



Works Approval

Works approval number	W2986/2025/1
Works approval holder	Water Corporation
Registered business address	629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	INS-0002986
Duration	30/04/2026 to 29/04/2029
Date of issue	30/04/2026
Premises details	Cocos (West) Island Wastewater Treatment Plant West Island, Cocos (Keeling) Islands WA 6799 Legal description - Part of Lot 100 on Deposited Plan 18500 Certificate of Title Volume 2103 Folio 109

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 85: Sewage facility	70 m ³ per day

This works approval is granted to the works approval holder, subject to the attached conditions, on 30 April 2026, by:

Grace Heydon

**MANAGER, WASTE INDUSTRIES
APPROVALS - STATEWIDE DELIVERY**

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

Works approval history

Date	Reference number	Summary of changes
30/04/2026	W2986/2025/1 APP-0029080	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

Construction Environmental Management Plan (CEMP)

1. The works approval holder must submit a Construction Environmental Management Plan (CEMP) to the CEO a minimum 30 working days prior to construction activities commencing.
2. The CEMP specified in condition 1 should include as a minimum:
 - (a) details of the potential sources of:
 - (i). noise emissions;
 - (ii). odour emissions; and
 - (iii). dust emissions;
 during the construction works; and
 - (b) provide mitigation and management measures to reduce and prevent the potential emissions listed under condition 2(a).

Infrastructure and equipment

3. The works approval holder must:
 - (a) continue operation of the Wastewater treatment plant (WWTP), as specified in Row 1 of Table 1;
 - (b) construct and/or install the infrastructure and/or equipment as specified in Rows 2 to 7 of Table 1;
 - (c) in accordance with the corresponding design and construction / installation requirements; and
 - (d) 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.	Wastewater treatment plant (WWTP)	(a) Able to receive and treat 53 m ³ of wastewater per day. (b) Able to treat sewage to the following output standards: <ol style="list-style-type: none"> (i). pH 6.5 - 8.5; (ii). Total Nitrogen ≤10 mg/L; (iii). Total Phosphorus ≤15 mg/L; (iv). Biological Oxygen Demand ≤15 mg/L; and (v). Total Suspended Solids ≤20 mg/L. 	Figure 2 of Schedule 1

	Infrastructure	Design and construction / installation requirements	Infrastructure location
2.	Inlet works	<p>(a) Modifications to the inlet screening to include:</p> <ul style="list-style-type: none"> (i). inlet screening pump and mechanical sieve system to remove solids and rags from incoming wastewater; (ii). platform and stairs; and (iii). a bin below the sieve to collect screening material <p>(b) Must be constructed and installed in accordance with Schedule 1, Figures 2, 3 and 4.</p> <p>(c) Inflow monitoring to remain installed as per the existing process.</p>	Figures 2, 3 and 4 of Schedule 1
3.	Intermittent Aeration Tank (IAT) and Decant system	<p>(a) Existing Sinkair aerators to be replaced by Jet aerators</p> <p>(b) Equivalent replacement of components of the decant system.</p>	Figure 2 of Schedule 1
4.	Balance Tank	<p>(a) An inlet pipe connection to be fitted at the Balance Tank for connecting the accommodation camp wastewater treatment plant to support the Cocos (Keeling) Islands Airfield Upgrade Project undertaken by the Australian Government Department of Defence, located within Lot 3003 on Deposited Plan 44688 (Crown Reserve 47378).</p>	Figure 2 of Schedule 1
5.	Return Activated Sludge (RAS) Pumps	<p>(a) The configuration of the existing Waste Activated Sludge (WAS) pumps to be converted to Return Activated Sludge (RAS) pumps, with installation of additional pipework to enable the reconfiguration.</p>	Figure 2 of Schedule 1
6.	Sludge Drying	<p>(a) A polymer dosing unit is to be installed, with the existing sludge drying beds converted into geobag storage areas.</p> <p>(b) An additional concrete laydown area and leachate draining system is to also be installed.</p> <p>(c) The geobag storage area contain drainage trenches which returns all leachate to the existing leachate pump station.</p> <p>(d) Geobag storage areas must achieve a permeability of less than 1×10^{-9} metres per second or equivalent.</p> <p>(e) Must be constructed and installed in accordance with Schedule 1, Figures 5 and 6.</p>	Figures 2, 5 and 6 of Schedule 1

