Licence

Licence number	L9127/2018/1
Licence holder	City of Greater Geraldton
Registered business address	63 Cathedral Avenue GERALDTON WA 6530
DWER file number	DER2018/000553-1~4 and INS-0002041
Duration	1/06/2018 to 31/05/2038
Date of amendment	20/06/2023
Premises details	Meru Waste Disposal Facility Landfill Road, NARNGULU WA 6532 Legal description - Lot 204 on Plan 403161, Lot 2268 on Plan 250829 and Lot 203 on Plan 403161.

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed throughput capacity**
Category 13: Crushing of building material	60,000 tonnes/year
Category 57: Used tyre storage (general)	1,500 tyres
Category 61: Liquid waste facility	6,000 tonnes/year
Category 61A: Solid waste facility	20,000 tonnes/year
Category 62: Solid waste depot	20,000 tonnes/year
Category 64: Class II or III putrescible landfill site	100,000 tonnes/year

This licence is granted to the licence holder, subject to the attached conditions, on 20 December 2024, by:

Melissa Chamberlain

Digitally signed by Melissa Chamberlain
Date: 2024.12.20 13:47:39 +08'00'

MANAGER WASTE INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
29/04/2016	L6462/1992/12	Amendment Notice – extension of licence duration to 11 December 2034
12/01/2017	L6462/1992/12	Amendment Notice 1 – Inclusion of additional categories within the existing licence.
16/03/2018	L64621992/12	Amendment Notice 2 - construction of a HDPE geomembrane liner within the western septage pond of the liquid waste facility and the acceptance of waste paint for temporary storage at the premises.
2/05/2018	L6462/1992/12	Amendment Notice 3 – construction of a new lined cell (No. 5) with leachate sump, leachate pond and storm water containment pond.
1/06/2018	L9127/2018/1	Replacement to Licence L6462/1992/12 which ceased due to the late payment of the annual fee. Administrative changes were made, including consolidation of previous Amendment Notices.
12/02/2019	L9127/2018/1	Amendment Notice 1 - extension of operational hours during the construction of Cell 5 and Septage Pond.
31/05/2021	L9127/2018/1	Amendment to authorise the operation of FOGO composting infrastructure constructed under W6231/2019/1.
16/05/2022	L9127/2018/1	Notice of amendment of licence reporting requirements
20/06/2023	L9127/2018/1	Amendment to increase the range of hazardous waste accepted at the premises and increase the liquid waste facility throughput capacity from 4,000 tonnes to 6,000 tonnes per year. Increase the electronic waste acceptance limit up to 40 tonnes per annual.
20/12/2024	L9127/2018/1	Amendment to authorise infrastructure constructed under W6519/2021/1 and other associated operational modifications.

Interpretation

In this licence:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this licence:

  (i). if dated, refers to that particular version; and

  (ii). if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The Licence Holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Class III waste cells	Comprising: • Cell 1 • Compacted Waste Cell 2 • Compacted Waste Cell 3 (includes burial area for special waste types 1 and 2) • Builders Waste Cell 4 (includes inert waste type 1) • Cell 5 - comprising geosynthetic clay liner and HDPE liner with a thickness of 2mm (includes burial areas for special waste types 1, 2 and 3)	As located within Attachment 1, Figure 4.

Resource Recovery Station	Comprising:
	• Recycling Drop off Area
	  ○ concrete hardstand and cages for the acceptance of e-waste.
	  ○ concrete hardstand for the acceptance of used tyres.
	  ○ concrete hardstand for the acceptance of bulk electrical items and white goods.
	  ○ concrete hardstand for the acceptance of Inert or C&D waste from the community.
	  ○ a self-bunded containment system (consisting of an acid proof and ultraviolet (UV) resistant low density polyethylene portable container) for the acceptance of batteries.
	• Multi-Tier Drop off Facility
	  ○ to have capacity for ten 30 m^3 skip bins.
	• Mulch Collection Area
	  ○ 1% slope towards a surface water swale drain
	• Household Hazardous waste (HHW) shed
	  ○ enclosed shed, with concrete, bunded floor which is sloped to containment drainage sumps.
	• Surface water swale drains
	  ○ lined with High Density Polyethylene (HDPE) meeting a permeability of less than 1 x 10^{-9} m/s.
		As located within Attachment 1, Figure 9.

Site infrastructure and equipment	Operational requirement	Infrastructure location
Processing Shed	• Containing a 30 HP automatic baling press or equivalent.	Adjacent to the Tip Shop as located within Attachment 1, Figure 4.
Southern hardstand	• 35m x 28.5m concrete slab with 1:50 and 1:75 slopes to the hardstand leachate sump.	As located within Attachment 1, Figure 4.
Leachate pond	• Comprising geosynthetic clay liner and HDPE liner with a thickness of 2mm. • 7,800 m^2 in size	As located within Attachment 1, Figure 4.
Storm water sump	• For the containment of uncontaminated storm water to infiltrate to ground	As located within Attachment 1, Figure 6.
Liquid waste ponds	• Ponds 1 and 2 lined with a HDPE geomembrane liner. • Ponds 3, 4 and 5 clay lined and used only for overflow from Ponds 1 and 2.	As located within Attachment 1, Figure 4 & 5.
Southern hardstand leachate sump	• Constructed of concrete with a depth of 1.6 m and a run-off platform of 15 m by 4.5 m wide with a 1:10 slope.	As located within Attachment 1, Figure 4.
Stock truck wash bay	• Concrete hardstand with containment to capture all wash waters. • Wash waters must be pumped into the Liquid waste pond.	As located within Attachment 1, Figure 4.
Crushing and screening plants	• Located in the C&D stockpile location as located within Attachment 1, Figure 4.	As located within Attachment 1, Figure 4.
Oil tanks	• Two tanks with a combined capacity of 33 kL located within a 93 kL concrete containment bund.	As located within Attachment 1, Figure 4.
Security fencing	• 1.8 m high security fence installed around the perimeter of Cell 5 and the leachate pond, with gates to permit vehicle and pedestrian access.	As located within Attachment 1, Figure 4.
Previous Household Hazardous waste (HHW) shed	• Enclosed shed, with concrete, bunded floor which is sloped to a blind drainage sumps.	As located within Attachment 1 Figure 4

WASTE ACCEPTANCE AND MANAGEMENT

2. The Licence Holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 2.

Table 2: Types of waste authorised to be accepted onto the Premises

Category	Waste type	Rate at which waste is received	Acceptance specification
13	Inert waste type 1	20,000 tonnes per annual period	None specified
57	Inert waste type 2 (Used tyres)	1,500 tyres at any one time	To be accepted at the Resource Recovery Station and relocated to the Tyre storage area for storage.
61	Liquid waste	6,000 tonnes per annual period	Limited to Controlled waste categories K110: Waste from grease traps and K210: Septage wastes, being liquid and solid components from the pump-out of septic tanks.
	Waste oil	35 tonnes per annual period	To be accepted through the Resource Recovery Station. Acceptance of a maximum of 20 L of residential waste oil per drop-off and 205 L of commercial waste oil per drop-off.
61A	Putrescible waste	20,000 tonnes combined per annual period	Carboard only
	Inert Waste Type 2		Limited to HDPE and PET only
	Mattresses and ensemble bed bases		To be accepted through the Resource Recovery Station.
	Green waste		No treated timber to be accepted. To be accepted through the Resource Recovery Station.
62	Electronic waste	20,000 tonnes per annual period	Limited to a maximum of 40 tonnes accepted during an annual period.
	Household Hazardous waste		To be accepted through the Resource Recovery Station. Limited to material accepted within the Household Hazardous Waste program as listed in Schedule 1: Household Hazardous Wastes. Individual containers of waste must not exceed 20L or 20kg. Limited to 30 tonnes per annual period. Acceptance of a maximum of 100L of paint per drop-off. Individual paint containers must not exceed 20L or 20kg. Limited to 35 tonnes per annual period. DrumMUSTER containers must only be accepted if they have been rinsed and are free of chemical residue

Category	Waste type	Rate at which waste is received	Acceptance specification
	Inert waste type 1		Scrap metal only
64	Clean fill	100,000 tonnes combined per annual period	None specified.
	Inert waste type 1		
	Inert waste type 2		
	Putrescible wastes		
	Class III contaminated solid waste		Must meet the classification criteria as specified in the Landfill Waste Classification and Waste Definitions 1996 (As amended 2019). Must be supported by documentation that demonstrates compliance with the acceptance criteria for Class III landfills.
	Special waste type 1		Asbestos containing material (ACM) must be sealed in double-lined or double bagged, heavy duty plastic sheeting of at least 0.2 millimetres thickness. ACM and/or asbestos contaminated soil that cannot be practicably wrapped in heavy duty plastic must be contained in a manner that prevents asbestos fibres entering the atmosphere. Accept only wrapped or otherwise contained asbestos waste or material containing asbestos, which is labelled or marked with the words 'CAUTION – ASBESTOS' in letters not less than 50 millimetres high.
	Special waste type 2		The Licence Holder, or their representative, must complete and sign the original waste transport certificate noting, in writing, any discrepancies between waste declared and waste received. Must keep a record of the waste transport certificate for at least three years.
	Special waste type 3		Must meet the acceptance criteria for Class III landfills as specified in Schedule 2 and the acceptance criteria for Class III landfills as specified in the Landfill Definitions for contaminants other than PFAS.

