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Planning

Working Beyond Expectations

Statement of Environmental Effects

Demolition of Service Station Awning; Removal of Underground Petroleum Storage System Infrastructure; and associated Remediation

Property:
321 Boomerang Drive, Blueys Beach
Lot 1 DP 862876

Applicant:
Ingenia Communities

Date:
September 2018

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Project Management • Town Planning • Engineering • Surveying
Visualisation • Economic Analysis • Social Impact • Urban Planning

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Document Control Sheet

Issue No.	Amendment	Date	Prepared By	Checked By
A	Draft – issued for Client review	05/09/18	LW	MLOU
B	Final	11/09/18	LW	MLOU

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1.0 Introduction

1.1 PURPOSE OF THE REPORT

ADW Johnson Pty Ltd has been commissioned by Ingenia Communities to prepare a Statement of Environmental Effects and accompanying development application seeking development consent for the proposed demolition of the service station awning, removal of Underground Petroleum Storage System (UPSS) infrastructure and associated remediation at 321 Boomerang Drive, Blueys Beach and described as Lot 1 DP862876 (the subject site).

It is proposed to cease operation of the service station to provide opportunity for the future redevelopment of an existing caravan park that is located on the Site.

1.2 APPLICATION DETAILS

Statement of Environmental Effects Prepared By	
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Application Details	
Applicant Name:	Ingenia Communities
Applicant Address:	Ingenia Communities C/– ADW Johnson Pty Ltd 7/335 Hillsborough Road Warners Bay NSW 2285
Landowner	INA Operations Pty Ltd
Property Description:	Lot 1 DP862876 321 Boomerang Drive, Blueys Beach
Project Description:	Demolition of service station awning; removal of underground petrol storage system infrastructure; and associated remediation
Site Area:	7.39 hectares
Zoning:	Great Lakes Local Environmental Plan 2014 • Part: RE2 – Private Recreation • Part: E2 – Environmental Conservation

1.3 BACKGROUND

1.3.1 Existing Development

A substantial area of the subject land is developed with an existing caravan park, service station and convenience store, all of which share a vehicular entrance onto Boomerang Drive, Blueys Beach.

The caravan park is proposed to be redeveloped under a separate Development Application for the purpose of long term dwelling sites and associated community facilities, roads, landscaping and stormwater/drainage infrastructure. It is anticipated that this development application will be lodged with Council in the near future.

1.3.2 Development Consent

DA-685/2007 was granted on 10 December 2013 for an "Extension of Caravan Park (25 New Long Term Sites)". The consent is valid for 5 years and lapses on 10 December 2018. The long term sites approved as part of this development are located toward the western extent of the existing park.

1.3.3 Planning Proposal

Lot 83 DP 753168 and Lot 427 DP 861736, that sit immediately north of the Site are currently subject to a planning proposal (PP_2017_MCOAS_003_00) seeking to amend Great Lakes LEP 2014 as follows:

- Rezone E2 Environmental Land to RE2 Private Recreation;
- Reduce the minimum lot size; and
- Amend the floor space ratio for 3.4ha of land.

The purpose of the planning proposal is to facilitate the expansion of the existing caravan park. The proposal is also linked to a planning agreement which will see the dedication of 60ha of land to Mid-Coast Council for permanent conservation purposes.

The planning proposal has been approved at Gateway and is currently with Mid Coast Council for implementation.

Once gazetted, it is anticipated that a separate development application will be lodged with Mid Coast Council seeking to expand the existing caravan park facility.

1.4 BRIEF OVERVIEW OF THE PROPOSED DEVELOPMENT

The subject land is described as Lot 1 DP 862876, with a physical address of 321 Boomerang Drive, Blueys Beach. It comprises an existing caravan park known as Palms Oasis, with associated service station and convenience store.

The land is located on the northern side of Boomerang Drive, Blueys Beach. It has an area of approximately 7.39 hectares, and frontage to Boomerang Drive of approximately 700m.

This application is seeking development consent for proposed demolition of the service station awning, removal of Underground Petrol Storage System (UPSS) infrastructure and associated remediation. The service station will cease operations to enable the proposed remediation work to be carried out.

The site is split zoned RE2 Private Recreation and E2 Environmental Conservation under the provisions of *Great Lakes Local Environmental Plan 2014* (GLLEP). The proposed demolition and remediation works are wholly contained within land zoned RE2.

The proposed demolition works are permissible under GLLEP, whilst the remediation works are permissible under State Environmental Planning Policy 55.

Ramboll Australia have prepared a Remedial Action Plan (RAP) for the works, and include methodology for the removal of the UPSS, extent of excavation, proposed remediation works and validation reporting (refer **Appendix F**).

2.0 Description of Proposal

2.1 OBJECTIVES OF THE PROPOSAL

The objectives of the proposal are to remove the petrol station component and associated infrastructure from the subject land and remediate the land to ensure it is appropriate for future residential uses.

2.2 DESCRIPTION OF PROPOSED DEVELOPMENT

Ingenia Communities are seeking development consent for:

- Demolition of the awning over the petrol station;
- Removal of Underground Petroleum Storage System (UPSS) infrastructure which includes three (3) Underground Storage Tanks (UST), associated pumps (bowsers), vents and fuel lines; and
- Associated remediation.

Site and Demolition plans are included in **Appendix B** of this report. A Remedial Action Plan (RAP) has been prepared by Ramboll and is included as **Appendix F**. The RAP includes a detailed methodology for removal of the UPSS which is summarised below:

Task 1 – Project preparation
Includes notification to local authorities, engagement of contractors, preparation of health and safety documentation and underground utility clearances.

Task 2 – Environmental Controls
The environmental controls will be implemented prior to commencement of the works and will include, but not be limited to, the following:

- Control of Site access / egress;
- Soil/erosion management;
- Excavation water (groundwater and surface water) management;
- Stockpile management;
- Material tracking and disposal; and
- Noise, odour, dust, and vibration controls.

Task 3 – UPSS Removal
- UST Removal Preparation Works
- Removal of USTs including:
  - Excavate concrete forecourt – excavate and temporarily stockpile on site the remaining concrete forecourt that was previously cut located above the footprint of the USTs;
  - Excavate UST's overburden – excavate and temporarily stockpile onsite the UST's overburden to expose to top of the USTs and associated fittings/pipe work;
  - De-gas UST (nitrogen purge) – nitrogen purge USTs until monitors indicate oxygen levels within the UST at 5% or less;
  - Onsite destruction of USTs – render nitrogen purged USTs incapable of acting as vessels to eliminate vapour recharge within the USTs;
  - Excavate UST concrete anchors and packing sands – excavate and stockpile on site the UST's concrete strip anchors. The packing sands adjacent to the USTs will be

removed and stockpiled onsite so as to free the USTs for removal from the excavation;

- Offsite disposal of stockpiled concrete – excavated concrete from the forecourt and the UST's anchors will be disposed offsite. If the concrete has strong hydrocarbon odours then it will be disposed offsite as contaminated waste at an appropriately licensed waste disposal facility;
- Removal of USTs from excavation – the three USTs will be lifted out of the excavation and loaded on to a truck for offsite transport and disposal;
- Offsite transport and disposal of destroyed USTs and bowser – offsite transport and disposal of USTs and bowsers. A UST Destruction Certificate will be provided upon completion of the works;
- Excavation of remaining soil material – excavation and stockpiling of additional soil from the walls and floor of the excavation at the direction of the environmental consultant;
- Validation sampling by the environmental consultant from the walls and floor of the excavation/s; and
- Demobilisation – make safe and temporally demobilise (potentially backfill into the excavation) until receipt of analytical results.

Task 4 - Excavation of Hydrocarbon Impacted Material and Stockpile Management
Based on the anticipated excavation dimensions, Ramboll estimates that approximately 150-200 m3 of stockpile soil may be generated during the works.

All soil removed during the excavation works will be temporarily stockpiled on-site in a designated area until laboratory results are received. Based on the laboratory results, the soil will be either reused on-site to backfill the excavations or will be disposed of off-site to a licensed landfill facility. Any stockpiled material will be bound by silt-trapping barriers for the control of silt and surface water runoff. Sediment erosion control devices shall be installed and will be maintained throughout the works as required.

Task 5 - Reinstate and Grade the Excavation
Site reinstatement will be undertaken as soon as practical following the completion of excavation, remedial works (if any).

The UST excavation will be reinstated in 200mm layers with previously excavated stockpiled material if deemed suitable for re-use following chemical assessment and with imported VENM (replacement volume of UST and associated concrete anchors). Compaction testing of the surface layer of the backfilled material to confirm that a compaction density of 98% has been achieved.

Backfilling will be completed by using clean material, free of organic matter and compacted in horizontal layers not more than 250 mm thick concrete to 95% of the standard maximum dry density of soil.

Field staff will collect photographic documentation of the demolition, to document progression of the works.

Soils may be re-used on site or taken off site for reuse as Virgin Excavated Natural Materials.

