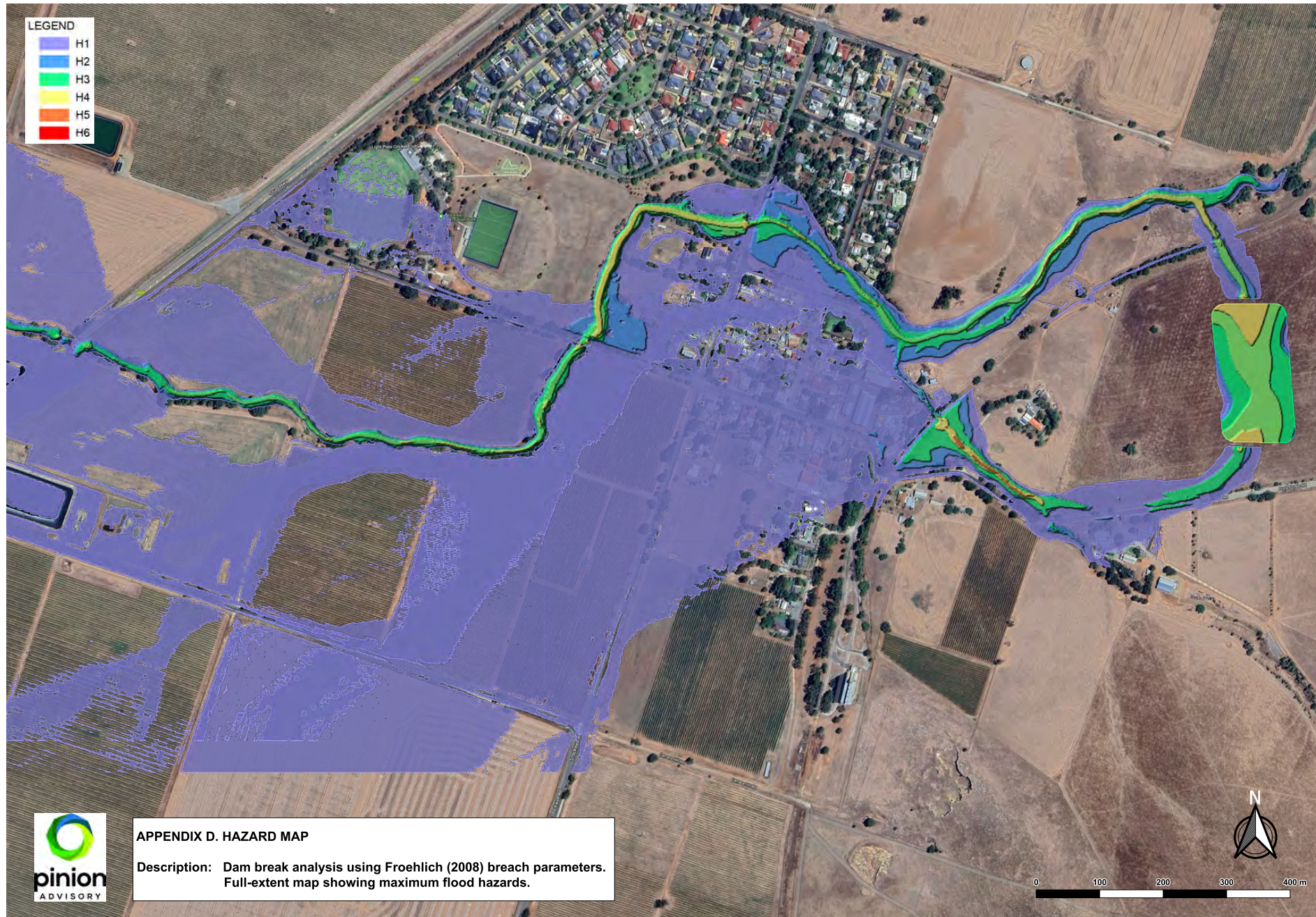


APPENDIX D. HAZARD MAP

Page **20** of **20** - Appendix D. hazard map

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APPENDIX E. FLOODED CARS ASSESSMENT

Project: Old Salem Dam

Road: Stockwell Road

Date: 02/10/2023

Table A1: Inundation statistics			
Parameter	Combined	North	South
Length of Road Hazard	100 m	100 m	100 m
Duration of Hazard (T _I)	15 mins	15 mins	15 mins
Maximum Depth	3.00 m	-	-
Maximum Water Velocity	4.0 m/s	-	-
Maximum Depth-Velocity Product	5.00 m ² /s	-	-
Damage to Road (Significant damage only)	Road surface		

Table A2: Traffic statistics			
Parameter	Combined	North	South
Lane Traffic Distribution - Business Hours (8am-6pm)	-	50%	50%
Lane Traffic Distribution - After-hours (6pm - 8am)	-	50%	50%
Heavy Vehicle % - Business hours	-	10.0%	10.0%
Average annual daily traffic (AADT)	4000	2000	2000
Number of vehicles (N _v) - Business hours	3200	1600	1600
Number of vehicles (N _v) - After-hours	800	400	400
N _v /hr - Business hours	320.0	160.0	160.0
N _v /hr - After-hours	57.1	28.6	28.6
Effective AADT - Business hours	7680	3840	3840
Effective AADT - After-hours	1371	686	686
Vehicle Speed	-	80 km/h	80 km/h
People per Vehicle	1.5	1.5	1.5
Inundation Transit Time (T _v)	4.50 secs	4.50 secs	4.50 secs
Scenario A temporal probability (P _{T:S-A}) - Business hours	0.40	0.20	0.20
Scenario A temporal probability (P _{T:S-A}) - After-hours	0.07	0.04	0.04
Traffic volume ID for P _{T:S} contributions - Business hours	2	2	2
Traffic volume ID for P _{T:S} contributions - After-hours	2	3	3
Traffic volume classification - Business hours	Moderate	Moderate	Moderate
Traffic volume classification - After-hours	Moderate	Low	Low
Use combined traffic volume ID?	TRUE		

