

**PROPOSED RESOURCE
RECOVERY FACILITY**

**LOTS 28 and 29 DP 19407
JELlicoe STREET
SOUTH NOWRA**

Prepared for

Normans Plant Hire Pty Ltd

April 2014



Prepared by:

COWMAN STODDART PTY LTD

PRELIMINARY ENVIRONMENTAL ASSESSMENT

PROPOSED RESOURCE RECOVERY FACILITY

LOTS 28 AND 29 DP 19407
JELlicoe STREET
SOUTH NOWRA

Ref. 13/97

Town Planning, Agricultural & Environmental Consultants

Stephen Richardson, M.App.Sc., BTP, Grad. Dip. Env. Mgt, CPP, MPIA

Stuart Dixon, B. Urb. & Reg. Plan., CPP, MPIA

Associates: Peter Cowman, B.Sc.Agr., MAIAST

Angela Jones, BA Hons, MSc

The Holt Centre, 31 Kinghorne Street, Nowra

Telephone (02) 4423 6198 (02) 4423 6199

Fax (02) 4423 1569

PO Box 738, Nowra NSW 2541

www.cowmanstoddart.com.au

Email – info@cowmanstoddart.com.au



COWMAN STODDART PTY LTD

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1.0 INTRODUCTION

1.1 BACKGROUND

This Preliminary Environmental Assessment (PEA) has been prepared to identify the key environmental issues associated with a proposal by Normans Plant Hire Pty Ltd (“Normans”) to establish a Resource Recovery Facility on Lots 28 and 29 DP 19407 Jellicoe Street, South Nowra.

Normans presently operate an approved “Bulk Materials Depot” and crushing and screening operation from Lot 28.

The Resource Recovery Facility will in effect comprise an expansion of these existing approved operations onto the adjoining Lot 29.

The operation will receive resources from a range of suppliers and separate them into constituent materials for recovery. The facility will be designed to maximise recovery of and minimise contamination of materials. The Resource Recovery Facility will process resources classified by the NSW EPA as “*general solid waste (non-putrescible)*” as well as *waste tyres*. The operation will process up to 600,000 tonnes of material per annum once fully operational. The proposal will include the use of sections of the site for the parking of trucks, earthmoving machinery and the like associated with the proposed use.

The purpose of this document is to provide advice to accompany an application to the Minister for Planning to declare the proposed development to be a project of State Significance under Division 4.1 in Part 4, Section 89C of the Environmental & Planning Assessment (EP&A) Act 1979 and to seek Director-General’s Requirements (DGRs) for the preparation of an Environmental Assessment (EA) to accompany a development application. This PEA describes the project; identifies the key environmental issues pertaining to the proposal; and provides the basis of information to allow the Department of Planning and Infrastructure and other relevant agencies to prepare DGRs for this project.

1.2 THE PROPONENT

Cowman Stoddart Pty Ltd has prepared this Preliminary Environmental Assessment on behalf of Normans Plant Hire Pty Ltd.

Proponent’s name:	Normans Plant Hire Pty Ltd
Postal address:	PO Box 808, Nowra 2541
ACN No:	001 009 981
ABN No:	41 001 009 981

1.3 PURPOSE AND CONTENT OF THE REPORT

This report provides an initial assessment of the key environmental issues associated with the proposal to establish a Resource Recovery Facility on Lots 28 and 29 DP 19407 Jellicoe Street, South Nowra.

The report is structured as follows:

1. A description of the subject land (Section 2.0);
2. A brief description of the proposal (Section 3.0);
3. The planning and legislative assessment framework (Section 4.0);
4. A description of the existing environment (Section 5.0);
and
5. A preliminary environmental risk analysis of the key (Section 6.0)
environmental issues that will need to be addressed
in the Environmental Impact Statement (EIS)
6. The justification for the project and conclusion (Section 7.0)

The PEA seeks the Director-General's Requirements (DGRs) for the preparation of an EIS for this project.

2.0 THE SUBJECT LAND

2.1 LOCAL AND REGIONAL CONTEXT

The City of Shoalhaven is located approximately 160 kilometres south of Sydney and extends 160 kilometres from Foxground in the north to Durras in the south. The Shoalhaven City Council area consists of a number of towns and villages with the main commercial centres located in Nowra and Ulladulla. Nowra is the major urban and administration centre in the northern part of the region.

The subject site is described as Lots 28 and 29 DP 19407 and is located on Jellicoe Street, South Nowra (refer **Figure 1**). The subject site is located approximately 3.5 km to the south of the Nowra central business district in the South Nowra Industrial Estate.

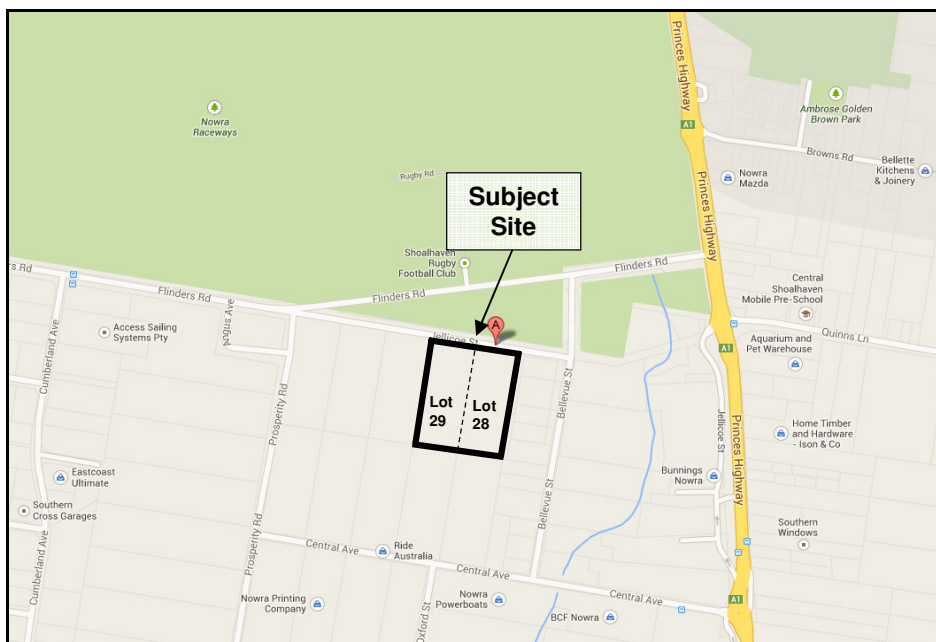


Figure 1: Site Locality Plan.

The Shoalhaven region has an estimated resident population of 92,195 (a population increase of 5.9% over the preceding five years), with over 48,517 private dwellings, of which 26.8% were unoccupied at the time. Of the 35,508 occupied dwellings, 31,887 were separate houses (89.8%), 2,730 were medium density (7.7%), 51 were high density (0.1%), 737 were caravans / cabins / houseboats (2.1%) (Reference: Census 2006). It is expected that the Shoalhaven's population will grow by 43.1% over the thirty years to 2036. At 1.4% per annum, that will see the region's population increase to 131,970. The bulk of that growth will occur in Council's Planning Area 1, which includes Nowra, Bomaderry and Berry. There the population will rise to 65,879 by 2036, up 52.3% (SCC, 2012).

2.2 SITE DESCRIPTION

Lot 28 DP 19407 is currently owned by J. & M. Norman; while Lot 29 DP 19407 is owned by JACKM Pty Ltd.

Lots 28 and 29 are two adjoining, regular shaped allotments with a combined area of 4.96 ha.

Normans obtained development consent (DA 01/1548) from Shoalhaven City Council in 2001 to establish a Bulk Materials Depot on Lot 28. This approval enabled the use of the site for stockpiling of construction materials such as road aggregate; gabion rock; sand; soil; recycled concrete; and landscaping rocks. The consent limited the amount of material that could be stored on the site to 30,000 m³ per annum.

Normans Plant Hire obtained subsequent approvals for a weighbridge facility for the site (DA 07/1053) on the 2nd May 2007.

On the 16th June 2008, a further development approval was obtained (DA 08/1531) for the operation of a crushing and screening plant on the subject site. This approval was limited for a duration of 4 times per year and a maximum of 10,000 tonnes crushed/screened in any one year. This development application sought approval for the:

- receipt and storage of recyclable concrete and brick materials;
- crushing of concrete and brick demolition materials on the site;
- storage and blending of crushed material in stockpiles on the site.

All of these approved operations are taking place on Lot 28. **Annexure 1** includes plan detailing the layout of the existing approved operation on the site.

Lot 29 is presently vacant and undeveloped.

3.0 PROPOSED DEVELOPMENT

3.1 INTRODUCTION

The proposal will seek approval for the construction and operation of a Resource Recovery Facility involving an expansion and intensification of the existing operations that occur on Lot 28 to be located on both Lots 28 and 29 DP 19407 Jellicoe Street, South Nowra.

