Native Vegetation Clearance

Cowell Foreshore – Project Updates

Data Report

Clearance under the *Native Vegetation Regulations 2017*

31 August 2021

Prepared by Angela Carpenter and Dr Travis How – EBS Ecology

Native Vegetation Clearance Cowell Foreshore – Project Updates Data Report

31 August 2012

Version 1

Prepared by EBS Ecology for District Council of Franklin Harbour

Document Control					
Revision No.	**Date issued**	**Authors**	**Reviewed by**	**Date Reviewed**	**Revision type**
1	24/08/2021	Angela Carpenter	Dr Travis How Darren Zechner	24/08/2021 31/08/2021	Draft

Distribution of Copies			
Revision No.	**Date issued**	**Media**	**Issued to**
1	27/08/2021	Electronic	Darren Zechner, District Council of Franklin Harbour

EBS Ecology Project Number: EX200804

COPYRIGHT: Use or copying of this document in whole or in part (including photographs) without the written permission of EBS Ecology's client and EBS Ecology constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of EBS Ecology's client, and is subject to and issued in connection with the provisions of the agreement between EBS Ecology and its client. EBS Ecology accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

CITATION: EBS Ecology (2021) Native Vegetation Clearance Cowell Foreshore Updates Data Report. Report to District Council of Franklin Harbour. EBS Ecology, Adelaide.

Cover photograph: Native Vegetation within the Proposed Clearance Area.

EBS Ecology
112 Hayward Avenue
Torrensville, South Australia 5031
t: 08 7127 5607
http://www.ebsecology.com.au
email: info@ebsecology.com.au

Glossary and abbreviations

AHD	Australian Height Datum
BAM	Bushland Assessment Method
BDBSA	Biological Database of South Australia (maintained by DEW)
DAWE	Department of Agriculture, Water and the Environment (Commonwealth)
DC	District Council
DEW	Department for Environment and Water (South Australia)
EBS	Environment and Biodiversity Services Pty Ltd (trading as EBS Ecology)
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
ha	Hectare(s)
IBRA	Interim Biogeographical Regionalisation of Australia
km	Kilometre(s)
NatureMaps	Initiative of DEW that provides a common access point to maps and geographic information about South Australia's natural resources in an interactive online mapping format
NPW Act	*National Parks and Wildlife Act 1972*
NV Act	*Native Vegetation Act 1991*
NVC	Native Vegetation Council
OMC	Optimum Moisture Content
PMST	Protected Matters Search Tool (under the EPBC Act; maintained by DAWE)
Project	Proposed Clearance of Clearance Area.
Project Area	Also referred to as the Proposed Clearance Area. Shown in Figure 2.
RL	Reduced Level
SA	South Australia(n)
Search Area	5 km buffer of the Project Area considered in the desktop assessment database searches
SEB	Significant Environmental Benefit
sp.	Species
spp.	Species (plural)
ssp.	Sub-species

STAM	Scattered Tree Assessment Method
TEC	Threatened Ecological Community
var.	Variety (a taxonomic rank below that of species and subspecies, but above that of form)

Table of contents

List of Tables

List of Figures

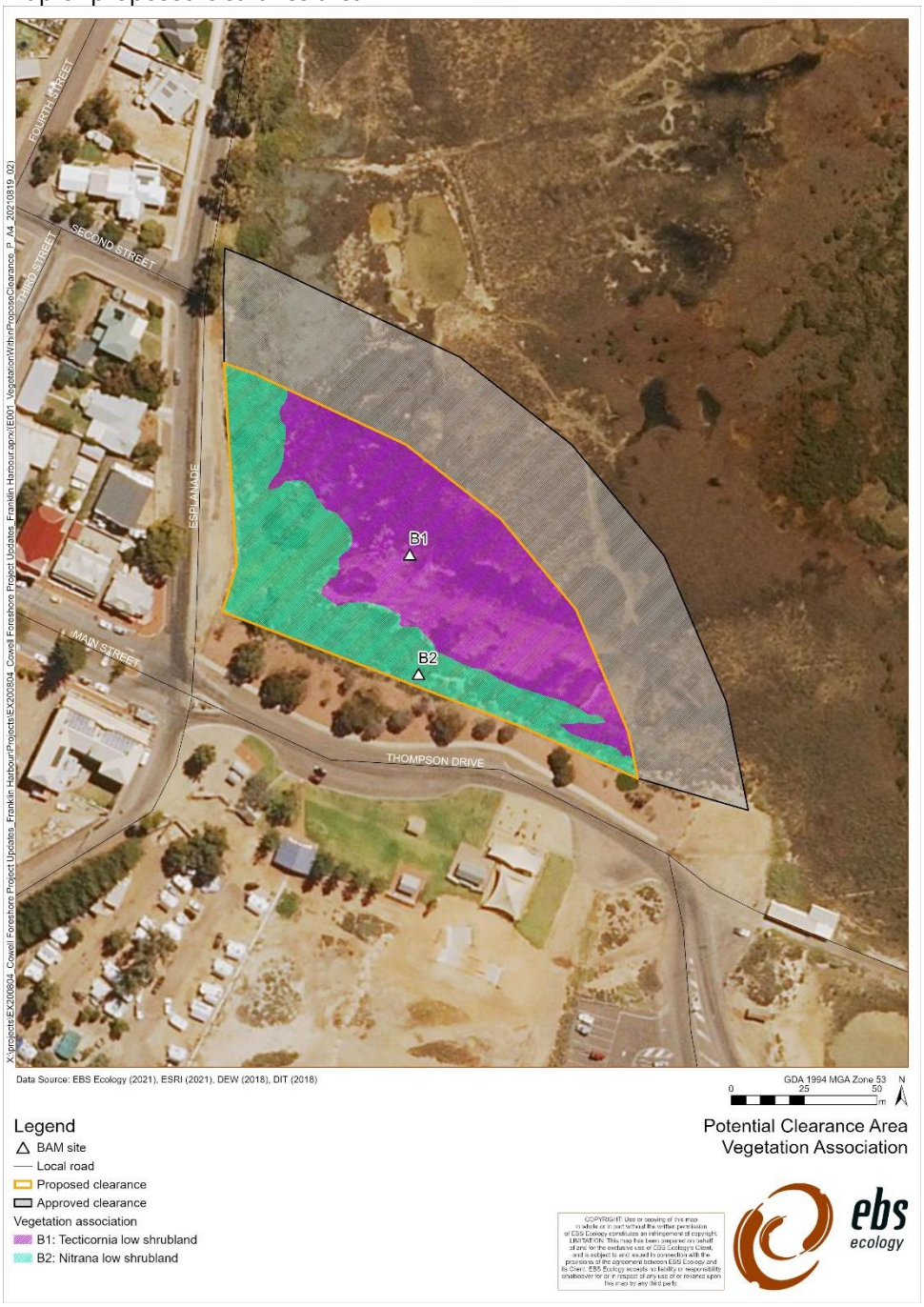
1. Application information

Table 1. Application details.

Applicant:	District Council of Franklin Harbour		
Key contact:	Darren Zechner, Works Manager		
Landowner:	District Council of Franklin Harbour		
Site Address:	Area between Esplanade, Second St, and Main St/Thompson Drive, Cowell.		
Local Government Area:	The District Council of Franklin Harbour	**Hundred:**	532600 Playford
Title ID:	Road reserve plus: CR/6253/181 (0.3113 ha) CT/6253/182 (0.6138 ha)	**Parcel ID**	D124864 Q102 D124864 Q103

Table 2. Summary of the proposed clearance.

Purpose of clearance:	The main purpose of the clearance is to construct a wetland to detain and treat stormwater runoff from the Main St, Thompson Drive and Second St catchments and prevent the release of pollutants into the Foreshore.
Native Vegetation Regulation:	Regulation 12, Schedule 1; clause 34, Infrastructure.
Description of the vegetation under application:	0.55 ha of *Tecticornia* Low Shrubland in medium to high condition. 0.4 ha of *Nitraria* Low Shrubland in medium to high condition
Total proposed clearance – area (ha) and/or number of trees:	0.95 ha are proposed to be cleared.
Level of clearance:	Level 4
Overlay (Planning and Design Code):	Native Vegetation Overlay, (Coastal Area Overlay).

Map of proposed clearance area:	Map of proposed clearance area 
Mitigation Hierarchy:	Impacts will be minimised by using dust control measures and other measures detailed in the Construction Environment Management Plan during construction. The area will be landscaped and planted with native vegetation once completed.
SEB Offset proposal	Payment of $16,739.26 or 44.88 SEB points required (from 243.1 available in DC Franklin Harbour Offset Area).