Table A3: 'Flooded Cars' scenarios and risk contributions for traffic volumes

Traffic volume classification	Scenario A Vehicles present when the flood arrives	Scenario B Vehicles driving into the flooded area	Scenario C Vehicles driving over the damaged road after flooding
High Traffic Volume $P_{T:S-A} \geq 0.5$	High contribution Use calculated $P_{T:S-A}$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Moderate Traffic Volume $0.05 \leq P_{T:S-A} < 0.5$	Moderate contribution Use calculated $P_{T:S-A}$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Low Traffic Volume $P_{T:S-A} < 0.05$ $AADT \geq 500$ $AADT \times T_L \geq 1.0$	Negligible contribution May assume $P_{T:S-A} = 0$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Very Low Traffic Volume $P_{T:S-A} < 0.05$ $AADT < 500$ $AADT \times T_L < 1.0$	Negligible contribution May assume $P_{T:S-A} = 0$	Negligible contribution May use $P_{T:S-B} = 0$	High contribution $P_{T:S-C} = 1.0$

Table A4: Calculated contributing vehicles from scenarios

Scenario	Description	Calculated $P_{T:S}$		Override $P_{T:S}$	
		North	South	North	South
A_(BH)	Vehicles present when the flood arrives	0.200	0.200		
A_(AH)		0.036	0.036		
B₁(BH)	First vehicle arriving at flood	0.5	0.5		
B₁(AH)		0.5	0.5		
B₂(BH)	Subsequent vehicles arriving at flood	39	39		
B₂(AH)		7	7		
C_(BH)	First vehicle arriving at damaged road	0.5	0.5	0	0
C_(AH)		0.5	0.5	0	0

Table A5: 'Flooded Cars' suggested values for probability of driver inaction

Descriptor	P_{NEIT}	Guidance (for sunny day)
Virtually certain	0.999	
Very likely	0.99	Situation of high speed, short sight distance, night time resulting in driver not being aware of the dambreak until they are upon it.
Likely	0.9	
Neutral	0.5	
Unlikely	0.1	Good sight distance and appropriate breaking distance (speed) resulting in being able to stop before the flood, but depth of water is low for drivers may try entering regardless (driver experience).
Very unlikely	0.01	
Virtually impossible	0.001	

Table A6: Calculation of probability of driver inaction

Parameter	Combined	North	South
Vehicles following pioneer - BH	-	39	39
Vehicles following pioneer - AH	-	7	7
Sight Distance (SD) - BH	-	400 m	400 m
Sight Distance (SD) - AH	-	120 m	120 m
Road slope on approach	-	-2%	2%
Driver reaction time	1.5 secs	-	-
Light vehicle road friction coefficient	0.46	-	-
Heavy vehicle road friction coefficient	0.29	-	-
Driver likelihood of willingly proceeding through flood	0%	-	-
Crashed cars visibility to following vehicle - BH	100%	-	-
Crashed cars visibility to following vehicle - AH	100%	-	-
Sight Stopping Distance (SSD)† - Light vehicles	-	91 m	86 m
Sight Stopping Distance (SSD)† - Heavy vehicles	-	127 m	115 m
SSD standard deviation - Light vehicles	-	10%	10%
SSD standard deviation - Heavy vehicles	-	20%	20%
SD/SSD Difference - Light vehicles - BH	-	342%	366%
SD/SSD Difference - Heavy vehicles - BH	-	216%	249%
SD/SSD Difference - Light vehicles - AH	-	32%	40%
SD/SSD Difference - Heavy vehicles - AH	-	-5%	5%
P _{NET} - Light vehicles - BH	-	0.002	0.002
P _{NET} - Heavy vehicles - BH	-	0.002	0.002
P _{NET} - Light vehicles - AH	-	0.002	0.002
P _{NET} - Heavy vehicles - AH	-	0.841	0.500
P _{NET} - All vehicles weighted average - BH	-	0.002	0.002
P _{NET} - All vehicles weighted average - AH	-	0.085	0.051
P _{NET} - Pioneer (no crashed/stopped vehicles present) - BH	-	0.002	0.002
P _{NET} - Pioneer (no crashed/stopped vehicles present) - AH	-	0.085	0.051
P _{NET} - Following vehicle - BH	-	0.002	0.002
P _{NET} - Following vehicle - AH	-	0.002	0.002
P _{NET} - Weighted average for following vehicles - BH	-	0.000	0.000
P _{NET} - Weighted average for following vehicles - AH	-	0.000	0.000

Table A7: 'Flooded Cars' factors for vulnerability

Factor	Qualifier	Value
Road speed base factor (BF)	40 - 80 km/h	0.01
	90 - 110 km/h	0.1
Impact (I)	Impact with safety barrier or run off road	0.2
	Impact with ditch, fence, or small tree	0.4
	Impact with large tree, off embankment or into breach	2.0
Water Present (W)	Vehicle not in water but has impact accident	1.0
	Vehicle ends up in shallow slow-moving water	2.0
	Vehicle ends up in deep fast-moving water	$(0.7 \leq V_{D:A} \leq 0.999)^{\dagger}$
Time of Day (TD)	Business hours	1.0
	After-hours	2.0
Response Time (RT)	< 30 min	1.0
	≥ 30 min	2.0
$V_{D:A} = BF \times I \times W \times TD \times RT$		

[†] In a situation where an accident occurs in 'deep, fast-flowing water', a vehicle is virtually certain to be swept off the road with a high probability of drowning of the passengers. As such, this is an override situation with $V_{D:A}$ between 0.7 and 0.999.

