Notice of Intent

JHRC Group Pty Ltd T/A Tasmania Oil - Oil Recovery System 1000m3/pa

Project No: 7168

Date: July 2022

environmental service & design

ABN: 97 107 517 144
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Document Control

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Prepared For:	Tasmania Oil

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Final v2	Rod Cooper	ES&D	8/8/2022

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Introduction

This Notice of Intent (NOI) is being submitted to initiate the approval for the upgrade to an operation of the existing oil refinery owned and operated by Tasmania Oil, 20 River Road Wivenhoe (the site). The oil refinery development application will be submitted with the EER to Burnie City Council for upgrade of the operations.

The proposal involves the upgrade of the current oil recovery system to cover the available oil contaminated products to be processed. Wastewater from the process is expected to be of acceptable quality to discharge to the sewer system and will be tested quarterly to satisfy TasWater's requirements. The new treatment units have the required design to improve the quality of the wastewater and environmental impacts on the site. As the system has been developed, additional environmental management has been implemented.

The site currently receives waste oil and lubricants, as well as used oil filters for processing and produce 0.5 megalitres pa clean oil. The oil produced will be sold as bunker oil (industrial fuel oil for burning to produce energy). This NOI is seeking to increase oil production to 1 megalitres pa. There is increasing customer demand. Upon discussion with stakeholders the proponent has reviewed operations and some operations have been stopped and/or abandoned. Plastic recovery has been removed from the site and will not be progressed. A coalescing plate separator of adequate capacity to deal with the increase in production will be installed.

The NOI was prepared by the proponent and reviewed by Rod Cooper of Environmental Service and Design (ES&D). Rod Cooper is a Site Contamination Specialist (CEnvP) and experienced chemist and process engineer.

1 Proponent Name and Contact Details

Table 1 – Proponent Details

Proponent Name	JHRC Group Pty Ltd
ABN	11630824006
Business Address	20 River Road, Wivenhoe TAS 7320
Postal Address	20 River Road, Wivenhoe TAS 7320
Contact Name	Mr Hugh Calvert
Phone Number	0409 216 650
Email Address	Admin@tasmaniaoil.com.au

Table 2 – Details of Likely Person Lodging Council Applications/Permits

Company Name	Environmental Service and Design
ABN	97 107 517 144
Business Address	74 Minna Road Heybridge, TAS 7316
Postal Address	PO BOX 651 Burnie, TAS 7320
Contact Name	Mr Rod Cooper
Phone Number	6431 2999
Email Address	rcooper@esandd.com.au

2 Name of Proposed Project and its Location

The project is the **Tasmania Oil – Oil Recovery System 1000m^3 (1ML) pa.** The proposed project site is **20 River Road, Wivenhoe TAS 7320**. Land titles and easements are given in Appendix 1.

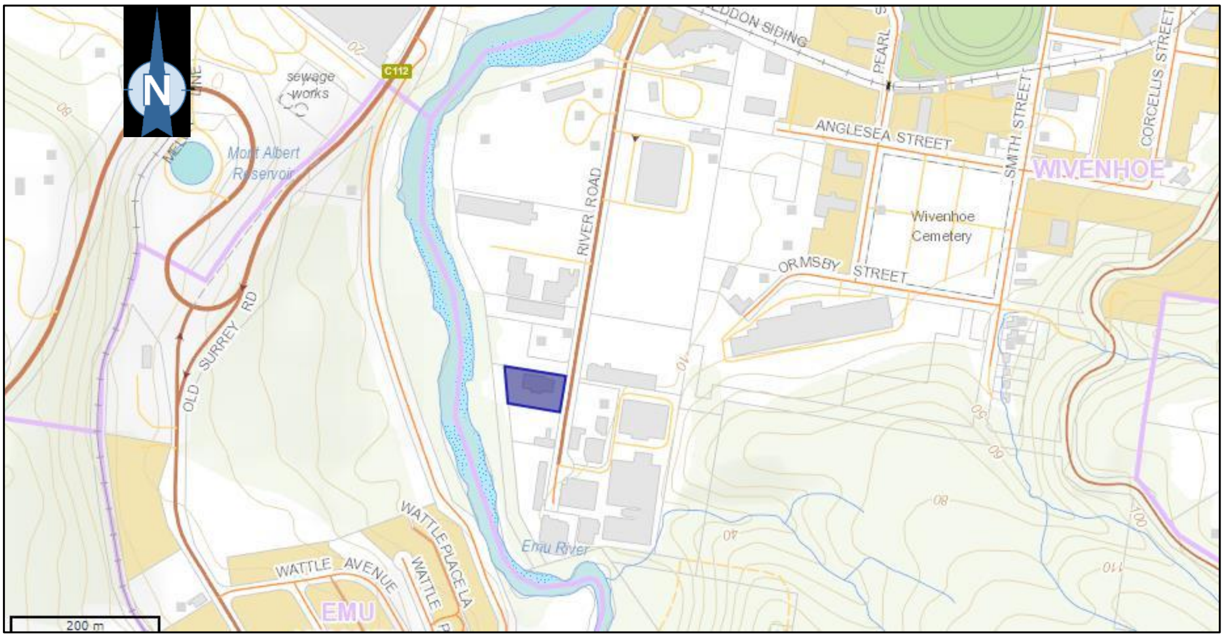


Figure 1: Site Location

Table 3: Site Details

Street Address	Property ID	Title Reference	Approx. Area (m^2)
20 River Road	7548781	17950/15	4000

3 Background of the Project Proponent

Tasmania Oil have been operating an oil disposal and recovery (refinery) business for 20 years. Tasmania Oil pumps out oil sumps and removes chemicals and waste from Industrial sites. This service is expanding and recently a belt filter was purchased to dewater waste / sludge to allow disposal of "spadable" materials. Wet contaminated soils are to be processed through the system.

