



<b>Licence number</b>	L9221/2019/1
<b>Licence holder</b>	Fortescue Ltd
<b>ACN</b>	002 594 872
<b>Registered business address</b>	Ground Floor, 256 St Georges Terrace PERTH WA 6000
<b>DWER file number</b>	INS-0002103
<b>Duration</b>	04/12/2019 to 12/03/2039
<b>Date of Issue</b>	03/12/2019
<b>Date of amendment</b>	02/07/2025
<b>Premises details</b>	Eliwana Iron Ore Mine Mining Tenements M47/1509, M47/1522, and part of tenements M47/1523, M47/1524, M47/1525, M47/1526, M47/1537, M47/1601, L47/807 and L47/1075 HAMERSLEY RANGE WA 6716

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations</i> 1987)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	35,000,000 tonnes per annual period
Category 6: Mine dewatering	Volume as specified under Ministerial Statement 1109
Category 12: Screening etc. of material	1,000,000 tonnes per annual period
Category 52: Electric power generation	33.5 MW
Category 54: Sewage facility	472.5 m <sup>3</sup> /day of effluent, plus 251.5 m <sup>3</sup> /day of waste Reverse Osmosis brine
Category 57: Used tyre storage (general)	5,000 tyres
Category 62: Solid waste depot	6,000 tonnes per annual period
Category 63: Class I inert landfill site	7,000 tonnes per annual period
Category 64: Class II putrescible landfill site	10,000 tonnes per annual period
Category 73: Bulk storage of chemicals etc.	7,500 m <sup>3</sup> in aggregate
Category 77: Concrete batching or cement products manufacturing	18,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 02 July 2025 by:

**MANAGER, RESOURCE INDUSTRIES**

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

## Licence history

Date	Reference number	Summary of changes
3/12/2019	L9221/2019/1	Licence granted
25/05/2020	L9221/2019/1	Amended to add Category 54 for operation of the Eliwana Mine WWTP
17/03/2021	L9221/2019/1	Amended to add: <ul style="list-style-type: none"> <li>Category 52 electric power generation from W6294/2019/1</li> <li>Category 57 used tyre storage</li> <li>Category 73 Bulk storage of chemicals etc. from W6294/2019/1 (not including the Fuel Storage Facility)</li> <li>Category 12 extension to the prescribed premises boundary consistent with approved Ministerial Statement (MS) 1109 mine development envelope</li> </ul>
31/01/2022	L9221/2019/1	Amended to add: <ul style="list-style-type: none"> <li>New Category 5 processing or beneficiation of metallic or non-metallic ore constructed under W6294/2019/1</li> <li>New Category 6 mine dewatering constructed under W6294/2019/1. Dewatering discharge up to 4 GL/year to surface and managed aquifer recharge. Note regulated under MS 1109 (up to 4 GL/year)</li> <li>Include an additional three diesel generators at the camp power station to provide an additional 3 MW of power</li> <li>Category 57 used tyre storage. Change in location for the storage and burial of used tyres. No change in number of used tyres stored or buried</li> <li>Category 73 bulk storage of chemicals. Increase capacity from a current combined volume of 1,800 m<sup>3</sup> to a new combined volume of 4,500 m<sup>3</sup> as approved through W6294/2019/1</li> <li>New oily water separator discharge outlet</li> </ul>
30/03/2023	L9221/2019/1	Amend to include: <ul style="list-style-type: none"> <li>New Categories 62 and 64 assessed under W6478/2020/1</li> <li>Increase used tyre storage at the Premises prior to burial and include additional burial locations (disused mined pits)</li> <li>Administrative changes for the OWS discharge points</li> <li>Administrative changes to upgrade maps in Schedule 1</li> <li>Include Category 63 for the dispose of concrete, rubber and untreated timber waste within mined voids and waste rock dumps</li> <li>Increase the volume of bulk storage of chemicals (category 73) from 4,500 m<sup>3</sup> to 6,500 m<sup>3</sup></li> <li>Extension of the approved Shooting Star Managed Aquifer Recharge (MAR) borefield and injection network to include the new Apollo injection borefield (consisting of an additional 6 new injection bores and ~5 km of injection pipeline) with an additional ~15 km of pipeline required for Flying Fish dewatering to be connected to Apollo. Note the MAR program is regulated under MS 1109.</li> </ul>

Date	Reference number	Summary of changes
05/02/2024	L9221/2019/1	<p>Licence amendment to include the following:</p> <ul style="list-style-type: none"> <li>• Category 77 Concrete batching or cement products manufacturing</li> <li>• Mining tenement M47/1601 to the prescribed premises boundary</li> <li>• Approved Apollo MAR borefield to Schedule 1 Map, namely Figure 1</li> </ul>
02/07/2025	L9221/2019/1	<p>Licence amendment to:</p> <ul style="list-style-type: none"> <li>• Include the infrastructure constructed under W6779/2023/1 and W6664/2022/1</li> <li>• Include the infrastructure not yet constructed under W6779/2023/1</li> <li>• Increase the design capacity of Category 52 for the power generation areas constructed under W6779/2023/1</li> <li>• Increase the design capacity of Category 54 for the inclusion of the Eliwana Flying Fish Camp WWTP (constructed under W6664/2022/1) and the increase to the Kartajirri Camp WWTP</li> <li>• Increase the design capacity of Category 73 for the inclusion of the infrastructure constructed or yet to be constructed under W6779/2023/1</li> <li>• Expansion of the prescribed premises boundary</li> </ul>

## 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

#### Construction

1. The licence 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
<b>Concrete Batch Plant (CBP)</b>		
Eliwana Mobile CBP	<ul style="list-style-type: none"> <li>Maximum production capacity of 50 m<sup>3</sup>/hr</li> <li>Mobile mounted batch plant consisting of:               <ul style="list-style-type: none"> <li>Ground Granulated Blast-Furnace Slag silo (if required)</li> <li>A cement weigh hopper</li> <li>Twin aggregate weigh bins (if required)</li> </ul> </li> </ul>	At the location shown in Schedule 1, Figure 2 as Concrete Batching Plant
Aggregate storage bins/bays/stockpiles	<ul style="list-style-type: none"> <li>Each of the aggregate storage bins/bays/stockpiles must be fitted with a dedicated spray water system</li> <li>The spray water system for each bin/bay must consist of multiple sprinklers, positioned in each bay to ensure coverage across the entire storage area</li> </ul>	
Wedge pit	<ul style="list-style-type: none"> <li>Wedge pit constructed of concrete</li> <li>Wedge pit designed to avoid any overflows</li> </ul>	
Wash out pit	<ul style="list-style-type: none"> <li>Wash out pit constructed of an earthen bund and plastic lined</li> <li>Wash out pit designed to avoid any overflows</li> </ul>	
Diversion structures (bunds or channels)	Diversion structures (bunds or channels) must be installed to separate and divert clean surface water flows around the CBP work areas and stockpiles	Not shown
<b>Bulk fuel and chemical storage</b>		
Bulk fuel and chemical storage areas to store 1,000 m <sup>3</sup> (in aggregate)	All chemicals and hydrocarbons stored in tanks must meet the following design/construction requirements: <ul style="list-style-type: none"> <li>All tanks shall be double-walled</li> <li>The spacing between adjacent tanks shall</li> </ul>	At the locations shown in Schedule 1, Figures 3 and 4

## Department of Water and Environmental Regulation

Infrastructure	Design and construction / installation requirements	Infrastructure location
	<p>be at least 600 mm</p> <ul style="list-style-type: none"> <li>• Shall be protected from damage caused by vehicle or equipment impact. This can include windrows and/or bollards</li> <li>• Shall have a method of determining the level of its contents</li> </ul> <p>All bunds must meet the following requirements:</p> <ul style="list-style-type: none"> <li>• Must have a net capacity of at least 110% of the capacity of the largest vessel and 25% of the total capacity of all vessels stored within the bund</li> <li>• If two or more vessels operate as a single unit, the capacity of all such vessels shall be utilised when calculating the necessary compound capacity</li> <li>• Must be lined with a HDPE liner</li> <li>• Must be sufficiently designed to allow practical recovery of any spillage and/or any collected and potentially contaminated rainfall</li> <li>• Must be capable of directing hydrocarbon spillage to the oily water separation facility for disposal</li> </ul>	
<b>Non-process infrastructure (NPI) facility</b>		
Maintenance and refuelling areas including washdown bays and oily water separation (OWS) facility	<ul style="list-style-type: none"> <li>• Refuelling area to be concreted with spill containment</li> <li>• Capable of directing fuel spillage or accumulated storm water to the oily water separation facility for treatment and disposal</li> <li>• Each maintenance workshop and washdown bay includes a sump sized to accommodate a daily capacity of 1,440 m<sup>3</sup> of washdown water and capable of being redirected to the wash down water collection pond</li> </ul>	<p>At the location shown in Schedule 1, Figure 2</p> <p>As shown in Schedule 1, Figure 3</p>
Power generation	<ul style="list-style-type: none"> <li>• Installation of two duty generators including 2 x 350 kVA and one standby generator 350 kVA</li> </ul>	At the location shown in Schedule 1, Figure 3

2. The licence holder must operate the infrastructure / equipment listed in Table 1 in accordance with the condition 3 of this Licence, following submission of the compliance document required under condition 13.