3. The Licence Holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 2 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

4. The Licence Holder must ensure that the waste types specified in Table 2 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

Table 2: Waste processing

Category	Waste type	Process(es)	Process limits and/or specifications
13	Inert waste type 1	Crushing and screening of waste	The Licence Holder must only operate the crushing and screening plants at the following times: (i) Monday to Saturday from 0700 to 1800 hrs; and (ii) Sunday 0900 to 1800 hrs.[1] The Licence Holder must only operate one mobile plant at any given time. The Licence Holder must ensure all crushing and screening equipment operating on the Premises: (i) incorporate dust screen fencing surrounding the equipment; and (ii) are fitted with conveyor covers The Licence Holder must ensure that C&D waste is handled, processed and stored within a designated area with a minimum separation distance of at least 10 m from all other waste types. Note 1: Compliance with the *Environmental Protection (Noise) Regulations 1997* still apply during these hours.
57	Used tyres	Receipt, handling and storage prior to disposal or removal offsite	Maximum of 1,500 tyres to be stored at any given time, for reuse/ recycling. The Licence Holder must ensure that used tyres are stored in tyre windrows or hooklift bins with at least three metres separating each windrow or hooklift bin to allow access by fire-fighting equipment.
61	Liquid waste	Receipt, handling and storage/ disposal	Disposed to Liquid Waste Ponds 1 or 2 as specified in Table 1 (As located within Attachment 1, Figures 4 and 5). Waste from the Stock truck washbay to be disposed to Liquid Waste Ponds 1 or 2.
61A	Putrescible waste (cardboard) Inert Waste Type 2	Receipt, handling, baling and storage prior to removal offsite	Sorted and baled within the Processing shed
	Mattresses and ensemble bed bases	Receipt, handling, shredding and disposal by landfilling onsite	Shredded and disposed of within a Class III cell.

Category	Waste type	Process(es)	Process limits and/or specifications
	Green waste	Receipt, handling, mulching and storage prior to removal offsite	Mulched within the Green waste storage area and stored in the Mulch Collection Area
62	Electronic waste	Receipt handling and storage prior to removal offsite	All electronic waste: (i). must be stored within bunded containment, and (ii). must be protected by a weatherproof covering.
	Household Hazardous waste	Receipt, handling and storage prior to removal offsite	Must be only be stored in the Household Hazardous Waste shed specified in Attachment 1: Figure 4 All hazardous wastes (other than fire extinguishers and gas bottles) must be stored on a sealed hardstand, within separate shelves, into secondary containers (e.g. chemical resistant plastic tubs or trays) Flammable Liquids, toxic substances, corrosive substances, oxidising agents and miscellaneous dangerous goods (household chemicals and unknown liquids) must be stored within impermeable dangerous goods containers located on a sealed hardstand. Fire extinguishers and gas bottles must be stored in metal cages. Batteries must be stored in a fully enclosed and bunded area/container. All incompatible waste types must be stored separately. All hazardous waste storage containers must be visually inspected regularly for leakage and/or damage. Any accumulated liquids, and residues from the recovery of spills or leaks of hazardous waste, are stored in an impervious container prior to disposal at an appropriately authorized facility. Limited to a maximum of 11 tonnes stored onsite at any given time. Paint must not be decanted or treated on the Premises. Paint to be contained within bunded Intermediate Bulk Containers (IBC) containment and placed on a low permeability hardstand.
	Inert waste type 1 (scrap metal)	Receipt, handling and storage prior to removal offsite	Scrap metal accepted for storage and removal from the premises.

Category	Waste type	Process(es)	Process limits and/or specifications
64	Clean fill Inert waste type 1 Inert waste type 2 Putrescible wastes Class III contaminated solid waste	Receipt, handling and disposal by landfilling onsite	Must only take place within Class III waste cells as specified in Table 1 (as located within Attachment 1, Figure 4). Dispose of waste on the premises at least 35 metres from the premises' boundary. Place waste within a defined trench or within an area enclosed by earthen or other bunds. Restrict the non-greenwaste tipping area to a maximum linear length of 30 metres. Cover waste with at least 100 mm of cover material at least daily. Clean fill can be used as cover material within the Class III waste cells. Cover municipal waste within 24 hours of delivery. Class III contaminated solid waste must be disposed of to an active Class III waste cell on the same day of acceptance. Stockpile sufficient cover material to allow waste to be covered in accordance this condition and to cover waste in the event of a fire. Except where trenches are used, initially spread waste in layers not more than 500mm thickness prior to being compacted with a minimum of five passes with the waste compacting machine. Manage the active landfill area such that at no time does landfilling result in an exposed face exceeding two metres in vertical height. Cover waste with a final soil cover of at least one metre. Placement of waste within the landfill cells is undertaken using a 'bottom up' approach to ensure that the loading of the liner does not compromise liner integrity. The Licence Holder must dispose of tyres at the premises in accordance with regulation 14 (2) of the *Environmental Protection Regulations 1987*.
	Special waste type 1		As soon as practicable and before compaction, ACM wrapped in heavy duty plastic must be covered with a layer of soil at least 300 millimetres thick or with a layer of dense, inert and incombustible material at least 1 metre thick. ACM and/or asbestos contaminated soil that is not wrapped in heavy duty plastic must be covered with cover material to a depth of at least 500 mm immediately after deposit. Record as grid references on a premises plan all locations used for the disposal of asbestos waste or material containing asbestos and keep this plan as a permanent record.

Category	Waste type	Process(es)	Process limits and/or specifications
			Not deposit any asbestos waste or material containing asbestos within two metres of the final tipping surface of the landfill. Operate the landfill such that any existing asbestos waste or material containing asbestos deposited at the premises remains undisturbed. Make all records available for viewing by an inspector upon request.
	Special waste type 2		Must immediately unload and cover the waste with a minimum depth of one metre of soil or solid waste. Must define the disposal area(s) by grid references on the site plan. Must ensure the disposal areas are not excavated or uncovered during subsequent landfill operations. Must restrict access to the landfill site where the waste is buried to authorised personnel only. Must make the information recorded in accordance with this condition available for viewing or copying by the CEO during any inspection of the premises.
	Special waste type 3	Receipt, handling and disposal by landfilling onsite	Must only be disposed of into a designated area within Cell 5. Waste to be covered with 200mm of soil at the end of the day.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.
Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

FENCING

5. The Licence Holder must maintain a fence at least 1.8 m high around the whole of the perimeter of the premises, except where there is a lockable gate(s).

6. The Licence Holder must ensure that any entrance to the premises is securely locked when the premises is unattended.

7. The Licence Holder must ensure that weekly inspections of the fence and gates referred to in conditions 5 and 6 are undertaken and that any damage to the fence and gate(s) are repaired within one working day of its discovery.

WIND-BLOWN WASTE

8. The Licence Holder must ensure that wind-blown waste is contained within the boundaries of the active landfill area.

9. The Licence Holder must ensure that any wind-blown waste is removed from the premises' fences and roads, and any wind-blown waste emanating from the premises is collected and removed on a weekly basis or more frequently when directed in writing by the CEO.

MONITORING AND REPORTING

10. The Licence Holder must by **1 March in each year**, provide to the CEO an Annual Audit Compliance Report, signed and certified in the manner required, indicating the extent to which the Licence Holder has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning 1 January the previous year and ending on 31 December for that same year.

11. The Licence Holder must provide to the CEO a copy of the Annual Environmental Report containing the monitoring data required by any condition of this licence. The report must contain data collected from 1 January to 31 December and must be provided by **2024 and biennially thereafter,** in a format approved by the CEO.

12. The report must include, but not be limited to, an assessment of the data against any limits set in this licence or other environmental guidelines or policies and data from previous years' monitoring. It must identify any data exceeding those limits, guidelines or policies and provide information on why the exceedance occurred (if known) and action taken by the Licence Holder to prevent recurrence of such exceedances.

13. The Licence Holder must list any monitoring methods used to collect and analyse data required by any condition of this licence to demonstrate they comply with the methods specified in this licence.

14. The Licence Holder must provide details of:

(i) measures taken to control pests and vermin;

(ii) number and severity of any fires on site;

(iii) measures taken to suppress dust;

(iv) measures taken to control windblown waste;

(iii) average compaction rates;

(iv) records detailing the number of tyres collected, stored, on-sold, and disposed at the premise; and

(vi) the number and type of complaints received including the nature of complaint (where appropriate cross referenced with prevailing wind directions) and action taken.

15. The Annual Environmental Report must include any changes to site boundaries, internal buffer zones, asbestos and biomedical waste disposal areas, location of groundwater monitoring bores and surface drainage channels.

16. The Annual Environmental Report must include any issues raised by DWER (e.g. arising from inspections) during the reporting period must be summarised together with details on how these have been addressed/rectified or, if the required work has yet to be completed, how and when they will be rectified/completed.

SIGNAGE

17. The Licence Holder must maintain signage at the entrance to the premises which clearly displays the following:

(i) contact telephone number for information and complaints or notification of fires;

(ii) a list of materials that are accepted;

(iii) the types of waste that must not be deposited on the premises and a contact telephone number for alternative disposal options; and

(iv) a warning, indicating penalties for people lighting fires.

LEACHATE POND

18. A freeboard of 0.5 m must be maintained within the leachate pond at all times.

DUST – GENERAL REQUIREMENT

19. The Licence Holder must suppress dust from the open landfill face or trench, stockpiled areas and transport activities, to ensure that no visible dust crosses the boundary of the premises.

BURNING OF WASTE

20. The Licence Holder must not burn or allow the burning of waste on the premises.

21. The Licence Holder must extinguish any fire that may occur within the landfill site immediately on being notified of the fire.

22. The Licence Holder must provide the CEO with a report on an unauthorised fire within 7 days of the fire and include:

(i) details of the date, time and location of the fire;

(ii) the time the fire was declared safe by the Fire Control Officer for the premises; and

(iii) the cause, or suspected cause, of the fire.

FIRE FIGHTING CAPABILITY

23. The Licence Holder must ensure that appropriate fire-fighting equipment is stored on-site that is capable of controlling and/or abating a fire at the premises.

24. The Licence Holder must ensure that a fire management strategy is implemented and updated as required.

25. The Licence Holder must advise the CEO immediately in the event of a fire on the premises.

MANAGEMENT OF STORMWATER AND WASTEWATER

26. The Licence Holder must direct uncontaminated stormwater run-off, such as water from roofs and site drainage, away from the filled and peripheral areas and associated sumps or drains into dedicated stormwater drains.

27. The Licence Holder must ensure stormwater drains on the premises are kept clear of waste to allow for their effective use.

28. The Licence Holder must ensure that any stormwater that has come into contact with waste and any other liquid waste that may result from fire-fighting is diverted into a sump on the premises or otherwise retained on the premises.

