



Works approval number	W6805/2023/1
Works approval holder	Devon Gold Project Pty Ltd
ACN	656 058 918
Registered business address	Level 2, 8 Colin Street WEST PERTH WA 6005
DWER file number	DER2023/000241
Duration	17/07/2023 to 17/07/2028
Date of issue	17/07/2023
Premises details	Devon Gold Project Legal description - Part of mining tenements M39/500 and M39/1077 As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 6: Mine dewatering	1,100,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 17 July 2023, by:

**A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

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

Works approval history

Date	Reference number	Summary of changes
17/07/2023	W6805/2023/1	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; and
 - (d) within the corresponding timeframe,
 as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
1.	Stage 1 dewatering infrastructure	1. 90 kW submersible pump must be mounted on a pontoon and be positioned near the pit lake surface; and 2. DN200 flowmeter must be installed.	Located within area labelled 'Sump/Tank/ Pipeline Location In-Pit Location', as depicted in Schedule 1: Maps, Figure 2.	----
	Stage 1 pipeline	1. Pipeline from the submersible pump to pit crest must consist of HDPE DN200 PN16; 2. Pipeline outside of the open pit must consist of HDPE DN200 PN10; 3. Outside of the open pit, the pipeline must be installed within either the abandonment bund or within road windrows/v-drains; 4. Pipeline must be installed from submersible pump (within the open pit) to the mine dewater discharge outfall; and 5. All pipelines installed for pumping of mine dewater must meet the following standards: a. AS/NZS 2033:2008 b. AS/NZS 4129:2020 c. AS/NZS 4130:2018	Labelled as 'Dewatering Pipeline (Stage 1)', as depicted in Schedule 1: Maps, Figure 2.	

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
	Mine dewater discharge outfall	1. Mine dewater discharge outfall must be installed at least 200 m from the open pit; 2. Outfall must be equipped with a discharge diffuser, comprising of two 12m DN200 PN10 pipes containing a series of holes; and 3. Outfall must be installed atop a rock mattress.	Labelled as 'Dewater Discharge Outfall (W1)', as depicted in Schedule 1: Maps, Figure 2.	
2.	Stage 2 dewatering infrastructure	1. Sumps must be constructed and equipped with a sump pump.	Located within area labelled 'Sump/Tank/ Pipeline Location In-Pit Location', as depicted in Schedule 1: Maps, Figure 2.	----
	Stage 2 pipeline	1. Pipeline from the sump to pit crest must consist of HDPE DN200 PN16; 2. Pipeline outside of the open pit must consist of HDPE DN200 PN10; 3. Outside of the open pit, the pipeline must be installed either between the pit crest and abandonment bund, or within road windrows/v-drains; 4. Pipeline must be installed from sumps (within the open pit) to settling ponds and/or sedimentation tank before being pumped to the Stage 1 pipeline and the mine dewater discharge outfall; 5. All pipelines installed for pumping of mine dewater must meet the following standards: a. AS/NZS 2033:2008 b. AS/NZS 4129:2020 a. AS/NZS 4130:2018	Located within area labelled 'Sump/Tank/ Pipeline Location Surface Location', as depicted in Schedule 1: Maps, Figure 2.	
	Settling pond	1. Settling pond must comprise of two cells separated by a central compacted embankment; 2. Settling pond must contain storage capacities of at least 700	Located within area labelled 'Sump/Tank/ Pipeline Location	Settling pond or sedimentation tank must be constructed and operational

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		m³ and 1,300 m³ for the dirty and clean water cells, respectively; 3. A spillway must be constructed in the central embankment to enable water flow from the dirty water cell to the clean water cell; 4. Clean water cell must be equipped with a pump to transfer treated mine dewater to the mine dewater discharge outfall; and 5. Settling pond must be constructed either within the open pit or adjacent to the pit.	Surface Location', as depicted in Schedule 1: Maps, Figure 2.	prior to commencement of time limited operation of Stage 2 dewatering infrastructure.
	Sedimentation tank	1. Sedimentation tank must be equipped with a pump to transfer treated mine dewater to the mine dewater discharge outfall; and 2. Sedimentation tank must be installed either within the open pit or adjacent to the pit.	Located within area labelled 'Sump/Tank/ Pipeline Location Surface Location', as depicted in Schedule 1: Maps, Figure 2.	