3.2 PROJECT DESCRIPTION

The Resource Recovery Facility will receive resources from a range of suppliers and separate them into constituent materials for recovery; any residual waste which is not recoverable is aggregated for appropriate disposal. The Resource Recovery Facility is proposed to operate at 600,000 tonnes per year once fully operational.

3.3 RESOURCE RECOVERY FACILITY OPERATIONS

3.3.1 Introduction

The Resource Recovery Facility will process “*general solid waste (non-putrescible)*” as defined by the NSW EPA Waste Classification Guidelines and will principally be a crushing, grinding and separating operation for hard waste/construction and demolition materials including coalwash, concrete bricks, gravel and crushed rock, road base, and asphalt. The material will be recovered and processed on a daily basis. The recovered materials will be processed to generate products suitable for both direct sales to markets and as intermediate products for feed stocks to other operations on and off the site.

The following wastes have been pre-classified as ‘general solid waste (non-putrescible)’ by the NSW EPA’s Waste Classification Guidelines:

- *glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal*
- *paper or cardboard*
- *household waste from municipal clean-up that does not contain food waste*
- *waste collected by, or on behalf of, local councils from street sweepings*
- *grit, sediment, litter and gross pollutants collected in, and removed from, stormwater treatment devices and/or stormwater management systems that have been dewatered so that they do not contain free liquids.*
- *grit and screenings from potable water and water reticulation plants that have been dewatered so that they do not contain free liquids*
- *garden waste*

- *wood waste*
- *waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions*
- *containers, previously containing dangerous goods, from which residues have been removed by washing or vacuuming*
- *drained oil filters (mechanically crushed), rags and oil-absorbent materials, that only contain non-volatile petroleum hydrocarbons and do not contain free liquids*
- *drained motor oil containers that do not contain free liquids*
- *non-putrescible vegetative waste from agriculture, silviculture or horticulture*
- *building cavity dust waste removed from residential premises or educational or child care institutions, being waste that is packaged securely to prevent dust emissions and direct contact*
- *synthetic fibre waste (from materials such as fibreglass, polyesters and other plastics) being waste that is packaged securely to prevent dust emissions, but excluding asbestos waste*
- *virgin excavated natural material*
- *building and demolition waste*
- *asphalt waste (including asphalt resulting from road construction and waterproofing works)*
- *biosolids categorised as unrestricted use, or restricted use 1, 2 or 3, in accordance with the criteria set out in the Biosolids Guidelines (EPA 2000)*
- *cured concrete waste from a batch plant*
- *fully cured and set thermosetting polymers and fibre-reinforcing resins*
- *fully cured and dried residues of resins, glues, paints, coatings and inks*
- *any mixture of the wastes referred to above.*

In addition it is also proposed to collect and process waste tyres.

Incoming wastes would be unloaded from collection vehicles in designated areas on the site. Each waste stream would be visually screened and obvious contaminants, bulky and hazardous wastes would be extracted for suitable disposal. Rigorous asbestos and other hazardous waste inspection and rejection, processes will be undertaken.

3.3.2 Proposed Site Layout

The conceptual operational footprint proposed for the Resource Recovery Facility, is included as **Annexure 2** to this PEA.

Design features of the site include:

- The site will utilise an existing vehicular access from Jellicoe Street.
- Parking will be provided. An all-weather gravel surface will form the base on both lots.
- Existing sheds are located on Lot 28. It is proposed to erect a shed along the southern boundary of both Lots 28 and 29. This shed will be used for the handling and processing of materials.
- Both lots will have designated areas for the storage of processed product. The storage areas will be utilised for parking of trucks, earthmoving machinery and the like when not in use for the storage of processed product.
- Stormwater will be diverted from both sites to a stormwater detention basin to be sited on the north-eastern corner of Lot 29.

3.3.3 Receiving, Processing and Storage Areas

The receiving and processing areas will be housed in one of the fully enclosed buildings. The key to the volume capacity of the facility is that the material will be processed on daily basis and the minimal amount of material will be stored on site. Example of the process pathways is provided in **Table 1**. More detail of the processing pathways will be provided in the Environmental Assessment.

Table 1
Processing Pathways

<i>Feedstock</i>	<i>Processing</i>	<i>Product</i>
Concrete, brick, tiles	Crushing/screening Blending	Various aggregates Crusher Dust DGB 20 & DGS 20
Asphalt/road base/ coalwash	Crushing/screening	Recycled road base Gravel Products
Soil	Screening/blending	Soil blends
Steel	Sorting	Steel
Glass	Crushing/screening	Aggregate
Timber	Shredding	Mulch
Green waste and soils	Mulching	Mulch & Compost

The processed material will be stored in open stockpiles in designated stockpiles outside hardstand storage areas.

3.3.4 On-site Equipment

The following equipment will be utilised on-site to the processing and handling of the material:

- Bobcat loaders, wheel loaders (up to 35 ton);
- Excavators (5 ton/45 ton with various attachments);
- Impact crushers (up to 45 ton);
- Jaw crushers (6 – 45 ton);
- 1-2-3 horizontal deck screens/trammel screens; and
- Conveyor systems (up to 18 m long);
- Mobile shredders.

3.3.5 Waste and Residual Management

Materials received will be inspected by the operator to ensure materials are consistent with that to be recovered in the processing area and to ensure asbestos is not received at the Resource Recovery Facility. Once inspection has occurred, materials are delivered to the sorting area where the operator will undertake further inspection.

Rigorous asbestos inspection and rejection processes will be undertaken. Materials that are unsuitable or uneconomical for recovery and recycling (eg. contaminated soil and loads that cannot be physically sorted) would be directed at the weighbridge to an appropriate licenced waste facility for disposal.

Materials that are unsuitable or uneconomical for recovery and recycling (eg. contaminated soil and loads that cannot be physically sorted), would be directed to an approved waste facility for treatment or disposal.

3.4 HEAVY VEHICLE PARKING AND STORAGE

The truck depot component of the proposal will allow sections of the site to be utilised for parking of trucks, earthmoving machinery and the like. Both lots will have designated areas for the storage of processed product. The storage areas will be utilised for parking of trucks, earthmoving machinery and the like when not in use for the storage of processed product.

3.5 TRANSPORTATION

The construction and operation of the Resource Recovery Facility would result in changes in traffic levels in the vicinity of the site. The principal changes would relate to the increased numbers of inbound heavy vehicles for deliveries of waste and outbound

heavy vehicles with recycled/processed products and increased numbers of light vehicles due to the increased employment on the site. The types of heavy vehicles which are intended to utilise the site include rigid trucks, truck and dog trailer combinations, semi-trailer combinations, B-double combinations. It is estimated that at full operational capacity (i.e. 600,000 tonnes) the proposal and a 7 day working week will generate in the vicinity of 55 – 60 heavy vehicles (one-way) per day.

3.6 HOURS OF OPERATION

The use of the site for screening/crushing/blending and stockpiling of the resources is proposed to operate 24 hours, 7 days per week.

3.7 WORKFORCE

The construction workforce would vary throughout the construction period depending on the activities underway. Typically, the workforce would vary between 10 and 15 persons.

Once fully operational, it is expected that there will be 6 – 12 employees on site at any given time, 2 – 3 shifts per day.

3.8 ENVIRONMENTAL MANAGEMENT

An Environmental Management Plan would be developed that nominates responsibilities, control systems and lines of communication. The following aspects would be considered in the EMP:

- Site supervision and control;
- Control, monitoring and recording of incoming wastes;
- Waste handling/management;
- Surface water and soil management;
- Odour control;
- Dust control;
- Noise control;
- Fire management;
- Complaints handling;
- Incident reporting;
- Staff training requirements; and
- Document control.

The key areas of environmental management are provided below.

Dust

Dust management will be addressed by the following controls:

- Facility roadways are sealed;
- Delivered materials are stored in an undercover building;
- Processing of materials is undertaken in an undercover building;
- The receival area floor is sealed;
- The storage and processing area is hardstand; and
- Crushing equipment and stockpiles will be fitted with water sprays (if required).

Noise

A full noise assessment will be required for inclusion in the Environmental Assessment document. It is anticipated that noise will not provide any issues to the following:

- Processing of materials is undertaken in an undercover building; and
- The nearest resident to the intended processing shed is located approximately 300 m away.

Stormwater

- Divert all clean stormwater runoff from upstream undisturbed areas and revegetated areas around disturbed areas;
- Collect the rainwater from the proposed new buildings and reuse the water within the process.
- Maintain undisturbed and rehabilitated / revegetated areas as filters for sediment from disturbed areas;
- Capture all stormwater runoff from disturbed areas to minimise release of sediments and maximise the opportunities for the vegetation to strip sediment from the runoff. Any concentration of flow would be avoided, wherever possible;
- Implement and maintain appropriate erosion control measures, eg. revegetation, silt fencing, etc. on all disturbed areas as soon as practicable; and
- Capture all potentially contaminated runoff from disturbed areas or final processed product areas and treat such water in the proposed stormwater ponds for reuse in dust suppression.