PROTECTION OF GROUND AND SURFACE WATERS

29. The Licence Holder must maintain an undisturbed separation distance of at least 2 metres between the base of the current and future waste disposal areas and the highest level of the groundwater.

30. The Licence Holder must maintain a minimum distance of at least 100 metres between the waste disposal site and any superficial water body.

GROUNDWATER BORES

31. The Licence Holder must maintain groundwater monitoring bores specified in Table 4, as depicted in Attachment 1, Figure 2 - Map of groundwater monitoring bore locations, to enable the monitoring procedures required by condition 3232.

GROUNDWATER MONITORING

32. The Licence Holder must take representative groundwater samples from the following monitoring sites and have them analysed for the following parameters:

Table 4: Ground water monitoring

Monitoring location	Sampling frequency	Parameters (mg/L[1])
Groundwater monitoring bores: Bores 1 to 3 MW04 MW06 BOR127603 BOR127611 BOR127613 BOR127616 GHDMW01 GHDMW02	Annual	Arsenic, ammonia-nitrogen, cadmium, copper, chloride, chromium, conductivity, lead, manganese, mercury, molybdenum, nickel, pH[2], selenium, total phosphorus, total nitrogen, total dissolved solids, zinc and standing water level (SWL[2])

Note 1: All parameters to be measured in mg/ L except for pH, conductivity and SWL

Note 2: In-situ non-NATA accredited sampling permitted; SWL must be determined prior to collection of other water samples.

33. The Licence Holder must collect all water samples in accordance with Australian Standard 5667.

34. The Licence Holder must submit all water samples to a laboratory with current NATA accreditation for the analyses specified.

35. The Licence Holder must ensure that the recorded results of the sampling and analysis referred to in conditions 32, 33 and 34 are provided to the CEO in accordance with condition 11.

OPERATION OF THE LIQUID WASTE PONDS

36. The Licence Holder must operate the liquid waste treatment system in the following manner:

(i). maintain a minimum of 300mm freeboard in the treatment pond(s) so that overflow does not occur as a result of either wave action alone or wave action coupled with incident or inflowing stormwater;

(ii). all stormwater is diverted away from the lagoons to prevent erosion of pond embankments; and

(iii). there is no discernible leakage from the ponds.

LIQUID CHEMICAL STORAGE

37. The Licence Holder must store environmentally hazardous chemicals including, but not limited to, fuel, oil or other hydrocarbons (where the total volume of each substance stored on the premises exceeds 250 litres) within low permeability (10^{-9} metres per second or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound.

38. The compound(s) described in condition 37 must:

(i) be graded or include a sump to allow recovery of liquid;

(ii) be chemically resistant to the substances stored;

(iii) include valves, pumps and meters associated with transfer operations wherever practical. Otherwise the equipment must be adequately protected (e.g. bollards) and contained in an area designed to permit recovery of chemicals released following accidents or vandalism;

(iv) be designed such that jetting from any storage vessel or fitting will be captured within the bunded area as per Australian Standard 1940-2017 (as amended from time to time);

(v) be designed such that chemicals which may react dangerously if they come into contact, are in separate bunds in the same compound or in different compounds; and

(vi) be controlled such that the capacity of the bund is maintained at all times (e.g. regular inspection and pumping of trapped uncontaminated rain water).

39. The Licence Holder must immediately remove and dispose of any liquid resulting from spills or leaks of chemicals including fuel, oil or other hydrocarbons, whether inside or outside the low permeability compound(s).

40. The Licence Holder must keep a record of any incident that included the loss of chemicals including fuel, oil or other hydrocarbons and provide a summary of each incident in the annual report required in condition 1111.

PROCESS MONITORING

41. The Licence Holder must visually inspect all loads of C&D waste accepted for the purpose of crushing and screening when they arrive at the Premises prior to unloading and during unloading to determine the risk of a load containing Asbestos or ACM and each load must be classified in accordance with the risk classification procedure outlined in Attachment 2 (Classified Load).
Note: This condition does not apply to C&D waste accepted for the purpose of disposal within Class III cells.

42. Where the inspection of C&D waste confirms that material does contain asbestos or ACM, the Licence Holder must:

(i) reject the waste material for the purposes of acceptance for recycling or reuse;

(ii) maintain accurate records of all rejected loads on the Premises and the documentation must be made available to DWER officers upon request; and

(iii) record the details of the material source, material carrier, registration number of the vehicle and date of rejection.

43. The Licence Holder must maintain Classified Loads in a damp state.

44. The Licence Holder must ensure that suspected “high risk” Classified Loads of C&D waste are isolated, kept damp and appropriately contained in accordance with DER Asbestos Guidelines.

45. The Licence Holder must ensure that suspected "high risk" Classified Loads are managed in accordance with the high-risk procedure as outlined in section 3.4 of the *Guideline: Managing asbestos at construction and demolition waste recycling facilities* (Attachment 3).

46. The Licence Holder must, as a minimum maintain records of all accepted load inspections and of any accepted loads which have been determined as "high risk" Classified Loads.

47. The Licence Holder must continue to visually inspect material on the Premises at all stages of the storage, sorting and crushing process of C&D waste. Suspected asbestos identified at any stage of the process must be handled in accordance with Conditions 50 and 52 of this Licence.

48. Where C&D waste is to be recycled, the Licence Holder must maintain C&D waste on the Premises in at least three separate stockpiles areas for unprocessed material, processed material tested for ACM and:

(i) unprocessed material and processed material areas must be kept clearly separated at a minimum 3 m distance;

(ii) processed material tested for ACM and processed material awaiting testing for ACM must be clearly separated by a minimum 3 m distance or clearly delineated and separated with impermeable barriers; and

(iii) clearly visible and legible signage must be erected on individual stockpiles to clearly identify and delineate tested processed material, untested processed material and unprocessed material.

49. The Licence Holder must ensure that testing of all finished products used in the construction of infrastructure on the Premises or supplied for re-use must be undertaken in accordance with the product testing procedures as outlined in section 4.3 of the *Guideline: Managing asbestos at construction and demolition waste recycling facilities* (Attachment 3).

50. The Licence Holder must ensure that finished products used in the construction of infrastructure on the Premises or supplied for re-use are only used or supplied to customers from stockpiles that have been sampled and tested in accordance with section 4.3 of the *Guideline: Managing asbestos at construction and demolition waste recycling facilities* (Attachment 3) and shown to conform to the product specification of 0.001% asbestos weight for weight (w/w) for asbestos content (in any form) within any recycled products.

51. The Licence Holder must retain all asbestos testing records.

52. The Licence Holder must ensure that the asbestos content of any recycled output originating from construction and demolition (C&D) waste does not exceed the contamination limits specified in Table 5.

Table 5: Recycled output contamination limits

Output	Parameter	Limit[1]
Recycled drainage rock	Asbestos (in any form)	0.001% w/w
Recycled sand		
Recycled road base		

Note 1: *Guideline: Managing asbestos at construction and demolition waste recycling facilities*

DISPOSAL OF SLUDGE MATERIAL FROM LIQUID WASTE PONDS

53. The Licence Holder must inform the CEO no less than 7 days prior to the desludging of any liquid waste ponds at the premises.

54. Spadeable sludges and solids removed from the liquid waste ponds during desludging activities must be tested, classified, and disposed of to an appropriate landfill cell.

MANAGEMENT OF BIOSOLIDS

55. The Licence Holder must remove accumulated biosolids from the truck wash separator on a daily basis for incorporation into the green waste processing or disposal into the landfill cell.

CONSTRUCTION – INFRASTRUCTURE AND EQUIPMENT

56. The licence holder must:

(a) construct and/or install the infrastructure;
(b) in accordance with the corresponding design and construction requirements;
(c) at the corresponding infrastructure location; and
(d) within the corresponding timeframe,

as set out in Table 6.

Table 6: Design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location	Timeframe
1.	Liquid Waste Pond 1 disposal point	(i) In accordance with the specifications provided in Attachment 1, Figures 8 and 9. (ii) The above ground pipe is to have a fall of 1% to allow liquid waste disposed to flow into Pond 1.	As depicted in Attachment 1, Figures 7 and 8.	To be completed by 30 June 2025

57. The licence holder must within 30 calendar days of an item of infrastructure required by condition 56 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 56; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

58. The Environmental Compliance Report required by condition 57, must include as a minimum the following:

(a) certification by suitably qualified engineer that the items of infrastructure, as specified in condition 56, have been constructed in accordance with the relevant requirements specified in condition 56;

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 56; and

(c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
ACM	means asbestos containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009).
ACN	means the Australian Company Number.
AER	means Annual Environmental Report.
Annual Period	means a 12 months period commencing from 1 January until 31 December
Approved/ approval	means approved and approval in writing from time to time, respectively.
AS 4454	means the Australian Standard AS 4454 Compost, soil conditioners and mulches.
Asbestos	means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those.
asbestos waste	means Special Waste Type 1 – asbestos and asbestos cement products waste as defined in the current version of the 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2009)'.
Asbestos Containing Material (ACM)	has the meaning defined in the 'Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)'.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*.
Books	has the same meaning given to that term under the EP Act.
Bottom-up	means waste is placed in horizontal lifts evenly across the complete cell floor of the landfill working upwards, and not from one side of the landfill to the other.
Category/ Categories/ Cat.	means categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations.