Table A8: Calculation of vulnerability from factors

North	BF	I	W	TD	RT	$V_{D:A}$	
						Calculated	Override
A _(BH)	0.01	0.4	2	1	1	0.008	
A _(AH)	0.01	0.4	2	2	1	0.016	
B _{1(BH)}	0.01	0.4	2	1	1	0.008	
B _{1(AH)}	0.01	0.4	2	2	1	0.016	
B _{2(BH)}	0.01	0.4	2	1	1	0.008	
B _{2(AH)}	0.01	0.4	2	2	1	0.016	
C _(BH)	0.01	0.4	1	1	1	0.004	
C _(AH)	0.01	0.4	1	2	1	0.008	
South							
A _(BH)	0.01	0.4	2	1	1	0.008	
A _(AH)	0.01	0.4	2	2	1	0.016	
B _{1(BH)}	0.01	0.4	2	1	1	0.008	
B _{1(AH)}	0.01	0.4	2	2	1	0.016	
B _{2(BH)}	0.01	0.4	2	1	1	0.008	
B _{2(AH)}	0.01	0.4	2	2	1	0.016	
C _(BH)	0.01	0.4	1	1	1	0.004	
C _(AH)	0.01	0.4	1	2	1	0.008	

Table A9: 'Flooded Cars' probability of accident given driver inaction

Vehicle stability criteria	Population at risk scenario	Vehicle Speed	
		50 km/h	100 km/h
$D \times V \leq 0.45 \text{ m}^2/\text{s}$ with limiting $D < 0.4 \text{ m}$ and $V < 3.0 \text{ m/s}$	A - Vehicles present when the flood arrives	0.1	0
	B - Vehicles arriving at flood	0.1	0
	C - Vehicles arriving at minimally damaged road	N/A	N/A
	C - Vehicles arriving at minimally washed-out culvert/br	N/A	N/A
$D \times V \geq 0.45 \text{ m}^2/\text{s}$ with limiting $D > 0.4 \text{ m}$ and $V > 3.0 \text{ m/s}$	A - Vehicles present when the flood arrives	0.8	0
	B - Vehicles arriving at flood	0.8	0
	C - Vehicles arriving at significantly damaged road	0.1	0
	C - Vehicles arriving at significantly washed-out culv/br	0.8	0

Table A10: Calculation of PAR and PLL

North	$P_{T \rightarrow S}$	PAR_{vehicle}	$P_{NE \rightarrow T}$	PAR_{Weighted}	$P_{A \rightarrow NE}$	$V_{D \rightarrow A}$	PLL_{Scenario}
$A_{(BH)}$	0.200	1.500	1.000	0.125	0.800	0.008	0.001
$A_{(AH)}$	0.036	1.500	1.000	0.031	0.800	0.016	0.000
$B_{1(BH)}$	0.500	1.500	0.002	0.000	0.800	0.008	0.000
$B_{1(AH)}$	0.500	1.500	0.085	0.037	0.800	0.016	0.000
$B_{2(BH)}$	39.000	1.500	0.000	0.000	0.800	0.008	0.000
$B_{2(AH)}$	7.000	1.500	0.000	0.000	0.800	0.016	0.000
$C_{(BH)}$	0.000	1.500	0.002	0.000	0.100	0.004	0.000
$C_{(AH)}$	0.000	1.500	0.085	0.000	0.100	0.008	0.000
South							
$A_{(BH)}$	0.200	1.500	1.000	0.125	0.800	0.008	0.001
$A_{(AH)}$	0.036	1.500	1.000	0.031	0.800	0.016	0.000
$B_{1(BH)}$	0.500	1.500	0.002	0.000	0.800	0.008	0.000
$B_{1(AH)}$	0.500	1.500	0.051	0.022	0.800	0.016	0.000
$B_{2(BH)}$	39.000	1.500	0.000	0.000	0.800	0.008	0.000
$B_{2(AH)}$	7.000	1.500	0.000	0.000	0.800	0.016	0.000
$C_{(BH)}$	0.000	1.500	0.002	0.000	0.100	0.004	0.000
$C_{(AH)}$	0.000	1.500	0.051	0.000	0.100	0.008	0.000
PAR:				0.373	PLL: 0.002		

Project: Old Salem Dam

Road: Ponds Duck Road

Date: 02/10/2023

Table A1: Inundation statistics			
Parameter	Combined	East	West
Length of Road Hazard	500 m	500 m	500 m
Duration of Hazard (T _I)	15 mins	15 mins	15 mins
Maximum Depth	1.00 m	-	-
Maximum Water Velocity	4.0 m/s	-	-
Maximum Depth-Velocity Product	3.00 m ² /s	-	-
Damage to Road (Significant damage only)	Road surface		

Table A2: Traffic statistics			
Parameter	Combined	East	West
Lane Traffic Distribution - Business Hours (8am-6pm)	-	50%	50%
Lane Traffic Distribution - After-hours (6pm - 8am)	-	50%	50%
Heavy Vehicle % - Business hours	-	10.0%	10.0%
Average annual daily traffic (AADT)	1400	700	700
Number of vehicles (N _v) - Business hours	1120	560	560
Number of vehicles (N _v) - After-hours	280	140	140
N _v /hr - Business hours	112.0	56.0	56.0
N _v /hr - After-hours	20.0	10.0	10.0
Effective AADT - Business hours	2688	1344	1344
Effective AADT - After-hours	480	240	240
Vehicle Speed	-	50 km/h	50 km/h
People per Vehicle	1.5	1.5	1.5
Inundation Transit Time (T _v)	36.00 secs	36.00 secs	36.00 secs
Scenario A temporal probability (P _{T:S-A}) - Business hours	1.12	0.56	0.56
Scenario A temporal probability (P _{T:S-A}) - After-hours	0.20	0.10	0.10
Traffic volume ID for P _{T:S} contributions - Business hours	1	1	1
Traffic volume ID for P _{T:S} contributions - After-hours	2	2	2
Traffic volume classification - Business hours	High	High	High
Traffic volume classification - After-hours	Moderate	Moderate	Moderate
Use combined traffic volume ID?	TRUE		

