



# Works Approval

<b>Works approval number</b>	W6962/2024/1
<b>Works approval holder</b>	Mardie Minerals Pty Ltd
<b>ACN</b>	152 574 457
<b>Registered business address</b>	Level 2, 1 Altona Road WEST PERTH WA 6005
<b>DWER file number</b>	DER2024/000324
<b>Duration</b>	20/01/2025 to 19/01/2028
<b>Date of issue</b>	20/01/2025
<b>Premises details</b>	Mardie Project Partly within General Lease G08/101 MARDIE WA 6714 As defined by the coordinates in Schedule 2

<b>Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)</b>	<b>Assessed production capacity</b>
Category 58A: Bulk material loading or unloading – Premises on which salt is loaded onto or unloaded from vessels by an open materials loading system.	Salt: 5.3 million tonnes per annual period Sulphate of potash: 140,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 20 January 2025, by:

## **MANAGER, PROCESS INDUSTRIES**

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

## Works approval history

Date	Reference number	Summary of changes
20/01/2025	W6962/2024/1	Works approval granted.

## 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 and/or install the infrastructure and/or equipment;
  - (b) in accordance with the corresponding design and construction / installation requirements; and
  - (c) at the corresponding infrastructure location, as set out in Table 1.

**Table 1: Design and construction / installation requirements**

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Land based infrastructure	(a) Comprises of the following: <ol style="list-style-type: none"> <li>i. salt stockpile area comprising of a compacted pad of 300mm thickness;</li> <li>ii. two dome shelters for stockpiling sulphate of potash; and</li> <li>iii. Jetty Conveyor, Shiploader Conveyor, Salt Product Conveyor and SoP Conveyor each fitted with a primary and secondary belt scraper.</li> </ol> (b) Salt stockpile area shall be designed and constructed to drain to retention pond(s) to prevent discharge of stormwater from the salt stockpiles from the premises. (c) Wash down pits shall be installed down-gradient of the dome shelters that are sized sufficiently to capture any run-off from the sulphate of potash stockpiles.	Schedule 1: Figure 1, Figure 2 and Figure 3
2.	Transshipping vessels	(a) The loading arm transferring product to the Ocean Going Vessels shall be fitted with a loading sock to minimise dust emissions and product spillage; (b) Transshipping Vessels to have completely enclosed cargo holds; and (c) Outbound conveyor to Ocean Going Vessel to be fitted with a cover (for sections not within cargo hold) and a belt cleaning system.	

#### Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
  - (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 suitably qualified engineer that the infrastructure, 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 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 infrastructure.
5. The works approval holder may conduct time limited operations for the infrastructure specified in condition 1:
- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that infrastructure; or
- (b) until such time as a licence for that infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).

### Time limited operations requirements and emission limits

6. During time limited operations, the works approval holder must ensure that the site infrastructure and equipment 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 operational requirements**

Infrastructure and equipment	Operational requirement	Infrastructure location
Ocean Going Vessel and Transshipping Vessel	<p>(a) Loading of Ocean Going Vessels only to occur within the designated anchorage areas (as depicted in Figure 1 of Schedule 1 and described by the locations in Table 5 of Schedule 3);</p> <p>(b) Maximum of one Transshipping Vessel loading an anchored Ocean Going Vessel at any one time;</p> <p>(c) Maximum of one anchorage location utilised at any one time for loading activities;</p>	Schedule 1: Figure 1 Schedule 3: Table 5

Infrastructure and equipment	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>(d) Transshipping Vessels shall be securely berthed alongside the Ocean Going Vessel prior to loading activities commencing;</li> <li>(e) Loading of sulphate of potash onto Transshipping Vessels and Ocean Going Vessels will occur for a maximum of one day each calendar month; and</li> <li>(f) Maximum throughput at the premises does not exceed:                             <ul style="list-style-type: none"> <li>(i) 5.3 million tonnes of salt per annual period; and</li> <li>(ii) 140,000 tonnes of sulphate of potash per annual period.</li> </ul> </li> </ul>	
Transshipping Vessel (Unloading infrastructure)	<ul style="list-style-type: none"> <li>(a) Transshipping Vessel to have completely enclosed cargo hold;</li> <li>(b) Outbound conveyor to Ocean Going Vessel to be operated with a cover (for sections not within cargo hold) and a belt cleaning system; and</li> <li>(c) Transfer of product to the Ocean Going Vessels shall be via a loadout sock.</li> </ul>	
Conveyors and stockyard	<ul style="list-style-type: none"> <li>(a) Jetty Conveyor, Shiploader Conveyor, Salt Product Conveyor and SoP Conveyor shall be operated with a primary and secondary belt scraper;</li> <li>(b) Truck trailers must be covered while carrying sulphate of potash;</li> <li>(c) No more than 14,000 tonnes of sulphate of potash shall be stockpiled at any one time;</li> <li>(d) Sulphate of potash shall be stockpiled beneath the dome shelters indicated in Figure 1 of Schedule 1; and</li> <li>(e) Any sulphate of potash material remaining in the stockpile following the completion of loading into the Transshipping Vessels shall be stored beneath tarps to prevent windblown dust emissions until the next scheduled shipment.</li> </ul>	
Transshipping Vessel (wastewater discharge <sup>1</sup> )	<ul style="list-style-type: none"> <li>(a) Discharge limited to clean water wash out and desalination brine from onboard the transshipping vessel;</li> <li>(b) Only for the purposes of washing down storage ports for clean out between switches in product loading (approximately monthly);</li> <li>(c) Conducted in a manner that minimises inputs to the marine environment;</li> <li>(a) Only discharge desalination brine and clean out water:</li> </ul>	N/A

