Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6472/2020/1
Works approval holder	Pantoro South Pty Ltd
ACN	633 003 737
Registered business address	1 Phoenix Road Norseman WA 6443
DWER file number	DER2020/000594
Duration	06/10/2021 to 05/10/2024
Date of issue	06/10/2021
Date of amendment	16/11/2023
Premises details	Central Norseman Gold 1 Phoenix Road, Norseman WA 6443 Being part mining tenements M63/11, M63/13, M63/14, M63/15, M63/36, M63/42, M63/43, M63/44, M63/48, M63/68-I, M63/133-I, M63/140-I, M63/142, M63/155, M63/156, M63/214, M63/218, M63/258, M63/259 and M63/275

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	1 500 000 tonnes per annum
Category 6: Mine dewatering	380 000 tonnes per annum
Category 85: Sewage facility	100 m^3 per day
Category 64: Class II or III putrescible landfill site	4,500 tonnes per annum
Category 70: Screening etc. of material	Up to 50 000 tonnes per annum

This works approval is granted to the works approval holder, subject to the attached conditions, on 16 November 2023, by:

Sonya Poor
Digitally signed by Sonya Poor
Date: 2023.11.16 08:48:00 +08'00'

A/MANAGER, RESOURCE INDUSTRIES

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

Works Approval history

Date	Reference number	Summary of changes
06/10/2021	W6472/2020/1	Works approval granted.
5/05/2023	W6472/2020/1	Works approval holder initiated administrative amendment to extend time limited operation expiry.
16/11/2023	W6472/2020/1	DWER initiated amendment to extend time limited operation expiry.

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 7 of Schedule 2.

2. The works approval holder is authorised to:

(a) construct embankment raises for TSF4 to the construction height; and

(b) operate TSF4 subject to conditions 5 and 10,

as specified in Table 1.

Table 1: Staged construction and operating heights for TSF4

Stages	TSF	Construction height (mRL)
Stage 3 (Figure 6)	• Upstream raise of main embankment. • Main embankment formed by compacted tailings and compacted mine waste rock.	RL 309 m
Stage 4 (Figure 6)	• Upstream raise of main embankment. • Main embankment formed by compacted tailings and compacted mine waste rock. • Construction of two saddle dams (South Saddle and Northeast Saddle). • Saddle dams constructed with compacted tailings and compacted waste rock.	RL 312 m
Stage 5 (Figure 6)	• Upstream raise of main embankment, South Saddle and Northeast Saddle dams and construction of the Northwest and North saddle dams. • Main embankment formed by compacted tailings and compacted mine waste rock. • Saddle dams constructed with compacted tailings and compacted waste rock.	RL 315 m

Compliance reporting

3. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 and 2 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.

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

(a) certification by a suitably qualified geotechnical or civil engineer that items 1, 2 and 3 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) certification that items 4, 5, 6 and 7 of infrastructure or component(s) thereof, as specified in condition 1 have been constructed in accordance with the relevant requirements specified in condition 1;

(c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1 and 2;

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

(e) a map showing the location of installed seepage recovery bores as specified in condition 1;

(f) details on installed noise attenuation equipment and acoustic barriers implemented as specified in condition 1;

(g) details on the constructed mobile crushing and screening plant as specified in condition 1; and

(h) details on the additions to the wastewater treatment system as specified in condition 1.

5. The works approval holder must submit a Seepage Management Report after recovery measures relating to seepage infrastructure set out in condition 1 have been operational and successful to meet current standing water level limits for all existing monitoring bores designated to TSF4. The Seepage Management Report must include the following:

(a) a map clearly showing the location and label of installed seepage recovery bores;

(b) bore logs for installed recovery bores;

(c) findings of further investigations and extent of already occurring seepage before and after commencement of seepage recovery measures;

(d) actual efficiency of seepage recovery;

(e) seepage volume recovered; and

(f) ambient groundwater monitoring as per condition 12, and brief interpretation of data, including reference to relevant guidelines and historical groundwater monitoring data.

6. Prior to the commencement of any time limited operations, the works approval holder must submit a revised Lake Dundas Aquatic Biota assessment report with following additional information:

(a) revision and confirmation that all identified resting stages have been classified correctly;

(b) identification of *Branchinella* species if resting stage has been found;

(c) further information on identified egg bank viability and proposed site-specific salinity ranges;

(d) identification of *Parartemia* species and determination of acceptable salinity range for each life stage; and

(e) a map showing the confirmed vegetation monitoring locations.