4.0 PLANNING AND ASSESSMENT PROCESS

4.1 COMMONWEALTH LEGISLATION AND POLICIES

The principal Commonwealth legislation relevant to the project is the EPBC Act. The objectives of the *Environment Protection and Biodiversity Act 1999* (EPBC Act) are to protect the environment, promote sustainable development, recognise indigenous heritage and conserve biodiversity through the provision of a rigorous assessment and approvals process. The EPBC Act focuses Commonwealth involvement on matters of national environmental significance, as follows:

- listed threatened species and communities;
- migratory species protected under international agreements;
- RAMSAR wetlands of international importance;
- the Commonwealth marine environment;
- World Heritage properties;
- National Heritage places; and
- nuclear actions.

Under the EPBC Act 1999 an action will require approval from the (Federal Environment) Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance.

The project is unlikely to have an impact on a significant impact on a matter of national environmental significance, as the site is located in an industrial estate and is predominantly cleared of vegetation.

4.2 ENVIRONMENTAL PLANNING AND ASSESSMENT (EP&A) ACT 1979

4.2.1 State Significant Development (SSD)

For the purposes of the Environmental Planning and Assessment Act 1979 (the Act), State Significant Development (SSD) is development that is:

- declared to be SSD by State Environmental Planning Policy (SEPP) (State and Regional Development (SRD)) 2011 (SRD SEPP); or
- otherwise called-in by the Minister as SSD.

The SRD SEPP declares development to be SSD if it:

- is, by operation of another environmental planning instrument, permissible with development consent; and

- is also included in Schedule 1 or 2 of the SRD SEPP.

Clause 5(23)(3) of Schedule 1 to the SRD SEPP includes the following development:

“23 Waste and resource management facilities

- (3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste”.*

Given that the project involves a resource recovery facility that is proposed to operate at 600,000 tonnes per year once fully operational, the project is development specified in Schedule 1 to the SRD SEPP.

A development application for State Significant Development (SSD) must be accompanied by an environmental impact statement (EIS), prepared in accordance with the Environmental Planning and Assessment Regulation 2000 (the Regulation). Before preparing an EIS, an applicant must request the Director-General of Planning requirements (DGRs) for the EIS for the proposed development.

4.2.2 Environmental Planning Instruments

The following Environmental Planning Instruments (EPIs) apply to the site and this type of development. These EPIs may be considered by the Minister and will need to be addressed in the EIS.

4.2.2.1 State Environmental Planning Policies

The following SEPPs may require consideration with respect to this project:

- SEPP 14 – Coastal Wetlands;
- SEPP 33 (Hazardous and Offensive Development);
- SEPP 44 – Koala Habitat Protection;
- SEPP 55 – Remediation of Land;
- SEPP 71 – Coastal Protection;
- SEPP (Infrastructure) 2007
- SEPP (State and Regional Development) 2011;

SEPP 14 – Coastal Wetlands

The aim of SEPP 14 is to ensure that the coastal wetlands are preserved and protected in the environmental and economic interests of the State. No SEPP 14 wetlands are located within the vicinity of the subject site following a review of mapping that supports the SEPP.

SEPP 33 – Offensive and Hazardous Industry

SEPP 33 aims to ensure that appropriate measures are employed to minimise the impacts of developments that are deemed to be either ‘hazardous’ or ‘offensive’. SEPP 33 requires the consent authority to consider whether an industrial proposal is a “potentially hazardous industry” or a “potentially offensive industry”. A hazard assessment is completed for potentially hazardous developments to assist the consent authority determine acceptability.

A hazard is defined as a source of potential harm or a situation with a potential loss. Hazards can relate to situations with potential for human injury, damage to property, damage to the environment, or a combination of these factors. Hazards typically associated with waste management facilities include:

- Health (biological) hazards;
- Noise emission;
- Fugitive dust emission;
- Occupational Health and Safety (OH&S) hazards;
- Operational hazards; and
- Hazards during excavation and construction works.

The Department of Planning has prepared guidelines, titled “*Applying SEPP 33*” (dated July 2008), which provides guidance on how SEPP 33 is to be applied. The guidelines provide the guidance as to when a project should be considered to be a “potentially hazardous industry” or a “potentially offensive industry”. In particular, the draft guideline:

- makes it clear that “potentially hazardous industries” are to be limited to industries which pose a physical risk, such as explosives or fire; and
- states that any project which requires a “licence under any pollution control legislation” should be considered potentially offensive within the meaning of SEPP 33.

The project is not a “potentially hazardous industry” as it does not pose any physical risk such as explosion or fire. Therefore a Preliminary Hazard Analysis (PHA) as described in Clause 12 of the SEPP will not be required for this project.

Clause 13 of the SEPP outlines matters that a consent authority is required to take into consideration when considering applications from either potentially hazardous or offensive development. These matters will need to be addressed in any EIS for this project.

SEPP 44 – Koala Habitat Protection

SEPP 44 encourages the conservation and management of natural vegetation that provides habitat for koalas to ensure permanent free living populations will be maintained over their present range. The policy applies to the local government area of the Shoalhaven.

A consent authority is required to determine whether an area affected by a proposed development is core koala habitat. Given the subject land has been cleared previously of vegetation it is unlikely that the site would comprise core koala habitat.

SEPP 55 – Remediation of Land

SEPP 55 introduces state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use due to it being contaminated. If land is found to be unsuitable, remediation must occur before the land is developed.

The presence (or otherwise) of contamination will need to be investigated in the EA. If remediation is required it will be undertaken in accordance with the *“Managing Land Contamination – Planning Guidelines”* (DUAP & EPA 1998).

SEPP 71 – Coastal Protection

SEPP 71 introduces provisions that essentially aim to protect the coastal areas of NSW. The SEPP also identifies sensitive coastal locations. The route of the proposed pipelines will in part be situated within land to which the SEPP applies; however has been located in such a manner that it will not encroach onto areas that have been identified as sensitive coastal locations under the SEPP. From a review of mapping supporting the SEPP it is evident that this SEPP does not apply to the subject site.

SEPP (Infrastructure) 2007

This SEPP was introduced to facilitate the delivery of infrastructure across the State by improving regulatory certainty and efficiency. In determining the project, the consent authority must take into account a number of matters including whether a justifiable demand exists for the development, the appropriateness of the location and the views of the relevant public authorities and councils.

Division 23 of the SEPP applies to "waste and resource management facilities". Resource Recovery Facility is defined in Clause 120 as follows:

- *Resource Recovery Facility means a facility for the recovery of resources from waste, including such works or activities as separating and sorting, processing or treating the waste, composting, temporary*

storage, transfer or sale of recovered resources, energy generation from waste gases and water treatment, but not including re-manufacture of materials or goods or disposal of the material by landfill or incineration;

Clause 121 of the SEPP provides that development for the purpose of a waste or resource management facility may be carried out with consent. This section provides that development for the purpose of waste or resource management facilities other than development referred to in subclause (2) may be carried out by any person with consent on land in a prescribed zone. “Prescribed zone” includes land zoned IN1. The subject site is currently zoned 4(a) General Industry which is equivalent to the IN1 zone. In this regard the subject site is proposed to be zoned IN1 under the draft Shoalhaven LEP 2013.

SEPP (State and Regional Development) 2011

This SEPP was introduced in conjunction with the repealing of Part 3A of the EP&A Act. Schedule 1 of the SEPP provided a list of the classes of development that are considered State Significant Development for the purposes of EP&A Act. Clause 8(1) of the Policy specifies development that, in the opinion of the Minister, is a development of the kind described in the Schedule 1 or 2 of the SEPP. Clause 23 (1a) of Schedule 1 provides that:

“Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste”.

Given the project is proposed to operate at 600,000 tonnes per year once fully operational, the project is development specified in Schedule 1 to the SRD SEPP.

4.2.2.2 Regional Environmental Plans (Deemed SEPP)

The Illawarra Regional Environmental Plan (IREP) 1 applies to the subject land. The IREP 1 provides a framework for local area planning within the Illawarra Region.

A series of maps are attached to the Plan which identify localities where specific policy issues apply. In relation to the subject land, the site is:

- NOT identified as a wildlife corridor;
- NOT identified as containing rainforest vegetation;
- NOT identified as land with prime crop and pasture potential;
- identified as land with landscape or environmental attributes.

There are no other specific provisions within the regional plan that apply to land with Landscape and Environmental Attributes. The plan is supported by The Illawarra Regional Landscape and Environment Study that provides specific recommendations for

broad areas along the south coast, including the land associated with this project. In terms of the area within which the subject site is located ('Shoalhaven Delta'), this Study identifies the area as Ve Development Control. The recommendation for this area under the study is:

"Built up corridor comprising existing Village, Non-urban 1(a) and Non-Urban 1(b) zones. No recommendations for change."