## Department of Water and Environmental Regulation

## Operation

3. The licence holder must ensure that the site 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**

Site infrastructure	Operational requirement	Infrastructure location
<b>Ore Processing Facility and Train load out</b>		
Ore Processing Facility and Train load out	<ul style="list-style-type: none"> <li>Maintain and operate dust extractor fans and dust collectors at the tertiary crushers</li> <li>Ensure all screens with exposed decks have the dust covers adequately maintained</li> <li>Ensure all processing equipment feed and discharge points are adequately enclosed within covers/chutes</li> <li>Ensure all conveyor loading zones and discharge points covers or head chutes have maintained dust curtains</li> <li>Maintain and operate water sprays fitted at the following transfer points: <ul style="list-style-type: none"> <li>ROM feed bin</li> <li>Apron feeder to primary crusher</li> <li>Primary crusher to primary crusher discharge feed conveyors</li> <li>Primary crusher discharge feed conveyors to scalping screen feed conveyors 2</li> <li>Tertiary crusher to screen feed conveyor</li> <li>Product screen undersize to product conveyor</li> <li>Overland conveyor to stockpiling conveyor</li> <li>Stacker conveyor transfer points</li> <li>Train loadout conveyor and bin</li> </ul> </li> <li>Maintain and operate water cannons at ore stockpiles</li> <li>Processing of no more than 35,000,000 tonnes per annum</li> </ul>	As shown in Schedule 1, Figures 2 and 5 as OPF and TLO and Figure 6
Windrows or bunds	Maintained to direct stormwater run-off from the catchment away from the operational areas	As shown in Schedule 1, Figure 6
Sumps, stormwater drain systems and sediment basins	Maintained to collect storm water and wash water within operational areas of the premises boundary, ensuring sediment does not accumulate to affect operation	As shown in Schedule 1, Figure 1
<b>Mobile crushing and screening facility</b>		
Mobile crushing and screening facility	Production capacity of 1,000,000 tonnes per annual period	Within the prescribed premises boundary as shown in Schedule 1, Figure 1

## Department of Water and Environmental Regulation

Site infrastructure	Operational requirement	Infrastructure location
<b>Power generation</b>		
Power station and Power generation areas including: <ul style="list-style-type: none"> <li>• Kartajirri Camp power station generators</li> <li>• Eliwana Flying Fish Camp power station generators</li> <li>• ART workshop power generators</li> <li>• NPI power generators</li> </ul>	<ul style="list-style-type: none"> <li>• Design capacity of 33.5 MW</li> <li>• Areas equipped with spill kits</li> <li>• Generators maintained and operated in accordance with manufacturer's specifications</li> </ul>	At the locations shown in Schedule 1, Figures 2, 3, 4, 9, 10 and 11
<b>WWTPs</b>		
Kartajirri Camp WWTP and Irrigation Field	<ul style="list-style-type: none"> <li>• Maintain the infrastructure in good working order to prevent and manage spills</li> <li>• Maintained and operated in accordance with manufacturer's specifications</li> <li>• Able to treat up to 385 m<sup>3</sup>/day<sup>1</sup> of raw sewage</li> <li>• Must be able to treat wastewater to the following output standards:               <ul style="list-style-type: none"> <li>○ 5-day BOD &lt;20 mg/L</li> <li>○ pH &gt;6.5 – &lt;8.5 pH units</li> <li>○ TSS &lt;30 mg/L</li> <li>○ TDS &lt;1,000 mg/L</li> <li>○ Total Nitrogen &lt;30 mg/L</li> <li>○ Total Phosphorus &lt;7.5 mg/L</li> <li>○ <i>E. coli</i> &lt;1,000 cfu/100 mL</li> <li>○ Residual free chlorine &gt;0.5 – &lt;2.0 mg/L</li> </ul> </li> <li>• RO Brine Tank to cater for 225 m<sup>3</sup>/day<sup>1</sup> of RO brine for mixing with treated effluent before co-disposal to the Irrigation Field</li> <li>• Disposal via irrigation must not exceed 610 m<sup>3</sup>/day<sup>1</sup> of blended effluent</li> </ul> <p>Note 1: Averaged across a monthly period</p>	At the location shown in Schedule 1, Figure 7
Eliwana Flying Fish Camp WWTP and Spray Field	<ul style="list-style-type: none"> <li>• Maintained and operated in accordance with manufacturer's specifications</li> <li>• Able to treat up to 87.5 m<sup>3</sup>/day<sup>1</sup> of raw sewage</li> <li>• Must be able to treat wastewater to the following output standards:               <ul style="list-style-type: none"> <li>○ 5-day BOD &lt;20 mg/L</li> </ul> </li> </ul>	At the location shown in Schedule 1, Figure 8



## Department of Water and Environmental Regulation

Site infrastructure	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>○ pH 6.5 – 8.5</li> <li>○ TSS &lt;30 mg/L</li> <li>○ TDS &lt;1,500 mg/L</li> <li>○ Total Nitrogen &lt;30 mg/L</li> <li>○ Total Phosphorus &lt;8 mg/L</li> <li>○ <i>E. coli</i> &lt;1,000 cfu/100 mL</li> <li>○ Residual free chlorine 0.2 – 2.0 mg/L</li> <li>• Volumetric flow meters maintained on the RO brine holding tank outlet, WWTP inlet and outlet to the Spray Field</li> <li>• RO Brine Tank to cater for 26.25 m<sup>3</sup>/day<sup>1</sup> of RO brine for mixing with treated effluent before co-disposal to the Spray Field</li> <li>• Disposal via irrigation must not exceed 114 m<sup>3</sup>/day<sup>1</sup> of blended effluent</li> </ul> <p>Note 1: Averaged across a monthly period</p>	
Overflow lagoon	<ul style="list-style-type: none"> <li>• HDPE liner maintained</li> <li>• Operational freeboard of at least 0.5 m must be maintained</li> </ul>	At the location shown in Schedule 1, Figure 8
<b>Used tyres storage and disposal</b>		
Used tyres (Inert Waste Type 2) storage and disposal areas	<ul style="list-style-type: none"> <li>• Used tyres buried within waste rock dumps and mined pit voids meeting the following criteria: <ul style="list-style-type: none"> <li>○ In batches separated from each other by at least 100 mm of soil and each batch consisting of not more than 1,000 whole tyres; and</li> <li>○ Buried under a final soil cover of not less than 500 mm</li> </ul> </li> <li>• Stormwater drainage system to segregate internally captured stormwater with external surface water runoff</li> <li>• Maximum number of used tyres stored onsite at any one time awaiting burial within waste rock dumps and mined pit voids must not exceed 5,000</li> <li>• Used tyre stacks must not exceed 1,000 used tyres per stack</li> <li>• Each used tyre stack must not exceed 5 m in height</li> <li>• Used tyre stacks must be positioned in windrows with at least a 3 m separating distance between each windrow to allow access by fire-fighting equipment</li> <li>• Maximum number of used tyres buried annually within waste rock dumps and mined pit voids shall not exceed 5,000</li> </ul>	At the locations shown in Schedule 1, Figure 12
<b>Solid waste depot</b>		
Solid waste depot	<ul style="list-style-type: none"> <li>• A combined total of 6,000 tonnes per annum of hazardous and/or recyclable wastes can be stored or sorted, pending final disposal or re-use</li> <li>• Hazardous waste is to be stored in self bunded</li> </ul>	At the location shown in Schedule 1, Figure 13 as

## Department of Water and Environmental Regulation

Site infrastructure	Operational requirement	Infrastructure location
	containers and/or covered bins <ul style="list-style-type: none"> <li>Asbestos is to be stored in asbestos waste bags inside covered bins</li> <li>Maintain stock proof perimeter fence</li> <li>A Fire and Emergency Management Plan must be implemented, that sets out:               <ul style="list-style-type: none"> <li>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</li> <li>the firefighting equipment and fire response capabilities and responsibilities</li> <li>waste handling, sorting and storage requirements for fire prevention and control</li> <li>how, in the event of a fire occurring within the approved activities, impacts to the environment and human health will be mitigated</li> </ul> </li> </ul>	Waste Transfer Station
<b>Inert and putrescible landfills</b>		
Class I Inert landfill	<ul style="list-style-type: none"> <li>The following wastes can be buried within waste rock dumps and mined pit voids:               <ul style="list-style-type: none"> <li>Inert Waste Type 1 - Concrete</li> <li>Inert Waste Type 2 - Rubber</li> <li>Putrescible waste - Untreated timber only</li> </ul> </li> <li>Maximum volume of inert waste buried annually shall not exceed 7,000 tonnes</li> <li>Waste shall be buried under a final soil cover of not less than 500 mm</li> </ul>	At the locations shown in Schedule 1, Figure 12
Class II landfill	<ul style="list-style-type: none"> <li>The following wastes can be disposed of to the landfill trenches:               <ul style="list-style-type: none"> <li>Clean fill</li> <li>Inert Waste Type 1</li> <li>Putrescible waste</li> <li>Waste meeting the acceptance criteria for Class II landfill cells</li> </ul> </li> <li>Maximum volume of Class II waste buried annually shall not exceed 10,000 tonnes</li> <li>Maintain stock proof perimeter fence</li> <li>Tipping face must be less than 30 m in length and 2 m above ground level in height</li> <li>Waste must be covered at least weekly with dense, inert and incombustible material</li> <li>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</li> <li>No waste is to be placed within:</li> </ul>	At the location shown in Schedule 1, Figures 13 and 14

## Department of Water and Environmental Regulation

Site infrastructure	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>○ 35 m from the prescribed premises boundary</li> <li>○ 100 m from any surface water body</li> <li>○ 3 m of the highest level of the water table</li> <li>• Stormwater must be diverted away from the landfill trenches</li> <li>• Stormwater that has come into contact with waste is to be diverted into a sump</li> <li>• No burning of waste is to occur</li> </ul>	
<b>Hydrocarbons and chemicals</b>		
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> <li>• Mobile bulk fuel storage located within the Premises boundary</li> <li>• Maintain concrete hard stands, bunding and sumps to contain spills</li> <li>• Empty sumps as required and before rain</li> <li>• Maintain stormwater diversion drains</li> <li>• No more than 7,500 m<sup>3</sup> in aggregate</li> <li>• Weekly inspections of chemical and hydrocarbon storage areas</li> </ul>	As shown in Schedule 1, Figures 1, 3, 4, 5, 6, 9 and 11
Maintenance facility / refuelling areas including washdown bays and OWS facility	<p><u>ART workshop</u></p> <ul style="list-style-type: none"> <li>• Washdown water must be directed to the sump and hydrocyclone OWS</li> <li>• Captured waste hydrocarbons must be removed from the site via a licensed controlled waste carrier</li> </ul> <p><u>NPI facility</u></p> <ul style="list-style-type: none"> <li>• Washdown water must be directed from the sump and then redirected to the wash down water collection pond and OWS facility</li> </ul>	At the locations shown in Schedule 1, Figures 3 and 4
OWS	<ul style="list-style-type: none"> <li>• Maintained and operated so Total Recoverable Hydrocarbon (TRH) levels in discharge water is less than 15 mg/L at all times as per Table 4</li> </ul>	As shown in Schedule 1, Figures 2, 3, 4 and 5
<b>CBPs</b>		
Eliwana CBP and Flying Fish CBP	<ul style="list-style-type: none"> <li>• Operated and maintained in accordance with manufacturer's specifications</li> <li>• Maintain and operate spray water system at each of the aggregate storage bins/bays/ stockpiles</li> <li>• Diversion structures (bunds or channels) maintained to separate and divert clean surface water flows around the CBP work areas and stockpiles</li> <li>• All stormwater drainage, washdown water and spillages within the CBP's work areas collected to designated collection points and sedimentation traps</li> <li>• Combined production capacity of no more than 18,000 tonnes per annual period</li> </ul>	At the locations shown in Schedule 1, Figure 2 as Concrete Batching Plant

