Construction Environmental Management Plan

Ravensworth Composting Facility Expansion

74 Lemington Road Ravensworth NSW

Revision History

Rev No.	Revision Date	Author / Position	Details	Authorised Name / Position
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1. Introduction

1.1 Purpose of the CEMP

This Construction Environmental Management Plan (CEMP) details the environmental management and control measures which are to be implemented for construction activities associated with the expansion of the Bettergrow Ravensworth compost facility to process up to 200,000 tonnes per annum of organic material, including water drainage and leachate works, hardstand areas and associated infrastructure, to ensure the works are managed so as to reduce adverse impacts on the environment and the surrounding local community.
This CEMP has been prepared to satisfy the requirements of Conditions C1, C2, C3 and C4 of Part B Specific Environmental Conditions in Development Consent SSD 9418.

The CEMP specifies actions, responsibilities, conformance requirements and mitigation activities to be followed during the construction phase of the development.

The mitigations and measures detailed in this plan are required to achieve compliance with the requirements of Development Consent SSD 9418 and commitments contained in the Environmental Impact Statement (EIS 14 November 2019)) and Response to Submissions (RTS) Report (20 June 2022).

Prior to the commencement of construction, this CEMP is to be approved by the Planning Secretary, Department of Planning and Environment (DPE).

This CEMP is a live document and will be reviewed and updated where necessary to reflect changes introduced by the development team, site specific outcomes, non-conformances and recommendations arising out of inspections, meetings and audits. Where this CEMP is reviewed and updated, it will be submitted to the Planning Secretary for approval within six weeks of the review.

1.2 Objectives of the CEMP

The objectives for this CEMP are summarised in **Table 1**.

Table 1 CEMP Objectives

Objectives	Targets	Execution
Compliance with environmental legislation	• 100% compliance with all legal requirements	• Review of audit reports
Compliance with Development Consent conditions	• 100% compliance with consent conditions	• Review of audit reports
Avoidance of environmental harm	• Compliance with CEMP and environmental procedures	• Installation and monitoring of environmental controls • Environmental reporting, auditing and recording • Awareness and education
Conformance with best practice environmental management procedures	• Conduct environmental site inductions • Achieve targets in plans and checklists • Undertake environmental inspections	• Training of personnel in CEMP measures • Environmental monitoring and audits • Review of incidents and non-conformances register

Objectives	Targets	Execution
	• Undertake audits as per audit program • Report and log all environmental incidents and non-conformances • Assign and complete corrective actions within designated timeframe	• Review of environmental reports
Maintain commitments to stakeholders and community	• Minimal complaints • Respond to all complaints within 48 hour period	• Review of complaints register

1.3 Document Control

This CEMP will be issued to the Construction Manager and relevant extracts to other parties as controlled copies as applicable.

Revisions to this CEMP may be required during the development to reflect changing circumstances. Revisions may result from:

- Compliance Report;
- Incident or Non-Compliance Report;
- Independent Environmental Audit;
- Approval of any modification of SSD 9418;
- A direction of the Planning Secretary under SSD 9418 condition A2(b);
- Improve the environmental performance of the development; and
- Changes in legislation.

As described in **Section 1.1**, any revisions will be submitted to the Planning Secretary DPE for endorsement.

1.4 Records

The Construction Manager (CM) and Environmental Manager (EM) shall maintain environmental records as part of the development records. The following records (**Table 2**) will be maintained during construction.

Table 2 Environmental Records

Record	Type	Minimum length of time to keep record from completion of construction	Responsible Person
Daily diaries	Hard copy	4 years	CM
Inspections	Electronic copy	4 years	CM/EM
Waste dockets (if any)	Hard/Electronic copy	4 years	CM/EM
Waste Classification Reports (if any)	Hard/Electronic copy	For the life of the development	EM
Monitoring results (including test results as required)	Electronic copy	4 years	CM/EM

Record	Type	Minimum length of time to keep record from completion of construction	Responsible Person
Incident/Non-Compliance reports	Electronic copy	4 years	CM/EM
Training records (e.g. Induction)	Electronic copy	4 years	CM/EM
Complaints records	Electronic copy	4 years	EM
Materials tracking documentation (VENM, ENM, wastes listed in EPL 7654)	Hard/Electronic copy	4 years	CM/EM

2. Compliance Requirements

2.1 Development Consent Conditions

Development Consent SSD 9418 conditions relevant to the construction phase of the development that have been considered in this Plan are detailed in **Table 3**. Refer to **Appendix A** for the full Development Consent SSD 9418 conditions.

Table 3 Development Consent Conditions

No.	Requirement	Document Reference
	Management Plan Requirements	
C1	Management plans required under this consent must be prepared in accordance with relevant guidelines and include:	
	a) Details of baseline data	N/A
	b) Details of:	
	(i) The relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2.2
	(ii) Any relevant limits or performance measures and criteria; and	Section 7
	(iii) The specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures	Section 7
	c) A description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria	Section 7
	d) A program to monitor and report on the:	
	(i) Impacts and environmental performance of the development; and	Section 7
	(ii) Effectiveness of the management measures set out pursuant to paragraph (c) above	
	e) A contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible	Section 8

No.	Requirement	Document Reference
	f) A program to investigate and implement ways to improve the environmental performance of the development over time	Section 14
	g) A protocol for managing and reporting any: (i) Incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria; (ii) Complaint; and (iii) Failure to comply with statutory requirements	Section 11 Section 12
	h) A protocol for periodic review of the Plan	Section 15
	Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular Management Plans	
Construction Environmental Management Plan		
C2	The Applicant must prepare a CEMP for the development in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary	This Plan
C3	As part of the CEMP required under condition C2 of this consent, the Applicant must include the following:	
	a) Erosion and Sediment Control Plan	Appendix C
	b) Contamination Unexpected Finds Procedure (condition B37)	Appendix E
	c) Community Consultation and Complaint Handling	Section 12
C4	The Applicant must: a) Not commence construction of the development until the CEMP is approved by the Planning Secretary; and b) Carry out the construction of the development in accordance with the CEMP approved by the Planning secretary and as revised and approved by the Planning Secretary from time to time	

2.2 Legislative Compliance

The environmental compliance requirements and legislative context of this development are listed below and addressed in the Environmental Impact Statement (November 2019). The primary statutory instruments applicable to this development include but are not limited to those listed in the following sub-sections.

2.2.1 Commonwealth Legislation

- *Environment Protection and Biodiversity Conservation Act 1999*

2.2.2 State Legislation

- *Environmental Planning and Assessment Act 1979*
- *Protection of the Environment Operations Act 1997*
- *National Parks and Wildlife Act 1974*

2.2.3 State Environmental Planning Policies

- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy 33 – Offensive and Hazardous Development

2.2.4 Local Planning Instruments and Controls

- Singleton Local Environmental Plan 2013

2.3 Approvals, Licences and Permits

The following environmental approvals, licences or permits are associated with the development:

- Environment Protection Licence 7654 (EPL 7654) issued under Section 55 of the *Protection of the Environment Operations Act 1997* applies to the premises for the scheduled activity composting.
- In the event of an Aboriginal artefact or site being discovered during earthworks, excavation or disturbance, work in the immediate area must stop, and the Regional Operations Group of the OEH, Council and the Registered Aboriginal Parties are to be consulted. Under the *National Parks and Wildlife Act 1974*, a permit is required from the OEH for consent to disturb or destroy any Aboriginal artefact or site. An unexpected finds protocol for heritage items is included as **Appendix B**.
- If any archaeological relics are uncovered during the course of work, then all works shall cease immediately in that area and the OEH NSW Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the *Heritage Act 1977* may be required before further works can continue in that area. An unexpected finds protocol for heritage items is included as **Appendix B**.
- Department of Planning and Environment Development Consent SSD 9418

Note the above list is not necessarily comprehensive and Bettergrow shall ensure necessary approvals, licences and permits are obtained where applicable for all construction activities.

2.4 Consultation with Key Agencies

Consultation has been undertaken with key agencies throughout the design phase and environmental assessment of the development, including:

- Department of Planning and Environment
- Roads and Maritime Services (RMS)
- Department of Primary Industries
- Singleton Council
- Environment Protection Authority
- NSW Rural Fire Service
- Mine Subsidence Board
- Office of Environment and Heritage

Issues raised by each of the above agencies are included in the EIS (2019) Section 7 Consultation and Stakeholder Engagement and Appendix E Correspondence and Consultation.

2.5 Community Consultation

Consultation was undertaken with the surrounding landowners and occupiers that may be affected by the development, and the local Aboriginal community. Issues raised are included

in the EIA Section 7 Consultation and Stakeholder Engagement and Appendix E Correspondence and Consultation.

Community liaison will be maintained to ensure local residents are kept up to date on the progress of the development, and to provide an avenue for communication between the community and the development team.

2.5.1 Opportunities for Information Exchange

Bettergrow has in place the following avenues to register enquiries and complaints related to construction and operational activities:

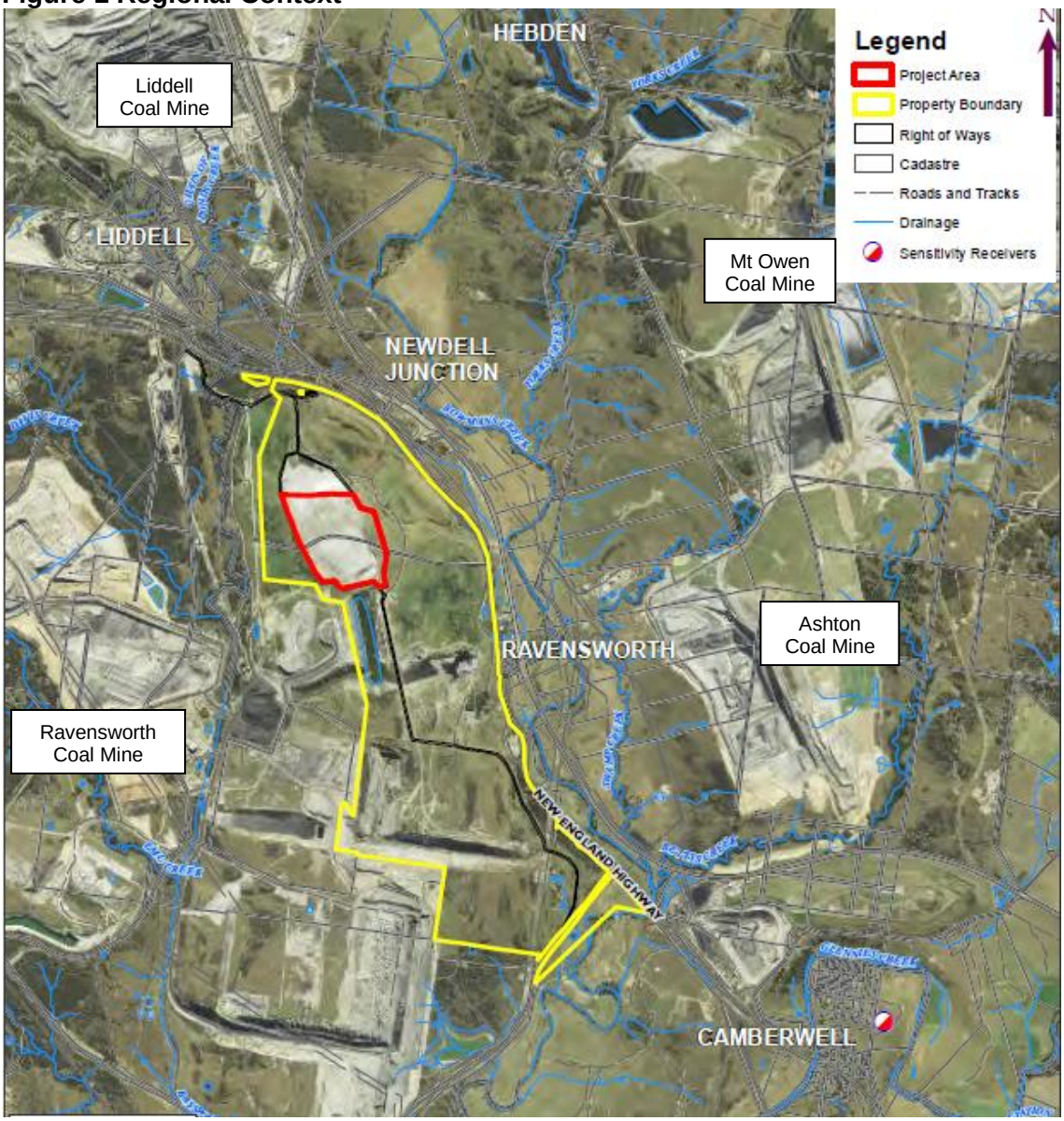
- A 24-hour free call community liaison line (1300 105 500)
- Postal address for written complaints (Head Office, 2 Wella Way, Somersby NSW 2250)
- Email address for electronic complaints (info@bettergrow.com.au)

This information will be disseminated in the community and can be included on public information, which may include the website, local area advertisements, letterbox notifications and development specific fact sheets.

3. Existing Environment

The Bettergrow site is located at Ravensworth No. 2 mine and is formally described as Lot 10 DP 1204457 at 74 Lemington Road Ravensworth NSW. See **Figure 1** for regional context.

Figure 1 Regional Context



3.1 Existing Operations and Approval

Current composting operations at the site are approved under DA140/2016 (and subsequent modifications DA2016.140.2 and DA2016.140.3) as approved by Singleton Council, to receive and process up to 76,000 tonnes per annum of biosolids and garden organics. Once construction is complete under SSD 9418, the site will have the ability to process up to 200,000 tonnes per annum of organic material to facilitate the increased composting of available organic material and allow for the sale of excess material to third parties. **Table 4** provides a summary of the existing and past approvals that apply to the site.

Table 4 Summary of Development Consents

Application No.	Date Determined	Description of Development
DA 86/51	16.12.1986	Ravensworth South mine approval granted by NSW Department of Urban Affairs and Planning
DA 144/93	8.12.1993	Mine rehabilitation works issued by Singleton Council

Application No.	Date Determined	Description of Development
DA 138/93	13.12.1993	Mine rehabilitation works issued by Muswellbrook Council
DA 140/2016.1	25.11.2016	Establishment and operation of a 50,000tpa composting facility to support the rehabilitation of the Ravensworth No.2 mine and Ravensworth South mine
DA 140/2016.2	16.04.2018	Modification to increase materials from 50,000 to 76,000tpa
DA 140/2016.3	18.12.2018	Modification to sell processed material off-site from the facility
SSD 9418	31.08.2022	Expansion of an existing resource recovery facility to process up to 200,000 tonnes per annum of organic material, including water drainage and leachate works, hardstand areas and associated infrastructure

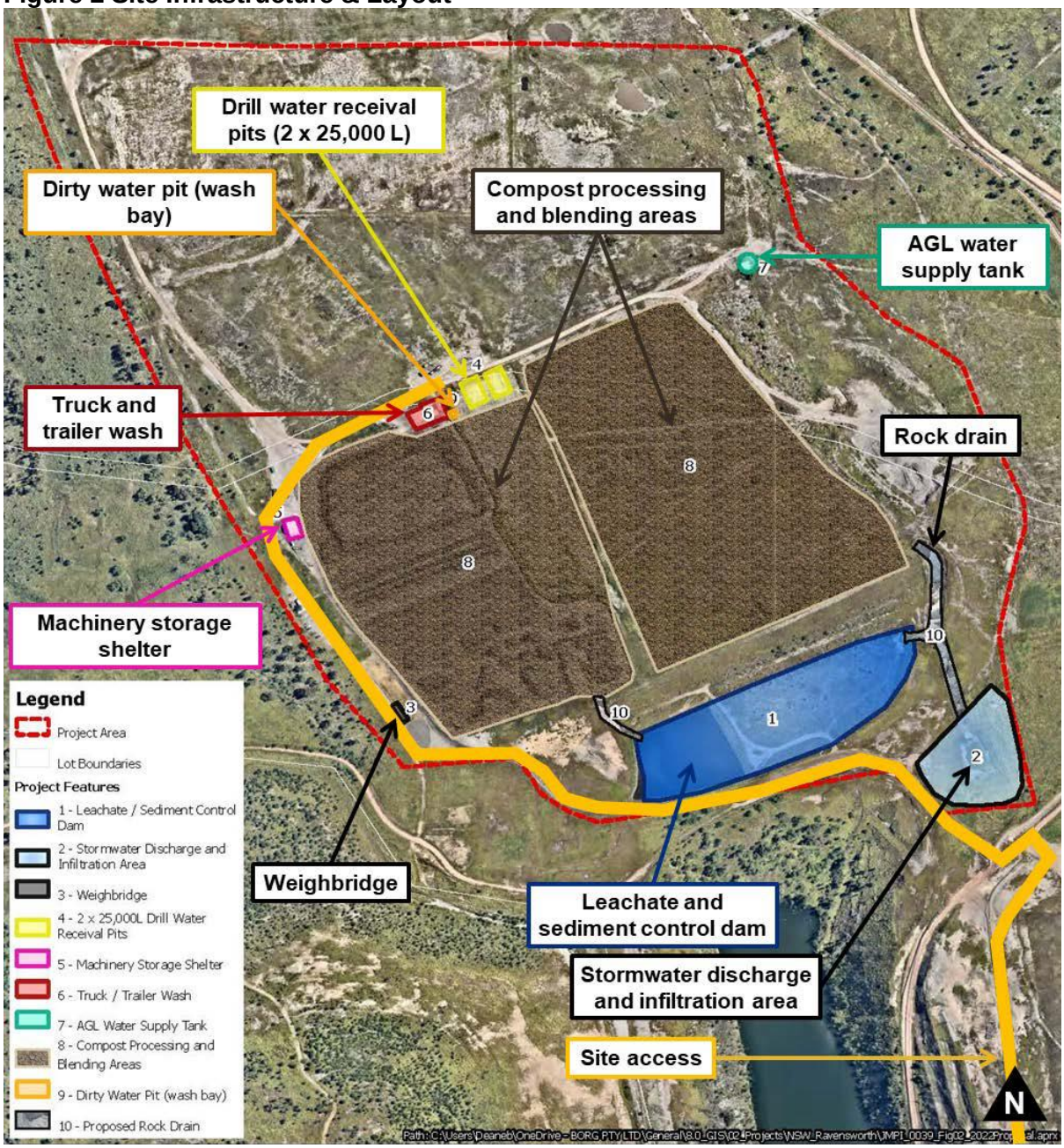
The site is cleared of native vegetation and is located on part of a capped open cut mining void which has been filled with ash for the AGL Bayswater Power Station. Significant disturbance of the natural environment within and surrounding the development site has occurred as a result of the long history of mining and power generation activities in the area. The Hunter River is located 6 km to the south of the site, while Bowmans Creek is located 1.6 km to the east.