2. Purpose of clearance

2.1. Description

The District Council of Franklin Harbour propose to clear a triangular shaped area between the recently approved clearance of the Second St Extension at Cowell and the Esplanade, Second St, and Main St/Thompson Drive.

The main purpose of the clearance is to construct a wetland to detain and treat stormwater runoff from the Main St, Thompson Drive and Second St catchments and prevent the release of pollutants into the Foreshore. The area will be a public open space and will be landscaped and planted with native species.

Surrounding land-use of the Proposed Clearance Area is reserve, utility industry, residential and non-private residential.

2.2. Background

On 20 September 2017 the District Council of Franklin Harbour proposed an elevated (RL 3.0 m AHD) extension of Second Street in the Cowell Foreshore to be used by trailered fishing vessels (including oyster boats towed by tractors) for direct access to the boat ramp. This would improve safety during peak summer periods (Bebbington 2017).

As part of the application, Bebbington (2017) carried out a vegetation assessment for the Second Street Extension Native Vegetation Clearance Application which also covered the current Proposed Clearance Area. This report was called *Vegetation Assessment: Second Street extension and Foreshore Access Upgrade, Cowell SA for District Council of Franklin Harbour*. The vegetation was mapped at a very fine scale. The history of Cowell since the 1880's and the foreshore historical disturbance was detailed in this report. The report recognised that the area is the EPBC listed Vulnerable threatened ecological community *Subtropical and Temperate Coastal Saltmarsh* but it said it did not meet the diagnostic criteria or condition thresholds due to being degraded. Assessments against Clearance Principles were made in a non-standardised way and found Clearance to be either at Variance or Not at variance.

On 16 June 2020 the 0.7 hectare (ha) Second Street Extension Vegetation Removal Request was approved by the NVC, subject to 9 conditions (see Appendix 2).

Condition 4 was around protecting the vegetation surrounding the Second Street Extension, including the area of saltmarsh enclosed by the new road. Condition 5 was to install sufficient culverts under the Second Street Extension to retain tidal movement to the enclosed saltmarsh, to ensure the ongoing health of the saltmarsh.

Conditions 6-9 were regarding a set-aside area to offset the clearing in a 174-hectare set-aside area near Franklin Harbour Conservation Park on CT/6141/952, 10 km south west from the Proposed Clearance Area. The set aside-aside area is named DC Franklin Harbour Offset Area. A summary of the set-aside area and SEB points balance is provided further below.

Table 3. DC Franklin Harbour Offset Area CT6141 952 DP 2578 Allotment 283 at 27 August 2021.

	Hectares	**Points**
Total SEB area	174.3	751.76
Previous offsets, associated with Council Projects prior to 1 July 2017)	104.1	448.67
Second Street Extension	7.6	60.8
Balance at 27 August 2021	*62.6 (approximately)*	*243.1*

Condition 7 of the approval required an updated management plan for the period 2020-2030 which was prepared by EBS Ecology (2020).

The Second Street Extension was 80% completed at 24 August 2021.

In July 2021 the District Council of Franklin Harbour proposed to clear the additional area between the approved Second Street extension and the foreshore for the purpose described above in Section 2.1. This new area is 0.95 ha and is on Council owned land of D124864 Q102 and D124864 Q103. This area is also to be offset in DC Franklin Harbour Offset Area, if possible.

2.3. General location map

Figure 1. General site location.

Figure 2. Proposed clearance area and adjacent approved clearance area (Second St Extension).

2.4. Details of the proposal

The surveyed drawing (below) was initially provided by the District Council of Franklin Harbour. Spatial data was supplied on 19 August 2021 and was used by EBS to produce maps and calculate impact areas. The impact area from the spatial files differed slightly to what is in the drawing below.

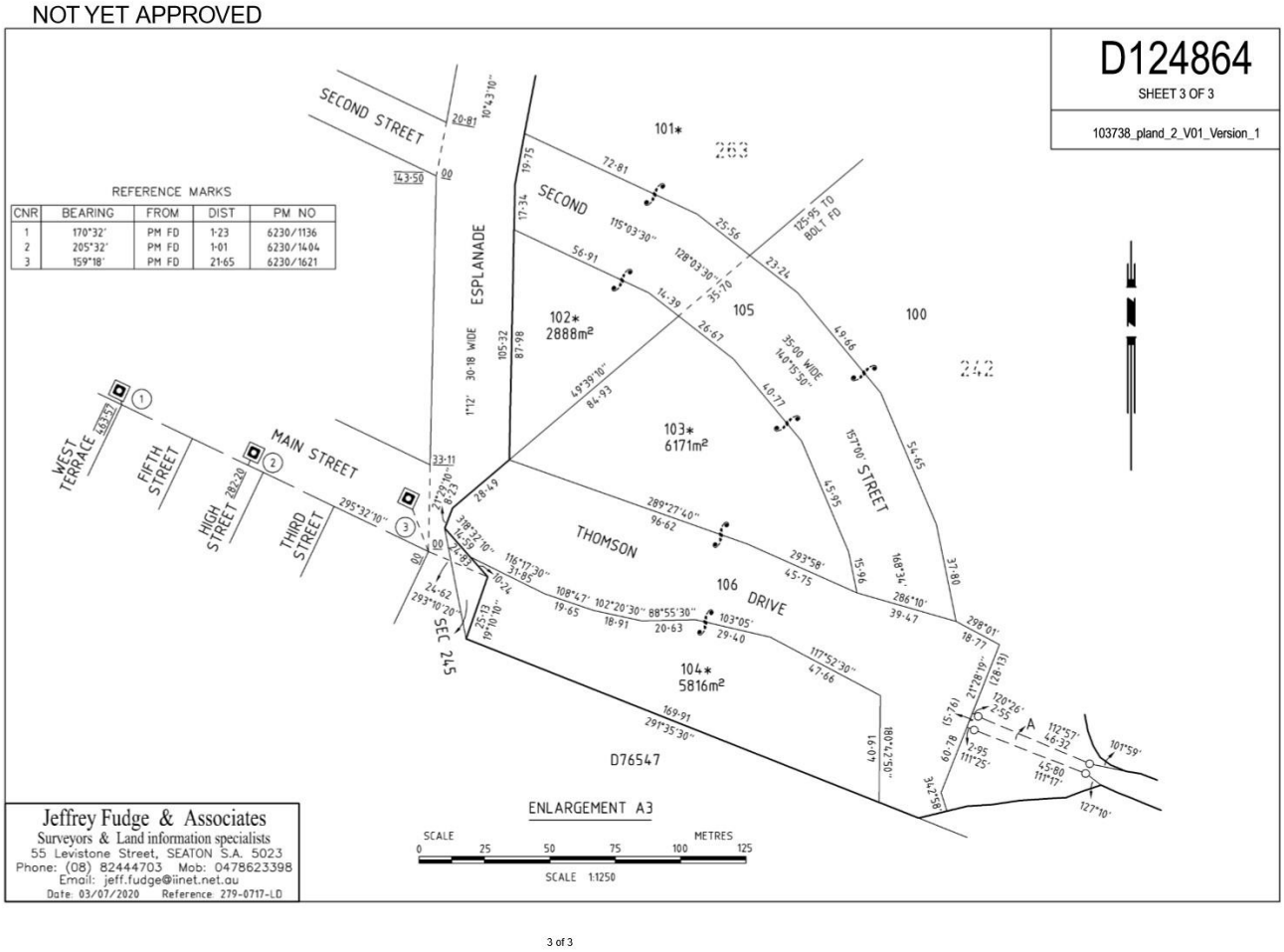


Figure 3. Surveyed area proposed to be cleared between the Second Street Extension and the Esplanade and Thomson Drive.

District Council of Franklin Harbour confirmed that there is a 1200mm Diameter pipe under the new road with an invert level of 0.825m AHD that will be the outlet for an extreme rainfall event, a flap valve will be installed on the outside to prevent sea water entering the area which was a condition on the Development Approval for the road imposed by the Coast Protection Board. The roads have been elevated to 2.8m AHD minimum such that tides will not over top in the next 50 years.

2.5. Approvals <u>required</u> *or* <u>obtained</u>

Relevant approvals and applications are listed below:

- Native Vegetation Act 1991 – approval has been granted for the adjacent Second Street Extension.
- Planning, Development and Infrastructure Act 2016 (a Development Application has been submitted.
- EPBC Act referral is not required for this Project.

