



Works approval number W6478/2020/1

Works approval holder Fortescue Metals Group Ltd

ACN 002 594 872

Registered business address Level 2/87 Adelaide Terrace
EAST PERTH WA 6004

DWER file number DER2020/000612

Duration 30/04/2021 to 29/04/2023

Date of issue 30/04/2021

Premises details Eliwana Landfill and Waste Transfer Facility
Legal description -
Part of Mining Lease 47/1524

As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 62: Solid waste depot: premises on which waste is stored or sorted, pending final disposal or re-use, other than in the course of operating — (a) a refund point (as defined in the Waste Avoidance and Resource Recovery Act 2007 section 47C(1)) (a refund point); or (b) a facility or other place (an aggregation point) for the aggregation of containers that have been returned to refund points until those containers are accepted for processing or disposal.	6,000 tonnes/annum
Category 64: Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	10,000 tonnes/annum

This works approval is granted to the works approval holder, subject to the attached conditions, on 30 April 2021, by:

Tracey Hassell

A/Manager, Waste Industries

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

Works approval history

Date	Reference number	Summary of changes
30/04/2021	W6478/2020/1	Issue of new works approval

Interpretation

In this works approval:

- (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 works approval:
 - (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 works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct the infrastructure;
 - (b) in accordance with the corresponding design and construction requirements; and
 - (c) at the corresponding infrastructure location as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	Class II Landfill	<ul style="list-style-type: none">• Trenches 114m x 28m x 7m;• 5m firebreak;• Stock proof perimeter fence;• Perimeter drainage channel;• Drainage sump large enough to contain a 5% AEP rainfall event; and• Three groundwater monitoring bores. Designed and constructed in accordance with <i>ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores.</i>	As shown in Figure 3 of Schedule 1
2.	Solid waste depot	<ul style="list-style-type: none">• Compacted hardstand;• Stock proof perimeter fence; and• Earthen windrow between each compartment.	As shown in Figure 4 of Schedule 1

Environmental compliance reporting

2. The works approval holder must within 30 calendar days of the finalisation of construction of each item of infrastructure required by condition 1:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a qualified civil, structural or mining engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

- (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
- (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for the item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 6:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*.

Time limited operations requirements

6. During time limited operations, the works approval holder must ensure that the premises infrastructure listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operations

	Site infrastructure	Operational requirement	Infrastructure location
1.	Class II Landfill	<ul style="list-style-type: none"> • Tipping face must be less than 30m in length and 2m above ground level in height; • Waste must be covered at least weekly with dense, inert and incombustible material; • all reasonable and practical measures must be taken to ensure that no windblown waste escapes from the Premises and that wind-blown waste is collected on at least a monthly basis and returned to the tipping area; • no waste is to be placed within: <ul style="list-style-type: none"> ○ 35m from the prescribed premises boundary; ○ 100m from any surface water body; and ○ 3 metres of the highest level of the water table. • Stormwater must be diverted away from the landfill trenches; • Stormwater that has come into contact with waste is to be diverted into a sump; and • No burning of waste is to occur. 	As shown in Figure 2 of Schedule 1

	Site infrastructure	Operational requirement	Infrastructure location
2.	Solid waste depot	<ul style="list-style-type: none"> Hazardous waste is to be stored in self bunded containers and/or covered bins; Asbestos is to be stored in asbestos waste bags inside covered bins; and A Fire and Emergency Management Plan must be implemented, that sets out: <ul style="list-style-type: none"> (a) how fires will be prevented, detected, responded to, suppressed, contained and controlled for all approved activities addressing all waste types and stages of the waste handling, sorting and storage process; (b) the firefighting equipment and fire response capabilities and responsibilities; (c) waste handling, sorting and storage requirements for fire prevention and control; and (d) how, in the event of a fire occurring within the approved activities, impacts to the environment and human health will be mitigated. 	As shown in Figure 2 of Schedule 1

7. The works approval holder must only accept onto the premises waste types listed in Table 3 at a rate that does not exceed the volume listed in Table 3.