Term	Definition
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Classified load	means the classification of waste loads during acceptance and post acceptance based on the risk of waste containing Asbestos or ACM and through visual inspection. Classification of wastes loads must be undertaken in accordance with the provisions outlined in Section 3.3 and 3.4 of DER Asbestos Guidelines
Clean fill	has the meaning defined within the *Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009)* guidelines.
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
construction and demolition waste or C&D waste	means materials in the waste stream which arise from construction, refurbishment or demolition activities and as defined within the Landfill Waste Classification and Waste Definitions 1996 (as amended from time to time).
continuous cover technique	means the daily covering of waste with at least 100mm of cover material.
Controlled waste	As defined in the *Environmental Protection (Controlled Waste) Regulations 2004.*
cover material	means subsoil or other approved inert waste used for covering of waste.
Crushed Recycled Road Base	means material that has been produced in accordance with and meets the specifications in the DER Asbestos Guidelines and the Institute of Public Works Engineering Australasia and the Western Australia Local Government Association Specification for the supply of recycled road base, May 2016.
CS Act	means *Contaminated Sites Act 2003 (WA)*.
Damp	means moist to the touch.
DFES	means the Department of Fire and Emergency Services Authority of Western Australia.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder

Term	Definition
Request	in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
DoH	means the Department of Health.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the *Environmental Protection Act 1986* (WA).
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
Fire Control Officer	means a person who has such qualifications in fire-fighting or fire control as are approved, appointed to that position by the occupier of the premises.
Green waste	means waste that originates from trees or plants.
Guideline: Managing asbestos at construction and demolition waste recycling facilities	means the document titled "*Guideline: Managing asbestos at construction and demolition waste recycling facilities*", published by the Department of Water and Environmental Regulation, dated April 2021.
hardstand	means a surface with a permeability of 1 x 10^{-9} metres/second or less.
Household Hazardous Waste	means the materials listed in Schedule 1 accepted of by occupiers of private residences; that is, not produced by industrial or other sources
'Inert Waste Type 1' means:	means (a) non-hazardous, non-biodegradable (half-life greater than 2 years) wastes containing contaminant concentrations less than Class I landfill acceptance criteria but excluding paper and cardboard; and (b) materials specified under the heading 'Examples of Type 1 inert wastes' in Table 2 of the document entitled 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2019)'.
'Inert Waste Type 2' means:	(a) non-hazardous, non-biodegradable (half-life greater than 2 years) wastes containing contaminant concentrations less than Class I landfill acceptance criteria but excluding paper and cardboard; and (b) includes materials specified under the heading 'Examples of Type 2 inert wastes' in Table 2 of the document entitled 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2019)'.

Term	Definition
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)	refers to the document issued by the Chief Executive Officer of the Department of Water and Environmental Regulation, dated 2009 (as amendment 2019).
Leachate	means liquid released by or water that has percolated through waste and which contains some of its constituents.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Low permeability	means a surface with a hydraulic conductivity of 1×10^{-9} metres/second (m/s) or less.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
'material containing asbestos'	means as defined in the *Environmental Protection (Controlled Waste) Regulations 2004.*
Mattress and ensemble bed bases	means mattresses and ensemble bed bases that comprise textiles, foam, timber, metal and plastic materials.
mm and mg/L	means millimetres, and milligrams per litre, respectively.
mBGL	means metres below ground level.
m^3	means cubic metres.
municipal waste	means waste collected at the kerbside by the local authority collection vehicle or its contractor.
NATA	means National Association of Testing Authorities.
Non-conforming waste types	means any waste material removed from the Premises that requires disposal, other than at the premises, and which does not conform to the waste acceptance defined under condition 2 of the Licence.
Occupier	has the same meaning given to that term under the EP Act.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the Premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Attachment 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
putrescible waste	means (a) the component of the waste stream likely to become putrid – including wastes that contain organic materials such as food wastes or wastes of animal or vegetable origin, which readily

Term	Definition
	bio-degrade within the environment of a landfill; (b) includes materials specified under the heading 'Examples' in Table 2 of the document entitled 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2009)'.
Quarter	means every three months.
Risk Event	as described in *Guidance Statement: Risk Assessment*.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Spadeable	has the meaning defined within the *Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009)* guidelines
Special Waste type 1	means (a) asbestos wastes; and (b) includes materials specified under the heading 'Examples of Type 1 Special Waste' in Table 2 of the document entitled 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2009)'.
Special Waste type 2	means (a) biomedical wastes; and (b) includes materials specified under the heading 'Examples of Type 2 Special Waste' in Table 2 of the document entitled 'Landfill Waste Classification and Waste Definitions 1996 (As amended 2009)'.
Suitably qualified engineer	means a person who: (a) holds a Bachelor of Engineering degree recognised by Engineers Australia; and (b) has a minimum of five years of experience working in a supervisory role in civil or structural engineering; and (c) is employed by an independent third party external to the Licence Holder's business; or is otherwise approved in writing by the CEO to act in this capacity.
SWL	means the standing water level in metres below ground level or AHD (prior to sampling)
tyres	where 100 whole used tyres are the equivalent of 2 cubic metres of shredded, broken or pieces of used tyres; 1 truck tyre = 7 car tyres; 1 light truck tyre = 1.5 car tyres; 1 super single = 14 car tyres; 1 earth moving tyre = 20 car tyres.
tyre windrows	means parallel rows where each row is no more than 3 metres high and no more than 4 metres wide and separated by a minimum of 3 metres of clear ground from any other row.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
UDR	*Environmental Protection (Unauthorised Discharges) Regulations*

Term	Definition
	2004 (WA).
µg/m^3	micrograms per cubic metre.
µg/L	micrograms per litre.
Waste	has the same meaning given to that term under the EP Act.
WA Waste Strategy	means the Western Australian Waste Strategy, Waste Authority 2012.
WALGA	means the Western Australian Local Government Association.
WHO	means the World Health Organisation.