Access to the facility is off Lemington Road which connects to the New England Highway, and along an internal access road. The existing compost processing area is located on a graded hardstand area surrounded by perimeter bunding. A detention basin and spillway are located towards the southern end of the site. A diversion wall and channel direct stormwater runoff from the eastern corner of the facility into the spillway. A spillway channel connects the spillway to the lower basin.

The site also operates under Environment Protection License 7654 (EPL 7654) which authorises the scheduled activity of composting.

Figure 2 below shows the site layout and existing infrastructure, and the additional items approved under SSD 9418 (see **Section 4.1** General Description of the Development for items under SSD 9418).

Figure 2 Site Infrastructure & Layout



4. Project Description

4.1 General Description of the Development

The development is the expansion of the existing Bettergrow composting facility up to a capacity of 200,000 tpa and sell compost that exceeds the rehabilitation needs of AGL to the wholesale market. The existing development had two stages with construction under Stage 1 complete and operational. Under SSD 9418, Bettergrow have incorporated both stages in the SSD and will surrender DA 140/2016 as per SSD 9418 condition A10.
Stage 1 comprised the following:

- Establishment of a compacted earth processing pad

- Surface water drainage, including a rock drain and stormwater discharge and infiltration area
- Leachate and sediment control dam
- Portable site office and staff amenities
- AGL Macquarie water tank for raw water storage

The components of the Stage 2 expansion are:

- Expand the compacted earth processing pad/compost processing and blending area
- Extend the surface water drainage works to cover the additional processing pad area
- Expand leachate and sediment control dam to final design capacity
- Install the following:
    - A single lane weighbridge
    - A dedicated trailer wash bay
    - Two recycled drill water storage tanks
    - A machinery shelter for the storage of tools and machinery for servicing
- Surrender of DA 140/2016 issued by Singleton Council

4.2 Development Infrastructure

The development will comprise of the following key features as shown in **Figure 2** above:

1. Leachate and sediment control dam - The dam will be constructed to its maximum design capacity of 50.2 ML. Currently, Stage 1 of the dam is complete with a capacity of 14.7 ML. The dam will capture stormwater runoff/leachate from the compost processing and blending area. The dam will have the capacity for a 1 in 25-year Annual Exceedance Probability (AEP) 24-hour rainfall event. Further detail on this key construction activity is provided in **Section 4.2.1**.
2. Stormwater discharge and infiltration area – The point of discharge is also referred to as the 'lower basin'. This basin will capture overflow from the leachate dam during extreme rainfall events. In the rare event the lower basin fills, water will overflow into Void 4 which provides emergency storage capacity. Further detail on this key construction activity is provided in **Section 4.2.2**.
3. Weighbridge – A single weighbridge, designed to accommodate vehicles up to 27.5 m in length, will weigh incoming and outgoing trucks. Further detail on this key construction activity is provided in **Section 4.2.3**.
4. Two 25,000 L drill water receival pits – The drill water receival pits will store recycled drill water from Bettergrow's existing drill mud processing facilities for re-use in the composting process and for dust suppression on the haul roads and internal roads. Further detail on this key construction activity is provided in **Section 4.2.4**.
5. Machinery storage shelter – This structure will be used for the storage and maintenance of plant and equipment. Further detail on this key construction activity is provided in **Section 4.2.5**.
6. Truck and trailer wash – Trucks and equipment will be washed down with raw water pumped from Void 4. Dirty water and sediment will be captured and reused in the composting process. Further detail on this key construction activity is provided in **Section 4.2.6**.
7. AGL Macquarie water supply tank – No changes are proposed to the AGL raw water storage tank (300,000 L).
8. Compost processing pad and blending area – The processing area will be constructed of compacted fly-ash and spoil, graded to direct leachate and stormwater to the dam. The processing area will be expanded by 4.93 ha, for a total area of 21.51 ha. Further detail on this key construction activity is detailed in **Section 4.2.7**.

9. Dirty water pit – Dirty water storage from the truck and trailer wash. Further detail on this key construction activity is detailed in **Section 4.2.6**.
10. Rock drain – The concrete lined channel has sufficient capacity to discharge the peak flow during a 1 in 100 AEP rainfall event.

4.2.1 Leachate Dam Expansion

The expanded operations require increasing the existing leachate dam to its maximum design capacity of 50.2 ML to treat water from the Stage 1 (east) and Stage 2 (west) pad areas shown in **Figure 2**. The dam will be extended in an easterly direction and encompass the existing leachate dam. The bed and banks of the leachate dam will be constructed from compacted clay, screened compacted overburden and other approved materials to achieve the required permeability of less than 10-9 ms- 1.

The leachate/sediment dam has been sized to provide a minimum capacity of a 1 in 25 year, 24 hour rainfall event (approximately 50 megalitres of water storage) which is in excess of the requirements of the *Environmental Guidelines: Composting and Related Organics Processing Facilities* (DECC 2003). This excess capacity will provide for the storage and use of additional process water. Whilst the leachate dam has an overall capacity to contain a 1 in 100 year, 24 hour rainfall event, Bettergrow is committed to ensuring the containment capacity within the onsite detention basin is sufficient to contain the volume of stormwater runoff generated over the operational catchment area of the site during a 1 in 25 year annual exceedance probabilities (AEP) 24 hour rainfall event (approximately 5.99mm/hr) or less.

4.2.2 Surface Water Drainage Extension

The construction of Pads 3 and 4 within Stage 2 will also require the extension of the existing surface water drainage system. This will involve an extension to the perimeter bunding for Pads 3 and 4 to divert clean water runoff away from the composting area to the surrounding voids. An existing diversion bank and channel direct stormwater runoff from the eastern corner of the facility into the spillway and sediment barrier bunds constructed using overburden and will be stabilised using compost produced onsite and a suitable grass seed mix. A detailed operational Surface and Groundwater Management Plan will be prepared for the site and submitted to the Planning Secretary for approval prior to commencement of operational activities.

4.2.3 Weighbridge

A single weighbridge will be installed at the south-western corner of the site adjacent to the processing pad (see **Figure 2**). The bridge will weigh trucks entering the site with loads of organics, and also weigh outgoing trucks once loaded.

Real-time camera recognition will also be installed at the weighbridge to assist with managing material entering the site and for transport security.

The weighbridge will be designed to accommodate vehicles up to 27.5m in length, with the weighbridge structure having a reinforced concrete foundation, steel sub-structure, and concrete deck which will be raised above the surrounding ground surface.

4.2.4 Drill Water Receival Storage

Two 25,000 litre drill water receival pits at the facility will be installed for the storage and reuse of recycled drill water. This recycled water will be trucked from one of Bettergrow's existing drill mud processing facilities at either Vineyard or Wetherill Park in NSW and used in the organics composting process and for dust suppression on site roads. Each pit will be 5m long, 5m wide and 2.5m deep which will provide for a 0.5m of freeboard in the storage

capacity. Each storage pit will be constructed of reinforced concrete poured in situ on site or from pre-cast tanks delivered to site. See **Figure 2** for pit locations.

4.2.5 Machinery Storage Shelter

An equipment and storage shelter will be constructed onsite as part of the expansion works. This structure will be used for the onsite storage and maintenance of plant and equipment. The structure will be an all-shelter design with shipping containers on the eastern and northern ends of the structure and a curved steel supported tarp positioned centrally as the roof. The floor of the shed will be approximately 36m long, 20m wide and 5.7m high at the central section of the roof. The location of the machinery shelter is shown in **Figure 2**. Appendix C of the EIS contains design plans for the structure.

4.2.6 Truck and Trailer Wash

Trucks and equipment requiring cleaning at the site will be washed down with raw water pumped from the Ravensworth No. 4 void. A purpose built trailer wash will be constructed onsite that will capture dirty water washed from trucks and equipment. A sump will be constructed as part of the wash bay that will collect sediment and water. The water will be decanted from the sump and reused in the composting process, while the sediments will be extracted from the sump by a front-end loader and integrated into the composting process. The truck wash is proposed to be located on the eastern side of the site and is shown on **Figure 2.**

4.2.7 Processing Pad

As part of the expansion of the development the remaining pad processing area (Pads 3 and 4 on Stage 2 –**Figure 2**) will be constructed, including related surface water drainage. The pad has been designed in accordance with the requirements of the *Environmental Guidelines: Composting and Related Organics Processing Facilities* (DECC 2003).

Works for the extension of the pad will comprise the preparation of an operations area by placing and compacting a sub-base of 300-400mm of site won overburden. The 300-400mm of site won overburden will be placed over an existing cap that has been constructed over the Void No. 3 fly ash dam. The capping layer over the fly ash material has been confirmed by geotechnical testing pitting to comprise a 400mm layer of overburden. The existing capping layer has been subject to rolling, compaction, and compaction testing during its construction, therefore providing a stable sub-base for the construction of Pads 3 and 4.

Details of the engineering design and subsequent construction quality assurances can be found in Appendix C of the EIS (November 2019).

4.3 Construction Activities

4.3.1 Site Preparation

Site preparation activities will generally follow the below sequence:

1. Undertake land survey, geotechnical and other preliminary investigations;
2. Establishment and demarcation of work areas;
3. Establishment of construction erosion and sediment control structures such as sediment fencing, diversion channels to existing stormwater management system;
4. Remove or move any impacted site infrastructure such as fencing or water lines;
5. Establishment of ancillary facilities including equipment compound and laydown areas; and
6. Undertake any clearing as required.

4.3.2 Construction Materials

It is expected that the majority of the construction materials for the expanded pad area will be sourced from either onsite or from local quarries. Prefabricated structures such as the machinery storage shelter will be sourced locally or from Newcastle. All other materials will be sourced from specialised equipment suppliers. The main construction materials required for the expansion will include:

- Overburden, aggregates and road base for construction of the extended pad area, the machinery storage shelter floor, and surface water bunds and drains;
- Ready mix concrete for lining drains, storage shelter and culverts;
- Prefabricated pits and pipes for stormwater and leachate management;
- Shipping containers and prefabricated frame for the all-shelter roof;
- All-shelter roof tarp;
- Prefabricated weighbridge and associated concrete approaches;
- Trailer wash and associated sump and spray equipment;
- Polypipe water line to extend existing water supply from existing onsite water storage tank; and
- Geotextile fabric, compost and grass seed mix for stabilising disturbed areas following construction activities.

4.3.3 Construction Schedule

Construction of activities for the expansion of the facility are expected to be completed over an approximately 6 month period with a commencement date early 2023. Each construction aspect and approximate duration are detailed below in **Table 5**.

Table 5 Construction Schedule

Activity	Month					
	1	2	3	4	5	6
Site preparation including installation of erosion and sediment controls						
Civil works (pad and drainage)						
Installation of machinery shed						
Installation of weighbridge						
Installation of trailer wash						
Stabilisation and rehabilitation of disturbed areas						
Commissioning						

4.4 Construction Site Facilities

Existing site facilities (offices, amenities and any chemical storage) will be used where possible during construction activities. Where existing site facilities are insufficient, the following considerations will be made when selecting the location for the construction facilities:

- Within the footprint of the development;
- Away from surface water drainage lines;
- Suitable vehicle access and parking area;
- Separate storage for fuels, chemicals and hazardous goods, inside bunded area(s);
- Minimise potential for work near dry vegetation which could cause fire; and
- If lighting is required for night-time security, lights will be installed to avoid nuisance to neighbours.

All site sheds and other facilities will present a neat appearance with safety signs erected as required. The construction areas will be regularly maintained and will be kept tidy and free of rubbish. Covered rubbish bins will be provided.

5. Structure and Responsibilities

The delivery team, as per the list presented below, shall manage the construction phase of the development. During this period, all personnel including the Construction Manager, Environmental Manager, Safety Coordinator, Site Supervisor, Work Assistants, and engaged Contractors have general responsibilities in the development of a positive environmental management culture and for ensuring all activities are conducted in a manner that is consistent with the CEMP. Specific project responsibilities in relation to environmental management are shown below.

Bettergrow CEO

The CEO is responsible for:

- approving appointment of the Construction Manager;
- periodic management review of the CEMP and its implementation; and
- investigating any serious incidents, complaints or non-conformances and ensuring necessary corrective action is implemented.

Construction Manager

The Construction Manager reports to the Bettergrow CEO and is responsible for the day-to-day management of environmental performance on the project. The Construction Manager is ultimately accountable for the implementation of the requirements contained within this CEMP. The Construction Manager is responsible for:

- implementing the CEMP;
- instructing project personnel on how to comply with environmental policy and procedures;
- ensuring the Site Supervisor is aware of and complies with the environmental obligations as detailed within this CEMP;
- ensuring that employees, contractors and sub-contractors are aware of, and comply with the conditions of consent and requirements of this CEMP relevant to their respective activities;
- tracking and compliance against the conditions of consent for the scope of works being performed;
- evaluation of how effectively environmental controls are performing;
- initiating remedial measures as recommended by the Environment Manager when environmental deficiencies are observed or in response to environmental complaints, incidents or non-conformances;
- engaging Environment Manager and/or environmental consultants where required to provide support in relation to implementing the CEMP; and
- investigating any incidents, non-conformances or complaints and ensuring necessary corrective action is implemented (in consultation with Bettergrow CEO for significant incidents / complaints).

Environment Manager
The Environment Manager will assist the Construction Manager in meeting environmental performance targets for the project. The Environmental Manager is responsible for:

- preparing and updating the CEMP;
- assisting the Construction Manager in implementing the CEMP;
- assist the Construction Manager with the tracking of compliance with the conditions of consent;
- assisting in training project personnel on how to comply with environmental policy and procedures;
- undertaking, and/or arranging suitably trained personnel for periodic monitoring and inspection;
- regular site inspections to determine how effectively environmental controls are performing and the active pursuit of opportunities to enhance environmental outcomes;
- spot checks and general environmental compliance observations;
- tracking and reporting environmental performance;
- recommending remedial measures when environmental deficiencies are observed;
- maintaining environmental performance records; and
- investigating any incidents, non-conformances or complaints and ensuring necessary corrective action is implemented (in consultation with the Bettergrow CEO and Construction Manager for significant incidents / complaints).

Safety Coordinator
The Safety Coordinator will assist the Construction Manager in meeting safety performance targets for the development. The Safety Coordinator is responsible for:

- advising on all issues related to work health and safety;
- inducting employees, contractors and sub-contractors to the development;
- maintaining the SDS register;
- maintaining the WHS Management System; and
- maintaining the hazardous substances register.

Site Supervisor
The Site Supervisor will report to the Construction Manager and is responsible for:

- Managing employees/contractors and construction activities on a daily basis to ensure the appropriate environmental controls are implemented and maintained in accordance with the requirements of this CEMP;
- Ensuring all staff are inducted onto the site and undertake weekly toolbox talks;
- Undertake daily site inspections of environmental controls and maintain records of environmental actions;
- Reporting any environmental management concerns or incidents immediately to the Construction Manager;
- Recommending improvements to this CEMP to the Construction Manager and/or the Environmental Manager; and
- Implementing any corrective actions issued as a result of any site inspections, audits or meetings.

Works Assistants and Contractors
The Work Assistants and Contractors will report to the Site Supervisor and are responsible for:

- Implementing the requirements of this CEMP as they conduct their works; and
- Reporting any environmental concerns or incidents immediately to the Site Supervisor.

6. Environmental Risk Assessment

Construction stage environmental aspects and potential impacts have been identified based on the Environmental Impact Statement (November 2019) and supporting studies, the Development Consent conditions and general experience on construction projects as shown on **Table 5**.