2.6. Native Vegetation Regulation

Identify the regulation(s) and the associated clause(s) in Schedule 1 in Division 5 of the Native Vegetation Regulations under which the proposed clearance is suggested to be assessed.

The proposed development may fall under Regulation 12 (34) Infrastructure.

34—Infrastructure

(1) Clearance of vegetation—

(a) incidental to the construction or expansion of a building or infrastructure

where the Minister has, by instrument in writing, declared that the Minister is

satisfied that the clearance is in the public interest; or

(b) required in connection with the provision of infrastructure or services to a

building or proposed building, or to any place,

provided that any development authorisation required by or under the Development

Act 1993 has been obtained.

(2) In this clause—

infrastructure includes—

(a) flood mitigation works; and

(b) an airstrip; and

(c) a shipping channel; and

(d) a public reservoir.

2.7. Development Application information (if applicable)

The Development is in a Conservation Zone and a Visitor Experience Subzone. It falls under the Native Vegetation Overlay and under the Coastal Area Overlay.

3. Method

3.1. Flora assessment

The flora assessment was undertaken by NVC Accredited Consultant Dr. Travis How on the 28 August 2020 in accordance with the Bushland Assessment Method (BAM) (NVC, 2020a)**.**

3.1.1. Bushland Assessment Method

The BAM is derived from the Nature Conservation Society of South Australia's Bushland Condition Monitoring methodology (Croft *et al.* 2007, 2008a, 2008b, 2009; Milne and Croft 2012; Milne and McCallum 2012). The BAM used to assess areas of native vegetation requiring clearance and calculate the SEB requirements.

Details of site selection/stratification and assessment protocols, and the biodiversity value components assessed and the factors that influence these components are outlined in the *Bushland Assessment Manual* (NVC 2020a).

The Conservation Significance Scores were calculated from direct observations of flora and direct and historical observations of fauna species of conservation significance. All fauna identified as known to occur in the PMST, and fauna with BDBSA records since 1995 and with a spatial reliability of less than 1 km, within 5 km of the Project Area, were included in the BAM scoresheets. Species determined as unlikely to occur within the Project Area will be removed by the Native Vegetation Branch if the finding is supported. Marine and/or wetland species were included in the scoresheets given the Project Area is in an area intermittently inundated by marine tides.

3.2. Fauna assessment

A desktop assessment was undertaken to determine the potential for any threatened fauna species, and Threatened Ecological Communities (TECs) (both Commonwealth and State listed) to occur within the Project Area. This was achieved by undertaking database searches using a 5 km buffer of the Project Area (Search Area).

3.2.1. PMST report

A Protected Matters Search Tool (PMST) report was generated on 4/8/2021 to identify nationally threatened flora and fauna, migratory fauna and TECs under the EPBC Act relevant to the Project Area (DAWE 2020). Only species and TECs identified in the PMST report that are likely or known to occur within the Search Area were assessed for their likelihood of occurrence within the Project Area.

3.2.2. BDBSA data extract

A data extract from the Biological Database of South Australia (BDBSA) was obtained from DEW on 13 August 2021 to identify flora and fauna species that have been recorded within 5 km of the Project Area (data extracted 13/08/2021; DEW 2021). The BDBSA is comprised of an integrated collection of species records from the South Australian Museum, conservation organisations, private consultancies, Birds SA, Birdlife Australia and the Australasian Wader Study Group, which meet the Department for Environment and Water's (DEW) standards for data quality, integrity and maintenance. Only species with records since 1995 and a spatial reliability of less than 1 km were assessed for their likelihood of occurrence.

3.2.3. Field survey

- The field survey focussed on vegetation associations and condition with fauna opportunistically recorded within the 0.95 ha Proposed Clearance Area.

3.2.4. Likelihood of occurrence

The criteria for the likelihood of occurrence of threatened species within the Project Area are described in Table 4.

Table 4. Criteria for the likelihood of occurrence of threatened species within the Project Area.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

4. Assessment outcomes

4.1. Vegetation assessment

4.1.1. General description of the vegetation, the site and matters of significance

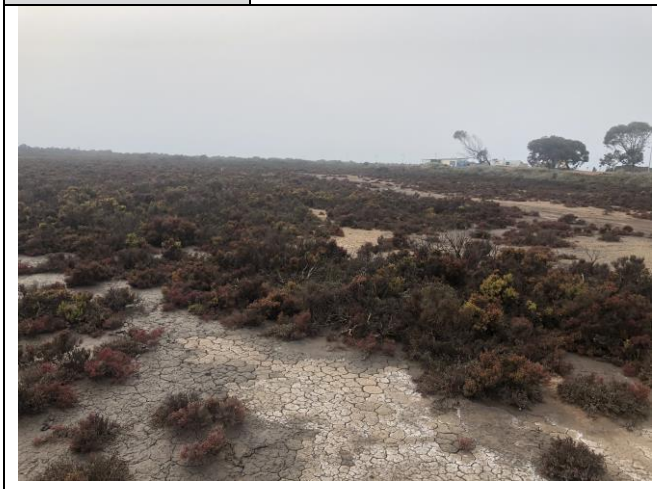
The Proposed Clearance Area is placed within the following landscape context:

- The Proposed Clearance Area is in a swampy saltmarsh zone with clay soil receiving occasional tidal inundation. It abuts the raised and developed Cowell esplanade and jetty access road (Thomson Drive).
- It is soon to be enclosed by the Second Street Extension with tidal inundation no longer to occur (see Section 2.4).
- Franklin Harbor Conservation Park is to the south of Cowell. The Park features one of South Australia's most important nurseries for King George whiting, as well as for prawns, sardines, scale fish and blue swimmer crabs. The harbor is part of Franklin Harbor Marine Park which is also a Wetland of National Importance. Wetlands of National Importance provide important habitat for waterbirds including migratory shorebirds.
- Whilst Bebbington (2017) mapped numerous vegetation types within the Proposed Clearance Area, it was considered by EBS that two broad vegetation associations (B1 and B2) were at a more suitable scale.
- The vegetation is a mosaic of patches and bare ground with some previous disturbance from vehicles and development evident in satellite imagery, however EBS found the condition of the vegetation to be good with very few weeds apart from adjacent to built-up areas. This is in contrast to Bebbington (2017) who described the area as very degraded.

4.1.2. Details of the vegetation associates proposed to be impacted

Two broad vegetation associations were present in the proposed clearance area as listed below.

Table 5. Summary of native vegetation association B1.

<table>
<tr><td>Vegetation Association</td><td colspan="5">Tecticornia Low Shrubland.</td></tr>
<tr><td colspan="6"> 
• Facing south east. GPS coordinate Zone 53 Easting 678692 Northing 6271196.</td></tr>
<tr><td>General description</td><td colspan="5">Tecticornia x 3 species (Samphire's). Is likely to be occasionally inundated by king tides. Native vegetation in moderate to good condition. Approximately 40% bare ground.</td></tr>
<tr><td>Threatened species or community</td><td colspan="5">The EPBC listed threatened ecological community Subtropical and Temperate Coastal Saltmarsh is currently present but will no longer be once the approved Second Street Extension is completed (See Section 2.4 and 4.2).

No threatened species were recorded in the proposed clearance area during the field survey. Thirty-seven threatened fauna species have been recorded within 5 km since 1995 from the BDBSA records or are known to occur according to the PMST report and are included in the BAM scoresheets and the threatened species assessment in 4.2.</td></tr>
<tr><td>Landscape context score</td><td>1.18</td><td>Vegetation Condition Score</td><td>30.96</td><td>Conservation significance score</td><td>1.10</td></tr>
<tr><td>Unit biodiversity Score</td><td>40.19</td><td>Area (ha)</td><td>0.55</td><td>Total biodiversity Score</td><td>22.10</td></tr>
</table>

Table 6. Summary of native vegetation association B2.