The EIS will need to address how the project will be consistent with this recommendation.

4.2.2.3 Local Environmental Plans

Shoalhaven Local Environmental Plan is the principal planning instrument for the City of Shoalhaven providing controls on land use within the city. The land proposed to be developed for the Resource Recovery Facility is zoned 4(a) (Industrial "A" (General)) under the Shoalhaven Local Environmental Plan (LEP) 1985 (refer **Figure 2**).

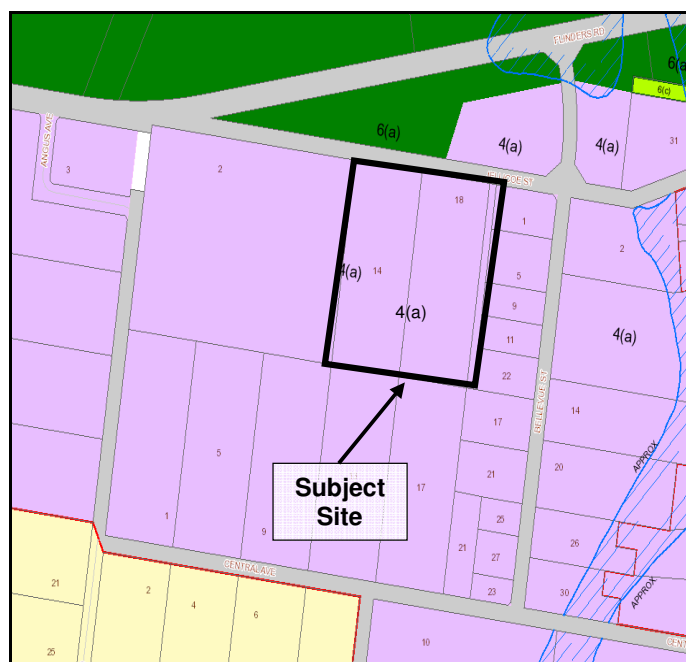


Figure 2: Land Zoning under SLEP 1985.

Under the Draft Shoalhaven LEP 2013 the site is proposed to be zoned IN1 General Industrial (refer **Figure 3**). Draft Shoalhaven LEP 2013 has been exhibited with the commencement of this plan imminent.

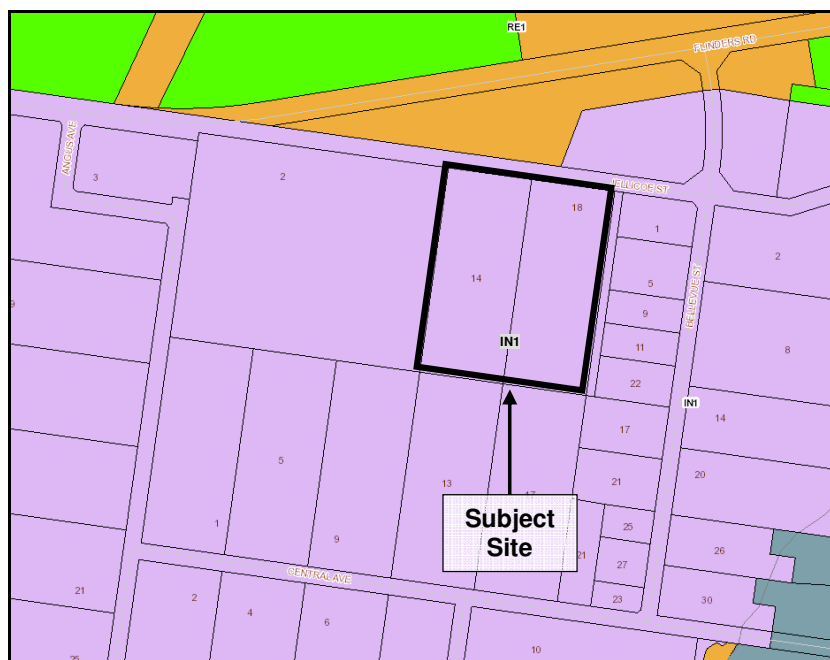


Figure 3: Land Zoning under Draft Shoalhaven LEP 2013.

4.3 OTHER NSW AND COMMONWEALTH LEGISLATION

A range of other legislation, both State and Commonwealth, may apply to the pipeline route. Comments on relevance of each Act are also included.

Legislation	Application	Relevance to Project
Commonwealth		
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Protects Aboriginal and Torres Strait Islander heritage.	The land is either developed or cleared. No known sites of Aboriginal heritage are located on the site.
Australia Heritage Council Act 2003	Protects non-indigenous heritage.	The subject site is not identified as an item of heritage significance as identified by relevant EPIs.
Environmental Protection and Biodiversity Conservation Act 1999	Protects matters of national environmental significance (NES).	There are no known impacts by the project on NES matters. The site is partially developed and cleared of vegetation.
Native Title Act 1993	Enables native title claims over relevant lands.	The site is not subject to Native Title.
NSW		
Contaminated land Management Act 1997	Requires notification and remediation of known contaminated land.	The proposal may be subject to a Stage 1 Environmental Site Assessment pursuant to this Act and its supporting guidelines.

Legislation	Application	Relevance to Project
Environmentally Hazardous Chemicals Act 1985	Licences use or disposal of environmentally hazardous chemicals or declared chemical waste.	License if required will be sought prior to construction.
Fisheries Management Act 1994	Protects aquatic threatened species, populations or ecological communities and their habitats.	No waterway will be impacted by the proposal. Whilst mapping shows a watercourse through Lot 29, there is no physical watercourse within the site.
Heritage Act 1977	Protects non-indigenous heritage of state significance.	The site is not identified as a heritage item.
National Parks & Wildlife Act 1974	Protects native flora and fauna, NPWS estate and Aboriginal sites and objects.	No known sites of Aboriginal heritage occur on the site.
Native Vegetation Act 2003	Regulates the clearing of native vegetation.	The subject site is zoned Industrial. The provisions of this legislation will not apply to this proposal.
Noxious Weeds Act	Minimise risk of spread and control of noxious weeds.	Weed control measures will be required to be put in place during construction.
Occupational Health & safety Act 2000	Promotes and regulates the health, safety and welfare of workers.	OH&S will be incorporated into project planning and the construction phase.
Pesticides Act 1999	Controls and regulates pesticides.	Pesticide use, if required, will be required to be carried out in accordance with relevant regulations during construction and operations.
Protection of the Environment Operations Act 1997	Regulates and licenses pollution	The <i>Protection of the Environment Operations Act 1997</i> (POEO Act) establishes the licensing framework and classification system for managing and regulating waste in NSW. POEO Act also sets out the requirements for an activity to be classified as a scheduled activity thus requiring a license from Environmental Protection Authority (EPA). Activities required to obtain a licence under the Act are detailed in Schedule 1 of the Act. As the Resource Recovery Facility intends to process an estimated 600,000 tonnes per year it satisfies the definitions of Schedule 1 under the following subclauses and therefore would be classified as a Scheduled Activity requiring an Environmental Protection Licence: • Clause 34 Resource Recovery - An operation which involves the <i>recovery of general waste</i> and process more 30,000 tonnes of waste per year; or involves having on-site at any time more than 2,500

Legislation	Application	Relevance to Project
POEO Act continued		tonnes or 2,500 m³ whichever is lesser, of waste; or involves having on-site more than 50 tonnes of waste tyres; or involves processing more than 20 tonnes of waste tyres per day or 5,000 tonnes of tyres per year. • Clause 41 Waste Processing (non-thermal treatment) - meaning the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off-site and its processing otherwise than by thermal treatment and process more 30,000 tonnes of waste per year; or involves having on-site at any time more than 2,500 tonnes or 2,500 m³ of waste; or involving having on-site more than 50 tonnes of tyres; or involves processing more than 20 tonnes of tyres per day or 5,000 tonnes of tyres per year. • Clause 42 Waste Storage - meaning the receiving from off site and storing (including storage for transfer) of waste, and receives more 30,000 tonnes of waste per year; or more than 2500 tonnes or 2500 m³ of waste is stored on the premises at any time; or more than 50 tonnes of waste tyres or 5000 waste tyres are stored on the premises at any time. The operation of the Resource Recovery Facility must also comply with the requirements of the following sections of the POEO Act in relation to environmental protection: • Part 5.3 Water pollution; • Part 5.4 Air pollution; • Part 5.5 Noise pollution; • Division 2 Land pollution; • Division 3 Waste offences; and • Part 5.7 Duty to notify pollution incidents. The Protection of the Environment Operations (Waste) Regulation 2005 (Waste Regulation) provides a regulatory framework that covers: • Waste classification and licensing – the grouping of waste into classes that pose similar risks to the environment and human health and