VENM is an exempt material under the waste legislation and does not specifically require testing but is based on an assessment of the potential for contamination. Where there is uncertainty, testing may be undertaken. Excavated natural material can also be re-used

once tested. If ENM were to be generated for off-site re-use this would need to meet the requirements of the relevant Resource Recovery Order.

2.3 DOCUMENTATION

The following documentation has been provided to support the proposed development and includes the following:

- Certificate of Title, Deposited Plan & Section 10.7 Planning Certificate – **Appendix A.**
- Site & Demolition Plans (ADW Johnson) – **Appendix B.**
- Environmental Site Assessment (Aurora Environmental Consulting) – **Appendix C.**
- Environmental Delineation Assessment Report (Aurora Environmental Consulting) – **Appendix D.**
- Groundwater Monitoring (Ramboll Australia P/L) – **Appendix E.**
- Remedial Action Plan (Ramboll Australia P/L) – **Appendix F.**
- Waste Management Plan – **Appendix G.**

3.0 Site Description and Context

3.1 PROPERTY DESCRIPTION

The subject land is described as Lot 1 DP 862876, with a physical address of 321 Boomerang Drive, Blueys Beach. It comprises an existing caravan park known as Palms Oasis.

The site is located on the northern side of Boomerang Drive, Blueys Beach. It has an area of approximately 7.39 hectares, and frontage to Boomerang Drive of approximately 700m. The petrol station covers an area of approximately 400m at the front of the site.

Lot 1 DP 862876 is owned by INA Operations Pty Ltd. A copy of the Certificate of Title and Deposited Plan are included in **Appendix A** of this report.

3.2 LOCALITY

The subject site is located in Blueys Beach, in the Mid Coast Local Government Area (LGA). Blueys Beach is a beachside suburb. The site is approximately 1.3km from the beach. Travel time to the site by car from Forster is approximately 20 minutes; and approximately 35mins from Bulahdelah.

Figure 1 and Figure 2 below show the location of the subject land in the context of the Mid Coast LGA and the local context of Blueys Beach.

Figure 1. Locality Map showing the site in the context of the Mid Coast LGA

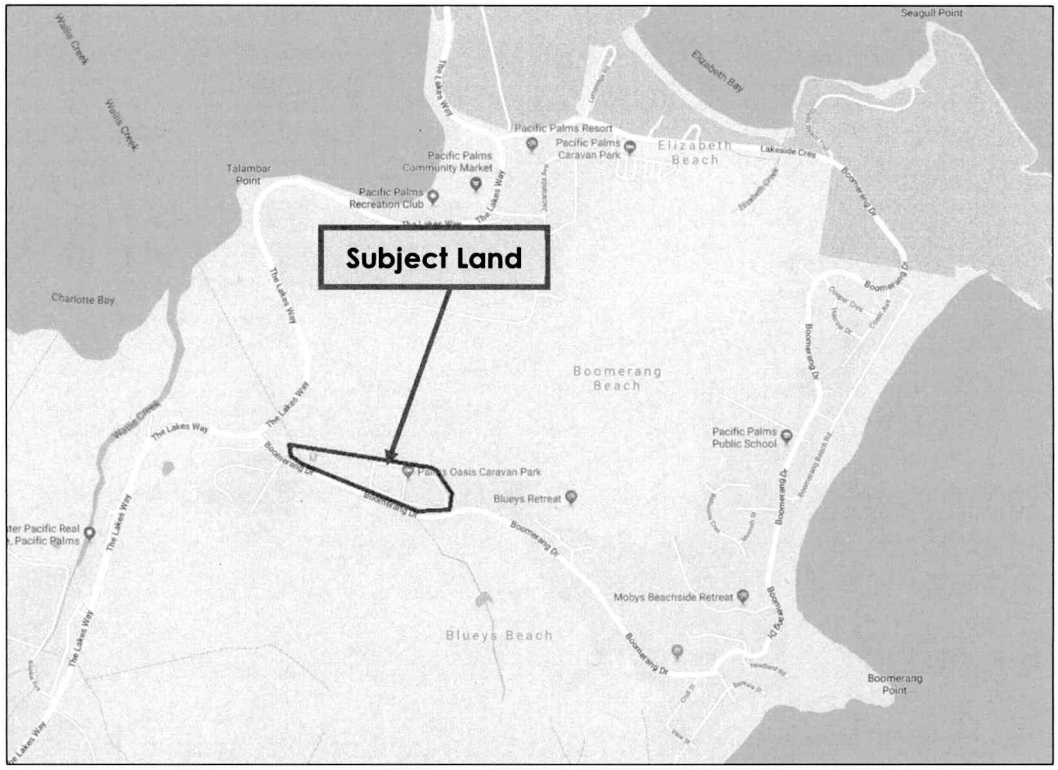

Figure 2. Locality map showing the site in the local context of Blueys Beach

3.3 CURRENT AND PREVIOUS LAND USES

The site comprises an existing caravan park known as Palms Oasis.

The existing site conditions are summarised as follows:

- The eastern portion of the Site is developed for the purposes of a caravan park;
- The service station and convenience store are located toward the site frontage and share the site entry driveway with the caravan park;
- The central and central western portion of the site is undeveloped and substantially cleared of vegetation. An existing development consent applies to this area, permitting an expansion to the existing caravan park operations. This approval is summarised in Section 1.3.2 of the SoEE; and
- The western most section of the site, toward the intersection of Boomerang Drive and The Lakes Way remains undeveloped and largely vegetated.

A cadastre plan and aerial image are provided below as **Figure 3**and **Figure 4** respectively.

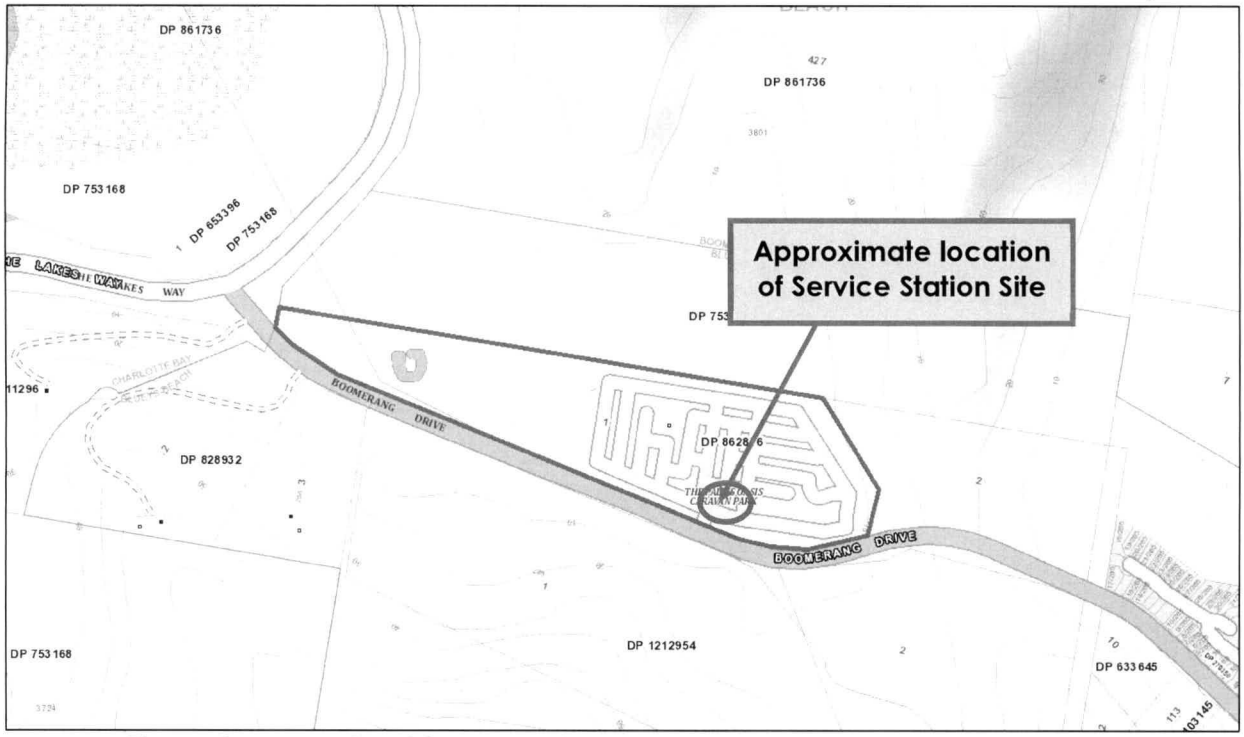

Figure 3. Extract from SIX Viewer NSW topographic mapping layer.
(Source: https://maps.six.nsw.gov.au/)