The Risk Assessment Matrix in **Table 3** has been used to assess the unmitigated risk of each individual environmental aspect relevant to the construction of the development. The level of risk assessed from the matrix informs the level of mitigations required for that environmental aspect. These risks are to be mitigated through the application of measures identified in this CEMP.

Table 3 – Risk Assessment Matrix

		Probability				
Consequence		A	B	C	D	E
	1	H	H	H	H	M
	2	H	H	H	M	M
	3	H	H	M	M	L
	4	M	M	M	L	L
	5	M	L	L	L	L

Table 4 provides explanatory notes on the selection of the consequence and probability for each environmental aspect.

Table 4 – Risk Matrix Explanation

Probability			Consequence		
A	Almost Certain	Expected to occur, quite common	1	Major	• Major environmental harm. e.g. major pollution incident causing significant damage or potential to health or the environment.
B	Likely	Will probably occur, has happened	2	Significant	• Long term or serious environmental damage • Numerous complaints received • Potential for prosecution
C	Possible	Might occur at some time	3	Moderate	• Moderate environmental impact • Will cause complaints • Possible fine
D	Unlikely	Could occur at some time although unlikely	4	Minor	• Minimal environmental harm • Potential for complaints • Fine unlikely
E	Rare	Might occur at some time in exceptional circumstances	5	Insignificant	• Little or no environmental harm • Little potential for fines or complaints

Table 5 – Risk Matrix Explanation

Aspect	Potential Construction Stage Impact	Probability	Consequence	Risk Ranking	Controls
Noise	Excessive noise generated by construction activities, and/or truck and vehicle movements causing nuisance to sensitive receivers	D	4	Medium	Refer **Section 7.1**
Sedimentation and erosion control and construction stormwater management	Erosion of sediments from stockpiles or exposed areas	B	3	High	Refer **Section 7.2**
	Clean surface water mixing with leachate	B	3	High	
	Discharge of sediment laden stormwater leading to potential impacts to downstream environment	E	5	Low	
Air quality and dust	Generation of dust from soil stockpiles and other exposed areas	C	3	Medium	Refer **Section 7.3**
	Generation of dust during civil works	C	3	Medium	
	Generation of dust from vehicle movements	C	4	Medium	
	Unacceptable emissions from vehicles / plant	D	4	Low	
	Build-up of dirt on the public road network	E	4	Low	

Aspect	Potential Construction Stage Impact	Probability	Consequence	Risk Ranking	Controls
Hazardous materials/ Dangerous Goods	Leaking or spillage of fuels or chemicals stored or used during construction leading to potential impacts to soil, groundwater or surface water	C	2	High	Refer **Section 7.4**
	Quantities of dangerous goods exceeds the threshold quantities listed in SEPP 33	D	3	Medium	
Imported fill material	Unapproved/unsuitable fill material imported to site	C	3	Medium	Refer **Section 7.5**
Contaminated material	Unexpected find of contaminated material during excavation	C	3	Medium	Refer **Section 7.5**
Heritage	Disturbance of Aboriginal artefacts or skeletal remains during excavation	D	3	Medium	Refer **Section 7.6**
Waste management	Inappropriate disposal of waste	D	2	Medium	Refer **Section 7.7**
	Not minimising generation of waste	D	4	Low	
Traffic management	Traffic causing congestion or damage on local roadways	E	4	Low	Refer **Section 7.8**
	Traffic incident / accident	D	2	Medium	

7. Environmental Management and Controls

This section identifies the performance indicators and management measures which will be implemented during the construction of the development to mitigate against the environmental aspects identified in **Table 5**. The Construction Manager will ensure that personnel responsible for undertaking the works are aware of their roles and responsibilities as detailed in this CEMP.

As part of this CEMP, the following have been included as required under SSD 9418 condition C3:

- Erosion and Sediment Control Plan (**Appendix C**);
- Contamination Unexpected Finds Procedure (**Appendix E**); and
- Community Consultation and Complaints Handling (**Section 2.5** and **Section 12**).

It is intended that this CEMP be a live document and that it be regularly reviewed for effectiveness, with procedures to be modified where considered beneficial. Procedures for review are discussed in **Section 1.3**.

7.1 Construction Noise Management

7.1.1 Objectives

- Prevent outside of hours noise and traffic impacts resulting from construction activities.
- Prevent excess noise generation resulting in noise complaints.

7.1.2 Applicable Conditions of Approval

Conditions B25, B26 and B27 of Part B in Development Consent SSD 9418 for the development requires:

B25 The Applicant must comply with the hours detailed in Table 1, unless otherwise agreed in writing by the Planning Secretary.

Activity	Day	Time
Construction	Monday – Friday Saturday Sunday Public Holidays	7 am to 5 pm 8 am to 1 pm Nil Nil
Operation	Monday – Saturday Sunday Public Holidays	6 am to 6 pm Nil Nil
Deliveries	Monday – Friday Saturday – Sunday Public Holidays	6:30 am to 5 pm Nil Nil

B26 Works outside of the hours identified in Condition B25 may be undertaken in the following circumstances:
(a) works that are inaudible at the nearest sensitive receivers;
(b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
(d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

B27 *The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009) (as may be updated or replaced from time to time). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures in the Appendix 2* [Applicant's Management and Mitigation Measures].

Construction noise management levels during and outside standard construction hours have been included in *Global Acoustics Noise Impact Assessment* (January 2019) and are as follows:

Table 6 Construction Noise Management Levels

Type of Receiver	RBL	Within Standard Hours L_{Aeq}, 15 min	Outside Standard Hours L_{Aeq}, 15 min
Residence	35	45	40

7.1.3 Management & Mitigation Measures

The Noise Impact Assessment conducted by Global Acoustics (2019) determined there will be no construction noise impacts from the development and as such, no specific noise mitigation measures or monitoring is required. Regardless, as part of the site induction all employees and contractors will be made aware of the following:

- Relevant license and approval conditions
- Permissible hours of work
- Location of nearest sensitive receiver
- Construction employee parking areas
- Designated loading/unloading areas and procedures
- Site opening/closing times (including deliveries)
- Environmental incident procedures

7.1.4 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
No construction related noise complaints	24 hour complaints hotline	Construction Manager / Environment Manager	Complaints Register

7.2 Surface and Groundwater Management

7.2.1 Objectives

- Set out strategies to manage chemical, oil and fuel spills and to control soil erosion and sediment generation close to the source and thereby minimise the potential for construction activities to adversely affect surface water quality and impacts to groundwater.
- Comply with the requirements of the latest version of the *Managing Urban Stormwater: Soils and Construction Guideline* (Landcom, 2004).

7.2.2 Applicable Conditions of Approval

Condition B15 of Part B in Development Consent SSD 9418 for the development requires:

B29 Prior to the commencement of construction or other surface disturbance for the development, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction – Volume 1: Blue Book (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the CEMP required by Condition C2.

7.2.3 Surface Water Drainage Infrastructure - to be Constructed

Not all infrastructure authorised by DA140/2016 has been constructed. The remaining Stage 2 surface water infrastructure will be constructed as part of this development and will include:

- Expansion of the existing surface water drainage system, comprising the following works:
    - Extension of perimeter bunding for Stage 2 to divert clean water runoff away from the composting area to the surrounding voids;
    - Bunding will be constructed using overburden and will be stabilised during compost produced onsite and a suitable grass seed mix; and
    - Expansion of the leachate dam as approved as part of the Stage 2 SSD 9418.

The expansion of the sites surface water management system will be undertaken to the same standard as employed for the existing infrastructure. In accordance with *Ravensworth Composting Pad Leachate Detention Basin – Construction Report* (Aurecon, 2017) the design specifications will similarly include:

- Designed to capture stormwater runoff from the facility in excess of the minimum EPL 7654 requirement (4% AEP, 24-hour event). The detention basin will be enclosed on the southern, western and eastern sides by embankments up to 1.5 meters in height. The basin has enough storage volume (50,200 m^3) to capture all runoff up to the 1% AEP, 24-hour storm event without any uncontrolled discharge off site. An overflow spillway is provided at RL 107.1 mAHD on the eastern wall to assist in discharging runoff in excess of design;
- The northern and western perimeters feature earth filled buttresses added to the existing batters to separate and seal the pond storage area from loose overburden;
- Runoff will enter the basin from the northeast via a shotcrete lined channel, connecting from the composting pad to the leachate detention basin. The channel will have enough capacity to discharge the peak flow during a 1% AEP, 24-hour storm event; and
- Soil overburden used for the detention basin embankment is compacted to a minimum 98% maximum dry density (MDD) to achieve low permeability ($1x10^{-9}$).

Appendix C *Erosion and Sediment Control Plan Stage 2 Hardstand Area* shows the surface water diversions and controls, and expansion of the leachate dam to be undertaken as part of these works.

Standard erosion and sediment control drawings have been included in **Appendix D** for reference when installing these controls.

7.2.4 Surface Water Drainage Infrastructure – Existing

The existing sediment basin will be utilised during construction to capture stormwater runoff. Water discharges from this basin as approved under EPL 7654 and identified as Point 4.

The following monitoring requirement will be followed during construction and will be undertaken by the Site Coordinator as per operational requirements.

Frequency	Pollutant	Within range of	100 percentile concentration limit
Daily during any discharge	pH	6.5 – 8.5 pH	
	Total suspended solids		50 mg/l
	Ammonia	No limit set in EPL 7654	
	EC		
	Nitrogen (total)		
	Total organic carbon		
	Total petroleum hydrocarbons		

7.2.5 Potential Impacts & Mitigation Measures

Potential Impact	Mitigation Measures
Pollution from oil/chemical spills and gross pollutants	• Limit fuels and chemicals stored on site • All chemicals and fuels are to be stored in a bunded enclosure, away from any surface water drainage lines • Plant and equipment to be regularly inspected and serviced • Refuelling of vehicles/equipment/machinery to occur on the concrete hardstand • Adequate supply of fully stocked spill kit(s) to be on site at all times • All staff will be trained in the spill response procedure • A high standard of site housekeeping will be maintained to limit gross pollutants entering surface water system (i.e. construction waste, litter) • All reasonable and practicable measures will be taken to prevent pollution of any waterway as a result of oil and grease spills from any machinery • Any spills to be immediately contained and cleaned up with any contaminated material/clean up items disposed of to an appropriately licensed waste facility • Monitoring of pollutants will be undertaken as per EPL 7654
Pollution from excess sedimentation	• Wash down area for plant and equipment to be constructed to capture all wastewater with any collected solid material to be disposed offsite to a licenced facility or incorporated into the compost if suitable • Exposed bare earth areas within the composting facility will be minimised • Unused areas to be revegetated/stabilised • Install stabilised bunding along the southern end of the Stage 2 pad area and rock lined swale to existing leachate basin • Create clean water diversion swale around northern and eastern boundary of the Stage 2 pad area • Monitoring of pollutants will be undertaken as per EPL 7654

7.2.6 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
Ensure localised erosion and sediment control devices are installed	Prior to commencement of earthworks	Site Supervisor / Environment Manager	Initial inspection
Topsoil stockpiles to be	Monthly	Site Supervisor /	Monthly inspection

Monitoring	Frequency	Person Responsible	Record
managed in accordance with the ERSED Plan		Environment Manager	
Erosion and sediment control devices inspected post-rainfall	During and/or immediately following rainfall event	Site Supervisor / Environment Manager	Post-rainfall inspection
Erosion and sediment control devices inspected routinely	Monthly	Site Supervisor / Environment Manager	Monthly Inspection Checklist
Follow-up inspection after sediment removal from devices	Within 1 week of sediment removal requirement identified	Site Supervisor / Environment Manager	Post maintenance inspection

7.3 Air Quality (Dust) Management

7.3.1 Objectives

- Minimise air pollution from construction activities.
- Minimise the exposure of areas for wind erosion.
- Control, to the maximum extent practicable, the generation of dust on site and migration of dust offsite.
- Undertake activities with the objective of preventing visible dust emissions from the site.

7.3.2 Applicable Conditions of Approval

Condition B8 and B9 of Part B in Development Consent SSD 9418 for the development requires:

B8 *The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.*

B9 *During construction and operation of the development, the Applicant must ensure that:*
(a) exposed surfaces and stockpiles are suppressed by regular watering;
(b) all trucks entering or leaving the site with loads have their loads covered
(c) trucks associated with the development do not track dirt onto the public road network;
(d) public roads used by these trucks are kept clean; and
(e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

7.3.3 Management & Mitigation Measures

1) Toolbox meetings will be held to ensure all personnel on site are made aware that if they observe excessive dust in the air leaving the site, they are to immediately inform the Site Supervisor. In such cases, the Site Supervisor will investigate the source of the dust and ensure that proper controls are in place. If those controls prove ineffective that activity will cease until methods to successfully control the dust are employed.
2) The following measures will be implemented to manage dust generation from stockpiles of soil:

- Minimise the period and volume of stockpiling where practicable;
- Minimise the height of any stockpile to no greater than 2 meters;
- Where any long term stockpiling is required, stabilise the stockpiles and installed sediment/erosion controls; and
- Use of water sprays on any un-stabilised stockpiles.

3) Evaluate prevailing weather conditions - excavation/fill works to ceased or be modified if dust generation observed.
4) Stabilise exposed areas as soon as practicable.
5) Spray water on unsealed areas.
6) Minimise the height from which dust-generating material is dropped.
7) Minimise the surface area of a work zone.
8) Construction plant and equipment are to be maintained and serviced regularly.
9) Efficient use of plant and equipment, e.g. turning off idling plant and equipment.
10) Covering of all truck loads before leaving the site.
11) Remove dirt and debris from the tyres and underside of trucks prior to leaving the site.
12) Daily visual inspections by the Site Supervisor of the immediate surrounding area to ensure no materials have been lost from vehicles entering or leaving the site, and to assess general dust generation.
13) Visual inspection of plant on a daily basis by the Site Supervisor for excessive exhaust emissions. Defective plant will be stood down until repaired.
14) Offensive odours are not expected to be generated from the site as a result of construction activities. If this does occur work involved is to stop temporarily, the source of odour investigated, and solutions actioned so that offensive odour production does not continue.

7.3.4 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
Visual inspection of site for excessive dust generation, weather conditions, truck load covers, condition of stabilised site work access controls	Daily	Site Supervisor	Daily Diaries
Visual inspection of stockpile stability	Monthly	Site Supervisor / Environment Manager	Monthly Inspection
Toolbox talks to include reminders about reporting excessive dust from either internal or external sources, covering loads, efficient use of plant and equipment	Weekly	Site Supervisor	Toolbox Record

7.4 Storage of Hazardous Materials

7.4.1 Objectives

- Prevent leaks or spills of hazardous materials
- Prevent pollution arising from leakage or spillage of hazardous materials

7.4.2 Applicable Conditions of Approval

Condition B33, B34, B35 and B36 of Part B in Development Consent SSD 9418 for the development requires:

B33 The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department's Hazardous and Offensive Development Application Guidelines – Applying SEPP 33, at all times.

B34 The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
(a) the requirements of all relevant Australian Standards; and
(b) for liquids, the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Manual.

B35 In the event of an inconsistency between the requirements of conditions B34(a) and B34(b), the most stringent requirement must prevail to the extent of the inconsistency.

B36 The Applicant must store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storage and Handling of Liquids: Environmental Protection – Participants Manual (Department of Environment and Climate Change, 2007).

7.4.3 Management & Mitigation Measures

1) Manufacturer's Safety Data Sheets (SDS) for substances and materials shall be obtained and kept in a file on site, which will be readily available to site construction personnel when needed.
2) Minimise fuel and chemical storage on site.
3) Bunds around any chemical, fuel or oil storage (to contain 110% of largest tank/container, or 25% of the total volume of all drums, whichever is greater). Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storage and Handling of Liquids: Environmental Protection – Participant's Manual*.
4) Spill kits to be kept onsite in marked containers (containing absorbent materials – granular vermiculite, mats, and pillows) and personnel should be trained in spill response.
5) Vehicles transporting materials on-site will be operated in a manner to prevent any loss of materials during loading, transport and unloading.

7.4.4 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
Visual inspection of chemical and fuel storage areas and bunding	Monthly	Site Supervisor	Monthly Inspection Checklist
Maintain SDS register	As required	Site Supervisor / Safety Coordinator	SDS register
Visual inspection of spill kits contents	Monthly	Site Supervisor / Environment Manager	Monthly Inspection Checklist
Maintain Hazardous Substances Register	As required	Site Supervisor / Safety Coordinator	Hazardous Substances Register

7.5 Contamination Management

7.5.1 Objectives

- Avoid and minimise the environmental and human health risks arising from the disturbance of contaminated land if encountered during construction of the project.
- No degradation to the receiving environment as a result of disturbance of contaminated land (if encountered).
- No contamination of soil, air or water as a result of spillages or other impacts arising from construction activities.
- No importation of potentially contaminated soils to site.

7.5.2 Applicable Conditions of Approval

Conditions B14 and B37 of Part B in Development Consent SSD 9418 for the development requires:

B14 *The Applicant must:*
(a) ensure that only VENM, ENM, or other material approved in writing by the EPA is brought onto the site;
(b) keep accurate records of the volume and type of fill to be used; and
(c) make these records available to the Planning Secretary upon request.