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Table A3: 'Flooded Cars' scenarios and risk contributions for traffic volumes

Traffic volume classification	Scenario A Vehicles present when the flood arrives	Scenario B Vehicles driving into the flooded area	Scenario C Vehicles driving over the damaged road after flooding
High Traffic Volume $P_{T:S-A} \geq 0.5$	High contribution Use calculated $P_{T:S-A}$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Moderate Traffic Volume $0.05 \leq P_{T:S-A} < 0.5$	Moderate contribution Use calculated $P_{T:S-A}$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Low Traffic Volume $P_{T:S-A} < 0.05$ $AADT \geq 500$ $AADT \times T_L \geq 1.0$	Negligible contribution May assume $P_{T:S-A} = 0$	High contribution $P_{T:S-B} = 1.0$	Negligible contribution May assume $P_{T:S-C} = 0$
Very Low Traffic Volume $P_{T:S-A} < 0.05$ $AADT < 500$ $AADT \times T_L < 1.0$	Negligible contribution May assume $P_{T:S-A} = 0$	Negligible contribution May use $P_{T:S-B} = 0$	High contribution $P_{T:S-C} = 1.0$

Table A4: Calculated contributing vehicles from scenarios

Scenario	Description	Calculated $P_{T:S}$		Override $P_{T:S}$	
		East	West	East	West
A_(BH)	Vehicles present when the flood arrives	0.560	0.560		
A_(AH)		0.100	0.100		
B₁(BH)	First vehicle arriving at flood	0.5	0.5		
B₁(AH)		0.5	0.5		
B₂(BH)	Subsequent vehicles arriving at flood	13	13		
B₂(AH)		2	2		
C_(BH)	First vehicle arriving at damaged road	0.5	0.5	0	0
C_(AH)		0.5	0.5	0	0

Table A5: 'Flooded Cars' suggested values for probability of driver inaction

Descriptor	$P_{NE:T}$	Guidance (for sunny day)
Virtually certain	0.999	
Very likely	0.99	Situation of high speed, short sight distance, night time resulting in driver not being aware of the dambreak until they are upon it.
Likely	0.9	
Neutral	0.5	
Unlikely	0.1	Good sight distance and appropriate breaking distance (speed) resulting in being able to stop before the flood, but depth of water is low for drivers may try entering regardless (driver experience).
Very unlikely	0.01	
Virtually impossible	0.001	

Table A6: Calculation of probability of driver inaction

Parameter	Combined	East	West
Vehicles following pioneer - BH	-	13	13
Vehicles following pioneer - AH	-	2	2
Sight Distance (SD) - BH	-	400 m	400 m
Sight Distance (SD) - AH	-	120 m	120 m
Road slope on approach	-	-2%	2%
Driver reaction time	1.5 secs	-	-
Light vehicle road friction coefficient	0.46	-	-
Heavy vehicle road friction coefficient	0.29	-	-
Driver likelihood of willingly proceeding through flood	0%	-	-
Crashed cars visibility to following vehicle - BH	100%	-	-
Crashed cars visibility to following vehicle - AH	100%		
Sight Stopping Distance (SSD) [†] - Light vehicles	-	43 m	41 m
Sight Stopping Distance (SSD) [†] - Heavy vehicles	-	57 m	53 m
SSD standard deviation - Light vehicles	-	10%	10%
SSD standard deviation - Heavy vehicles	-	20%	20%
SD/SSD Difference - Light vehicles - BH	-	826%	868%
SD/SSD Difference - Heavy vehicles - BH	-	598%	661%
SD/SSD Difference - Light vehicles - AH	-	178%	190%
SD/SSD Difference - Heavy vehicles - AH	-	109%	128%
P _{NET} - Light vehicles - BH	-	0.002	0.002
P _{NET} - Heavy vehicles - BH	-	0.002	0.002
P _{NET} - Light vehicles - AH	-	0.002	0.002
P _{NET} - Heavy vehicles - AH	-	0.002	0.002
P _{NET} - All vehicles weighted average - BH	-	0.002	0.002
P _{NET} - All vehicles weighted average - AH	-	0.002	0.002
P _{NET} - Pioneer (no crashed/stopped vehicles present) - BH	-	0.002	0.002
P _{NET} - Pioneer (no crashed/stopped vehicles present) - AH	-	0.002	0.002
P _{NET} - Following vehicle - BH	-	0.002	0.002
P _{NET} - Following vehicle - AH	-	0.002	0.002
P _{NET} - Weighted average for following vehicles - BH	-	0.000	0.000
P _{NET} - Weighted average for following vehicles - AH	-	0.000	0.000

Table A7: 'Flooded Cars' factors for vulnerability

Factor	Qualifier	Value
Road speed base factor (BF)	40 - 80 km/h	0.01
	90 - 110 km/h	0.1
Impact (I)	Impact with safety barrier or run off road	0.2
	Impact with ditch, fence, or small tree	0.4
	Impact with large tree, off embankment or into breach	2.0
Water Present (W)	Vehicle not in water but has impact accident	1.0
	Vehicle ends up in shallow slow-moving water	2.0
	Vehicle ends up in deep fast-moving water	$(0.7 \leq V_{D:A} \leq 0.999)^{\dagger}$
Time of Day (TD)	Business hours	1.0
	After-hours	2.0
Response Time (RT)	< 30 min	1.0
	≥ 30 min	2.0
$V_{D:A} = BF \times I \times W \times TD \times RT$		

[†] In a situation where an accident occurs in 'deep, fast-flowing water', a vehicle is virtually certain to be swept off the road with a high probability of drowning of the passengers. As such, this is an override situation with $V_{D:A}$ between 0.7 and 0.999.