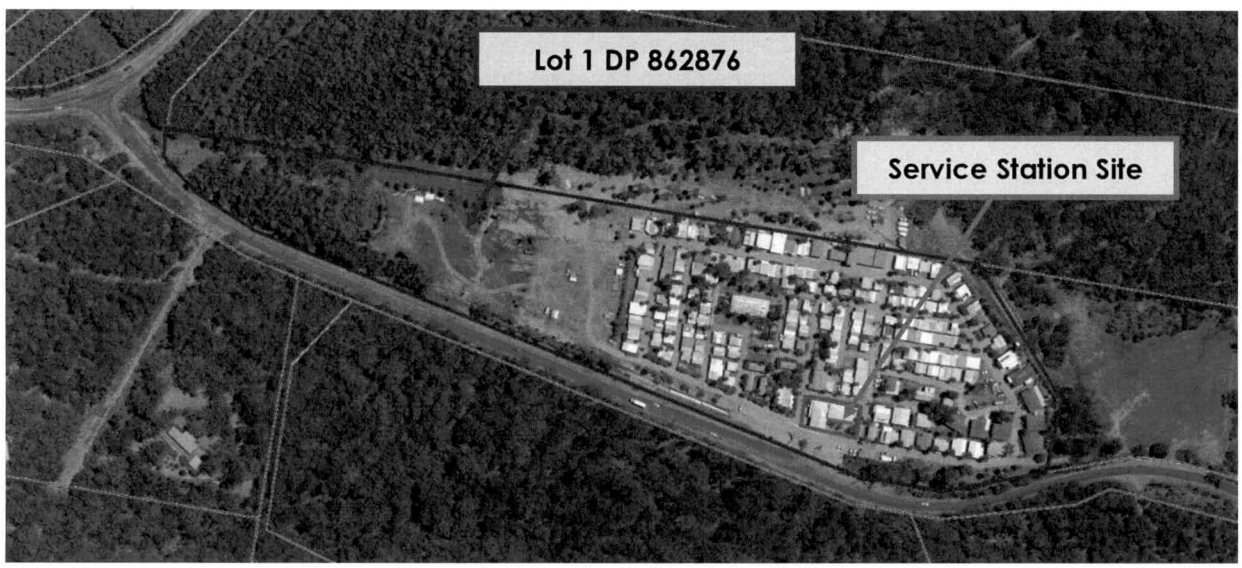

Figure 4. Aerial image of Site.
(Source: Google Earth: 2018)

3.4 TOPOGRAPHY, DRAINAGE & FLOODING

The service station component of the site covers approximately 400sqm and slopes at a moderate gradient towards the north west.

The site is a relatively flat, paved area with a slight slope from the road towards the central service station area. Surface water would be expected to flow from the road and collect in a central drain and flow west into the subsurface stormwater system.

As evident in the cadastre image (refer Figure 3) a first order water course traverses the western end of the site and then runs along the Boomerang Drive frontage in an eastern direction.

The location of the service station within Lot 1 is clear of the watercourse. No works are proposed to the watercourse as part of this application. Notwithstanding the works are within 40m of the watercourse and as such this application will require referral to the Natural Resource Access Regulator.

The western half of the site is identified as being flood prone land on the Great Lakes LEP 2014 (GLLEP) Flood Planning map (refer **Figure 5** below). Again, the location of the service station within Lot 1 is clear of the mapped flood planning area.

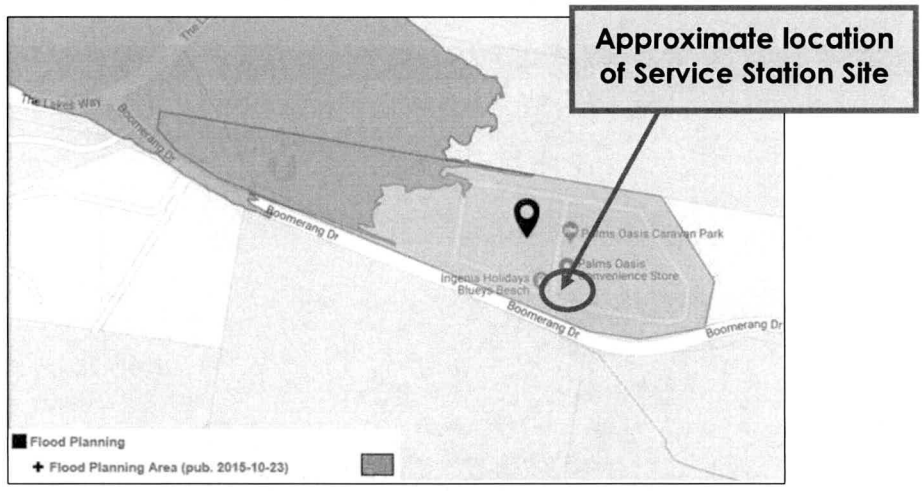

Figure 5. Extract from the GLLEP Flood planning map.
Source: NSW Planning Portal accessed 15/06/18

Stormwater and flooding are addressed in Sections 4 & 5 of this report.

3.5 CONTAMINATION & GEOTECHNICAL CHARACTERISTICS

3.5.1 Contamination

The site is identified on the Planning Certificate (2248/2018) as being potentially contaminated land. This is due to the existing retail petrol outlet (bowsers and tank) located on the site.

The extent of contamination is well documented in the Aurora Environmental Consulting and Ramboll Australian P/L reports contained in **Appendices** C, D & E of this report.

In summary these assessments have identified limited groundwater contamination to be present at the service station and off-site migration of contaminants towards sensitive receptors was evident.

No asbestos containing materials were identified in the service station buildings.

The 2016 Aurora Investigation found limited soil contamination (TRH and BTEX) however potential localized soil contamination is likely to exist around the UPSS which may require management or remediation.

Accordingly, a RAP has been prepared by Ramboll Australia P/L and is included as **Appendix F** of this report.

Contamination and remediation are discussed further in Section 5 of this report.

3.5.2 Geotechnical

The 1:250000 Newcastle Geology map indicates the site is underlain by lower Carboniferous-aged sandstones siltstones and claystones.

3.5.3 Mine Subsidence

The land is not proclaimed as a mine subsidence district.

3.6 ACID SULFATE SOILS

The site is identified on the GLLEP Acid Sulfate Soils map as containing potential acid sulfate soils Classes 2, 3 & 5 (refer **Figure 6** below).

Acid Sulfate Soils are addressed in Section 4 below.

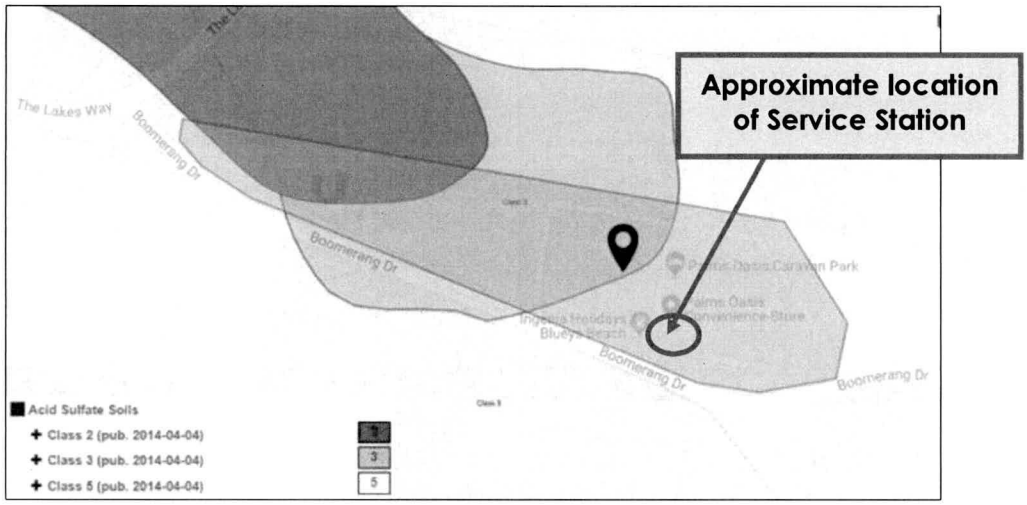

Figure 6. Extract from the GLLEP Acid Sulfate Soils map
Source: NSW Planning Portal accessed 15/07/18.

3.7 FLORA AND FAUNA

As evident in the aerial photo above, the western portion of the site is heavily vegetated.

The eastern portion of the site is occupied by the existing caravan park, service station and convenience store; and is largely cleared with the exception of landscape ground covers, shrubs and isolated trees.

The planning certificate (2248/2018) identifies that the land is not Biodiversity certified. No biodiversity stewardship agreements apply to the land.

No vegetation is proposed to be removed as part of this application.

Flora and Fauna is addressed in **Sections 4 & 5** of this report.

3.8 BUSHFIRE

The subject site is identified on the NSW Planning Portal as being bushfire prone land Vegetation Buffer with a small patch of Vegetation Category 1 & Vegetation Category 2 on the western end of the Boomerang Drive frontage (refer **Figure 7** below).

The proposed development will not increase the bushfire risk and will essentially reduce the bushfire risk by removing a potential fuel source.

This application does not trigger referral to the NSW Rural Fire Service under Section 4.46 of the EP&A Act 1979.

Bushfire is discussed further in Section 5 of this report.