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a suitably qualified professional 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;
 - (c) a summary of monitoring results obtained before the commencement of time limited operations specified in conditions 9 and 10, including spatial coordinates of sediment samples; and
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 6 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 6:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 2 for Item 1 of Table 1; 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 5(a).

Time limited operations requirements and emission limits

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

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Stage 1 dewatering infrastructure	1. Submersible pump must be maintained with pump intake near the pit lake surface, when in operation; and 2. DN200 flow meter must be maintained and monitored monthly.	Located within area labelled 'Sump/Tank/ Pipeline Location In-Pit Location', as depicted in Schedule 1: Maps, Figure 2.
	Stage 1 dewatering pipeline	1. Pipeline must be inspected daily; and 2. Abandonment bund, road windows and v-drains that contain dewatering pipeline must be maintained, when pipeline is in operation.	Labelled as 'Dewatering Pipeline (Stage 1)', as depicted in Schedule 1: Maps, Figure 2.
	Mine dewater discharge outfall	1. Discharge diffuser and rock mattress must be maintained, when the discharge outfall is in operation; 2. Outfall infrastructure must be inspected daily to confirm structural integrity of rock mattress, check for signs of erosion and/or sedimentation, and ensure discharged mine dewater is not pooling along the lake shore; and 3. Mine dewater from Stage 2 dewatering infrastructure cannot be discharged prior to treatment through either the settling pond and/or sedimentation tank.	Labelled as 'Dewater Discharge Outfall (W1)', as depicted in Schedule 1: Maps, Figure 2.

	Infrastructure	Design and construction / installation requirements	Infrastructure location
2.	Stage 2 dewatering infrastructure	1. Stage 2 dewatering infrastructure cannot commence operation before either the settling pond and/or sedimentation tank are operational; and 2. Mine dewater abstracted from sumps must report to either the settling pond and/or sedimentation tank prior to discharge at the outfall; and	Located within area labelled 'Sump/Tank/ Pipeline Location In-Pit Location', as depicted in Schedule 1: Maps, Figure 2.
	Stage 2 pipeline	1. Pipeline must be inspected daily; and 2. Abandonment bund, road windows and v-drains that contain dewatering pipeline must be maintained, when pipeline is in operation.	Located within area labelled 'Sump/Tank/ Pipeline Location Surface Location', as depicted in Schedule 1: Maps, Figure 2.
	Settling pond	1. A minimum freeboard of 500 mm must be maintained; and 2. Settling pond must be inspected daily to confirm freeboard and structural integrity.	Located within area labelled 'Sump/Tank/ Pipeline Location Surface Location', as depicted in Schedule 1: Maps, Figure 2.
	Sedimentation tank	1. Sedimentation tank must be maintained to manufacturer specifications.	Located within area labelled 'Sump/Tank/ Pipeline Location Surface Location', as depicted in Schedule 1: Maps, Figure 2.

7. During time limited operations, the works approval must ensure that the emissions listed in Table 3 are emitted/discharged only at the emission points at the corresponding emission point location in accordance with Table 3 and do not exceed the corresponding limits in accordance with Table 3.

Table 3: Authorised emission points during time limited operation

Emission point reference	Emission description	Limit	Emission point location
Dewatering discharge outfall at Lake Carey (W1)	Mine dewater from the Devon open pit	1,100,000 tonnes per annual period	Labelled as 'Dewater Discharge Outfall (W1)', as depicted in Schedule 1: Maps, Figure 2.

Monitoring during time limited operations

8. During time limited operations, the works approval holder must monitor discharges:
- (a) at the corresponding monitoring points;
 - (b) for the corresponding parameters;
 - (c) at the corresponding frequency;

- (d) for the corresponding averaging period;
 - (e) in the corresponding unit, and
 - (f) must not exceed the corresponding target,
- as set out in Table 4.

Table 4: Monitoring of emissions and discharges

Emission point reference	Parameter	Unit	Frequency	Averaging period	Target
Dewatering discharge outfall (W1), labelled as 'Dewater Discharge Outfall (W1)', as depicted in Schedule 1: Maps, Figure 2.	Discharge volume	kL	Monthly during time limited operation	Monthly	---
	pH ¹	pH unit	Quarterly during time limited operation	Spot sample	---
	Electrical conductivity (EC) ¹	µS/cm			---
	Alkalinity (as CaCO ₃) ¹	mg/L			At least 60 mg/L
	Total dissolved solids	mg/L			---
	Major ions: sodium, potassium, calcium, magnesium, bicarbonate, sulfate.	mg/L			---
	Dissolved metals and metalloids: arsenic, cadmium, chromium, copper, cobalt, iron, lead, nickel, selenium, zinc	mg/L			Less than 0.027 (for selenium)
	Total recoverable hydrocarbon	mg/L			---

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

- 9.** During time limited operations, the works approval holder must monitor ambient sediment quality:
- (a) at the corresponding monitoring points;
 - (b) for the corresponding parameters;
 - (c) at the corresponding frequency;
 - (d) for the corresponding averaging period, and
 - (e) in the corresponding unit,
- as set out in Table 5.