Time limited operations phase

Commencement and duration

7. The works approval holder may only commence time limited operations for

(a) items 1, 2 ,4 and 5 of infrastructure identified in condition 10 where the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure.

(b) item 4 of infrastructure identified in condition 10, Table 2 where the revised Lake Dundas Aquatic Biota assessment report as required by condition 6 has been submitted by the works approval holder for that item of infrastructure.

8. The works approval holder may only commence time limited operations for stages identified in condition 2 and deposition of tailings into TSF4 as set out as item 2 in condition 10, Table 2:

(a) where the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure and stage; and

(b) where the Seepage Management Report as required by condition 5 has been submitted by the works approval holder

9. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 10 (as applicable):

(a) for a period not exceeding 450 calendar days from the day the works approval holder meets the requirements of condition 7 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 9(a).

Time limited operations requirements and emission limits

10. 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.	Process plant and related water storage	**Process plant** • Processing ore sourced from open pits and underground ore bodies located on premises. • Dust suppression via sprays for: run-of-mine (ROM) bin, primary crusher, primary crushed ore stockpile, classifying screen, cone crusher, fine ore surge bin reclaim circuit. • Water cart sprays for dust suppression used for stockpiles. • Regular inspections to evaluate effectiveness of dust controls and corrective action undertaken where necessary. • Noise mitigation measures as per Figure 5 are in place. **Process plant events dam:** • Lined environmental dam/process plant dam. • Freeboard 0.75 m. • Runoff collected reused for process. • Bunded process plant area capturing surface water, reporting to existing drain and sump water recovery system and environmental/ process plant events dam. • Stormwater from process plant reports to environmental dam/process plant events dam via Transfer Point 1. • Overflow from environmental dam/process plant events dam reports to existing triceptor tank system (with environmental filter) and overflow into existing high-density polyethylene (HDPE) lined dam. **Raw water dam** • Containing raw water for process plant, gland seal water requirements and for dust suppression. • Freeboard 0.3 m maintained. **Process water dam** • Containing recycled water streams: thickener tailings overflow stream, TSF decant water, environmental/process plant dam reclaim water, raw water tank transfer. • Freeboard 0.3 m maintained.	Figure 2 Figure 3 Figure 4 Figure 5

Item	Site infrastructure and equipment	Operational requirement	Infrastructure location
2.	TSF4 deposition	• Spigots placed on south embankment, and east where tailings is beached away from embankment. • Spigotting and deposition in thin layers.	Figure 6
3.	Seepage recovery bores	• Water level sensors which activate bore pumps for water delivery to underdrainage water collection tank, water pumped back to decant pond.	Indicative location as per Figure 7
4.	Dewatering activities	• Minimum freeboard of 5m maintained for pit to pit transfers. • Minimum freeboard of 0.3 m maintained in water storage/transfer ponds. **Scotia pit to Lake Dundas** • Dewatering pond set with level control activating automatic start and stop of pump to transfer water to the lake. **OK to Bullen underground and process plant** • Groundwater is pumped from underground via the rising main located to the south of the laydown area to the eastern most pond. The second pond is used for re-cycling water for re-use underground. • The DP will be set up with level control that activates automatic start and stop of the pump to transfer water to the lake when between the set levels including the standpipe. **North Royal** • Daily visual inspection of pipeline during dewatering activities.	Figure 8 Figure 9 Figure 10
5.	Landfill trenches	• Volumes of each load to be monitored (m^3) and recorded. **Inert type 1 waste** • Can be disposed of to the trenches at Bullen, Harlequin, Butterfly, Scotia, OK, GEV landfills. **Inert type 2 waste (tyres)** • Can be disposed of to the trenches at Bullen, Harlequin, Scotia, OK, GEV landfill. • Covered in batches separated from each other by minimum 100 mm of soil. • Final cover minimum 500 mm soil. **Putrescible waste** • Can be disposed of to the trenches at Bullen, Harlequin, Butterfly, Scotia, OK, GEV landfill. • Minimum of 100 mm of with type 1 waste or soil cover, weekly.	Figure 11