The business balance sheet includes land and assets with cash reserves to facilitate the required investment.

4 Description of the Proposed Project

The proposal is an upgrade of the current oil refinery system. Initially the NOI proposed that the site was being developed. This NOI is proposing a final system as a waste depot and refinery. All materials and equipment on site that are not related to the proposed system will, or has been removed from site. Upon approval the proposed system will be operational.

The new system will operate by recovering oils and greases from oil filters and other oil contaminated components that are disposable units. The treatment process will be specific to the oil source. All materials/waste received will be reprocessed to produce a saleable oil product and solid waste for disposal at appropriate landfills.

The oil will be collected, cleaned up and placed in storage for sale. Oil is typically used by clients as fuel for kilns and boilers.

Hydrocarbon contaminated water will be bought onsite via tanker and will be pumped through a vertical separator and a secondary separator, settling and separation will occur. The oil is then recovered to storage for sale and the wastewater is decanted through a TasWater approved coalescing separator and discharge to sewer.

5 Production Data

5.1 Currently

We are recovering oil from:

Soil	0 Lpa
Water	450,000 Lpa
Oil Filters etc.	50,000 Lpa

5.2 Proposed Limits

We will be recovering oil from[#]:

Soil	50,000m Lpa
Water	800,000m Lpa
Oil Filters etc.	150,000m Lpa

(Total limit being 1,000,000 Lpa or 1000 m3 pa)

Waste oil delivered to the site ranges from 0.716 to 0.863 kg/L (based on a 30,000 L truckload weighing an average of 21.5-25.9 T).

5.3 Trade waste

Based on a 5% oil content in the tanker wastewater volumes it is proposed that the volume of water to go to sewer is 16 mega litres pa.

If the removal efficiency of the separator meets the warranty guarantee (<30ug/l) The volume of oil lost to the sewer per year will not be greater than 480 g/year. As part of the consultation process TasWater have visited the site and a trade waste agreement will be in place prior to commissioning the new system.

 # All data is based on current market position; this can change at any time, the maximum production rate is set.

New recovery bays (F in figure 10) will allow for the recovery of oil from soil/slurry from hydrocarbon sumps. This material comes from service stations and workshops. NATA testing will occur at the sump and some materials will be directed to landfill rather than processing, based on analysis. This material is currently taken directly to landfill.

The proposed system consists of the following sections:

(a) Oil recovery from water

(b) Oil recovery from oil filters

(c) Oil recovery from various disposable receptors

(d) Oil recovery/conversion from grease

(e) Oil recovery from soil in grease/oil sumps

(f) Oil recovery from contaminated soil.

The components used to recover oil are described in detail in figures 2 – 5.

The solid waste is in a spadable form to meet EPA waste tracking and approvals.