Infrastructure and equipment	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>(i) While vessel is moving (greater than 5 knots) to allow sufficient mixing and dilution;</li> <li>(ii) In deeper waters (more than 12 NM from the coast between the berthing area and Ocean Going Vessel anchorage area; and</li> <li>(iii) Does not include detergents or other cleaning agents or additives.</li> </ul>	

Note 1: Additional requirements for wastewater discharges from the transshipping vessel may be applicable under the MARPOL convention and requirements established by the Pilbara Ports Authority.

- 7. The works approval holder must take all possible measures to prevent spills of environmental hazardous materials including fuel, oil or other hydrocarbons to the marine environment.
- 8. The works approval holder must:
  - (a) take all possible measure to minimise spillage of salt and sulphate of potash products into the marine environment; and
  - (b) cease or restrict all unloading activities between the Transshipping Vessel and Ocean Going Vessel during extreme weather conditions.

**Compliance reporting – time limited operations**

- 9. The works approval holder must submit to the CEO a report on the time limited operations within 30 days of the completion date of time limited operations or 90 days before the expiration of the works approval, whichever is sooner.
- 10. The works approval holder must ensure that the report required by condition 9 includes the following:
  - (a) a summary of time limited operations, including timeframes and the amount of material (salt and sulphate of potash) loaded each month;
  - (b) a review of the operational performance and compliance against the conditions of the works approval;
  - (c) where the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures;
  - (d) a summary of any complaints recorded in accordance with condition 11, including any response action taken.

**Records and reporting (general)**

- 11. 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.
- 12.** 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) the amount of each product that loaded each month; and
  - (d) complaints received under condition 11.
- 13.** The books specified under condition 12 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 3 have the meanings defined.

**Table 3: Definitions**

Term	Definition
annual period	a 12 month period commencing from 1 January until 31 December of that year.
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 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
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 and/or equipment has been constructed and/or installed in accordance with the works approval.
Designated anchorage areas	means the areas depicted in Schedule 1 (Figure 1) being the area within a 1km radius from the coordinates listed in Schedule 3.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
extreme weather conditions	means weather conditions where the wind speed averages 25 knots or greater over three consecutive 10 minutes periods.
Ocean Going Vessel	means the capesize vessel that receives cargo from the Transhipping Vessel to transport overseas.
premises	the premises to which this licence applies, as specified at the front of this licence 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 operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.



Term	Definition
Transshipping Vessel	means the vessel that transports cargo from the port to the Ocean Going Vessel.
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 (Figure 1).