Table 3: Authorised waste types

Site infrastructure	Waste types	Specifications	Volume (tonnes/annum)
Class II Landfill	Clean fill	n/a	10,000
	Inert waste type 1	Untreated and treated timber, concrete, rubber, tyres, and treated bioremediated soils.	
	Inert waste type 2		
	Putrescible wastes	Not exceeding Class II criteria, including; wastewater treatment plant treated, spadeable sludge	
Solid waste depot	Hazardous wastes	Chemicals and hydrocarbons (including oily rags, batteries and waste oil), asbestos, medical waste and fluorescent lighting tubes.	500

Site infrastructure	Waste types	Specifications	Volume (tonnes/annum)
	Recyclable waste	Paper, glass, plastic, scrap metal, wood, empty IBC (Intermediate bulk containers), fire extinguishers, HDPE liner, conveyor belts and waste rubber, empty ANFO bags.	5,500

Monitoring during time limited operations

8. The approval holder must monitor and record the total volumes of each waste type accepted at and removed from the premises according to the parameters in Table 4.

Table 4: Monitoring requirements

	Waste type	Units ^{1, 2}	Frequency
Landfill	Clean fill	tonnes	Continuous: each load accepted at and removed from the premises
	Inert waste type 1		
	Inert waste type 2		
	Putrescible wastes		
Solid waste depot	Hazardous wastes		
	Recyclable waste		

Note 1: Where weigh bridges are used to measure the units of waste, the weigh bridges must be calibrated in accordance with the manufacturer's specifications a minimum of once every annual period.

Note 2: Where volumes are estimated to measure the units of waste, the conversion of volume to weight must be done following the conversion factors in the *Local government guidance note: Converting volumes to tonnes*.

9. The works approval holder must monitor groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 5.

Table 5: Monitoring of ambient concentrations during time limited operations

Parameter	Monitoring location	Unit	Frequency	Sampling	Method
Standing water level	Three bores as depicted in Schedule 1, Figure 3	mbgl	Quarterly	In-field measurement	AS 5667.1 AS 5667.11
pH		pH unit			
Electrical Conductivity		µS/cm			
Total Recoverable Hydrocarbons		mg/L		Spot Sample	
Arsenic					
Cadmium					
Chromium					

Parameter	Monitoring location	Unit	Frequency	Sampling	Method
Copper					
Mercury					
Lead					
Nickel					
Zinc					
Nitrate					
Phosphate					

Compliance reporting

10. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
11. The works approval holder must ensure the report required by condition 10 includes the following:
 - (a) a summary outlining compliance with operational requirements in Table 2;
 - (b) timeframes for the completion of construction;
 - (c) volumes of waste landfilled;
 - (d) monitoring parameter results; and
 - (e) copies of laboratory results for monitoring parameters.

Record keeping

12. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
13. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:

- (a) the works conducted in accordance with condition 1;
- (b) any maintenance of infrastructure that is performed in the course of complying with condition 6;
- (c) results of the monitoring conducted in accordance with condition 9; and
- (d) complaints received under condition 12.

14. The books specified under condition 13 must:

- (a) be legible;
- (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
- (c) be retained by the works approval holder for the duration of the works approval; and
- (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table have the meanings defined.

Table 6: Definitions

Term	Definition
AEP	means Annual Exceedance Probability
AS 5667.1	means Australian Standard 5667.1 - Water quality – Sampling Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
AS 5667.11	means Australian Standard Water quality 5667.11– Sampling Part 11 – Guidance on sampling of groundwaters
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i> .
mbgl	metres below ground level
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
time limited	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that