Vegetation Association	*Nitraria billardierei* Low Shrubland +/- *Tecticornia sp.*				
 Facing west. GPS coordinate Zone 53 Easting 678695 Northing 6271155.					
General description	Dominated by *Nitraria billardierei (Nitre-bush) and Tecticornia sp. (Samphire).* Approximately 20% bare ground.				
Threatened species or community	The EPBC listed threatened ecological community *Subtropical and Temperate Coastal Saltmarsh* is currently present but will no longer be once the approved Second Street Extension is completed (See Section 2.4 and 4.2). No threatened species were recorded in the proposed clearance area during the field survey. Thirty-seven threatened fauna species have been recorded within 5 km since 1995 from the BDBSA records or are known to occur according to the PMST report and are included in the BAM scoresheets and the threatened species assessment in 4.2.				
Landscape context score	1.18	**Vegetation Condition Score**	43.31	**Conservation significance score**	1.10
Unit biodiversity Score	56.22	**Area (ha)**	0.40	**Total biodiversity Score**	22.49

4.1.3. Site map showing areas of proposed impact

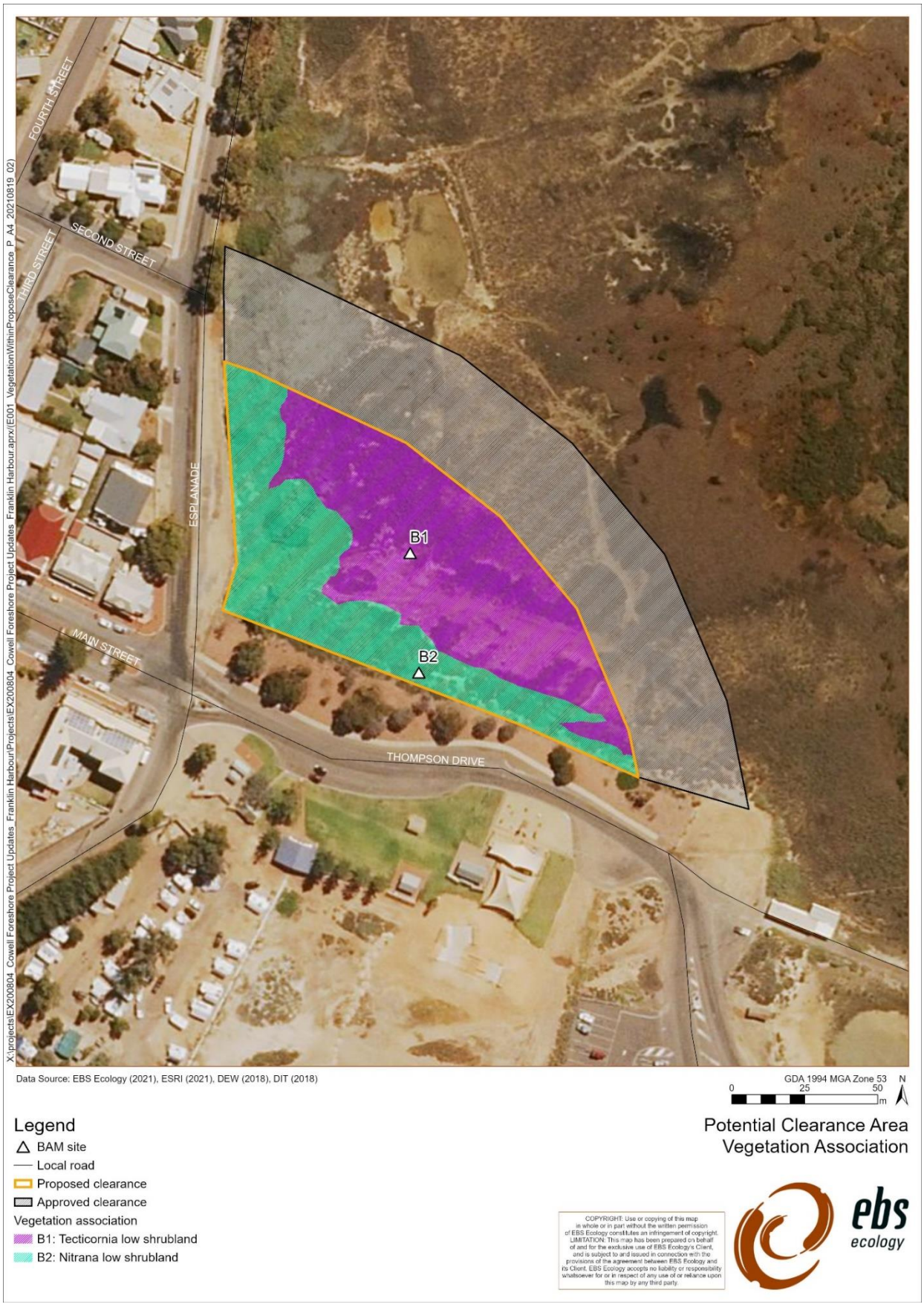


Figure 4. Proposed clearance area with native vegetation to be removed and BAM sites.

4.1.4. Photo log

Not applicable. Photos above in Section 4.1.2.

4.2. Threatened species assessment

The Proposed Clearance Area meets the Key Diagnostic characteristics of the Nationally Vulnerable threatened ecological community (TEC) *Subtropical and Temperate Coastal Saltmarsh* (Table 7). However, it does not meet one of the condition thresholds and is therefore NOT the threatened ecological community. This is based on information given by the client in August 2021 that the .

Table 7. Key Diagnostic criteria of Subtropical and Temperate Coastal Saltmarsh.

Key Diagnostic characteristics	Criteria Met	Comment
Occurs south of 23° 37' S latitude - from the central Mackay coast on the east coast of Australia, southerly around to Shark Bay on the west coast of Australia (26° latitude), and including the Tasmanian coast and islands within the above range.	Yes	Latitude -33
Occurs on the coastal margin, along estuaries and coastal embayment's and on low wave energy coasts.	Yes	
Occurs on places with at least some tidal connection, including rarely-inundated supratidal areas, intermittently opened or closed lagoons, and groundwater tidal influences, but not areas receiving only aerosol spray.	Yes	Receives occasional tides
Occurs on sandy or muddy substrate and may include coastal clay pans (and the like).	Yes	Muddy
Consists of dense to patchy areas of characteristic coastal saltmarsh plant species (i.e., salttolerant herbs, succulent shrubs or grasses, that may also include bare sediment as part of the mosaic).	Yes	Saltmarsh species dominant
Proportional cover by tree canopy such as mangroves, Melaleucas or Casuarinas is not greater than 50%, nor is proportional ground cover by seagrass greater than 50%.	Yes	No trees in Proposed Clearance area. No seagrass.

Condition thresholds and survey guidelines are below. The Proposed Clearance Area will not meet the Tidal connection condition once Second Street extension is completed.

Table 8. TEC condition thresholds.

Condition threshold	Met Yes/No
Ecotone Where the ecological community intergrades with an adjacent community, such as seagrass, mangroves, paperbark (Melaleuca spp.) and Casuarina spp. swamp, or freshwater marshes, then in this ecotone region, if 50% or more of the groundcover/understorey is comprised of coastal saltmarsh vegetation then it is considered to be the ecological community.	Yes, 50% or more of groundcover is saltmarsh.
Patch/mosaic size The Proposed Clearance Area is part of a larger mosaic of saltmarsh around the harbor. Minimum size of collective areas within the mosaic of ≥0.1 ha.	Yes, Proposed Clearance Area is 0.95 ha.
Tidal connection The ecological community requires some form of ongoing connection to the tidal regime.	No. The Proposed Clearance Area is going to be cut off from tides by the approved Second Street extension that is almost completed. See Section 2.4.

Exclusions from the TEC are listed below in Table 9.

Table 9. Exclusions for inclusion as a threatened ecological community.

Exclusions	Met Yes/No
Saltmarsh occurring in seepage zones on sea cliffs and elevated rock platforms above the tidal limit and on elevated headlands subject only to aerosolic salt.	Not applicable
Saltmarsh occurring on inland saline soils with no tidal connection.	Not applicable
Isolated patches of saltmarsh < 0.1 ha	Not applicable
Patches or areas of saltmarsh that contain > 50% weeds (i.e., patches must be dominated by native saltmarsh plant species to be the ecological community)	Not applicable
Patches of saltmarsh (possibly senescent) within the coastal margin that are disconnected (either naturally or artificially) from a tidal regime but were once connected. However, should the patch be reconnected to the tidal regime (e.g., via removal of an artificial barrier, or constructing a pipeline under	This applies. The Proposed Clearance Area is excluded from the threatened ecological community. See Section 2.4.

a roadway), then the patch can become part of the ecological community (i.e., if it meets other key diagnostics and condition thresholds).	

Within the BDBSA records there were no threatened plants recorded since 1995 within 5 km of the Proposed Clearance Area, therefore no map is included in this application. One Nationally Vulnerable plant, *Acacia rhetinocarpa* (Neat Wattle/Resin Wattle), is known to occur within 5 km according to the PMST report and is therefore included in the assessment in Table 10. This plant was not found by Bebbington (2017) or EBS Ecology (2020) during the field survey of the Proposed Clearance Area and is considered unlikely to occur.