Table 5: Monitoring of sediment quality

Monitoring point reference	Parameter	Unit	Averaging period	Frequency
Sampling transect at 50 m, 100m, and 200 m from dewatering discharge outfall (W1), labelled as 'Indicative Sediment Monitoring Location', as depicted in Schedule 1: Maps, Figure 3.	Salt crust thickness	mm	Spot sample	Once prior to commencement of time limited operation. Once during time limited operation.
	pH ¹	pH unit		
	Electrical conductivity (EC) ¹	µS/cm		
	Major ions: sodium, potassium, calcium, magnesium, bicarbonate, sulfate.	mg/kg		
	Dissolved metals and metalloids: arsenic, cadmium, chromium, copper, cobalt, iron, lead, nickel, selenium, zinc	mg/kg		
	Total recoverable hydrocarbon	mg/kg		

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

10. During time limited operation, the works approval holder must undertake photographic monitoring:

- (a) at the corresponding monitoring points;
- (b) at the corresponding monitoring locations;
- (c) for the corresponding parameters, and
- (d) at the corresponding frequency

as set out in Table 6.

Table 6: Photographic monitoring

Monitoring point reference	Monitoring point location	Parameter	Frequency
Dewatering discharge outfall (W1)	Labelled as 'Dewater Discharge Outfall (W1)', as depicted in Schedule 1: Maps, Figure 2.	1. Photographic monitoring 2. Erosion assessment	Once prior to commencement of time limited operation.
Riparian vegetation monitoring sites: DEV1, DEV2, DEV3, DEV4, DEV5, DEV6, DEV7	Labelled as 'Riparian Vegetation Monitoring Site', as depicted in Schedule 1: Maps, Figure 3.	1. Photographic monitoring 2. Riparian vegetation health assessment	

Compliance reporting

11. The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 90 calendar days before the expiration date of the work approval, whichever is the sooner.

- 12.** The works approval holder must ensure the report required by condition 11 includes the following:
- (a) a summary of the time limited operations, including timeframes and amount of mine dewater discharged;
 - (b) a review of operational performance and compliance against conditions 6 and 7;
 - (c) a summary of monitoring results obtained during time limited operations specified in conditions 8 and 9, including spatial coordinates of sediment samples and exceedances of any targets and any measures taken; and
 - (d) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures has the works approval holder taken to meet them, and what were the timeframes taken to implement those measures.

Records and reporting

- 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 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 6;
 - (c) monitoring programmes undertaken in accordance with conditions 8, 9, and 10; and
 - (d) 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 7 have the meanings defined.

Table 7: Definitions

Term	Definition
annual period	a 12-month period commencing from 1 January until 31 December of the same year.
AS/NZS 2033:2008	refers to the Australian/New Zealand Standards for the 'Installation of polyethylene pipe systems'.
AS/NZS 4129:2020	refers to the Australian/New Zealand Standards for the 'Fittings for polyethylene (PE) pipes for pressure applications'.
AS/NZS 4130:2018	refers to the Australian/New Zealand Standards for the 'Polyethylene pipes for pressure application'.
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 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)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i> .
HDPE	means high density polyethylene.
quarterly period	such that there are at least 45 days in between the days on which samples are taken in successive quarters.
premises	the premises to which this licence applies, as specified at the