## Emissions and discharges

4. The licence holder must ensure that the emissions specified in Table 3 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

**Table 3: Authorised discharge points**

Emissions	Discharge point	Discharge point location
Surplus mine dewatering water	Apollo MAR and Shooting Star MAR borefields	As shown in Schedule 1, Figure 2 as Bore Locations
Treated wastewater blended with waste RO brine	Kartajirri Camp WWTP - 8.75 hectare Irrigation Field	As shown in Schedule 1, Figure 7
	Eliwana Flying Fish Camp WWTP - 3 hectare Spray Field	As shown in Schedule 1, Figure 8
Fuel burning exhaust	<p><u>Power station generators:</u></p> <ul style="list-style-type: none"> <li>GN001</li> <li>GN002</li> <li>GN003</li> <li>GN004</li> <li>GN005</li> <li>GN006</li> <li>GN007</li> <li>GN008</li> <li>GN009</li> <li>GN010</li> <li>GN011</li> <li>GN012</li> <li>GN013</li> <li>GN014</li> <li>GN015</li> <li>GN29</li> </ul> <p><u>Kartajirri Camp power station generators:</u></p> <ul style="list-style-type: none"> <li>GN091</li> <li>GN092</li> <li>GN093</li> </ul> <p><u>Eliwana Flying Fish Camp power station generators:</u></p> <ul style="list-style-type: none"> <li>Three gensets, plus one spare genset</li> </ul> <p><u>NPI Facility:</u></p> <ul style="list-style-type: none"> <li>Two duty generators and one standby generator</li> </ul> <p><u>ART workshop:</u></p> <ul style="list-style-type: none"> <li>One duty generator and one standby generator</li> </ul>	At the locations shown in Schedule 1, Figures 2, 3, 4, 9 and 11

## Department of Water and Environmental Regulation

Emissions	Discharge point	Discharge point location
Treated OWS wastewater	OWS Contingency Discharge Point (during heavy rainfall events, maintenance periods, and inflow surges)	At the location shown in Schedule 1, Figure 5
	OWS Dust Suppression Outlet	Within the prescribed premises boundary as shown in Schedule 1, Figure 1
	Post treatment wastewater from NPI facility OWS reused for dust suppression	
	Post treatment wastewater from ART workshop washdown OWS reused for dust suppression	

## Emission trigger value

5. The licence holder must notify the CEO within 30 days of an exceedance where emissions:
- (a) from the discharge point listed in Table 4;
  - (b) for the corresponding parameter;
  - (c) exceed the corresponding trigger value,
- when monitored in accordance with condition 8
- and outline the management measures to be implemented with timeframes.

Table 4: Emission trigger values

Discharge Point	Parameter	Trigger Value
Oily water discharge locations as shown in Schedule 1, Figures 2 and 5	Total Recoverable Hydrocarbons (TRH)	15 mg/L

## Emission limits

6. The licence holder must ensure that blended effluent discharged via irrigation does not exceed the parameter limits specified in Table 5.

Table 5: Irrigation emission limits

Discharge Point	Parameter	Discharge limit	Units
Kartajirri Camp WWTP Irrigation Field	Total Nitrogen	480	kg/ha/year
Eliwana Flying Fish Camp WWTP Sprayfield	Total Phosphorus	120	kg/ha/year
Kartajirri Camp WWTP Irrigation Field	TDS	1,000	mg/L
Eliwana Flying Fish Camp WWTP Sprayfield	TDS	1,500	mg/L

## Department of Water and Environmental Regulation

7. The licence holder must ensure that when irrigating via the WWTPs sprayfields that:
- (a) raw RO brine is not discharged undiluted;
  - (b) treated wastewater from the WWTPs is blended with waste RO brine for irrigation;
  - (c) no irrigation generated runoff or discharge occurs beyond the boundary of the WWTP sprayfields;
  - (d) irrigation does not occur on land that is waterlogged;
  - (e) wastewater is evenly distributed over the irrigation areas, and that no ponding or pooling occurs;
  - (f) no soil erosion occurs; and
  - (g) irrigation does not occur over leach drains or areas receiving stormwater drainage.

## Monitoring

8. The licence holder must monitor emissions from the WWTPs:
- (a) from each discharge point;
  - (b) at the corresponding monitoring location(s);
  - (c) for the corresponding parameter;
  - (d) at the corresponding frequency;
  - (e) for the corresponding averaging period;
  - (f) in the corresponding unit; and
  - (g) using the corresponding method,
- as set out in Table 6.

**Table 6: Emissions and discharge monitoring**

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
Kartajirri Camp WWTP Irrigation Field as depicted in Schedule 1, Figure 7 and Eliwana Flying Fish Camp WWTP Spray Field as	Pipeline leading to the WWTP sprayfield	Flow volume to sprayfield	Continuous	24 hours	kL/day	-
		5-day BOD	Quarterly	Spot sample	mg/L	AS/NZS 5667.1 AS/NZS 5667.10
		TSS			mg/L	
		Total Nitrogen			mg/L	
		Total Phosphorus			mg/L	
		<i>E. coli</i>			cfu/100mL	
		Residual Free Chlorine <sup>2</sup>			mg/L	
		pH <sup>1</sup>			pH units	

## Department of Water and Environmental Regulation

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
depicted in Schedule 1, Figure 8		TDS			mg/L	
	Reverse Osmosis brine tank inlet	Volume of brine received	Continuous	24 hours	kL/day	-
OWS	OWS Contingency Discharge Point as shown in Schedule 1, Figure 5	TRH	Prior to discharge	Spot sample	mg/L	AS/NZS 5667.1 AS/NZS 5667.10
	OWS Dust Suppression Outlet as shown in Schedule 1, Figure 5		Quarterly			
	NPI facility OWS as shown in Schedule 1, Figure 2					
	ART workshop washdown OWS as shown in Schedule 1, Figure 2					

Note 1: Measurement of pH with a serviced and calibrated field water quality meter is permitted.

Note 2: Measurement of residual free chlorine with field based equipment is permitted.

9. All sample analysis must be undertaken by laboratories with current NATA accreditation for the relevant parameters, unless otherwise specified in condition 8.
10. The licence holder must ensure that monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.
11. The licence holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
12. The licence holder must record the results of all monitoring activity required by condition 8.

## Records and reporting

- 13.** The licence holder must within 30 calendar days of all items 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.
- 14.** The Environmental Compliance Report required by condition 13, must include as a minimum the following:
- (a) certification by a suitably qualified 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 or 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 licence holder and contains the printed name and position of that person.
- 15.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- (a) the calculation of fees payable in respect of this licence;
  - (b) any maintenance of infrastructure that is performed in the course of complying with conditions 1, 3 and 7 of this licence;
  - (c) complaints received under condition 17 of this licence;
  - (d) volume of concrete, rubber and untreated timber buried within waste rock dumps and mine pit voids;
  - (e) volume of waste buried within the class II landfill site;
  - (f) number of used tyres buried within waste rock dumps and mined pit voids; and
  - (g) monitoring programmes undertaken in accordance with condition 8 of this licence.
- 16.** The books specified under condition 15 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 licence holder for the duration of the licence; and
  - (d) be available to be produced to an inspector or the CEO as required.



## Department of Water and Environmental Regulation

- 17.** The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- the name and contact details of the complainant, (if provided);
  - the time and date of the complaint;
  - the complete details of the complaint and any other concerns or other issues raised; and
  - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- 18.** The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - prepare and submit to the CEO an Annual Audit Compliance Report for that period in the approved form by 31 March each year.
- 19.** The licence holder must:
- prepare an Environmental Report that provides information in accordance with Table 7 for the preceding two annual periods; and
  - submit that Environmental Report to the CEO by 31 March 2024 and biennially thereafter.

**Table 7: Environmental reporting requirements**

Conditions	Requirement
Condition 3	<ul style="list-style-type: none"> <li>summary of inspections and maintenance performed;</li> <li>volume of concrete, rubber and untreated timber buried within waste rock dumps and mine pit voids;</li> <li>volume of waste buried within the class II landfill site;</li> <li>number of used tyres buried within waste rock dumps and mined pit voids</li> </ul>
Condition 6	Details on any licence limit exceedances observed during the reporting period and any specified actions taken to resolve these exceedances
Condition 8	<p>WWTPs:</p> <ul style="list-style-type: none"> <li>volume (in kL) of brine received at the RO brine tank for the Kartajirri Camp WWTP and the Eliwana Flying Fish Camp WWTP in monthly cumulative volumes presented in table format;</li> <li>volume (in kL) of wastewater applied daily to each irrigation area, and monthly cumulative volumes presented in table format;</li> <li>treated wastewater monitoring data in tabulated and graphical form including the sampling date;</li> <li>tabulated quarterly and annual loadings of nitrogen, phosphorus and BOD applied to each irrigation area, including an explanation of the basis for determining loading rates; and</li> </ul>

## Department of Water and Environmental Regulation

Conditions	Requirement
	<ul style="list-style-type: none"> <li>an assessment and interpretation of the data, including comparison against the output standards shown in condition 3; and to historical trends.</li> </ul> <p>OWS:</p> <ul style="list-style-type: none"> <li>the dates at which the monitoring was undertaken for each location;</li> <li>the raw monitoring data for each location, for TRH in a tabulated form; and</li> <li>an assessment of results against previous monitoring results and the emission trigger value.</li> </ul>
Condition 17	<ul style="list-style-type: none"> <li>complaints summary</li> </ul>
N/A	<ul style="list-style-type: none"> <li>summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.</li> </ul>

## Definitions

In this licence, the terms in Table 8 have the meanings defined.