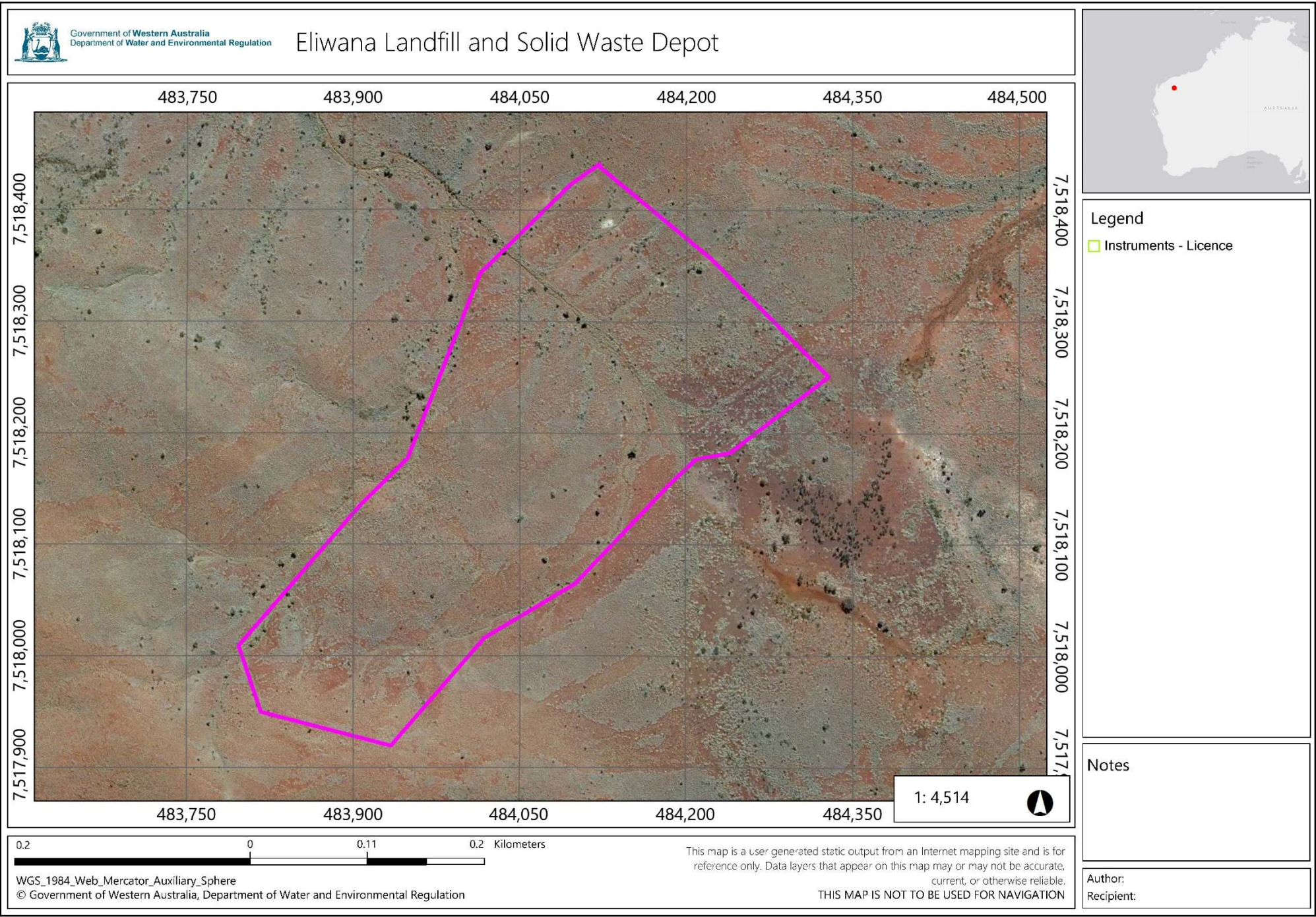
Term	Definition
operations	purpose, subject to the relevant conditions.
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below