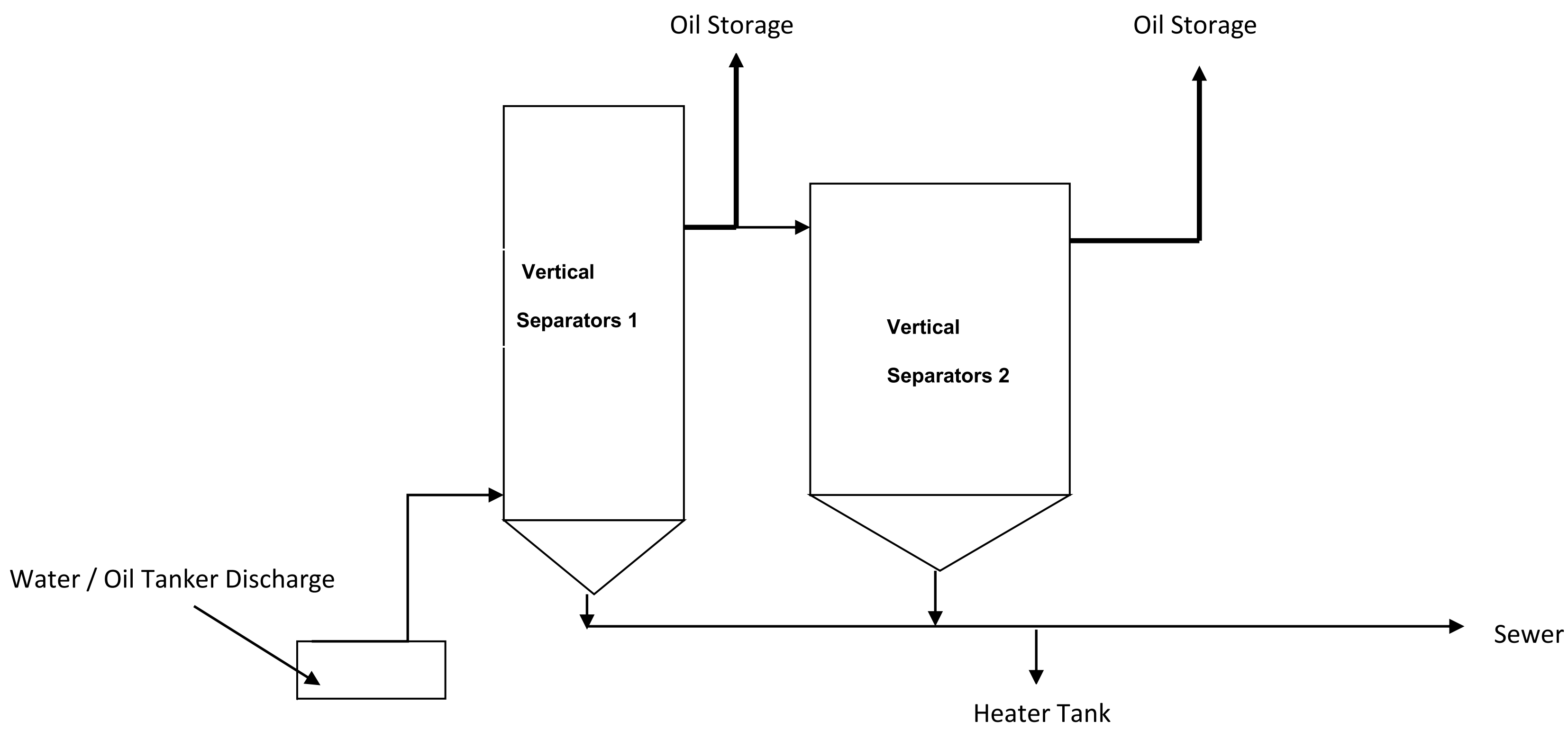


Figure 2 Oil Recovery from Water (a)

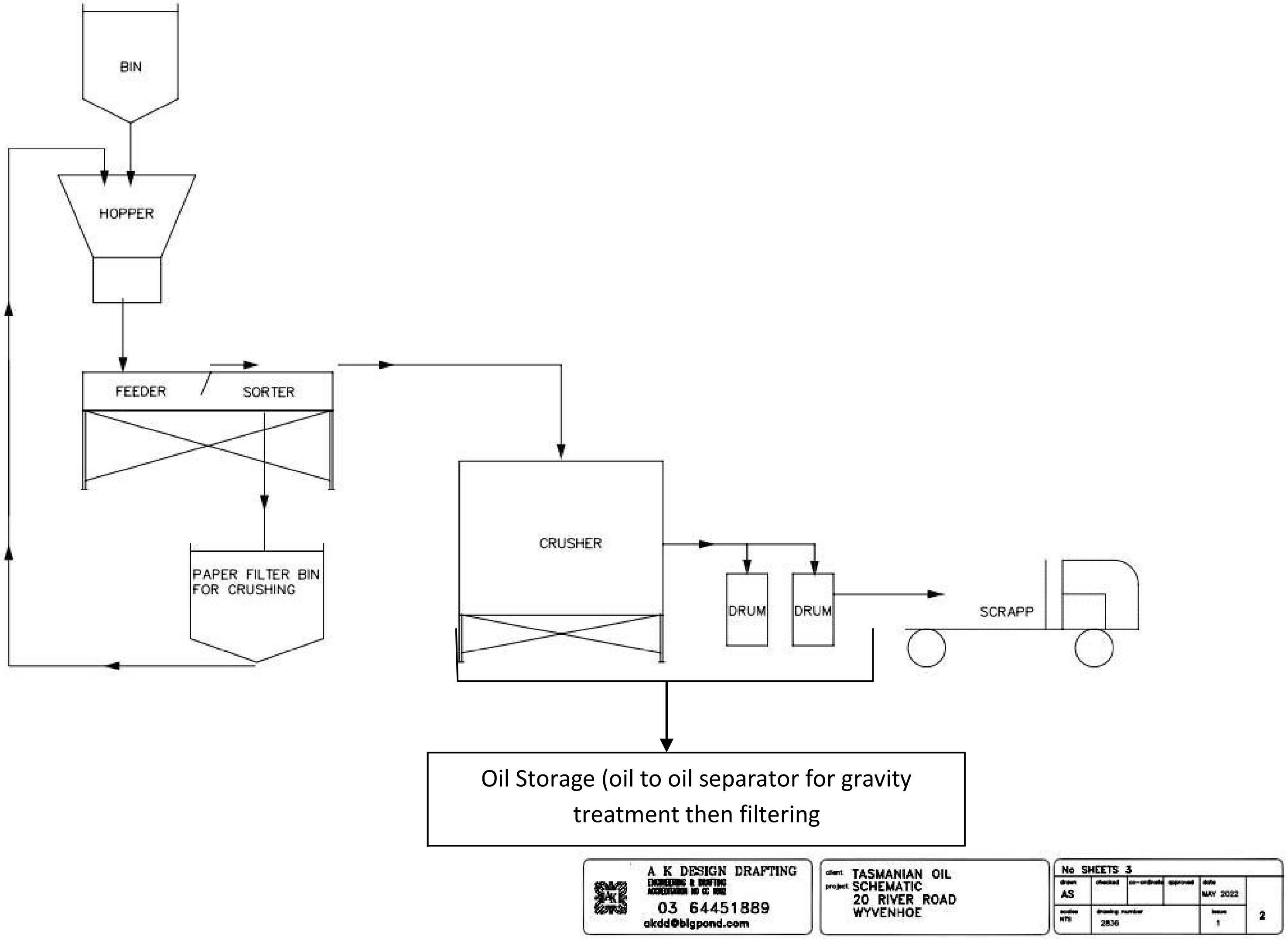


Figure 3 Oil Filter Cleanup / Disposal (b&c)