Item	Site infrastructure and equipment	Operational requirement	Infrastructure location
		Class III waste • Can be disposed of to a designated trench at Butterfly landfill. • Asbestos demolition waste wrapped and contained. • GPS location of each load recorded. • Final cover minimum of 150 mm of fill.	
6.	Crushing and screening	• Located in bunded area on working level of Harlequin, Bullen, OK or Scotia waste rock dump. • Dust suppression system must be in use whilst material is being crushed and screened. • Stockpiles within bunded working area. • Stockpiles dust suppression via water carts as required. • Crushing and screening activities undertaken on day shift only.	Figure 12

11. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 3, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 3: Authorised discharge points

No.	Emission	Discharge point	Discharge point location
1.	Mine dewater	Lake Dundas	As shown in Schedule 1, Figure 8
2.	Mine dewater	Bullen underground	As shown in Schedule 1, Figure 9

Monitoring during time limited operations

12. The works approval holder must monitor the groundwater

(a) prior and immediately following construction of infrastructure specified in item 2 in condition 1;

(b) during time limited operations of TSF4 as set out in condition 9

for concentrations of the identified parameters in accordance with Table 4.

Table 4: Monitoring of ambient groundwater concentrations

Monitoring location	Parameter	Unit	Limit	Frequency	Averaging period	Method
TSF4 monitoring bore: PB2 (as per Figure 13)	Standing water level	mbgl	4	Condition 12(a) At least one campaign Condition 12(b) Monthly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11
	pH	N/A	N/A			
	Electrical Conductivity	µS/cm				
	Total Dissolved Solids	mg/L				
	Weak Acid Dissociable Cyanide		0.8			
	Total Cyanide		N/A			
	Free Cyanide					
	Bicarbonate					
	Carbonate					
	Calcium					
	Magnesium					
	Potassium					
	Sodium					
	Chloride					
	Sulfate					
	Cadmium					
	Cobalt					
	Copper					
	Lead					
	Manganese					
	Mercury					
	Nickel					
	Aluminium					
	Arsenic					
	Antimony					
	Iron					
	Selenium					
	Zinc					

13. The works approval holder must monitor the ambient sediment and surface water quality

(a) Prior to commencing;

(b) during; and

(c) after completing

time limited operations as set out in condition 10 for concentrations of the identified parameters in accordance with Table 5.

Table 5: Monitoring of ambient sediment and surface water quality during time limited operations

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
Sediment and surface water quality LDP1, LDP2, LDP3, LDP4, LDP5, LDP6 LDP7, LDP8 (as per Figure 14)	pH	-	At least once for each period as specified in condition 12(a), 12(b), and 12(c)	Spot sample	AS/NZS 5667.1 AS/NZS 5667.4 AS/NZS 5667.12
	Electrical Conductivity[1]	µS/cm			
	Temperature[1,2]	ºC			
	Total Dissolved Solids	Sediment: mg/kg Surfaces water: mg/L			
	Moisture Content[3]				
	Nitrate and Nitrite				
	Total Nitrogen				
	Total Phosphorous				
	Antimony[2]				
	Arsenic				
	Cadmium				
	Chromium				
	Cobalt				
	Copper				
	Lead				
	Manganese[2]				
	Mercury				
	Nickel				
	Selenium				
	Zinc				
	Bicarbonate				
	Carbonate				
	Calcium				
	Magnesium				
	Sodium				
	Chloride				
	Sulfate				

Note 1: Parameters in surface water measured in situ
Note 2: Parameter measured in surface water only
Note 3: Parameter measured in sediment only

14. The works approval holder must record the results of all monitoring activities required by conditions 12 and 13.

Compliance reporting

15. 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.

16. The works approval holder must ensure the report required by condition 15 includes the following:

(a) a summary of the time limited operations, including timeframes for each item of infrastructure and the amount in kilolitres of mine dewater discharged to Lake Dundas and Bullen underground;

(b) a tabulated and graphical summary of ambient groundwater, surface water and sediment results obtained during time limited operations under condition 12 and 13;

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

(d) 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)

17. 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.

18. 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 10;

(c) monitoring programmes undertaken in accordance with condition(s) 12 and 13; and

(d) complaints received under condition 17.