Site overview map

An overview of the premises layout is shown in the map below

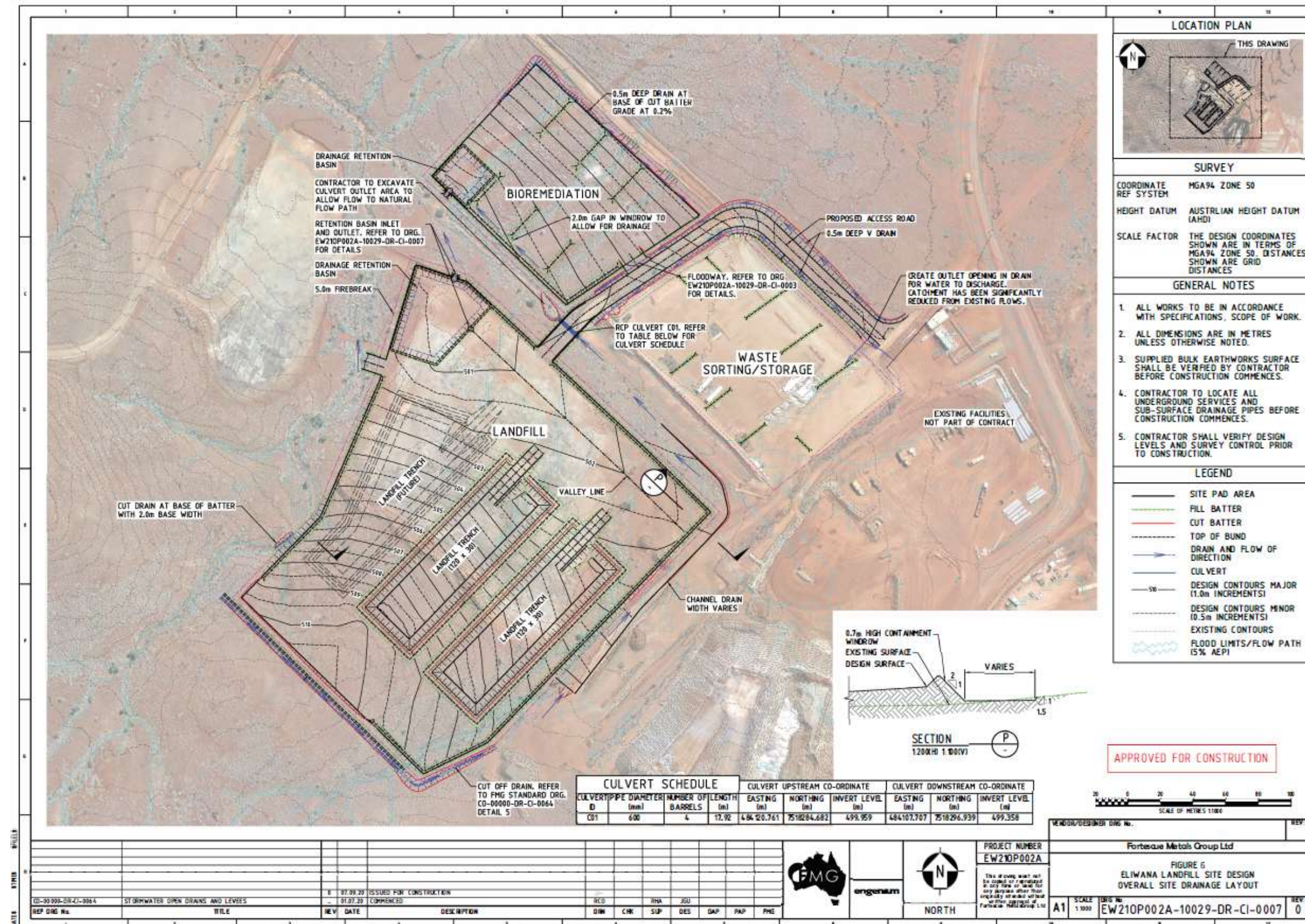


Figure 2: Overview of the premises layout

Landfill site design map