ATTACHMENT 1: Premises maps

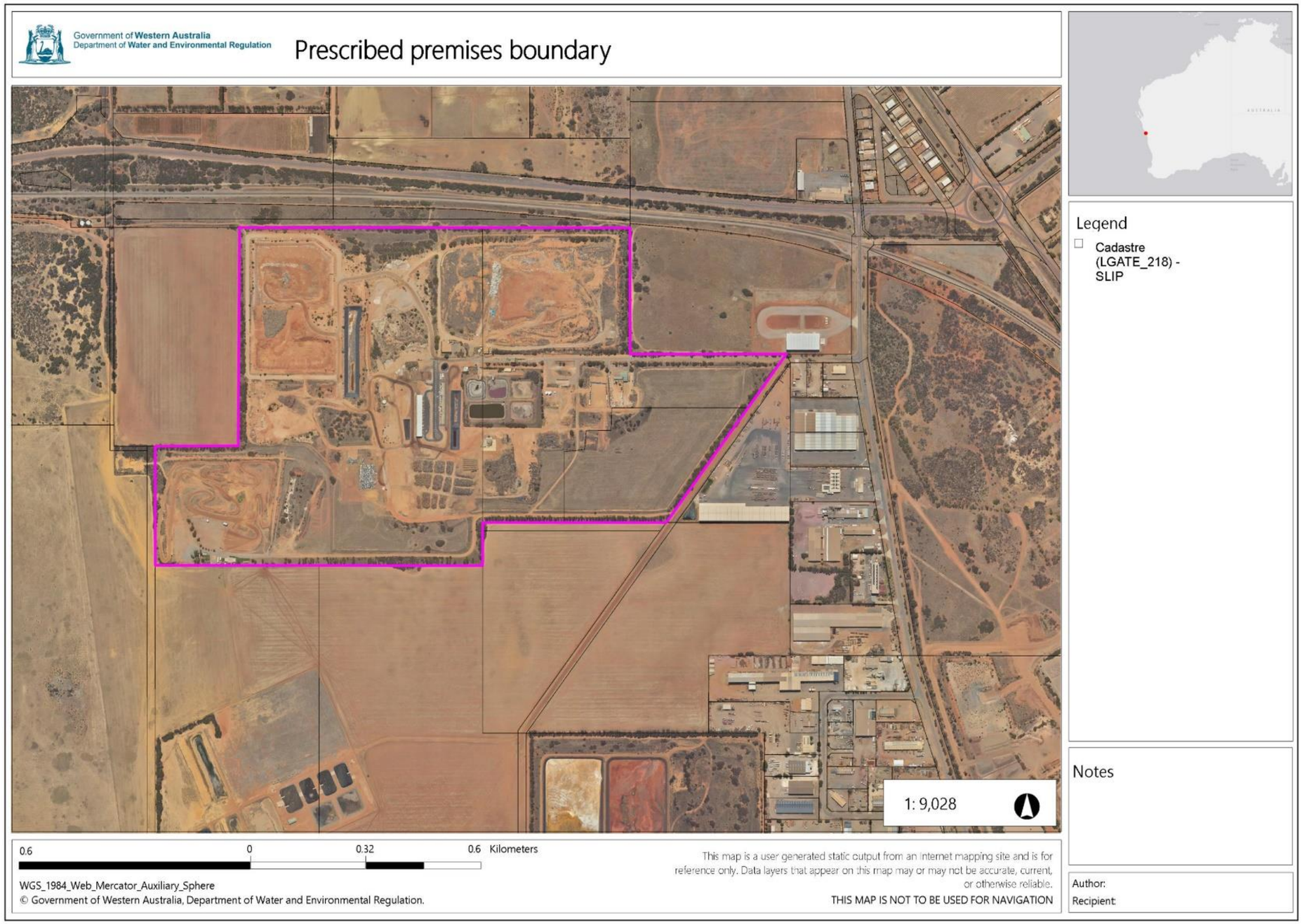

Figure 1. Map of premises

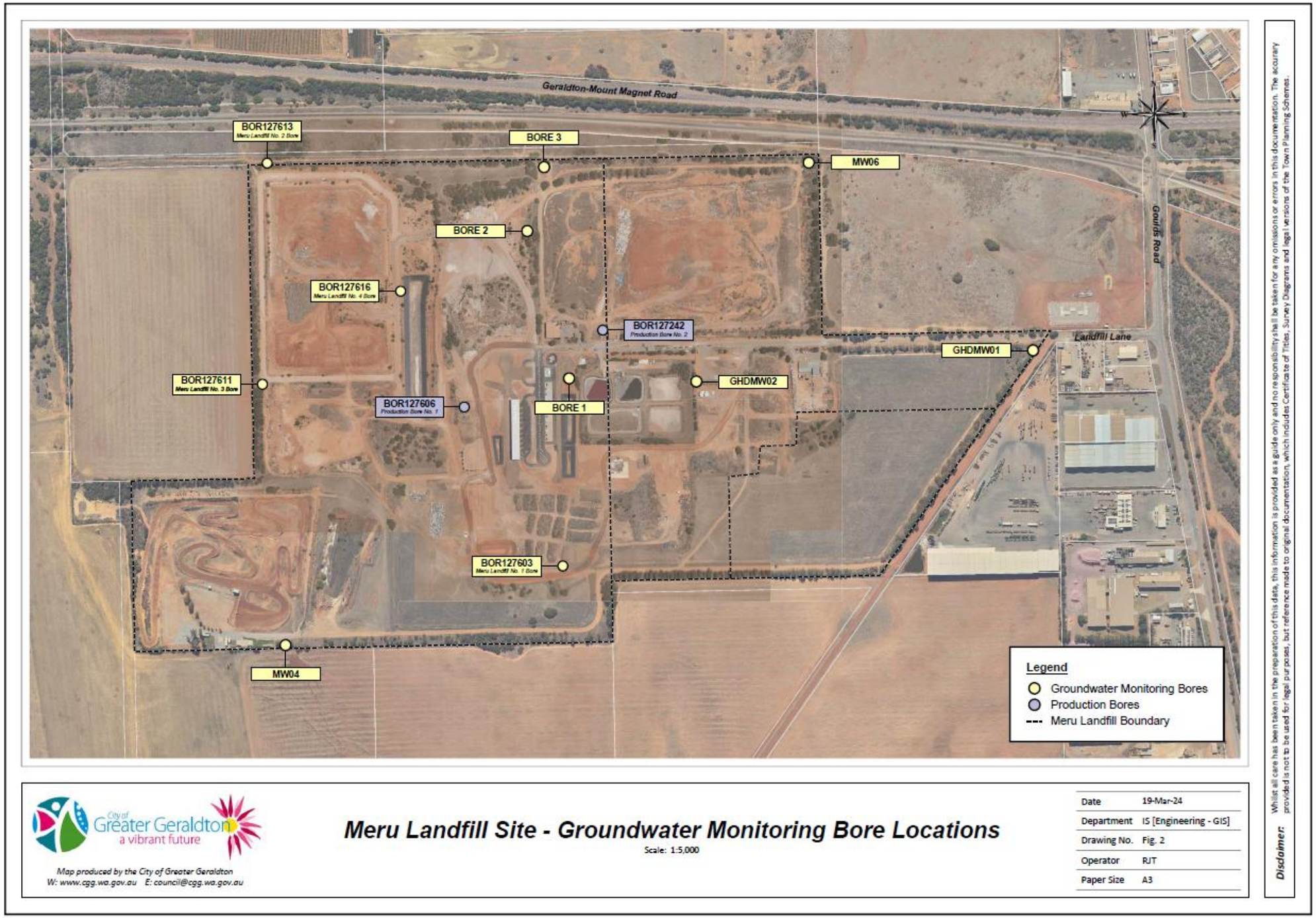

Figure 2. Map of groundwater monitoring bore locations

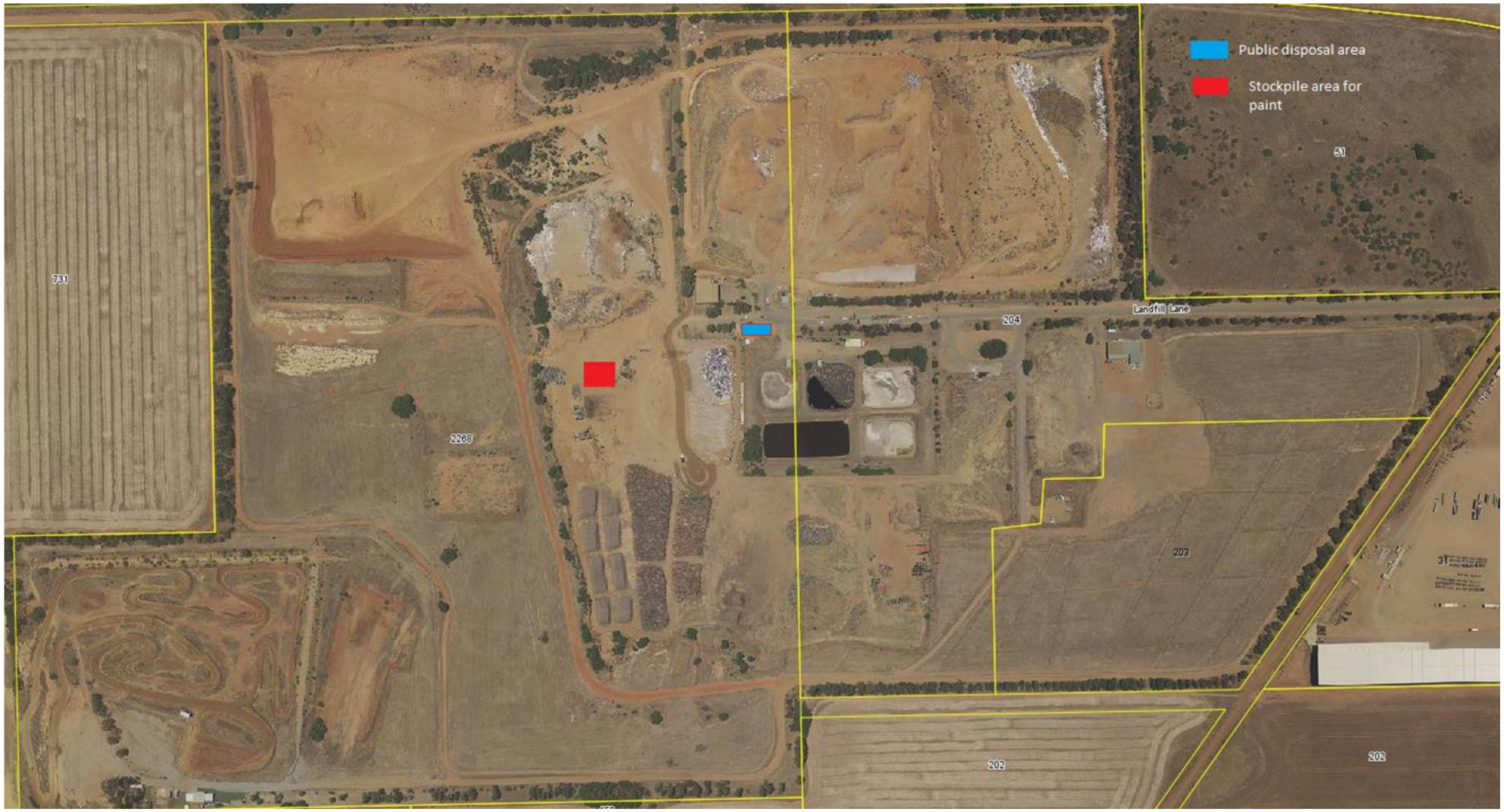

Figure 3. Map of paint receival, stockpile/ storage area

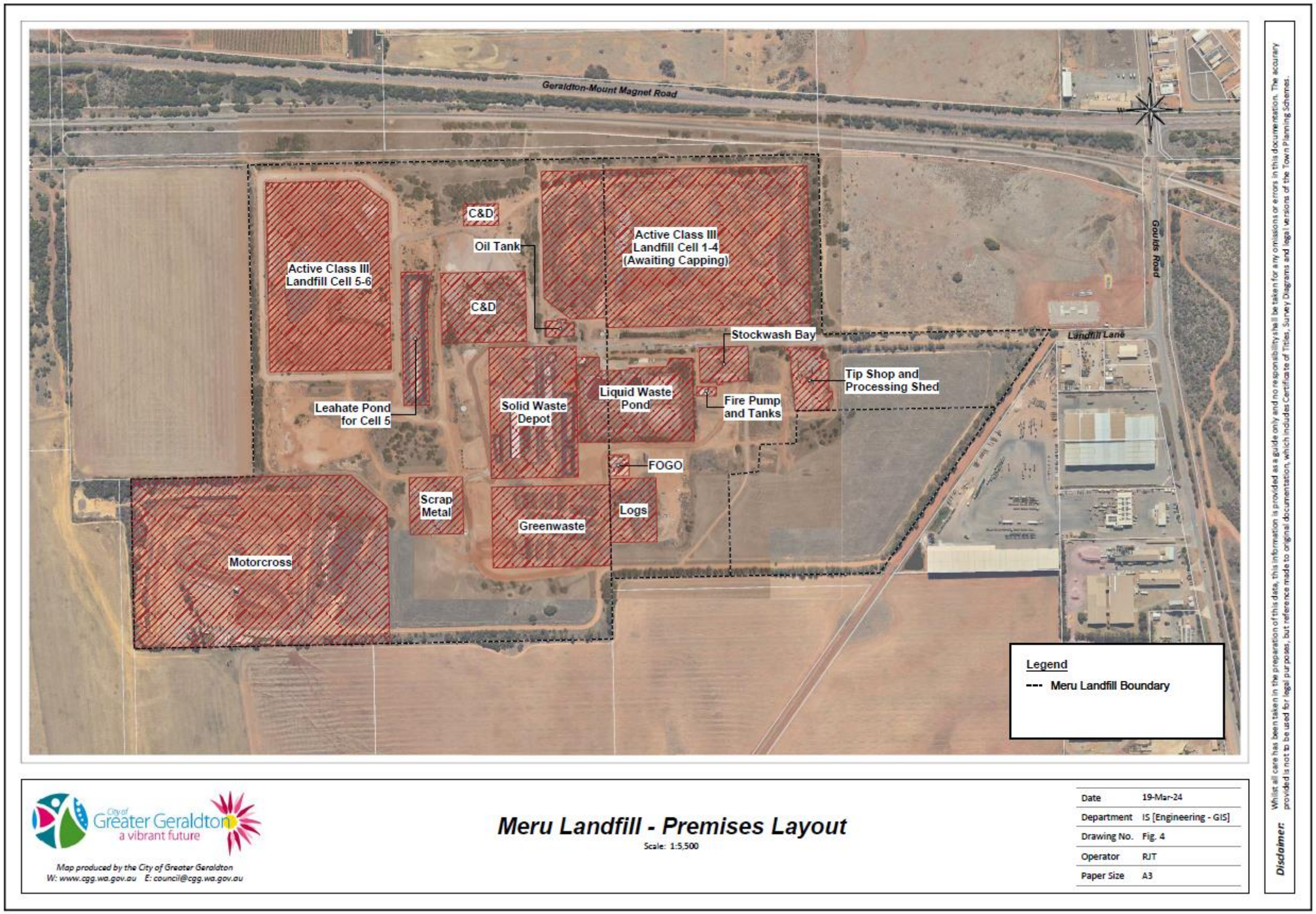

Figure 4. Premises layout

Figure 5. Liquid Waste Facility Layout

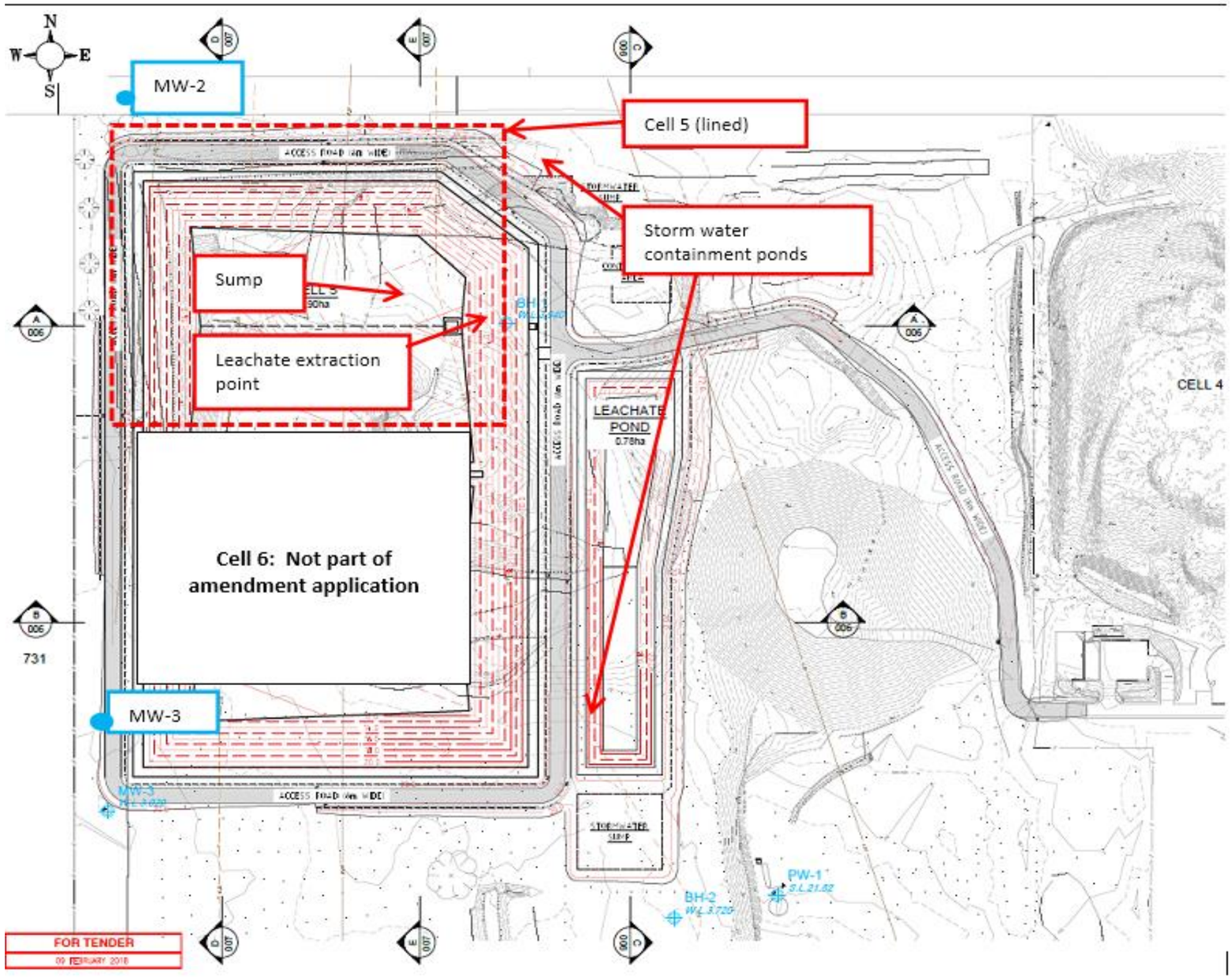

Figure 6. Map of Cell 5 construction and associated infrastructure layout

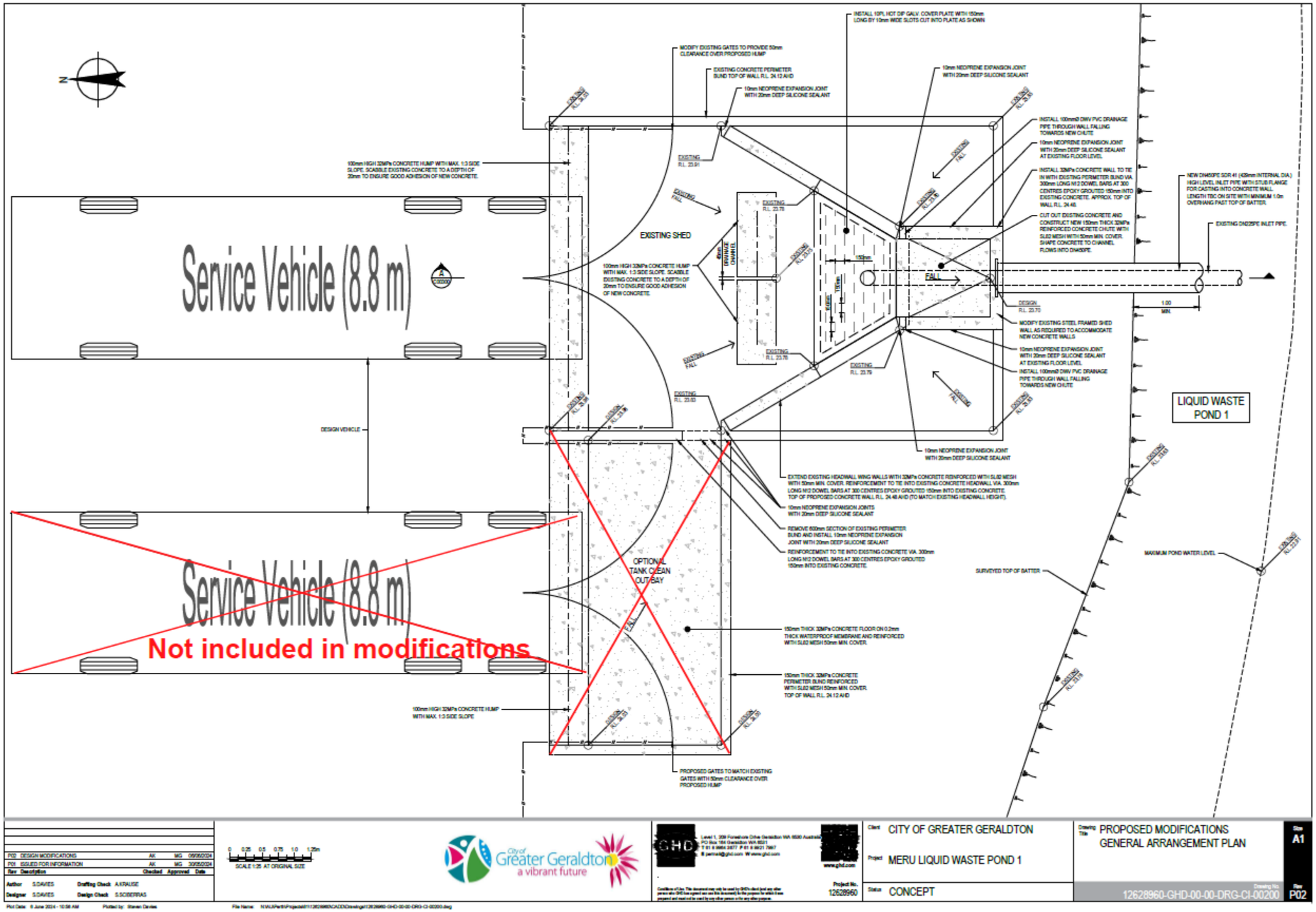

Figure 7. Proposed Liquid Waste Pond 1 modification plan

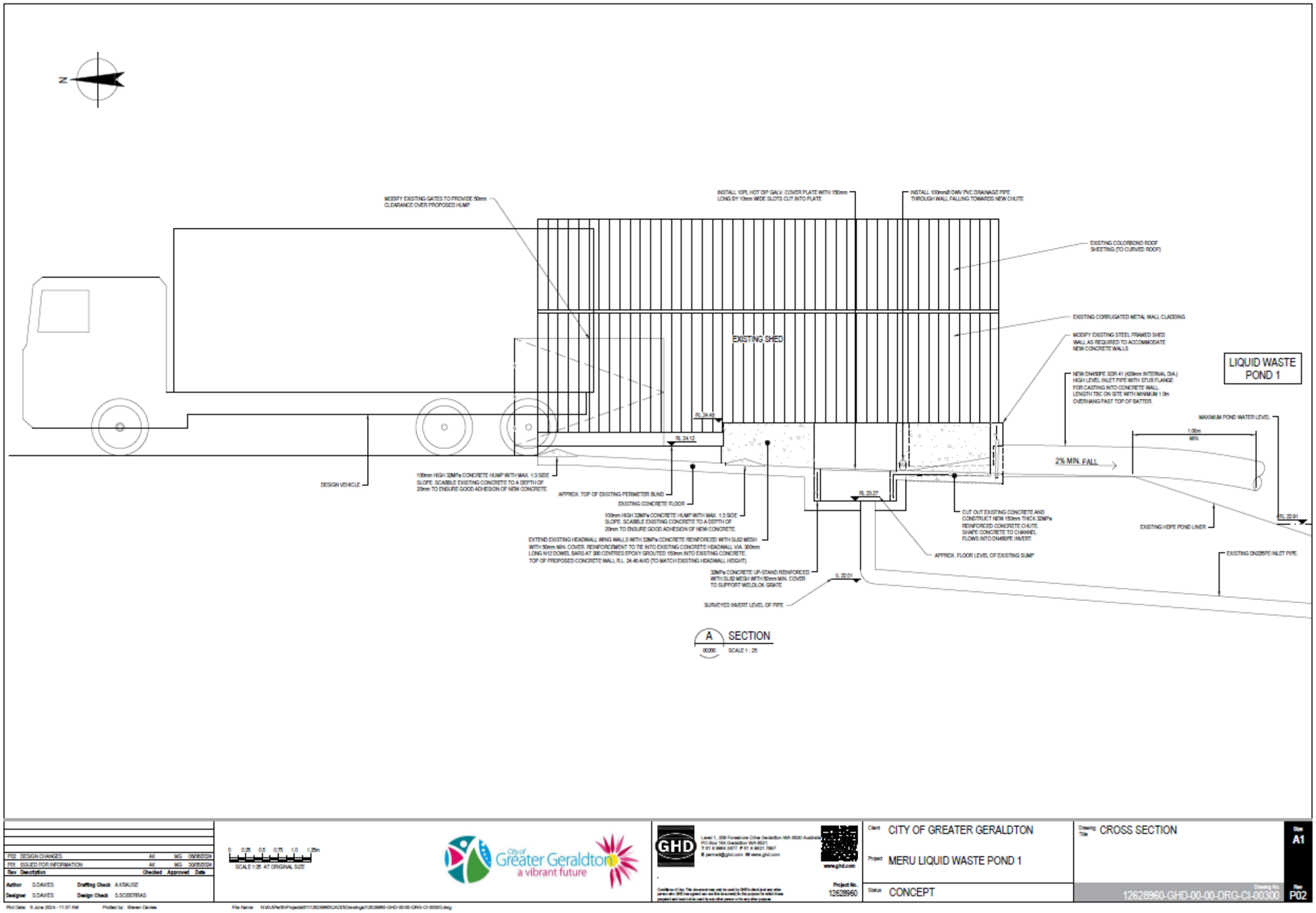

Figure 8. Proposed Liquid Waste Pond 1 modification cross section

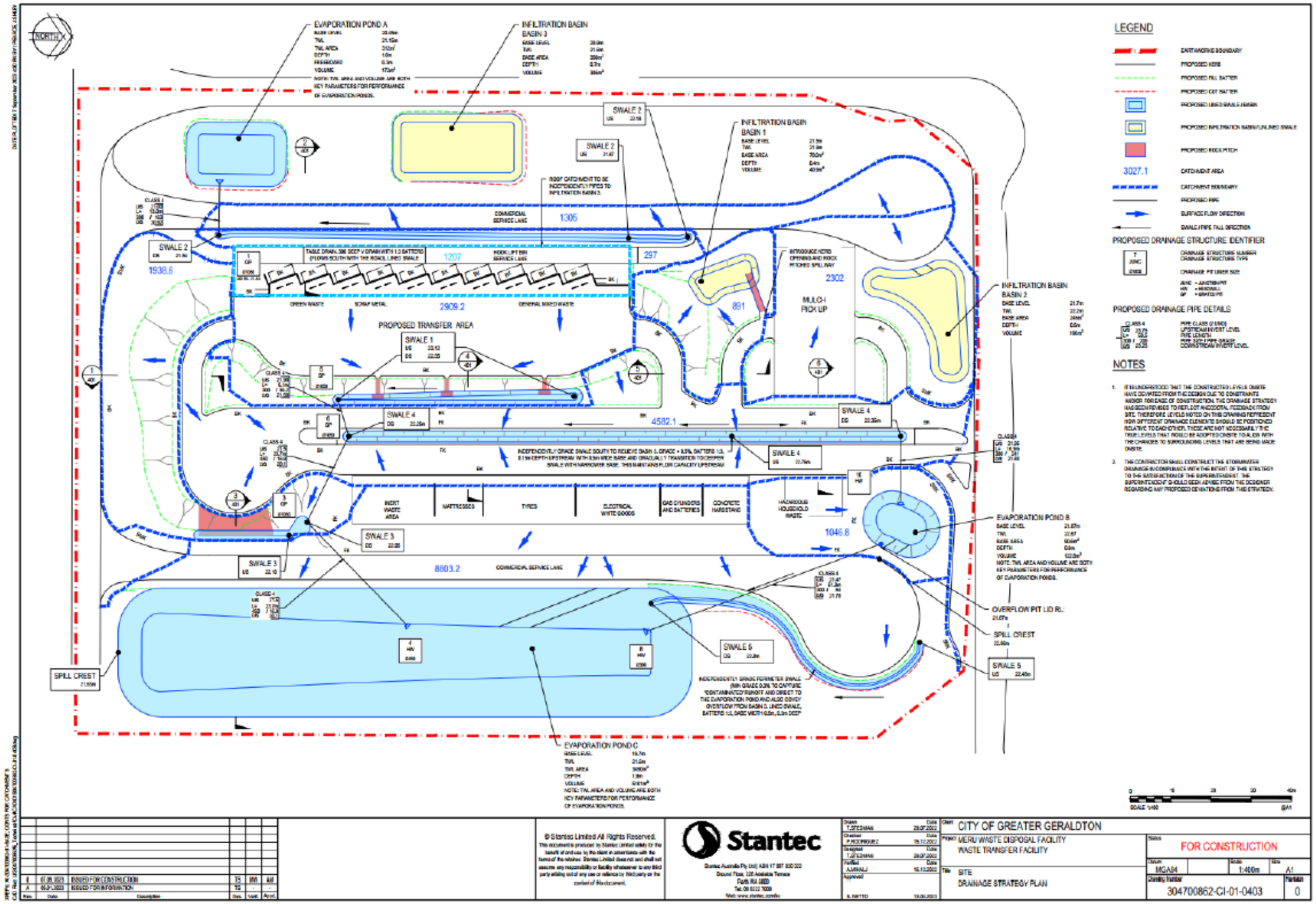

Figure 9. Community Waste Transfer Station Layout Plan

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ATTACHMENT 2: Section 3.4 of Guideline: Managing asbestos at construction and demolition waste recycling facilities (pages 8 - 9)

3.4 Load inspection after acceptance

Each accepted and classified load shall be directed to an unloading area at the site, which is appropriately designed and constructed to ensure the waste will not mix with other waste. Where feasible, separate unloading areas shall be provided for low-risk and high-risk wastes.

All loads shall be dampened before unloading and maintained in a dampened state throughout the inspection process. Operators will need to ensure there are adequate facilities on the premises to achieve this.

3.4.1 Low-risk load procedure

Loads classified as 'low risk' must be visually inspected while the material is being unloaded to determine whether any asbestos can be identified.

If suspect fibrous asbestos (FA) or asbestos fines/fibres (AF) are detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Asbestos factsheet in Appendix A, redirected to an appropriately authorised disposal facility. If suspect ACM is identified, the load must be reclassified as 'high risk' and be processed in accordance with the high-risk procedure below. Where the visual inspection confirms that the load is clear of suspect ACM, FA and AF, the load may then be added to the waste stockpiles awaiting further processing (e.g. crushing and screening).