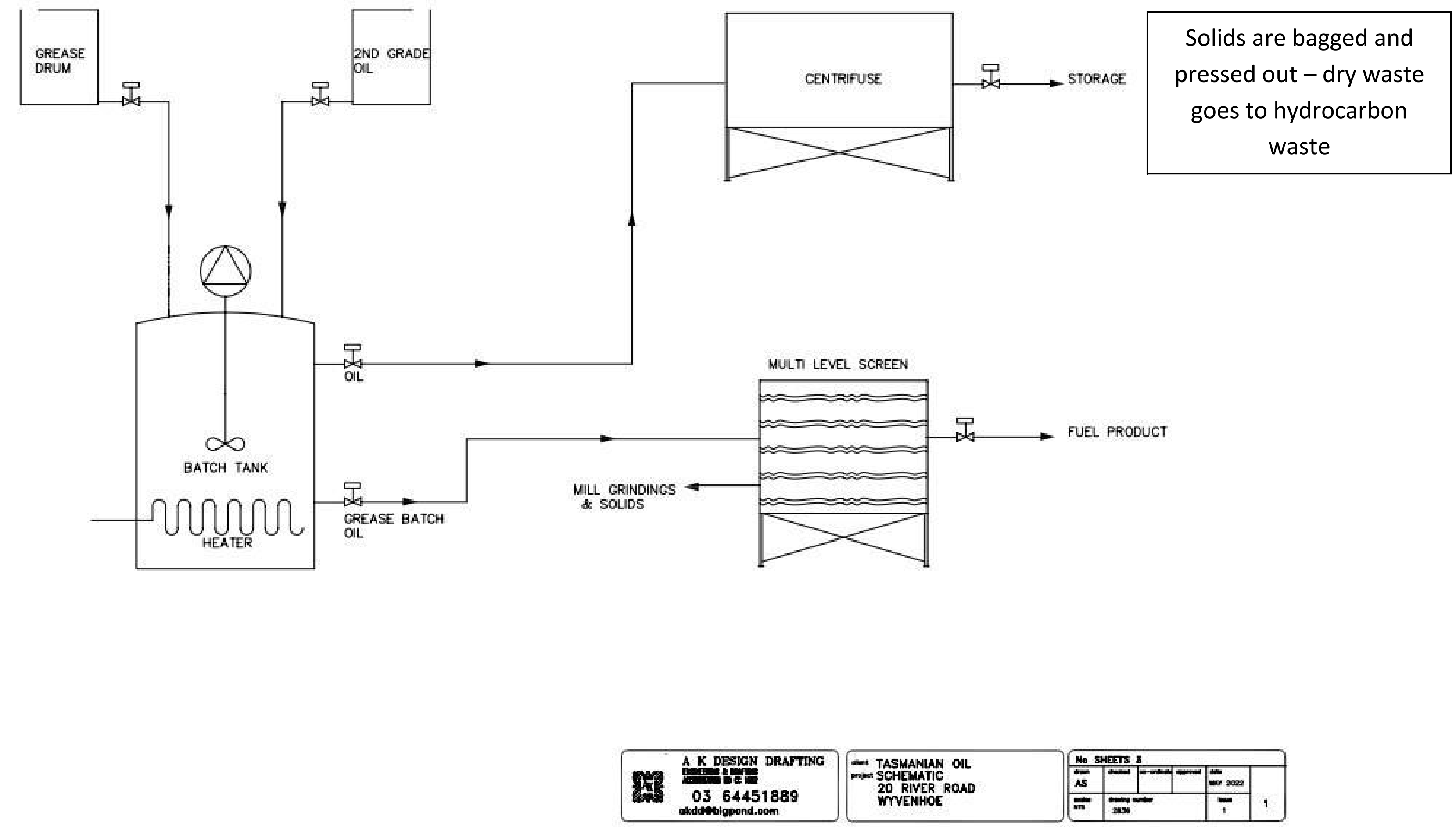


Figure 4 Grease Conversion System (d)