Table A8: Calculation of vulnerability from factors

East	BF	I	W	TD	RT	$V_{D:A}$	
						Calculated	Override
A _(BH)	0.01	0.4	2	1	1	0.008	
A _(AH)	0.01	0.4	2	2	1	0.016	
B _{1(BH)}	0.01	0.4	2	1	1	0.008	
B _{1(AH)}	0.01	0.4	2	2	1	0.016	
B _{2(BH)}	0.01	0.4	2	1	1	0.008	
B _{2(AH)}	0.01	0.4	2	2	1	0.016	
C _(BH)	0.01	0.4	1	1	1	0.004	
C _(AH)	0.01	0.4	1	2	1	0.008	
West							
A _(BH)	0.01	0.4	2	1	1	0.008	
A _(AH)	0.01	0.4	2	2	1	0.016	
B _{1(BH)}	0.01	0.4	2	1	1	0.008	
B _{1(AH)}	0.01	0.4	2	2	1	0.016	
B _{2(BH)}	0.01	0.4	2	1	1	0.008	
B _{2(AH)}	0.01	0.4	2	2	1	0.016	
C _(BH)	0.01	0.4	1	1	1	0.004	
C _(AH)	0.01	0.4	1	2	1	0.008	

Table A9: 'Flooded Cars' probability of accident given driver inaction

Vehicle stability criteria	Population at risk scenario	Vehicle Speed	
		50 km/h	100 km/h
$D \times V \leq 0.45 \text{ m}^2/\text{s}$ with limiting $D < 0.4 \text{ m}$ and $V < 3.0 \text{ m/s}$	A - Vehicles present when the flood arrives	0.1	0
	B - Vehicles arriving at flood	0.1	0
	C - Vehicles arriving at minimally damaged road	N/A	N/A
	C - Vehicles arriving at minimally washed-out culvert/br	N/A	N/A
$D \times V \geq 0.45 \text{ m}^2/\text{s}$ with limiting $D > 0.4 \text{ m}$ and $V > 3.0 \text{ m/s}$	A - Vehicles present when the flood arrives	0.8	0
	B - Vehicles arriving at flood	0.8	0
	C - Vehicles arriving at significantly damaged road	0.1	0
	C - Vehicles arriving at significantly washed-out culv/br	0.8	0

Table A10: Calculation of PAR and PLL

East	P _{T:S}	PAR _{vehicle}	P _{NE:T}	PAR _{Weighted}	P _{A:NE}	V _{D:A}	PLL _{Scenario}
A _(BH)	0.560	1.500	1.000	0.350	0.800	0.008	0.002
A _(AH)	0.100	1.500	1.000	0.088	0.800	0.016	0.001
B ₁ (BH)	0.500	1.500	0.002	0.000	0.800	0.008	0.000
B ₁ (AH)	0.500	1.500	0.002	0.001	0.800	0.016	0.000
B ₂ (BH)	13.000	1.500	0.000	0.000	0.800	0.008	0.000
B ₂ (AH)	2.000	1.500	0.000	0.000	0.800	0.016	0.000
C _(BH)	0.000	1.500	0.002	0.000	0.100	0.004	0.000
C _(AH)	0.000	1.500	0.002	0.000	0.100	0.008	0.000
West							
A _(BH)	0.560	1.500	1.000	0.350	0.800	0.008	0.002
A _(AH)	0.100	1.500	1.000	0.088	0.800	0.016	0.001
B ₁ (BH)	0.500	1.500	0.002	0.000	0.800	0.008	0.000
B ₁ (AH)	0.500	1.500	0.002	0.001	0.800	0.016	0.000
B ₂ (BH)	13.000	1.500	0.000	0.000	0.800	0.008	0.000
B ₂ (AH)	2.000	1.500	0.000	0.000	0.800	0.016	0.000
C _(BH)	0.000	1.500	0.002	0.000	0.100	0.004	0.000
C _(AH)	0.000	1.500	0.002	0.000	0.100	0.008	0.000
PAR:				0.877	PLL:		0.007

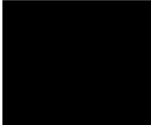
Details of Representations

Application Summary

Application ID	23035013
Proposal	Construction of a 160ML irrigation dam, with max fill of 11m and max cut of 6.5m (total storage area of approx. 2.5km ²)
Location	LOT 4 DUCK PONDS RD STOCKWELL SA 5355

Representations

Representor 1 - Kevin Walsh

Name	Kevin Walsh
Address	
Submission Date	16/01/2024 07:21 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development

Reasons

The specific reasons I believe that planning consent should be granted/refused are: Looking at the flood hazard mapping assessment and comparing it to the damage severity I believe that the risk and value of potential damage has been grossly underestimated. My family and I live at 6 railway Terrace in Stockwell and I don't believe that the computer generated flood hazard assessment has taken into consideration how the flood water will actually flow should the dam wall fail. The assessment estimates approximate less than 10million in damages but looking at the hazard map and seeing how many houses would be inundated I think that this value to repair the water damage to be completely insufficient. I also believe that the hazard assessment is incorrect as any water that flows over to the south side of duckponds road inevitably ends up affecting most residents in Railway Terrace which has been raised and proven over the last 18 months. These water course issues should be taken into consideration when completing an assessment of this application as any future development within the immediate area and towards Stockwell road would be greatly effected given that there is still no solution for an run-off rain water let alone an influx due to dam wall failure. Please when assessing this application take the current water drainage issues raised with the Barossa Council into consideration and come up with a viable solution before construction is granted and undertaken on this project as there is still no current solution for inundation when we get 20mm of rain in a downpour let alone a 160ML dam failing.