Legislation	Application	Relevance to Project
<i>POEO Act continued</i>		the licensing of waste and resource recovery facilities where there is a potential risk to the environment; • Establishment of a waste and environment levy for waste disposal; • Resource Recovery Exemptions – to enable the reuse of waste or waste-derived materials as fill or fertiliser (land applications) or as a fuel or as an alternative raw material in thermal applications; and • Environmental offence provisions – to enforce handling, transportation and disposal of waste in NSW.
Roads Act 1993	Regulates the carrying out of activities on public roads.	Both Shoalhaven City Council and the RTA will be consulted if works is required within public road reserves.
Soil Conservation Act 1938	Provides for the conservation of soil resources and farm water resources and for the mitigation of erosion.	Erosion and sedimentation control will be incorporated into construction works.
Threatened Species Conservation Act 1995	Conserves threatened species, populations and ecological communities (and their habitats) of animals and plants.	There are no known impacts by the project on threatened flora and fauna or their habitats. The site is partially developed and largely cleared of vegetation.
Waste Avoidance and Resource Recovery Act 2001	Promotes waste avoidance and recovery	Waste will be managed in accordance with NSW Waste Avoidance and Resource Recovery Strategy 2007.
Water Act 1912	License and permits use of water. Regulates water pollution.	No extraction of water is likely. If it is relevant licences will be sought.
Water Management Act 2000	Protects, enhances and restores water sources and their associated ecosystems.	No extraction of water required. Activity approvals as required by this legislation do not apply SSD projects pursuant to Section 89J of the EPA Act.
Wilderness Act 1987	Protection and management of nominated wilderness areas.	No declared wilderness areas will be affected.

4.4 OTHER STATE, REGIONAL AND LOCAL PLANNING STRATEGIES

4.4.1 NSW Waste Avoidance and Resource Recovery Strategy 2007

The NSW Waste Avoidance and Resource Recovery Strategy 2007 (WARR Strategy) provides a framework for maximising conservation of our natural resources and minimising environmental harm from waste. It identifies goals in four key result areas:

- preventing and avoiding waste;

- increasing the recovery and use of secondary materials across municipal, commercial and industrial (C&I) and construction and demolition (C&D) sectors;
- reducing toxicity in products and materials; and
- reducing litter and illegal dumping.

The Strategy includes the 2014 recycling targets for the three waste streams relating to the first two key result areas above, which have been picked up as State Plan (2010) commitments.

The Waste Strategy 2007 sets specific targets for waste reduction by 2014:

- Municipal waste – 66% to be recycled in 2014;
- Commercial and Industrial waste – 63% to be recycled in 2014; and
- Construction and demolition waste – 76% to be recycled in 2014.

The WARR Strategy recognises the importance of the waste hierarchy to guide effective resource management and includes a range of actions and programs across the whole life cycle of goods and materials, including extraction, manufacturing, distribution, consumption and recovery for reprocessing or disposal.

The WARR Strategy also contains a list of programs in key action areas which will contribute to the outcomes of the Strategy. These include:

- Providing a supportive policy and regulatory environment;
- Reducing municipal waste;
- Reducing litter and illegal dumping;
- Supporting waste reduction in rural and regional NSW;
- Improving other specific waste streams;
- Promoting product stewardship and extended producer responsibility programs;
- Promoting better knowledge and data; and
- Promoting education.

The most relevant program in relation to this feasibility study are:

- Reducing construction and demolition waste:
 - o support to develop systems to identify non-recyclable timbers;
 - o more 'green specifications' for major materials to increase reuse; and
 - o support for councils to implement Waste Not Development Control Plans (DCPs).

4.4.2 NSW Coastal Policy

The NSW Coastal Policy applies:

- three nautical miles seaward of the mainland and offshore islands;
- one kilometre landward of the open coast high water mark;
- a distance of one kilometre around:
 - ⇒ all bays, estuaries, coastal lakes, lagoons and islands;
 - ⇒ tidal waters of coastal rivers to the limit of mangroves, as defined by NSW Fisheries (1985) maps or the tidal limit whichever is closer to the sea.

The subject site is NOT identified by mapping supporting the NSW Coastal Policy as being affected by the provisions of the Policy.

4.4.3 South Coast Regional Strategy

The primary purpose of the South Coast Regional Strategy (SCRS) is to ensure that adequate land is available and appropriately located to sustainably accommodate projected housing and employment needs for the South Coast Region for the next 25 years.

In summary the aims of the strategy include:

- *Protect high value environments including pristine coastal lakes, estuaries, aquifers, threatened species, vegetation communities and habitat corridors by ensuring that no new urban development occurs in these important areas and their catchments.*
- *Cater for a housing demand of up to 45,600 new dwellings by 2031 to accommodate the additional 60,000 people expected in the Region over the next 25 years.*
- *Increase the amount of housing in existing centres to ensure the needs of future households are better met, in particular the needs of smaller households and an ageing population.*
- *Prioritise and manage the release of future urban lands to ensure that new development occurs in and around existing well serviced centres and towns.*
- *Use the recommendations of the Sensitive Urban Lands Panel to guide the finalisation of the development form and environmental management of the 17 'sensitive urban lands'.*
- *Manage the environmental impact of settlement by focusing new urban development in existing identified growth areas such as Nowra-Bomaderry, Milton-Ulladulla, Batemans Bay and Bega.*

- *Only consider additional development sites if it can be demonstrated that they satisfy the Sustainability Criteria (Appendix 1).*
- *No new towns or villages will be supported unless compelling reasons are presented and they can satisfy the Sustainability Criteria.*
- *No new rural residential zones will be supported unless as part of an agreed structure plan or settlement strategy.*
- *Ensure an adequate supply of land to support economic growth and provide capacity to accommodate a projected 25,800 new jobs, particularly in the areas of finance, administration, business services, health, aged care and tourism.*
- *Limit development in places constrained by coastal processes, flooding, wetlands, important primary industry resources and significant scenic and cultural landscapes.*
- *Protect the cultural and Aboriginal heritage values and visual character of rural and coastal towns and villages and surrounding landscapes.*

Where development or rezoning increases the need for State infrastructure, the Minister for Planning may require a contribution to the provision of such infrastructure, having regard to the State Infrastructure Strategy and equity considerations.

According to the Regional Strategy an additional 26,500 dwellings will be required within the Shoalhaven over the next 25 years, of which approximately 15,800 can potentially be accommodated within existing urban land.

The Regional Strategy addresses waste resources. One of its specific actions is to encourage Councils to promote waste avoidance and resource recovery in demolition and building work. This proposal is consistent with this stated action of this Strategy.

4.4.4 Nowra – Bomaderry Structure Plan

The Nowra Bomaderry Structure Plan provides the strategic framework for the future of the Nowra Bomaderry. This plan looks at the implications for the ongoing growth of the urban area and Nowra Bomaderry's long term role as the regional service provider.

The Nowra Bomaderry Structure Plan does not itself zone land. It does however identify where future investigation should be directed to when considering where urban expansion should occur within this locality.

The Structure Plan identifies South Nowra as the main industrial area of the Shoalhaven and identifies an additional 91.8 hectares of land at South Nowra for industrial use in the future. The proposed resource recovery facility is demonstrably consistent with the Nowra Bomaderry Structure Plan.

5.0 THE EXISTING ENVIRONMENT

5.1 THE PHYSICAL ENVIRONMENT

5.1.1 Terrain

The subject site comprises gently sloping terrain with the land sloping from the south-east to north-western corner. The topography of the site does not present any physical constraints to development.

5.1.2 Geology and Soils

Geologically the site is underlain by Nowra Sandstone and Wandrawandian Siltstone of the Permian aged Shoalhaven Group. The Nowra Sandstone consists typically of quartz sandstone and the Wandrawandian Siltstone consists typically of siltstone and sandy siltstone. Soils derived from this geology are typically poorly drained with low nutrient levels. Low hills, ridges and valleys are typically associated with these soils.

The geology of the site offers an excellent base for building foundations constructed largely on solid rock. Earthworks would be required to level some of the site.

5.1.3 Climate and Meteorology

The maximum average annual temperature in Nowra is 22.6°C, while the average annual minimum is 11.8°C. In December the mean maximum increases to 27.5°C. On average it rains about 80 days per year, with 974.7mm of rain.

A long term summary of relevant monthly weather data will be included in the EA, together with appropriate wind roses.

5.1.4 Watercourses and Wetlands

Mapping prepared by Shoalhaven Council (**Figure 4**) identifies a category 2 watercourse flowing across the north-western corner of Lot 29. It is evident from a review of the site however that no watercourse physically flows within this part of the site.

No SEPP 14 wetlands are located within the vicinity of the subject site.