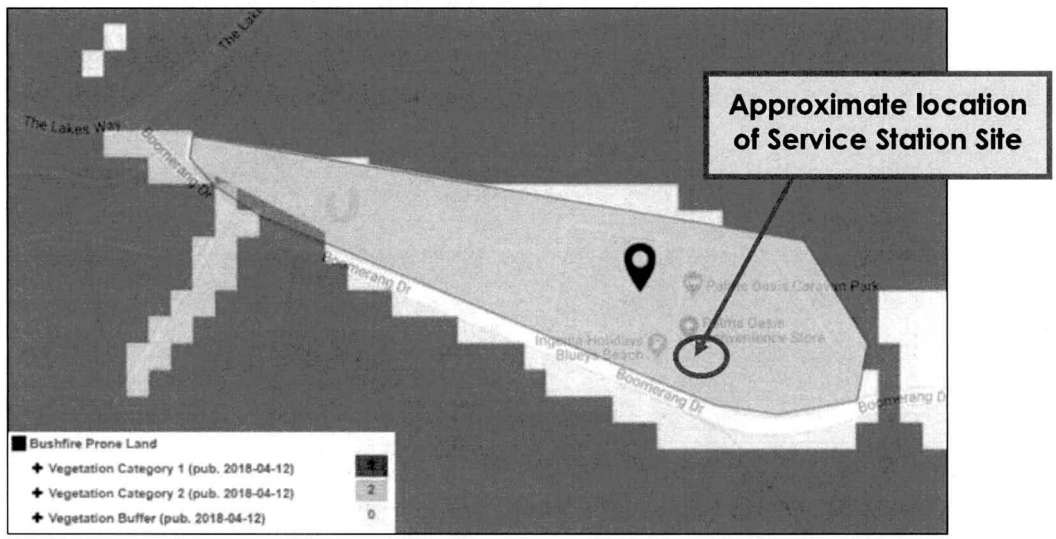

Figure 7. Extract from NSW Planning Portal Bushfire Prone land map layer
Source: NSW Planning Portal accessed 15/07/18

3.9 TRAFFIC, ACCESS & ROAD NETWORK

The site is located on Boomerang Drive at Blueys Beach. Boomerang Drive is a two way, two lane sealed road, without formal kerb and guttering. Boomerang Drive is a local collector road for the area with a 60km/h speed limit. Boomerang Drive connects to The Lakes Way approximately 50m to the west of the site.

The Lakes Way is a main road connecting Bulahdelah to Forster. The Lakes Way is generally a two way two lane sealed road with an 80km/h speed limit applicable to the relevant section of road.

The Planning Certificate (2248/2018) identifies that the land is not affected by plans for road widening or realignment.

There are regular bus services operating on a daily basis through Blueys Beach offering connections to Forster, Bulahdelah and Newcastle. The bus stops are located in front of the local shops approximate 1km east of the site.

Traffic, access and car parking is addressed further in Section 5 of this report

3.10 HERITAGE

There are no known heritage items located in the vicinity of the subject site.

3.11 COASTAL AREAS, COASTAL WETLANDS AND LITTORAL RAINFORESTS

The subject site is identified on the Coastal Management SEPP mapping as being partly located within a coastal environment area, and partly located in a coastal use area (refer **Figure 8** and **Figure 9**).

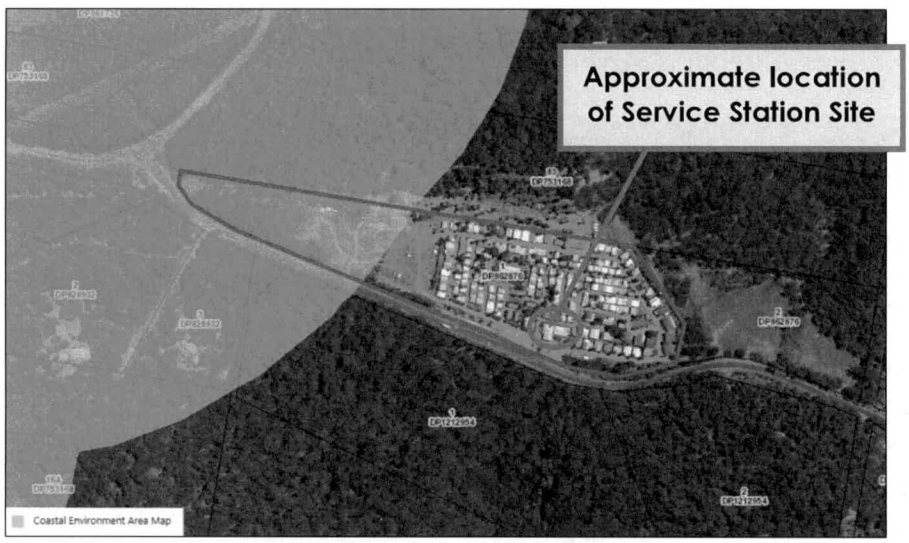

Figure 8. Extract from Coastal Management SEPP Coastal Environment Area Map

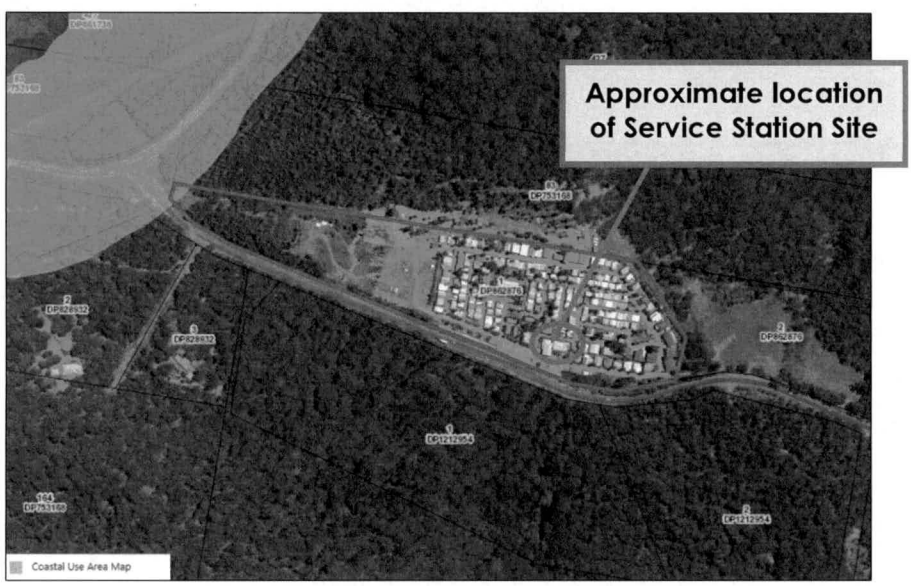

Figure 9. Extract from Coastal Management SEPP Coastal Use Area Map

The very western tip of the site is identified as being land within proximity to a coastal wetland (Refer **Figure 10** below).

Figure 10. Extract from Coastal Management SEPP Coastal Wetlands and Littoral Rainforest map

Coastal protection is addressed in the context of the Coastal Management SEPP in Section 4 below.

3.12 UTILITY SERVICES

Utility services to the subject land will not be impacted by the proposed works.

3.13 LAND RESERVED FOR ACQUISITION

The land is not reserved for acquisition

3.14 OBSERVATIONS FROM THE SITE CHARACTERISTICS & LOCALITY

The proposal is entirely appropriate in that it will return the land to a suitable condition for future residential landuse. Ensuring that the existing contamination is appropriately remediated so as to prevent any harm to human health or the surrounding environment.

4.0 Statutory Planning Context

4.1 STATE PLANNING LEGISTATION AND CONTROLS

A review of all State planning legislation including relevant State Environmental Planning Policies has been undertaken and the following state planning controls are applicable to the proposed development.

4.1.1 NSW Environmental Planning and Assessment Act 1979

In determining a Development Application, a consent authority is to take into consideration the matters specified in Clause 4.15 of the EP&A Act, including:

(a) the provisions of:

(i) any environmental planning instrument, and
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
(iii) any development control plan, and
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
(v) (Repealed)

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest.

This SOEE satisfies the relevant heads of consideration given in Section 4.15 of the EP&A Act. There is no planning agreement relating to the site. Council have identified the site as suitable for development for the purpose of a caravan park through previous approvals on the site and the strategic zoning of the site. The proposed removal of the UPSS infrastructure, and associated remediation will ensure the longevity of the site to cater for long term sites/residential purposes.

4.1.2 Water Management Act 2000

The objects of the *Water Management Act 2000* are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present

and future generations.

As outlined in **Section 3**, the service station location is within 40m of a first order watercourse. As such this application will require referral to the Natural Resource Access Regulator under Section 91 of the *Water Management Act 2000.*

In the event that significant groundwater ingress is encountered (ie, where inflow makes further excavation impractical) then excavations will require dewatering and disposal to an appropriately licensed facility prior to collection of validation samples and / or backfilling. This action is identified in the RAP (refer **Appendix F)** as part of its contingency plan.

4.1.3 Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014

The *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014* commenced in September 2014 for the purpose of regulating the commissioning, operations and decommissioning of Underground Petroleum Storage Systems.