**Table 8: Definitions**

Term	Definition
ACN	Australian Company Number.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 January until 31 December in the same year.
ART	Autonomous Road Train.
AS/NZS 5667.1	means the Australian/New Zealand Standard: Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.10	means the Australian/New Zealand Standard: Water quality – sampling – guidance on sampling of waste waters.
averaging period	means a time over which a limit is measured or a monitoring result is obtained.
BOD	Biochemical Oxygen Demand.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919 or: <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
cfu/100mL	colony forming unit per 100 millilitres.
Class I landfill	means an unlined landfill designed to accept inert waste for burial.
Class II landfill	means an unlined landfill designed to accept putrescible and inert waste for burial.
Clean fill	has the meaning defined in the Landfill Definitions.
CBP	Concrete Batch Plant.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.

## Department of Water and Environmental Regulation

Term	Definition
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 licence.
EP Act	<i>Environmental Protection Act 1986 (WA).</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
Hazardous wastes	includes chemicals and hydrocarbons (including oily rags, batteries and waste oil), asbestos, medical waste and fluorescent lighting tubes.
HDPE	high density polyethylene.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
kg/ha/year	kilograms per hectare per year.
kL	kilolitres.
kVA	means 1,000 volt-amps.
Landfill Definitions	means the document titled <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)</i> published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
MAR	Managed Aquifer Recharge.
MW	megawatt.
mg/L	milligrams per litre.
mS/cm	microsiemens per centimetre.
NATA	National Association of Testing Authorities.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
NPI	Non-Process Infrastructure.
OWS	Oily Water Separator.
premises	refers to 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 of this licence.

## Department of Water and Environmental Regulation

Term	Definition
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible Waste	has the meaning defined in the Landfill Definitions.
Quarterly	The four periods from 1 January to 31 March; 1 April to 30 June; 1 July to 30 September; 1 October to 31 December.
Recyclable	includes paper, glass, plastic, scrap metal, wood, empty IBC (Intermediate bulk containers), fire extinguishers, HDPE liner, conveyor belts and waste rubber, and empty AN bags.
RO	Reverse Osmosis.
TDS	Total Dissolved Solids.
TRH	Total Recoverable Hydrocarbon.
TSS	Total Suspended Solids.
waste	has the same meaning given to that term under the EP Act.
WWTPs	means the Kartajirri Camp and Eliwana Flying Fish Camp Wastewater Treatment Plants.

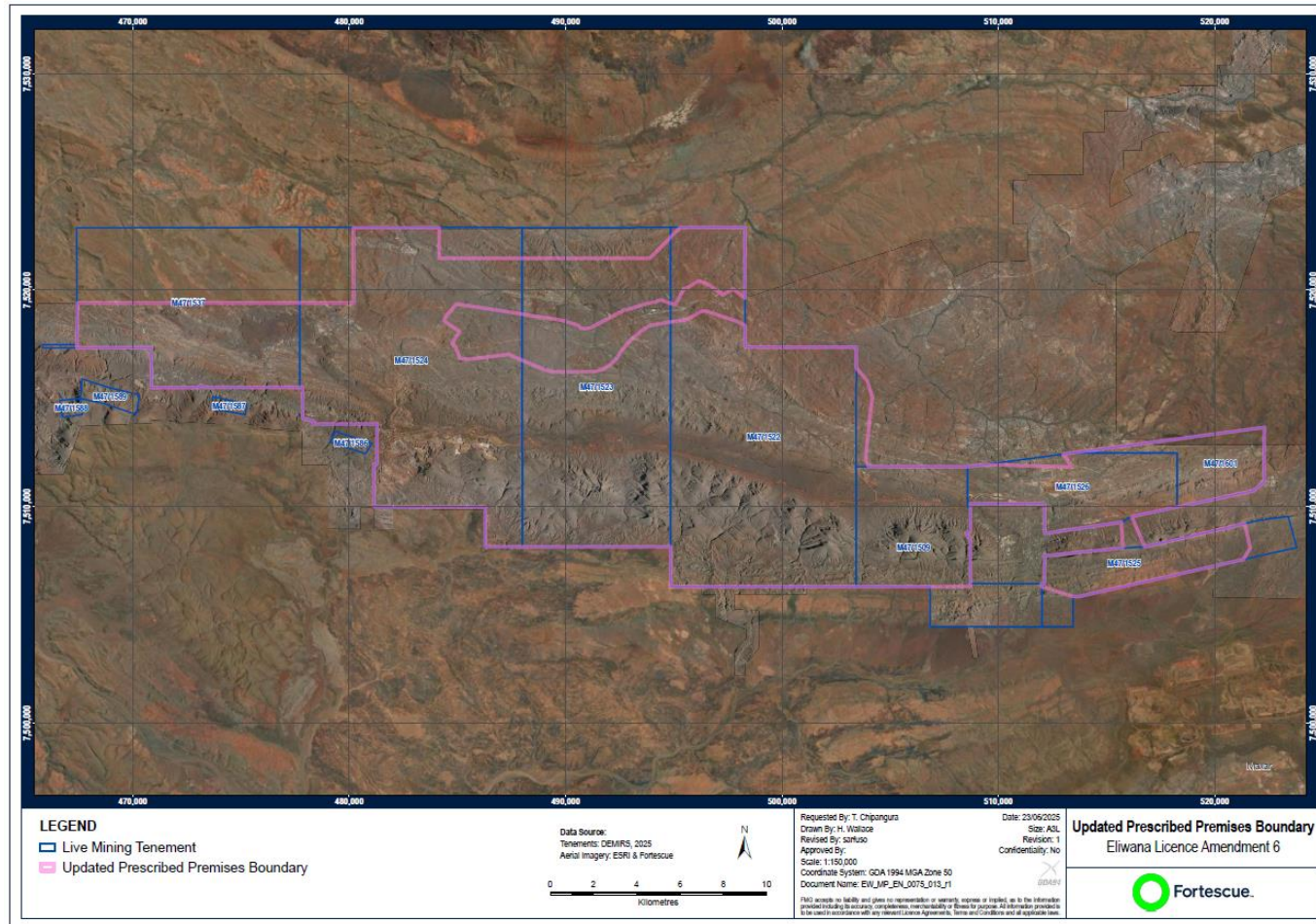
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**END OF CONDITIONS**

## Schedule 1: Maps

### Premises map

The boundary of the prescribed premises is shown in purple outline in the map below (Figure 1).