	Infrastructure	Design and construction / installation requirements	Infrastructure location
7.	Effluent disposal line	(a) The effluent disposal pipeline is to be rerouted to allow clearance along the Northern boundary.	Figure 2 of Schedule 1

Compliance reporting

4. The works approval holder must within 60 calendar days of all items of infrastructure or equipment required by condition 3 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 3; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
5. The Environmental Compliance Report required by condition 4, 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 3, have been constructed in accordance with the relevant requirements specified in condition 3;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 3; 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

6. The works approval holder may only commence environmental commissioning of the infrastructure listed in condition 7 once the Environmental Compliance Report has been submitted in accordance with condition 4 of this works approval.
7. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
 - (a) in accordance with the corresponding commissioning requirements; and
 - (b) for the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

	Infrastructure	Commissioning requirements	Authorised commissioning duration
1.	Wastewater treatment plant (WWTP)	<ol style="list-style-type: none"> (a) Not more than 53 m³ per day of wastewater to be treated by the WWTP. (b) The existing treatment process must remain operational throughout the commissioning of the upgraded infrastructure. (c) Flow meters must record the influent and effluent volumes that are received to and treated from the WWTP. 	For a period not exceeding 3 months in aggregate.

8. During environmental commissioning, the works approval holder must ensure that the emission specified in Table 1, is discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 1: Authorised discharge points during commissioning

Emission	Discharge point
Treated wastewater	Indian Ocean via an outfall pipeline approximately 400 m offshore and at a depth of 10m.

Monitoring during environmental commissioning

9. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 2.

Table 2: Emissions and discharge monitoring during environmental commissioning

Discharge point	Monitoring location	Parameter	Frequency	Unit
Ocean outfall	SP WI WWTP Effluent Autosampler	<i>E. coli</i>	Weekly	CFU or MPN /100 mL
		Total Nitrogen		mg/L
		Total Phosphorus		
		Nitrate + Nitrite and N		
		Ammonium		
		Biological Oxygen Demand		
		Total Dissolved Salts estimated from Electrical Conductivity		
		Total Suspended Solids		
		pH ¹		
		Cumulative flow volume ¹	Continuous	

Note 1: In-field non-NATA accredited analysis is permitted.

10. For the monitoring activity required by condition 9, the works approval holder must:
- (a) handle and preserve all water samples collected in accordance with AS/NZS 5667.1;
 - (b) conduct sampling in accordance with AS/NZS 5667.10;
 - (c) have analyses conducted by a laboratory with current National Association of Testing Authorities (NATA) accreditation for the parameters specified; and
 - (d) record the results.

Environmental commissioning report

11. The works approval holder must submit to the CEO an Environmental Commissioning Report within 60 calendar days of the completion date of environmental commissioning.
12. The works approval holder must ensure the Environmental Commissioning Report required by condition 11 of this works approval includes the following:
 - (a) A summary of the environmental commissioning activities undertaken, including timeframes and volume of wastewater processed;
 - (b) the monitoring results recorded in accordance with condition 9;
 - (c) copies of laboratory reports for monitoring results recorded in accordance with condition 9;
 - (d) a comparison of the monitoring results against the output standards specified in condition 3;
 - (e) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed;
 - (f) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
 - (g) 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.

Records and reporting (general)

13. 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.
14. 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 3;
 - (b) monitoring conducted in accordance with condition 9; and
 - (c) complaints received under condition 13.
15. The books specified under condition 14 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 5 have the meanings defined.