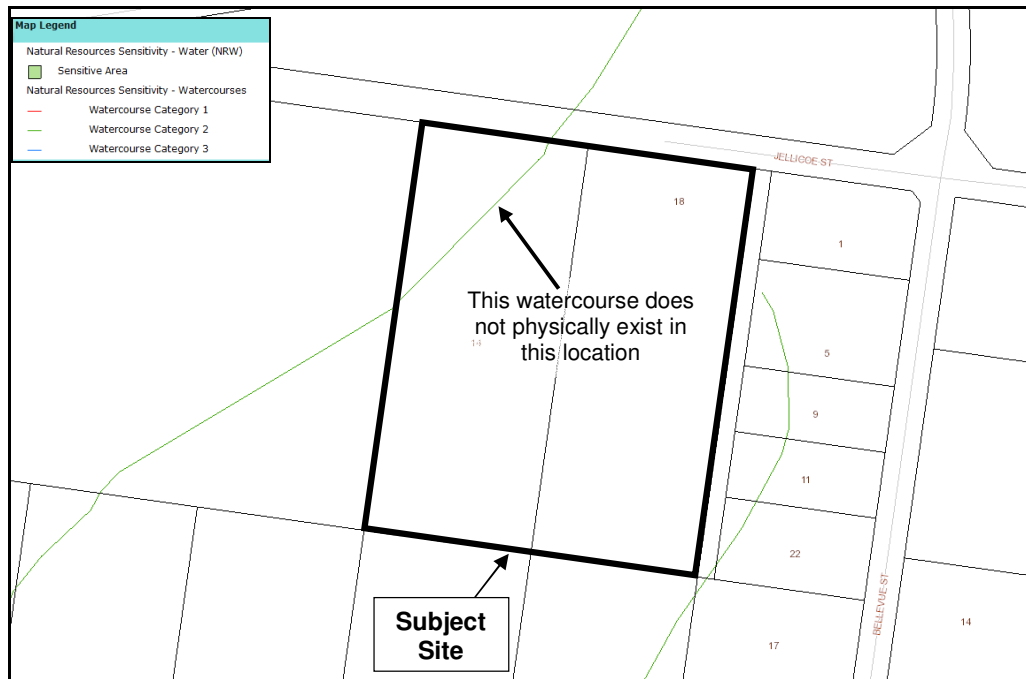


Figure 4: Watercourse (Draft Shoalhaven LEP 2013).

5.1.5 Vegetation

Vegetation mapping prepared by Shoalhaven City Council has been reviewed in addition to aerial photography for the locality

The subject site avoids areas of significant vegetation.

5.1.6 Natural Hazards

5.1.6.1 Bushfire Risk

The subject site is mapped as bushfire prone land by Shoalhaven City Council (**Figure 5**).

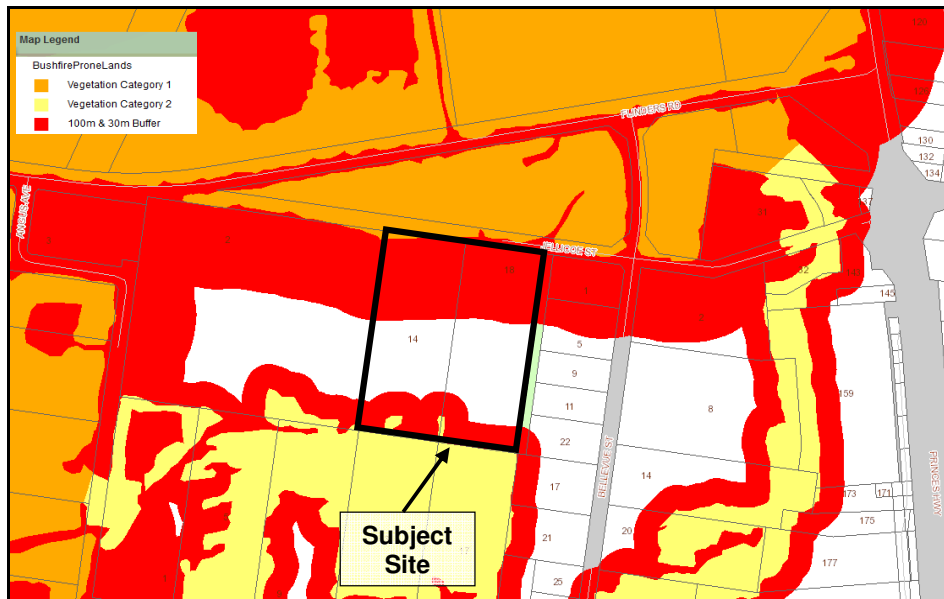


Figure 5: Bushfire Risk Mapping (Shoalhaven LEP 1985).

5.1.6.2 Flooding

Figure 6 identifies that a swathe land flowing generally south-west to north-east across Lot 29 is identified as flood liable land.

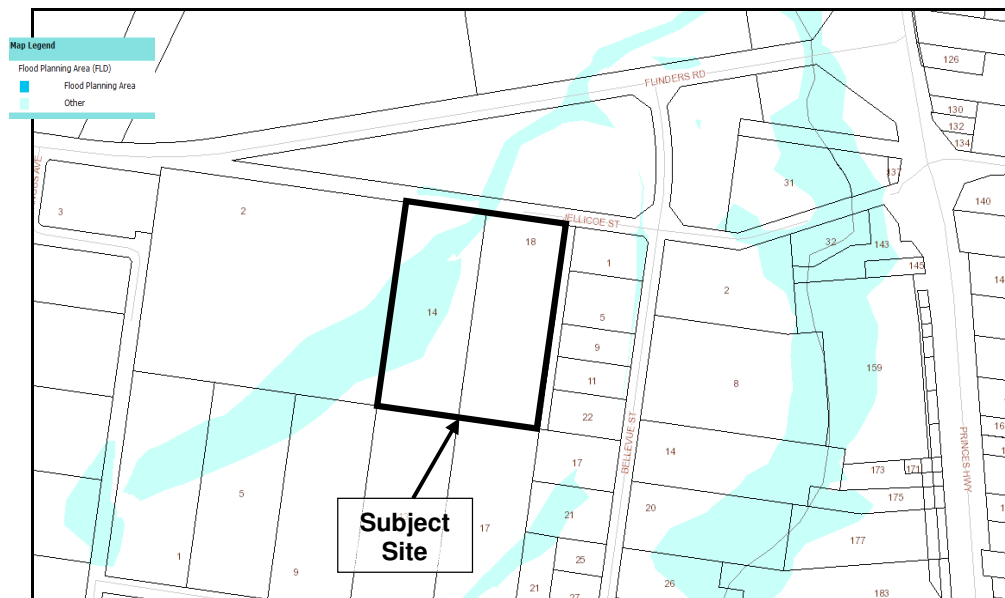


Figure 6: Flood Mapping (draft Shoalhaven LEP 2013)

5.1.6.3 Acid Sulphate Soils

Acid sulphate soils contain iron sulphides and are located in low lying coastal areas.

As is evident from **Figure 7**. Acid sulphate soils have a low probability of occurring within the subject site.

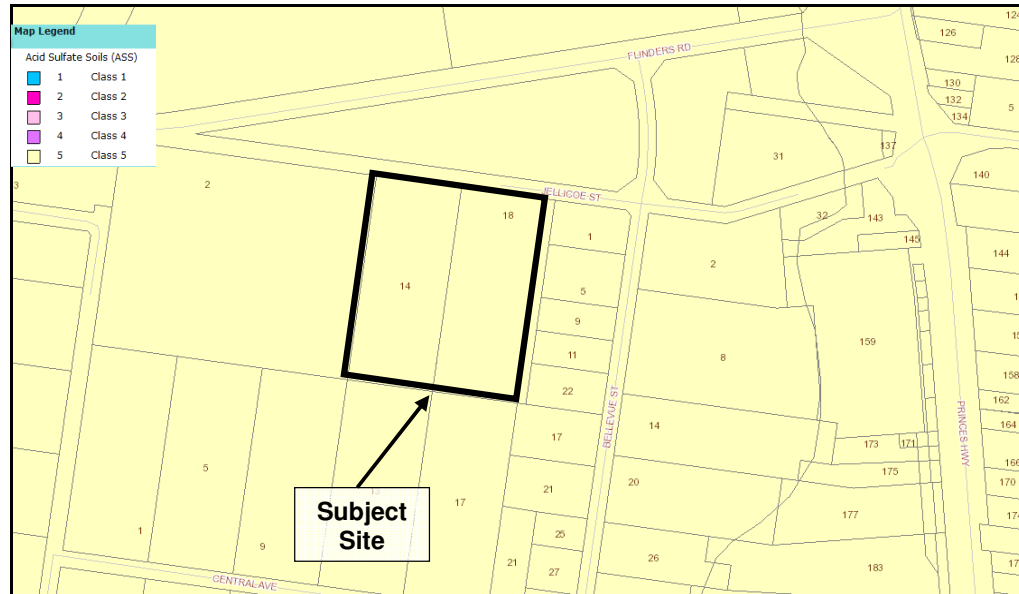


Figure 7: Acid Sulphate Soils Mapping (draft Shoalhaven LEP 2013)

6.0 ENVIRONMENTAL RISK ANALYSIS

6.1 KEY ENVIRONMENTAL ISSUES

Desk top constraints assessment and mapping (as outlined above) has been undertaken to identify the key environmental issues that would need to be addressed in any EIS for this project.