**Figure 1: Prescribed premises boundary**



## Infrastructure maps

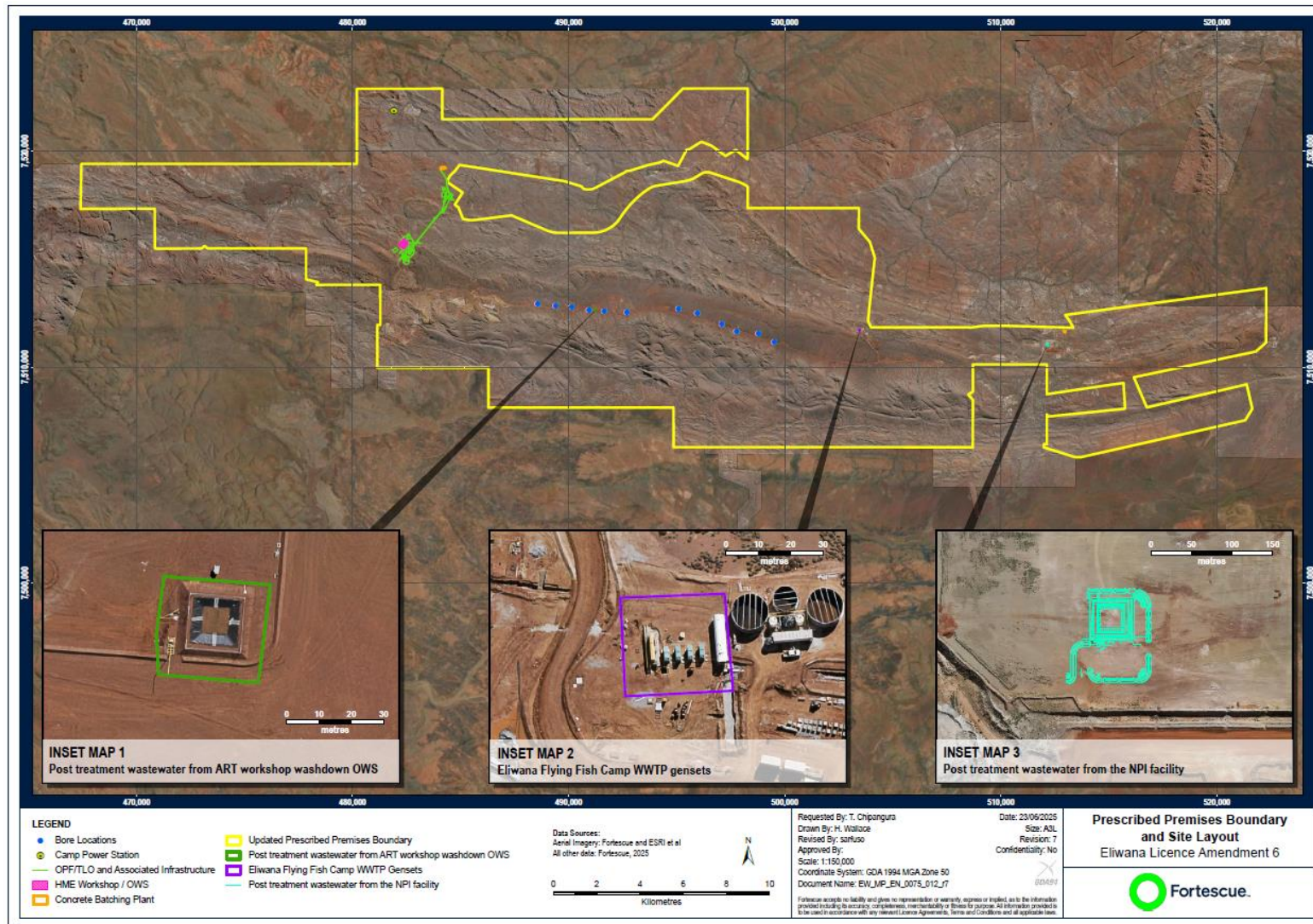


Figure 2: Site infrastructure

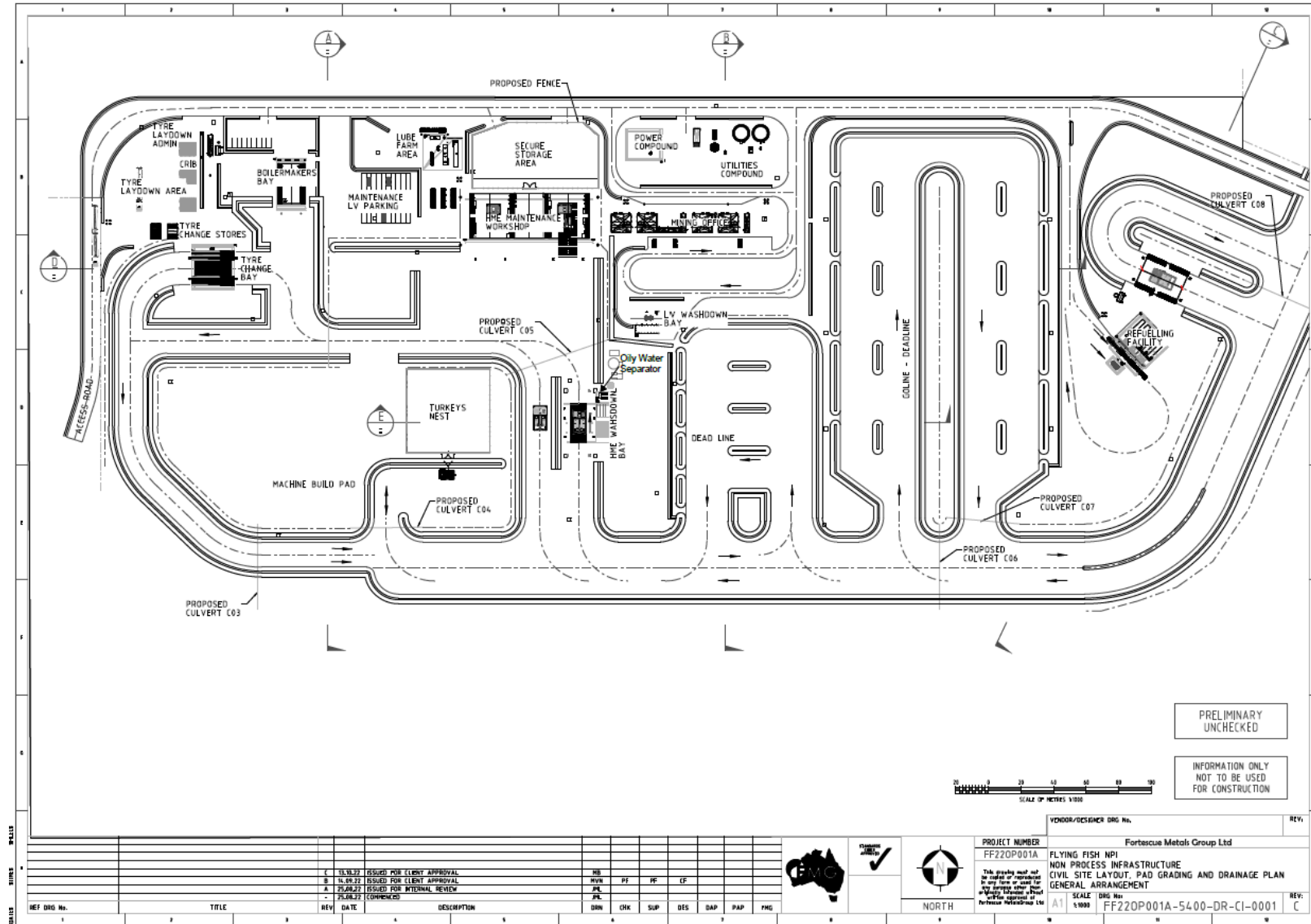


Figure 3: NPI facility site layout



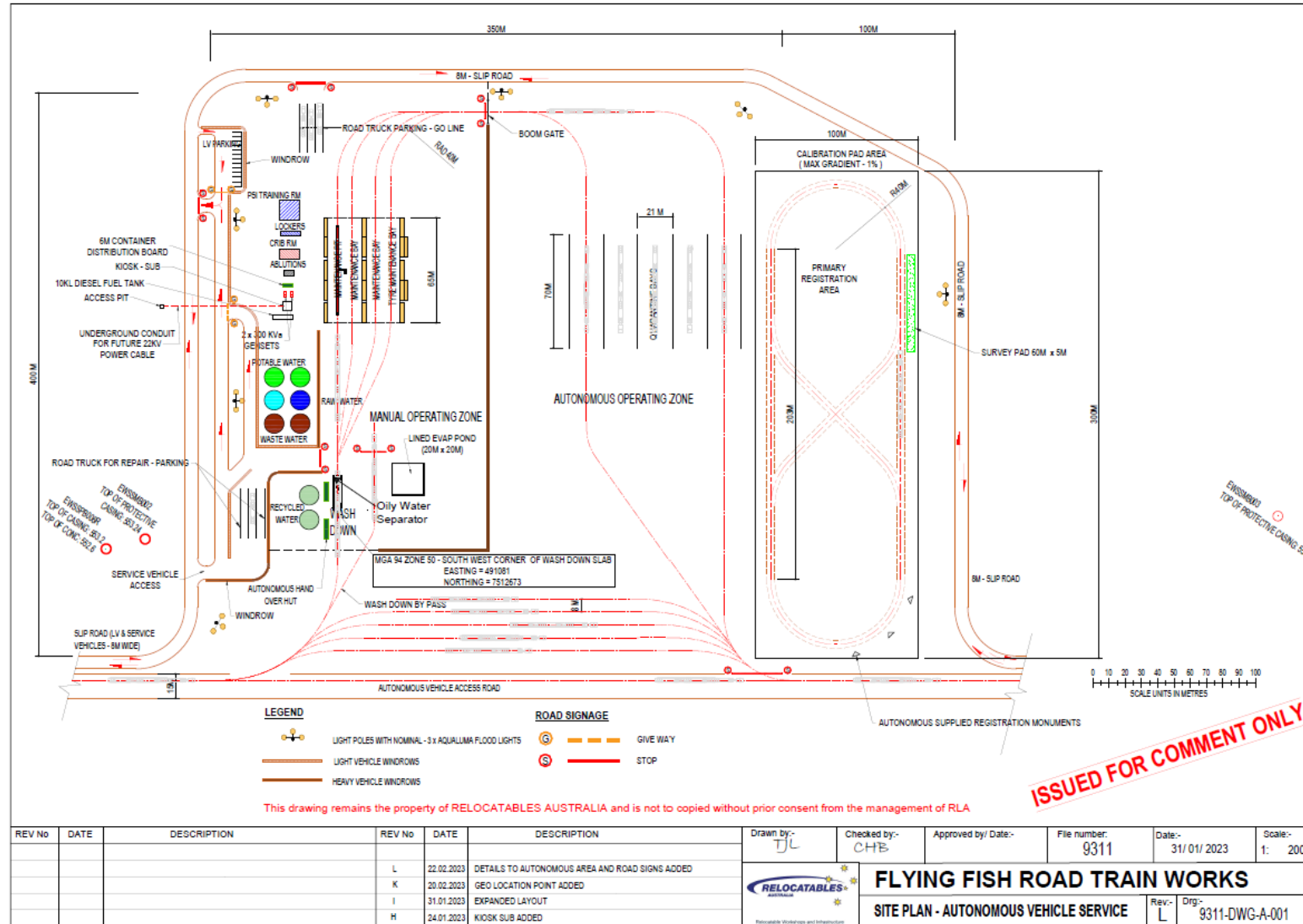


Figure 4: ART workshop site layout