The landfill site design is shown in the map below

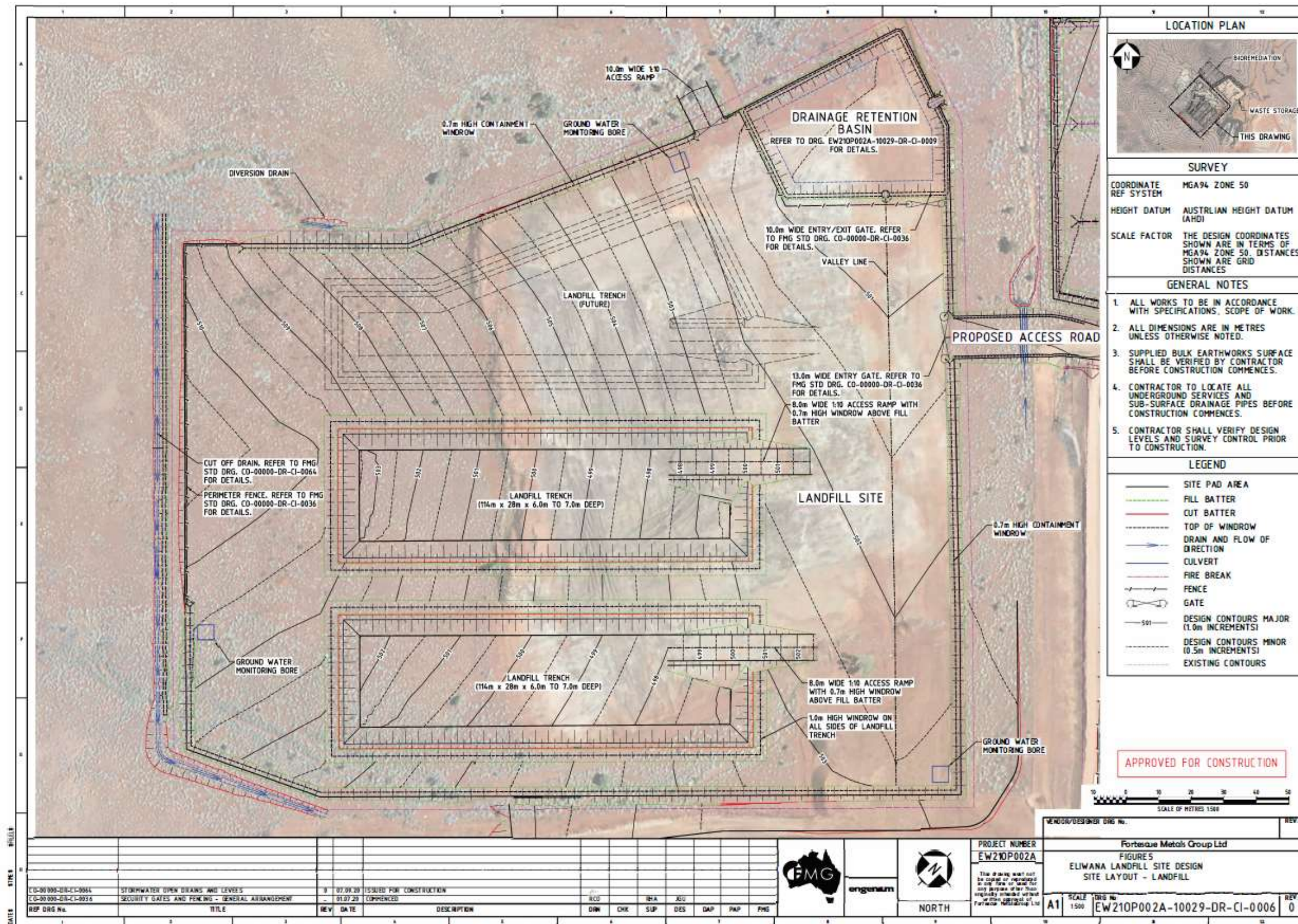


Figure 3: Map of the landfill site design

Solid waste depot site design map

The solid waste depot site design is shown in the map below.