B37 *Prior to the commencement of construction, the Applicant must prepare an unexpected contamination finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the CEMP in accordance with condition C2 and must ensure any material identified as contaminated is disposed of in accordance with the POEO Act and its associated regulations. Details of the final disposal location and the results of any associated testing must be submitted to the Planning Secretary prior to removal of the contaminated material from the site.*

7.5.3 Management & Mitigation Measures

1) The site Pollution Incident Response Management Plan (PIRMP) would be enacted in the event of a major fuel or chemical spill. Minor spills will be contained and cleaned up in accordance with the SDS, using available spill kits.
2) If potentially contaminated material is encountered the *Unexpected Contaminated Finds Procedure* (**Appendix E**) will be followed. Works in the vicinity will be stopped or modified and will not recommence until the material has been analysed and management measures developed.
3) All potentially affected spoil will be stockpiled on a bunded, impermeable surface.
4) If soils are to be disposed off-site, then testing would be undertaken to assess the appropriate waste classification of the soils according to the EPA *Waste Classification Guidelines.*
5) All imported VENM or ENM shall be classified based on soil tests and in accordance with *Waste Classification Guidelines* (DECCW 2009). For material to be considered VENM it must meet the requirements of the *Protection of the Environment Operations Act 1997*. Where an excavated material cannot be classified as VENM, it may be eligible for reuse under the ENM order and exemption.

7.5.4 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
Visual inspection of excavations to detect presence of contamination	Daily	Site Supervisor	Daily Diary
Record of unexpected contaminated land finds	As required	Site Supervisor / Environment Manager	Incident Report
Record of all environmental incidents/spills	As required	Site Supervisor / Environment Manager	Incident Report
Record of imported and/or exported materials from site	As required	Site Supervisor / Environment Manager	Waste dockets / VENM/ENM certificates

7.6 Aboriginal Heritage

7.6.1 Objectives

- Implement contingency measures to appropriately manage Aboriginal artefacts, skeletal material or historic relics in the unexpected event that they be encountered during site earthworks. The *Aboriginal Cultural Heritage Assessment* undertaken as part of the EIS concluded that the proposed development is unlikely to encounter Aboriginal objects or historic relics.

7.6.2 Applicable Conditions of Approval

Conditions B54 and B55 of Part B in Development Consent SSD 9418 for the development requires:

B31 If any item or object of Aboriginal heritage significance is identified on site:
(a) All work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately;
(b) A 10 m wide buffer area around the suspected item or object must be cordoned off; and
(c) Heritage NSW must be contacted immediately.

B32 Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the National Parks and Wildlife Act 1974.

7.6.3 Management & Mitigation Measures

1) All personnel working on the Site are to be made aware of the:

- *National Parks and Wildlife Act 1974* and the fact that it is an offence to move, disturb or destroy Aboriginal objects without the written permission of the Director General of the Office of Environment and Heritage (OEH).
- *Heritage Act 1977* and the fact that it may be an offence to move, disturb or destroy archaeological relics without consultation with the OEH NSW Heritage Division.

2) Should Aboriginal objects be identified during the course of site works, all work must cease immediately, and the *Heritage Unexpected Finds Procedure* (**Appendix B**) followed.

3) Should suspected skeletal material be identified during construction, all works must cease immediately, and the *Heritage Unexpected Finds Procedure* (**Appendix B**) followed.

7.6.4 Monitoring and Reporting

Monitoring	Frequency	Person Responsible	Record
Site Induction	Once, before work on site commences	Site Supervisor / Safety Coordinator	Induction Register
Toolbox talks reminding personnel of processes regarding heritage items	Weekly	Site Supervisor	Toolbox Record

7.7 Waste Management

Whilst SSD 9418 does not contain any conditions of approval for construction waste, this will be managed in accordance with the waste hierarchy established under the *Waste Avoidance and Resource Recovery Act 2001* by:

- Reducing waste generation associated with site construction activities;
- Where waste generation is unavoidable, promote reuse and recycling;
- Where onsite reuse or recycling is not practical, appropriate offsite recycling or disposal facility will be utilised ensuring the responsible treatment of all waste streams; and
- Ensuring all waste disposal is undertaken lawfully.

The below table identifies waste types expected to be generated during the construction phase of the development and how they will be managed.

Table 7 Construction Waste

MATERIALS ON SITE		TREATMENT/REUSE/RECYCLING		DISPOSAL
Type of Material	**Description**	**Onsite**	**Offsite**	**Residual**
Excavated material	Crushed rock	Stockpile and reuse on site as fill	Nil	Nil
Concrete – construction wastes	Surplus pours	Ensure that quantities are correctly estimated prior to pour. Crush and use any surplus as fill where possible.	Concrete waste to be separated and collected by concrete recycling contractor	Dispose any surplus to concrete crushing facility for recycling
Metals	Steel off-cuts, wiring of-cuts	Nil	Scrap metal to be separated and collected for recycling by recycling contractor	Nil
Plastic/HDPE	Wrap from material delivered and packaging	Nil	Collection by recycling contractor for recycling	Dispose non-recyclable material to licensed waste facility

Cardboard	Packaging from materials delivered	Nil	Collection by recycling contractor for recycling	Nil
General waste	Contractors/work force	All waste streams to be separated and recycled	Collection by recycling contractor for recycling	Dispose general waste to licensed waste facility

7.8 Traffic Management

7.8.1 Objectives

- To ensure construction related traffic does not impact local roads or local road users.

An internal haul road with access from Lemington Road currently exists on the site. Prior to the commencement of existing composting operations, the haul road was widened to accommodate incoming and outgoing heavy vehicle movements. The road surface was also upgraded to allow all-weather access, and surface water drainage was installed to divert stormwater away from the roadway onto suitably stable areas. No additional works are proposed on internal access roads.

7.8.2 Applicable Conditions of Approval

Condition B21 of Part B in Development Consent SSD 9418 for the development requires:

B21 The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public and residential streets or public parking facilities.

7.8.3 Management and Mitigation Measures

As stated above, an internal haul road currently exists for site access/egress and sufficient parking is available on site for construction related vehicles. The *Traffic Impact Assessment* provided by Pavey Consulting Services (2019) concluded that there would be no adverse impacts to the local road network and therefore, no further management or mitigation measures are required for construction related traffic.

8. Contingencies

Table 8 summarises issues that can reasonably be expected to be encountered during construction and how these may be resolved.

Table 8 Contingencies

Potential Anticipated Issue	Corrective Action
Excessive dust generation	Temporarily stop work activity that is causing dust generation. Review dust controls currently in place and assess need for additional measures. Such measures may include additional use of water sprays, cease dust-generating activity until better dust control can be achieved, temporarily cover dust producing areas, etc.
Excessive noise generation	Identify source, review noise attenuation equipment and as necessary provide silencers on noisy equipment or remove equipment from site.

Erosion and sediment control ineffective	Stop work, review appropriateness of environmental controls. Consider alternative measures. Consult Drainage Engineer if repeated/major issues occurring.
Release of fuel/oil from machinery	Remove source, use spill kit to remove oil, make any repairs as required.
Chemical spill/exposure	Stop work, refer to **Section 11.1** for response procedure.
Inspections reveal damage to environmental controls	Repair as required and assess cause of damage. Eliminate cause where possible, otherwise strengthen control to limit impact of cause.

9. Training and Implementation

9.1 Site Induction

All employees, sub-consultants and sub-contractors must undertake a site induction prior to their commencement of work on site. The induction of employees and contractors is the Site Supervisor's and Safety Coordinators responsibility.

The site induction will inform employees of their environmental responsibilities on site. It details the most significant environmental aspects and introduces this CEMP as the management tool used to address the controls and mitigation measures required to minimise environmental impact of the development.

The induction will cover the following:

- Contents of the CEMP;
- Critical environmental protection procedures including spill responses, erosion and sediment controls (including leachate management), emergency procedures, hazardous substances and dangerous goods handling, and monitoring of imported fill quality;
- The location of this CEMP during works; and
- General obligations.

All visitors to the site must undergo a visitor's induction. All visitors must be accompanied by a fully inducted member of staff at all times.

Site personnel shall be encouraged to be proactive and report any instances of environmental control measures not operating properly.

9.2 Toolbox Talks

Toolbox talks will be conducted weekly by the Site Supervisor for employees and sub-contractors. Toolbox talks will be undertaken in response to evolving issues on the ground, and in response to significant environmental and safety incidents and non-conformance issues.

10. Compliance

10.1 Environmental Monitoring

Monitoring that is required during the construction phase of the development is defined in **Section 7** of this CEMP.

Any measuring equipment used for monitoring shall be regularly serviced and calibrated.

10.2 Environmental Inspections

The following inspections will be undertaken:

- On a daily basis, site supervisory staff will inspect the site and any issues arising will be noted in the daily diaries and communicated to the Construction Manager. The inspections will be conducted visually prior to commencement of each day's work and where appropriate during the working day. A final daily inspection will also be undertaken at the end of the workday to ensure that systems and structures are in place.

- A monthly site inspection will be conducted by the Environment Manager. Checklists will be used to record and report on activities for compliance with this CEMP and specific issues presenting significant environmental risks will be addressed, such as erosion and sediment controls, surface water diversion channel management, etc. An example checklist is shown in **Appendix F**. Checklists may be edited to reflect changing site conditions.

Where necessary, any damage or reduced capacity of environmental control measures will be corrected. If required, environmental control measures may be upgraded.

11. Incident and Non-Compliance Management

11.1 Environmental Incidents

An environmental incident is an unplanned event which occurs on-site and has the potential to result in adverse environmental impacts either on-site or in the surrounding area. Environmental incidents include spills, uncontrolled discharges (to air or water) or emissions, unintended damage to native vegetation, or injury to wildlife.

Depending on the nature of the incident and the risk posed to site personnel, all practical steps will be taken to minimise the risk of environmental damage as soon as possible after the event.

In the case of an environmental incident, actions to be taken are:

- Notify the Site Supervisor immediately;
- Immediately cease work in that area and remove people from the incident zone;
- Activate the site Pollution Incident Response Management Plan (PIRMP) if appropriate;
- Notify emergency services as/if required;
- Where safe to do so, attempt to contain the hazard and prevent it from spreading;
- If the incident is a spill:
    - Use silt fences, bunding or interception pits;
    - Use absorbent materials stored in site spill kits to clean up spill;
    - Contain contaminated soil/absorbent material waste in appropriate containers, and dispose of contaminated soil/absorbent material to an appropriately licensed off-site disposal facility;
- Notify any relevant agencies when an incident causes or threatens material harm to the environment and /or an exceedance or limit of the performance criteria in the approval and /or when legislation requires;
- The Site Supervisor is to notify the Environment Manager and Construction Manager of any environmental incident as soon as practicable;

- Temporarily repair or isolate the failed plant or equipment component;
- Determine actions to rectify the incident in consultation with the Environment Manager;
- Sample the impacted site media be it soil and/or surface water; and
- Implement any longer term remedial measures that may be required.

11.2 DPE Reporting

Condition C10 of Part C in Development Consent SSD 9418 for the development requires:

C10. The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3 [Appendix 3 of SSD 9418 Incident Notification and Reporting Requirements].

11.3 EPA Reporting

The Environment Manager will be responsible for notifying NSW EPA of the pollution incident in accordance with the site's Pollution Incident Response Management Plan (PIRMP). Information to be provided under section 150 of the POEO Act includes:

- Time, date, nature, duration and location of the incident;
- Location of the place where pollution is occurring or is likely to occur;
- Nature, the estimated quantity or volume and concentration of any pollutants involved;
- Circumstances in which the incident occurred (including the cause of the incident, if known); and
- Action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution.

The Environment Manager is to collect and document (to the extent practicable) the above information. For example, this would include taking photographs, collecting surface water samples of any unplanned water discharges both from the source of the pollution and upstream and downstream in the receiving waterway (for analysis and comparison) where appropriate.

Any environmental incidents, spills, uncontrolled discharges or emissions, unintended damage to native vegetation, etc , and the corrective actions undertaken, shall be recorded in DataStation, Bettergrow's incident management system.

In accordance with Condition C8(b) of Part C in Development Consent SSD 9418, within three months of the submission of an incident report under Condition C10 Bettergrow must review the Plans required under SSD 9418 and the Planning Secretary must be notified in writhing of the outcomes of any review.

11.4 Emergency Contacts

Emergency contact details are listed in the Bettergrow Pollution Incident Response Management Plan (PIRMP).

12. Complaints Management

12.1 Complaints Handling

The Environment Manager is to be notified of any received complaints. The Environment Manager is to follow the complaints handling procedure (**Section 12.4.1**) and notify the Construction Manager as soon as practicable. The Construction Manager will notify the Bettergrow CEO, as appropriate.

12.4.1 Inquiry and Complaints Handling Process

Bettergrow's community and stakeholder management system includes procedures for recording, investigating, tracking and handling of all inquiries and complaints.

Once Bettergrow has received verbal or written inquiries and/or complaints via telephone, email or post, the Environment Manager or their nominated delegate will:

- undertake an immediate investigation into the nature/cause of the inquiry and/or complaint;
- make initial contact with the community or stakeholder representative within 48 hours to clarify the reason for the inquiry and/or complaint and to notify of the investigation process including an appropriate re-notification time;
- record the enquiry and/or complaint on the Community Complaints register. This register includes the following details:
    - Complaint date and time;
    - Site;
    - Title;
    - Category;
    - Description;
    - Caller details;
    - Action;
    - Status;
    - Follow-up;
    - Complaint validity; and
    - Attachments.
- further investigate the inquiry and/or complaint and provide the community or stakeholder representative with an explanation of the cause and details of any actions taken to mitigate its effect.

Records of complaints will be maintained in the complaints register database for at least four years after the complaint was made.

13. Non-Conformance

13.1 Non-Conformance and Corrective Action Report

All non-conformances noted in the Site Inspections, Incident Reports, or reported to the Construction Manager by staff or other parties/authorities will be investigated and recorded in a Non-Conformance and Corrective Action Report which will be provided to the Construction Manager on a monthly basis. Details of the non-conformance, including any immediate corrective actions undertaken, are to be recorded by the Environment Manager in DataStation.

It is the responsibility of the Site Supervisor to immediately initiate corrective actions, if required. The Non-Conformance and Corrective Action Report must include details of the corrective action proposed and an appropriate close out date. Corrective Actions will include containment measures, clean-up and restoration of the affected area and of any deficient operational controls or monitoring controls. On completion, the Environment Manager will re-inspect the outcomes to ensure that they are acceptable before signing, dating and filing the Non-Conformance Report.

The occurrence of such an event will be brought to the attention of personnel responsible, and environmental controls will be updated to prevent a reoccurrence.

13.2 Environmental Incidents Register

Environmental incidents are recorded in DataStation. Each incident report will detail the issue, the corrective and preventative actions proposed, and the responsibilities and timing for completion of the actions. The report will include any comments and the completion date of corrective actions.

The Environment Manager shall review the Environmental Incidents Register monthly to ensure actions are completed and that controls are performing effectively. The Environment Manager shall also review the CEMP to determine if the above situations require project scope changes or if the incident identifies opportunities for improvement in mitigations or work practices.

14. Monitoring and Improvement

14.1 Monitoring

Environmental monitoring is used to check the performance of the development against legislative and regulatory requirements. Records of all environmental monitoring and results are kept on site and made readily available.

In accordance with Section 66(6) of the POEO Act the results from Bettergrow monitoring programs are published on the Bettergrow website:
https://www.bettergrow.com.au/environmental

Regular environmental monitoring is integral to the successful implementation of the CEMP. The measurement and evaluation of criteria allows for the assessment of performance against quantitative and qualitative standards and assists in the identification of any non-conformances, areas that may require additional attention or opportunities for improvement. Environmental monitoring requirements for the development are detailed in Section 7 of this CEMP.

14.2 Analysis and Reporting

The Environmental Manager will review all environmental monitoring results on a regular basis to ensure compliance with all statutory, legislative and approval requirements, and to identify where results or trends indicate a risk of future non-compliance to the development consent criteria or EPL conditions.

Where identified, any reporting to both DPE and EPA will be done in accordance with the procedures identified in Section 11 of this CEMP.

15. Review

Construction activities will be subject to regular inspections and review to ensure conformance with the commitments made in this CEMP.

In accordance with Part C Environmental Management, Reporting and Auditing condition C8 of Development Consent SSD 9418, the CEMP will be reviewed and if necessary revised within three months of:

(a) the submission of a Compliance Report under condition C14;
(b) the submission of an incident report under condition C10;
(c) the submission of an Independent Audit under condition C16;
(d) the approval of any modification of the conditions of this consent; or
(e) the issue of a direction of the Planning Secretary under condition A2(b) which requires a review.

APPENDICIES

Appendix A - Development Consent SSD 9418

Development Consent

Section 4.38 of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning under delegation executed on 9 March 2022, I approve the Development Application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development

Chris Ritchie
Director
Industry Assessments

Sydney 31 August 2022 File: EF19/12321

SCHEDULE 1

Application Number:	SSD-9418
Applicant:	Bettergrow Pty Ltd
Consent Authority:	Minister for Planning
Site:	74 Lemington Road, Ravensworth NSW 2330 Lot 10 DP 1204457
Development:	Expansion of an existing resource recovery facility to process up to 200,000 tonnes per annum of organic material, including water drainage and leachate works, hardstand areas and associated infrastructure.