3.4.2 High-risk load procedure

Loads classified as 'high risk' must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material. One method of achieving this is to spread the material to a depth of less than 30 cm and to turn over the material with the use of an excavator or similar. Where appropriate, larger sections of concrete should be inverted to permit a visual check for embedded or underlying asbestos product debris.

If suspect FA or AF are detected, the load must be isolated and kept wet. Once appropriately contained in accordance with the Asbestos factsheet in Appendix A, it should be redirected to an appropriately authorised disposal facility.

Where suspect ACM is identified within a load and is not capable of being easily removed by hand, the load must be rejected and should be isolated and kept wet. Once appropriately contained in accordance with the Asbestos factsheet in Appendix A, it should be redirected to an appropriately authorised disposal facility.

Where suspected ACM fragments capable of being easily removed by hand are identified in a load, the suspect ACM must be removed from the load and either:

1. appropriately isolated and covered for asbestos testing. If testing of representative samples confirms the material is ACM it must be redirected to an appropriately authorised disposal facility. If testing confirms the material is not ACM the waste can be added to the stockpile awaiting further processing; or

2. assumed to be ACM and redirected to an appropriately authorised disposal facility.

All suspected or assumed ACM must be segregated. Material must be clearly labelled, kept secure and sufficiently contained to prevent the release of asbestos, including wind-blown fibres.

Once all suspected or assumed ACM has been removed from a load in line with the above procedure the residual waste can be added to the stockpile awaiting further processing.