Thirty-seven fauna species (35 birds and two turtles) have been recorded within 5 km of the Proposed Clearance Area or are known to occur according to the PMST report as listed below in Table 10. Of these, 13 are BDBSA and 15 are Birdlife records. A further 3 birds are listed in the BDBSA records and the PMST report and 6 are only in the PMST report with no matching records to show on a map (Figure 5).

Species observed on site, or recorded within 5km (50km in the arid zone) of the application area since 1995, or the vegetation is considered to provide suitable habitat

Table 10. Likelihood of occurrence of threatened species identified in the desktop assessment. The data source and threat levels are described in the table footer.

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Acanthiza iredalei iredalei (Slender-billed Thornbill (western))		R	1	2012	Usually occurs in chenopod shrublands that are dominated by samphire's or Maireana and Atriplex associations. It occasionally occurs in acacia shrublands and mangroves adjacent to more preferred habitat. Also been recorded in shrublands and mangroves at coastal sites where these habitat types occur adjacent to more preferred samphire shrublands.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Actitis hypoleucos (Common Sandpiper)		R	1	2009	Habitat is banks, rocks and sandy beaches near water. Found in coastal or inland wetlands, both saline or fresh.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Ardea intermedia plumifera (Plumed Egret)		R	1	2001	Occupies a great variety of habitats but is mainly found around shallow inland freshwater areas with abundant emergent aquatic	Possible. Records within last 20 years within 5 km. Limited suitable habitat in

					vegetation. This includes habitats such as seasonally flooded marshes, inland deltas, ponds, swamp forests, freshwater swamps, pools, rivers, streams, rice-fields, wet meadows, and flooded and dry pastures near water. Also occurs around mudflats, tidal estuaries, coastal lagoons, saltmarshes, and tidal streams and rivers, and often roosts in mangroves.	Proposed Clearance Area.
Ardeotis australis (Australian Bustard)		V	1	2017	Mainly occurs in inland Australia and is now scarce or absent from southern and south-eastern Australia. Mainly inhabits tussock and hummock grasslands, though prefers tussock grasses to hummock grasses; also occurs in low shrublands and low open grassy woodlands; occasionally seen in pastoral and cropping country, golf courses and near dams.	Unlikely. Records within last 10 years within 5 km. No suitable habitat in the Proposed Clearance Area.
Arenaria interpres interpres (Ruddy Turnstone)		R	1	2019	It is found in most coastal regions, with occasional records of inland populations. It strongly prefers rocky shores or beaches where there are large deposits of rotting seaweed. South Australian sites of international importance for this species are Kangaroo Island, Port MacDonnell coast and Carpenter Rocks, Pelican Point.	Likely. Records within the last 20 years within 5 km of the Project Area. Potential suitable habitat in Proposed Clearance Area.
Biziura lobata menziesi (Musk Duck)		R	1	2020	Endemic to Australia. Occurs in deep freshwater lagoons, with dense reed beds. They are normally seen singly or in pairs, but may form medium to large groups in the winter.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.

Bubulcus ibis coromandus (Eastern Cattle Egret)		R	1	2019	Widespread and common. In south-east Australia it is found from Bundaberg, inland to Roma, Thargominda, and then down through Inverell, Walgett, Nyngan, Cobar, Ivanhoe, Balranald to Swan Hill, and then west to Pinnaroo and Port Augusta. The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands. It has occasionally been seen in arid and semi-arid regions however this is extremely rare. High numbers have been observed in moist, low-lying poorly drained pastures with an abundance of high grass; it avoids low grass pastures. It uses predominately shallow, open and fresh wetlands including meadows and swamps with low emergent vegetation and abundant aquatic flora.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Calidris canutus (rogersi) (Red Knot)	EN	E	1,5	2014	In Australasia the Red Knot mainly inhabit intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and salt works, but rarely use freshwater swamps. They rarely use inland lakes or swamps.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.

Calidris ferruginea (Curlew Sandpiper)	CR	E	5		Important sites include Imperial Chemical Industries (ICI) and Price Salt fields, and The Coorong. Occasionally they occur in inland areas south of the Murray River and elsewhere. Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in salt works and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. Occasionally they are recorded around floodwaters.	Unlikely. No records within last 30 years within 5 km of the Proposed Clearance Area despite likely adequate survey effort.
Calidris melanotos (Pectoral Sandpiper)		R	1	2002	In South Australia, the Pectoral Sandpiper is found mostly in the south-east, from north to the Murray River and west to Yorke Peninsula. Outside of this region the species is occasionally recorded in Innamincka, Welcome Bore and Mintabie. In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Caretta caretta (Loggerhead Sea Turtle)	EN	E	5		In Australia, the Loggerhead Turtle occurs in the waters of coral and rocky reefs, seagrass beds	Unlikely. No records. No suitable habitat

					and muddy bays throughout eastern, northern and western Australia. While nesting is concentrated in southern Queensland and from Shark Bay to the North West Cape in Western Australia, foraging areas are more widely distributed.	in the Project Area.
Cladorhynchus leucocephalus (Banded Stilt)		V	1	2008	Endemic to Australia, mainly in the south and inland. Found mainly in saline and hypersaline (very salty) waters of the inland and coast, typically large, open and shallow	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Corcorax melanorhamphos (White-winged Chough)		R	1	2020	White-winged Choughs are found in open forests and woodlands. They tend to prefer the wetter areas, with lots of leaf-litter, for feeding, and available mud for nest building.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Dermochelys coriacea (Leatherback Turtle)	EN	V	5		The Leatherback Turtle is a pelagic feeder, found in tropical, subtropical and temperate waters throughout the world. It has been recorded feeding in the coastal waters of all Australian States.	Unlikely. No records. No suitable habitat in the Project Area.
Egretta garzetta nigripes (Little Egret)		R	1	2020	It inhabits fresh, brackish or saline wetlands and shows a preference for shallow waters (10-15 cm deep) in open, unvegetated sites where water levels and dissolved oxygen levels fluctuate daily, tidally or seasonally, and where fish are concentrated in pools or at the water's surface.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Egretta sacra sacra (Pacific Reef Heron)		R	1	2016	Found on the coast and islands of most of Australia, but is more common on the Queensland coast and Great Barrier Reef than elsewhere. Lives on	Highly Likely. Records within the last 10 years within 5 km. Potential

					beaches, rocky shores, tidal rivers and inlets, mangroves, and exposed coral reefs.	suitable habitat in Project Area.
Falco peregrinus macropus (Peregrine Falcon)		R	1	2019	This species prefers open habitats such as grasslands, tundra and meadows and nests on cliff faces and in crevices. It has an extremely large range and is found world-wide except for rainforests and cold, dry Arctic regions. This species has increasingly been observed inhabiting urban areas.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Falco subniger (Black Falcon)		R	1	2016	This species is found along tree-lined watercourses and in isolated woodlands, mainly in arid and semi-arid areas	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Gallinago hardwickii (Latham's Snipe)		R	1	1999	In Australia, Latham's Snipe occurs in permanent and ephemeral wetlands up to 2000 m above sea-level. They usually inhabit open, freshwater wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies). However, they can also occur in habitats with saline or brackish water, in modified or artificial habitats, and in habitats located close to humans or human activity. Latham's Snipe occurs in temperate and tropical regions of Australia.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Haematopus fuliginosus fuliginosus (Sooty Oystercatcher)		R	1	2020	The Sooty Oystercatcher is strictly coastal, usually within 50 m of the ocean. It prefers rocky shores, but will be seen on coral reefs or sandy beaches near mudflats. It breeds on	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat

					offshore islands and isolated rocky headlands. It is endemic to Australia and is widespread in coastal eastern, southern and western Australia.	in Proposed Clearance Area.
Haematopus longirostris (Pied Oystercatcher)		R	1	2020	The Pied Oystercatcher prefers mudflats, sandbanks and sandy ocean beaches and is less common along rocky or shingle coastlines. Although rarely recorded far from the coast, the Pied Oystercatcher may occasionally be found in estuarine mudflats and short pasture. It is found in coastal areas throughout the Australian continent except for areas of unbroken sea cliffs such as the Great Australian Bight.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Haliaeetus leucogaster (White-bellied Sea Eagle)		E	1	2019	This species is distributed along the coastline (including offshore islands) of mainland Australia and Tasmania. Distribution also extends inland along some of the larger waterways, especially in eastern Australia. The inland limits of the species are most restricted in south-central and south-western Australia, where it is confined to a narrow band along the coast. Found in coastal habitats (especially those close to the sea-shore) and around terrestrial wetlands in tropical and temperate regions of mainland Australia and its offshore islands.	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Hieraaetus morphnoides (Little Eagle)		V	1	2017	The Little Eagle is widespread in mainland Australia, central and eastern New Guinea. It is seen over woodland and forested lands and open	Possible. Records within last 20 years within 5 km. Limited suitable habitat in