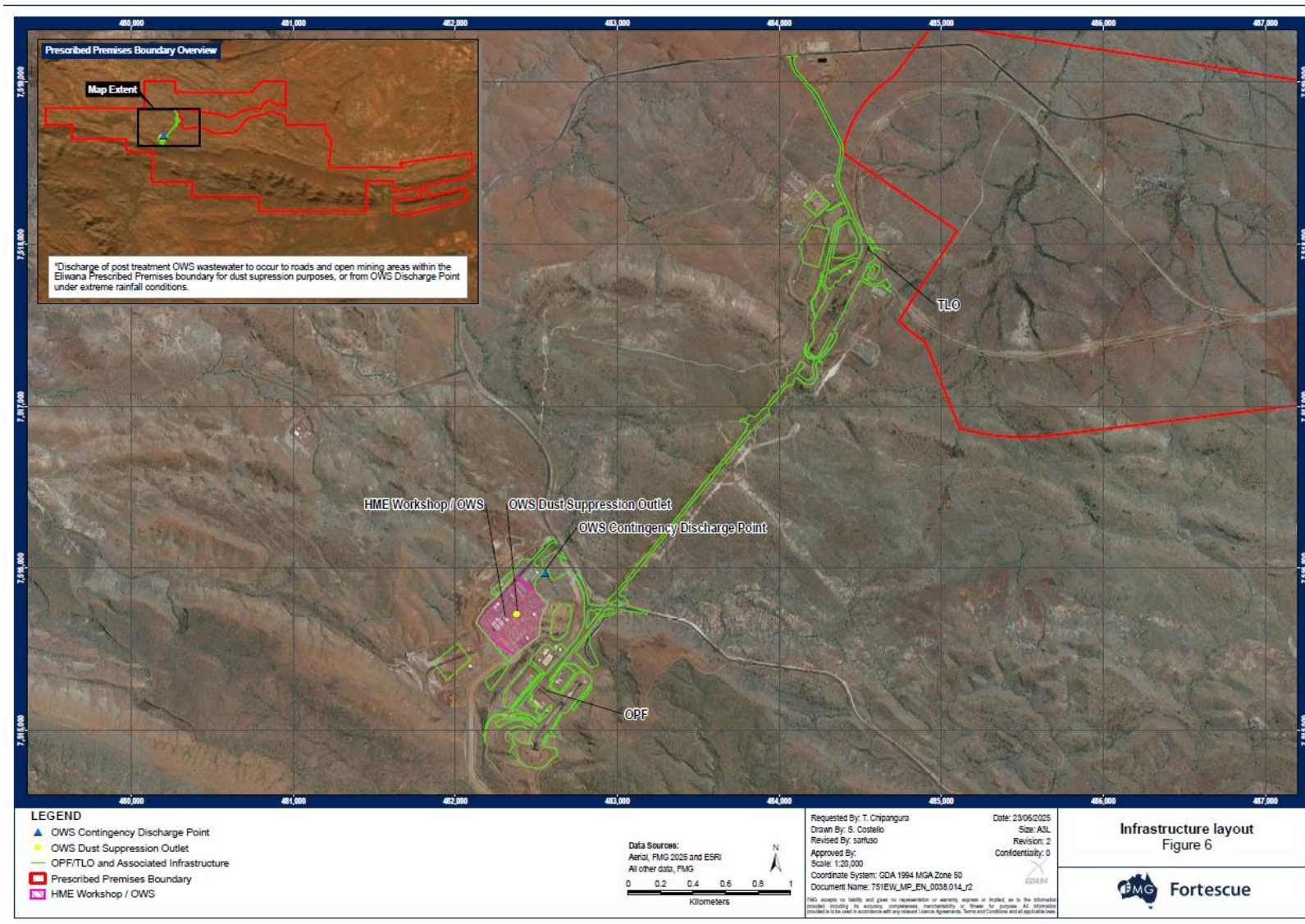


Figure 5: Infrastructure layout



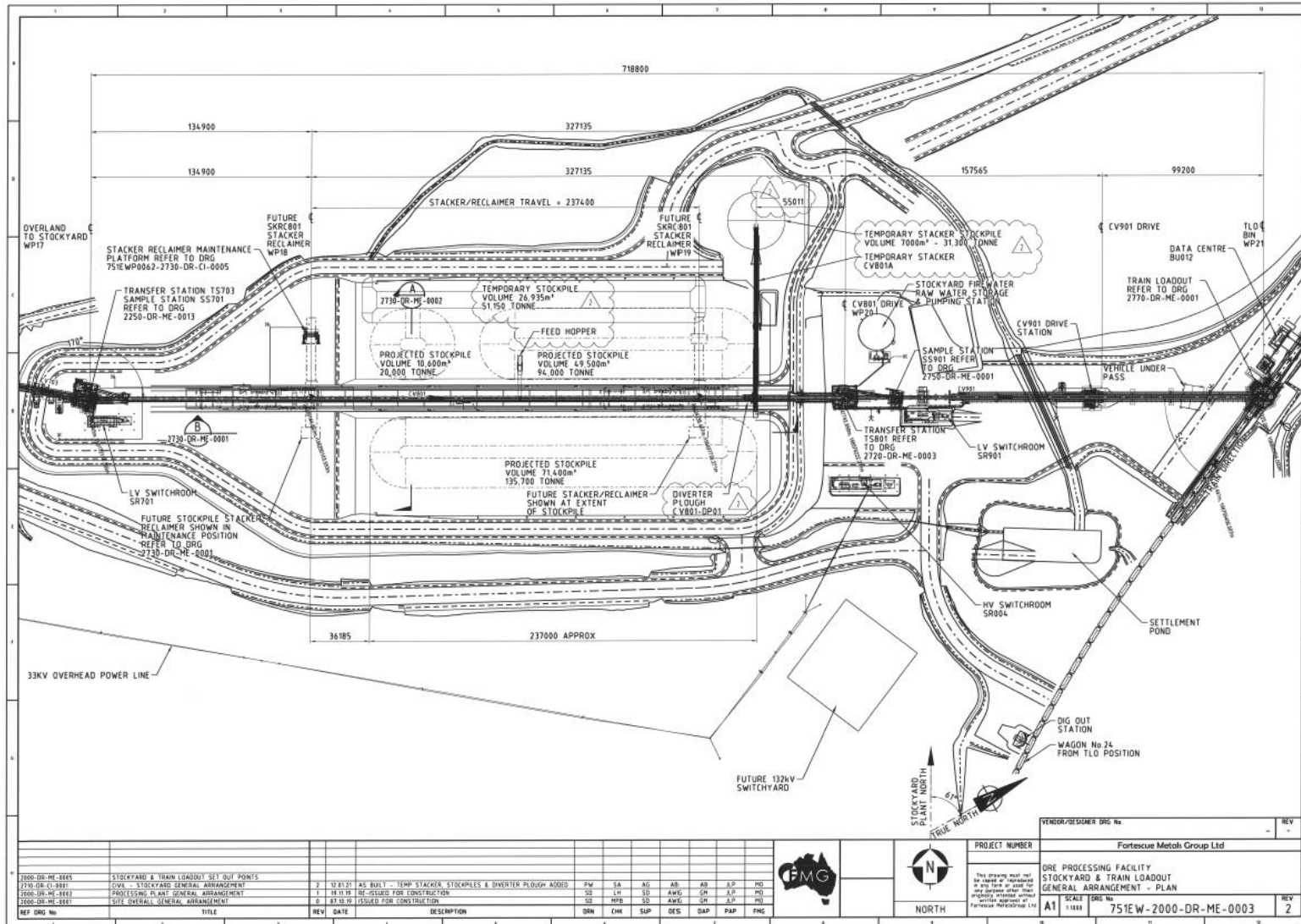


Figure 6: Ore processing facility layout



Figure 7: Kartajirri Camp WWTP and Irrigation Field



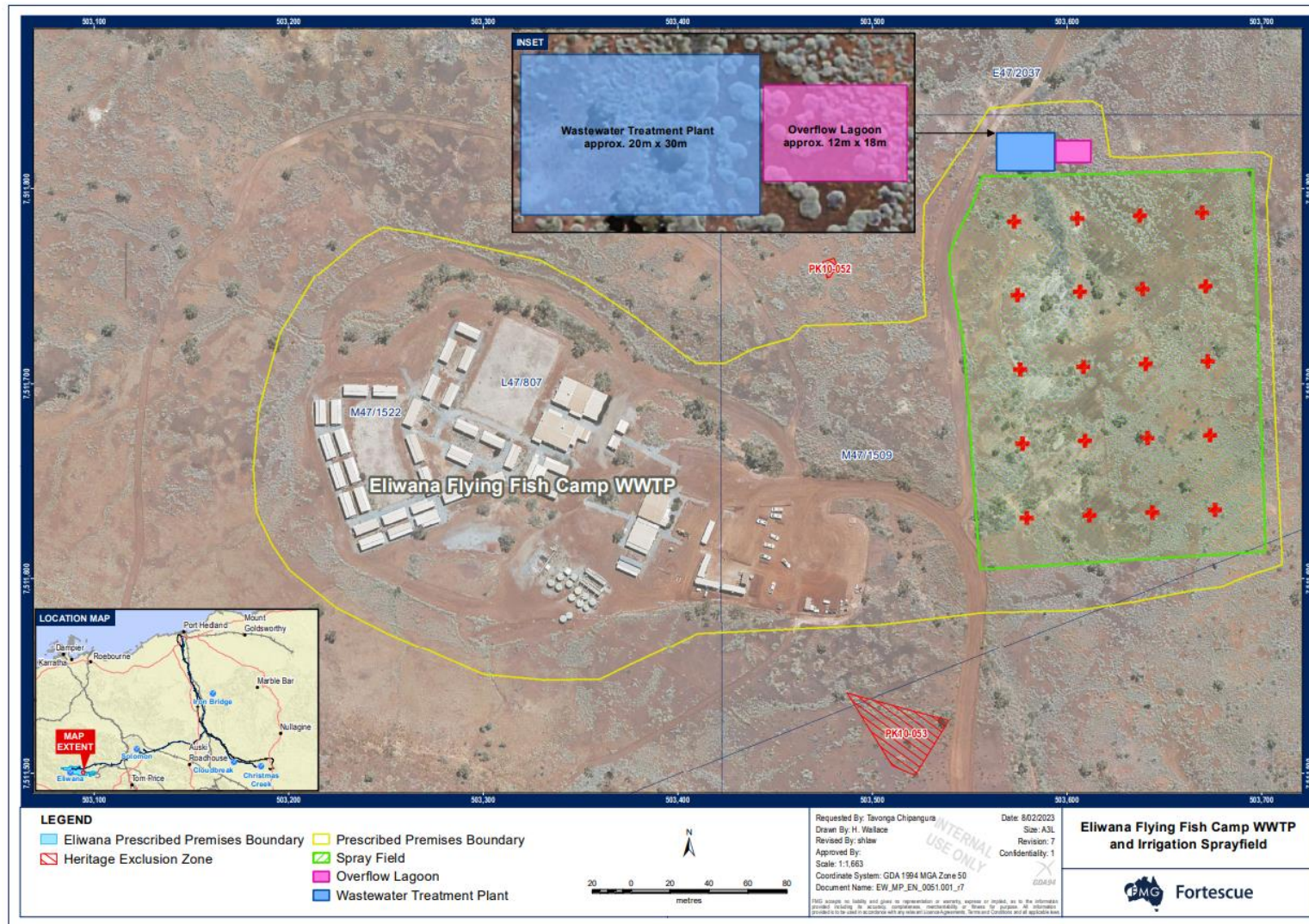


Figure 8: Eliwana Flying Fish Camp WWTP, Spray Field and Overflow Lagoon