Records must be kept to ensure the process from receipt of C&D material to the completion of the unloading procedure is auditable and that any loads found to contain suspect asbestos can be traced back to the customer and originating site. Through Part V licence conditions, the department will require records to be submitted on a regular basis detailing loads found to contain asbestos and action taken by the C&D recycler to address this issue with the customer. The department will take follow-up action with customers delivering asbestos-containing waste to the premises as necessary.

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ATTACHMENT 3: Section 4.5 of Guideline: Managing asbestos at construction and demolition waste recycling facilities (pages 12 – 16)

4.3 Product testing and supply

To ensure recycled products have been produced to the required specification in relation to asbestos content it is necessary for product testing to be undertaken. The testing procedures detailed in this section have application for the three main recycled products:

1. Recycled drainage rock 20–27 mm.
2. Recycled sand, screened to <10 mm.
3. Recycled road base, <19 mm.

The testing must be documented as outlined under section 5.3.

4.3.1 Product specification

To ensure the health of those using or coming into contact with recycled C&D products is protected, the asbestos content (in any form) of any recycled products must not exceed 0.001 per cent asbestos weight for weight (w/w).

4.3.2 Inspection and sampling requirements

All types of recycled product must be inspected and/or sampled and tested for ACM, FA and AF, as outlined below. Inspections and sampling may be undertaken by staff employed by the licensee as long as they have received the required asbestos training for operational staff set out in section 5.2.

ACM and FA are subject to visual inspection and sampling procedures since they are larger in size (>7 mm). AF (<7 mm) is assessed by submitting samples for laboratory analysis.