					country, extending into the arid zone. It tends to avoid rainforest and heavy forest.	Proposed Clearance Area.
Hylacola cauta (Shy Heathwren)		R	1	2001	Inhabits mallee woodlands with a relatively dense understorey of shrubs and heath plants. Occurs across southern Australia extending from the wheatbelt in southern Western Australia east to central NSW, including Kangaroo Island.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Leipoa ocellata (Malleefowl)	VU	V	5		The original distribution of Malleefowl covered much of the southern half of the continent from the west coast to the Great Dividing Range in the east. The Malleefowl is now found principally in the semi-arid to arid zone in shrublands and low woodlands dominated by mallee and associated habitats such as Broombush Melaleuca uncinata and Scrub Pine Callitris verrucosa. Malleefowl also occur in Red Ironbark E. sideroxylon woodland at the eastern limit of their distribution and in Brown Stringybark E. baxteri/E. araneosa woodland in the south of Victoria and South Australia. A sandy substrate and abundance of leaf litter are clear requirements for the construction of the birds' incubator-nests. Densities of the birds are generally greatest in areas of higher rainfall and on more fertile soils and where shrub diversity is greatest.	Unlikely. No records within 5 km of the Proposed Clearance Area since 1995 with a spatial reliability of less than 1 km. No suitable habitat in the Proposed Clearance Area.
Limosa lapponica baueri (Bar-tailed Godwit (baueri))	VU		5		Bar-tailed Godwit has been recorded in the coastal areas of all Australian states. Found mainly in coastal habitats such as large intertidal sandflats,	Unlikely. No records within last 30 years within 5 km of the Proposed Clearance Area

					banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays.	despite likely adequate survey effort.
Neophema elegans elegans (Elegant Parrot)		R	1	2008	The Elegant Parrot occurs in western Victoria and south-western New South Wales (along the lower reaches of the Darling River), eastern parts of South Australia, north to the Flinders Ranges and west to the Eyre Peninsula, and also in Western Australia. Inhabiting open habitats, the Elegant Parrot can be found in a wide variety of habitats, including grasslands, shrublands, mallee, woodlands and thickets, bluebush plains, heathlands, saltmarsh and farmland.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Numenius madagascariensis (Far Eastern Curlew)	CR	E	1,5	2016	The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes use the mangroves. The birds are also found in salt works and sewage farms.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Numenius phaeopus variegatus (Whimbrel)		R	1	2016	The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, unvegetated mudflats. It is	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.

					occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms.	
Oxyura australis (Blue-billed Duck)		R	1	2017	Endemic to south-eastern and south-western Australia. Habitat is permanent swamps with dense vegetation. Large open lakes, tidal inlets and bays.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Pachycephala inornata (Gilbert's Whistler)		R	1	2016	Sparsely distributed over much of the arid and semi-arid zone of inland southern Australia, from the western slopes of NSW to the Western Australian wheatbelt. Habitat is shrubby woodland and mallee.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Pandion haliaetus cristatus (Eastern Osprey)		E	1	2016	Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Plegadis falcinellus (Glossy Ibis)		R	1	2017	Preferred habitat for foraging and breeding are fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. The species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes and coastal lagoons.	Possible. Records within last 20 years within 5 km. Limited suitable habitat in Proposed Clearance Area.
Podiceps cristatus australis (Great Crested Grebe)		R	1	2016	Nesting colonies of the Greater Crested Grebe may be found in southern Australia and New Zealand, with individuals wintering in eastern and northern Australia. During breeding season, habitat is	Highly Likely. Records within the last 10 years within 5 km. Potential suitable habitat

					freshwater lakes with aquatic and marginal vegetation. During non-breeding season, habitat is fresh or saline waters – lakes, lagoons, estuaries and bays.	in Proposed Clearance Area.
Sternula nereis (Fairy Tern)	VU	E	1, 5	2009	Habitat is coasts, estuaries; breeds on sandy beaches and sand spits.	Likely. Records within the last 20 years within 5 km. Potential suitable habitat in Proposed Clearance Area.
Thinornis cucullatus cucullatus (Hooded Plover)	VU	V	5		The Hooded Plover (eastern) is a small Australian beach nesting bird. It mainly occurs on wide beaches backed by dunes with large amounts of seaweed and jetsam, creek mouths and inlet entrances. Nests are found above the high water mark on flat beaches, on stony terraces, or on sparsely vegetated dunes. As the hooded plover occurs on beaches, it is easily disturbed by human activities, particularly off-leash domestic dogs.	Unlikely. No records within last 30 years within 5 km of the Proposed Clearance Area despite likely adequate survey effort.
Acacia rhetinocarpa (Neat Wattle / Resin Wattle)		V	5		Grows in disjunct sub-populations on EP in a few small scattered areas from Kimba to around Arno Bay, Cleve and Lock. Also occurs on the east coast of the Yorke Peninsula region near Curramulka, the Southern Lofty region and the Murray region where it is restricted to the Monarto area. Known to occur on dune crests and dunes/hills, plains and swales. It is also known to survive in degraded sites largely devoid of remnant vegetation and often confined to roadsides and rail reserves. Normally	Unlikely. No records within last 30 years within 5 km of the Proposed Clearance Area. No suitable habitat in Proposed Clearance Area.

					associated with low mallee of *Eucalyptus dumosa* (White Mallee), *E. foecunda* (Hooked Mallee), *E. calycogona* (Square-fruited Mallee), *E. incrassata* (Ridge-fruited Mallee) and *E. brachycalyx* (Gilja) mallee associations.	
Source; 1- BDBSA, 2 - AoLA, 3 – NatueMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

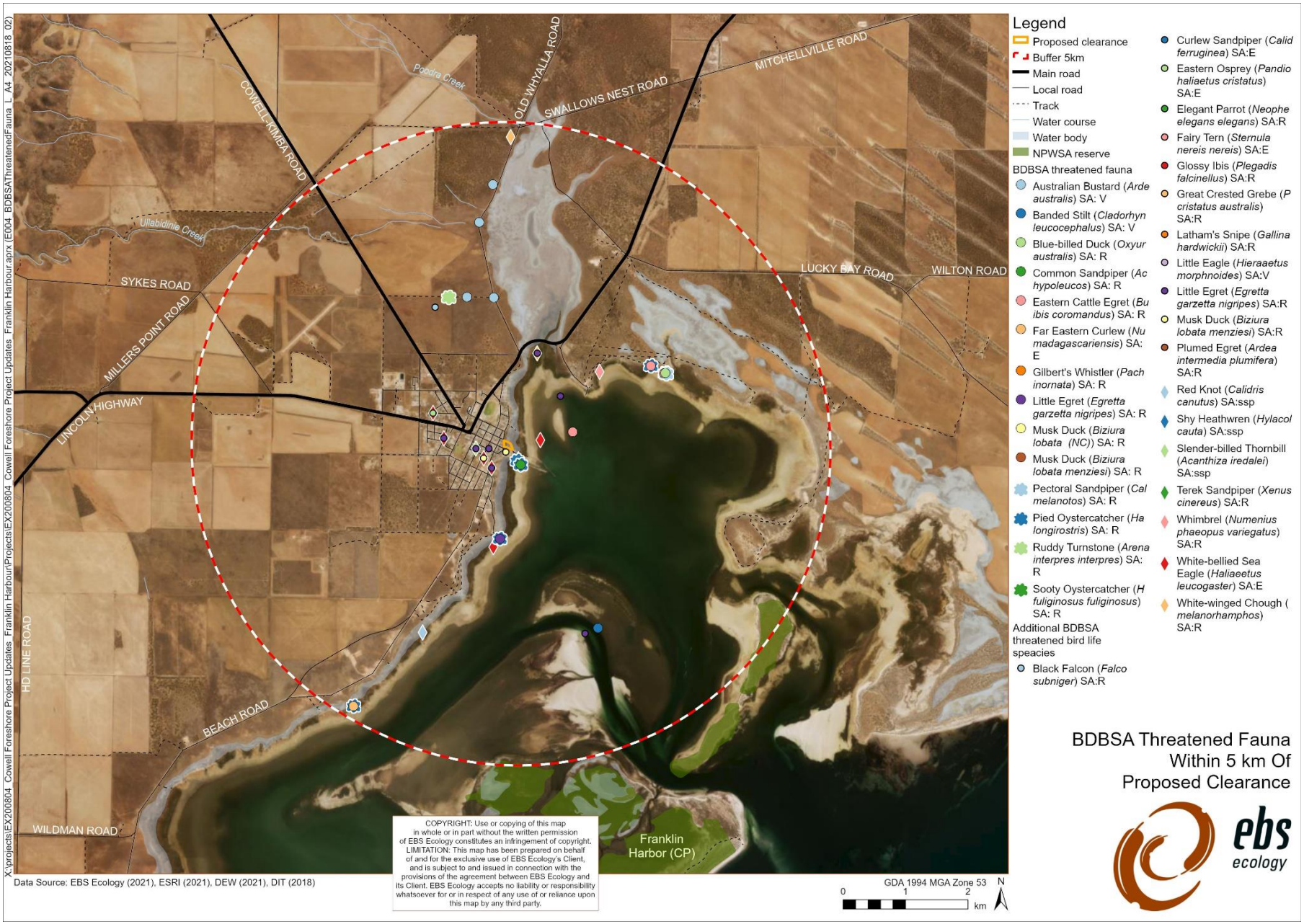


Figure 5. Threatened fauna recorded within 5 km of the Proposed Clearance Area since 1995.