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DEFINITIONS

Amendment Report	The Amendment Report titled *RE: SSD9418 - Greenspot Hunter Valley Nutrient Recycling Facility – Amendment Report*, prepared by Space Urban Pty Ltd, dated 28 June 2022
Applicant	Bettergrow Pty Ltd, or any person carrying out any development to which this consent applies
BCA	Building Code of Australia
Calendar year	A period of 12 months commencing on 1 January
Carrier	Operator of a telecommunication network and/ or associated infrastructure, as defined in section 7 of the *Telecommunications Act 1997* (Cth)
Certifier	A council or an accredited certifier (including principal certifiers) who is authorised under section 6.5 of the EP&A Act to issue Part 6 certificates
CEMP	Construction Environmental Management Plan
Conditions of this consent	Conditions contained in Schedule 2 of this document
Construction	The carrying out of works for the purpose of the development, including bulk earthworks, and erection of buildings and other infrastructure permitted by this consent.
Council	Singleton Council
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
Decommissioning	The controlled process of safely retiring a facility from service, including decontamination, dismantling and disposal after the cessation of operations
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning and Environment
Development	The development described in Schedule 1, the EIS, Response to Submissions and Amendment Report, including the works and activities comprising construction and operation of an expanded resource recovery facility, as modified by the conditions of this consent
Development layout	The plans at Appendix 1 of this consent
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services, to prepare the site for construction
EIS	The Environmental Impact Statement titled *EIS for 200,000tpa Nutrient Recycling Facility – Ravensworth NSW, SSD 9418* (Version 3), prepared by RPS Group, dated 14 November 2019, submitted with the application for consent for the development, as amended by the Amendment Report titled *RE: SSD9418 - Greenspot Hunter Valley Nutrient Recycling Facility – Amendment Report*, prepared by Space Urban Pty Ltd, dated 28 June 2022 and including any additional information provided by the Applicant in support of the application
ENM	Excavated Natural Material
Environment	As defined in section 1.4 of the EP&A Act
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6 pm to 10 pm
Fibre-ready facility	As defined in section 372W of the *Telecommunications Act 1997* (Cth)
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance Note: "material harm" is defined in this consent

Land	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act
Material harm	Is harm that: a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	NSW Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
OEMP	Operational Environmental Management Plan
Operation	The receival, processing and storage of organic waste and the sale of finished product, as described in the EIS, Amendment Report and RtS
Principal Certifier	The certifier appointed as the principal certifier for the building work under section 6.6(1) of the EP&A Act
Planning Secretary	Secretary of the Department, or delegate
POEO Act	*Protection of the Environment Operations Act 1997*
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
Response to Submissions (RtS)	The Applicant's response to issues raised in submissions received in relation to the application for consent for the development under the EP&A Act and includes the document titled *Greenspot Hunter Valley, Nutrient Recycling Facility, Response to Submissions – SSD 9418* (Version 1), prepared by Space Urban Pty Ltd, dated 20 June 2022
Sensitive receivers	A location where people are likely to work, occupy or reside, including a dwelling, school, hospital, office or public recreational area
Site	The land defined in Schedule 1
TfNSW	Transport for New South Wales
VENM	Virgin Excavated Natural Material
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
Year	A period of 12 consecutive months

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

TERMS OF CONSENT

A2. The development may only be carried out:

(a) in compliance with the conditions of this consent;

(b) in accordance with all written directions of the Planning Secretary;

(c) in accordance with the EIS, Amendment Report and Response to Submissions;

(d) in accordance with the Development Layout in Appendix 1; and

(e) in accordance with the management and mitigation measures in Appendix 2.

A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:

(a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and

(b) the implementation of any actions or measures contained in any such document referred to in condition A3(a).

A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(e). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) or A2(e), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

LIMITS OF CONSENT

Lapsing

A5. This consent lapses five years after the date from which it operates unless the development has physically commenced on the land to which the consent applies before that date.

Waste

A6. The Applicant must not receive and process more than 200,000 tonnes per annum of waste, limited to:

(a) urban wood residues for composting (as defined in 'The compost order 2016');

(b) paper crumble for composting (defined as General or Specific Exempted Waste);

(c) wastewater from Bayswater Power Station;

(d) drill mud process water (as defined in ‘The Treated Drill Mud Order 2014’);

(e) natural organic fibrous composting material (as defined in Schedule 1 of the POEO Act);

(f) biosolids (as defined in ‘The Biosolids Order 2014’);

(g) garden waste (as defined in Schedule 1 of the POEO Act); and

(h) animal waste (as degined in Schedule 1 of the POEO Act).

A7. The Applicant must not receive or process food organic waste.

NOTIFICATION OF COMMENCEMENT

A8. The date of commencement of each of the following phases of the development must be notified to the Planning Secretary in writing, at least one month before that date, or as otherwise agreed with the Planning Secretary:

(a) construction;

(b) operation;

(c) cessation of operations; and

(d) decommissioning.

A9. If the construction or operation or decommissioning of the development is to be staged, the Planning Secretary must be notified in writing, at least one month before the commencement of each stage (or other timeframe agreed with the Planning Secretary), of the date of commencement and the development to be carried out in that stage.

SURRENDER OF EXISTING CONSENTS OR APPROVALS

A10. Within six months of the date of commencement of development to which this consent applies, or within another timeframe agreed by the Planning Secretary, the Applicant must surrender the existing development consent DA140/2016 in accordance with the EP&A Regulation.

A11. Upon the commencement of development to which this consent applies, and before the surrender of existing development consents or project approvals required under condition A10, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents or approvals.

Note: *This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 6 of the EP&A Act. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.*

EVIDENCE OF CONSULTATION

A12. Where conditions of this consent require consultation with an identified party, the Applicant must:

(a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and

(b) provide details of the consultation undertaken including:

(i) the outcome of that consultation, matters resolved and unresolved; and

(ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

A13. With the approval of the Planning Secretary, the Applicant may:

(a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);

(b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and

(c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

A14. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

A15. If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.

PROTECTION OF PUBLIC INFRASTRUCTURE

A16. Before the commencement of construction of the development, the Applicant must consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure.

A17. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:

(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and

(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

DEMOLITION

A18. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001).

STRUCTURAL ADEQUACY

A19. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with:

(a) the relevant requirements of the BCA; and

(b) any additional requirements of the SANSW where the building or structure is located on land within a declared Mine Subsidence District.

Note:

- *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.*
- *The EP&A (Development Certification and Fire Safety) Regulation 2021 sets out the requirements for the certification of the development.*
- *Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of Subsidence Advisory NSW's approval before carrying out certain development in a Mine Subsidence District.*

COMPLIANCE

A20. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

OPERATION OF PLANT AND EQUIPMENT

A21. All plant and equipment used on site, or to monitor the performance of the development, must be:

(a) maintained in a proper and efficient condition; and

(b) operated in a proper and efficient manner.

EXTERNAL WALLS AND CLADDING

A22. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.

A23. Prior to the issuing of:

(a) any Construction Certificate relating to the construction of external walls (including the installation of finishes and claddings such as synthetic or aluminium composite panels); and

(b) an Occupation Certificate,

the Applicant must provide the Certifier with documented evidence that the products and systems proposed for use or used in the construction of external walls (including finishes and claddings such as synthetic or aluminium composite panels) comply with the requirements of the BCA.

A24. The Applicant must provide a copy of the documentation given to the Certifier to the Planning Secretary within seven days after the Certifier accepts it.

UTILITIES AND SERVICES

A25. Before the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.

WORK AS EXECUTED PLANS

A26. Before the issuing of the Occupation Certificate for the development, work-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the Principal Certifier.

APPLICABILITY OF GUIDELINES

A27. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.

A28. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

ADVISORY NOTES

AN1. All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.

PART B SPECIFIC ENVIRONMENTAL CONDITIONS

WASTE MANAGEMENT

Waste Monitoring Program

B1. From the commencement of operation of the development, the Applicant must implement a Waste Monitoring Program for the development. The program must:

(a) be prepared by a suitably qualified and experienced person(s) prior to the commencement of operation;

(b) include suitable provision to monitor the:

(i) quantity, type and source of waste received on site; and

(ii) quantity, type and quality of the outputs produced on site; and

(c) ensure that:

(i) all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; and

(ii) staff receive adequate training in order to be able to recognise and handle any hazardous or other prohibited waste including asbestos.

Waste Management Plan

B2. Prior to the commencement of operation of the development, the Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Planning Secretary. The Waste Management Plan must form part of the OEMP and be prepared in accordance with condition C5. The Plan must:

(a) detail the type and quantity of waste to be generated during operation of the development;

(b) describe the handling, storage and disposal of all waste streams generated on site, consistent with the *Protection of the Environment Operations Act 1997, Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline* (Environment Protection Authority, 2014);

(c) detail the materials to be reused or recycled, either on or off site; and

(d) include the Management and Mitigation Measures included in Appendix 2.

B3. The Applicant must:

(a) not commence operation until the Waste Management Plan is approved by the Planning Secretary;

(b) implement the most recent version of the Waste Management Plan approved by the Planning Secretary.

Decommissioning and Closure Plan

B4. Five years prior to the commencement of decommissioning of the development, the Applicant must prepare a Decommissioning and Closure Plan for the development to the satisfaction of the Planning Secretary. The Plan must be prepared generally in accordance with section 3.13 of the EIS and in consultation with Council and the landowner.

Pests, Vermin and Priority Weed Management

B5. The Applicant must:

(a) implement suitable measures to manage pests, vermin and declared priority weeds on the site; and

(b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or priority weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area.

Note: *For the purposes of this condition, priority weed has the same definition of the term in the* Biosecurity Act 2015.

Statutory Requirements

B6. The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the latest version of EPA's *Waste Classification Guidelines Part 1: Classifying Waste* (EPA, 2014) and dispose of all wastes to a waste management facility or premises lawfully permitted to accept the waste.

B7. The Applicant must retain all sampling and waste classification data for the life of the development in accordance with the requirements of EPA.

AIR QUALITY

Dust Minimisation

B8. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.

B9. During construction and operation of the development, the Applicant must ensure that:

(a) exposed surfaces and stockpiles are suppressed by regular watering;

(b) all trucks entering or leaving the site with loads have their loads covered;

(c) trucks associated with the development do not track dirt onto the public road network;

(d) public roads used by these trucks are kept clean; and

(e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Air Quality Discharges

B10. The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements as specified in the EPL applicable to the site.

Air Quality Management Plan

B11. Prior to the commencement of operation of the development, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Planning Secretary. The AQMP must form part of the OEMP required by condition C5. The AQMP must:

(a) be prepared by a suitably qualified and experienced person(s);

(b) include the Management and Mitigation Measures included in Appendix 2;

(c) identify potential emissions from all sources of the development;

(d) identify the control measures that will be implemented for each emission source; and

(e) describe the following:

(i) record keeping;

(ii) complaints register; and

(iii) response procedures.

B12. The Applicant must:

(a) not commence operation until the Air Quality Management Plan required by condition B11 is approved by the Planning Secretary; and

(b) implement the most recent version of the Air Quality Management Plan approved by the Planning Secretary for the duration of the development.

Odour Management

B13. The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

SOILS, WATER QUALITY AND HYDROLOGY

Imported Soil

B14. The Applicant must:

(a) ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site;

(b) keep accurate records of the volume and type of fill to be used; and

(c) make these records available to the Planning Secretary upon request.

Erosion and Sediment Control

B15. Prior to the commencement of any construction or other surface disturbance for the development, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the *Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book* (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the CEMP required by condition C2.

Discharge Limits

B16. The development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.

Stormwater Management System

B17. Prior to the commencement of operation, the Applicant must install the 'Stage 2 Works' for the stormwater management system in accordance with the plans prepared by Tony Mexon & Associates, dated 23 February 2016 and ensure the system is operational.

Surface and Groundwater Water Management Plan

B18. Prior to the commencement of operation of the development, the Applicant prepare a Surface and Groundwater Management Plan to the satisfaction of the Planning Secretary. The Surface and Groundwater Management Plan must form part of the OEMP required by condition C5 and must:

(a) be prepared by a suitably qualified and experienced person(s);

(b) include the Management and Mitigation Measures included in Appendix 2;

(c) provide details of:

(i) water use and management on-site;

(ii) the water licence requirements for the development, if any;

(iii) the management of wastewater streams on-site;

(d) contain a **Surface Water Management Plan**, including;

(i) a program to monitor surface water flows, quality, storage and use;

(ii) sediment and erosion control plans;

(iii) surface water impact assessment criteria, including trigger levels for investigating any potential adverse surface water impacts; and

(iv) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria; and

(e) contain a **Groundwater Management Plan**;

(f) contain a **Leachate Management Plan**.

B19. The Applicant must:

(a) not commence operation until the Surface and Groundwater Management Plan required by condition B18 is approved by the Planning Secretary; and

(b) implement the most recent version of the Surface and Groundwater Management Plan approved by the Planning Secretary for the duration of the development.

Groundwater

B20. The Applicant must obtain relevant water access licence/s in accordance with the *Water Management Act 2000*, if the development will intercept groundwater.

TRAFFIC AND ACCESS

Parking

B21. The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public and residential streets or public parking facilities.

Operational Traffic Management Plan

B22. Prior to the commencement of operation, the Applicant must prepare an Operational Traffic Management Plan (OTMP) for the development to the satisfaction of the Planning Secretary. The OTMP must form part of the OEMP required by Condition C5 and must:

(a) be prepared by a suitably qualified and experienced person(s);

(b) detail the measures that are to be implemented to ensure road safety and network efficiency;

(c) detail heavy vehicle routes, access, and parking arrangements;

(d) include a stockpile management plan to describe how waste and product stockpiles will be managed to avoid encroaching onto the haulage route and allow the safe loading and unloading of heavy vehicles;

(e) include an Operational Driver Code of Conduct to:

(i) minimise the impacts on the local and regional road network;

(ii) minimise conflicts with other road users;

(iii) minimise road traffic noise;

(iv) inform truck drivers of the site access arrangements and use of specified haul routes; and

(v) include a program to monitor the effectiveness of these measures.

B23. The Applicant must:

(a) not commence operation until the OTMP required by condition B22 is approved by the Planning Secretary; and

(b) implement the most recent version of the OTMP approved by the Planning Secretary for the duration of the development.

Operating Conditions

B24. The Applicant must ensure:

(a) there is an appropriate area designated for parking;

(b) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTROADS guidelines;

(c) the development does not result in any vehicles queuing on the public road network;

(d) heavy vehicles and bins associated with the development are not parked on local roads or footpaths in the vicinity of the site;

(e) all vehicles are wholly contained on site before being required to stop;

(f) all loading and unloading of materials is carried out on-site;

(g) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network; and

(h) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times.

NOISE

Hours of Work

B25. The Applicant must comply with the hours detailed in Table 1, unless otherwise agreed in writing by the Planning Secretary.

Table 1 *Hours of Work*

Activity	Day	Time
Construction	Monday – Friday	7 am to 5 pm
	Saturday	8 am to 1 pm
	Sunday	Nil
	Public Holidays	Nil
Operation	Monday – Saturday	6 am to 6 pm
	Sunday	Nil
	Public Holidays	Nil
Deliveries	Monday – Friday	6:30 am to 5 pm
	Saturday – Sunday	Nil
	Public Holidays	Nil

B26. Works outside of the hours identified in condition B25 may be undertaken in the following circumstances:

(a) works that are inaudible at the nearest sensitive receivers;

(b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or

(c) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

Construction Noise Limits

B27. The development must be constructed to achieve the construction noise management levels detailed in *the Interim Construction Noise Guideline* (DECC, 2009) (as may be updated or replaced from time to time). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures in the Appendix 2.

Operational Noise Limits

B28. The Applicant must ensure that noise generated by operation of the development does not exceed the noise limits in Table 2.

Table 2 *Noise Limits (dB(A))*

Location	Day $L_{Aeq(15\ minute)}$	Evening $L_{Aeq(15\ minute)}$	Night $L_{Aeq(15\ minute)}$
Camberwell	40	35	35

Note *Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017) (as may be updated or replaced from time to time).*

BIOSECURITY

B29. Prior to the commencement of operation of the development, the Applicant must prepare a Biosecurity Protocol, detailing the procedures for a biosecurity emergency, to the satisfaction of the Planning Secretary. The protocol must form part of the OEMP required by condition C5. and must:

(a) describe the notification procedures;

(b) detail the measures to maintain quarantine control;

(c) detail measures to prevent ground water contamination; and

(d) detail the disposal procedures and options.

B30. The Applicant must:

(a) not commence operation until the Biosecurity Protocol required by condition B29 is approved by the Planning Secretary; and

(b) implement the most recent version of the Biosecurity Protocol approved by the Planning Secretary for the duration of the development.

ABORIGINAL HERITAGE

Unexpected Finds Protocol

B31. If any item or object of Aboriginal heritage significance is identified on site:

(a) all work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately;

(b) a 10 m wide buffer area around the suspected item or object must be cordoned off; and

(c) Heritage NSW must be contacted immediately.

B32. Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the *National Parks and Wildlife Act 1974*.