Recycled products may be sampled from conveyors or stockpiles. Whichever approach is adopted, the operator will need to ensure they have appropriate systems in place to allow them to identify where in the product stockpiles each sample is from to allow further testing or separation to occur if required.

4.3.3 Stockpile inspection and sampling

In the case of recycled drainage rock and recycled road base, a visual inspection should be undertaken in a systematic grid fashion over any new stockpile to identify any suspect asbestos material.

No sampling is required for recycled drainage rock, other than to determine by laboratory analysis if necessary whether a suspect fragment is asbestos.

For recycled road base and screened sand, sampling is necessary and must be spread evenly over the whole stockpile surface, or samples may be taken at regular intervals (as per conveyor sampling) during construction of the stockpile. Suspect asbestos material or areas must be targeted for sampling.

Sampling of road base and screened sand products must occur at a minimum rate of 40 locations per 4000 tonnes, or 14 samples per 1000 m^3 of product.

4.3.4 Conveyor sampling

Sampling of road base and screened sand products must occur at a minimum rate of one sample per 70 m^3 of a product output. Suspect asbestos material or areas must be targeted for sampling.

4.3.5 Sample treatment

Each sample collected must be at least 10 litres in volume and then be divided into two size fractions (>7 mm and <7 mm) in the field by sieving though a 7 mm screen or spread out for inspection on a contrasting colour fabric. The >7 mm fraction should be examined for any suspect asbestos material and this be retained to calculate the level of contamination.

The <7 mm fraction will need to be a minimum 500 ml, be wetted, and submitted for laboratory analysis. This sample size is considered necessary to improve the limit of detection for asbestos in the analysis procedure.

4.3.6 Reduced sampling criteria

Once premises have demonstrated their procedures are able to consistently produce recycled product that meets the product specification and that they undertake their activities to a high standard, the department may authorise a reduced product testing rate, including down to five locations per 4000 tonnes (one sample per 600 m^3) of product.

The criteria that the department will use to consider and determine a reduction in product sampling frequency are:

1. activities at the premises have been validated through an inspection or audit to comply with these guidelines
2. the department has confirmed through an inspection or audit that the conditions of the Part V licence are being met
3. the department has not undertaken any enforcement action in relation to the activities at the premises in the past six months
4. product testing has demonstrated that the product specification has been consistently achieved at the premises for a continuous six-month period
5. the presence of mitigating factors such as best practice management measures, high control of source material or use of the product for low-risk purposes
6. the quantity of waste processed in the past six months and the different sources/types of material processed at the premises
7. DoH has agreed to the reduction in product sampling rate at the premises.

All requests for a reduced product sampling rate must be submitted in writing to the relevant industry regulation regional leader for the premises, details of which can be found in the interpretation section of the Part V licence for the premises.

The department will refer all requests to the DoH and operators must ensure that all requests include sufficient evidence, particularly in relation to product testing, to support compliance with the above criteria.

Proponents should note, however, that despite a premises meeting the above reduced sampling criteria, there may be occasions where a reduced sampling rate is not approved by the department. This may occur, for example, where the site is close to sensitive receptors, is contentious and/or there is a need to provide public confidence in the activities at the site.

Where a reduced sampling rate is approved at a premises, the department will provide written notification of the approval and will continue to closely monitor that premises to ensure it remains compliant with the reduced sampling criteria. The department's monitoring of the premises will be further supported by the annual process audits required by section 5.1 and the results of the product sampling.

The department will withdraw the approval to implement a reduced sampling frequency where the reduced sampling criteria are not being met on an ongoing basis. Where the department withdraws approval for a reduced sampling frequency, proponents will be provided with the reasons for the withdrawal.

In the event that approval for a reduced sampling rate is withdrawn by the department, proponents will be required to make a new reduced sampling frequency request and demonstrate that:

1. they have implemented appropriate measures to prevent a reoccurrence of the non-compliance that caused the previous agreement for a reduced sampling frequency to be withdrawn
2. the product specification (sampled at the 40 samples per 4000 tonnes rate) has been consistently met for a six-month period following the implementation of the measures identified in 1. above.

4.3.7 Sample analysis method

>7 mm sample fractions

Asbestos concentrations (ACM and FA) should be calculated in accordance with the methods detailed in section 4.1.7 of DOH's *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (May 2009). As detailed in the DoH guidelines, averaging asbestos levels across the stockpile is not appropriate and asbestos levels within each sample should be reported.

< 7 mm sample fractions

Each <7 mm sample fraction must be analysed for FA and AF.

Asbestos analysis must be undertaken by an independent NATA-certified laboratory and comply with *Australian Standard Method for the Qualitative Identification of asbestos in bulk samples* (AS 4964–2004) or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS 4964-2004 is currently the only method in Australia that has NATA certification; however, the practicable level of detection for this standard polarised light microscopy method (PLM) and dispersion staining (DS) is 0.01% w/w. It is possible, however, to measure asbestos contamination at or lower than 0.001% w/w where an increased sample size is used; however, the department recognises that any reporting of concentrations below 0.01% w/w will be outside the conditions set by NATA.

Therefore, to determine whether recycled products meet the product specification for asbestos content, samples must be a minimum of 500 ml in size. Proponents must adopt one of the following analytical approaches:

1. Detected/non-detected – where any quantity of asbestos is detected by the PLM method it must be assumed, without further analysis, to be in concentrations above the product specification limit of 0.001% w/w. A weight-of-evidence approach may be adopted, i.e. the frequency and occurrence of other positive results in the stockpile can be taken into account, to determine whether the stockpile being assessed is considered to meet the product specification or not; or
2. Where any quantity of asbestos is detected by the PLM method, the sample is subject to further testing in the form of a semi-quantitative method with a lower level of detection for asbestos. A number of laboratories have developed such semi-quantitative methods for the analysis of low levels of asbestos. Techniques include:
    - the extraction and weighing of fibre bundles or fibre cement material from the total sample
    - measuring the width and length (i.e. volume) of individual fibre by Phase Contrast Microscopy (PCM) and calculating the weight of fibres in the extracted sub-sample.

The use of either of these methods is considered acceptable to the department.

Whatever analysis methods are adopted by an operator, the department expects a number of assessment-based statements to be included in all laboratory analytical reports. These include:

- details of the sample size
- a statement of limit of detection of the analysis
- results in relation to asbestos detected or not – note that AS 4964-2004 allows for a nil detection if the asbestos is less than a certain concentration and is non-respirable; however, the department would consider a positive result to exceed the 0.001% w/w limit
- a description of any asbestos detected
- an estimate of the concentration of asbestos detected if practical to do so.

4.3.8 Interpreting inspection and sampling results

If the visual inspection, sieve sample or analytical results identify asbestos above or possibly above the 0.001% w/w criteria then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as asbestos waste, or subject to further actions to remediate it or to demonstrate its acceptability by further assessment. A record should be made of the decision-making and action taken (e.g. off-site disposal, further assessment undertaken etc) in relation to that stockpile.

In addition to the above, where asbestos is identified above or possibly above the 0.001% w/w criteria, an investigation into the likely cause for the presence of asbestos in the product should be undertaken and measures implemented to prevent a reoccurrence. A record of the investigation and its findings, together with the details of any preventative measures implemented at the site, should be made.

As a guide, in the case of recycled drainage rock, identification of a piece of ACM or FA per 10 m^2 of surface would be deemed to exceed the specification for that area, and for the whole stockpile if repeated in two or more other separate areas. A single fragment exceedance can be considered an isolated occurrence in the absence of other contamination evidence and the stockpile allowed for beneficial use. If there is multiple contamination only of a localised area then that area can be excavated to the extent of any visible asbestos and then the remainder of the stockpile considered to be suitable for use.

For laboratory analysis it is important that each result be considered on its own merits in regard to the asbestos control specification and that there is no averaging across samples. In the case of a single exceedance at a level less than 0.01% w/w, the stockpile (nominally 4000 tonnes) may not be deemed contaminated if repeat samples of immediately adjacent areas do not demonstrate specification exceedances.

The same approach as indicated in the preceding paragraph can be applied to the results of the >7 mm sieve sampling in regard to recycled sand material and road base. In this case a 1 cm^3 fragment of ACM or FA would be deemed to exceed the specification for a 10-litre sample.

It should be noted that specification exceedances in regard to different assessment methods for the same type of stockpile should not be viewed in isolation from each other.

4.3.9 Product supply

Recycled products should only be supplied to customers from stockpiles that have been sampled and tested in accordance with section 4.3 and shown to conform to the product specification.

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Schedule 1: List of Hazardous household waste accepted within HHW program[1].

Acids and alkalis
Aerosols
Arsenic-based products
Batteries – household (tape terminals)
Batteries – lithium ion (does not include embedded batteries which cannot be removed from the device or electrical vehicle [EV] batteries)
Cyanides
Engine coolants and glycols
Fire extinguishers – non-Halon (red only)
Flammables
Flares
Fluorescent lamps and tubes (CFLs)
Gas cylinders (BBQ and small leisure or camping LPGs, butane canisters and disposable helium cylinders only)
General household chemicals (e.g. cleaners)
Heavy metal compounds
Herbicides
Inorganic oxidising agents (e.g. pool chlorine)
Low-level radioactive substances (e.g. smoke detectors)
Mercury – elemental
Organic peroxides
Paint
PCB materials (Polychlorinated biphenyls)
Pesticides
Solvents – halogenated
Poisons/toxics
Unknown chemicals must be in sealed, chemical-resistant containers.

Note 1: Accessed from www.wasteauthority.wa.gov.au at 16 September 2024.

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Schedule 2: Landfill acceptance criteria for Special Waste Type 3

Landfill Class		Landfill Acceptance Criteria[1]	
		PFOS + PFHxS	PFOA
Class III landfill	ASLP leachable concentration (µg/L) (ASLP 3)	0.7 µg/L	5.6 µg/L
	Concentration Limit (CL3) (mg/kg)	50 mg/kg	50 mg/kg

Note 1: Concentrations must be less than both the relevant leachable concentration and the concentration limit.