Clauses 13 & 15 relate to removal and decommissioning of storage systems, and require that a validation report for storage site, the removal of the tank and any associated remediation is prepared by an appropriately qualified person. The report must be submitted to the relevant local authority within 60 days of decommissioning, removal of the tank or completion of any associated remediation works.

This action is identified in the RAP (refer **Appendix F)** as part of its compliance and reporting process.

4.1.4 SEPP 55 – Remediation of Land

The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

A Remedial Action Plan (RAP) has been prepared by Ramboll Australia P/L and is included as **Appendix F** of this report.

The proposed remediation is a *Category 1 remediation work* requiring consent in accordance with Clause 9E (iii) of the SEPP, as the site is mapped for the purpose of:

- wildlife protection corridor being mapped under Clause 7.9 of the Great Lakes LEP 2014.

Accordingly, this application seeks development for the proposed remediation works. It is understood that the application will be advertised in accordance with the requirements of the SEPP.

Remediation is discussed further in **Section 5** of this report.

4.1.5 SEPP 44 – Koala Habitat Protection

The purpose of this policy is to encourage the proper conservation and management of

areas of natural vegetation that provide habitat for koalas to ensure their protection and survival in the natural environment.

No vegetation is proposed to be removed as part of this application.

Any potential for risk / contamination as a result of the works will be appropriately managed in accordance with the Remedial Action Plan (refer **Appendix F)** and associated Environmental Management Plans.

4.1.6 SEPP (Coastal Management) 2018

The aim of this Policy is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the *Coastal Management Act 2016*, including the management objectives for each coastal management area.

As identified in Section 3 above Lot 1 DP 862876 is identified on the SEPP mapping as being:

- partly within a coastal environment area (western half of the site),
- partly within a coastal use area (western tip only), and
- partly land with proximity to coastal wetlands (western tip only).

Mapping showing the above extents is provided in **Section 3.11** of this report as **Figure 8 - Figure 10**.

The service station within Lot 1 DP 862876 is clear of all the mapped coastal areas.

In response to the matters raised in Clauses 11, 13 & 14 of the SEPP; the proposed development will have a positive impact on the coastal environment. The proposal will remove a potential source of contamination and proposes associated remediation to restore the land to an acceptable condition for future residential landuse.

Any potential for risk of contamination during the works will be appropriately managed in accordance with the RAP (refer **Appendix F**) and associated Environmental Management Plans.

4.1.7 Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005

The purpose of the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005* (the Regs) is to provide opportunities for affordable alternatives in short-term and long-term accommodation through appropriate design, and promotion of health, safety and amenity of the occupiers.

There are no matters identified in the Regs that are considered relevant to this application.

4.1.8 SEPP 21- Caravan Parks

The aim of this Policy is to encourage the orderly and economic use and development of land used or intended to be used as a caravan park catering for both short and long term residents, including promotion of social and economic welfare of the community,

provision of adequate community facilities, and protection of the environment.

Given that no works are proposed to the existing caravan park located on the site, this SEPP is not applicable to this application.

There are no matters identified in the Regs that are considered relevant to this application.

4.1.9 SEPP (Vegetation in Non-Rural Areas) 2017

This SEPP was recently introduced in NSW as part of a suite of legislative changes relating to Biodiversity Conservation across NSW.

Clause 8 of the SEPP confirms that it is not applicable to this application given that this application seeks development consent under Part 4 of the EP&A Act 1979.

4.2 REGIONAL PLANNING CONTROLS

4.2.1 Hunter Regional Plan 2036

The NSW Government has developed the Hunter Regional Plan 2036 as an overarching framework to guide land use planning priorities and infrastructure funding decisions in the Hunter region over the next 20 years.

The Plan sets priorities and provides a direction for regional planning decisions. It focuses on new housing and jobs, and targets growth in strategic centres and renewal corridors close to transport to deliver social and economic benefits. It sets in place line-of-sight land use planning for the region, regional districts like the Greater Newcastle metropolitan area and each council area.

The vision of the Hunter Regional Plan 2036 is for the Hunter to be the leading regional economy in Australia with a vibrant new metropolitan city at its heart. To achieve this vision, the NSW Government has acknowledged the growing importance of Greater Newcastle and set the following regionally focused goals:

- The leading regional economy in Australia;
- A biodiversity-rich natural environment;
- Thriving communities; and
- Greater housing choice and jobs.

The HRP identifies Pacific Palms as a '*centre*' surrounded by a small amount of '*residential and employment land*' and within close proximity to the '*strategic centre*' of Forster Tuncurry (refer Figure 11 below).

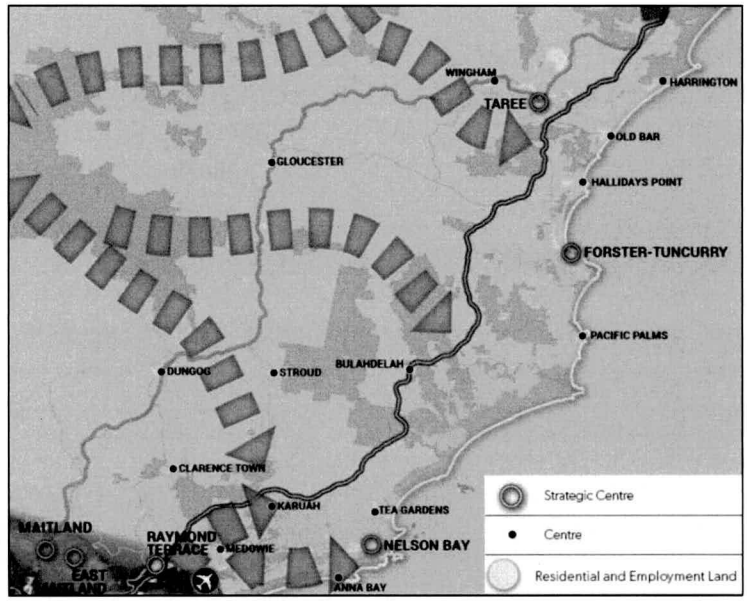

Figure 11. Extract from Hunter Regional Plan 2036

The Hunter Regional Plan includes the following directions:

- ***Direction 4: Enhance interregional linkages to support economic growth***, including the goal that 95% of the population to reside within 30min commute of a strategic centre by 2036;
- ***Direction 21: Create a compact settlement*** including promoting small-scale renewal in existing urban areas and provision of greater housing choice by delivering diverse housing, lot types and sizes including different options for infill sites;
- ***Direction 22: Promote housing diversity*** that responds to local demand including affordable housing options and accommodating the ageing community;
- ***Direction 23: Grow centres and renewal corridors***, concentrating growth in strategic and local centres to support economic and population growth; and
- ***Direction 26: Deliver infrastructure to support growth and communities*** including aligning landuses that capitalize on existing infrastructure.

The proposed development is consistent with the Hunter Regional Plan 2036 in that it will make good the land suitable for long term dwelling sites/residential purposes.

4.3 LOCAL PLANNING CONTROLS

4.3.1 Great Lakes Local Environmental Plan 2014

The proposed development is subject to the provisions of Great Lakes Local Environmental Plan 2014 (GLLEP).

The subject site is split zoned under the GLLEP (refer **Figure 12** below). The majority of the site zoned RE2 Private Recreation, with a small portion at the western end of the site zoned E2 Environmental Conservation.

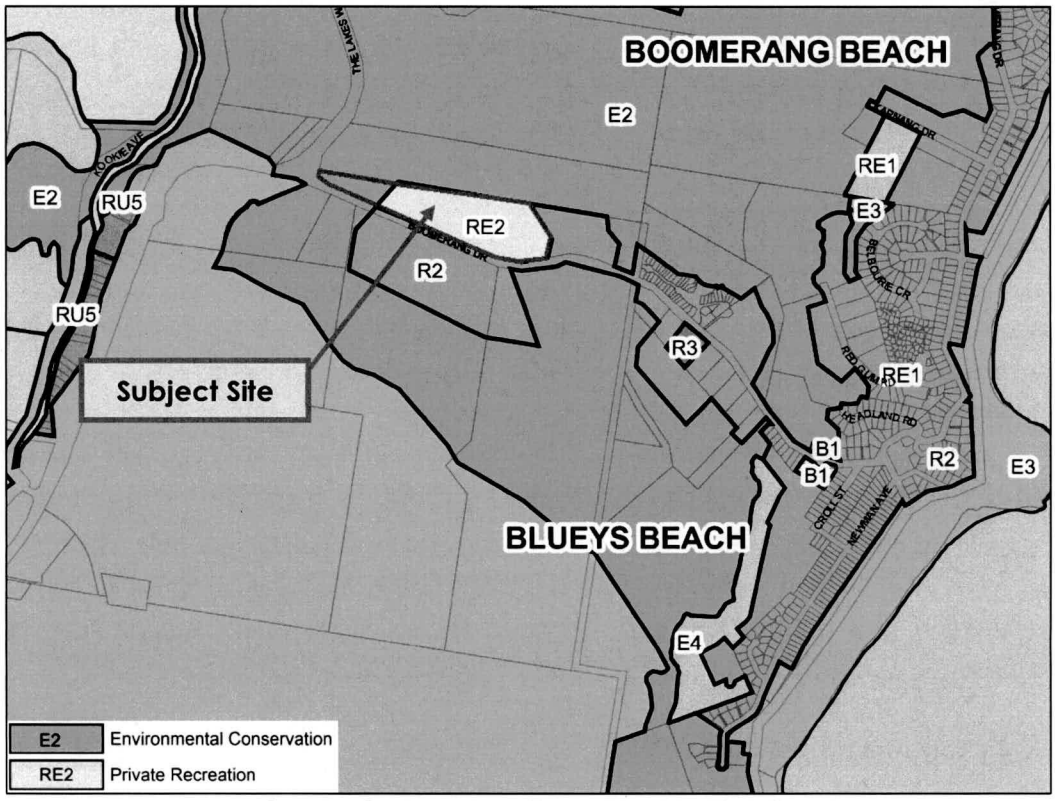

Figure 12. GLLEP Zone Map Extract
(Source: NSW Legislation Website. Accessed 17/07/18).