Attached Documents

Representation-on-Application-Performance-Assessed-Development-version-2-1-1325935.pdf

**REPRESENTATION ON APPLICATION –
PERFORMANCE ASSESSED DEVELOPMENT***Planning, Development and Infrastructure Act 2016*

Development Number:	23035013
Nature of Development:	Construction of 160ML irrigation dam
Zone/Sub-zone/Overlay:	Rural
Subject Land:	CT5229/947
Contact Officer:	The Barossa Council
Phone Number:	08 8563 8444
Close Date:	23/1/2024

My name*: Kevin Walsh	My phone number: [REDACTED]
My postal address*: [REDACTED]	My email: [REDACTED]

** Indicates mandatory information*

My position is:	☐ I support the development
	☐ I support the development with some concerns (detail below)
	☒ I oppose the development

The specific reasons I believe that planning consent should be granted/refused are:

Looking at the flood hazard mapping assessment and comparing it to the damage severity I believe that the risk and value of potential damage has been grossly underestimated.

My family and I live at 6 railway Terrace in Stockwell and I don't believe that the computer generated flood hazard assessment has taken into consideration how the flood water will actually flow should the dam wall fail.

The assessment estimates approximate less than 10million in damages but looking at the hazard map and seeing how many houses would be inundated I think that this value to repair the water damage to be completely insufficient.

I also believe that the hazard assessment is incorrect as any water that flows over to the south side of duckponds road inevitably ends up affecting most residents in Railway Terrace which has been raised and proven over the last 18 months. These water course issues should be taken into consideration when completing an assessment of this application as any future development within the immediate area and towards Stockwell road would be greatly effected given that there is still no solution for an run-off rain water let alone an influx due to dam wall failure.

Please when assessing this application take the current water drainage issues raised with the Barossa Council into consideration and come up with a viable solution before construction is granted and undertaken on this project as there is still no current solution for inundation when we get 20mm of rain in a downpour let alone a 160ML dam failing.

[attach additional pages as needed]



Government of South Australia
Department for Trade
and Investment

Note: In order for this submission to be valid, it must:

- be in writing; and
- include the name and address of the person (or persons) who are making the representation; and
- set out the particular reasons why planning consent should be granted or refused; and
- comment only on the performance-based elements of the proposal, which does not include the:
 - [Click here to enter text.](#) [list any accepted or deemed-to-satisfy elements of the development].

I:	☒ wish to be heard in support of my submission*
	☐ do not wish to be heard in support of my submission
By:	☒ appearing personally
	☐ being represented by the following person: Click here to enter text.

*You may be contacted if you indicate that you wish to be heard by the relevant authority in support of your submission

Signature: *Kevin Walsh*

Date: 16/1/2024

Return Address: [Click here to enter text.](#) [relevant authority postal address] or

Email: Development@barossa.sa.gov.au [relevant authority email address] or

Complete online submission:

plan.sa.gov.au/have_your_say/notified_developments/current_notified_developments

Representations

Representor 2 - Greg Schubert

Name	Greg Schubert
Address	
Submission Date	22/01/2024 04:40 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development

Reasons

- This entire property is 53.70ha or 537,000 square metres. The proposal indicates the Salem dam has a surface area of 2.5 square km = 1,000,000 square metres. This appears to be a major error in the submission? What other information supplied within the proposal is also wrong based on these calculations? Does this miscalculation also influence the information regarding the potential impact to the local community in the event of a dam breach? - The global viticulture industry is currently experiencing a massive oversupply of wine grapes. This is also the case in the local Barossa industry with many local growers unable to find a buyer for fruit in the current 2024 vintage. The industry doesn't need additional production when it has been recognised that the Australian production should in fact be reduced by approx 25%. - Rather than develop additional green field sites as this proposal supports, it would be far more prudent to pursue the purchase of existing vineyards available within the Barossa Valley with established irrigation and management infrastructure already in place. -The Salem property further encroaches into broadacre farm land increasing the risks for all farming parties. - The Salem property contains stoney red clay based soils that are highly soluble and prone to erosion. Existing evidence of erosion on the property suggests that intensive activity and heavy traffic enhances this matter. - Historical rainfall records and local flooding records show that large rainfall events have taken place within this catchment - 1983 Nuriootpa floodwaters from the Stockwell, Truro and Moculta regions, 1992 indicate over 150mm rainfall within a 1.5 hour window. 2022 summer rainfall events all experienced high surface water run off on the property attributing to erosion risk and bank integrity. Are these extreme weather events considered as part of the risk assessment outside of "typical" annual rainfall patterns? - The quality of the current grape production on the balance of the property is below premium - the industry doesn't need additional low value tonnes compounding the oversupply problems. - Although the risk of the dam breaching is very low, is this risk worth having on the table for a comparatively small increase in overall vineyard area and production on this site (as above, there are many existing and more financially attractive locations suitable for wine grape production within the Barossa production zone). - Existing vineyards in the region all have frost fans installed on the properties. If the Salem dam is approved will this also then have a knock on effect in the years ahead as the owners develop additional vineyard area. Frost fans would potentially impact neighbors including residents in the Stockwell township. - The Barossa Council have diverted heavy truck traffic away from Duckponds Road onto Bastian Hill Road east of Stockwell. Will this development include the return of regular heavy transport through the Stockwell township? This is obviously not what the Council desire and certainly wouldn't be approved by local residents..