Term	Definition
	front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

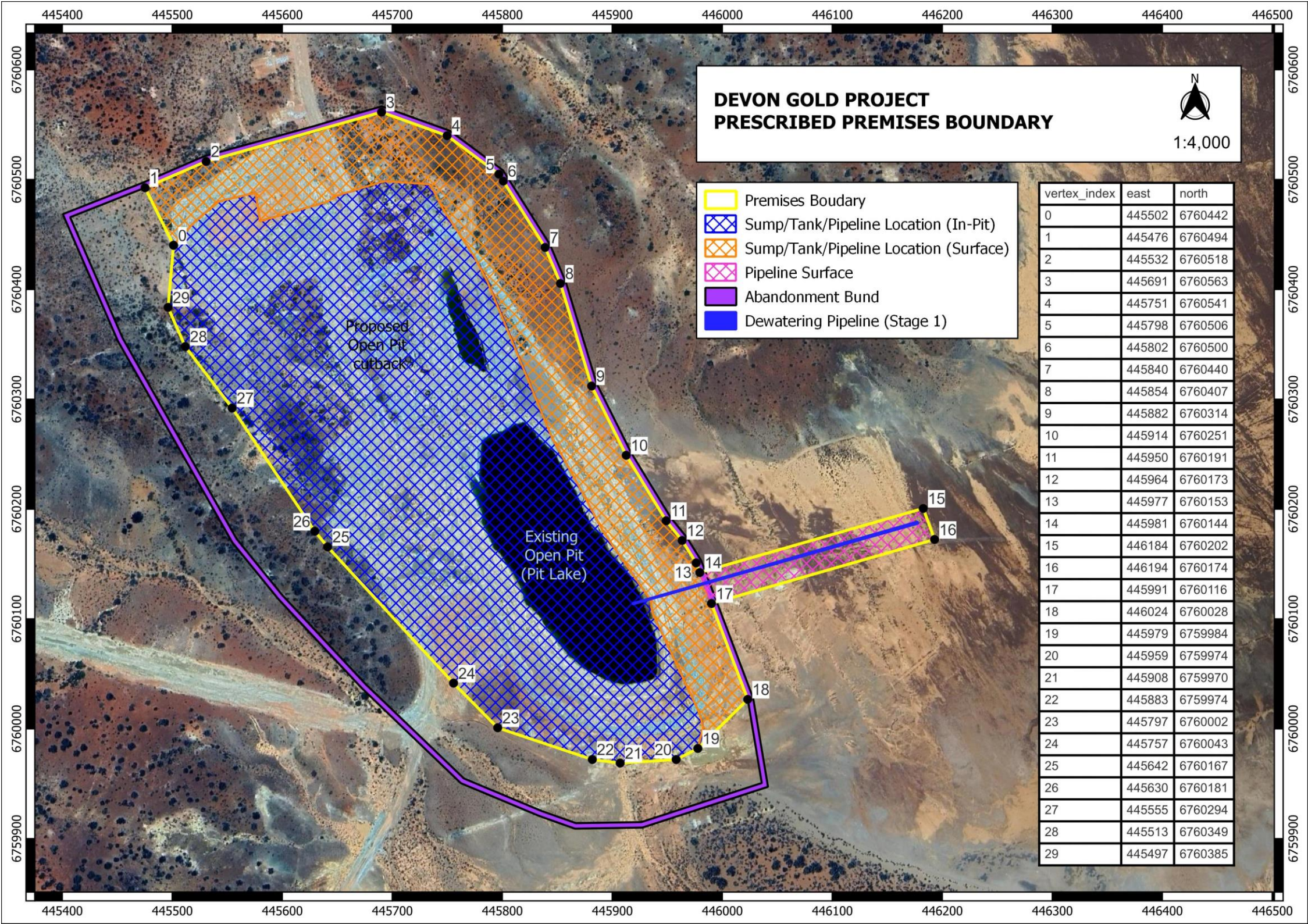


Figure 1: Map of the boundary of the prescribed premises

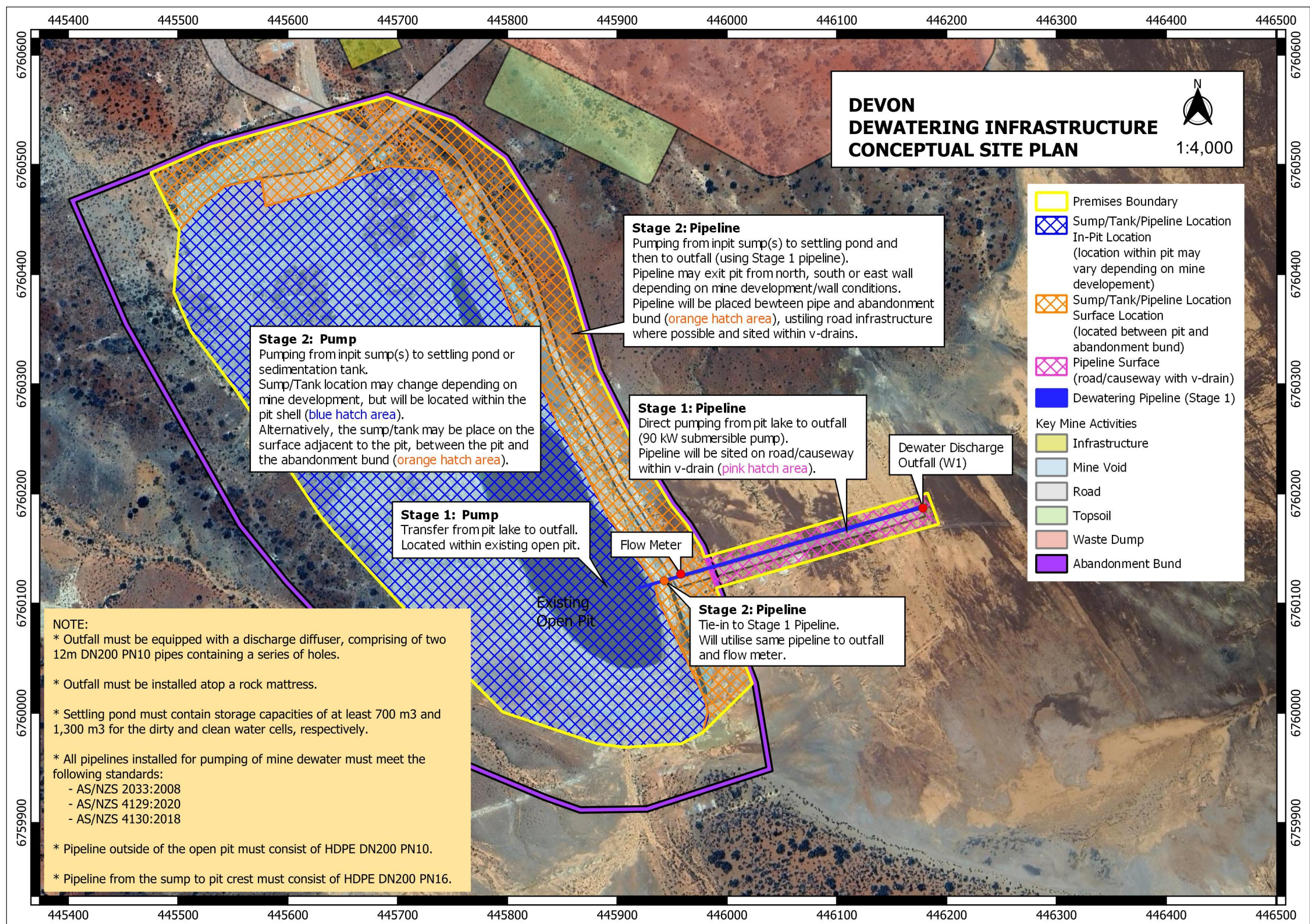


Figure 2: Site layout for Stage 1 and Stage 2 dewatering infrastructure

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IR-T05 Works approval template (v6.0) (September 2022)