This PEA has identified constraints has determined a number of environmental issues that may be relevant. A preliminary assessment of these issues is detailed in the following sections.

6.1.1 Flora and Fauna

Preliminary Assessment

Vegetation mapping prepared by Shoalhaven City Council has been reviewed in addition to aerial photography for the locality. The subject site is cleared of vegetation and partially developed.

Potential Impacts

Potential impacts could include:

- Clearing of native vegetation and removal of habitat (minimal vegetation is retained on site).
- Crossing of watercourses.
- Spread of weeds during construction.
- Disturbance of native animals due to increased vehicle and machinery movements.

Assessment Methodology

The review to date indicates that there is little likelihood of significant impact on flora and fauna and their habitats.

Impacts on flora and fauna will be assessed in accordance with the provisions of the Commonwealth's Environment Protection and Biodiversity Conservation Act and the NSW Threatened Species Act. The EIS will include a framework for further assessment (if required), mitigation, management and monitoring of any impacts on flora and fauna and their habitats.

6.1.2 Air and Noise

Preliminary Assessment

The proposed Resource Recovery Facility will involve the operation of crushing, grinding and separating machinery, and truck movements will also generate noise and dust on and around the site. Plant will only operate during normal business hours and as per conditions stipulated through the development consent and licensing process.

The main sources of air and noise pollution from the proposal would be via:

- earthworks associated with construction of the facility;
- vehicular movement;
- loading and unloading of vehicles;
- the handling/processing (including crushing and screening) of material; and
- windborne dust from passive areas.

As part of the preparation of the Environmental Impact Statement the following assessment will be undertaken:

- An air quality assessment will be conducted in accordance with OEH 'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW' (Approved Method) (DEC 2005b);
- A noise impact assessment will be conducted in accordance with Industrial Noise Policy (INP) and Environmental Criteria for Road Traffic Noise 1999 (ECRTN).

The potential impact on the local air and noise quality will be managed through a combination of mitigation measures including onsite dust suppression, sealing of access roads, undertaking the sorting and processing of the material in an enclosed shed and implementation of standard noise control measures.

It is anticipated that the main handling and processing operations will occur within the new proposed shed to be erected along the southern boundary of both lots. This shed will provide acoustic attenuation for the handling and processing operations that occur within the shed; as well as from noise generated from operations that occur outside the shed within the stockpile areas.

6.1.3 Indigenous and Non-Indigenous Heritage

Preliminary Findings

The development site is partially developed and completely cleared.

It is not expected that the proposal would impact on significant items of Indigenous cultural heritage significance.

Potential Impacts

Given the developed and cleared nature of the site it is unlikely that sites of Indigenous cultural heritage significance may be located on the subject site.

Assessment Methodology

The subject site is located within an area of past disturbance. It is unlikely that the proposal would have any adverse impacts on items of Aboriginal cultural heritage.

6.1.4 Visual Impacts

The potential visual impact of a proposed development within a precinct may be assessed by considering a combination of two factors:

- visibility of the development; and
- visual absorption capacity of the landscape to absorb the development.

An assessment of the visual impact of a proposed development must take into consideration the following elements: Key viewpoints; Period of view; Context of view; and Extent of view.

The potential for the proposal to impact on visual amenity is considered to be low, as the Resource Recovery Facility will be located within the South Nowra Industrial Estate. Therefore, given the location and position of the development within the landscape it is our view that the development will constitute a minor component of the wider view, barely observed by the casual passerby. Furthermore the capacity of the landscape to absorb the development is medium to high.

6.1.5 Heritage

It is unlikely that there would be any Non-Indigenous heritage or Indigenous heritage issues associated with the development of the subject land.

6.1.6 Traffic And Transport

The subject site is located in an area of the South Nowra Industrial Estate which has been developed with the expectation that it will be servicing significant levels of traffic associated with the development of several industrial businesses in this area.

Transportation issues that require assessment and will be reported in the EIS include the following:

- Site Access Requirements – the site will require appropriate vehicular access for transport of materials;
- Adequacy of Existing Road Network – a detailed assessment of the existing road network and traffic usage levels to assess its suitability to accommodate additional traffic generated by the development;
- Construction Stage Traffic Impacts – Assessment of the potential traffic impacts during the construction stage of the Development; and
- Operational Stage Traffic Impacts - Assessment of the potential traffic impacts which would occur during the ongoing operational stage of the Project and the interaction with the existing traffic utilising them key transport routes.

6.1.7 Water Management

While there are no natural watercourses located directly through the subject site there appears to be a man-made drain along the western boundary of Lot 29. The main management issues in relation to surface and ground water is stormwater/surface runoff. Surface runoff can transfer sediment, suspended solids, nutrients and other chemicals to receiving waters. Surface water run-on can also lead to excessive generation of leachate. Three main types of stormwater could be generated by the operation:

- Clean stormwater runoff from undisturbed and rehabilitated / revegetated areas of the site;
- Potentially sediment-laden stormwater runoff from disturbed areas of the site and stockpiles of product waiting to be sold; and

A range of appropriate measures would be implemented to minimise, contain, collect and dispose of stormwater generated during resource recovery operation at the site. The facility will be designed to manage stormwater through a combination of mitigation measures. The fundamental approach to stormwater management would be as follows:

- Divert all clean stormwater runoff from upstream undisturbed areas and revegetated areas around disturbed areas;
- Collected the rainwater from the proposed new buildings and reuse the water with the process;
- Maintain undisturbed and rehabilitated / revegetated area as filters for sediment from disturbed areas;

- Maintain all stormwater runoff from disturbed areas as diffuse as possible to minimise sediment loads and maximise the opportunities for the vegetation to strip sediment from the runoff. Any concentration of flow would be avoided, wherever possible;
- Implement and maintain appropriate erosion control measures eg. revegetation, silt fencing etc, on all disturbed areas as soon as practicable; and
- Capture all potentially contaminated runoff from disturbed areas or processing areas and treat such water in the proposed stormwater ponds.

The facility will also include procedures for dealing with spills, and appropriate equipment and materials (eg. dry mulch, sand or other absorbents) will be located onsite to deal with any spills.

During construction erosion and sediment control will be undertaken in accordance with the “Blue Book” Landcom (2004) Managing Urban Stormwater: Soils and Construction, 4th edition, with the objective of zero sediment from the construction site reaching the receiving water course.

6.1.8 Hazards

Mapping prepared by Shoalhaven City Council identifies a swathe through Lot 29 as being flood liable.

The project will involve the recontouring of the site; and placement of stockpiles, plant, machinery and buildings on this land.

The EIS will therefore need to be supported by a flood assessment report demonstrating that flood waters will not adversely impact the development; and the development will not significantly impede floodwaters in a manner that will adversely impact adjoining property.

The site is also identified by Shoalhaven City Council as being bushfire prone. Given the nature of the proposal, the application will not require authorisation from the NSW Rural Fire Service.

Any development application will however need to address the provisions of the NSW “Planning for Bushfire” guidelines.

6.1.9 Capital Investment Value

The capital investment is estimated to be \$6 million.

6.1.10 Summary of Environmental Issues and Risks

Information collected during the PEA process has determined that the project would have negligible impacts on surrounding topography; flora and fauna; visual; and Indigenous and Non-Indigenous heritage.

The key environmental considerations likely to influence the design and operation of the Resource Recovery Facility are as follows:

- Air Quality;
- Noise Amenity;
- Water Management;
- Waste Management (eg. management of contaminated loads);
- Traffic Management;
- Flooding; and
- Bushfire.

In each case, design and operational mitigation and control measures should be sufficient to ensure acceptable impacts are achieved.

6.1.11 Key Environmental Issues

Following the above preliminary assessment, the key issues, ie. those with the greatest risk of significant impact for the proposal are identified as:

- Air, noise and vibration;
- Traffic and transportation;
- Water management;
- Waste management;
- Hazards and in particular flooding;
- General environmental management during the construction phase and the need for the Environmental Assessment to be accompanied by a Construction Environmental Management plan.

The key environmental issues listed above will be further addressed in detail in the Environmental Assessment.