Table 5: Definitions

Term	Definition
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
environmental 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	<i>Environmental Protection Act 1986 (WA)(CKI)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)(CKI)</i> .
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.
suitably qualified	means a person who:

Term	Definition
engineer	(a) holds a Bachelor of Engineering recognised by the Engineers Australia; and (b) has a minimum of five years of experience working in a supervisory area of civil, structural, mechanical or water engineering; or is otherwise approved in writing by the CEO to act in this capacity
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

Figure 1: Map of the boundary of the prescribed premises

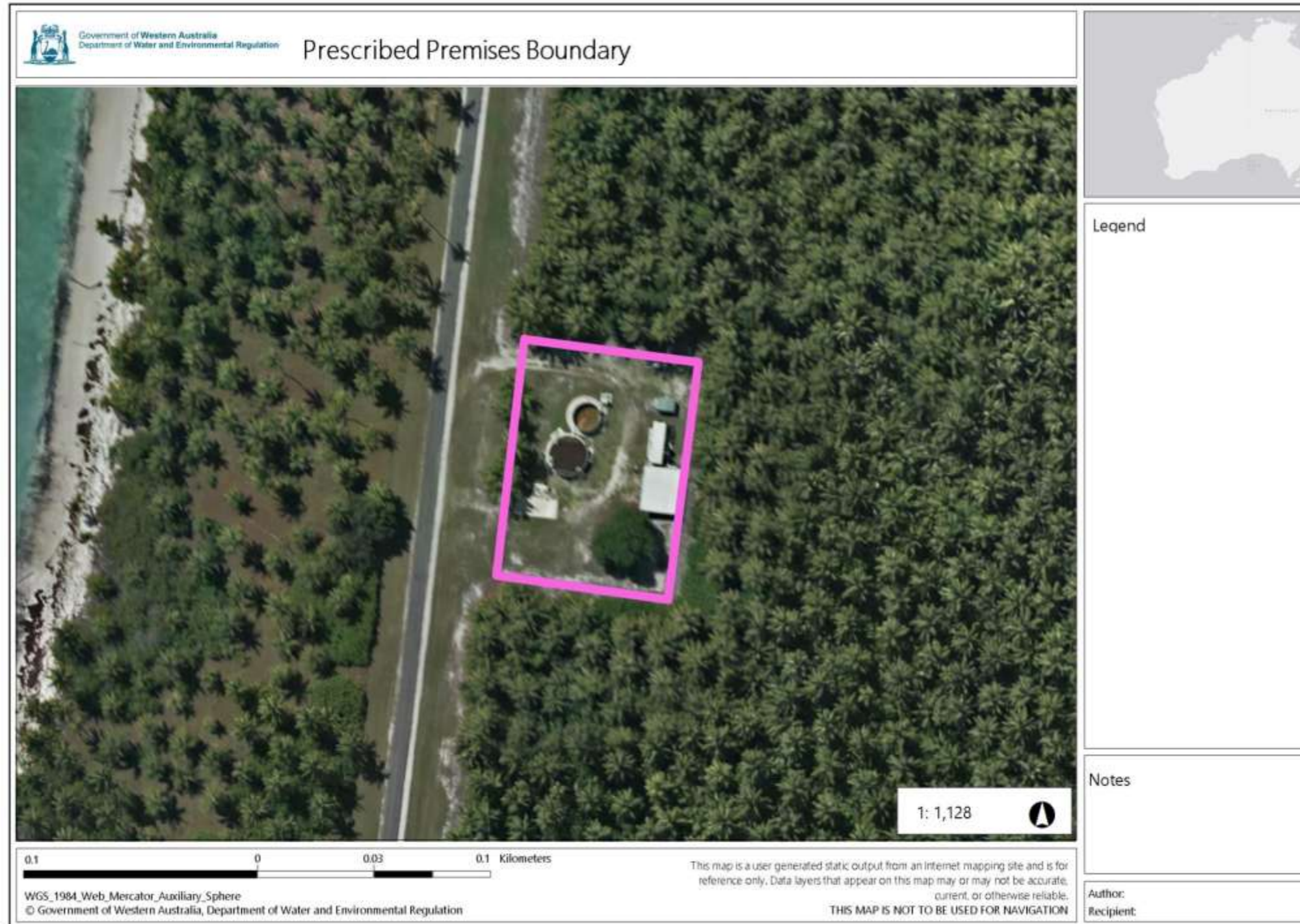