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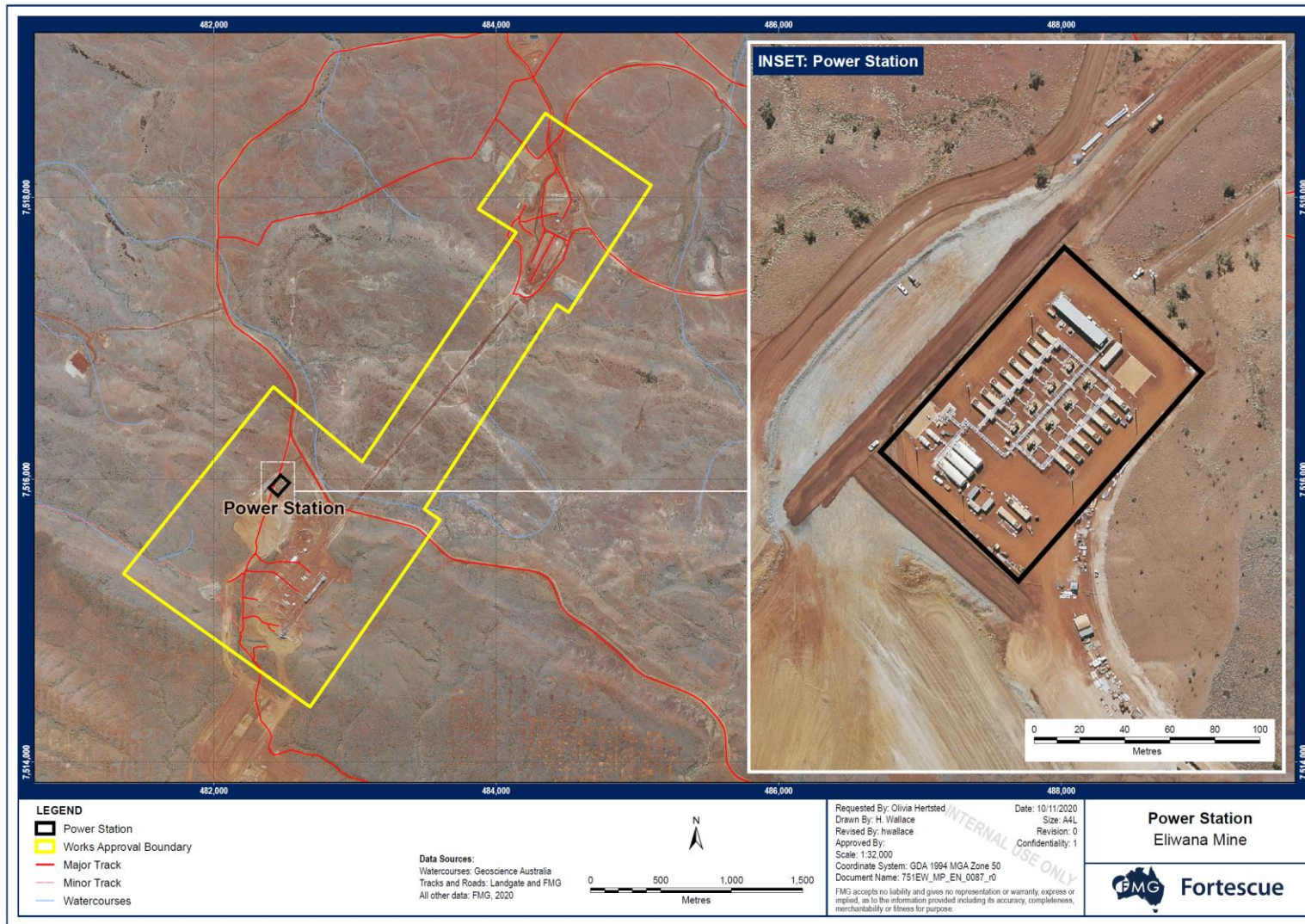


Figure 9: Power Station

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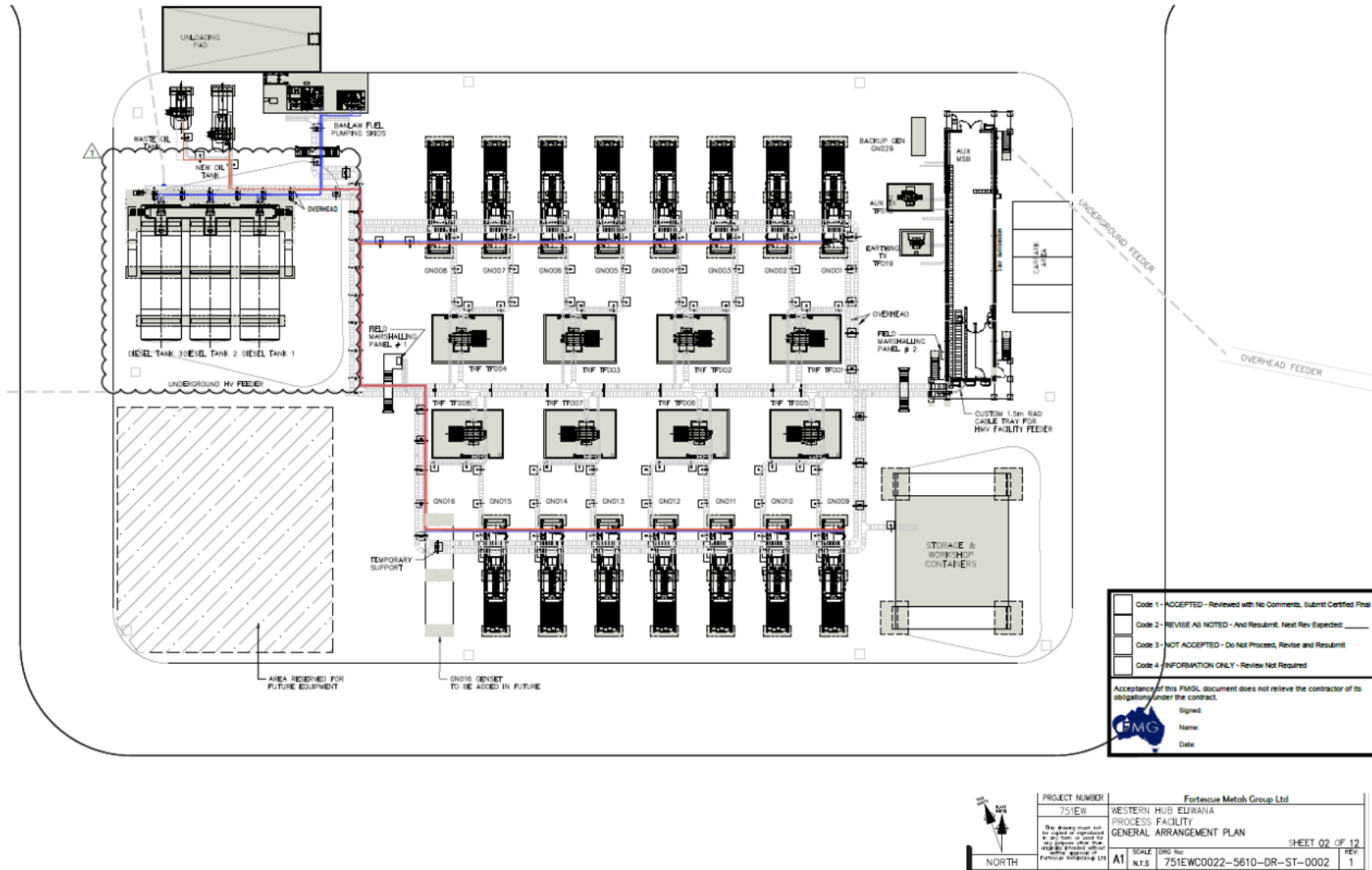


Figure 10: Power Station generator layout

L9221/2019/1 (date of latest update: 02/07/2025)