The objectives of the RE2 zone are:

- To enable land to be used for private open space or recreational purposes;
- To provide a range of recreational settings and activities and compatible land uses;
- To protect and enhance the natural environment for recreational purposes; and
- To provide for caravan parks and camping grounds and ancillary activities.

The objectives of the E2 zone are:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values; and
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

The proposed development is entirely consistent with the RE2 and E2 zonings of the site in that the proposal will make good the site suitable for future development in accordance with the zone objectives and subject to separate application.

4.3.2 Specific Great Lakes LEP 2014 Clauses

Clause 2.7 – Demolition requires development consent
Clause 2.7 specifies that demolition of building or work requires development consent. Accordingly, development consent is sought for the demolition of the existing service station awning and removal of the UPSS and associated infrastructure on the site. A demolition plan is included in **Appendix B.**

Clause 7.1 – Acid Sulfate Soils

As previously outlined the service station site is mapped as potential Class 5 acid sulfate soils on the GLLEP 2014 maps and shown in section 3.6, Figure 6 of this report.

Clause 7.1 outlines the following works which require consent:

> *Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.*

The RAP assumes excavation to a depth of 4m and consequently, an acid sulfate soils management plan is not considered necessary as part of this development application.

Clause 7.2 – Earthworks

Excavation will be necessary to remove the underground storage tanks. The proposed earthworks are described in the RAP included as **Appendix F** of this report.

Clause 7.3 – Flood Planning

The service station site within Lot 1 DP 862876 is not identified as a flood planning area on the GLLEP 2014 maps. The proposed demolition and removal of the UPSS will have no impact on flooding. Flooding is not addressed further in this report.

Clause 7.5 – Stormwater Management

The RAP (refer **Appendix F**) includes water management strategies and erosion and sediment controls for the proposed works.

Clause 7.7 – Riparian Land and Watercourses

As previously stated, this application involves works within 40m of a watercourse.

The proposed works will not impact the watercourse. The service station site is clear of the watercourse banks. The proposal does not include any alignment works or vegetation removal.

The RAP (refer **Appendix F**) includes risk management and environmental management measures.

Overall the proposal will have a positive impact on water quality within the locality with the removal of a potential source of contamination.

Clause 7.9 – Protection of wildlife corridors

The subject site is identified as a protection corridor on the GLLEP 2014 Wildlife protection corridors map (refer Figure 13 below).

No vegetation is proposed to be removed as part of this application. The proposed development will not negatively impact on the wildlife corridor.

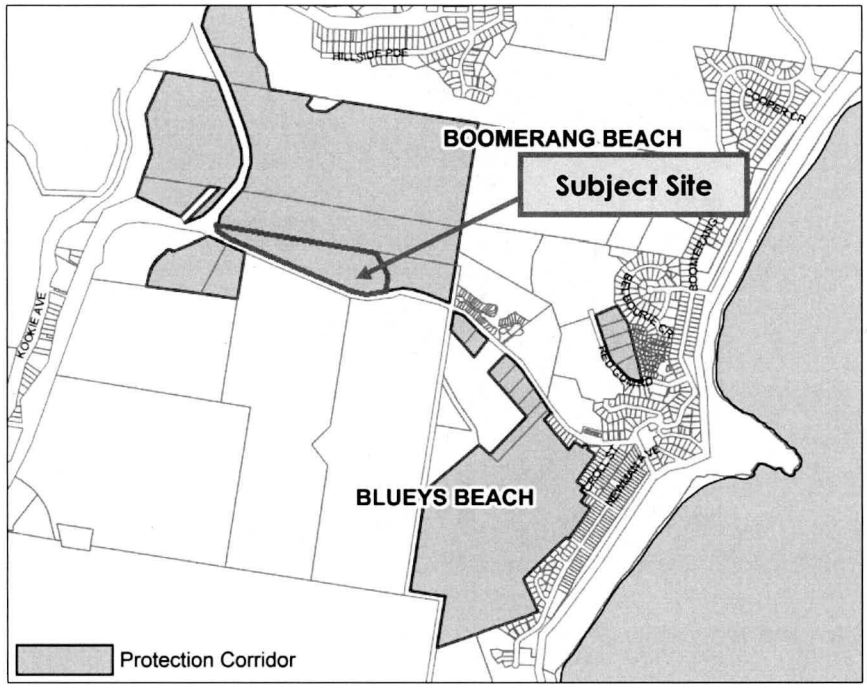

Figure 13. Extract from GLLEP Protection of Wildlife Corridors Map.

4.3.3 Great Lakes Development Control Plan

The Great Lakes Development Control Plan (GLDCP) applies to the proposed development. GLDCP complements The Great Lakes LEP 2014, providing objectives and controls for development.

The relevant sections of the GLDCP are addressed below.

Section 3 – Character Statement

The subject site sits within the Pacific Palms coastal village (including Blueys Beach, Boomerang Beach and Elizabeth Beach) refer to **Figure 14** below.

Figure 14. Extract of from GLDCP: Pacific Palms Coastal Village

The DCP provides the following character statement for the area:

Vision:
Future development within Pacific Palms is to enable sustainable development that enhances the village character and protects the natural setting.

Desired Future Character:
The desired future character of the Pacific Palms locality is derived from its inherent natural attributes associated with the National Park, Wallis Lake and proximity to the expansive Pacific Ocean and Marine Park. The beachside villages will continue to be defined and contained by the existing green spaces associated with Booti Booti National Park, Wallis Lake and the Pacific Ocean.

Hand in hand with protection of the existing natural assets and vegetation will be the creation of a safe environment for people and assets from bushfire hazard.

The overall built form of the locality is to be of a high quality design with an architecture suited to a sensitive coastal location. A low scale 'bushy' coastal setting is to be maintained by small scale sympathetic infill development in the low density residential areas and sensitive low scale development in the low density greenfield areas.

Areas zoned for open space purposes and environmental protection purposes are to be maintained as natural assets for the locality.

The Blueys Beach Neighbourhood Centre is to function as the main village service centre; it will serve the daily retail and service needs of the locality with a predominance of small specialised business.

Existing development within these areas is usually characterised by:

- *Development that is secondary to the landscape and natural environment;*
- *Development that does not dominate views and vistas;*
- *Buildings which avoid overshadowing and are in scale with existing development;*
- *Small scale detached buildings addressing the street; generally single storey;*

- *Development which follows the contour of the land on sloping and steep sites;*
- *Commonly gable and hipped roofs up to 22 degree pitch, but sometimes low, mono pitch (skillion) roofs with cantilevered eaves;*
- *Common use of fibre cement sheet and weatherboard for wall cladding with less common use of painted brick;*
- *Common use of corrugated roof sheeting;*
- *Mixture of small vertically proportioned windows in some cases, and larger expanses of glass to the view; and*
- *The retention of natural tree cover throughout residential lots and public space.*

The proposed works will not undermine the vision or desired character for the Pacific Palms coastal village.

Section 4. Environmental Considerations

The relevant considerations from this section are Ecological Impacts, Flooding, Coastal Planning Areas, Contaminated Land and Bushfire. All of these issues are well documented within this report, and associated specialist reports attached as Appendices to this report.

Section 11 Water Sensitive Design

Water management measures and erosion and sediment controls for the proposed works are detailed in the RAP (refer **Appendix F**).

Section 12 Tree and Vegetation Preservation

The subject site is identified as a protection corridor on the GLLEP Wildlife protection corridors map (refer Figure 13 above).

As previously outlined, no vegetation is proposed to be removed as part of this application. The proposed development will not negatively impact on the wildlife corridor.

Section 13 Landscaping and Open space

There is no landscaping or additional open space proposed as part of this proposal.

Section 14 Waste Management

Waste Management is addressed in Section 5 of this report.

Section 16 Site Specific Controls

Section 16.22 includes specific controls for identified sites within Pacific Palms. The subject site is identified as Site 12 on **Figure 15** below.

These controls have been reviewed and it is considered that none of the site specific controls applicable to Lot 1 DP 862876 are relevant to this application.