HAZARDS AND RISK

Dangerous Goods

B33. The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department's *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* at all times.

B34. The Applicant must store all chemicals, fuels and oils used on site in accordance with:

(a) the requirements of all relevant Australian Standards; and

(b) for liquids, the NSW EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Manual*.

B35. In the event of an inconsistency between the requirements of conditions B34(a) and B34(b), the most stringent requirement must prevail to the extent of the inconsistency.

Bunding

B36. The Applicant must store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Manual* (Department of Environment and Climate Change, 2007).

CONTAMINATION

Unexpected Finds

B37. Prior to the commencement of construction, the Applicant must prepare an unexpected contamination finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the of the CEMP in accordance with condition C2 and must ensure any material identified as contaminated is disposed of in accordance with the POEO Act and its associated regulations. Details of the final disposal location and the results of any associated testing must be submitted to the Planning Secretary prior to removal of the contaminated material from the site.

VISUAL AMENITY

Lighting

B38. The Applicant must ensure the lighting associated with the development:

(a) complies with the latest version of AS 4282-2019 - *Control of the obtrusive effects of outdoor lighting* (Standards Australia, 2019); and

(b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Management Plan Requirements

C1. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:

(a) detailed baseline data;

(b) details of:

(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);

(ii) any relevant limits or performance measures and criteria; and

(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;

(c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;

(d) a program to monitor and report on the:

(i) impacts and environmental performance of the development; and

(ii) effectiveness of the management measures set out pursuant to paragraph (c) above;

(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;

(f) a program to investigate and implement ways to improve the environmental performance of the development over time;

(g) a protocol for managing and reporting any:

(i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);

(ii) complaint;

(iii) failure to comply with statutory requirements; and

(h) a protocol for periodic review of the plan.

Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans*

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

C2. The Applicant must prepare a Construction Environmental Management Plan (CEMP) for the development in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.

C3. As part of the CEMP required under condition C2 of this consent, the Applicant must include the following:

(a) Erosion and Sediment Control Plan;

(b) Contamination Unexpected Finds Procedure (see condition B37); and

(c) Community Consultation and Complaints Handling.

C4. The Applicant must:

(a) not commence construction of the development until the CEMP is approved by the Planning Secretary; and

(b) carry out the construction of the development in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

C5. The Applicant must prepare an Operational Environmental Management Plan (OEMP) for the development in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.

C6. As part of the OEMP required under condition C5 of this consent, the Applicant must include the following:

(a) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;

(b) describe the procedures that would be implemented to:

(i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;

(ii) receive, handle, respond to, and record complaints;

(iii) resolve any disputes that may arise;

(iv) respond to any non-compliance;

(v) respond to emergencies; and

(c) include the following environmental management plans:

(i) Waste (see condition B2);

(ii) Air Quality (see condition B11);

(iii) Surface and Groundwater (see condition B18);

(iv) Traffic (see condition B22) and

(v) Biosecurity (see condition B29).

C7. The Applicant must:

(a) not commence operation until the OEMP is approved by the Planning Secretary; and

(b) operate the development in accordance with the OEMP approved by the Planning Secretary (and as revised and approved by the Planning Secretary from time to time).

REVISION OF STRATEGIES, PLANS AND PROGRAMS

C8. Within three months of:

(a) the submission of a Compliance Report under condition C14;

(b) the submission of an incident report under condition C10;

(c) the submission of an Independent Audit under condition C16;

(d) the approval of any modification of the conditions of this consent; or

(e) the issue of a direction of the Planning Secretary under condition A2(b) which requires a review,

the strategies, plans and programs required under this consent must be reviewed, and the Planning Secretary must be notified in writing of the outcomes of any review.

C9. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review required under condition C8, or such other timing as agreed by the Planning Secretary.

Note: *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

REPORTING AND AUDITING

Incident Notification, Reporting and Response

C10. The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3.

Non-Compliance Notification

C11. The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.

C12. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

C13. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Compliance Reporting

C14. Within the first year of commencement of operation of the development, and in the same month each subsequent year (or such other timing as agreed by the Planning Secretary), the Applicant must submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary. Compliance Reports must be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2020) and must also:

(a) identify any trends in the monitoring data over the life of the development;

(b) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and

(c) describe what measures will be implemented over the next year to improve the environmental performance of the development.

C15. The Applicant must make each Compliance Report publicly available no later than 60 days after submitting it to the Planning Secretary and notify the Planning Secretary in writing at least seven days before this is done.

Independent Audit

C16. Within one year of the commencement of operation of the development, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must:

(a) be prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020)

(b) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; and

(c) be submitted to the satisfaction of the Planning Secretary within three months of commissioning the Audit (or within another timeframe agreed by the Planning Secretary).

C17. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2020), the Applicant must:

(a) review and respond to each Independent Audit Report prepared under condition C16 of this consent;

(b) submit the response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations;

(c) implement the recommendations to the satisfaction of the Planning Secretary; and

(d) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary and notify the Planning Secretary in writing at least 7 days before this is done.

Monitoring and Environmental Audits

C18. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance reporting and independent auditing.

Note: *For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.*

ACCESS TO INFORMATION

C19. At least 48 hours before the commencement of construction of the development and for the life of the development, the Applicant must:

(a) make the following information and documents (as they are obtained or approved) publicly available on its website:

(i) the documents referred to in condition A2 of this consent;

(ii) all current statutory approvals for the development;

(iii) all approved strategies, plans and programs required under the conditions of this consent;

(iv) the proposed staging plans for the development if the construction, operation or decommissioning if the development is to be staged;

(v) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;

(vi) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;

(vii) a summary of the current stage and progress of the development;

(viii) contact details to enquire about the development or to make a complaint;

(ix) a complaints register, updated monthly;

(x) the Compliance Report of the development;

(xi) audit reports prepared as part of any Independent Audit of the development and the Applicant's response to the recommendations in any audit report;

(xii) any other matter required by the Planning Secretary; and

(b) keep such information up to date, to the satisfaction of the Planning Secretary.

APPENDIX 1 DEVELOPMENT LAYOUT PLANS

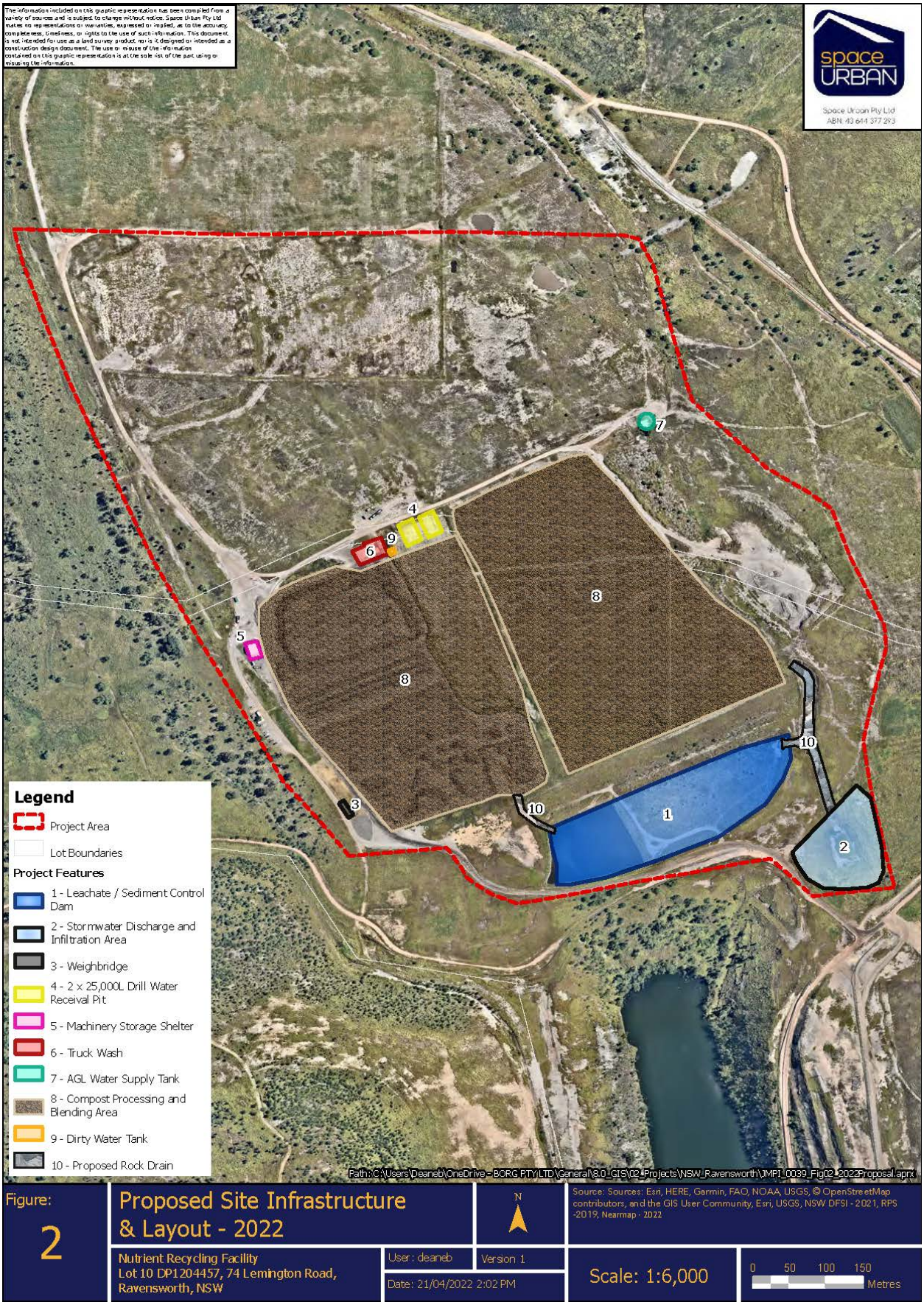


Figure 1: Site Plan

APPENDIX 2 APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

ENVIRONMENTAL ELEMENT	COMMITMENT
Air Quality	The following odour mitigation will be implemented for the expanded development: • A revised Compost Management Plan is to be prepared prior to the development increasing operations at the site. • Staff will receive training on methods to reduce odour generation. • Onsite dams, stormwater, and leachate to be suitably managed through separation of clean and leachate runoff, reuse, and sampling. • Only approved wastes will be accepted onsite. • Windrows will be managed in accordance with site operational procedure for windrow construction and maintenance. • All odorous wastes are to be mixed immediately with less odorous wastes to reduce odour generation. Where this is not possible odorous wastes will be covered temporarily with green waste or saw dust. • Homogeneous mixing will be undertaken. • Compost materials will be watered to a moisture content such as not to create an anaerobic environment. • Odour monitoring will be undertaken as required should an issue be identified at a sensitive receiver. The following greenhouse gas mitigation will be implemented for the expanded development: • Whenever practicable, vehicles to leave site with full loads to reduce the number of traffic movements and diesel consumption. • All vehicles/plant and machinery will be turned off when not in use and regularly serviced in accordance with manufacturers specifications to ensure efficient operation. • The use of alternative fuels and power sources for construction plant and equipment will be investigated and implemented, where appropriate. • Recycled materials will be incorporated into the project where possible. • The energy efficiency and related carbon emissions will be considered in the selection of vehicle and plant equipment. • All vehicles and machinery will be fitted with OEM exhaust systems to ensure exhaust emissions are within accepted standards. The following dust mitigation will be implemented for the expanded development: • Hardstand pads and the internal roadways will be regularly watered to suppress dust using site water carts. • Staff will undertake visual inspections of dust generation to ensure dust is not spreading beyond the site boundary. • Loads leaving the site will be required to be watered and tarped to prevent dust generation. • Windrows and stockpiles will be maintained by water cart and will have a minimum moisture content of 45%, with increased watering to occur prior to adverse weather conditions. • A site weather station will be utilised to inform of onsite weather conditions which will dictate operational activities. • During excessive wind conditions, loading activities will be reduced until more favourable conditions prevail. • Staff will receive training on methods to reduce dust generation.
Surface Water and Groundwater	• Surface and Groundwater Management Plan to be updated to include the expanded facility. • Limit fuels and chemicals stored onsite to a minimum. • All required chemicals and fuels must be located within a bunded enclosure located away from drainage lines and stormwater drains. • Plant and equipment must be regularly inspected and serviced to limit risk of oil loss.

	• Refuelling of vehicles or machinery is to occur within a containment or hardstand area.
	• designed to prevent the escape of spilled substances to the surrounding environment.
	• Wash down areas must be appropriately constructed to capture and treat all wastewater, with collected solid material disposed off-site to a licensed facility.
	• All staff to be appropriately trained in the spill response plan for the minimisation and management of unintended spills.
	• A high standard of site housekeeping is to be maintained to limit risk of gross pollutants entering surface waters (i.e. construction waste, litter).
	• All reasonable and practicable measures must be taken to prevent pollution of any existing waterways as a result of silt or untreated leachate run-off, and oil or grease spills from any machinery.
	• Wastewater for cleaning equipment must not be discharged or indirectly to any watercourses or stormwater systems.
	• Exposed bare earth areas within the composting facility site must be minimised. Unused areas are to be revegetated.
	• The facility must be designed to prevent surface water from mixing with the organics received and processed at the premises and the final products, process residuals and contaminated materials stored at the premises. This includes:
	  ○ Drains and spillways.
	  ○ Bunding.
	  ○ Sediment controls during construction.
	• Clean stormwater must be diverted around waste and leachate catchments through the installation of clean water catch drains and diversion bunds.
	• Maintain surface gradient of the hardstand pad and orientation/geometry of windrows to minimise leachate generation and to ensure that leachate flows directly to the primary detention basin without mixing with compost organics
	• Maintain all water related infrastructure, during construction and operation of expanded infrastructure, and operation, designed to maximise runoff and reduce infiltration including:
	  ○ Low permeability base in the composting processing areas.
	  ○ Lining of the leachate dams.
	  ○ Bunding and arrangement of windrows.
	  ○ Perimeter bunding and diversion drains.
	• Procedures for testing, treatment and discharge of leachate to be established and implemented, including monitoring anaerobic conditions.
	• Undertake aeration of the leachate dam (increase oxygen) if required (i.e. if hydrogen sulphide, dissolved oxygen or pH levels are outside limits).
	• Monitor water levels of the detention basin to ensure that the water levels do not drop below the anticipated use of water for composting and evaporation.
	• Maintain integrity of hardstand pad by repairs to areas damaged by plant and machinery movements.
	• Ensure drains and surface water gradients are free of excess vegetation and debris so that the flow of stormwater or leachate is not impeded, and the moisture / compaction levels achieved in embankment construction are maintained.
	• Regular inspections of onsite infrastructure and structural integrity of drains, hardstand, and leachate dam.
	• Repair and maintain any cracks observed in the base and side walls of the dam using clay, preferably bentonite or bentonite clay mixture.
	• Waste to be accepted at the facility is to be in accordance with the EPA licence. Waste must be effectively vetted so prohibited wastes are not accepted at the facility.
	• Waste is only to be received, stored, or processed in areas where the leachate barrier has been installed.
	• Monitoring of pollutants must be undertaken as per EPL 7654.
	• Leachate collection and storage facilities must be maintained to collect and impound all leachate in accordance with the design storm event.
	• Leachate is not to be used for dust suppression on haul roads.

	• Leachate is to be recycled through moisture conditioning of compost, to drawdown on basin volumes and ensure the design capacity of the basin is maintained for future storm events. • Management of windrows and gradients to ensure no ponding or pooling occurs. • Depressions must be filled promptly by using screened or sieved overburden. • All water that has entered processing and storage areas and water that has been contaminated by leachate must be handled and treated in the same manner as leachate. • Leachate must be collected and stored in a lined basin capable of capturing the 1% AEP, 24-hour runoff event. The hardstand pad and basin liner shall be constructed recompacted overburden/clay with an in-situ permeability (K) of less than 1x10–9 m/s in accordance with Aurecon (2017). • The leachate dam must be designed in accordance with AS 3798-2007 – Guidelines on Earthworks for Commercial and Residential Developments. • Leachate basin is to be regularly desilted in order to maintain design storage capacity, without compromising basin liner integrity.
Traffic and Access	• As there would be no impact on the performance of the local road network, road upgrades are not required. • While the traffic assessment concludes that the additional traffic generated by the facility will not adversely impact on road capacity, Bettergrow will, where possible, schedule the bulk of its heavy vehicle movements to avoid the busy morning and afternoon peak hours.

Noise and Vibration	• As the noise assessment has determined there will be no construction or operational noise impacts from the development, no specific noise mitigation measures or monitoring is proposed.
	• Notwithstanding the above, all employees and contractors are to receive an environmental induction that will include:
	  ○ Relevant licence and approval conditions.
	  ○ Permissible hours of work.
	  ○ Location of nearest sensitive receivers.
	  ○ Construction employee parking areas.
	  ○ Designated loading/unloading areas and procedures.
	  ○ Site opening/closing times (including deliveries).
	  ○ Environmental incident procedures.