## Department of Water and Environmental Regulation

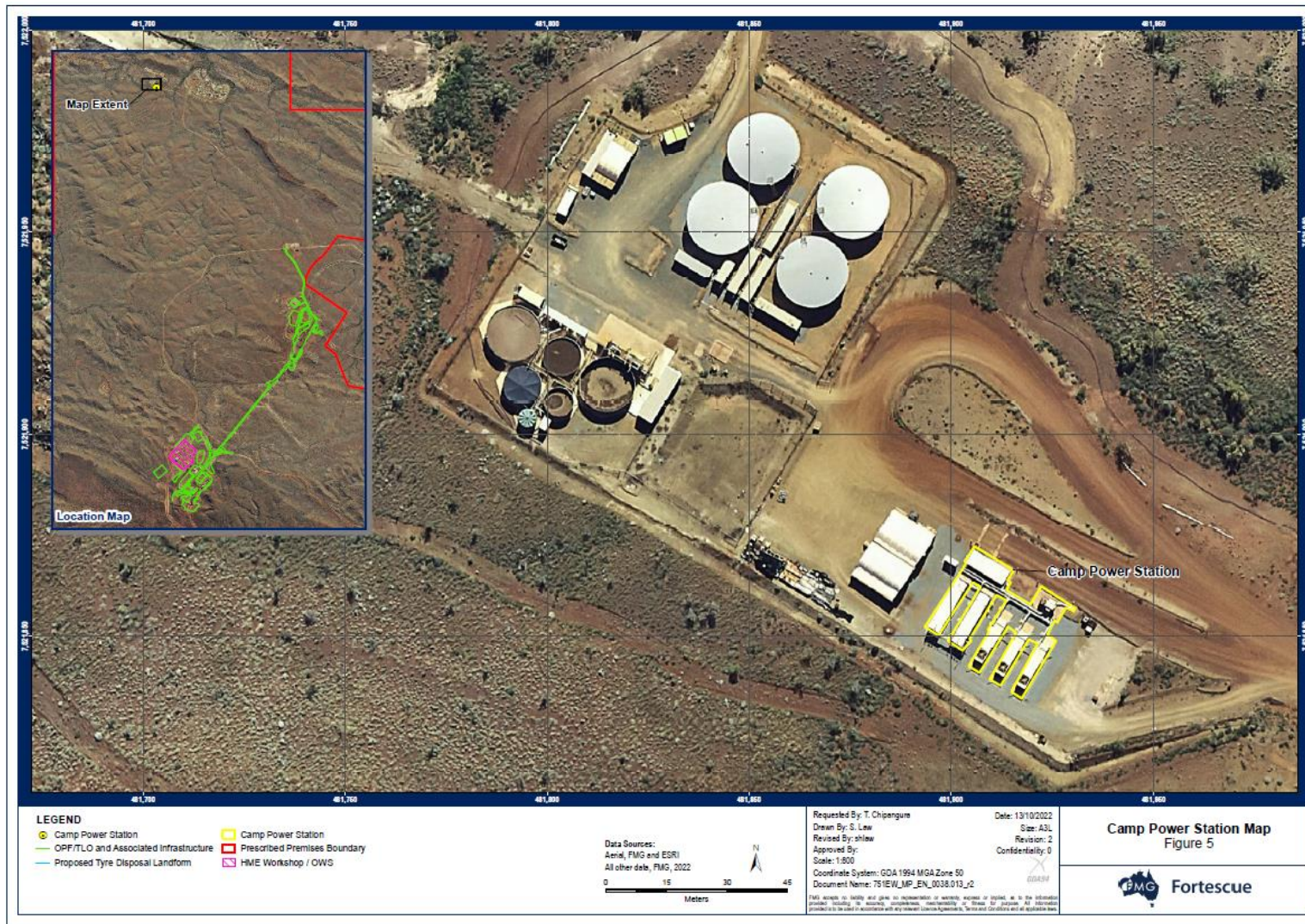


Figure 11: Kartajirri Camp Power Station generator layout



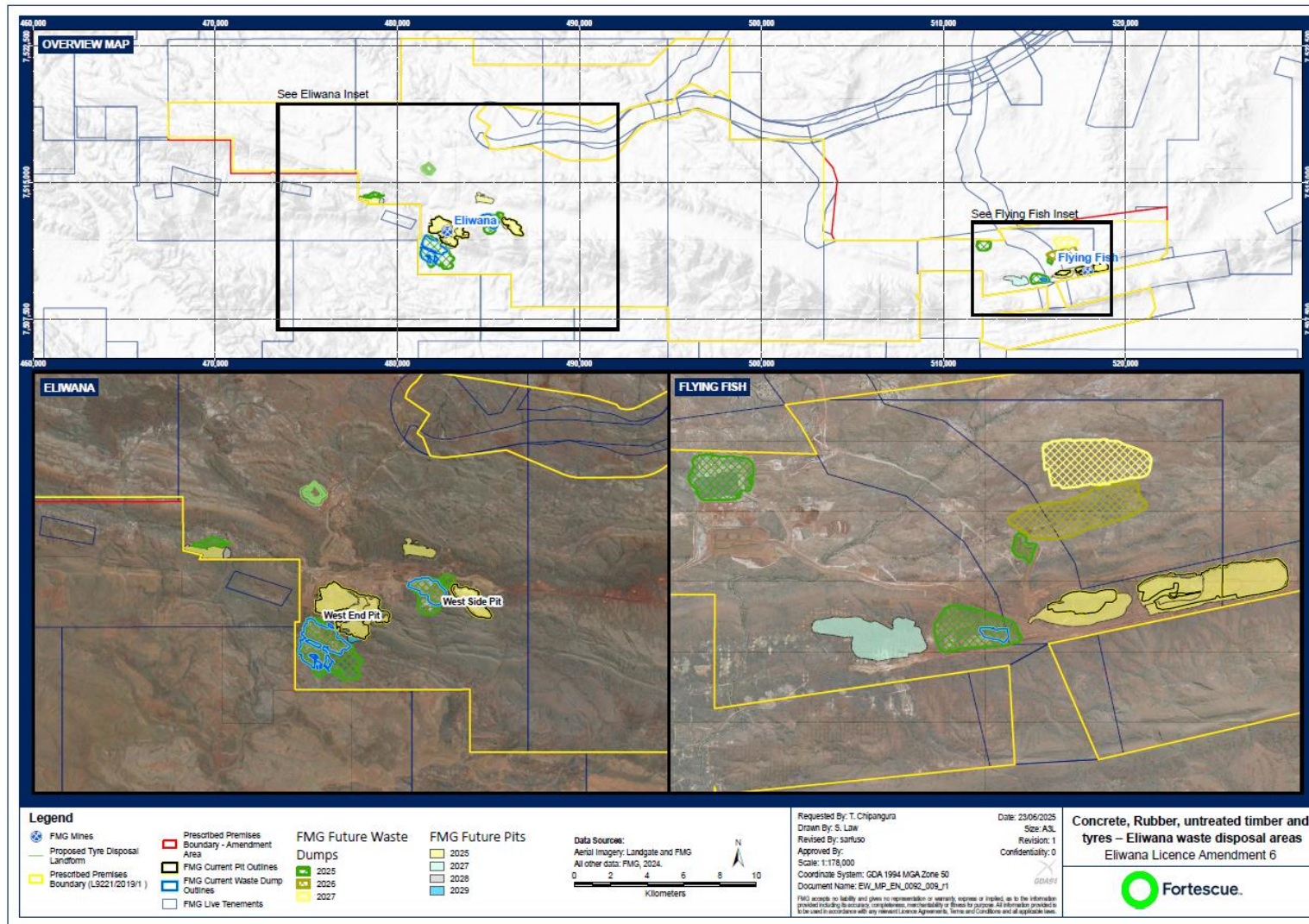


Figure 12: Inert waste pit disposal areas





**Figure 13: Class II Landfill and Waste Transfer Facility**



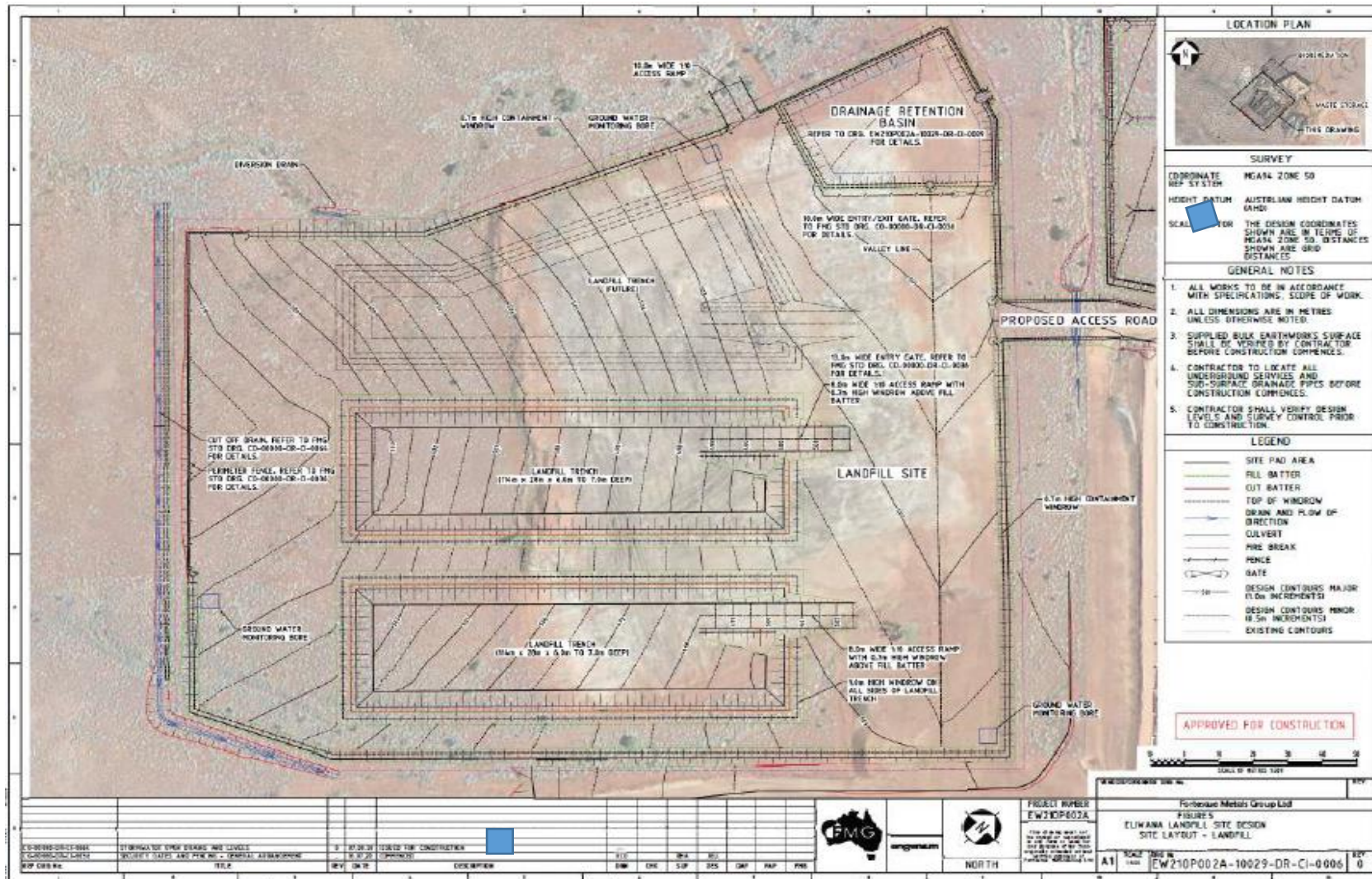


Figure 14: Class II Landfill design