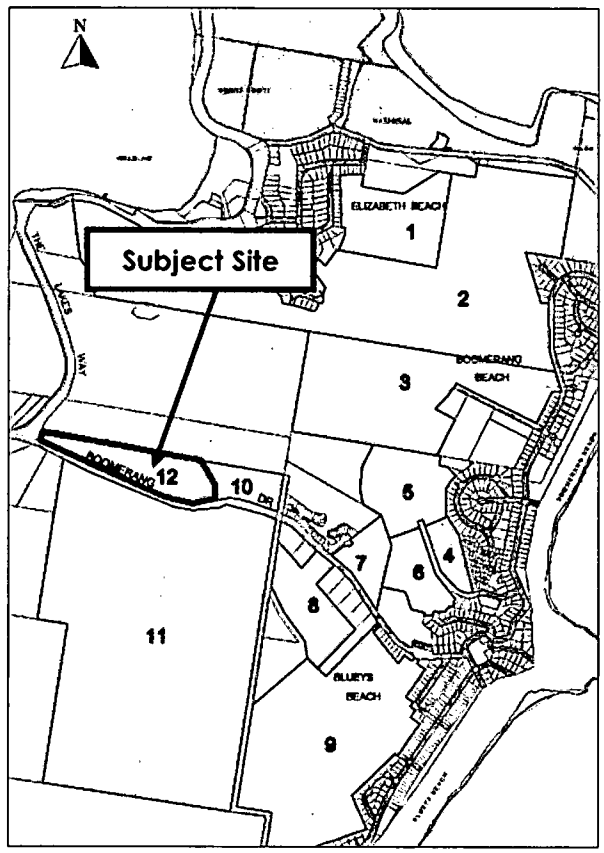

Figure 15. Extract from DCP Section 16.22 Controls for specific sites within Pacific Palms

4.3.4 Other Relevant Policies, Strategies and Controls

MidCoast 2030

Midcoast 2030 is a Community Strategic Plan 2018-2030, the first for the newly formed Midcoast Council. Midcoast 2030 details the following vision:

> *"We strive to be recognised as a place of unique environmental and cultural significance. Our strong community connection, coupled with our innovative development and growing economy, builds the quality of life we value."*

Midcoast 2030 outlines numerous values that, combined with the vision will form the direction and framework for the future planning of the region.

The proposed development is generally consistent with the Midcoast 2030 Plan in that it will return the land to a suitable condition appropriate for future residential use/long term dwelling sites.

5.0 Development Issues

5.1 ZONING AND PERMISSIBILITY

As indicated in **Section 4** of this report, the subject site is split zoned RE2 Public Recreation and E2 Environmental Conservation. The proposal is generally consistent with the zone objectives in that it will make good the land for future use in accordance with the zone objectives.

The proposed demolition is permissible with consent under clause 2.7 of the GLLEP 2014.

The proposed remediation is *Category 1 Remediation Work* and is permissible with consent under Clause 9 of SEPP 55.

5.2 CONTAMINATION

Three (3) environmental investigations have been conducted for the service station site including:

- *Environmental Site Assessment Report Palms Oasis Caravan Park*, Aurora Environmental Consulting, April 2016 (Aurora 2016);
- *Environmental Delineation Assessment Report Palms Oasis Caravan Park*, Aurora Environmental Consulting, October 2016 (Aurora 2016a); and
- *Groundwater Monitoring Palms Oasis Caravan Park, Blueys Beach NSW*, Ramboll, February 2018.

A summary of these investigations is presented below.

5.2.1 Environmental Site Assessment Report

In 2016, Aurora Environmental Consulting Pty Ltd undertook an Environmental Site Assessment of the service station and surrounding Caravan Park to assess the impacts of the storage of fuel products on the site soil and groundwater and the resulting risks to continued commercial use of the service station and residential use of the park.

The scope of the investigations encompassed:

- A review of site background information and available site history;
- Site investigation comprising drilling of six boreholes in the service station area and sampling and analysis of soil for total petroleum hydrocarbons (TPH), benzene, toluene, ethyl-benzene, xylene and naphthalene (BTEXN) and lead; and
- Installation of three groundwater monitoring wells into three of the boreholes and subsequent sampling and analysis of groundwater for TPH, BTEXN and lead.

Aurora (2016) reported that the site contained an operational service station facility including:

- A total of three USTs, installed in the early 1990s at the time of site commissioning;
- Two USTs had a capacity of 11800 Litres and contained PULP 95 and ADF fuel, respectively. One UST had a capacity of 16200 Litres and contained ULP 91;
- Three fuel dispenser pumps, located below the canopy which dispensed various grades of fuels;

- Vent lines located in the canopy; and
- A retail store outlet attached to the service station facility.

Overall the ESA recommended further investigations, accordingly an Environmental Delineation Assessment was undertaken. The conclusions and recommendations of both the ESA and EDA are presented below.

5.2.2 Environmental Delineation Assessment Report

An Environmental Delineation Assessment Report was prepared by Aurora Environmental Consulting, October 2016. Briefly the scope of the investigations encompassed:

- Following a review of the results from the March investigation, further boreholes were drilled to define the extent of observed impacted groundwater and a further six groundwater wells were installed to the west, northwest, north and east of the service station site in the surrounding caravan park;
- Soil and groundwater (from both the initial wells and the new wells) was sampled and analysed for the potential contaminants of concern; and
- A visual and odour inspection was conducted in September 2017 which indicated only a mild hydrocarbon odour in MW3 with no indication of a sheen in the wells.

The conclusion and findings of the investigations were

There were no visible signs of vegetation stress within the site, or in areas located down gradient (west)of the site.

- The closest environmentally sensitive receptor to the site is the coastal seawater body of Wallis Lake located approximately 1km to the west of the site;
- During the delineation assessment works, six (6) additional boreholes (MW4 to MW9) were drilled to depths of up to 5.0m BGL in locations targeted to delineate previously identified soil and groundwater impacts by petroleum hydrocarbons;
- The geology encountered during drilling consisted of sandy gravel and silty clay fill extending from below the concrete slab to approximately 0.8m BGL, underlain by weathered silty clays and clay to the maximum extent of investigation at 5.0m BGL;
- Six (6) groundwater monitoring wells were installed during the assessment to complement the three (3) existing monitoring wells, for lateral delineation purposes. All nine (9) wells were sampled as part of the assessment to determine the extent of groundwater contamination by petroleum hydrocarbons;
- Groundwater below the operational portion of the site is likely to occur as a semi confined aquifer at the interface between the weathered silty clays and the underlying less weathered clay between 2.0m and 3.2m BGL. The groundwater is flowing in a north-westerly direction towards Wallis Lake with a slope of 0.046m/m;
- Petroleum hydrocarbon impacts to the soils were not identified in measurable concentrations in any of the delineation boreholes installed as part of this additional assessment;
- Petroleum hydrocarbon compounds in groundwater were detected in concentrations above the adopted site assessment criteria in samples submitted for analysis from the three (3) monitoring wells located in the commercial retail refueling area immediately surrounding the UPSS. Concentrations of benzene and xylenes in MW1 and MW3, and Naphthalene in MW1, MW2 and MW3 exceeded the Groundwater Investigation Level (GIL) assessment criteria for the protection of aquatic ecosystems. The Health Screening Levels (HSLs) criteria for vapour intrusion was not exceeded based on the application of commercial land use for the retail fuel outlet and shop. These results are

in line with the findings of the Aurora March 2016 ESA; and

- Petroleum hydrocarbon impacts to the groundwater were not identified in measurable concentrations in any of the delineation monitoring wells (MW4 to MW9) installed as part of this additional assessment, with the exception of trace concentrations in MW5 which were below all adopted site assessment criteria for residential land use.

In summary, the results of the delineation assessment works indicated that at the time of the investigation, the network of delineation wells installed in areas down gradient and across gradient of identified impacted groundwater were found to be generally absent of measurable concentrations of petroleum hydrocarbons. As such, the previously identified soil and groundwater impacts in Aurora (April 2016) were considered to be confined to the operational areas of the retail petroleum outlet.

Given the delineation of petroleum hydrocarbon impact to within operational areas of the refuelling facility, notification of the contamination to the NSW EPA in accordance with the NSW EPA UPSS Regulations (2014) and/or section 60 of the *Contaminated Land Management Act (1997)* was considered to not be warranted at that time.

The site was considered suitable from a human health and ecological perspective for ongoing use as a caravan park and retail petroleum outlet, with regular and ongoing groundwater monitoring of the network of wells to be conducted to confirm the absence of risk to park residents, groundwater users and sensitive environmental receptors in the vicinity of the site, in addition to the mandatory leak detection requirements in accordance with the UPSS Regulations (2014).

5.2.3 Groundwater Monitoring Palms

In 2018, Ramboll undertook an updated round of sampling and laboratory analysis to assess ongoing impacts on groundwater at the service station within the caravan park.