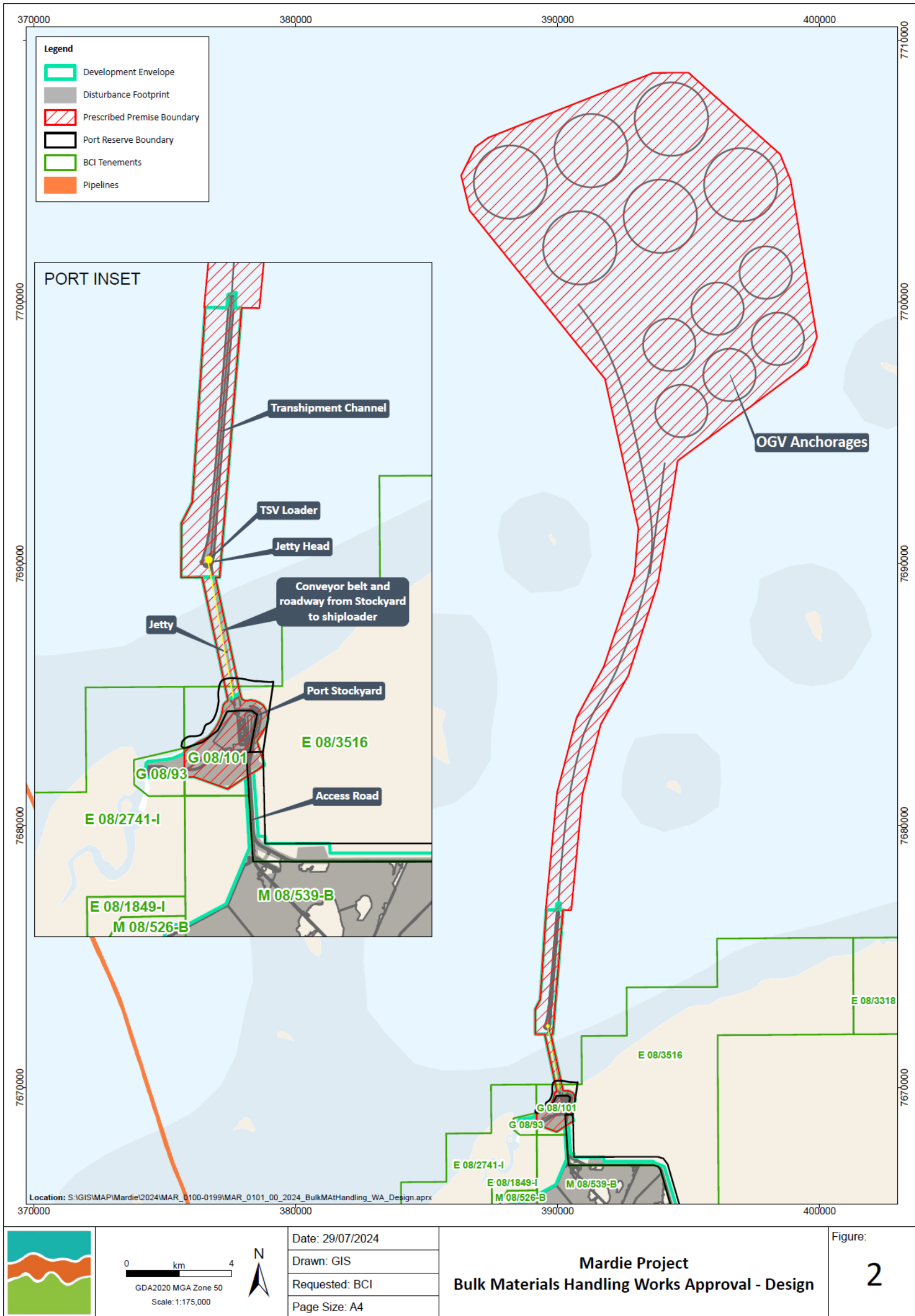


Figure 1: Map of the boundary of the prescribed premises

### Site layout map

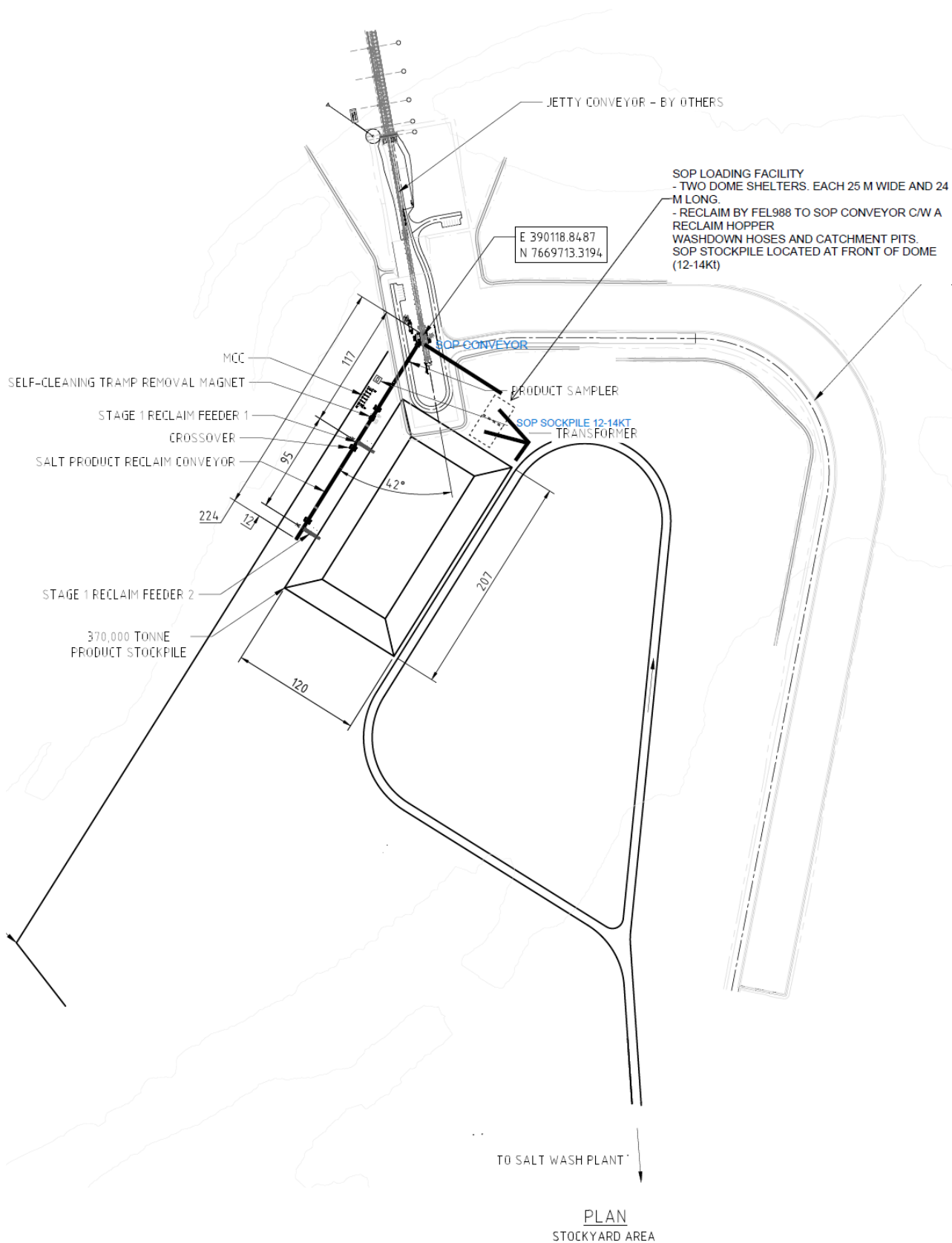


Figure 2: Proposed layout of the stockyard

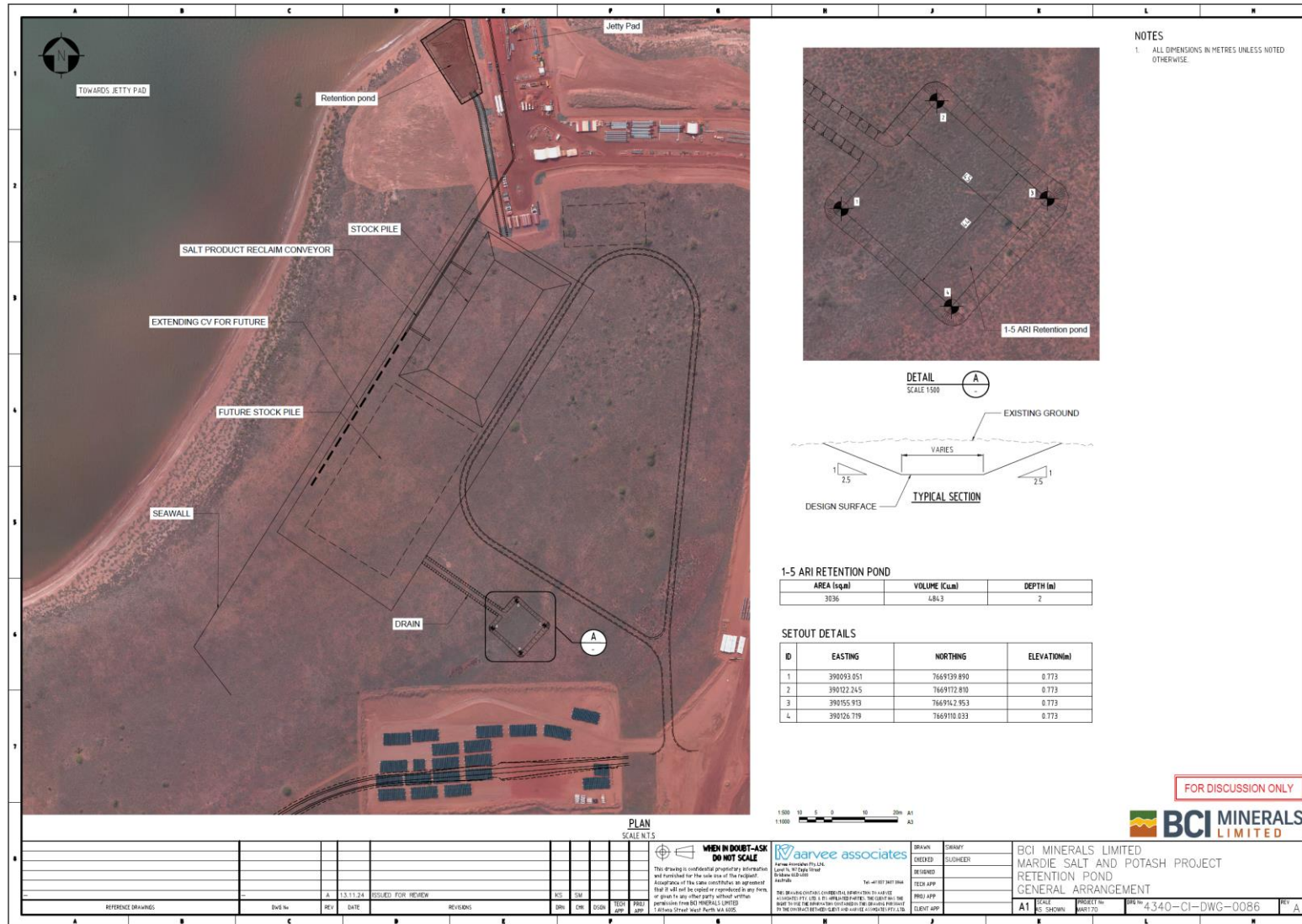


Figure 3: Stormwater plan.

## Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 4.

**Table 4: Premises boundary coordinates (GDA2020, Zone 50)**

	<b>Easting</b>	<b>Northing</b>
1.	390945.1	7681182
2.	390516.1	7676770
3.	390203.4	7676775
4.	389816.6	7672033
5.	389741.4	7672033
6.	390160.3	7670071
7.	390177.9	7669988
8.	390203.9	7669885
9.	390267.2	7669856
10.	390372.4	7669867
11.	390446.9	7669855
12.	390514.5	7669823
13.	390585	7669776
14.	390631.8	7669691
15.	390672.1	7669544
16.	390632.3	7669407
17.	390473.1	7669146
18.	390583.9	7668806
19.	390586.1	7668709
20.	390412.8	7668599