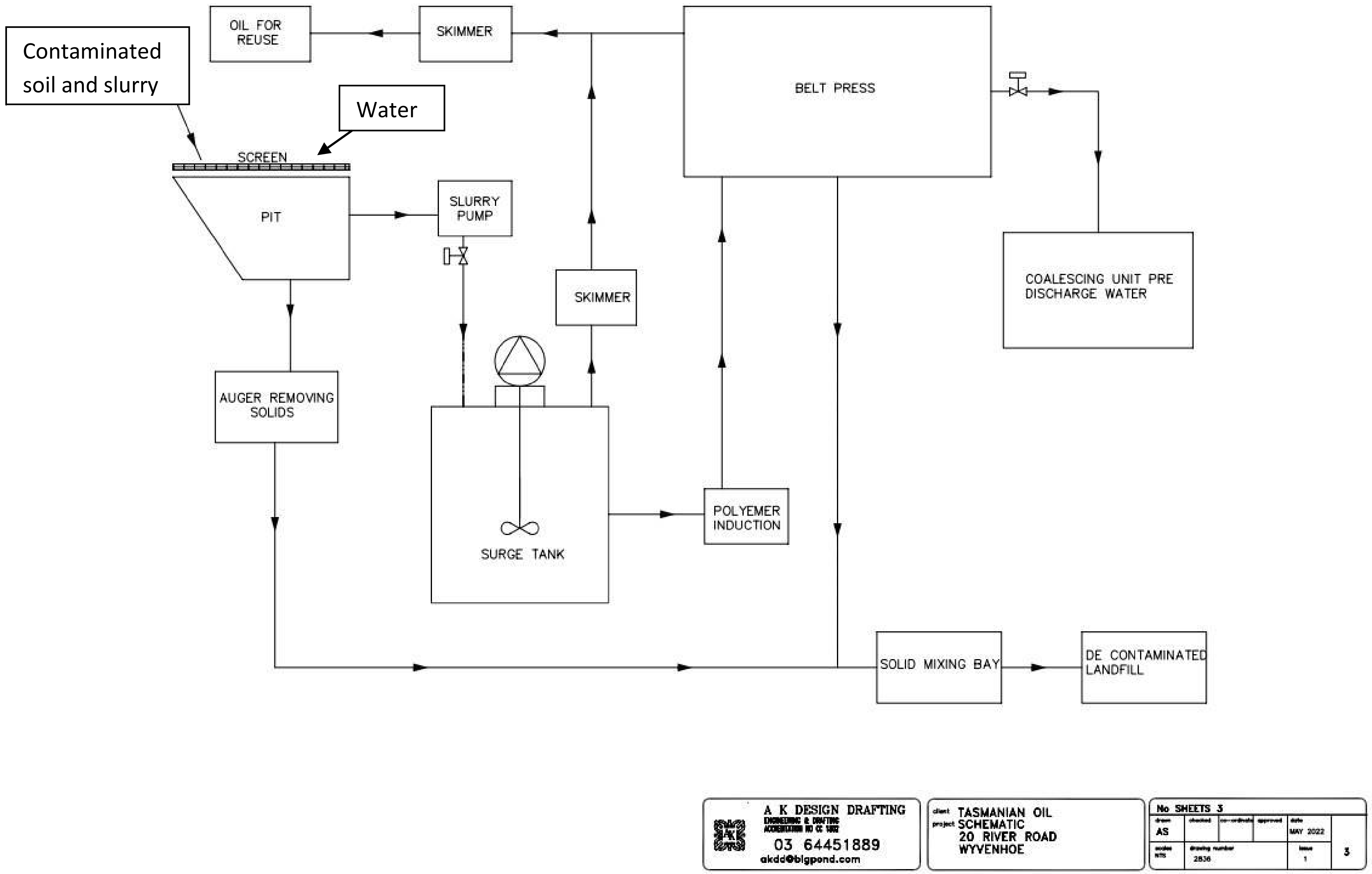


Figure 5 Oil Recovery from solids (e&f)

6 System Components

6.1 A - Recovery from Water

Water arrives by tankers and is pumped into Vertical Separator 1 and settled for a number of hours. Oil is pumped to storage oil / and water mix is pumped to Vertical separator 2 where it may settle for several days. Purified water is pumped to the Wastewater system. The separated oil is sent to storage and the poor quality oil is pumped to the slurry tank for reprocessing. Any solid is pumped to the sump for processing.

Figure 6 Vertical separators 1 & 2 vibrating separation and water to IBC.

As the truck is unloaded the oily water is transferred to vertical tank 1 and gravity separates the oil from water and the water is drawn from the base. When the water is bled off, the portion of oil between the water and burnable oil is transferred to the vertical tank 2 (the bigger tank) for agitation and further settling. This oil then passes to the batching tank.

6.2 B & C - Recovery From Oil Filters and Other Sources

Waste Oil filters are bailed through an onsite baler and then crushed to extract the entrained oil. The crushed blocks, once drained into the batching tank are sent to a scrap metal recycler via the Cake Tin.

Figure 7 Oil filter crusher

Figure 8 Crushed filters draining oil.

6.3 D Recovery from Grease

The Slurry tank is for blending 2nd grade oil that will not burn with solvent, so it will be a saleable commodity. This unit is used to break waste grease (with a solvent), for filtering and further processing. Preliminary filter and heater unit.

Figure 9 Slurry Tank - heater / filter

6.4 E & F -- Recovery from soil / sludge.

Slurry and soil will be flushed into a sump. A sump pump will pump the slurry into a slurry tank. The slurry is pumped through a belt filter.

Oil and water is pumped into the oil / water recovery system and the spadable solid will be disposed of as waste.

Each batch will be tested and then processed or transported to landfill depending on analysis. Soil will be managed via the EPA waste tracking system.

7 TasWater compliant coalescing separator.

The oil recovery system will continuously reduce the residual hydrocarbon loading on water until it is acceptable for the TasWater Compliant coalescing separator. The WW treatment system is certified to discharge <30mg/L of TPH to the sewer system. Quarterly samples will be taken and reported to EPA to confirm this.

Outside there is a sump with another small oil recovery skimmer and settling baffles. Underflow is pumped with flow control to the coalescing separator and then flow to the sewer. A sample point is set up so representative water samples can be taken. Overflow will return to the treatment system.

8 General Site Location Map

Figure 10 shows the location of 20 River Road in an industrial precinct of Wivenhoe Burnie. The site is bounded by River Road to the East and a reserve to the West. Industrial Sites North and South.

Figure 10 Site with Unit Positions

All of the units of operation are positionned where they are currently operating.

9 Outline of the Stakeholder Consultation Process

Tasmania Oil have consulted with EPA, TasWater, Council and Neighbouring Properties. No concerns were raised and the NOI was initiated.

10 General Description of the Physical Environment

River Road and the mouth of the Emu River was originally a swamp. Historic aerial photos accessed via TheLIST indicate that the area south of the current rail line and west of Dedham Street was reclaimed between 1955 and 1976 by APPM (Mainly Carbonated Carbon). However, the swamp may have been used as landfill earlier than this, as glass bottles from c.1900 were uncovered in pits at 21 River Road as part of ES&D Project 6764. Aerial photos show that the site appears to be occupied by outbuildings in 1969 which may have been related to the North West Acid plant (the plant itself was located across the road at the current ALS laboratory and Elphinstone sites). The site is empty by 1976.

River Road is part of the commercial/industrial zone of Wivenhoe, with service stations, transport depots, automotive workshops and other commercial operations nearby. The site is situated between Quick-Mix Concrete and a Shell service station, with ALS Geochemistry lab over the road and the Emu River to the west. Nearest residential properties are located on Fern Glade Road across the river, 168m to the southwest. See Figure 11. Note that the suburb of Emu Heights is shielded from the site by trees along the river.

The site is located on relatively flat land between 8-6m AHD, which slopes gently to the north. The nearest surface water body is the Emu River, approx. 40m from the western boundary of the site, and the Bass Strait is approx. 860m north. Groundwater most likely flows towards the river (ES&D Project 6764). The underlying geology is mostly fill, categorised by MRT as Qhmm (undifferentiated man-made Quaternary sediments), with the southeast corner of the site on the original natural Quaternary sediments (Qpsa).