Attached Documents

Representations**Representor 3 - Alea Devine**

Name	Alea Devine
Address	
Submission Date	23/01/2024 11:18 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
Reasons If it busts it will take out my property and my neighbours. We already have issues with flooding when heavy rain	

Attached Documents

Representations**Representor 4 - Nick Clowser**

Name	Nick Clowser
Address	
Submission Date	23/01/2024 11:21 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
Reasons If the dam busts or overflows my property will get flooded we already have flooding problems when we get heavy rain I do not like the idea of a massive dam near my house	

Attached Documents



30th January 2024

Ref: 9597resptoreps.

The Chief Executive Officer
The Barossa Council
PO Box 867,
Nuriootpa SA 5355

Access Planning (SA) Pty Ltd
ABN 57 089 702 241
PO Box 39
Plympton SA 5038
Telephone 0418 832 334
dhutchison@accessplanning.com.au
www.accessplanning.com.au

Attention Ms. Janine Lennon

Dear Janine

Re **PROPOSED DAM DUCK PONDS ROAD - PIECE 5 DEPOSITED PLAN 40747
STOCKWELL**

I refer to the 4 submissions received in response to the public notification of the above development.

As the submissions raise common issues, I have summarised the matters of concern and respond accordingly.

Issues raised include:

1. flood risk,
2. need for additional viticulture,
3. risk of erosion,
4. potential for frost fans as a result of future viticulture development,
5. additional heavy vehicle traffic on Duck Ponds Road.

1 Flood Risk

The issue of flood risk has been dealt with in the submission lodged with the application, which is repeated below.

Hazards (Flooding - Evidence Required) Overlay

DO 1 Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.

A detailed flood hazard assessment of the dam has been undertaken and forms part of the application documents. The assessment is based on a worst-case scenario involving a full dam and catastrophic failure of the northern wall of the dam releasing high volumes of water over a short period of time, with the majority of water in dam lost in the first 30 minutes of a breach (refer Figure 2 in the Dam Assessment report). The report assigns a significant risk downstream in the event of a catastrophic failure of the dam walls.

Clearly it is in the interest of the applicant to ensure that the dam is maintained to a proper extent to ensure that failure of the walls does not occur. To this end, and to minimise the likelihood of dam wall failure there will be an emergency release valve on the outlet pipe of



the dam. This will have the ability to release water at a controlled rate in the case of the dam needing to be emptied rapidly to prevent a wall failure.

The dam will be offline with a piped inlet from the BIL supply which will control the rate at which the dam is filled. The inlet will be valved to enable isolation when the dam is full. The dam is designed with a 0.6m freeboard which accommodates a 0.25m wave action and 0.15 m rainfall inflow (168 h 1 in 100 ARI as per ANCOLD guidelines). The 180 mm overflow pipe is designed to accommodate unabated inflow at 18 L/s (with no pumped outflow).

Proper maintenance of the dam is essential to ensure its continued effectiveness and safety and to this end regular monthly inspections are proposed and any required repairs, and upgrades will be undertaken by the applicant to ensure the integrity of the dam walls.

Further, the risk is also minimised by the fact that the dam has a limited upstream catchment and is primarily filled by pumped water, as such high-volume storm events are unlikely to contribute to high water input into the dam that might then contribute to failure of the dam walls.

It has been recommended that an Operations, Maintenance and Surveillance (OMS) Manual be prepared in accordance with ANCOLD, 2003 prior to the dam being commissioned. The manual should include but not necessarily be limited to the following:

- Design intent
- Operations and inspections
- Water management procedures
- Criteria of mechanical and electrical works
- Dam surveillance
- Maintenance and on-going works

Operational Management Plans with the OMS document should specifically highlight all designer requirements for operation and response actions which must be met to ensure the ongoing safety of the dam.

It is important to reiterate that the flood modeling has been based on a catastrophic failure of the dam wall. I am instructed that the only way such a failure is likely to occur would be by explosive detonation of the wall.

Through regular inspections as proposed there is normally ample time to prevent any failure of the dam wall once an issue is detected. Noting that it is clearly in the best interest of the applicants to ensure that the dam was is maintained in a structurally sound condition.

The applicant will be mitigating the chance of a catastrophic failure by:

- having a plastic lining to the dam,
- Leak detection and drainage,
- Controlled emergency discharge,
- Outer bank seeded for stabilisation,
- Design Freeboard allows for wave action, 24h of BIL inflow and 1:100 rainfall,
- Overflow is designed to cater for maximum BIL inflow and 1:100 rainfall event.



The dam design is such it will not be affecting the pervious catchment, so site runoff is no more or less than pre-development.

I can confirm that rainfall patterns based on 1:100 event and the Dam burst modelling and assessment follows ANCOLD guidelines a highly regarded industry standard software. Given the dam is a pumped storage runoff into the dam from the surrounding catchment is not an issue and water volumes in the dam can be controlled quite separately from inflow from external sources.

Modelling has been conducted by a qualified engineer and results reviewed by qualified and experienced engineer.

2. Need for additional viticulture,

This application is not a viticultural use of the land so comments in respect to the need for further viticultural development are irrelevant. Moreover, it is entirely up to applicant to determine the extent to which they need to develop additional viticultural land and the capability of the land to accommodate viticulture.

3. Risk of erosion,

I have seen any particular evidence of significant erosion on the land other than in short sections along the creek to the northeast of the proposed dam. Development of the dam will involve the diversion of water from within the existing limited catchment around the dam which will be undertaken with erosion protection measures in place.

4. Potential for frost fans as a result of future viticulture development,

As not viticulture and hence frost fans form part of the current application the representers concerns regarding these issues are irrelevant to an assessment of the application at hand.