4.3. Cumulative impacts

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

Cumulative impacts from the proposed clearance include the following:

- Direct clearance of the proposed area in addition to (and as a result of) the already approved Second Street Extension.
- Indirect clearance that may occur as a result of the development:
- Dust generation smoothing vegetation,
- Altered hydrology inundating or drying vegetation, especially due to the creation of a raised street and a raised infill area.
- Impacting on tree/shrub root zones (the application of fill) impacting on native vegetation health),

4.4. Addressing the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

The location of the road access which became the Second Street Extension was considered and the original proposed area reduced a number of times (Bebbington 2017). The placement of this Proposed Clearance area was influenced by the Second Street extension and was considered by Council to be the most preferable for the treatment of the stormwater.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).
Impacts will be minimised by using dust control measures and other measures detailed in the Construction Environment Management Plan during construction. All fill will be imported at optimum moisture content (OMC) and water used on site to mitigate any dust.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation.
Landscaping and planting with native vegetation will be carried out once completed.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.

The NVC will only consider an offset once avoidance, minimization and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.
A Significant Environmental Benefit (SEB) offset area managed by the applicant has available points to offset the clearance. The DC Franklin Harbour Offset Area has 243.1 SEB points available according to the Management Plan by EBS (2020).

4.5. Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

As this is a Data Report for a Risk Level 4 Application associated with a Development Application, then principles a – g are addressed in Table 11 below.

Table 11. Assessment against the Principles of Clearance.

Principle of clearance	Considerations
Principle 1(a) – it comprises a high level of diversity of plant species	Relevant information The number of plant species recorded (native and introduced) for each vegetation association B1 = 3 native species within quadrat B2 = 7 native species within quadrat Patches; Bushland Plant Diversity Score – 10 for B1 and 22 for B2 (scores less than 10 are Not at variance for diversity, 10-20 At Variance, >20 Seriously at Variance).
	Assessment against the principles Seriously at Variance B2 At Variance B1
Principle 1(b) – significance as a habitat for wildlife	Relevant information 37 fauna and 1 plant Part of important bird habitat Patches; Threatened Fauna Score – 0.1 for both B1 and B2 Unit biodiversity Score - >50 for both associations

	Assessment against the principles Seriously at Variance - B1 and B2
	Moderating factors that may be considered by the NVC Small area to be cleared.
Principle 1(c) – plants of a rare, vulnerable or endangered species	Relevant information Threatened Flora Score(s) - 0
	Assessment against the principles Not at variance
Principle 1(d) – the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered	Relevant information Not the TEC (See Section 2.4 and 4.2) Threatened Community Score - 1
	Assessment against the principles Not at variance
Principle 1(e) – it is significant as a remnant of vegetation in an area which has been extensively cleared	Relevant information Remnancy figures for IBRA Association 17% and IBRA Subregion 29%. The health of the remaining coastal wetland is dependent on future developments and managing anthropogenic impacts. It is at risk if sea levels rise. Total Biodiversity Score – 42.75
	Assessment against the principles At Variance
	Moderating factors that may be considered by the NVC
Principle 1(f) – it is growing in, or in association with, a wetland environment	Relevant information The whole coastal area near Cowell is a Nationally Important Wetland.
	Assessment against the principles Seriously at Variance - Associated vegetation
	Moderating factors that may be considered by the NVC The Proposed Clearance for stormwater treatment is not likely to significantly impact the surrounding foreshore wetland if managed well. This would become Not at Variance.

Principle 1(g) – it contributes significantly to the amenity of the area in which it is growing or is situated	Relevant information Amenity value is subjective. The proposed clearance and associated Second Street Extension could encroach on a natural functioning saltmarsh area. Some members of the public might think a landscaped stormwater treatment area is a visual improvement.
	N/A
	Moderating factors that may be considered by the NVC

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6. Risk assessment

The level of risk associated with the application

Table 12. Summary of the level of risk associated with the application.

Total clearance	No. of trees	0
	Area (ha)	0.95
	Total biodiversity Score	42.75
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1 (a) B2 diversity 1 (b) B1 and B2 wildlife habitat. 1 (d) B1 and B2 rare plant communities. (1 (f) Wetland)
Risk assessment outcome		Level 4

4.7. NVC guidelines

Other information that demonstrates that the clearance complies with any relevant NVC guidelines related to the activity

Not applicable.

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Species diversity	Threatened Ecological	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
B	B1	10	1.0	0	0.1	36.84	0.55	20.26	1			21.27	$7,520.01	$413.60
B	B2	22	1.0	0	0.1	56.22	0.4	22.49	1			23.61	$8,346.59	$459.06
						Total	**0.95**	**42.75**				**44.88**	**$15,866.60**	**$872.66**

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	42.75	44.88	$15,866.60	$872.66	$16,739.26

Economies of Scale Factor	0.5
Rainfall (mm)	268

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

☐ Establish a new SEB Area on land owned by the proponent.

☒ Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No. _____

☐ Apply to have SEB Credit assigned from another person or body. The application form needs to be submitted with this Data Report.

☐ Apply to have an SEB to be delivered by a Third Party. The application form needs to be submitted with this Data Report.

☐ Pay into the Native Vegetation Fund.

PAYMENT SEB

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

Not applicable.

ON-GROUND SEB

The proponent wishes to offset the Proposed Clearance (if approved) in an existing offset area under a management plan *DC Franklin Harbour Offset Area 2020-2030* (EBS Ecology 2020). A copy is available if required.

Table 13. DC Franklin Harbour Offset Area CT6141 952 DP 2578 Allotment 283 SEB balance if Proposed Clearance Area Approved.

	SEB Hectares	**SEB Points**
Total SEB area	174.3	751.76
Previous offsets, associated with Council Projects prior to 1 July 2017)	104.1	448.67
Second Street Extension - approved	7.6	60.8
Balance at 27 August 2021	*62.6 (approximately)*	*243.1*
Cowell Foreshore Project Updates - application	*5.61*	*44.88*
Potential balance if approved	*56.99*	*198.22*

7. References

Bebbington, L. (2017). Vegetation Assessment of Second Street Extension and Foreshore Access Upgrade Cowell South Australia for District Council of Franklin Harbour. Larry Bebbington – Habitat & Land Management Consultant.

Croft SJ, Pedler JA, Milne TI (2007) Bushland Condition Monitoring Manual – Northern Agricultural & Yorke Peninsula Regions. Nature Conservation Society of South Australia, Adelaide.

Croft SJ, Pedler JA, Milne TI (2008a) Bushland Condition Monitoring Manual – Eyre Peninsula Region. Nature Conservation Society of South Australia, Adelaide.

Croft SJ, Pedler JA, Milne TI (2008b) Bushland Condition Monitoring Manual – Southern Mt Lofty Ranges Region. Nature Conservation Society of South Australia, Adelaide.

Croft SJ, Pedler JA, Milne TI (2009) Bushland Condition Monitoring Manual – Murray Darling Basin Region. Nature Conservation Society of South Australia, Adelaide.

Cutten JL, Hodder MW (2002) Scattered tree clearance assessment in South Australia: streamlining, guidelines for assessment and rural industry extension. Biodiversity Assessment Services, Department of Water, Land and Biodiversity Conservation, Adelaide.

Department for Environment and Water (DEW) (2020) NatureMaps. Available at: http://data.environment.as.gov.au/NatureMaps/Pages/default.aspx [Accessed 24 August 2021].