21.	390356.4	7668564
22.	390319.6	7668542
23.	390310	7668536
24.	390268	7668510
25.	389961.2	7668306
26.	389365.5	7668519
27.	389250.4	7668518
28.	389198.8	7668517

	<b>Easting</b>	<b>Northing</b>
29.	389195.9	7668952
30.	389267.6	7669025
31.	389343	7669071
32.	389351	7669075
33.	389486.7	7669157
34.	389587.8	7669201
35.	389634.5	7669240
36.	389678	7669292
37.	389727.7	7669357
38.	389775.3	7669433
39.	389796.9	7669477
40.	389854.4	7669630
41.	389881.6	7669779
42.	389903.3	7669814
43.	389941.6	7669846
44.	389965.6	7669866
45.	389961.4	7669880
46.	389508	7672033
47.	389141	7672032
48.	389143.6	7672982
49.	389333.2	7673356
50.	389563	7676783
51.	389541	7676783
52.	389975.6	7681253
53.	390723.4	7684122
54.	391757.3	7686069
55.	392934.2	7689567
56.	393083.7	7691350

	<b>Easting</b>	<b>Northing</b>
57.	391801.8	7697064
58.	386641.1	7703485
59.	386315.7	7704829
60.	386853.9	7705911
61.	387348.6	7706273
62.	393647.1	7708749
63.	394995.3	7708757
64.	398493.4	7705636
65.	398887.3	7704651
66.	398887.3	7704651
67.	399899.2	7698647
68.	399517.6	7697603
69.	394579.3	7693930
70.	393831.6	7689295
71.	392700.6	7685740
72.	391644	7683864
73.	390945.1	7681182

## Schedule 3: Anchorage locations

The central coordinates of the anchorage locations are listed in Table 5.

**Table 5: Central coordinates of anchorage locations (GDA2020 MGA Zone 50).**

	Longitude	Latitude
1.	115.988128	-20.834549
2.	116.005905	-20.822201
3.	115.983884	-20.811662
4.	116.023679	-20.809851
5.	116.001659	-20.799314
6.	116.01943	-20.786965
7.	115.951303	-20.778007
8.	115.980893	-20.76731
9.	116.010478	-20.756608
10.	115.926037	-20.755199
11.	115.955623	-20.744506
12.	115.985206	-20.733808