I. Working surfaces EPA Goal To ensure storage areas, active composting surfaces, and associated access roads are constructed to prevent the pollution by leachate of subsoil, groundwater and surface water bodies and to allow all-weather vehicular access to any part of the processing site that needs to be reached by vehicles.

Mınımum Design Requirement is met as follows

The green waste shredding area will have an impervious concrete or asphalt concrete layer to prevent infiltration from the shredding surface.

The green waste shredding area has a perimeter drain to collect and direct runoff to the green waste runoff collection pond.

Composting and storage will be undertaken in a weatherproof shed which will have a concrete floor.

Leachate barrier system

To prevent the pollution by leachate of subsoil, groundwater and surface water bodies over the period of time that two organics or products remain on the premises, beyond the closure of the facility, and until the premises has ceased to pose potential environmental threats.

Mınımum Design Requirement is met as follows:

The green waste shredding area has an impervious layer to prevent infiltration from the shredding surface. The impervious layer will be concrete or asphalt cement (AC) pad of a thickness of at least 100 mm is to be

The concrete or AC pavement will be designed for a traffic loading of 1 x 105 E5A. Assuming a CBR of 5, the pavement thickness will be in the order of 340 mm including a minimum of 100 mm concrete of AC thickness.

A 100mm concrete or AC layer will withstand the loads from all machines, vehicles and equipment that are required to operate the facility.

. Leachate collection system

To ensure that leachate is collected efficiently at the composting and related processing facility for further management, thereby avoiding water pollution and/or odour problems.

Mınımum Design Requirement is met as follows

The composting process will occur under cover in a wea and will produce no or at worst a small volume of leachate

The compost process leachate collection system will composting process shed will have a concrete floor underlain by a vethylene membrane in order to prevent leachate infiltration into the consist of the

A primary concrete tank with a volume of 5,000 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

- A secondary concrete tank with a volume of 2,500 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.
- The secondary tank will be connected to the primary tank at the where the primary tank is at 4,000 litre storage (80%) capacity.
- The primary collection tank will be fitted with a sensor to indicate 75% capacity (le 3,750 litres. At this point the site manager shall arrange to have the primary tank primped out by a liquid waste tanker and disposed of at an appropriate treatment facility.

Leachate storage system

sure that leachate is stored efficiently at the composting and related issing facility for further management, thereby avoiding water pollution rodour problems.

Minimum Design Requirement is met as follows

The compost process the following: leachate collection and storage system will consist

- A primary concrete tank with a volume of 5,000 litres. The will be fitted with a watertight lid and internally sealed e concrete tank with an epoxy
- A secondary concrete tank with a volume of 2,500 litres. The concrete tank will be fitted with a watertight lid and internally scaled with an epoxy coating to ensure watertightness.
- The secondary tank will be connected to the pnmary tank at the level where the pnmary tank is at 4,000 litre storage (80%) capacity.
- The pnmary collection tank will be fitted with a storage level sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste

DENOTES STAGE 2 LIMITS DENOTES STAGE 1 LIMITS tanker and disposed of at an appropriate treatment facility.

DO NOT SCALE

EASEMENT FOR TRANSMISSION LINE 45.72 WIDE

inspection of the level in the leachate storage tank is to be

It is noted that above ground tanks are preferred, however underground tanks are proposed in this case because the composting area is within a weather proof shed which will mean that the generation of leachate will be nil

The composting process will be undertaken in a weatherproof shed. There in the composting process will be undertaken in a weatherproof shed to the leachate storage system, it is noted that rainwater from the weatherproof shed will be harvested for use on site for dust suppression.

Surface water controls

avoid the generation of excessive leachate and to prevent any sediment pollutants from being carried off the premises.

umum Design Requirementis met as follows: s surface water controls must at least meet the following requirements:

composting and storage; vention of surface water m

prevention of surface water mixing with organics will achieved by undertaking the composting process within a weatherproof building. The building will effectively prevent surface water mixing with the composting material.

· green waste shredding; vention of surface water mixing with organics will be achieved by:

200mm HIGH KERB

AREA

TURNING/BACKING

VEHICLE

SKIP BIN STORAGE AREA

EQUIPMENT AREA

ZONE LINE

- elevating the green waste shredding area above the internal road system in order to ensure that surface water does not run onto the
- the internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central V drain in order to ensure that surface water runs away from the shredding area.