Department of Agriculture, Water and the Environment (DAWE) (2020) Protected Matters Search Tool. Available at: https://www.environment.gov.au/epbc/protected-matters-search-tool [Accessed 4 August 2021].

EBS Ecology (2020) Native Vegetation Management Plan for a Significant Environmental Benefit. DC Franklin Harbour Offset Area 2020-2030. Report to DC Council of Franklin Harbour for NVC. EBS Ecology, Adelaide.

Milne TI, Croft T (2012) Bushland Condition Monitoring Manual – Benchmark Communities of the South East. Nature Conservation Society of South Australia, Adelaide.

Milne TI, McCallum B (2012) Bushland Condition Monitoring Manual – Benchmark Communities of Kangaroo Island. Nature Conservation Society of South Australia, Adelaide.

Native Vegetation Council (NVC) (2020a) Bushland Assessment Manual July 2020. Native Vegetation Council, Adelaide. Available at: https://www.environment.sa.gov.au/topics/native-vegetation/clearing/vegetation-assessments.

Native Vegetation Council (NVC) (2020b) Rangelands Assessment Manual July 2020. Native Vegetation Council, Adelaide. Available at: https://www.environment.sa.gov.au/topics/native-vegetation/clearing/vegetation-assessments.

Native Vegetation Council (NVC) (2020c) Scattered Tree Assessment Manual July 2020. Native Vegetation Council, Adelaide. Available at: https://www.environment.sa.gov.au/topics/native-vegetation/clearing/vegetation-assessments.

8. Appendices

Appendix 1. Bushland, Rangeland or Scattered Tree Vegetation Assessment Scoresheets associated with the proposed clearance and SEB Area (to be submitted in Excel format)

Appendix 2. Native Vegetation Approval 160620 for Second Street Extension with conditions of approval.

Native Vegetation Council

File: 2017/3066/922

Contact: Graham Carpenter
Telephone: 8207 7714

Level 8
81-95 Waymouth St
ADELAIDE SA 5000

GPO Box 1047
Adelaide SA 5001

Ph| 08 8303 9777

nvc@sa.gov.au

16 June 2020

District Council of Franklin Harbour
P.O. Box 71
COWELL SA 5602

Attention: Shane Gill, CEO

Dear Sir,

Re: Native Vegetation Removal Request – Second Street Extension, Cowell

I refer to application 2017/3066/922 in which approval was sought from the Native Vegetation Council (NVC) for the removal of native vegetation associated with extending Second Street across the Cowell foreshore under Native Vegetation Regulation 12(34).

At its meeting of 3 June 2020 the Native Vegetation Assessment Panel (NVAP) considered the application in conjunction your presentation and a report from the Native Vegetation Branch. The application for the development, as detailed in the Larry Bebbington report dated March 2017 and modified in February 2020, was considered against Regulation 12(34) – *Clearance of native vegetation associated with the building or provision of infrastructure.*

NVAP considered that the proposed clearance of up to 0.7 ha satisfies the requirements of Native Vegetation Regulation 12(34). NVAP were however concerned that the proposed set-aside may not provide a sufficient offset for the clearance and have requested that the SEB Management Plan prepared by L. Bebbington in March 2018 be revised. I also understand that planning approval for the proposed road extension (as per Condition 1) has now been obtained (25 May 2020 - DA 922/V001/20).

NVAP resolved to endorse the use of NV Regulation 12(34) for the clearance up to **0.7 ha** of samphire shrubland to extend Second Street across the Cowell foreshore, subject to:

1. No clearance to occur until any relevant planning approval for the infrastructure has been sought and obtained;

2. No clearance to occur on Sn 242 Hd Playford until consent from the Minister for Transport and Infrastructure (as landowner) has been obtained;

3. Clearance to be confined to the area shown on the attached Regulation Advice Plan 2017/3066/922 numbered 1 of 2;

4. Clearance to be undertaken in accordance with the recommendations (Section 7) in the 'Vegetation Assessment – Second Street extension and foreshore access upgrade' prepared by Larry Bebbington dated 16 March 2017, in particular to prevent damage and siltation of adjacent native vegetation including the area of saltmarsh enclosed by the new road (to be detailed in a Construction Environment Management Plan as required for DA 922/V001/20);

5. Sufficient culverts are to be installed under the proposed road embankment to retain tidal movement to the enclosed saltmarsh, to ensure the ongoing health of the saltmarsh;

6. The landowner is to permanently set aside a minimum area of land equivalent to 60.8 SEB points (about 7.6 ha) within the area marked "set-aside area" in the attached Regulation Advice Plan 2017/3066/922 numbered 2 of 2 for the growth of native vegetation and for no other purpose;

7. The landowner is to update the Native Vegetation Management Plan prepared for the set-aside area by L. Bebbington in March 2018, to take into account the following:

   a. Use of the Native Vegetation Council's current bushland assessment methodology to determine the number of SEB points provided by the set-aside area;
   b. Use of low impact methods (other than chemical control) to eradicate African Boxthorn *Lycium ferrocissimum* from the set-aside area; and
   c. An updated investigation of natural regeneration of native vegetation within the former cropped area, to determine whether direct seeding of this area is appropriate.

   The revised plan is to be provided to the Native Vegetation Council for endorsement within 6 months of this letter.

8. The landowner to manage the set-aside area in accordance with the revised Native Vegetation Management Plan, so as to permanently maintain that land for the purpose of growth of native vegetation. In particular, the plan requires the landholder to:

(a) undertake an effective and ongoing weed and rabbit control program within the set-aside area to ensure the successful regeneration of native vegetation in the area;

(b) erect a stock proof fence or other barricades to exclude stock and unauthorised vehicle access in the set-aside area, to be completed prior to undertaking the clearance;

(c) maintain and if necessary upgrade fences around the set-aside area so that stock or other domestic grazing animals are excluded from the set-aside area;

(d) not allow access to the set-aside area by any vehicles or machinery unless that access will assist in promoting growth or regeneration of native vegetation;

(e) not cause or permit the construction of any buildings or other structures, other than approved signs, on the set-aside area; and

9. The endorsement shall be for a period of two years, after which time a new endorsement is required.

Please contact Graham Carpenter on 8207 7714 if you have any questions.

Yours sincerely,

Delegate
Native Vegetation Council

Native Vegetation Regulation 12(34) Application

DISCLAIMER
The Department for Environment and Water, its employees and servants do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise.
The Department for Environment and Water, its employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein.

0 300 600 900 1,200 1,500 Meters

Scale: 1:20000

Government of South Australia
Department for Environment and Water

REGULATION ADVICE PLAN (2 of 2)

TO FORM PART OF THE ADVICE OF THE NATIVE VEGETATION COUNCIL

APPLICATION NO. 2017/3066/922

HUNDRED of PLAYFORD

Lot 283 FP 2578

Offset area

Conservation Park

Property/Section Boundary

Road

Native Vegetation Council

Delegate, Native Vegetation Council

Dated:

© Government of South Australia, through the Department for Environment and Water. This work is Copyright. Apart from any use permitted under the Copyright Act 1968 (Cwlth), no part may be reproduced by any process without prior written permission obtained from the Department for Environment and Water. Requests and enquiries concerning reproduction and rights should be directed to the Chief Executive, Department for Environment and Water, GPO Box 1047, Adelaide SA 5001.

Native Vegetation Regulation 12(34) Application

Government of South Australia
Department for Environment and Water

REGULATION ADVICE PLAN 1 of 2

TO FORM PART OF THE ADVICE OF THE NATIVE VEGETATION COUNCIL

APPLICATION NO. 2017/3066/922

HUNDRED of PLAYFORD

Sns 242 and 263

Clearance exempt under NV Regulation 12(34) (subject to conditions)

Property/Section Boundary

Road

Native Vegetation Council

DISCLAIMER
The Department for Environment and Water, its employees and servants do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise.
The Department for Environment and Water, its employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein.

0 20 40 60 80 100 Meters

Scale: 1:1500

© Government of South Australia, through the Department for Environment and Water. This work is Copyright. Apart from any use permitted under the Copyright Act 1968 (Cwlth), no part may be reproduced by any process without prior written permission obtained from the Department for Environment and Water. Requests and enquiries concerning reproduction and rights should be directed to the Chief Executive, Department for Environment and Water, GPO Box 1047, Adelaide SA 5001.

EBS Ecology
112 Hayward Avenue
Torrensville, SA 5031
www.ebsecology.com.au
t. 08 7127 5607