Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6643/2021/1
Works approval holder	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
Registered business address	Level 22, Central Park 152-158 St Georges Terrace PERTH WA 6000
DWER file number	DER2021/000744
Duration	19/08/2022 to 18/08/2025
Date of issue	19/08/2022
Date of amendment	29/01/2025
Premises details	Paraburdoo Iron Ore Mine, Eastern Range Project and the Western Range Project AML70/246, L47/326, AG70/4, AG70/14 and AML70/4 ROCKLEA WA 6751 As defined by the premises maps in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production / design capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	30,000,000 tonnes per annual period
Category 12: Screening, etc. of material	10,000,000 tonnes per annual period
Category 64: Class II putrescible landfill site	29,000 tonnes per annual period
Category 73: Bulk storage of chemicals, etc.	7,653 cubic meters in aggregate

This works approval is granted to the works approval holder, subject to the attached conditions, on 29 January 2025, by:

Jarrod Abrahams
Digitally signed by Jarrod Abrahams
Date: 2025.01.30 14:50:51 +08'00'

MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATE-WIDE DELIVERY)
Officer delegated under section 20 of the Environmental Protection Act 1986

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 construct and, or install the infrastructure listed in Table 4 in accordance with;

(a) the corresponding design and construction requirement and/or installation requirement; and

(b) at the corresponding infrastructure location; and

(c) within the corresponding timeframes,

as set out in Table 4 of Schedule 3.

2. The Works Approval Holder must not depart from the requirements specified in Table 4 except:

(a) where such departure does not increase risks to public health, public amenity or the environment; and

(b) all other Conditions in this Works Approval are still satisfied.

Compliance reporting

3. 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.

(c) Where a departure from the requirements specified in Table 4 occurs and is of a type allowed by Condition 2, the Works Approval Holder must provide to the CEO a description of, and explanation for, the departure.

4. The Environmental Compliance Report required by condition 3, must include as a minimum the following:

(a) certification by a suitably qualified professional engineer that each item of 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 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.

Environmental commissioning phase

Environmental commissioning requirements

5. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 6 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 3 of

this works approval.

6. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 1 may only be carried out:

(a) in accordance with the corresponding commissioning requirements; and

(b) for the corresponding authorised commissioning duration.

Table 1: Environmental commissioning requirements

Infrastructure	**Commissioning requirements**	**Authorised commissioning duration**
Primary crushing facility (Western Range); and Overland conveyor (Western Range to Paraburdoo)	(a) Environmental commissioning activities consisting of: (i) load commissioning which consists of introduction of feedstock with incremental load tuning; and (ii) performance verification which consists of gradual increases in feedstock. (b) Ore processed is sourced from within the premises boundary. (c) Volumes of ore processed each month to be recorded. (d) Operation of dust controls (dust collector, dry baghouse extraction system) to manage dust emissions. (e) Use of water trucks and control of vehicle movements to manage dust emissions for ore movement, storage and vehicle movements. (f) Inspections to evaluate effectiveness of dust controls and corrective action undertaken where necessary. (g) Operation of spray bars and moisture and dust analysers at open areas of the conveyor.	6 months from the date Environmental Compliance Report(s) for all Primary crushing and Overland conveying infrastructure requiring commissioning listed in Table 4 have been submitted
Heavy vehicle refuelling facility	(a) Environmental commissioning activities consisting of introducing diesel to the infrastructure.	4 months

7. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 1.

8. The works approval holder must ensure the Environmental Commissioning Report required by condition 7 of this works approval includes the following:

(a) a summary of the environmental commissioning activities undertaken, including timeframes of when commissioning activities commenced and finished and amount of ore processed;

(b) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at minimum includes records detailing the:

(i) the dust suppression measures used;

(ii) performance of the dry baghouse dust extraction system; and

(iii) performance of the dust suppression measures used in the open areas of the overland conveyor.

(c) a review of the works approval holder's performance and compliance against the conditions of this works approval; and

(d) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

Time limited operations phase

Commencement and duration

9. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1:

(a) where the item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure; and

(b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 6, the Environmental Commissioning Report for that item of infrastructure as required by condition 7 has been submitted by the works approval holder.

10. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:

(a) for a period not exceeding 29 April 2025; 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,* if one is granted before the end of the period specified in condition 10(a).

Time limited operations requirements

11. During time limited operations, the works approval holder must ensure that the premises 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 and equipment requirements during time limited operations

Item	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Primary crushing facility (Western Range) and Processing facilities (Western Range)	(a) Ore processed is sourced from within the premises boundary. (b) Volumes of ore processed each month to be recorded. (c) Operation of dust controls (dust collector, dry baghouse extraction system) to manage dust emissions. (d) Use of water trucks and control of vehicle movements to manage dust emissions for ore movement, storage and vehicle movements. (e) Inspections to evaluate effectiveness of dust controls and corrective action undertaken where necessary.	Figure 2 of Schedule 1: Maps
2.	Overland conveyor (Western Range to Paraburdoo)	(a) Operation of spray bars and moisture and dust analysers at open areas of the conveyor.	Figure 2 of Schedule 1: Maps
3.	Class II putrescible landfill; and Class II putrescible landfill (for construction wastes)	(a) Volumes of each load to be monitored (tonnes) and recorded. (b) Wastes covered with soil each weekly period to at least 200mm so that no waste is left exposed. (c) Waste type disposed into the landfill restricted to Clean fill, Putrescible waste, Inert Waste Type 1, Inert Waste Type 2, Special Waste Type 1 and Special Waste Type 2.	Figure 2 of Schedule 1: Maps
4.	Heavy vehicle refuelling facility	(a) Vehicle refuelling to occur over concrete hardstand. (b) Potentially contaminated surface water to be collected in sumps and directed to the oily water collection and treatment system. (c) Potentially contaminated surface water to be treated to achieve a total recoverable hydrocarbon concentration below 15mg/L. (d) Spill response equipment available for use.	
5.	Temporary bulk refuelling facilities	(a) Vehicle refuelling to occur over areas compacted to 95% Maximum Dry Density and lined with a 0.75 mm high density polyethylene liner. (b) Spill response equipment available for use.	

Compliance reporting

12. 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.

13. The works approval holder must ensure the report required by condition 12 includes the following:

(a) a summary of the time limited operations, including timeframes and amount of ore processed;

(b) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable), which includes records detailing the:

(i) operations of the infrastructure;
(ii) testing of infrastructure;
(iii) quantity of ore processed;
(iv) dust suppression methods used at the Primary crushing facility, Processing facilities and overland conveyor; and
(v) volumes of each waste type disposed of to each landfill.

(c) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and

(d) where the manufacturer's design specifications and the conditions of this works approval have not been met, measures the works approval holder will take to meet the specifications with timeframes.

Records and reporting (general)

14. 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.

15. 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 conditions 1;

(b) any maintenance of infrastructure that is performed in the course of complying with the conditions of this works approval;

(c) complaints received under condition 14.

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 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
AS 1940-2004	Australian Standard for The storage and handling of flammable and combustible liquids.
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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Clean fill	as defined in the Landfill Definitions.
commissioning	means to bring new infrastructure or equipment into working condition.
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.
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 commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
Inert Waste Type 1	as defined in the Landfill Definitions.
Inert Waste Type 2	as defined in the Landfill Definitions.

Term	Definition
Landfill Definitions	Landfill Waste Classification and Waste Definitions 1996, as amended from time to time.
monthly period	means a one-month period commencing from day 1 of a month until day 1 of the immediately following month.
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.
Putrescible	waste type as described in the Landfill Definitions.
Special Waste Type 1	as defined in the Landfill Definitions.
Special Waste Type 2	as defined in the Landfill Definitions.
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.
waste	has the same meaning given to that term under the EP Act.
weekly period	means a seven-day period commencing from the Tuesday of one week until the Monday of the immediately following week.
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).

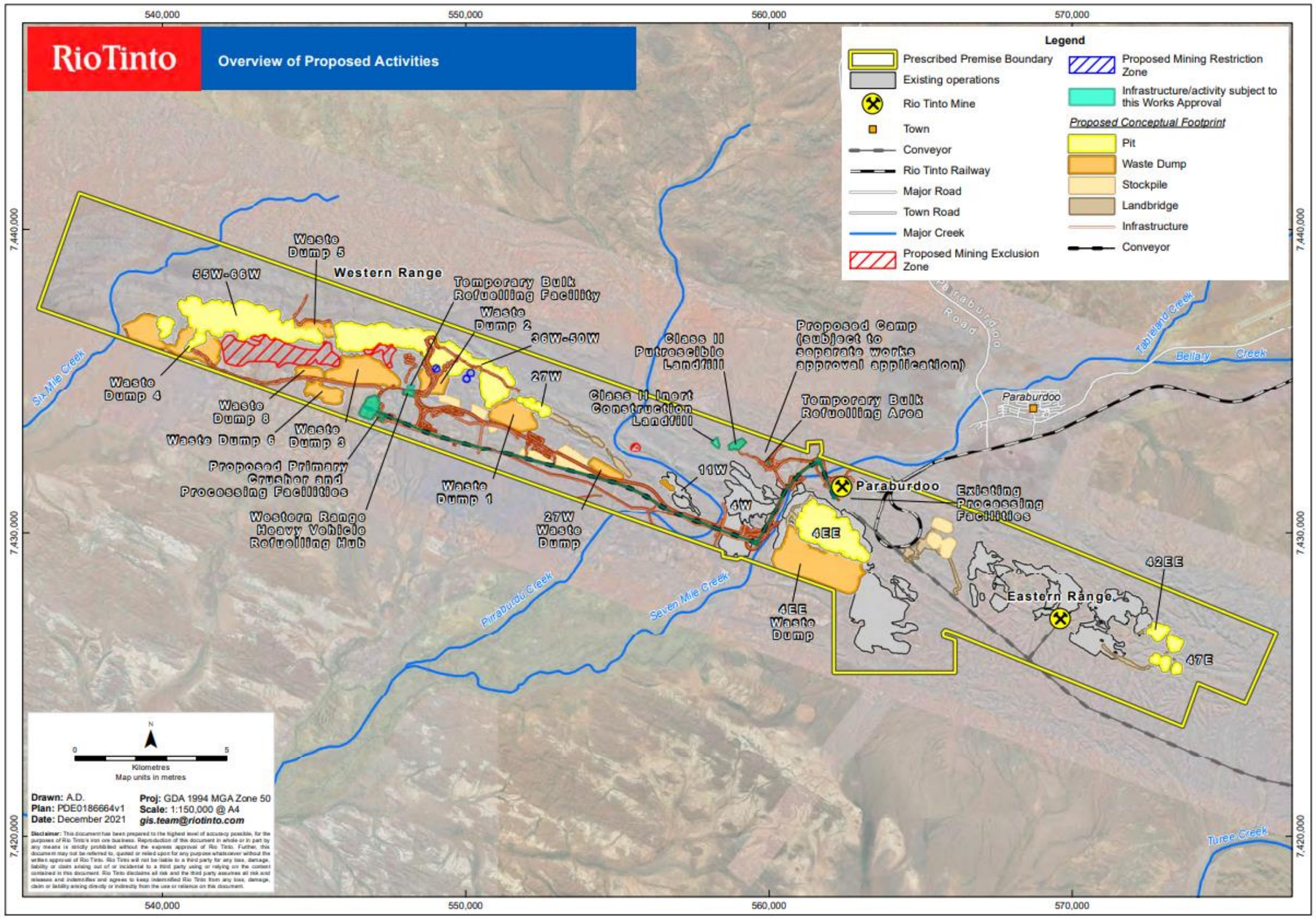

Figure 1: Map showing the premises boundary (yellow outline)

Infrastructure location map

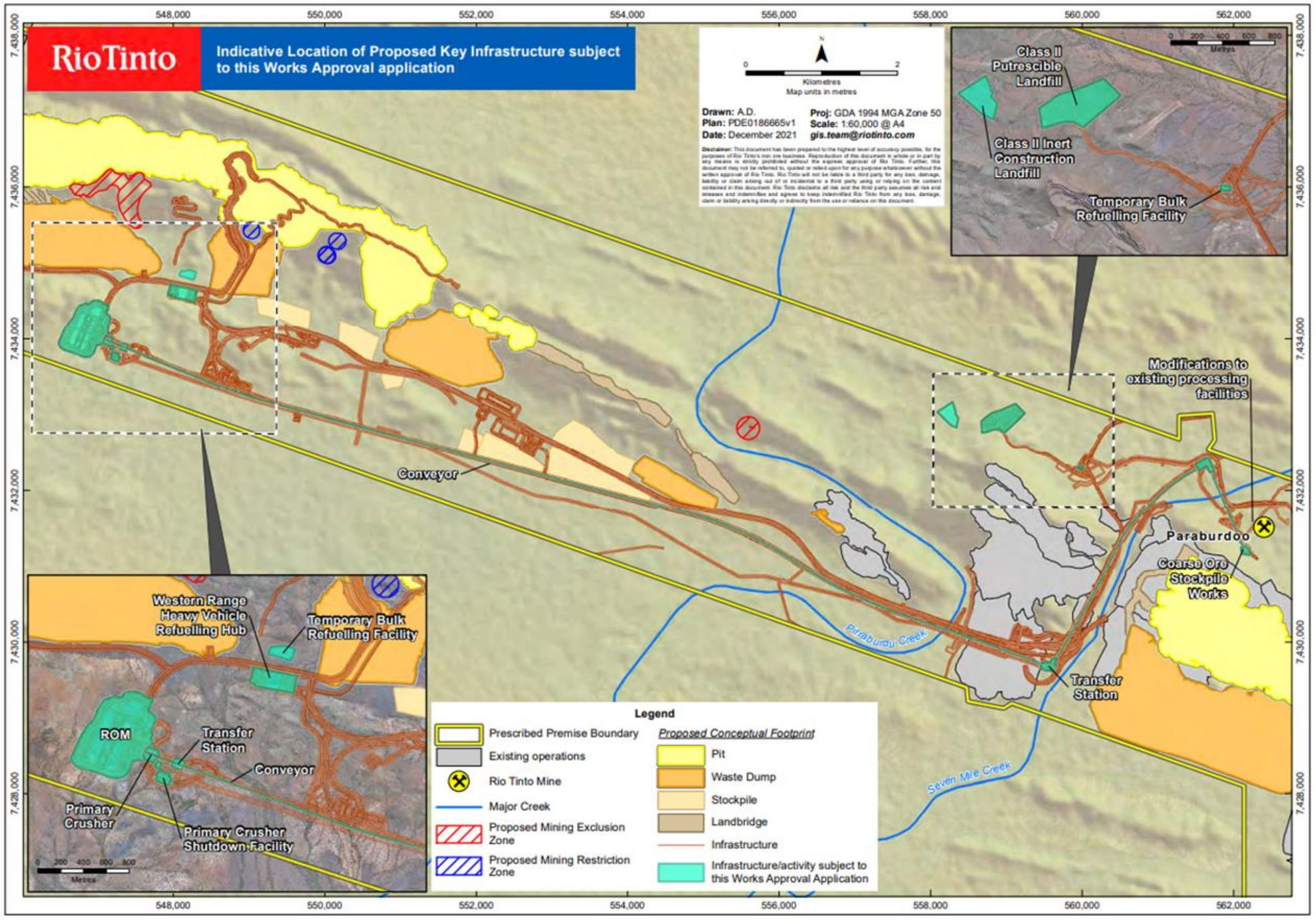

Figure 2: Location of infrastructure (indicated in green) at the premises (ROM is the run of mine pad)

Schedule 2: Design detail

Primary crushing facility (Western Range)

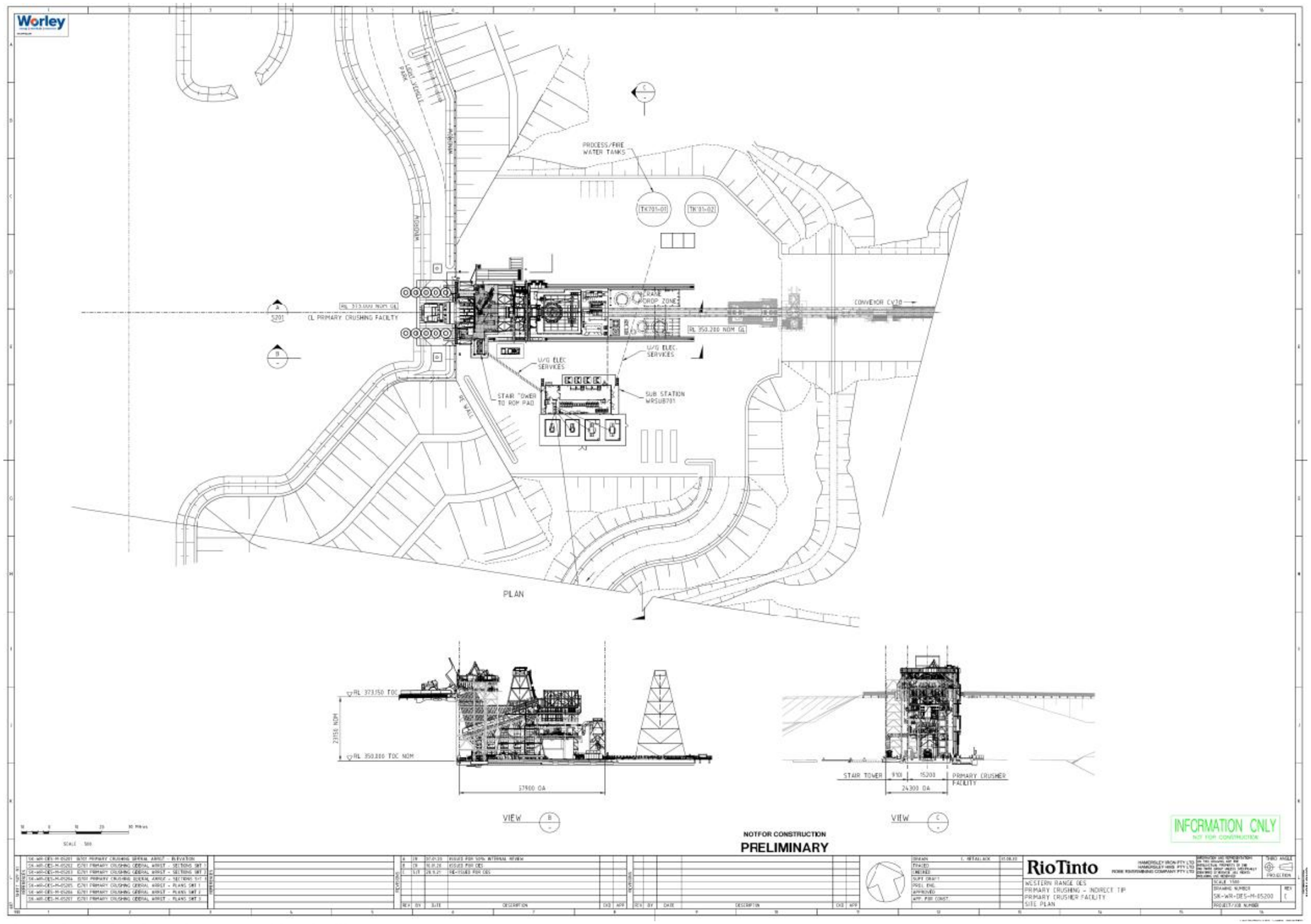

Figure 3: Design for primary crushing facility

Processing facilities (Western Range) – Run of mine pad

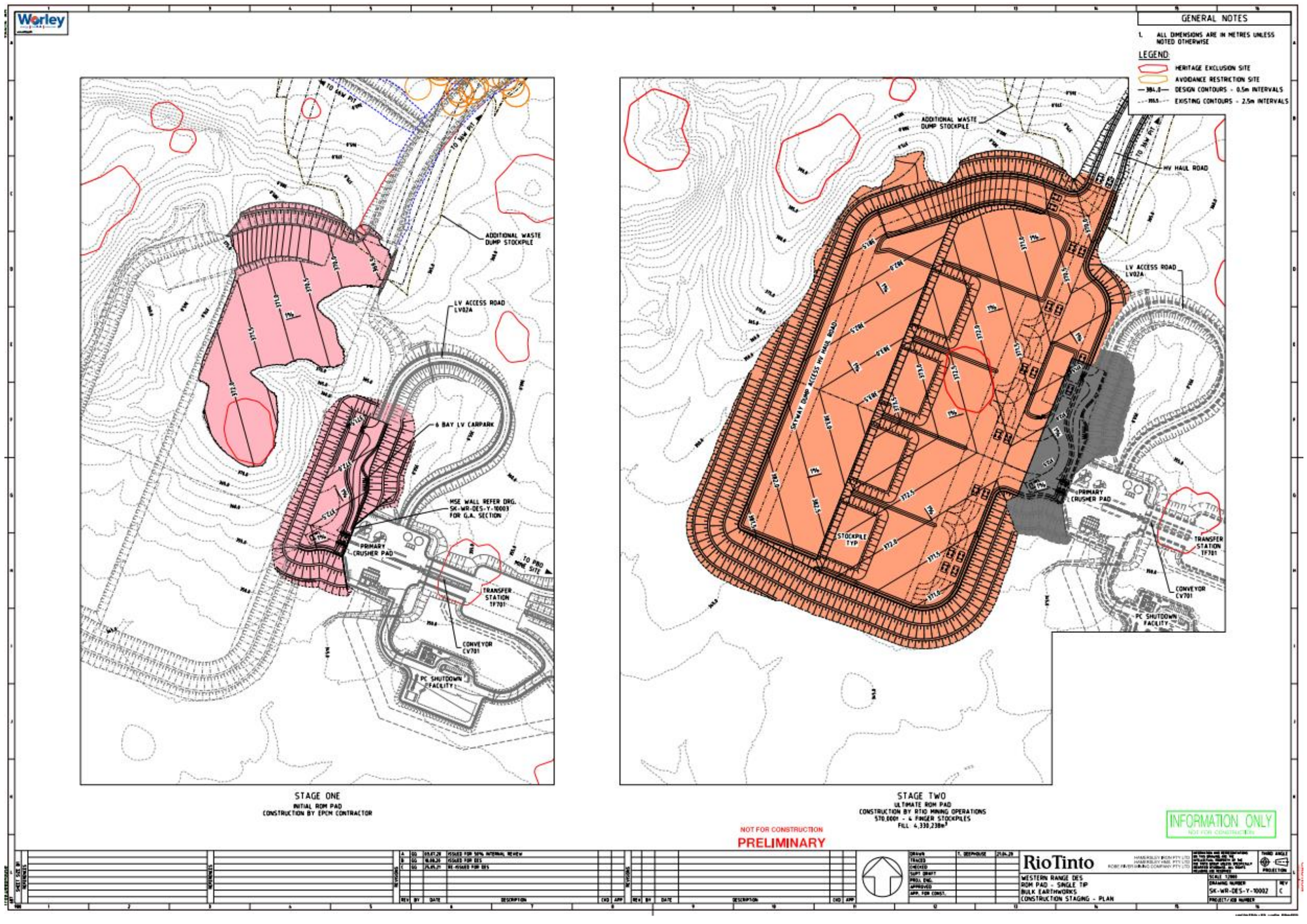

Figure 4: Run of mine pad layout

Overland Conveyor (Western Range to Paraburdoo)

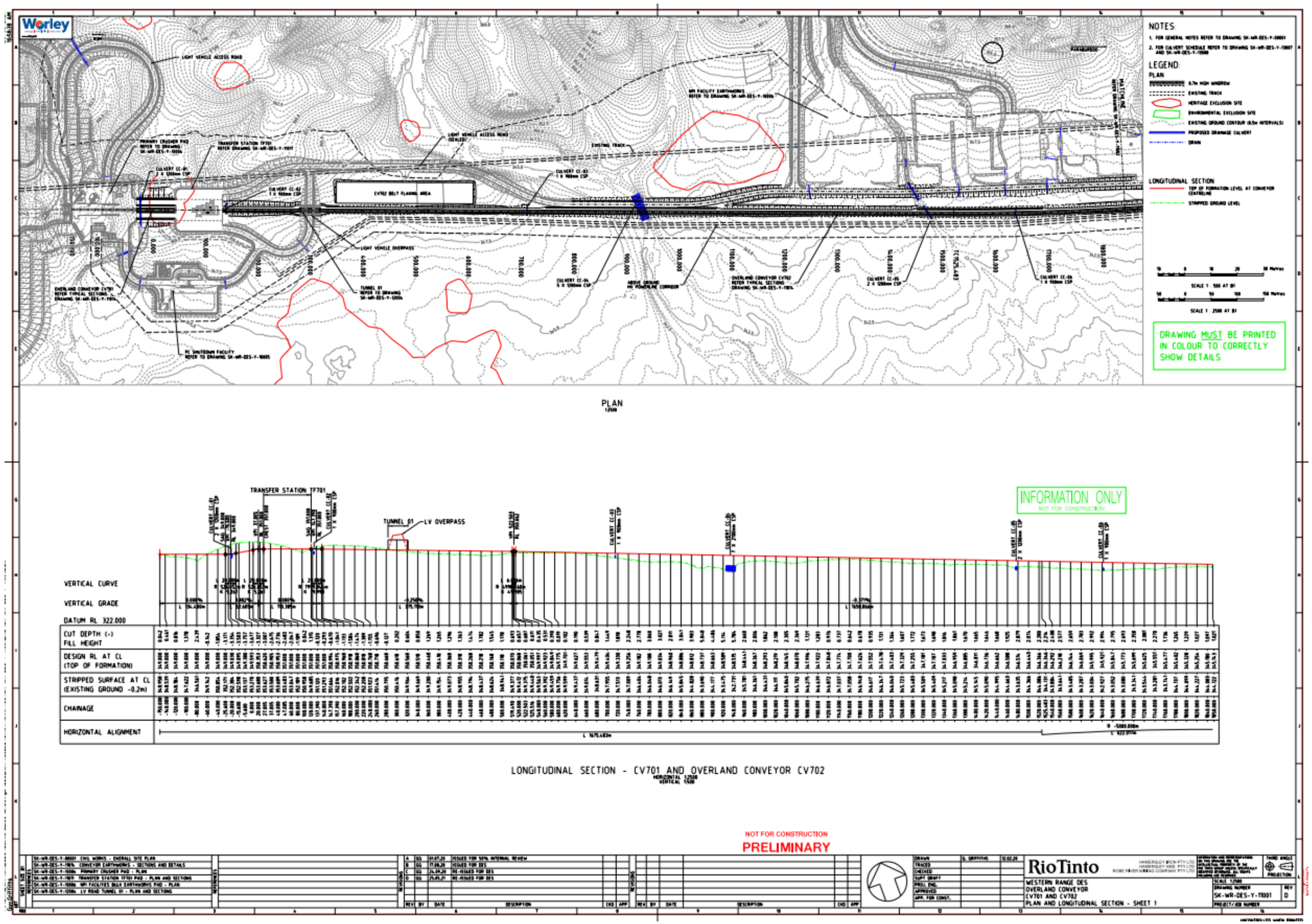

Figure 5: Overland conveyor

Existing processing facilities - Coarse Ore Stockpile

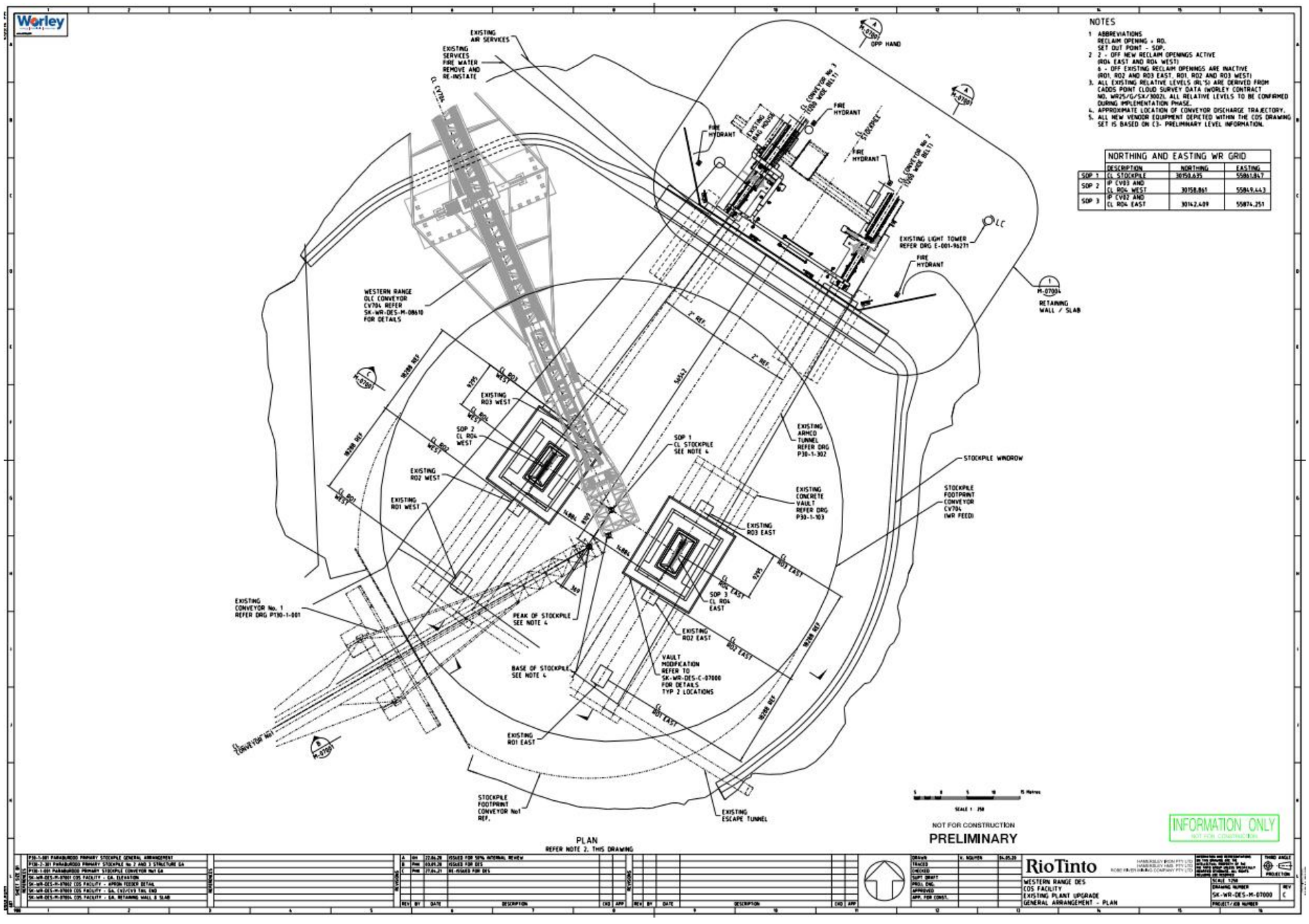

Figure 6: Coarse Ore Stockpile facility

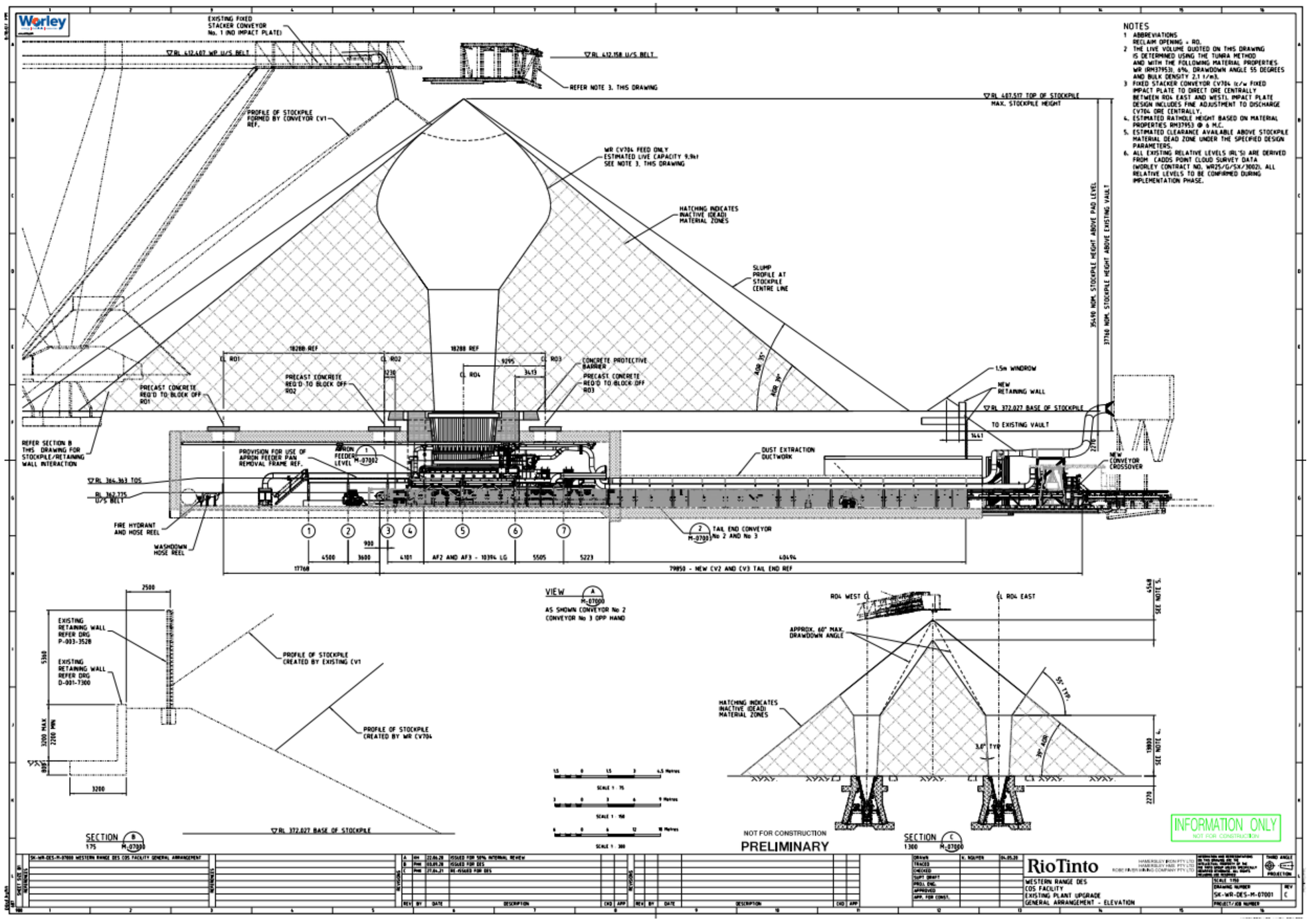

Figure 7: Cross section of Coarse Ore Stockpile facility

Class II putrescible landfill

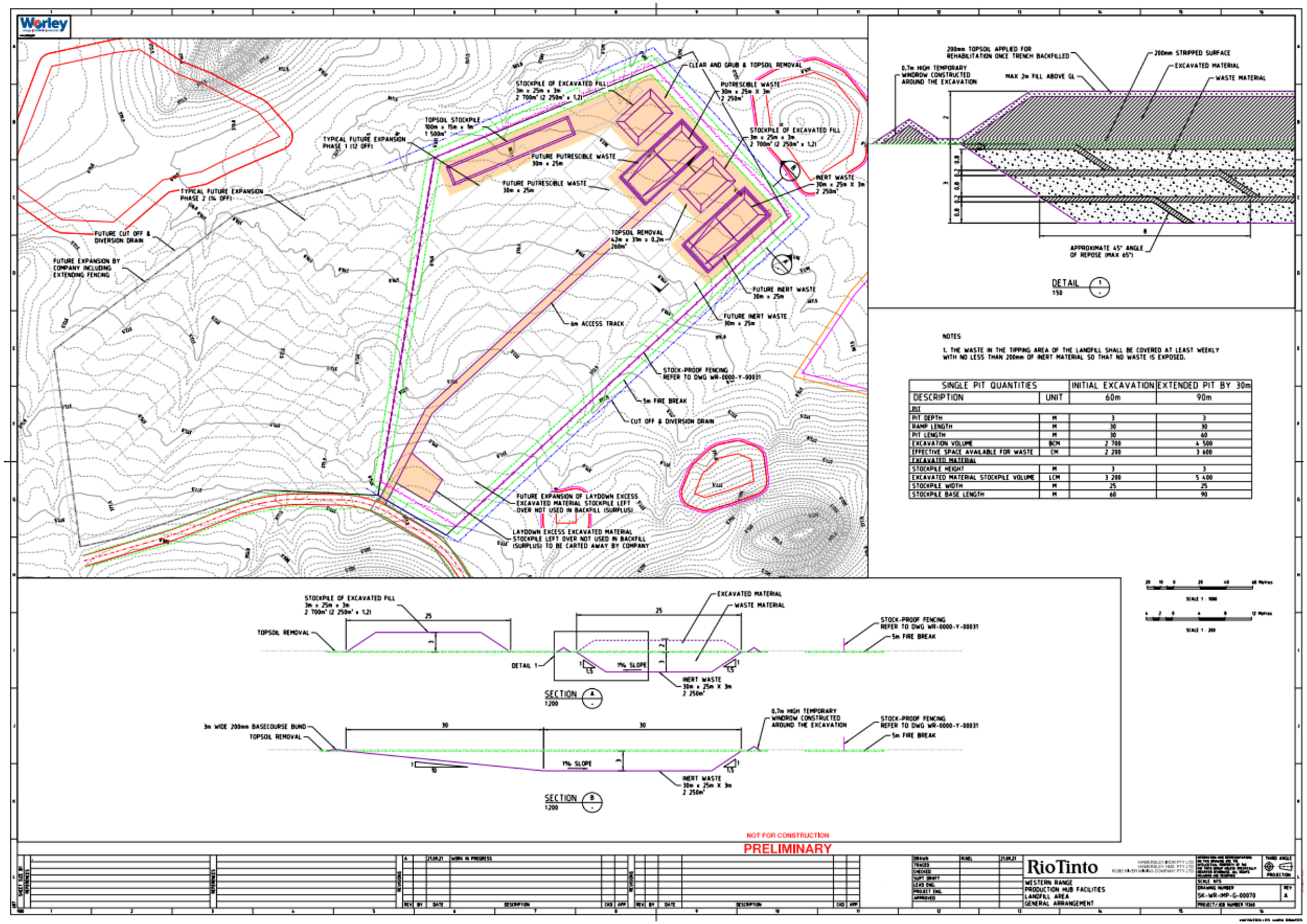

Figure 8: Class II putrescible landfill

Class II putrescible landfill (for construction wastes)

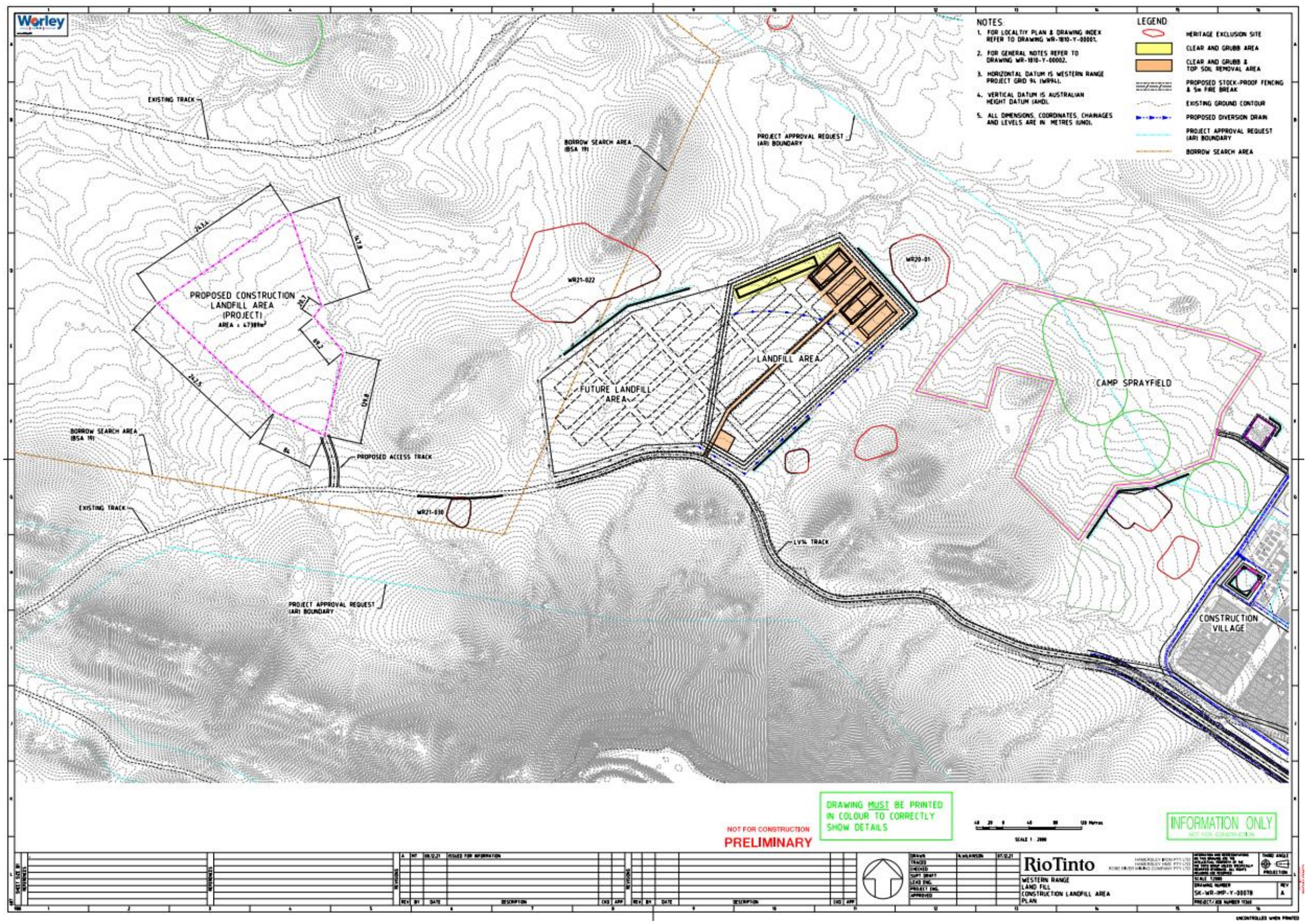

Figure 9: Class II putrescible landfill (for construction wastes)

Heavy vehicle refuelling facility

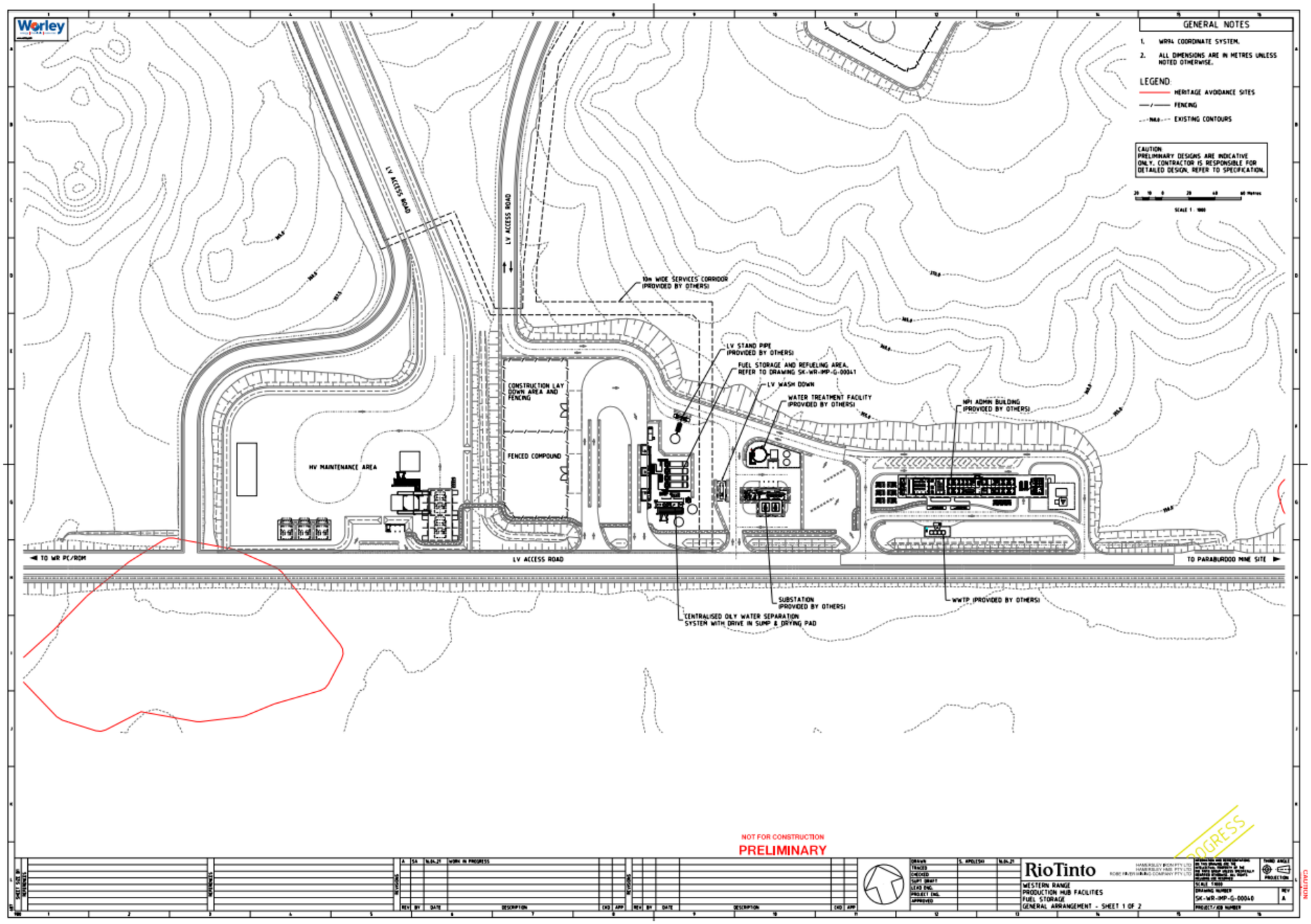

Figure 10: Heavy vehicle refuelling facility overview

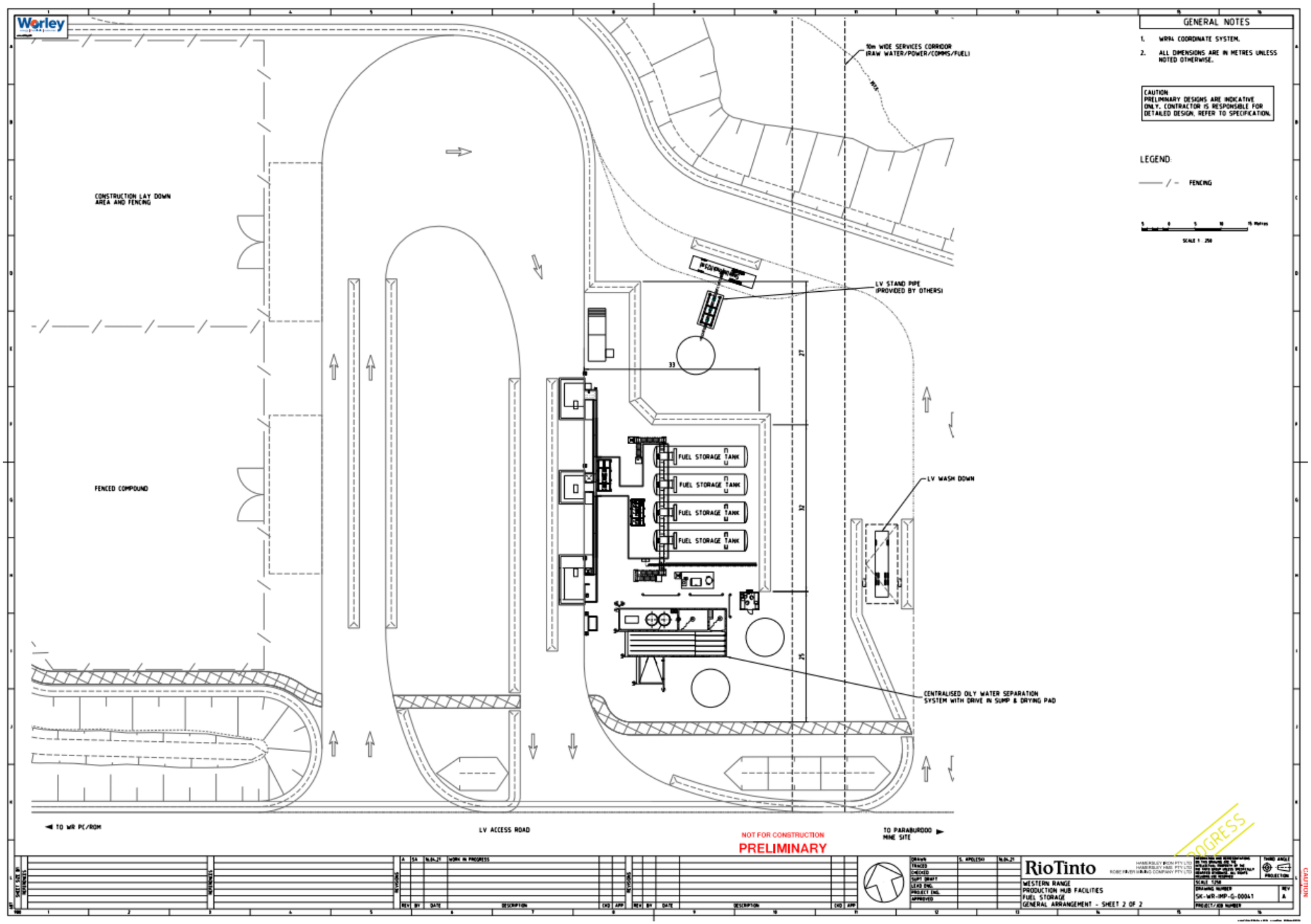

Figure 11: Detailed design of heavy vehicle refuelling facility

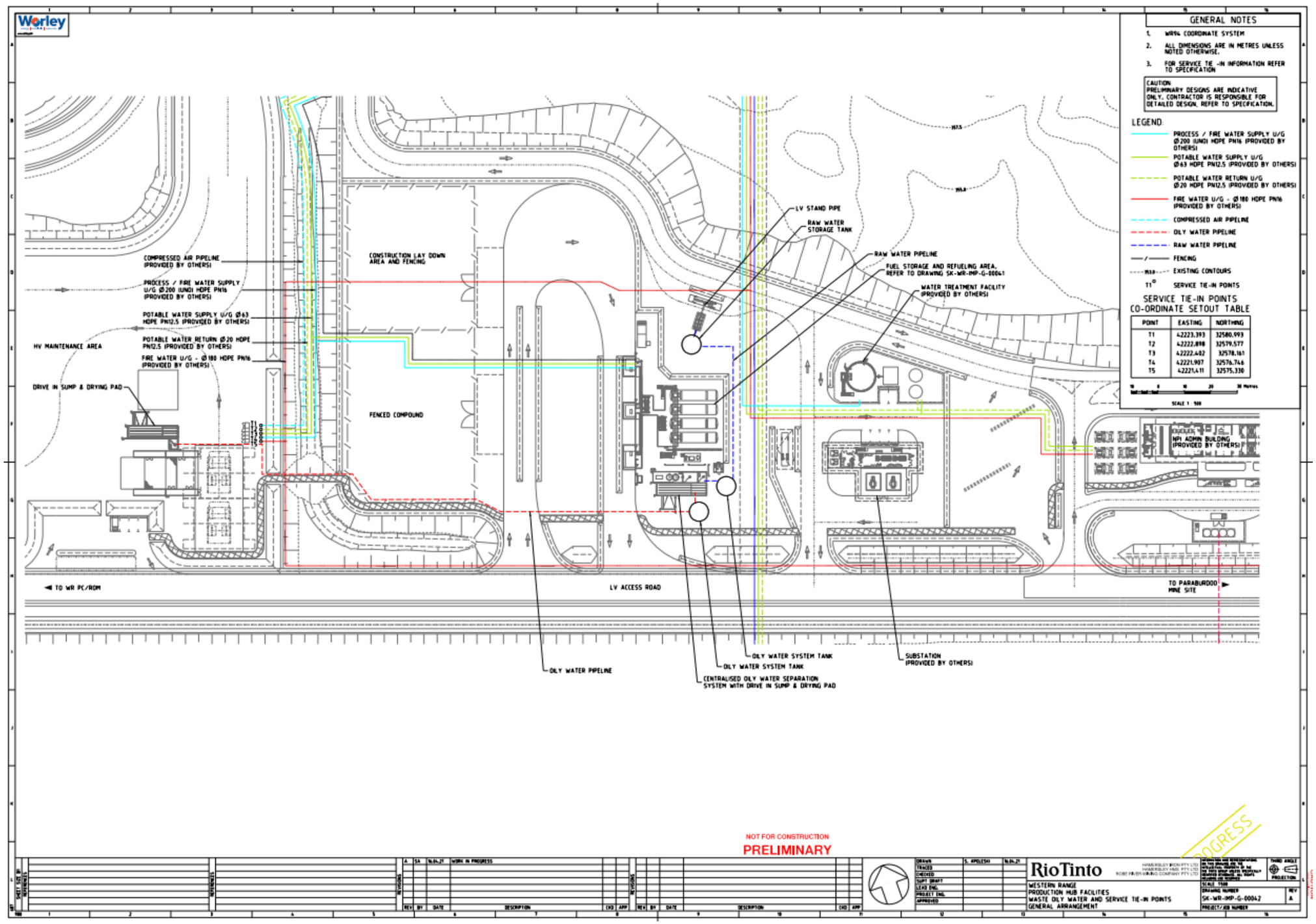

Figure 12: Heavy vehicle refuelling facility oily water separator

Temporary bulk refuelling facilities

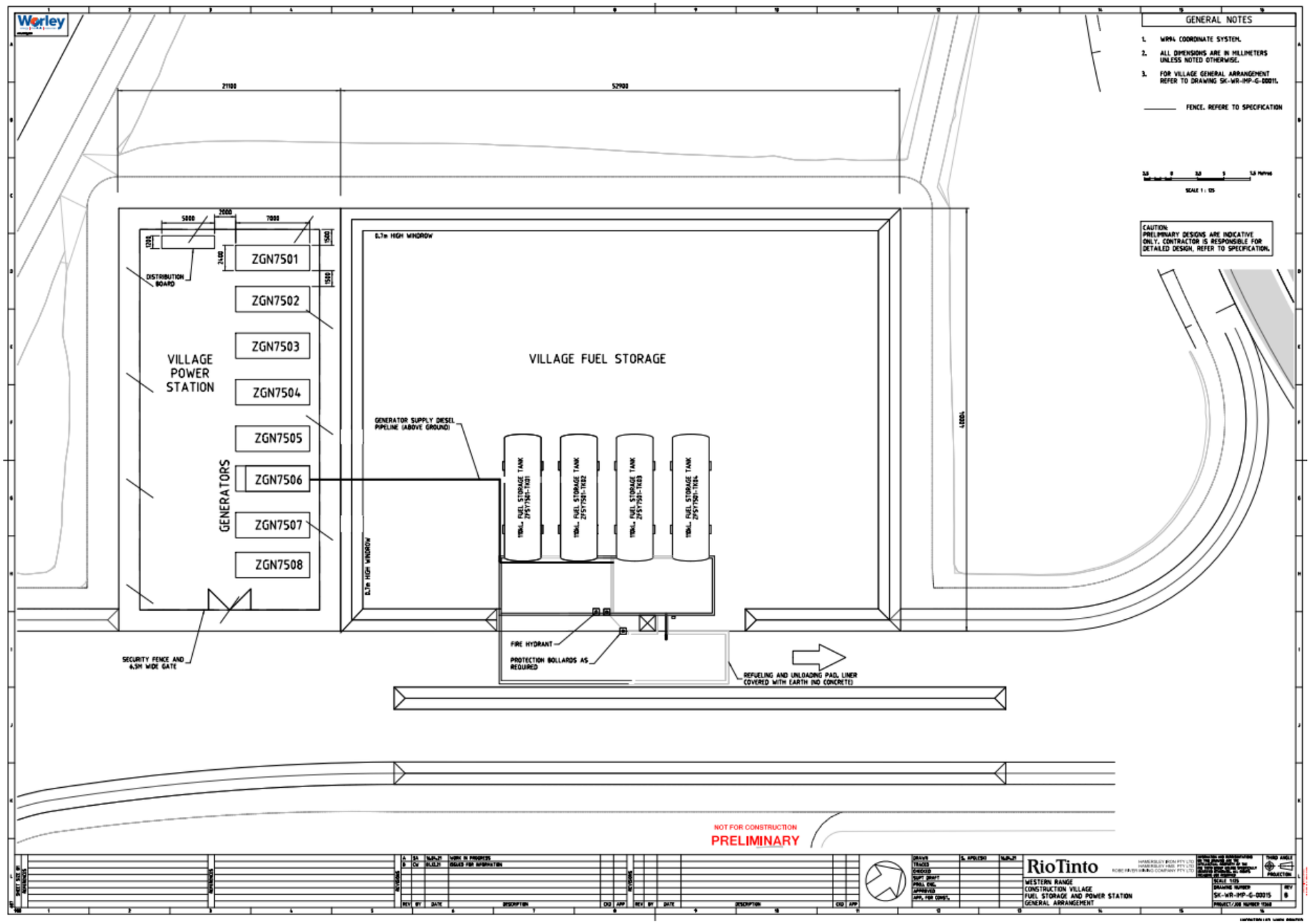

Figure 13: Camp temporary bulk refuelling facility

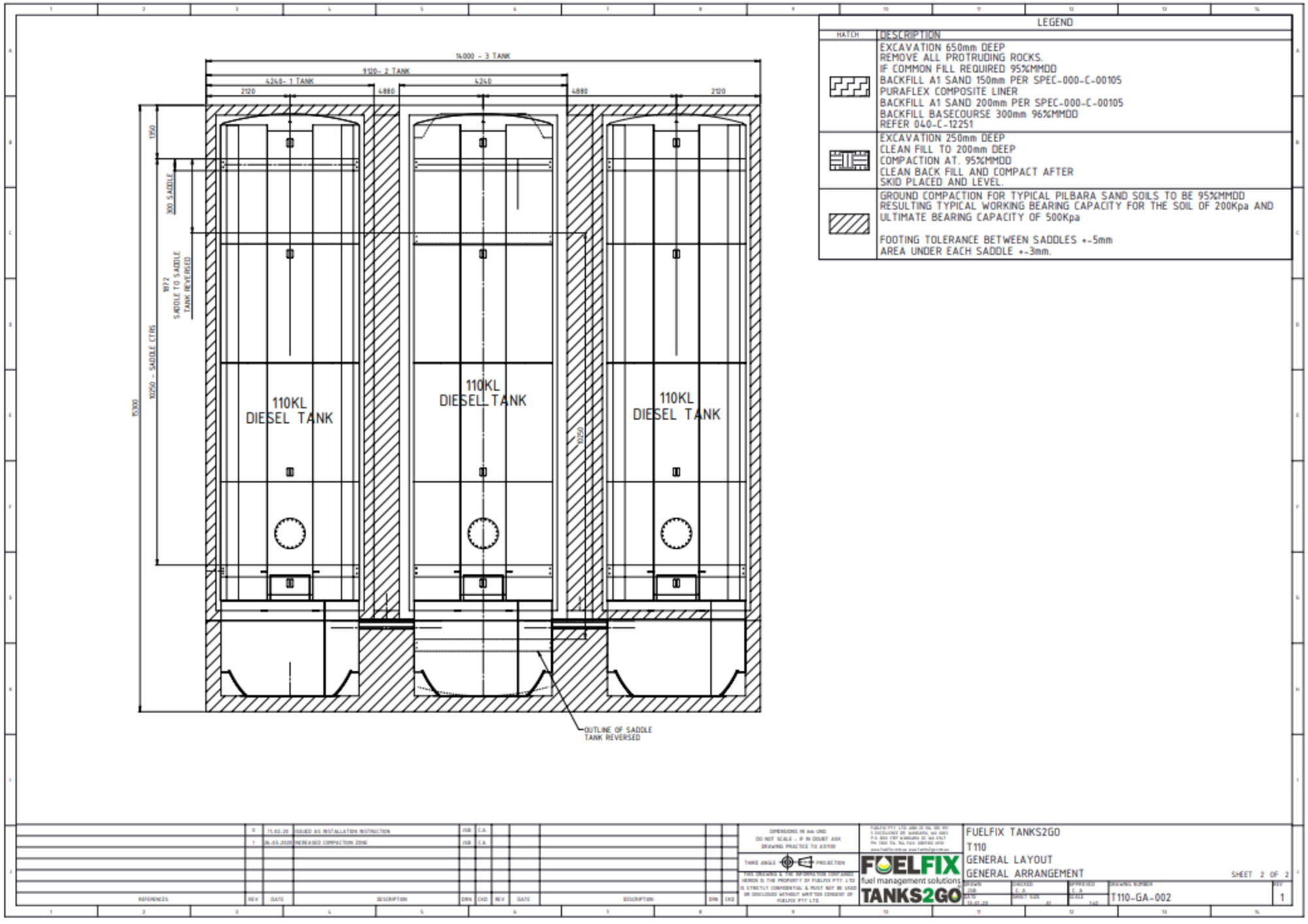

Figure 14: Western Range temporary bulk refuelling facility (next to the heavy vehicle refuelling facility)

Schedule 3: Infrastructure and equipment

Table 4: Design and installation requirements

Item	Infrastructure	Design and construction requirement and/or installation requirement	Infrastructure location	Timeframe
Category 5 - Processing or beneficiation of metallic or non-metallic ore				
1.	Primary crushing facility (Western Range)	(a) The design of the primary crushing facility to be in accordance with Figure 3 in Schedule 2: Design detail. (b) Includes a dry baghouse dust extraction system. (c) Baghouse chambers equipped with an insertable type dust collector at the top of the bin structure. (d) Load points from the baghouse hoppers onto each conveyor to include skirts and covers and dust suppression spray(s). (e) Installed on a concrete hardstand that allows for water to be collected in concrete sumps with overflow directed to earthen secondary containment structure which has been designed to withstand a peak 1:10 year rainfall event. (f) Surface water management structures (such as diversion bunds and drains) must be installed to: (g) direct surface water flows around the facility; and (h) prevent the ingress of water into the facility. (i) Designed to deliver ore to a discharge conveyor with the ground area surrounding transfer points to be a concrete hardstand that allows for water to be collected in concrete sumps which has been designed to withstand a peak 1:10 year rainfall event. (j) Primary crushing facility to have associated infrastructure which includes Run of Mine bin, apron feeder, two rock-breakers, gyratory crusher, crusher vault, baghouse dust extraction system, gantry crane, and discharge conveyor.	Figure 2 of Schedule 1: Maps	60 days before the expiry of this works approval
2.	Processing facilities (Western	(a) The design of the Run of Mine pad to be in accordance with Figure 4 in Schedule 2: Design detail.	Figure 2 of Schedule 1: Maps	60 days before the expiry of

Item	Infrastructure	Design and construction requirement and/or installation requirement	Infrastructure location	Timeframe
	Range)	(b) Surface water management structures (such as diversion bunds and drains) must be installed to: (i) direct surface water flows around the facility; and (ii) prevent the ingress of water into the facility.		this works approval
3.	Overland conveyor (Western Range to Paraburdoo)	(a) The design of the overland conveyor to be in accordance with Figure 5 in Schedule 2: Design detail. (b) Overland conveyor from Western Range to Paraburdoo (c) The overland conveyor must be: (i) covered for approximately 95% of the total length; and (ii) include dust suppression, moisture addition and dust analysing equipment.	Figure 2 of Schedule 1: Maps	60 days before the expiry of this works approval
4.	Existing processing facilities (Paraburdoo)	(a) The design of the Coarse Ore Stockpile to be in accordance with Figure 6 and Figure 7 in Schedule 2: Design detail. (b) Modifications to the existing Coarse Ore Stockpile which involves: (i) removal of concrete vault sections, apetures (holes) and their chute openings, air operated clam shell isolation gates, vibrating feeders including the chute work, and tail ends of the discharge conveyors; and (ii) installation of new concrete vault sections, apron feeders, chute work, discharge conveyors and services (c) Upgrade of the existing Scalping Screens and surrounding platforms and chute work (d) Upgrades to the existing plant Conveyors CV02 – CV06; CV09 and CV10.		
Category 12 - Screening, etc. of material				
5.	Mobile crushing and screening plant	(a) Located within the premises boundary in cleared areas.	N/A	60 days before the expiry of this works approval

Item	Infrastructure	Design and construction requirement and/or installation requirement	Infrastructure location	Timeframe
Category 64: Class II putrescible landfill site				
6.	Class II putrescible landfill	(a) The design of the landfill to be in accordance with Figure 8 in Schedule 2: Design detail. (b) Located more than 100 meters from any watercourse. (c) Located within a fenced area that provides access via a lockable gate. (d) A sign to be built at the landfill which clearly defines what waste is accepted. (e) Surface water management structures to be installed which divert surface water away from landfill facilities. (f) A sump or bunding to collect any surface water that has come into contact with waste.	Figure 2 of Schedule 1: Maps	60 days before the expiry of this works approval
7.	Class II putrescible landfill (for construction wastes)	(a) The design of the landfill to be in accordance with Figure 9 in Schedule 2: Design detail. (b) Located more than 100 meters from any watercourse. (c) Located within a fenced area that provides access via a lockable gate. (d) A sign to be built at the landfill which clearly defines what waste is accepted. (e) Surface water management structures to be installed which divert surface water away from landfill facilities. (f) A sump or bunding to collect any surface water that has come into contact with waste.		
Category 73 - Bulk Fuel Storage				
8.	Heavy vehicle refuelling facility	(a) The design of the heavy vehicle refuelling facility to be in accordance with Figure 10, Figure 11, and Figure 12 in Schedule 2: Design detail. (b) Facility to include: (i) Six, 200 kilolitre diesel storage tanks and associated infrastructure such as piping and pumps; (ii) Two bunded refuelling bays that drain to a sump; (iii) Sump pump systems at the refuelling stations;	Figure 2 of Schedule 1: Maps	60 days before the expiry of this works approval

Item	Infrastructure	Design and construction requirement and/or installation requirement	Infrastructure location	Timeframe
		(iv) Road train diesel unloading facility; (v) Light vehicle refuelling facility; and (vi) Central oily water separation and collection, drive in sump and treatment plant. (c) The oily water collection and treatment system must be designed to achieve a total recoverable hydrocarbon concentration below 15 mg/L in treated water. (d) Sumps must be installed to allow potentially contaminated or contaminated surface water to be collected and directed to an oily water collection and treatment system. (e) Designed and constructed in accordance with the following sections of AS 1940-2004: The storage and handling of flammable and combustible liquids: (i) Section 3.2.1; (ii) Sections 5.2.1, 5.2.4, 5.3, and 5.7 (as appropriate); (iii) Sections 5.8.1, 5.8.2, 5.8.3, and as appropriate sections 5.8.4 – 5.8.6; and (iv) Sections 6.1.1, 7.3.2, 7.4.1.		
9.	Temporary bulk refuelling facilities	(a) The design of the camp temporary bulk refuelling facility to be in accordance with Figure 13 in Schedule 2: Design detail. (b) The design of the Western Range temporary bulk refuelling facility to be in accordance with Figure 14 in Schedule 2: Design detail. (c) The facility at the camp bulk fuel storage area to include two, 110 kilolitre diesel storage tanks and have windrows that are 700 mm high at 2:1 batter surrounding the sides of the facility. (d) The facility next to the heavy vehicle refuelling facility (Western Range) to include three, 110 kilolitre diesel storage tanks and have windrows that are 700 mm high at 2:1 batter surrounding the sides of the facility. (f) Designed and constructed in accordance with the following sections	Figure 2 of Schedule 1: Maps Figure 2 of	60 days before the expiry of this works approval 60 days

Item	Infrastructure	Design and construction requirement and/or installation requirement	Infrastructure location	Timeframe
		of AS 1940-2004: The storage and handling of flammable and combustible liquids: (v) Section 3.2.1; (vi) Sections 5.2.1, 5.2.4, 5.3, and 5.7 (as appropriate); (vii) Sections 5.8.1, 5.8.2, 5.8.3, and as appropriate sections 5.8.4 – 5.8.6; and (viii) Sections 6.1.1, 7.3.2, 7.4.1.	Schedule 1: Maps	before the expiry of this works approval