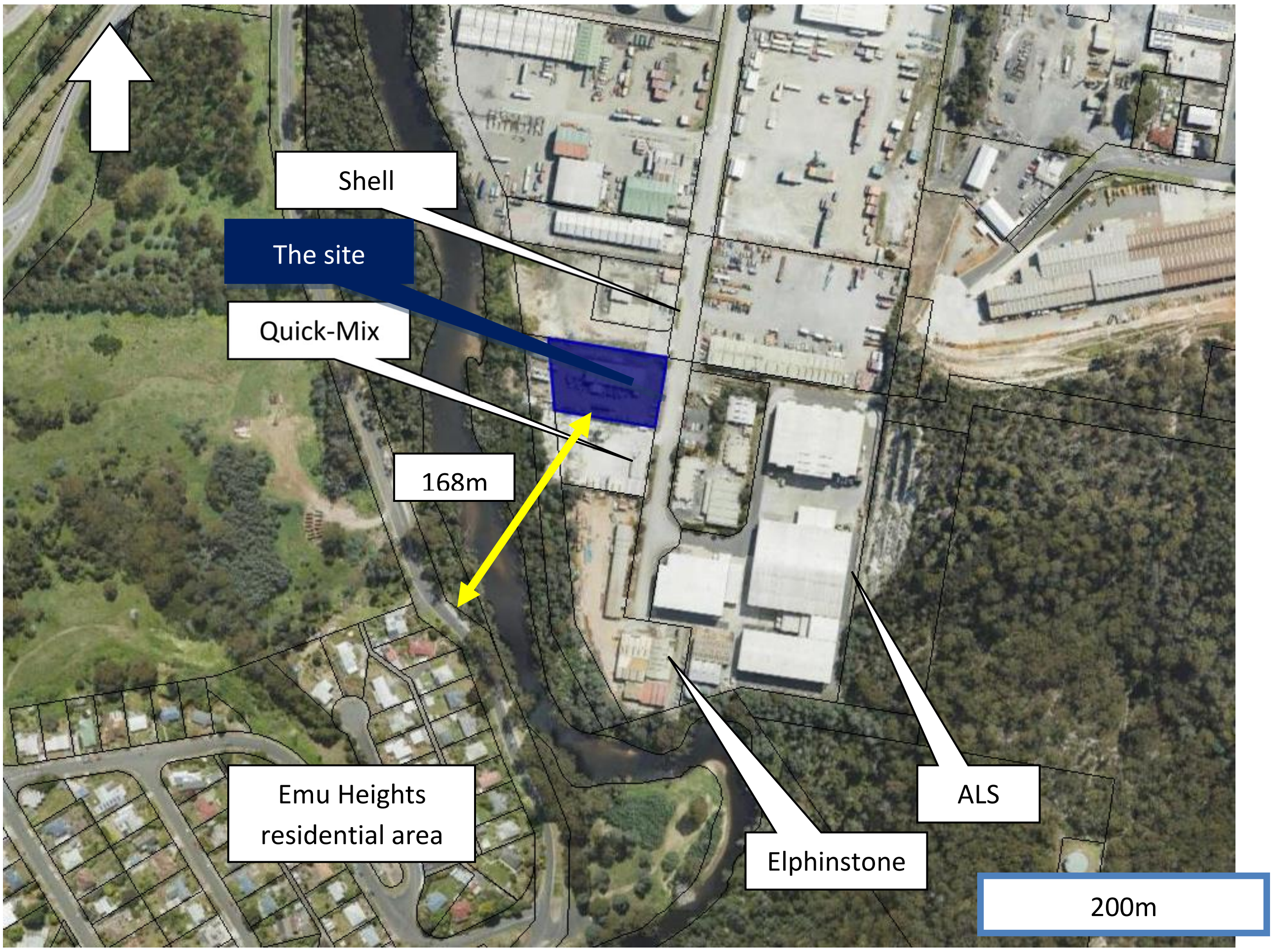


Figure 11: Nearby land uses

11 Key Environmental, Health, Economic and Social Issues Identified

The key environmental issue is that the site is recycling volumes of oil that would be otherwise impacting the environment via a leaching process from numerous landfills into the Tasmanian Environment. The recovered oil is used to reduce the use of fresh oils. The process generates income and provides jobs and revenue into the community. Recovery of waste for reuse is a key objective.

The sewer discharge has been quantified and is the main impact. Noise is not expected at the site as most activity is within the building. The noise will undoubtedly be below the council bylaws as there are no units of operation that require hearing protection. Operating hours are 08:00 to 17:00 Monday to Friday. There are no residential receptors within 160 meters.

Dust is a minor risk during summer, but again most activity will be within the factory and truck movements will be very low.

Odour is expected to be a minor issue within the building. The exterior area of the site is centred in an industrial area and so will not impact offsite receptors. Odour within the building will be managed with a cleaning program. Oil will be contained and sealed within vessels. Spills will be cleaned and floors will be washed regularly to prevent trips / slips. No PPE is required to control noise and odour.

Ventilation within the building is controlled with a large roller door to the west. This is fully open during work hours. There is mechanical ventilation in the factory wall.

Oils are contained within the building, within a bund within vessels. There are currently oils are bunded and can not enter the groundwater. Groundwater is protected and oils are prevented from entering groundwater as they are contained, spills will be managed as part of site procedures. There is always risk of spilling.

The development will allow better control of site processes, so better control of site. Management of materials onsite with set procedures and standard procedures will reduce loss and prevent errors.

The current impacts are minor and the proposed system will better manage oil and grease. The risk onsite will be reduced and the systemised use of PPE will further reduce risk to workers.

There are no new risks when the development is approved. The increase in production will not be instant but tied to market movements. The increase in production will pose additional risk due to the increase in volumes, truck movements and production increase.