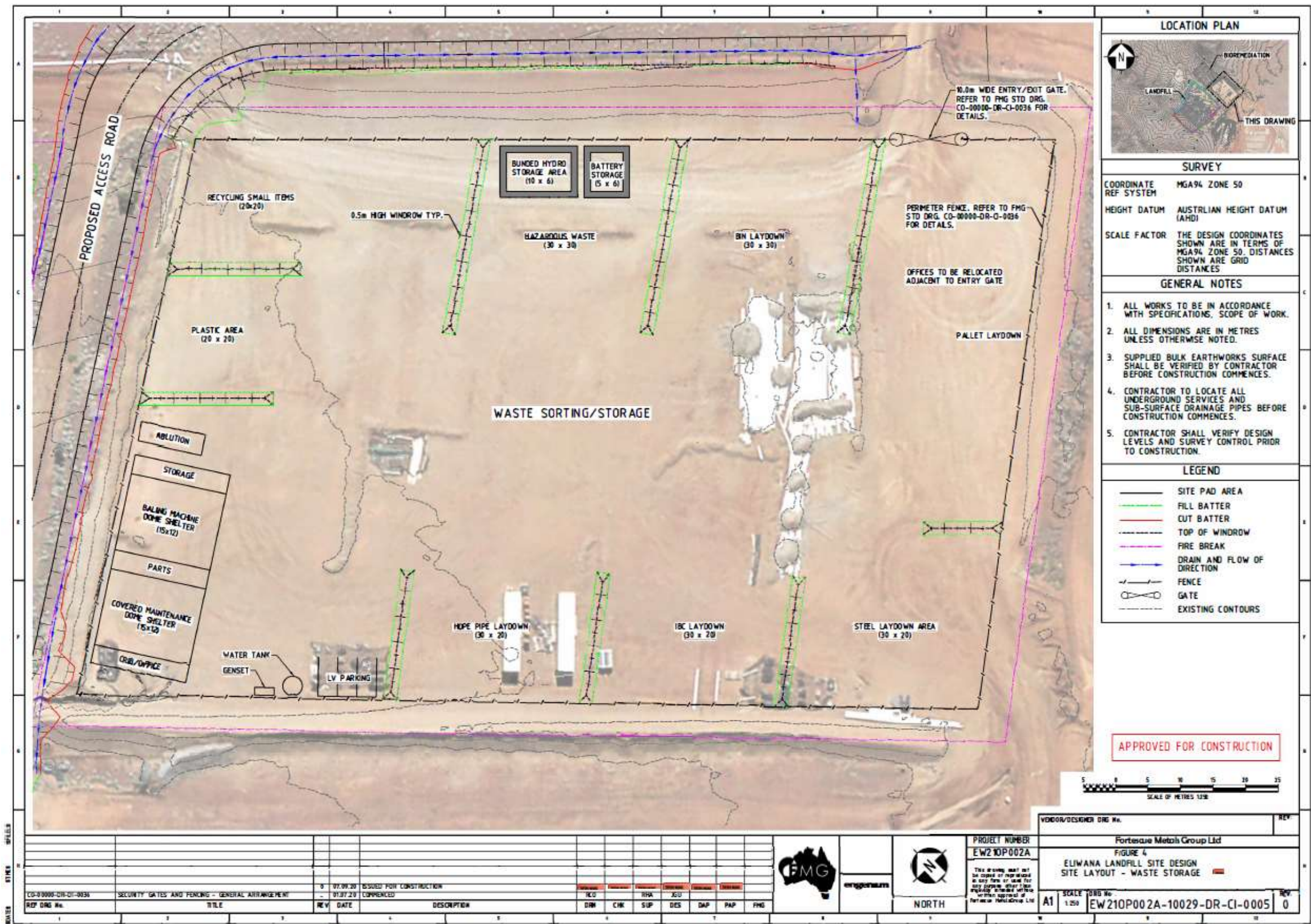


Figure 4: Map of the solid waste depot site design.

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 7.

Table 7: Premises boundary coordinates

Easting	Northing
484017.8	7518016
483933.7	7517920
483816.2	7517950
483796.4	7518010
483906.7	7518135
483948	7518177
484013.8	7518343
484095.6	7518423
484121.8	7518441
484121.0	7518439
484221.8	7518356
484328.2	7518251
484239.3	7518183
484209.1	7518177
484184.5	7518154
484100.4	7518066
484017.8	7518016