5. Additional heavy vehicle traffic on Duck Ponds Road.

Other than construction vehicles required during the construction of the dam, traffic associated with the proposed development will be unchanged, noting that the land is required to be accessed by heavy farm vehicles in its present use for cropping.

6.0 CONCLUSION

I consider that the concerns expressed in the submissions received misunderstand the flooding impacts which as iterated on a number of occasions only result from a catastrophic failure of the dam wall.

I confirm that I will be attending at the Panel meeting at which the application is to be considered to respond to any verbal submission or new matters raised.

Should you require further information please contact me on 0418832334 or by email and dhutchison@accessplanning.com.au.

Yours sincerely



A handwritten signature in blue ink that reads 'D Hutchison'.

David Hutchison BA, Grad Dip, PIA, CPP
Access Planning (SA) Pty Ltd

7. REPORTS – REVIEW OF ASSESSMENT MANAGER DECISIONS (PLANNING, DEVELOPMENT AND INFRASTRUCTURE ACT 2016)

Nil.

8. REPORTS – PANEL UPDATES

Nil.

9. REPORTS – OTHER BUSINESS

9.1 Assessment Manager Quarterly Report - October 2023 to December 2023

INTRODUCTION

Clause 18 of the Barossa Assessment Panel Operating and Meeting Procedures requires the Assessment Manager to prepare a quarterly report on:

- The development applications determined under delegated authority of the Barossa Assessment Panel for the previous period.
- A report at the next meeting of the Panel for any development application delegated by the Panel where a deemed consent notice has been received.

This report provides a quarterly report for the period October 2023 to December 2023.

REPORT

The Panel is assigned as a relevant authority, in its own right, under the *Planning, Development and Infrastructure Act 2016*. In the exercise of its duties, the Panel delegate to the Assessment Manager specific duties and powers on its behalf. Delegations enhance decision making processes and allow nominated matters to be resolved efficiently and effectively without the need for the Panel's consideration.

The delegations provide for:

- Administrative matters to assist in the timely processing of applications such as verifying development applications, undertaking statutory referrals and public notification.
- Determining prescribed development applications.

The planning applications received by The Barossa Council for the reporting period are summarised in the table below.

	Number
Planning Applications Lodged	175
Planning Applications determined (excluding Private Certification)	122
Notified Applications	15
Determined Planning Consents by Relevant Authority (excluding Private Certification):	
• BAP	8
• Assessment Manager (AM)	95
• AM for BAP	7

The number of development applications that were notified during this period was 15. 95 development applications were determined by the Assessment Manager. Eight (8) development applications were determined by the Panel and seven (7) development applications were determined by the Assessment Manager under delegation of the Panel.

There are no outstanding development applications subject to decision under the repealed *Development Act 1993* (prior to 19 March 2021).

Development Applications Assessed under Delegated Authority of BAP by the Assessment Manager

The development applications considered by the Assessment Manager under Delegated Authority of the Panel are summarised below:

Development Application 22028999 – 2591 Sturt Highway Nuriootpa <i>Alterations and additions to existing offices associated with an existing workshop and landscape service depot, new car parking and manoeuvring areas, relocation of shipping containers x 2, landscape storage bins and associated advertisement and landscaping</i> Representations – Nil Decision – Planning Consent Granted 6 December 2023 subject to conditions
Development Application 22037411 – 177 Cockatoo Lane Sandy Creek <i>Alterations and additions to existing Intensive Animal Keeping (Poultry Egg Farm); Extension of (poultry laying) sheds 16 & 17 (total shed size measuring 85.14m x 15.77m x 1.863m wall height & 85.14m x 12.27m x 2.38m wall height); Construction of a packing shed 15 (measuring 12.0m x 12.0m x 3.0m wall height); Construction of an egg conveyor structure between sheds 15, 16 & 17; Construction of three control room buildings (1 x measuring 6.0m x 3.03m x 1.8m wall height & 2 x measuring 3.0m x 3.0m x 2.2m wall height)</i> Representations – Three (nil requested to be heard) Decision – Planning Consent Granted 1 November 2023 subject to conditions
Development Application 23002772 – 15 Lindsay Street Angaston <i>Construction of an additional tourist accommodation building - single-storey, accommodating a maximum of two guests</i> Representations – Nil Decision – Planning Consent Granted 15 November 2023 subject to conditions
Development Application 23023292 – 118 Melrose Street Mount Pleasant <i>Change of use from shop & dwelling to single-storey detached dwelling and retention of existing sealed car park</i> Representations – One (nil requested to be heard) Decision – Planning Consent Granted 22 December 2023 subject to conditions
Development Application 23024715 – 12-14 Bilyara Road Tanunda <i>Single storey alterations and additions to an existing two-storey detached dwelling</i> Representations – Nil Decision – Planning Consent Granted 3 November 2023 subject to conditions
Development Application 23026242 – 310 Light Pass Road Light Pass (1) <i>Construction of a store - barrel store (measuring 20m x 15.7m x 6.0m wall height)</i> Representations – Nil Decision – Planning Consent Granted 1 November 2023 subject to conditions
Development Application 23030093 – 131 Krondorf Road Krondorf <i>Construction of Store (partially open-sided) in association with existing winery with maximum dimensions of 39.24m x 6.4m x 2.965m peak height</i> Representations – Nil Decision – Planning Consent Granted 12 December 2023 subject to conditions

Deemed Consents

No deemed consent notices have been received for this period.

CONCLUSION

The Assessment Manager's Quarterly Report for the period October 2023 to December 2023 be received and noted.

RECOMMENDATION

That the report be received.

10. REPORTS – CONFIDENTIAL

Nil.

11. NEXT MEETING

Tuesday 2 April 2024 commencing at 5.00 pm

12. CLOSURE OF MEETING

The Presiding Member will declare the meeting closed.