Based on the operation of the current system, conclusions regarding the proposed development can be made, including.

- The system will have no health impact on the site operators as the operators use PPE when operating the system based on WST regulation. PPE is used to prevent dermal contact – Gloves, boots, safety glasses, long sleeves and trousers.

- Current site monitoring includes regular ongoing monitoring of VOCs, NO_x, O_2, H_2S, CO, CO_2 and HCN with either handheld meters or in-line sensors. OH&S limits are set as alarms on the meters/sensors. No other health monitoring programs are considered necessary based on risk assessments. The proposal will systemise the procedures and insure schedules are completed.

- The proposal will be unlikely to create a dust or noise problem on the site or for adjoining sites. The odour of oil will be confined to the factory. Odour is not currently detected in the yard or near the boundary and so good housekeeping will prevent future impacts. The facility is contained within a shed with mechanical ventilation and open venting. Dry materials are not processed as all raw materials have high oil contents and are wet for good separation.

- Onsite dust measurement will be conducted if found necessary. A design HAZOP will be conducted prior to commissioning of the proposed system. The risk assessment will cover environmental impacts and increased risk from the system operation. The Hazop will be completed by a suitably qualified person.

- Procedures and risk assessments will be produced during the EER. The site has not received noise complaints in the past. A baseline noise assessment will be conducted during the EER.

- Oils are contained with bunding, all sumps and storage are bunded. Spill kits are placed in the factory work area. The proposed development will require all procedures to be followed and schedules completed to comply with to meet permit conditions.

- Odours are managed onsite with cleaning and housekeeping. The proposed development will require all procedures to be followed and schedules completed to comply with permit conditions. Vapour monitoring will be implemented if they are detected during the EER preparation.

- The proposed development, during the EER preparation will require groundwater bores to be installed down gradient. This will form a baseline and testing will occur as scheduled in the EER.

12 Surveys and Studies proposed or Underway in Relation to the Key Issues

No environmental site assessment, preliminary site investigation or environmental impact assessment has been completed for the site.

A Design HAZOP will be conducted during the EER to modify design if required. The output of the HAZOP will include Environmental and OH&S monitoring parameters. This will set operational procedures and schedules to prevent environmental and OH&S impacts.

The standard studies required in the EER will be completed.

A check with council will occur with regards to the proposal as a substantial intensification for the purposes of subsection 12(7) of the LUPA Act**.**

After Council has received the DA that they may require extra studies or assessments.

13 Proposed Timetable

The equipment is onsite and in position. Commissioning of the approved system will occur with approval. Approval is sought as quickly as possible as there is not currently a permit in place.

14 Environment Protection and Biodiversity Conservation Act 1999

The location of the proposal is in an industrial setting, in an area already highly disturbed (almost 100% hardstand and gravel) with no native vegetation and no clearing activities to take place. The site is secured with high industrial fencing. The project will not impact on any matters of national environmental significance, and does not take place on Commonwealth Land, therefore no approvals under the *Environment Protection and Biodiversity Conservation Act 1999* are required. The triggers will be confirmed during the EER process. An ecologist will be consulted.

15 Status of the Proposal under the *Land Use Planning and Approvals Act 1993*

Due to the data presented above we believe the current use and proposed changes do not require more detailed assessment, even so:

For the purposes of section 27B(2)(k) of the EMPC Act, the Board has determined that a NOI is to contain the following additional details.

1. The status of the proposal under the Land Use Planning and Approvals Act 1993 (the LUPA Act)6. This must include:

a. whether or not the relevant Council will require a LUPA Act permit application; - As discussed a DA will be submitted to BCC.

b. whether a single permit application or multiple applications will be required; - A single permit will be required.

c. the division of the LUPA Act under which the application will be made; N/A

d. zoning of the proposal site(s), and whether or not rezoning will be required; - Rezoning is not required.

e. if the proposal is for intensification or alteration of an existing activity, the status of the existing activity under the LUPA Act; and - No current permit exists.

f. if the proposal is for intensification or alteration of an existing activity, whether or not the council regards the proposal as a substantial intensification for the purposes of subsection 12(7) of the LUPA Act. **–** This will be worked through with council.

2. In the event that the proposal has a reasonable likelihood of requiring approval from the Commonwealth Government under the Environment Protection and Biodiversity Conservation Act 1999 (Cth), a statement is to be provided as to whether or not the proponent elects for the proposal to be assessed pursuant to the Bilateral Agreement made under section 45 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) between Tasmania and the Australian Government (dated 22 October 2014). No.

3. Where the NOI relates to an activity that requires an Environmental Licence under the EMPC Act:

a. Whether the person (which includes any body of **persons**, corporate or unincorporated) who intends to submit the development application has contravened (which includes failed to comply with) the EMPC Act. This includes failure to comply with environmental conditions or restrictions imposed under the Act or subordinate regulations, including those contained in permits issued under the LUPA Act and Environment Protection Notices issued under the EMPC Act. If so, provide details of these contraventions including the date and relevant provision of the EMPC Act. No.

b. Whether the person (which includes any body of persons, corporate or unincorporated) or an associate of the person has within the last 5 years been convicted of an offence against:

i. the EMPC Act; No.

ii. any other Tasmanian Act that relates to the protection of the environment; or

iii. a law of another State, a Territory, or the Commonwealth, that relates to the protection of the environment. No.

c. Where a natural person is intending to submit the development application (as opposed to a company or corporation), the person is over the age of 18. N/A