Briefly the scope of the investigations encompassed:

- A preliminary review of the existing site investigation reports for assessments conducted in 2016 by Aurora; and
- Groundwater monitoring of the nine site groundwater wells and analysis of samples for a range of contaminants of concern including total recoverable hydrocarbons (TRH), volatile aromatic hydrocarbons (VOCs), BTEXN, polycyclic aromatic, hydrocarbons, (PAHs) and lead.

Results:

- Results indicated concentrations of petroleum hydrocarbons, including mono-aromatic hydrocarbons (benzene, ethyl-benzene, toluene, and xylene) and naphthalene to be present at concentrations consistent with the previous investigations conducted by Aurora (Aurora 2016a and b);
- Fieldwork also confirmed similarly consistent depth to groundwater and groundwater flow directions;
- There were no separate phase hydrocarbons observed in any well;
- Concentrations of benzene, xylene and naphthalene exceeded the Groundwater Investigation Limits (GILs) relevant to the site, although they were below health screening criteria for inhalation and direct contact;
- Contaminant concentrations appeared to be decreasing over time in the groundwater collected from the service station wells MW1 and MW2, and increasing in

MW3, on the down hydraulic gradient side of the service station;
- Concentrations at the down-gradient wells, MW4, MW5 and MW6 in the residential caravan park area, remained low and near detection levels however had increased which may be indicative of the migration of the contaminant plume to the north-west, towards the residential area of the caravan park; and
- Considering the data gaps, there was no apparent complete pathway from the contaminant source (USTs and dissolved concentrations of petroleum hydrocarbons) to a receptor, and no indication that contamination had migrated beyond the site.

The groundwater assessment concluded:

- elevated contaminants in groundwater at the service station and the potential off-site migration towards sensitive receptors including the residential area of the caravan park requires action;
- Further monitoring is required to evaluate if the site warrants a potential risk of harm and notification to the NSW EPA under Section 60 of the *NSW Contaminated Land Management Act 1997*; and
- Monitoring in accordance with the UPSS is required.

In summary the results of the environmental investigations indicated limited groundwater contamination to be present at the service station site and off-site migration of contaminants towards sensitive receptors was evident.

No asbestos containing materials were identified in the service station buildings.

The ESA found limited soil contamination (TRH and BTEX) however potential localised soil contamination is likely to exist around the IPSS which may require management or remediation.

5.3 REMEDIATION

As detailed above the environmental investigations have identified the presence of limited existing soil and groundwater contamination from petroleum hydrocarbons. In order to render the site suitable for future residential use, remediation of affected soils is proposed as part of the removal of the UPSS works.

A Remedial Action Plan (RAP) has been prepared by Ramboll Australia Pty Ltd and is included as **Appendix F** of this report.

A summary of the RAP is presented below:

Remediation Goal
The goal of the remediation works is to remove the UPSS facility and associated infrastructure and any affected soils to render the site suitable for residential landuse.

Remediation Extent
The extent of the remediation is defined as the areal extent of the service station site and to a vertical depth of approximately 3m.

Remediation Options
As part of the development of the site, the removal of the UPSS facility is required. Remediation options for any affected soils are considered to include:

1. Excavation and off-site disposal of contaminated soil; and
2. On-site containment via capping of contaminated soil and implementation of a Long Term Environmental Management Plan.

Generally, on-site containment of impacted soils is not a suitable remediation strategy where contamination potentially extends below the groundwater surface where the presence of soil contamination can potentially form an ongoing source to groundwater. This option requires long term management and monitoring requirements. This option does not remove contamination from the site and legacy remains.

Preferred Remediation Option
The preferred remediation option is the removal of the UPSS and remediation of impacted soils and groundwater by off-site disposal.

The RAP includes a contingency plan detailing potential failure scenarios that could occur and the contingency mechanisms that would be implemented to achieve the overall remediation objective.

Interim Site Management
The site is paved and underlying soils are not accessible to the public. The service station currently not operational and development works are planned for the near future.

If delays with works occur it is recommended that the site is fenced to prevent casual access.

Compliance with UPSS regulations regarding monitoring should also be maintained until remedial works are commenced.

5.4 STORMWATER

The RAP (refer **Appendix F**) includes water management and erosion and sediment controls for the demolition works.

5.5 WATERCOURSE

Available mapping indicates a watercourse along the front boundary to Boomerang Drive conveying runoff during rainfall from an external catchment. The existing state of the watercourse is open channel east of the existing access to the park, downslope of 3x900mm dia pipes which cross under Boomerang Drive. Flood flows in the open channel are then piped from east to west via a small box culvert which has been laid by the previous owner piping the watercourse. The culvert is covered over by a flat, grassed area. The culvert has insufficient capacity for flood flows. Based on the Natural Resources and Access Regulator (NRAR), formerly NSW Office of Water, "Guidelines for riparian corridors on waterfront land" (Riparian Guidelines) this watercourse is a first order watercourse, classified under the Strahler System. Integrated development is triggered by the proposed development.

The proposed development will not impact on the watercourse. This development does not propose any vegetation removal, alignment works and is clear of the watercourse

banks. Any risk of contamination will be appropriately managed through the Remedial Action Plan (refer **Appendix F**) and associated Environmental Management plans.

Accordingly, we seek referral of the proposed development to NRAR for General Terms of Approval as part of the Integrated Approval process and accept that a Controlled Activity Approval is required prior to construction of the watercourse.

5.6 TRAFFIC, ACCESS AND CAR PARKING

Temporary fencing will be constructed around the identified works area and will be sited to ensure that access to the caravan park remains unrestricted.

The proposed works will not impact on access to existing car parking spaces.

5.7 SOCIAL AND ECONOMIC IMPACTS

The proposed works will have a positive social impact, as they will remove any potential source of contamination from the locality and will return the land to an appropriate condition suitable for future residential landuse.

5.8 WASTE

A Waste Management Plan is included in **Appendix G.** Additionally, waste management is addressed in the RAP included in **Appendix F.** The proposed actions are summarized as follows;

Prior to removal of UST's

- Any retained liquids in the UST excavation will be pumped out and disposed of by a licensed liquid waste contractor.

Removal of USTs

- Excavate concrete forecourt – excavate and temporarily stockpile on site the remaining concrete forecourt that was previously cut located above the footprint of the USTs;
- Excavate UST's overburden – excavate and temporarily stockpile onsite the UST's overburden to expose to top of the USTs and associated fittings/pipe work;
- De-gas UST (nitrogen purge) – nitrogen purge USTs until monitors indicate oxygen levels within the UST at 5% or less;
- Onsite destruction of USTs – render nitrogen purged USTs incapable of acting as vessels to eliminate vapour recharge within the USTs;
- Excavate UST concrete anchors and packing sands – excavate and stockpile on site the UST's concrete strip anchors. The packing sands adjacent to the USTs will be removed and stockpiled onsite so as to free the USTs for removal from the excavation;
- Offsite disposal of stockpiled concrete – excavated concrete from the forecourt and the UST's anchors will be disposed offsite. If the concrete has strong hydrocarbon odours then it will be disposed offsite as contaminated waste at an appropriately licensed waste disposal facility;
- Removal of USTs from excavation – the three USTs will be lifted out of the excavation and loaded on to a truck for offsite transport and disposal;
- Offsite transport and disposal of destroyed USTs and bowser – offsite transport and disposal of USTs and bowsers. A UST Destruction Certificate will be provided upon

completion of the works;

- Excavation of remaining soil material – excavation and stockpiling of additional soil from the walls and floor of the excavation at the direction of the environmental consultant;
- Validation sampling by the environmental consultant from the walls and floor of the excavation/s (See Section Error! Reference source not found.); and
- Demobilisation – make safe and temporally demobilise (potentially backfill into the excavation) until receipt of analytical results.

6.0 Conclusion

This Statement of Environmental Effects and supporting documentation comprehensively demonstrates that the proposed demolition of the service station awning, removal of underground petroleum storage system and associated infrastructure, and associated remediation is an appropriate and suitable development within the subject site when tested against the relevant heads of consideration detailed within Section 4.15 of the *Environmental Planning & Assessment Act 1979*.

The proposed works are permissible under the Great Lakes LEP 2014 and SEPP 55. Due consideration has been given to all potential associated development issues.

This statement has illustrated that the proposal will satisfy both statutory and merit-based planning considerations and that the proposal will make a positive contribution to the site and surrounding area in terms of removing a potential source of contamination, returning the site to a condition suitable for future residential landuse.

It is considered that there is no matter which should preclude the approval of the proposed development.

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Appendix A

CERTIFICATE OF TITLE AND DEPOSITED PLAN

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Appendix B

SITE & DEMOLITION PLANS

Appendix C

ENVIRONMENTAL SITE ASSESSMENT (AURORA ENVIRONMENTAL CONSULTING)

Appendix D

ENVIRONMENTAL DELINEATION ASSESSMENT (AURORA ENVIRONMENTAL CONSULTING)

Appendix E

GROUNDWATER MONITORING (RAMBOLL AUSTRALIA P/L)

Appendix F

REMEDIAL ACTION PLAN (RAMBOLL AUSTRALIA P/L)

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Appendix G

WASTE MANAGEMENT PLAN