7.0 PROJECT JUSTIFICATION AND CONCLUSION

7.1. NEED FOR THE PROJECT

7.1.1 State-wide Perspective

In 2007 there was increasing concern across NSW about the management of waste, limited re-use and recycling and heavy reliance on landfills (DECC 2007). Since that time the Waste Avoidance and Resource Recovery Strategy (WARR Strategy), which is required by the Waste Avoidance and Resource Recovery Act 2001 (WARR Act), has been effective in significantly increasing resource recovery across NSW, while protecting the environment. The WARR strategy provides the framework that is to guide the Government's policy objectives of minimising environmental harm from waste generation through to disposal, conserving and maximising resource use with the Broad Targets specified as:

"By 2014, to: Increase recovery and use of materials from the municipal waste stream, from 26% (in 2000) to 66%; Increase recovery and use of materials from the commercial and industrial waste stream, from 28% (in 2000) to 63%; and Increase recovery and use of materials from the construction and demolition sector, from 65% (in 2000) to 76%."

The NSW State Plan 2010 (State Plan) adopted the targets for municipal, commercial and industrial (C&I) and construction and demolition (C&D) waste in the WARR Strategy, which has given extra emphasis to driving improvement. In 2010, the NSW Government commissioned a review of the Waste Strategy to ensure that the policies and programs applied to waste management and resource recovery were optimised and sufficient to achieve the 2014 resource recovery targets. The review found that state and local government, the community and industry all accept the need for greater resource recovery and waste minimisation (DECCW, 2011).

While steady progress is being made to achieve the targets, in particular, with the C&D waste (73% in 2008-09) we need to refocus our efforts to guarantee that the 2014 resource recovery targets will be achieved. To achieve the targets, NSW needs a viable and mature recycling industry. This requires enhanced resource recovery, alternative waste treatment (AWT) infrastructure and strong community engagement (DECCW, 2011). Refer **Table 2**.

Table 2
Progress Towards Waste Diversion Targets. (Source: DECCW, 2011).

<i>Waste Sector</i>	<i>2000 baseline</i>	<i>2002-03</i>	<i>2004-05</i>	<i>2006-07</i>	<i>2008-09</i>	<i>2014 target</i>
Municipal	26%	30%	33%	38%	44%	66%
Commercial and Industrial	28%	34%	38%	44%	52%	63%
Construction and demolition	65%	64%	62%	67%	73%	76%
Overall	–	45%	46%	52%	59%	n/a
Total number of tonnes recycled (millions)	–	5.3	6.0	8.0	9.5	n/a

While WARR strategy provides the framework that guides Government’s policy and sets targets for waste reduction, the POEO Act establishes the waste and environment levy (the levy) which is payable by scheduled waste facilities (those requiring a licence) in the regulated area. The levy applies to waste disposed to landfill or intractable liquid waste facilities. The levy works by increasing the cost of waste disposal, thereby providing a strong economic incentive to reduce waste generation and promote resource recovery. The levy is designed to discourage landfill disposal and drive resource recovery investment in NSW to meet the WARR Strategy and targets. As the levy increases, it encourages waste generators to review their practices and makes recycling options more financially viable in comparison to landfill (OEHL, 2011c). C&D waste is particularly sensitive to the levy, due to the weight of the material. It would be anticipated that future levy increases will further drive up the recovery rate of C&D waste.

7.1.2 Local Perspective

Regardless of the NSW Waste Avoidance and Resource Recovery Strategy 2007, and NSW targets for reduction of waste to landfill the need for the Resource Recovery Facility is underpinned by the limited life of the current landfill at West Nowra. Wright (2008) concluded that

“In twenty years’ time, it is expected that Council will be disposing an additional 20,000 tonnes each year to landfill – up nearly 30% on the current disposal rate...over the 20 years this will amount to some 1.6 million tonnes disposed to landfill; which, when compared with the estimated remaining capacity for the West Nowra Recycling and Waste Facility of 1 million tonnes presents Council with a major challenge.”

Without the creation of Resource Recovery Facilities (and other waste reduction initiatives) within the Shoalhaven Region the West Nowra Recycling and Waste Facility

is anticipated to be exhausted within 12 years and a new site will need to be made ready prior to this period.

7.1.3. Justification of the Proposal

The development of the Resource Recovery Facility would deliver outcomes consistent with state legislation and strategies for sustainable waste management. These include the *Waste Avoidance and Resource Recovery Act 2001* and the *Waste Avoidance and Resource Recovery Strategy 2007*. The construction and operation of the Resource Recovery Facility aligns with the philosophy of viewing waste as a resource and recovering resources in their highest net resource value state.

The recovery of resources in this manner creates value from the waste stream.

7.2. CONCLUSION

The subject site is relative flat and cleared of vegetation and is well suited to the establishment and operation of a Resource Recovery Facility given its position within the South Nowra Industrial Estate and its proximity to Nowra CBD and the West Nowra Recycling and Waste Facility. The site's proximity to Nowra CBD the site is easily accessible. The land is zoned in a manner that permits the proposed use.

A number of potential environmental constraints have been identified which will require further investigation or mitigation measures incorporated into the final design and operational procedures to manage the impact to an acceptable level. However, the initial environmental investigation did not find any constraints that are likely to prevent the proposed development of the site.

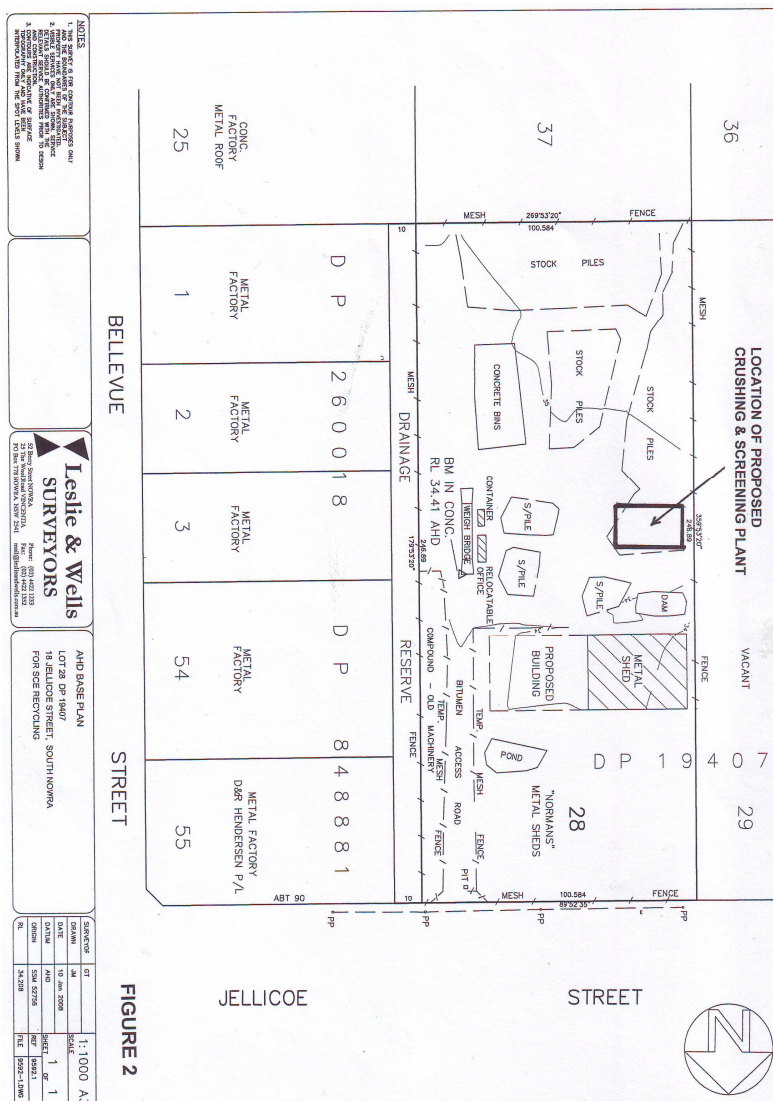
In summary, the site chosen is most suited for the development due to financial, social, and environmental considerations.



STEPHEN RICHARDSON
TOWN PLANNER CPP MPIA

ANNEXURE 1

**Site Plan of Existing Operation
on Lot 28**



ANNEXURE 2

**Site Plan of Proposed Expanded Operation
on Lots 28 and 29**



D P 8 0 5 1 7 5

1 : 600	DATE OF PLAN 21.03.2014	BY	DATE
(AT A1 SIZE)		BY	DATE
ALSTALIAH HEIGHT DATUM	STATION	NO	SECTION
SSW 52756	MAP	Number of section	
area	SR		
FL 54208 AHD	MAP		
	SECTION		



PLAN SHOWING PROPOSED RECYCLING CENTRE
OVER LOTS 28 & 29 DP 19407
AT JELICOE STREET, SOUTH MORRA
FOR JACKM PTY LTD

REC. IN		26163-03	
8/1/27	1	1	8/27/28
		RECEIVED	
		01	