Appendices

Appendix 1 – Titles / Easements

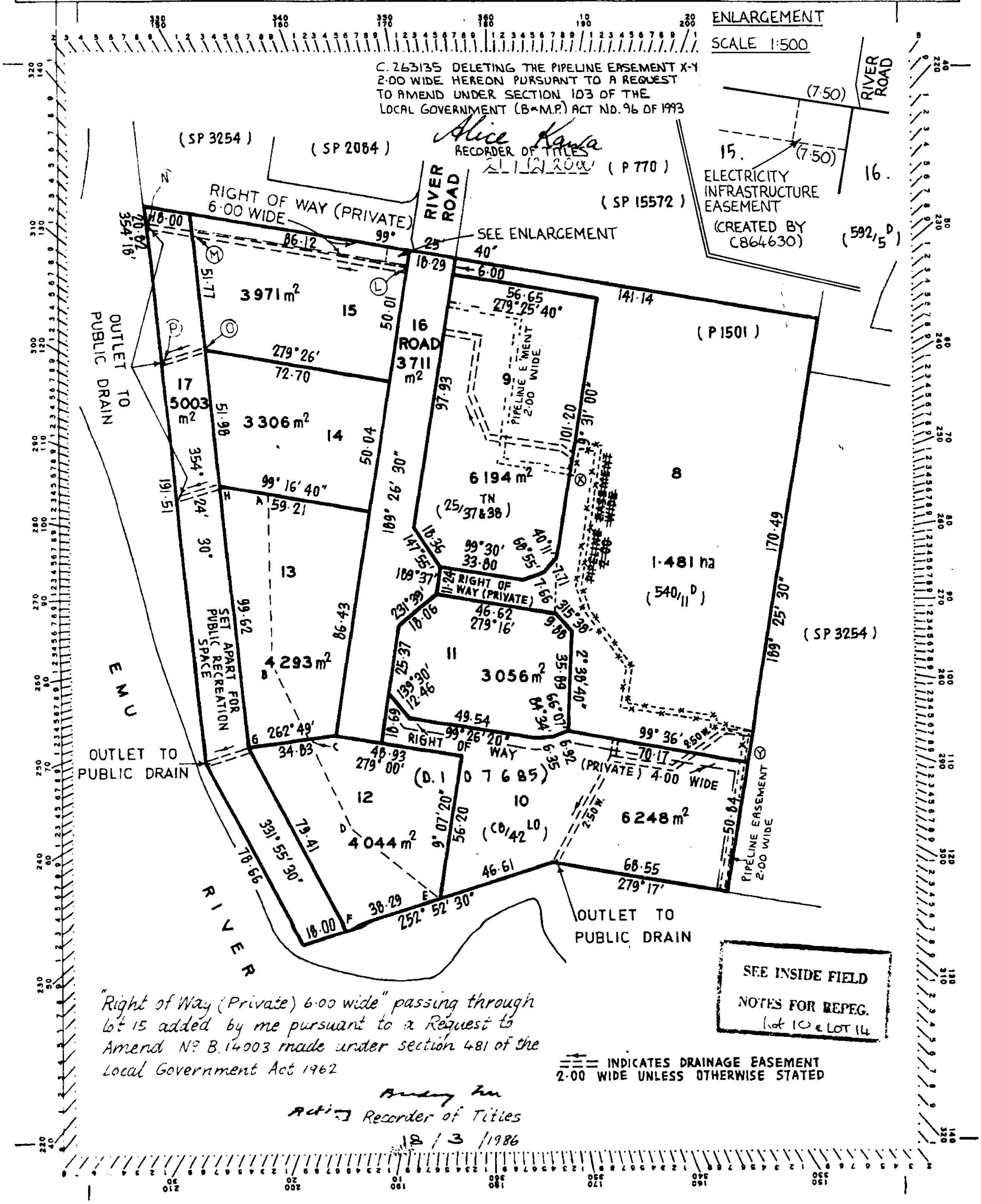
FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

Owner: North West Acid Proprietary Ltd	**PLAN OF SURVEY** by Surveyor P N Anderson of land situated in the DEVON – STOWPORT TOWN OF BURNIE	Registered Number: S.P 17950
Title Reference: CT 3898-73		Effective from:
Grantee: Part of 15A 1R 0P (Section S) gtd to Robert Alston Murray ~~& Part of lots 33925 (0-1-32)~~ & 33926 (1-1-75/10) gtd to The Marine Board of Burnie	SCALE 1:1500 MEASUREMENTS IN METRES	Recorder of titles



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
17950	15
EDITION	DATE OF ISSUE
11	27-Aug-2019

SEARCH DATE : 12-May-2021
SEARCH TIME : 01.22 PM

DESCRIPTION OF LAND

City of BURNIE
Lot 15 on Sealed Plan 17950
Derivation : Part of 15A-1R-0Ps. (Section 5) Gtd. to R.A. Murray and Part of Lot 33926 Gtd. to The Marine Board of Burnie
Prior CT 3965/91

SCHEDULE 1

M772549 TRANSFER to JHRC GROUP PTY LTD Registered 27-Aug-2019 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP 17950 BURDENING EASEMENT: right of carriage way for the Warden Councillors and Electors of the Municipality of Burnie over the Right of Way 6.00 wide shown no Sealed Plan 17950

SP 17950 BENEFITING EASEMENT: Right of Drainage over the drainage easement marked M.N. and O.P. on Sealed Plan 17950

SP 17950 BURDENING EASEMENT: Right of Drainage [appurtenant to Lot 16 on Sealed Plan No. 17950) over the Drainage Easement marked L.M. on Sealed Plan 17950

C864630 BURDENING ELECTRICITY INFRASTRUCTURE EASEMENT with the benefit of a restriction as to user of land in favour of Aurora Energy Pty Ltd over the Electricity Infrastructure Easement shown on Sealed Plan 17950 (Subject to Provisions) Registered 07-Aug-2008 at noon

E189654 MORTGAGE to Commonwealth Bank of Australia Registered 27-Aug-2019 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations