Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6956/2024/1
Works approval holder	Elders Toll Formation Pty Ltd
ACN	669 173 951
Registered business address	Level 10, 80 Grenfell Street, Adelaide SA 5000
DWER file number	DER2024/000381
Duration	24/10/2024 to 23/10/2027
Date of issue	24/10/2024
Premises details	Elders Toll Formulation Pty Ltd 4 Lodge Drive, East Rockingham Legal description - Part of Lot 32 on Deposited Plan 425178 As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production / design capacity**
Category 33: Chemical blending or mixing: premises on which chemicals or chemical products are mixed, blended or packaged in a manner that causes or is likely to cause a discharge of waste into the environment.	9,500 tonnes per year

This works approval is granted to the works approval holder, subject to the attached conditions, on 24 October 2024, by:

Michael Greenslade
Digitally signed by Michael Greenslade
Date: 2024.10.24 10:03:13 +08'00'

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
24/10/2024	W6956/2024/1	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.	Formulation mixing and storage tanks (Blending area)	a) Installation of 5 x 20kL formulation mixing tanks and 5 x 20kL storage tanks (T1 to T5); b) Installation of 4 x 5kL formulation mixing tanks and 4 x 5kL storage tanks (T6); c) Installation of associated hot water baths, pumps and piping; d) formulation mixing tanks and paired storage tanks must be: (i) located within a discrete blending area (10m x 10m) on an impervious concrete hardstand; (ii) located within an area bound by 4m high concrete panels (north, south and western sides); and (iii) roofed to prevent incidental rainfall; e) all tanks to be designed and constructed to meet the requirements of AS1940 and AS1692; f) Concrete bund wall to be constructed to 140mm high around perimeter of each blending area to allow secondary containment of 84kL; g) Blending area must be designed to ensure all spills are captured within an impervious containment sumps; a) all tanks to be protected by fire safety wall; b) liquid level alarms to be installed for 20kL tanks; and c) Designed and constructed to ensure that fumes/emissions generated during the chemical blending process and from each formulation and storage tank are collected and directed to the wet scrubber system.	As depicted in Figure 1 and Figure 2, Schedule 1
2.	Scrubber system	a) Wet scrubber to be installed and include dedicated vent headers from the: (i) Insecticide tanks (T1 and T2) including mixing and storage tanks; (ii) Herbicide tanks (T3, T4 and T5) including mixing and storage tanks; (iii) Herbicide tank (T6) including mixing and storage	As depicted in Schedule 1 Premises Map

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		tanks; (iv) Extraction system from filling area. b) Constructed to ensure that gaseous emissions collected (via extraction fans, collection hoods and ducting are directed to the wet scrubber for treatment prior to discharge from the scrubber stack; c) The combined extraction system to be ducted to a single packed bed scrubber, including spray nozzles, recirculation pipework and pump system, mist eliminator, clean air ductwork, ID fan and discharge stack. d) Extraction system design based on assessment of raw and final products and associated flow rates in T1-T6; e) pH control systems fitted to scrubber to maintain pH of recirculating water; f) Carbon filter to be installed from vent headers; g) Emissions via a stack that is not less than 19m high (measured from ground level); and h) Stack must be fitted with monitoring ports that meets the requirements of AS4323.1.	
3.	Product Packing area	a) Located within an enclosed building with a bunded impervious concrete hardstand; and b) Entry / exit points of the building to have a 38mm external bund that is sufficient to prevent any release of material outside of the building;	As depicted in Schedule 1 Premises Map
4.	Combustible liquid storage tanks	a) Installation of 2 x 80kL self-bunded double walled combustible liquid storage tanks; b) Tanks to be fitted with liquid level/overfill alarms and overfill float valves to prevent spills; c) 2 x high level switches with auto-emergency shutoff; and d) roll over /grate to capture any spills at transfer points to the tanks.	As depicted in Schedule 1 Premises Map
5.	Associated general infrastructure and storage areas	a) Installation of associated storage areas: (i) Raw material store; (ii) finished goods store; (iii) flammable good store; (iv) waste storage area b) Located within bunded impervious hardstand storage areas, or within self-contained bunding. c) Flammable goods must be constructed and stored in accordance with the requirements of the *Dangerous Goods Storage Safety Act 2004 and the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*	As depicted in Schedule 1 Premises Map
6.	Fire protection	a) Fire detection and fire-fighting equipment installed and maintained at the premises. b) Fire detection system linked to emergency services.	N/A

	Infrastructure	Design and construction / installation requirements	Infrastructure location
7.	Stormwater drainage	a) Designed and constructed to ensure that uncontaminated stormwater is diverted away from potentially contaminated areas of the premises and discharged via a swale drain / retention basin to the north of the premises (as depicted in Figure 3 – Northern drainage area); and b) Stormwater control infrastructure must be designed and constructed to capture all potentially contaminated stormwater from the chemical blending/mixing area, storage areas and associated plant infrastructure and direct collected runoff to the junction pits and containment sumps (as depicted in Figure 4 – Eastern drainage area)); c) Perimeter bund to be installed of impervious material, and installed to the northern, southern and western boundary of drainage area to prevent overflows and direct all runoff and discharges to the junction pits/containment sumps.	As depicted in Figure 1, 3 and 4, Schedule 1
8.	Containment sumps	a) Installation of 9 junction pits/underground containment sumps, constructed of impervious concrete material; b) Equipped with a shutoff valve to the drainage swale / retention basin in the event of a spill; c) Installation of a submersible pump (design flow rate of 31.32.m^3/hour) to remove liquid from within pits/sumps; and d) Installation of a 27 kL above ground storage tank, constructed of impervious material to store material collected within sumps/pits.	As depicted in Figure 4, Schedule 1

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 Chartered Engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and

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

Environmental commissioning phase

Environmental commissioning requirements and emission limits

4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 5 once the Environmental Compliance

Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.

5. The works approval holder must ensure that any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 are only carried out:

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

(b) for the corresponding authorised commissioning duration.

of Table 2.

Table 2: Environmental commissioning requirements

Infrastructure	Commissioning requirements	Authorised commissioning duration
Infrastructure associated with the chemical mixing process (including hot water baths, formulation mixing tanks and scrubber)	a) Plant and equipment to be operated and maintained in accordance with the manufacture's specifications; b) Water used for hydro/leak testing that is potentially contaminated with environmental hazardous materials to be retained or disposed offsite at a suitably authorised facility; and c) Any spills of treatment chemicals or wastewater (outside of containment) is immediately cleaned up.	For a period not exceeding 180 calendar days in aggregate.

6. 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 2.

7. The works approval holder must ensure the Environmental Commissioning Report required by condition 6 includes the following:

(a) a summary of the environmental commissioning activities undertaken;

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

(i) environmental commissioning of the scrubber system;

(ii) a summary of pressure testing/leak testing on tanks and pipework; and

(iii) commissioning of the process control system;

(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

Management Plans

8. The works approval holder must, at least 2 months prior to the commencement of time limited operations, submit to the CEO an updated Emissions Monitoring Plan.

9. The works approval holder must ensure that the updated Emissions Monitoring Plan required by condition 8 includes as a minimum:

(a) procedures for monitoring and managing emissions from the premises during operation, including a description of the proposed emissions monitoring to be undertaken, including frequency;

(b) an updated list of air quality monitoring parameters to be monitored that are reflective of the chemicals and mixing agents used in the chemical mixing processes at the premises (including consideration of feedstock, formulated products, potential by-products from the mixing process, generated fumes/gases from mixing processes, and potential environmentally hazardous compounds from the mixing and blending processes).

(c) an updated list of sampling methods for all parameters identified in part (b) of this condition;

(d) targets and/or triggers for each parameter, referenced against relevant environmental standards for the emission to air (where available); and

(e) is developed with the assistance of an independent air emissions specialist to ensure the developed air emissions monitoring plan is reflective of premises activities, environmental setting, likely gaseous emissions and risk profile.

10. The works approval holder, at least one month prior to the commencement of time limited operations, submit to the CEO a Spill Management Plan (Blending/Mixing Area).

11. The works approval holder must ensure that the Spill Management Plan required by condition 10 includes as a minimum:

(a) detail on how spills and spilt material/chemicals will be managed in the containment area, and specifically the procedure for isolating the spill and activation of the premises isolation valve;

(b) roles and responsibilities of premises staff in the event of a tank leak or spill associated with activities in the blending area (including the transport of material to and from the blending area);

(c) cleanup and disposal requirements for spills, including provisions for contaminant analysis for contaminated stormwater or materials to ensure its appropriate disposal;

(d) identification of appropriate disposal facilities for wastes contained within sumps, pits and storage tanks associated with the containment area; and

(e) detail on the inspection and maintenance of premises bunds, hardstands, collection sumps/pits, drainage swales and isolation valves to ensure the ongoing effective suitability of this infrastructure to contain spilled materials and prevent discharges of environmental hazardous materials to the environment.

12. The works approval must, at least one month prior to the commencement of time limited operations, submit to the CEO a Scrubber Operation and Maintenance Plan.

13. The works approval holder must ensure that the Scrubber Operation and Maintenance Plan required by condition 12 includes as a minimum:

(a) an overview of the operational and process requirements that ensure the effective operation of the wet scrubber installed on the premises;

(b) detail on the servicing and maintenance requirements of the wet scrubber system (in accordance with any manufacturers specifications) that ensure its

ongoing, effective operation. This includes detail for the carbon filter, mist eliminator and any other emission controls installed;

(c) the proposed frequency of any maintenance and servicing requirements for the wet scrubber and/or individual components; and

(d) contingency plans and/or proposed actions to ensure emissions during operations are appropriately contained and controlled in the event of a breakdown of the wet scrubber system or damage to any components is identified.

Time limited operations - commencement and duration

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

(a) The Environmental Compliance Report has been submitted in accordance with the requirements of condition 2 for that item of infrastructure; or

(b) the Environmental Commissioning Report has been submitted in accordance with the requirements of condition 6 for that item of infrastructure; and

(c) the CEO has notified the works approval holder that the updated Emissions Monitoring Plan required by condition 8 meets the requirements of condition 9; and

(d) the CEO has notified the works approval holder that the Spill Management Plan required by condition 10 meets the requirements of condition 11.

15. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1 (as applicable):

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 14 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 15(a).

Time limited operations – infrastructure and equipment

16. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement
1.	Formulation mixing and storage tanks and general site requirements	a) Spill kits to be available around the site to sufficiently contain and capture any spills of hydrocarbons or chemicals; b) Spilled materials are either reused on site or taken offsite to a suitably licensed facility; and c) Vents are maintained to direct all gaseous emissions to the scrubber system for treatment.
2.	Wet scrubber system	a) Must be in operation at all times during chemical blending and mixing; b) The wet scrubber system is to be maintained and operated in accordance with the manufacture's specifications to ensure optimal performance, and in

	Site infrastructure and equipment	Operational requirement
		accordance with the Scrubber Operation and Maintenance Plan once submitted in accordance with condition 12. c) Broken or faulty filters must be repaired or replaced when detected; d) Use of carbon filter to remove solvent naphtha (hydrocarbon) and improve efficiency for extraction system and emission levels; e) pH controls systems fitted to scrubber to maintain pH of recirculating water; and f) Stack emission point to be 19m in height (from ground level).
3.	Stormwater	a) Clean and uncontaminated stormwater to be directed to retention basins and drainage swale for discharge offsite; b) Potentially contaminated stormwater collected from throughout the premises to be collected and drain toward the junction pits and containment sumps and pumped to above ground storage tank and recovered for reuse or disposed of at an appropriate licensed facility; and c) Retention basins, junction pits and containments sumps must be maintained monthly to be free of sand, debris and water to ensure efficacy.
4.	Environmentally hazardous materials	a) Immediately recover or remove and dispose of spills of environmentally hazardous materials, whether inside or outside of an engineered containment system. b) Ensure that spills are managed in accordance with the Spill Management Plan as required by condition 10; c) Ensure that the containment area isolation valves are immediately closed in the event of the spill; and d) Ensure that following event, where material has entered the containment sumps and transferred to the above ground storage tank, that this material is removed as soon as practicable offsite to an appropriately authorised waste facility.
5.	Waste management	All solid and liquid wastes generated thorough the activities conducted on the premises must be removed from the premises and disposed of to an appropriately authorised waste facility

17. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 4, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 4: Authorised discharged points

Discharge point	Emission	Discharge point location
Wet scrubber system stack	Gaseous emissions from chemical mixing process	As shown in Schedule 1: Map, stack emission point

Time limited operations - emission limits

18. The works approval holder must monitor emissions during time limited operations in accordance with Table 5.

Table 5: Emissions and discharge monitoring during time limited operations

Discharge point	Monitoring location	Parameter[1]	Frequency	Averaging Period	Unit[2]	Method[3,4]
Wet scrubber stack	Discharge stack sampling port	Volumetric flow rate	a) 1 x Initial monitoring event to be conducted within 1 month of the commencement of partial operations (2 bays operating); b) 1 x Secondary monitoring event to be conduced upon commencement of full operations (5 bays) c) Quarterly monitoring conducted thereafter	N/A	m^3/s	USEPA Method 2
		Moisture content		60 minutes	$\mu g/m^3$	USEPA Method 4
		SO_2			$\mu g/m^3$	USEPA Method 6C
		NO_x			$\mu g/m^3$	USEPA Method 7E
		CO			$\mu g/m^3$	USEPA Method 10
		VOCs			$\mu g/m^3$	USEPA Method 18
		Trifluralin			$\mu g/m^3$	USEPA Method 26

Note 1: In the event that the updated Emissions Monitoring Plan, as required by condition 8 identifies additional parameters to monitor that are not already captured by this table, the works approval holder is required to sample these additional parameters in accordance with the remaining requirements of this table, and by the methods described in the updated Emissions Monitoring Plan.
Note 2: All units are referenced to STP dry
Note 3: Concentrations to be corrected to STP at 3% oxygen on a dry basis.
Note 4: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as referral to AS4323.1

19. The works approval holder must record the results of all monitoring activity required by condition 18.

Compliance reporting

20. 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.

21. The works approval holder must ensure the report required by condition 20 includes the following:

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

(b) a summary of stack test monitoring results obtained during time limited operations under condition 18;

(c) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable);

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

(e) where the manufacturer's design specifications and 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.

Records and reporting (general)

22. 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.

23. 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 16;

(c) complaints received under condition 22.

24. The books specified under condition 23 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 6 have the meanings defined.

Table 6: Definitions

Term	Definition
AS1692	means Australian Standard *Tanks for flammable and combustible liquids*
AS1940:2017	means Australian Standard *The Storage and Handling of flammable and combustible liquids*
AS4323.1	Australian Standard AS4323.1 1995 *Stationary Source Emissions - Selection of Sampling Positions*
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
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 and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
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.

Term	Definition
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.
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.
USEPA Method 2	refers to the United States Environmental Protection Agency EPA, Method 2 – Velocity – S – type Pitot
USEPA Method 4	refers to the United States Environmental Protection Agency EPA, Method 4 – Moisture content
USEPA Method 7E	refers to the United States Environmental Protection Agency EPA, Method 7E – Nitrogen Oxide
USEPA Method 10	refers to the United States Environmental Protection Agency EPA, Method 10 – Carbon Monoxide
USEPA Method 6C	refers to the United States Environmental Protection Agency EPA, Method 6C – Sulfur Dioxide
USEPA 3A	refers to the United States Environmental Protection Agency EPA, Method 3A – Oxygen and Carbon Dioxide
USEPA 18	refers to the United States Environmental Protection Agency EPA, Method 18 Volatile Organic Compounds
USEPA 26	refers to the United States Environmental Protection Agency EPA, Method 26 Determination of Hydrogen Halide

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

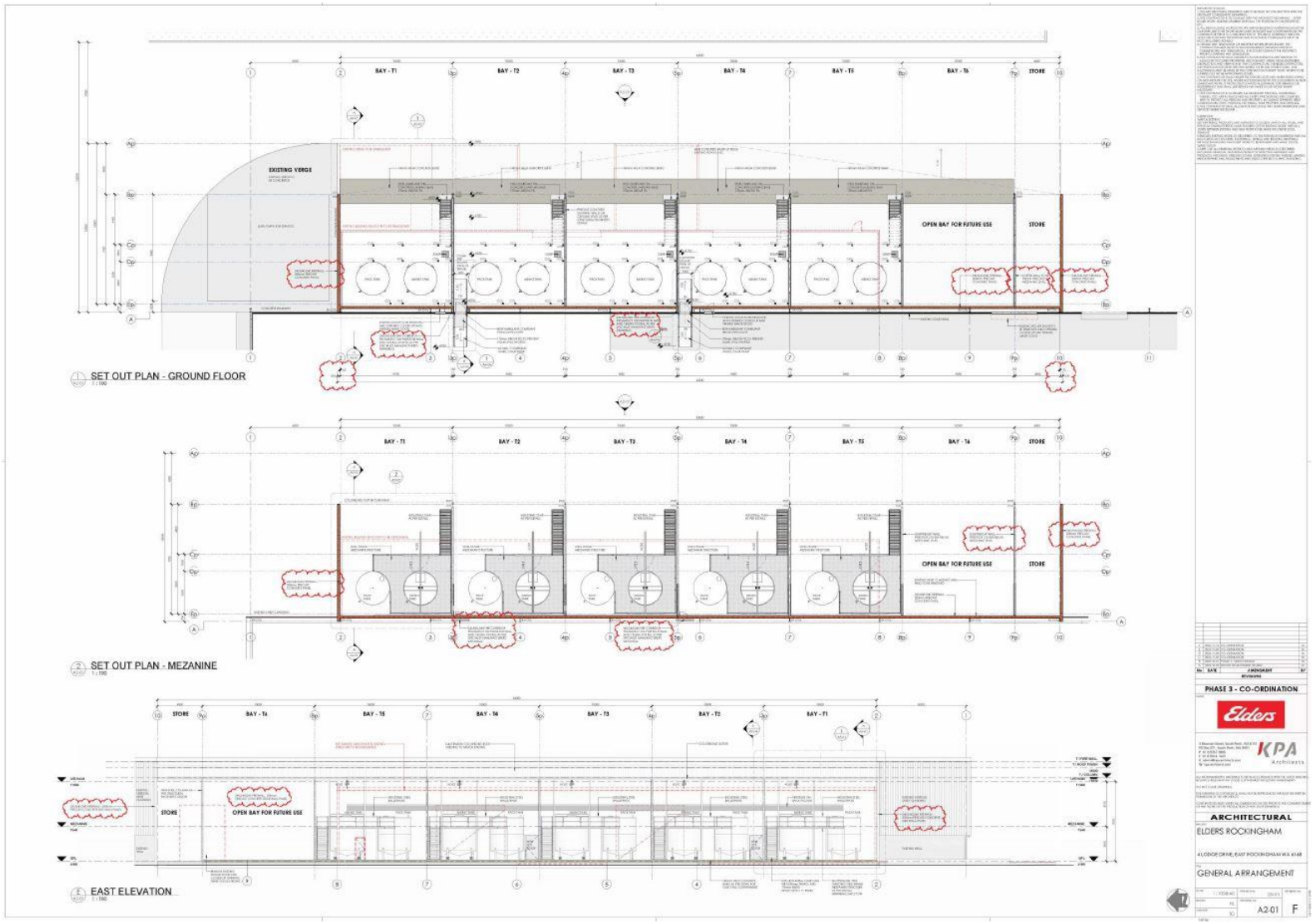

Figure 2: General arrangement – formulation/mixing area

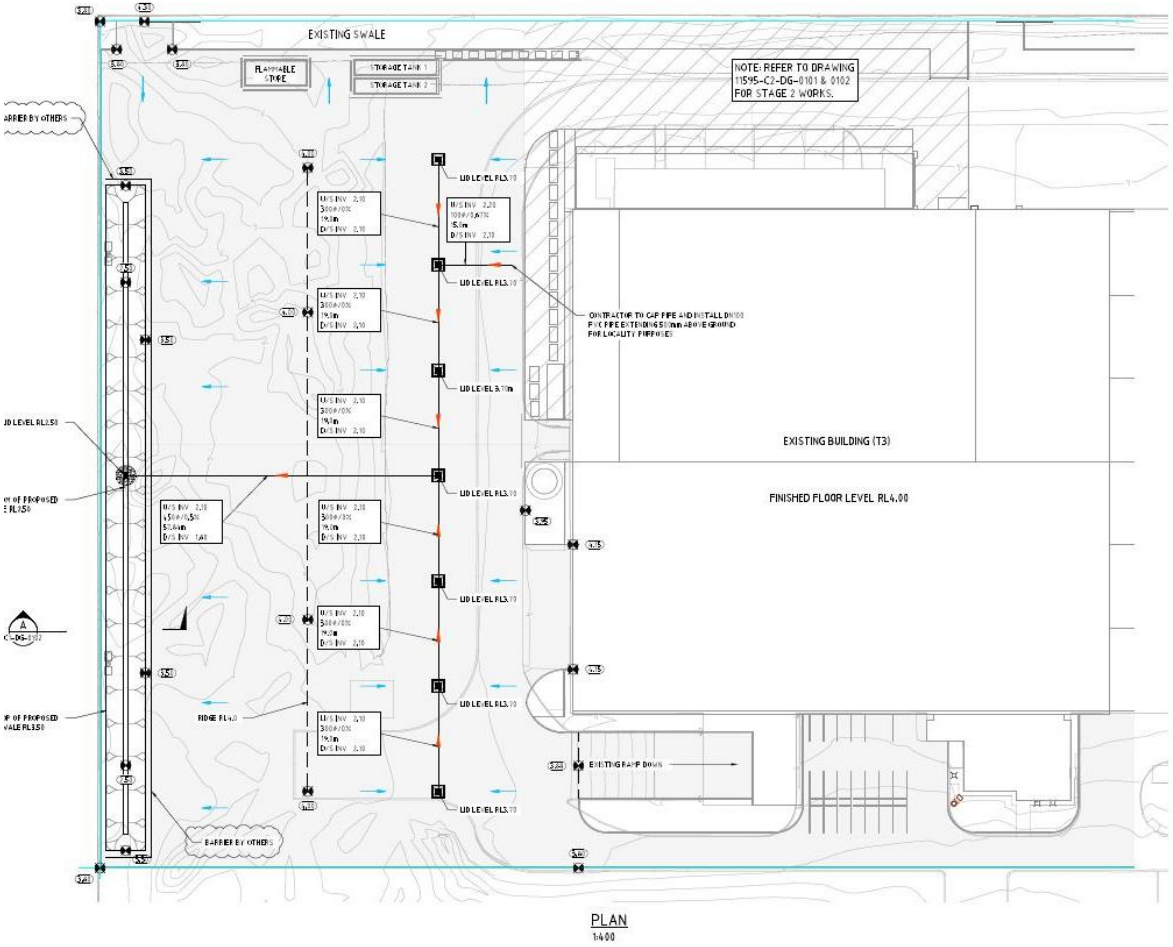

Figure 3: Northern drainage design

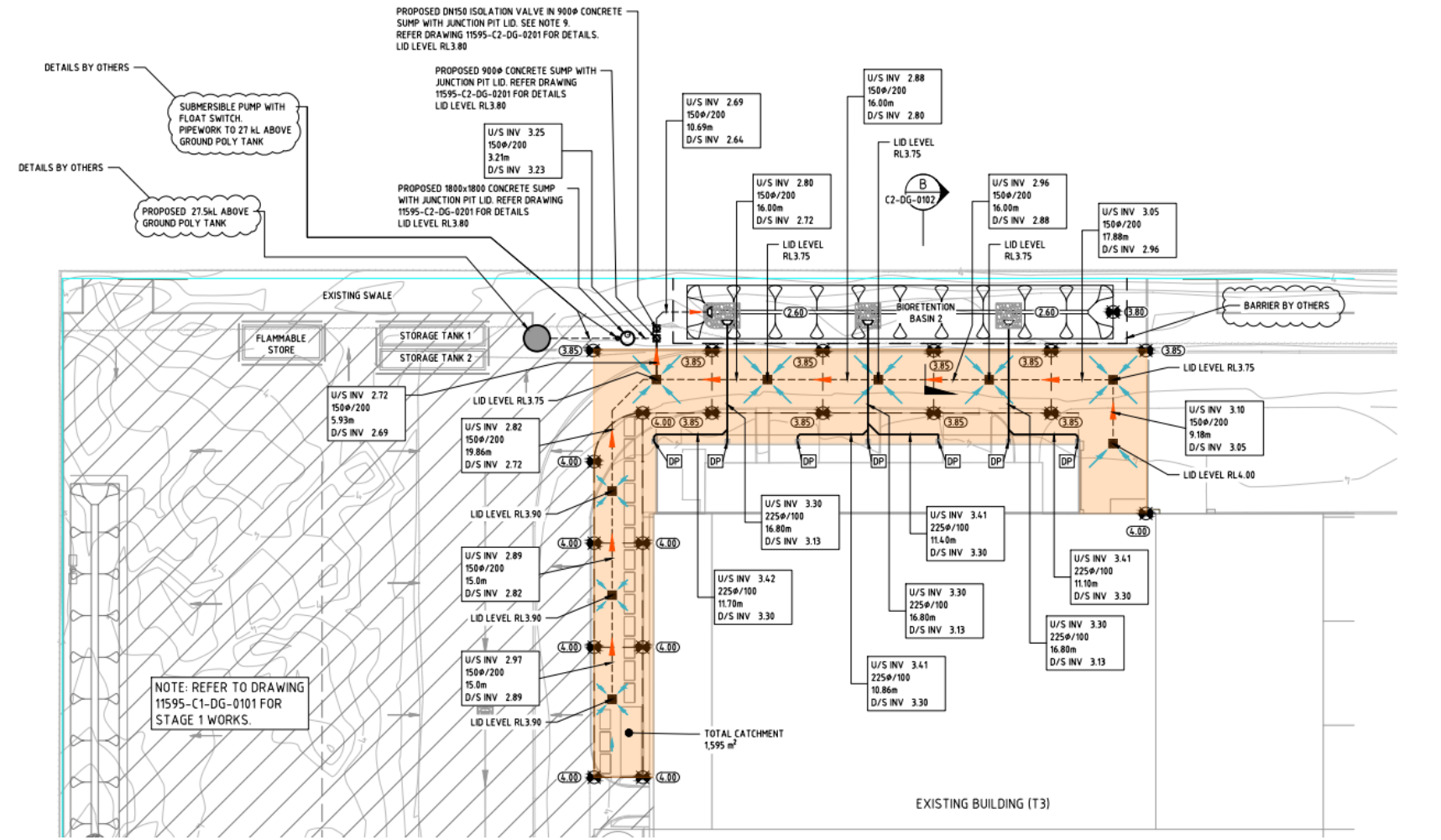

Figure 4: Eastern drainage design

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 7.

Table 7: Premises boundary coordinates (GDA2020)

	Longitude	Latitude
1.	115.7753	-32.267477
2.	115.7769	-32.267483
3.	115.7769	-32.268892
4.	115.7766	-32.268894
5.	115.7766	-32.269139
6.	115.7753	-32.269134