Biodiversity	• The establishment of artificial wetlands in the north-western area of the lease area, where small depressions exist, is recommended. Use of a variety of water depths, and planting of native wetland species endemic to the Singleton region is encouraged. • Weeds present over the disturbed areas of the site should be controlled/eradicated where feasible.
Bushfire	• Access Road - A minimum 4m wide access road with 1m shoulders, passing areas every 200m to allow two-way passing of vehicles, and all-weather trafficable is to be provided. • Perimeter Road - A minimum 4m wide unsealed all-weather trafficable road around the external perimeter of the compost mounds should be provided to prevent potential grass fires encroaching into the compost facility, or a fire from the compost facility spreading into surrounding grassed areas and properties. • Water - A diesel or petrol-powered fire-fighting pump, with at least a 40m long hose with steel nozzle, mounted on a mobile fire tanker unit should be provided. It should be able to pump out water and cart water from the water supply tank/dam, and fight any spot fires caused by ember attack, or self-combustion. • An Emergency and Evacuation Plan should be prepared - including details of the site Fire Warden, local Rural Fire Service contact numbers, emergency muster point, fire-fighting appliances and location, first aid kits, and emergency response procedures in the advent of a bush fire. • The Rural Fire Service should also be notified of the development once approved so it can be added to their facility register, and details also provided of access and fire-fighting capacity onsite.
Visual	• As the development site is already adequately screened from view no additional mitigation measures are proposed.

	• Design and location characteristics of the development provide sufficient mitigation. • Retention of existing trees within the site are recommended to maintain the existing level of screening.
Aboriginal Heritage	• All relevant staff should be made aware of their statutory obligations for heritage under the National Parks and Wildlife Act 1974 and the Heritage Act 1977. This is to be in the form of a heritage induction on site prior to works. • In the unlikely event that disturbed Aboriginal objects are identified during the development then they are to be collected and recorded in accordance with Heritage NSW guidelines and in consultation with the Registered Aboriginal Parties. • In the unlikely event that human skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area cordoned off. • The proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene or are possible Aboriginal remains. • If the remains are thought to be Aboriginal, Heritage NSW must be contacted via the Environment Line 131 555. • A Heritage NSW officer will determine if the remains are Aboriginal or not. • If the remains are identified as Aboriginal, a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence.
Historic Heritage	• All relevant staff should be made aware of their statutory obligations for heritage under the National Parks and Wildlife Act 1974 and the Heritage Act 1977. This is to be in the form of a heritage induction on site prior to works. • In the unlikely event that disturbed objects are identified during the development then they are to be collected and recorded in accordance with Heritage NSW guidelines. • In the unlikely event that human skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area cordoned off. • The proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene. • If the remains are thought to be of heritage significance, Heritage NSW must be contacted via the Environment Line 131 555. • A Heritage NSW officer will determine if the remains are of heritage significance.

Socio-economic	• No further mitigation measures are proposed with regard to socio-economic issues as it is considered that:
	  ○ the proposed development will be of net benefit to the community.
	  ○ provide decreased cost and increased social efficiency associated with composting and nutrient recycling.
	• Ongoing engagement will occur with key stakeholders during construction and operations.

Fire and Incident Management	• New storage structures on the site should be constructed to comply with Part E1 (deemed to satisfy provisions) and Part E2.3 (Special Hazards) of the BCA. • A strict no smoking policy should be enforced on site when in proximity of any combustible materials. Smoking will only be permitted in clearly signposted areas. • All water collection points should be checked regularly to ensure their ability to be accessed in an emergency. • Fire extinguishers should be positioned at readily accessible points, including on mobile plant, so that their use in an emergency is not restricted. • All firefighting plant and equipment should be regularly serviced in line with the manufacturer's recommendation. • The temperature of all stockpiles and windrows should be monitored in accordance with established workplace procedures. If temperatures throughout the compost exceed 67°C, then watering is to be initiated to dissipate heat. • All stockpiles and windrows should be sufficiently moist. The moisture content of compost windrows must be kept above 40% weight for weight to retard burning. • In the event of a fire within a windrow, the affected stockpile/windrow must first be suppressed with either the use of water and/or dirt. The stockpile/windrow must then be pulled apart. However, if weather conditions are such that pulling apart the stockpile/windrow is likely to ignite other stockpile/windrows or spread the fire internally

	or externally, (eg dry with moderate/strong winds), the stockpile must not be broken up until conditions are suitable. • In the event a fire cannot be extinguished using water or soil, the use of fire retardants should be considered (expert advice should be sought from Fire and Rescue NSW before taking action with retardants). • Once the fire has been extinguished, affected areas should be monitored on a continual basis until materials have cooled. • All fire water should be contained on site. • All staff should be trained in the use of onsite firefighting appliances. • Combustible materials should not be accumulated in areas close to exhausts or engines. • Display emergency procedures and information in the site office or other visible location. • Conduct or participate in site emergency scenarios as required. • Regularly identify and check all site fire extinguishers and firefighting equipment.
Hazard and Risk	• All mobile plant and equipment should be fitted with fire extinguishers. • An Emergency Response Plan should be prepared and implemented for the facility. • All staff on site should be appropriately trained in the handling of dangerous goods. • Flammable and combustible liquids with be stored in accordance with AS 1940-2004: The Storage and Handling of Flammable and Combustible Liquids.
Waste Management	• The following mitigation and management measures will be applied during construction and operation of the facility. • Plant and equipment should be regularly maintained. • Ordering should be limited to only the required amount of materials. • Materials should be segregated to maximise reuse and recycling. • Routine checks should be undertaken of waste sorting and storage areas for cleanliness, hygiene and OH&S issues, and contaminated waste materials. • Separate skips and recycling bins should be provided for effective waste segregation and recycling purposes. • Training and awareness of the requirements of the WMP and specific waste management strategies will be undertaken. • Contaminated waste will be managed, transported, and disposed of in accordance with licensing requirements. • Off-site waste disposal should be transported and disposed of in accordance with licensing requirements. • Assessment of suspicious potentially contaminated materials, hazardous materials and liquid wastes should be undertaken. • Regular monitoring, inspection and reporting requirements should be undertaken, and findings implemented.

APPENDIX 3 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C10 or, having given such notification, subsequently forms the view that an incident has not occurred.

2. Written notification of an incident must:
   (c) identify the development and application number;
   (d) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
   (e) identify how the incident was detected;
   (f) identify when the applicant became aware of the incident;
   (g) identify any actual or potential non-compliance with conditions of consent;
   (h) describe what immediate steps were taken in relation to the incident;
   (i) identify further action(s) that will be taken in relation to the incident; and
   (j) identify a project contact for further communication regarding the incident.

INCIDENT REPORT REQUIREMENTS

3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

4. The Incident Report must include:
   (a) a summary of the incident;
   (b) outcomes of an incident investigation, including identification of the cause of the incident;
   (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
   (d) details of any communication with other stakeholders regarding the incident.

Appendix B - Heritage Unexpected Finds Procedure

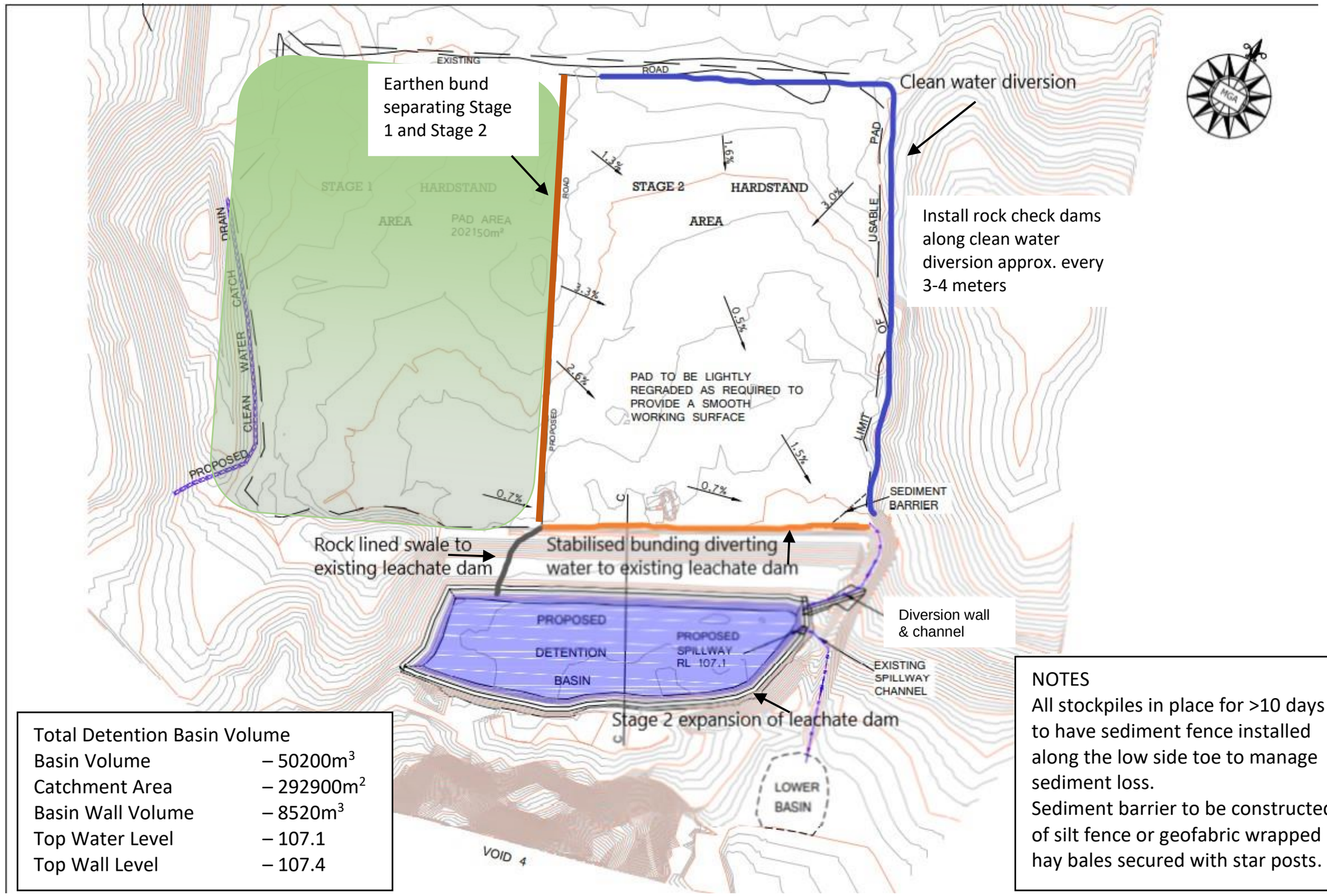
HERITAGE ITEM UNEXPECTED FINDS PROCEDURE

Action	Person Responsible	By When
Discovery of object/feature/relic STOP WORK IMMEDIATELY in the area and notify Site Manager	All site personnel	Upon find
Establish a 10 m buffer/no go zone around the item using high visibility fencing/flags/bunting where practical	Site Manager	Upon find
Inform all site personnel about the no go zone No further interference, including works, ground disturbance, touching or moving the item must occur	Site Manager All site personnel	Upon find
Notify the registered Aboriginal Party – Wonnarua Nation Aboriginal Corporation on 6571 8595 or 0412 593 020	Site Manager Environmental Manager	Upon find
Notify the Office of Environment and Heritage (OEH) on 1300 361 967 and submit a site card	Site Manager Environmental Manager	Upon find
Notify a suitably qualified heritage consultant to assess the object/feature/relic and recommend mitigation measures and salvage and/or avoidance options if necessary	Site Manager Environmental Manager	Upon find
Works can only recommence under instruction from the OEH	Site Manager Environmental Manager	At all times
Where applicable, apply to the OEH for an Aboriginal Heritage Impact Permit (AHIP)	Environmental Manager	Where applicable/instructed by OEH

HUMAN REMAINS UNEXPECTED FINDS PROCEDURE

Action	Person Responsible	By When
Discovery of suspected human remains STOP WORK IMMEDIATELY in the area and notify Site Manager	All site personnel	Upon find
Site Manager to immediately notify the police, Office of Environment and Heritage (OEH) on 1300 361 967	Site Manager	Upon find
OEH will provide details on the processes involved in best dealing with archaeological skeletal remains (both Aboriginal and historic)	Site Manager	At all times
Under the instruction of the police, a 50 m radius around the remains is to be cordoned off with temporary fencing Works can continue outside this area so long as there is no risk of interference to the remains	Site Manager	At all times
If the remains are determined to be Aboriginal, under the advice from OEH consult with the registered Aboriginal Party – Wonnarua Nation Aboriginal Corporation on 6571 8595 or 0412 593 020	Site Manager Environmental Manager	At all times
Do not recommence work at the location until all legal requirements and the reasonable requirements of OEH and the registered Aboriginal Party have been adequately addressed	Site Manager Environmental Manager	At all times

Appendix C – Erosion and Sediment Control Plan Stage 2



Total Detention Basin Volume

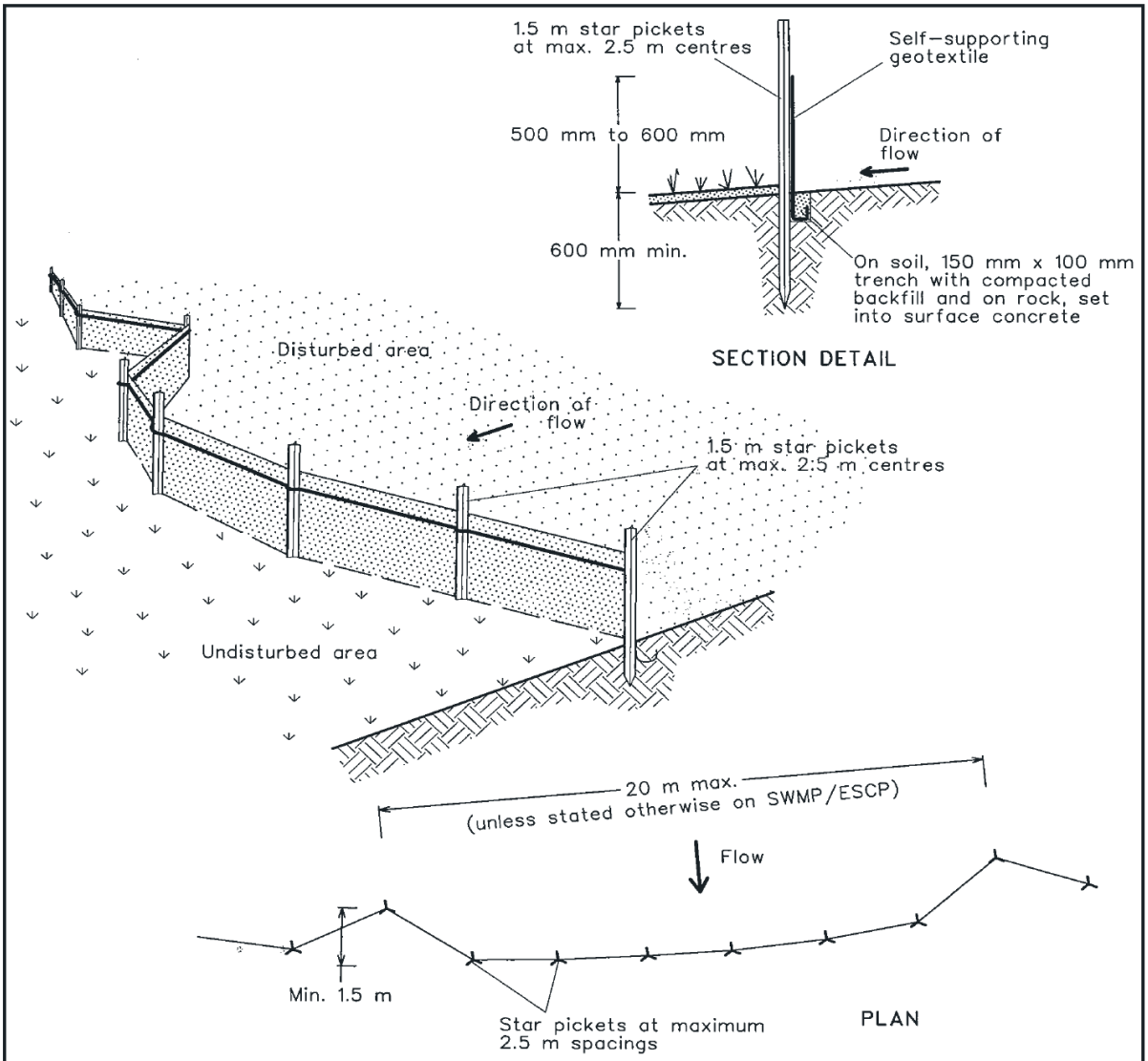
Basin Volume	– 50200m^3
Catchment Area	– 292900m^2
Basin Wall Volume	– 8520m^3
Top Water Level	– 107.1
Top Wall Level	– 107.4

NOTES

All stockpiles in place for >10 days to have sediment fence installed along the low side toe to manage sediment loss.

Sediment barrier to be constructed of silt fence or geofabric wrapped hay bales secured with star posts.