For composting: contamination of runoff will be prevented by u contamination of runoff will be prevented by the process and storage within a weatherproof effectively prevent surface water mixing with the undertaking the composting f building. The building will composting material.

For green waste shredding handling; treatment of runoff from the shredding area will be achieved.

elevating the green waste shredding area above the internal road system in order to ensure that surface water does not run onto the

PIPELINE 20 WIDE

STOCKPILING AND
LOADING AREA FOR
PROCESSED AND
UNPROCESSED
SAND, SOIL, TIMBER

(1)

AREA FOR PROCESSED AND UNPROCESSED CONCRETE, BRICK, RUBBLE, ROCK, STEEL SOIL MACOUNTY.

STEEL, SOIL, HARDFILL ETC

120

OUTDOOR PROCESSING.

AND GREEN WASTE

PROCESSING AND STORAGE SHED

SEPARATE GENERAL SOLID WASTE FOR FUTURE PROCESSING AND/OR PLACEMENT IN RELEVANT STOCKPILE" REFER TO D.J. DESIGN PLAN 21304/SHEET 18-REV-E

COMPOSTING <40mm

COLLECT SEEPAGE FROM COMPOST, DISCHARGE TO COLLECTION TANKS

the internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central dish-drain in order to ensure that surface water runs away from the shredding area.

COMPOST PRODUCTION

*COMPOST PRODUCTION = 2500m³/yr = 250m³/month = 2500m³/yr = 2500m²/yr = 2500m²/month = 2500m²/yr = 2500m²/month = 2500m²/yr = 2500m²/month = 2500m²/yr = 2500m²/month = 25

For composting: management of surface water generated from the design of a 1-in-10 year, management of surface water generated from the design of a 1-in-10 year, 24-hour-penod storm event will not be required because the composting operations are within a weatherproof building. The building will effectively prevent surface water mixing with the composting material.

For green waste shredding: management of surface water generated from the design of a 1-in-10 year, management of surface water generated by minimising the area of green waste exposed to rainfall and ensuring the shredding pond has sufficient volume. As runoff will not be heavily loaded with organic matter, water retained in the green waste shredding pond may be used a supplementary supply for dust suppression on site.

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RESTRICTED

PROVIDE 5,000 LITRE
UNDERGROUND CONCRETE
TANK FOR LEACHATE
COLLECTION

PROVIDE 2,500 LITRE
SECONDARY UNDERGROUND
CONCRETE TANK FOR
LEACHATE COLLECTION

The internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central V drain in order to ensure that surface water runs away from

LEGEND

AREA

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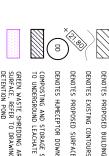
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GREEN WASTE

GREEN WASTE STOCKPILE TO
BE COVERED BY TARPAULIN
WHEN STOCKPILE IS TO BE IN
PLACE LONGER THAN 21 DAYS



COMPOSTING AND STORAGE SHED, CONCRETE FLOOR, DRAIN TO UNDERGROUND LEACHATE COLLECTION TANKS DENOTES PROPOSED SURFACE LEVELS DENOTES HUMECEPTOR DOWNSTREAM DEFENDER DENOTES EXISTING CONTOURS

GREEN WASTE SHREDDING AREA, CONCRETE OR ASPHALT SURFACE, REFER TO DRAWING KF110816/C17 DETENTION POND

SHREDDING RUNOFF POND

WATER
RECYCLING
POND

DETENTION BASIN A

DENOTES STORMWATER PITS AND PIPES

K.F. Williams & Associates Pty Ltd 28 Auburn Street Wollongong NSW 2500 A.C.N 008 664 417 Project Management, Surveying, Civil, Structural, Water & Sewer

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FUTURE ROAD

PLAN

DENNIS SMITH
Date of Survey Drawn A PROUDLOVE M.I.E.Aust. C.P.Eng MAR 2014

PROPOSED INDUSTRIAL DEVELOPMENT WYLLIE ROAD, KEMBLA GRANGE LEACHATE CONTROL PLAN LOT 10 DP 878167 ISSUED FOR DA APPROVAL 16 Of 18 KF110816 C32

ш PLOTTED BY



Height Datum AHD