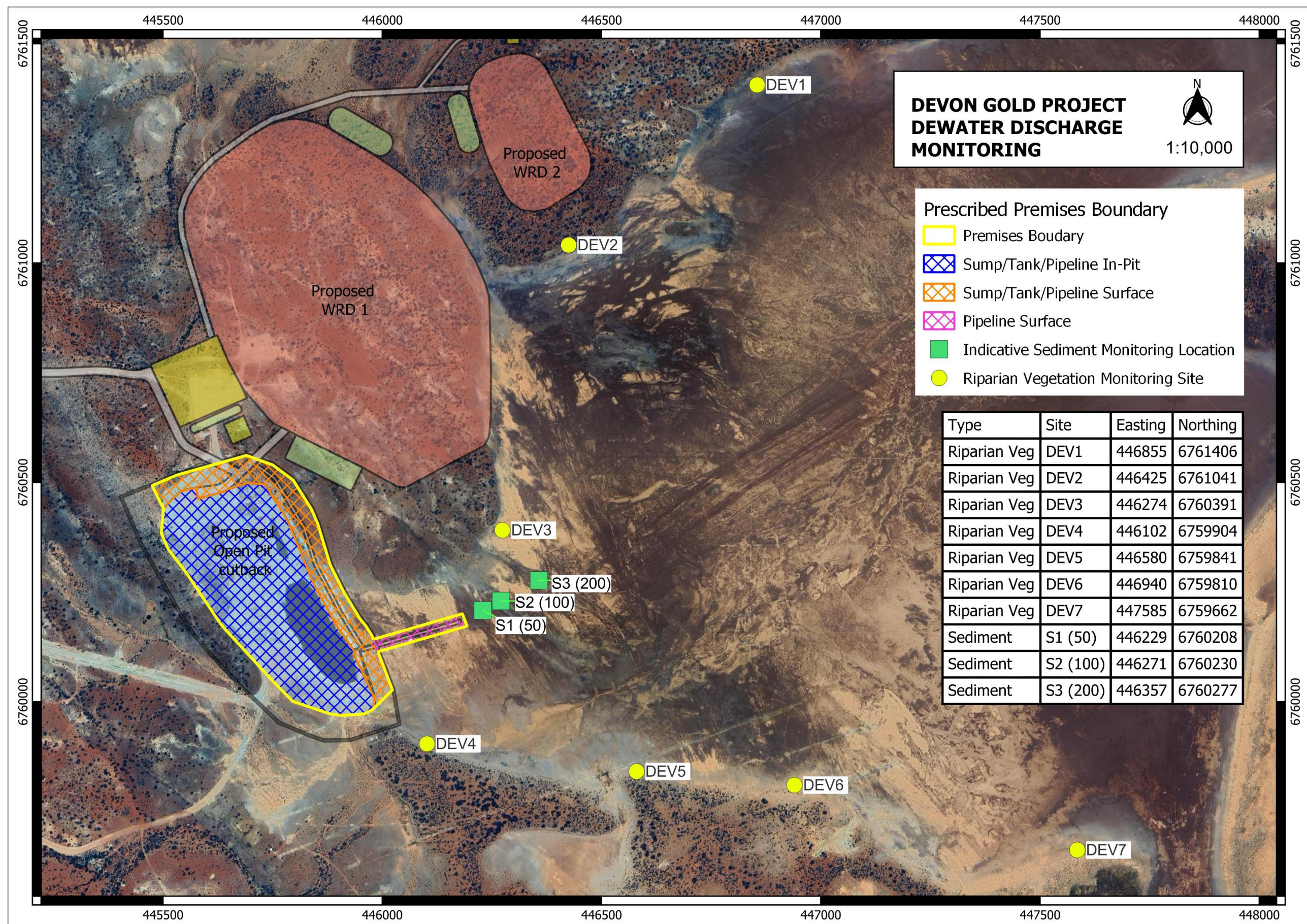


Figure 3: Sediment and vegetation monitoring locations

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IR-T05 Works approval template (v6.0) (September 2022)

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 8.

Table 8: Premises boundary coordinates (GDA2020)

ID	Easting	Northing	Zone	ID	Easting	Northing	Zone
0	445502	6760442	51	15	446184	6760202	51
1	445476	6760494	51	16	446194	6760174	51
2	445532	6760518	51	17	445991	6760116	51
3	445691	6760563	51	18	446024	6760028	51
4	445751	6760541	51	19	445979	6759984	51
5	445798	6760506	51	20	445959	6759974	51
6	445802	6760500	51	21	445908	6759970	51
7	445840	6760440	51	22	445883	6759974	51
8	445854	6760407	51	23	445797	6760002	51
9	445882	6760314	51	24	445757	6760043	51
10	445914	6760251	51	25	445642	6760167	51
11	445950	6760191	51	26	445630	6760181	51
12	445964	6760173	51	27	445555	6760294	51
13	445977	6760153	51	28	445513	6760349	51
14	445981	6760144	51	29	445497	6760385	51

The coordinates for sediment monitoring locations and vegetation monitoring locations are listed in Table 9 and Table 10, respectively.

Table 9: Sediment monitoring location coordinates (GDA2020)

Monitoring point reference	Distance from discharge outfall (W1)	Easting	Northing	Zone
S1 (50)	50 m	446229	6760208	51
S2 (100)	100 m	446271	6760230	51
S3 (200)	200 m	446357	6760277	51

Table 10: Vegetation monitoring location coordinates (GDA2020)

Monitoring point reference	Easting	Northing	Zone
DEV1	446855	6761406	51
DEV2	446425	6761041	51
DEV3	446274	6760391	51
DEV4	446102	6759904	51
DEV5	446580	6759841	51
DEV6	446940	6759810	51
DEV7	447585	6759662	51