Appendix D – ERSED Standard Drawings

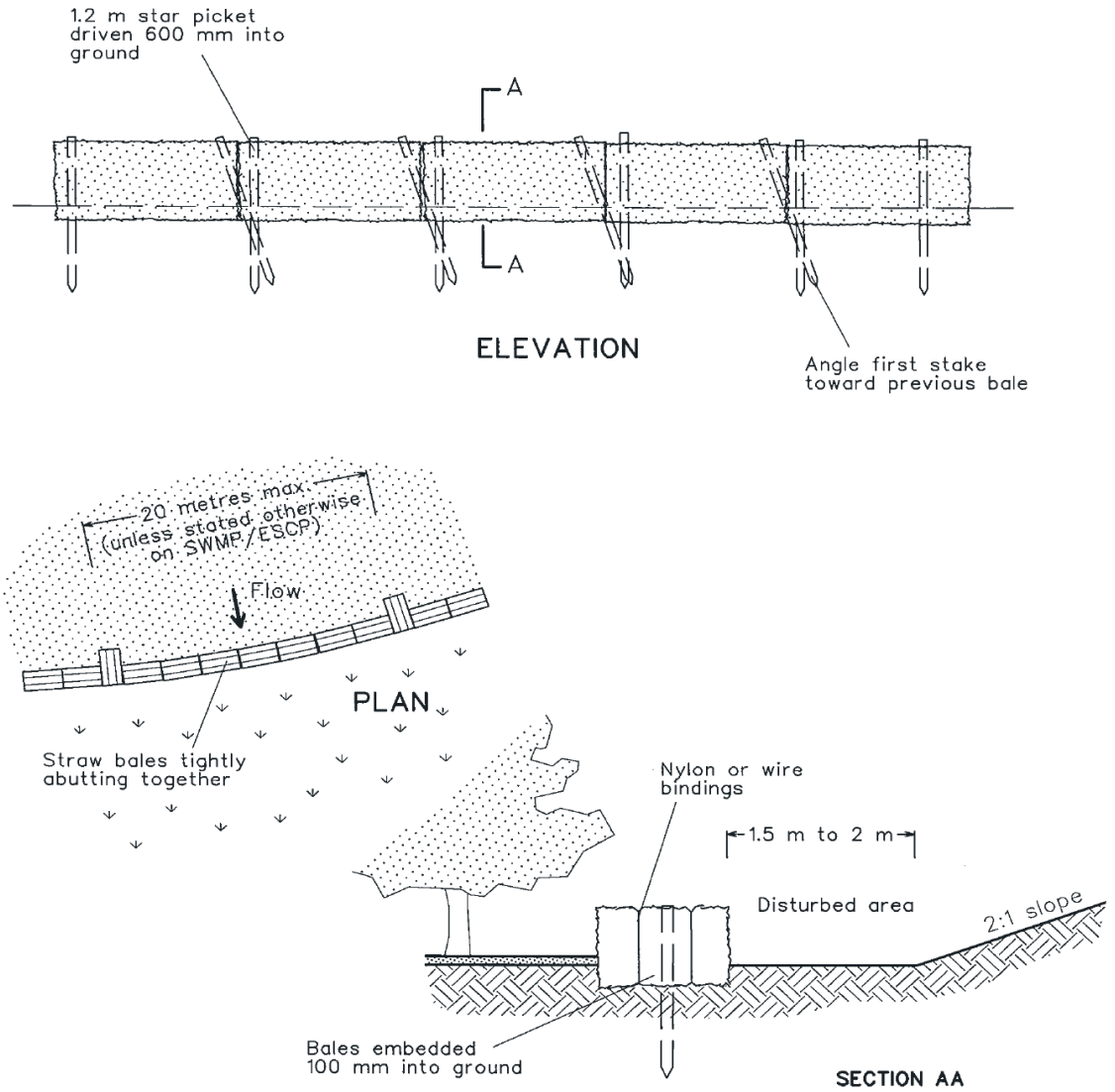


Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

SEDIMENT FENCE

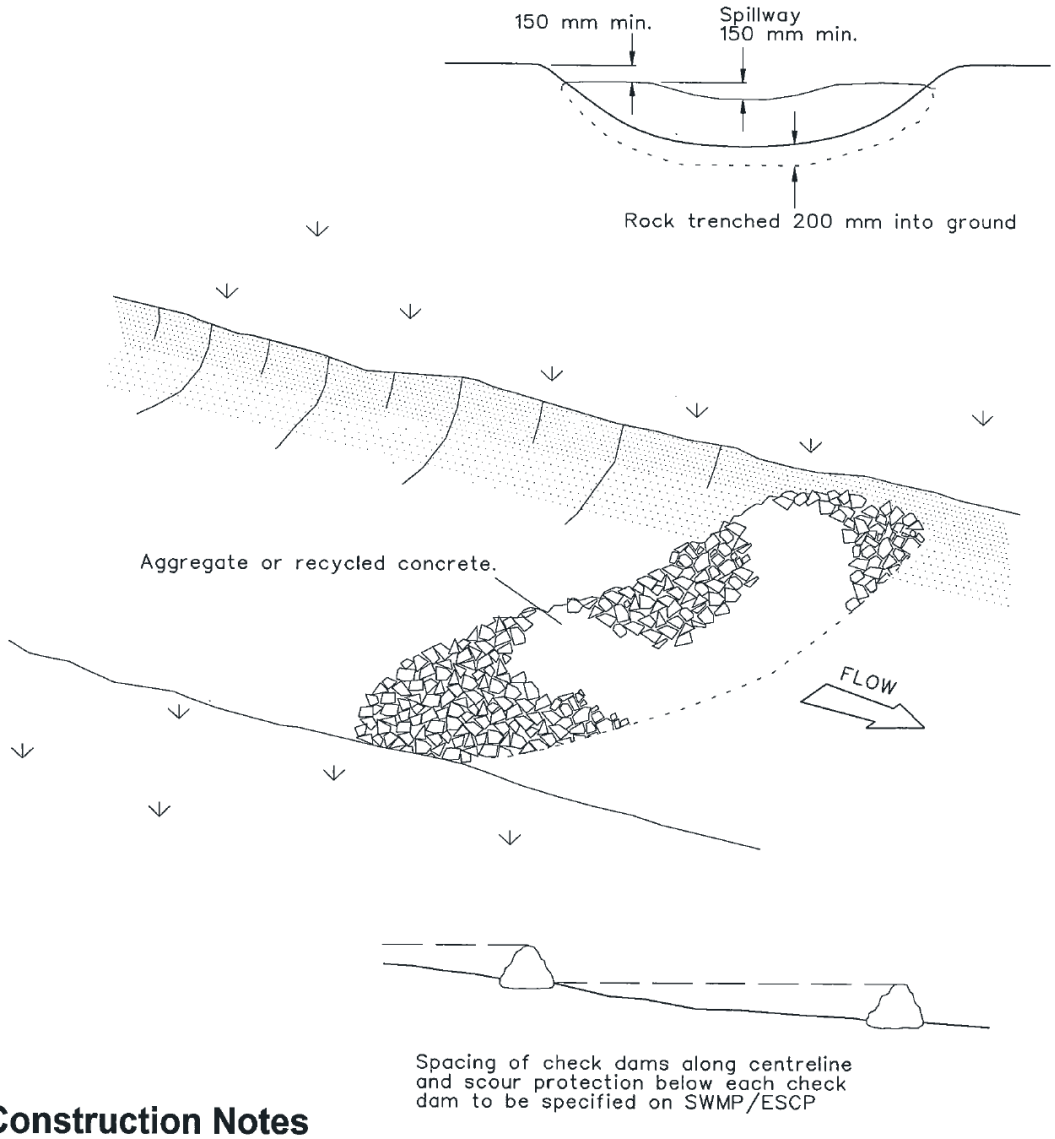
SD 6-8



Construction Notes

1. Construct the straw bale filter as close as possible to being parallel to the contours of the site.
2. Place bales lengthwise in a row with ends tightly abutting. Use straw to fill any gaps between bales. Straws are to be placed parallel to ground.
3. Ensure that the maximum height of the filter is one bale.
4. Embed each bale in the ground 75 mm to 100 mm and anchor with two 1.2 metre star pickets or stakes. Angle the first star picket or stake in each bale towards the previously laid bale. Drive them 600 mm into the ground and, if possible, flush with the top of the bales. Where star pickets are used and they protrude above the bales, ensure they are fitted with safety caps.
5. Where a straw bale filter is constructed downslope from a disturbed batter, ensure the bales are placed 1 to 2 metres downslope from the toe.
6. Establish a maintenance program that ensures the integrity of the bales is retained - they could require replacement each two to four months.

STRAW BALE FILTER SD 6-7



Construction Notes

1. Check dams can be built with various materials, including rocks, logs, sandbags and straw bales. The maintenance program should ensure their integrity is retained, especially where constructed with straw bales. In the case of bales, this might require their replacement each two to four months.

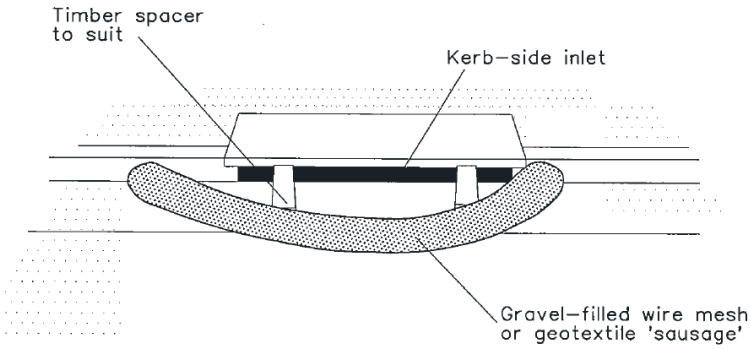
2. Trench the check dam 200 mm into the ground across its whole width. Where rock is used, fill the trenches to at least 100 mm above the ground surface to reduce the risk of undercutting.

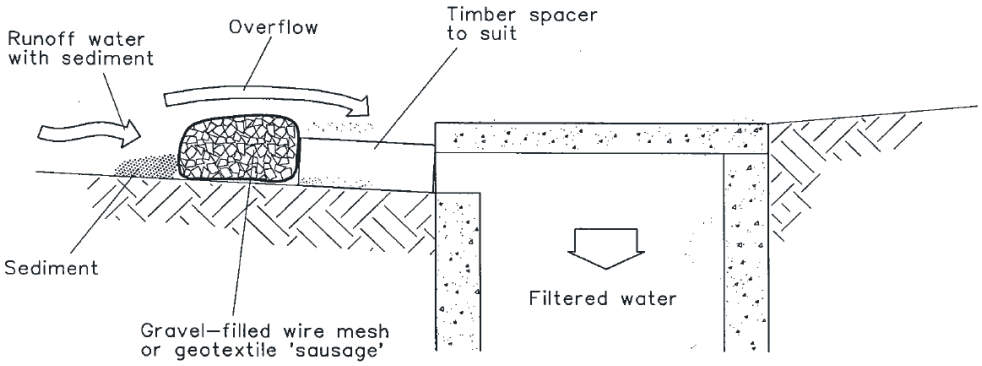
3. Normally, their maximum height should not exceed 600 mm above the gully floor. The centre should act as a spillway, being at least 150 mm lower than the outer edges.

4. Space the dams so the toe of the upstream dam is level with the spillway of the next downstream dam.

ROCK CHECK DAM

SD 5-4





NOTE: This practice only to be used where specified in an approved SWMP/ESCP.

Construction Notes

1. Install filters to kerb inlets only at sag points.
2. Fabricate a sleeve made from geotextile or wire mesh longer than the length of the inlet pit and fill it with 25 mm to 50 mm gravel.
3. Form an elliptical cross-section about 150 mm high x 400 mm wide.
4. Place the filter at the opening leaving at least a 100-mm space between it and the kerb inlet. Maintain the opening with spacer blocks.
5. Form a seal with the kerb to prevent sediment bypassing the filter.
6. Sandbags filled with gravel can substitute for the mesh or geotextile providing they are placed so that they firmly abut each other and sediment-laden waters cannot pass between.

MESH AND GRAVEL INLET FILTER SD 6-11

Appendix E – Unexpected Contamination Finds Procedure

UNEXPECTED CONTAMINATION FINDS PROCEDURE

Action	Person Responsible	By When
Discovery of potentially contaminated soil / material (e.g. asbestos, odorous material, discoloured material, any other suspect material) STOP WORK IMMEDIATELY in affected area	All site personnel	Upon find
Immediately contact Site Manager for assistance Site Manager to liaise with Environment Manager and Safety Manager	All site personnel	Upon find
Fence off area and no further works to occur in the area until advised by the Site Manager	All site personnel Site Manager	Upon find
Engage a suitably qualified and experienced contaminated land expert to undertake an assessment and if necessary, sample the material Material is to be classified in accordance with the EPA Waste classification guidelines	Environmental Manager Site Manager	Upon find
Where material is identified as contaminated, provide the Planning Secretary with details of the disposal location and classification prior to removal off-site	Environmental Manager	Prior to off-site disposal
Where it is identified that the material is contaminated, dispose of to a waste facility lawfully able to take the material in accordance with the POEO Act and associated regulations	Environmental Manager Site Manager	Once material has been classified

Action	Person Responsible	By When
All contaminated material to be transported off-site for disposal to be in accordance with the EPA contaminated material waste tracking procedures	Environmental Manager Site Manager	At all times
Where necessary, contaminated material to be handled and transported by a suitable licensed/qualified person (e.g. asbestos)	Environmental Manager Site Manager	At all times
Stockpiled material with known contamination to be appropriately protected from erosion (compaction or covered) and runoff Install sediment fence to downslope side of stockpile Contaminated material to be disposed off-site as soon as practicable	Site Manager Environmental Manager	At all times
All trucks transporting contaminated material shall be covered to ensure material does not become airborne during transport	Site Manager	At all times
Where remediation is advised from a suitably qualified and experienced expert, a Site Validation Report shall be prepared verifying that the site has been remediated to a standard consistent with the intended land use.	Environmental Manager	At all times

Appendix F – Example Environmental Inspection Checklist

Monthly Site Inspection Checklist

Note: This form is designed for general use and may not be exhaustive. Modifications and additions may be necessary as the project progresses to address specific environmental issues and associated mitigation measures.

Project : Expansion of existing resource recovery facility
Site Location : Bettergrow Ravensworth
Inspection Date : _____ Inspection Time : _____
Inspected by : _____ Weather : _____

Inspection Items	Implemented?		N/A	Remarks (i.e. specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective/preventative actions)
	Yes	No*		
1. Soil and Water Management				
New Areas				
1.1. Localised erosion and sediment control devices installed prior to earthworks				
1.2. Erosion and sediment controls working effectively				
1.3. Work access controls installed at the point of access and egress to all areas with exposed earth works				
1.4. Topsoil stockpiles • <2m in height • Surrounded by sediment fence • Located away from drainage lines				
Existing Areas				
1.5. Inspect erosion and sediment control devices				
1.6. Inspect work access controls				
1.7. Inspect separation controls between existing and new area, confirm no leachate entering new area				
1.8. Others (please specify)				
2. Noise Management				

Inspection Items	Implemented?		N/A	Remarks (i.e. specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective/preventative actions)
	Yes	No*		
2.1. Observation of noise generating activities on-site at time of inspection				
2.2. Others (please specify)				
3. Air Quality (Dust) Management				
3.1. Visual inspection of stockpiles for stability and dust generation				
3.2. Others (please specify)				
4. Storage of Hazardous Materials				
4.1. Visual inspection of chemical and fuel storage areas and bunding				
4.2. Visual inspection of spill kits contents				
4.3. Others (please specify)				
5. Construction Waste Management				
5.1. Visual inspection of surface free from waste, bins have sufficient capacity				
5.2. Visual inspection of all loads leaving site are covered				
5.3. Sight records kept for all waste removed from site				
5.4. Others (please specify)				
6. Traffic Management				

Inspection Items	Implemented?		N/A	Remarks (i.e. specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective/preventative actions)
	Yes	No*		
6.1. Observation of driver conduct during inspection				
6.2. Others (please specify)				
7. Contamination Management				
7.1. Visual inspection of excavations to detect presence of contamination				
7.2. Sight records for all imported fill material, i.e. VENM or ENM certificates				
7.3. Others (please specify)				

- Any '**No**' recorded represents the potential breach of regulatory requirements or identification of improvement needed. Details of non-conformity **(NC)** shall be recorded in the **Remarks** section.
- Report NC in DataStation under Incidents or Hazards.
- The responsible person shall identify the root cause of the NC and adopt appropriate corrective and preventative actions for mitigation.
- Confirmation of the effectiveness of the actions shall be verified by the Environmental Manager in an agreed timeframe.

Signature (Environmental Manager) and Date:

Daily Inspection Checklist for Site Supervisor

Note:

On a daily basis, site supervisory staff will inspect the Site and any issues arising will be noted in the daily diaries and communicated to the Construction Manager.

The inspections will be conducted visually prior to commencement of each day's work and where appropriate during the working day.

A final daily inspection will also be undertaken at the end of the workday to ensure that systems and structures are in place.

Visual inspection of the site for:

- excessive dust generation
- weather conditions and activities being carried out
- condition of stabilised site work access controls
- truck load covers
- excessive exhaust emission from plant and equipment
- visual inspection of excavations to detect presence of contamination
- erosion and sediment control effectiveness or if need clean out