Figure 3: Plan view of Inlet screen

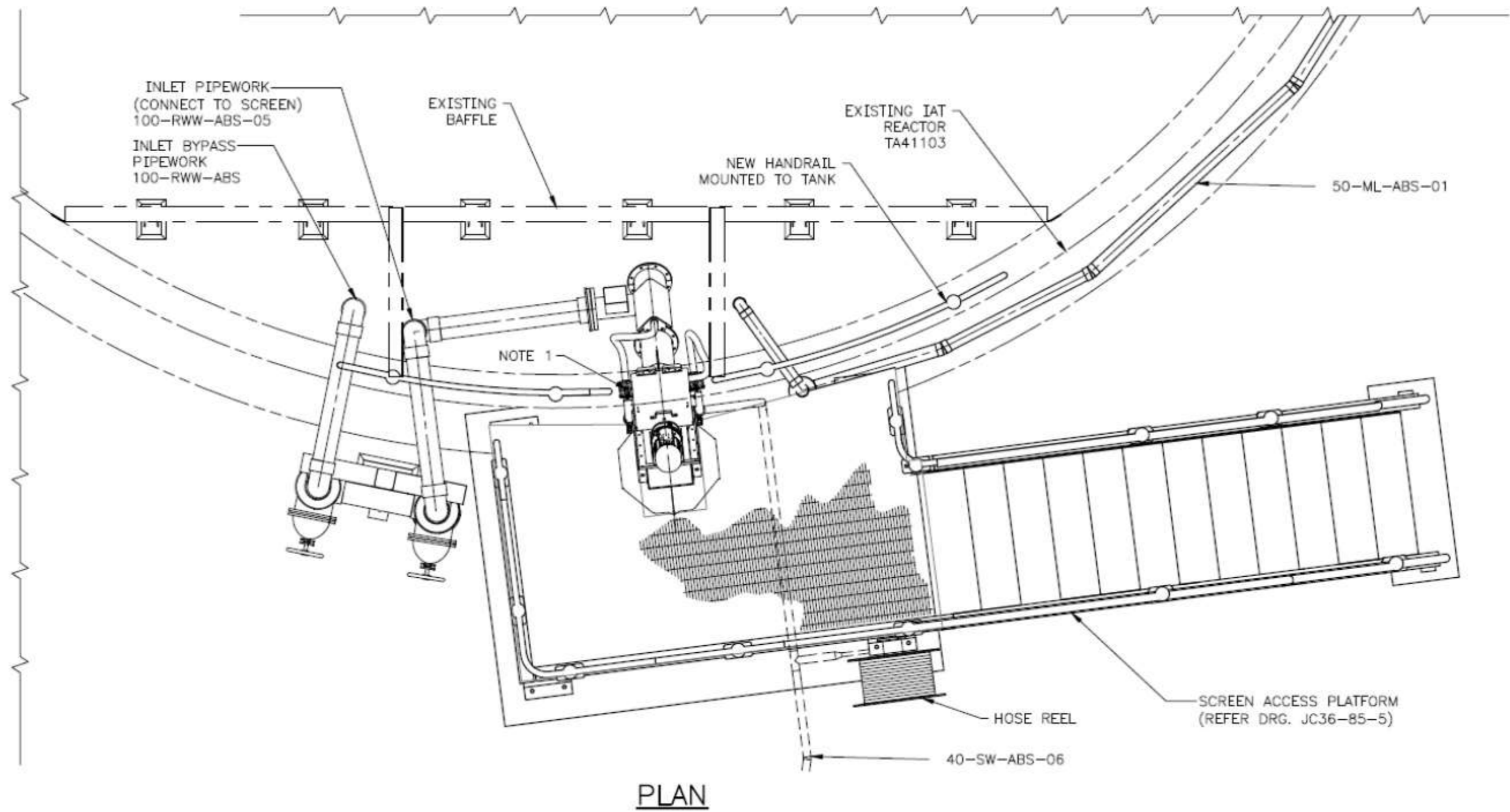


Figure 4: Inlet screen

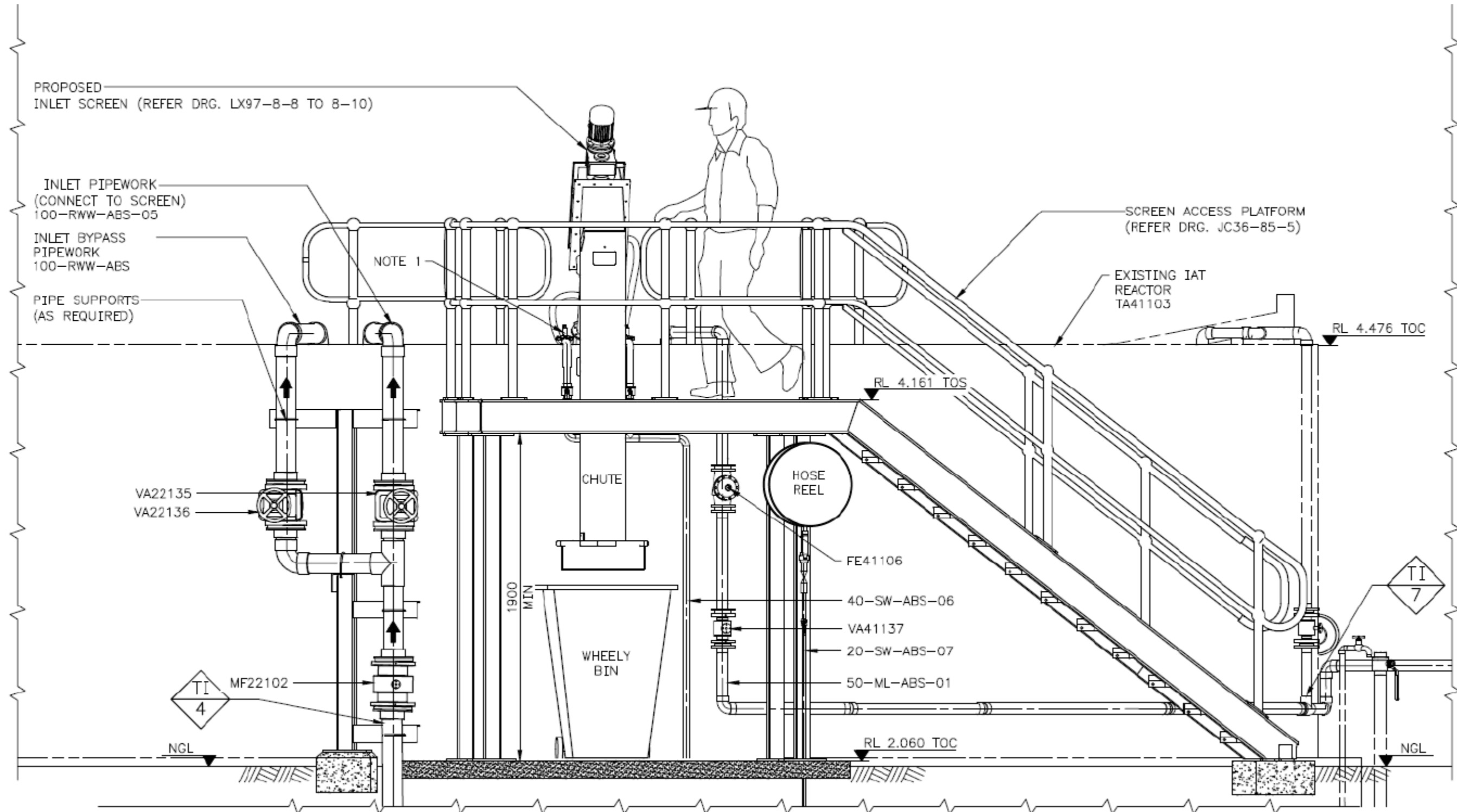


Figure 5: Sludge drying beds

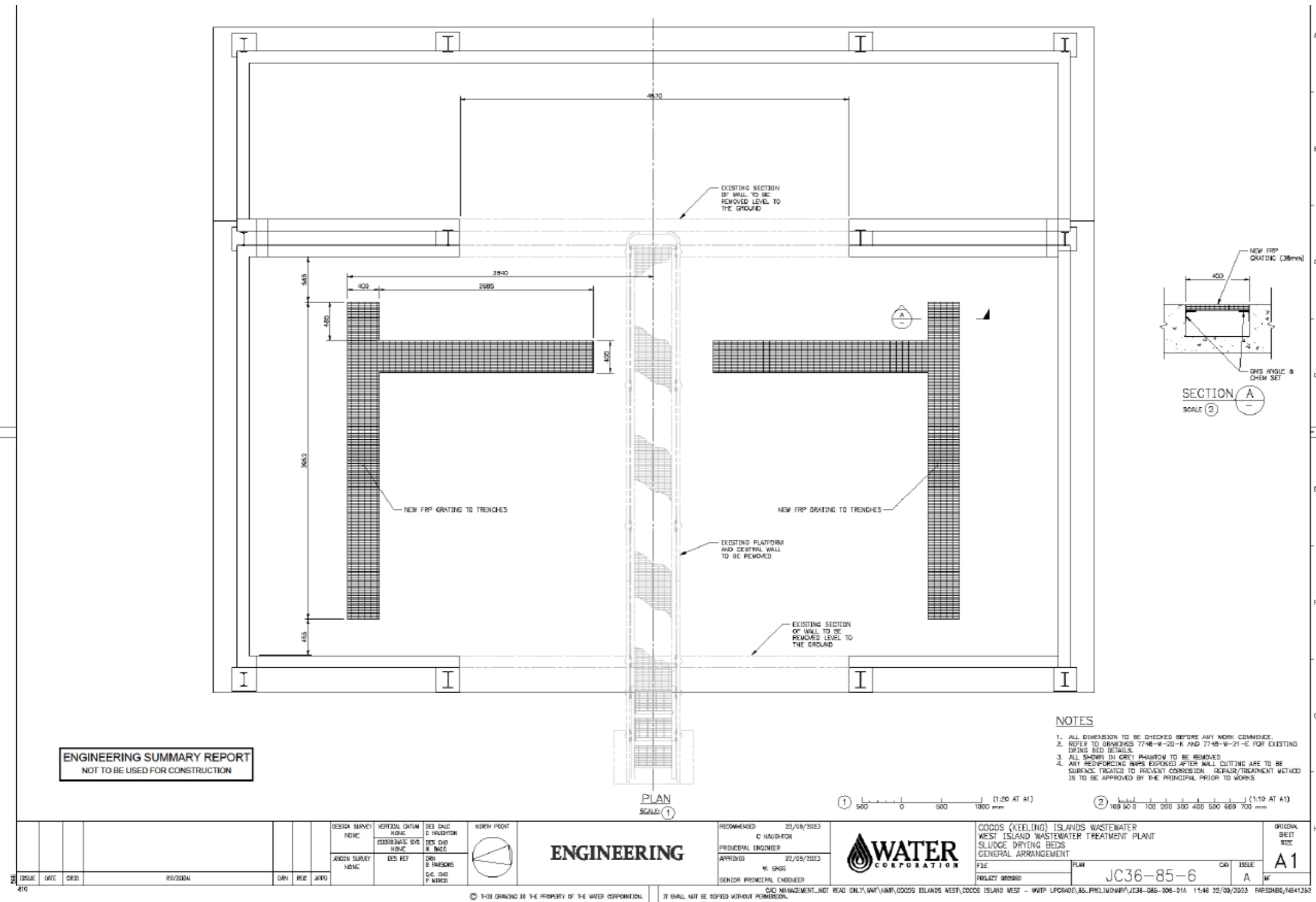


Figure 6: Additional Concrete slab for geobag drying