19. The books specified under condition 18 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
AS/NZS 2033	means the Australian Standard AS/NZS 2033: Installation of polyethylene pipe systems
AS/NZS 4129	means the Australian Standard AS/NZS 4129: Fittings for polyethylene (PE) pipes for pressure applications
AS/NZS 4130	means the Australian Standard AS/NZS 4130: Polyethylene (PE) pipes for pressure applications.
AS/NZS 4131	means the Australian Standard AS/NZS 4131: Polyethylene (PE) compounds for pressure pipes and fittings
AS/NZS 5667	means the Australian Standard AS/NZS 5667: Water quality – sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples as amended from time to time
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 Water quality - sampling - guidance on sampling form lakes, natural and man made.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality - sampling - guidance on sampling groundwater.
AS/NZS 5667.12	means the Australian Standard AS/NZS 5667.12 Water quality - sampling - guidance on sampling of bottom sediments.
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.

Term	Definition
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).
monthly period	means a one-month period commencing from the second day of a month until the first day 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.
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.

END OF CONDITIONS

Schedule 1: Maps

Premises map

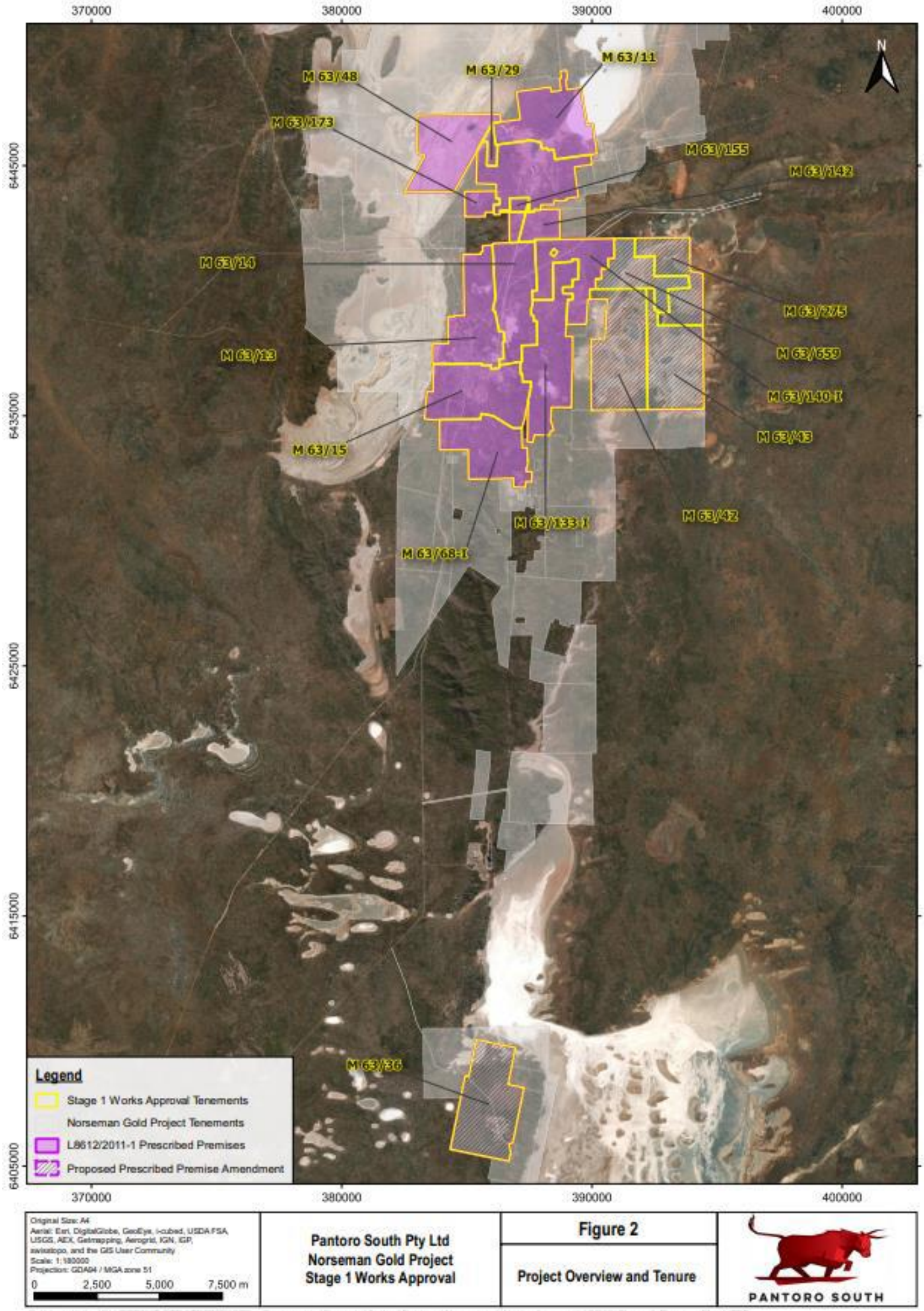

Figure 1: Map of the boundary of the prescribed premises

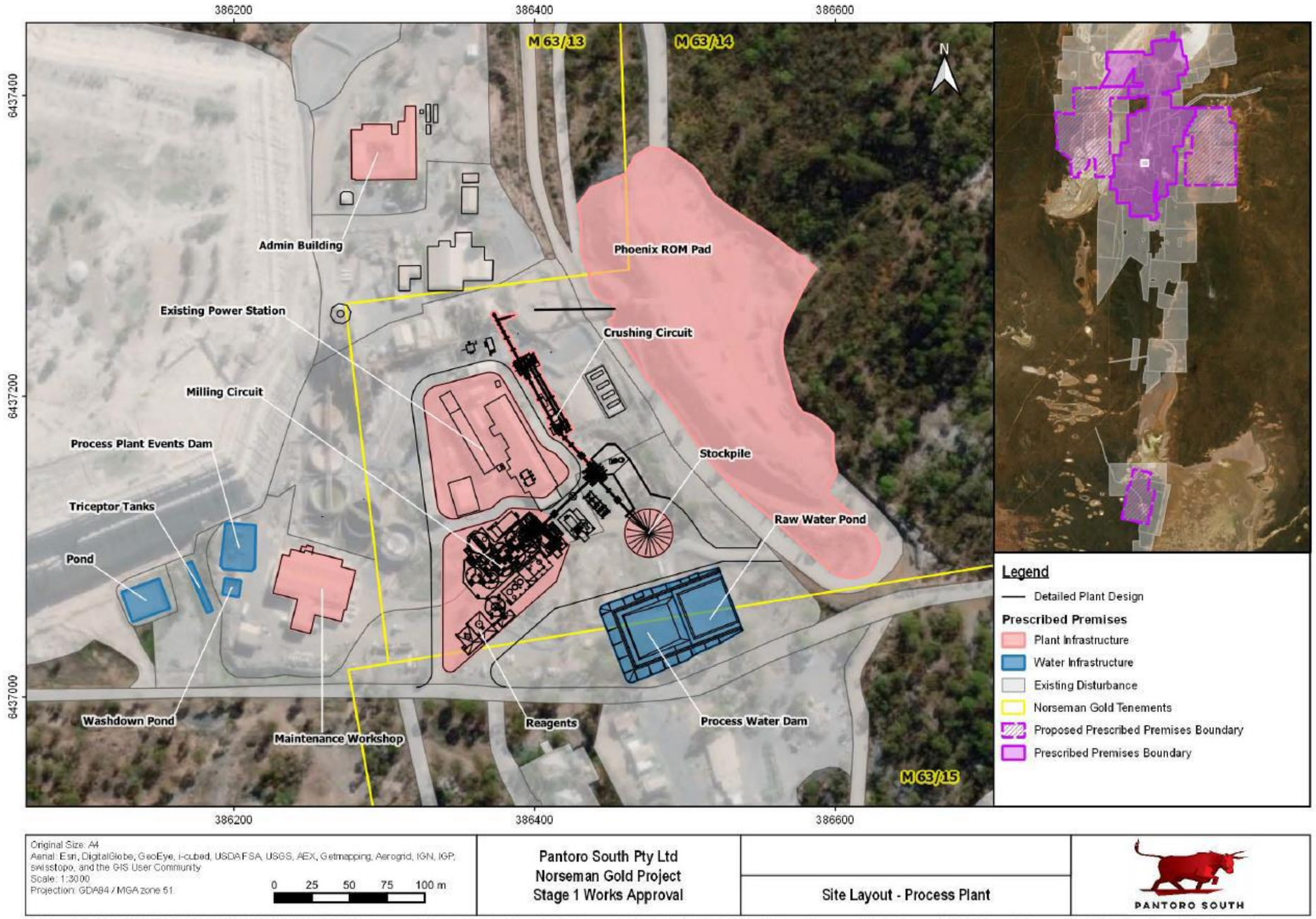

Figure 2: Process plant layout

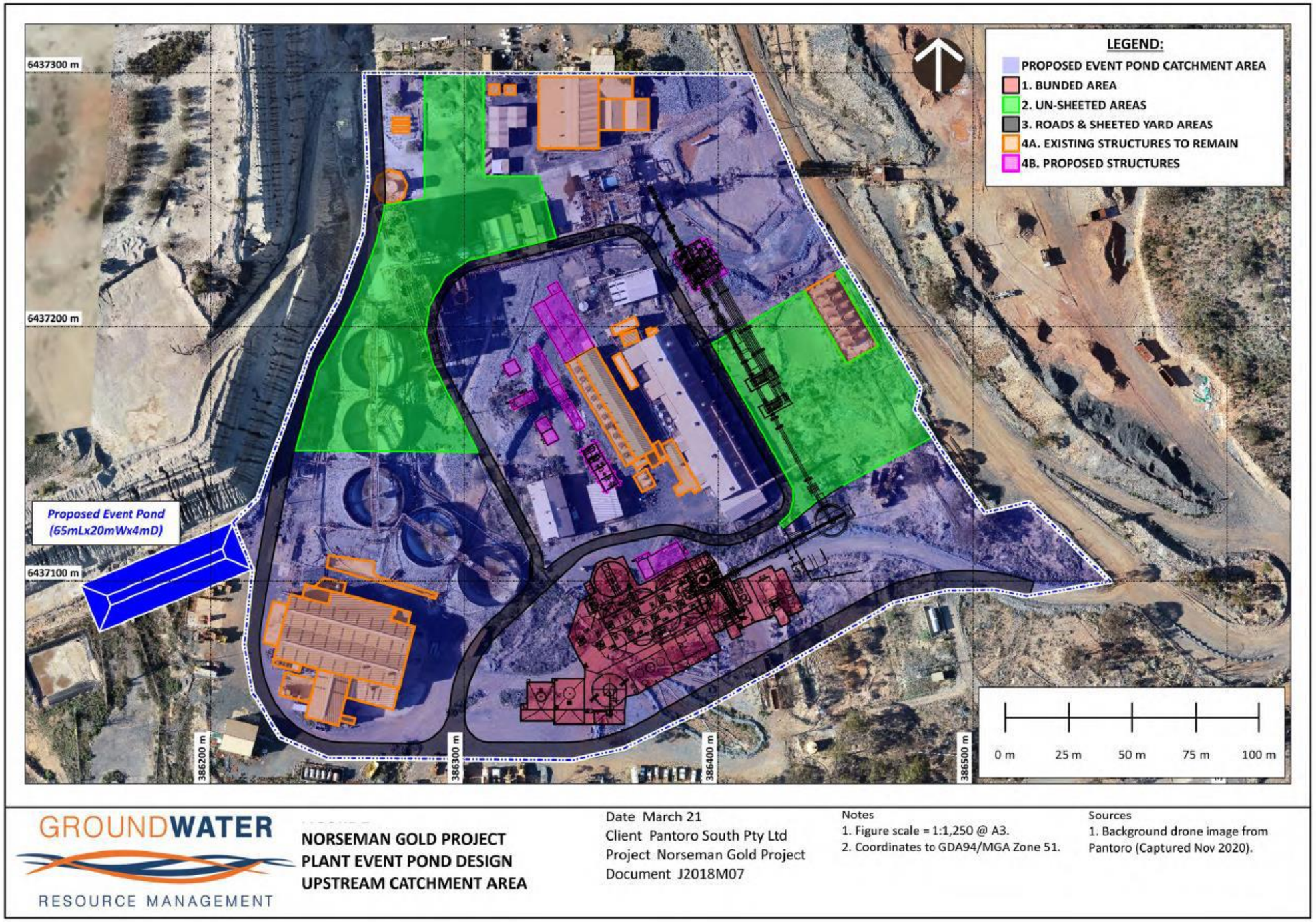

Figure 3: Environmental/process dam (Event Pond) and stormwater catchment

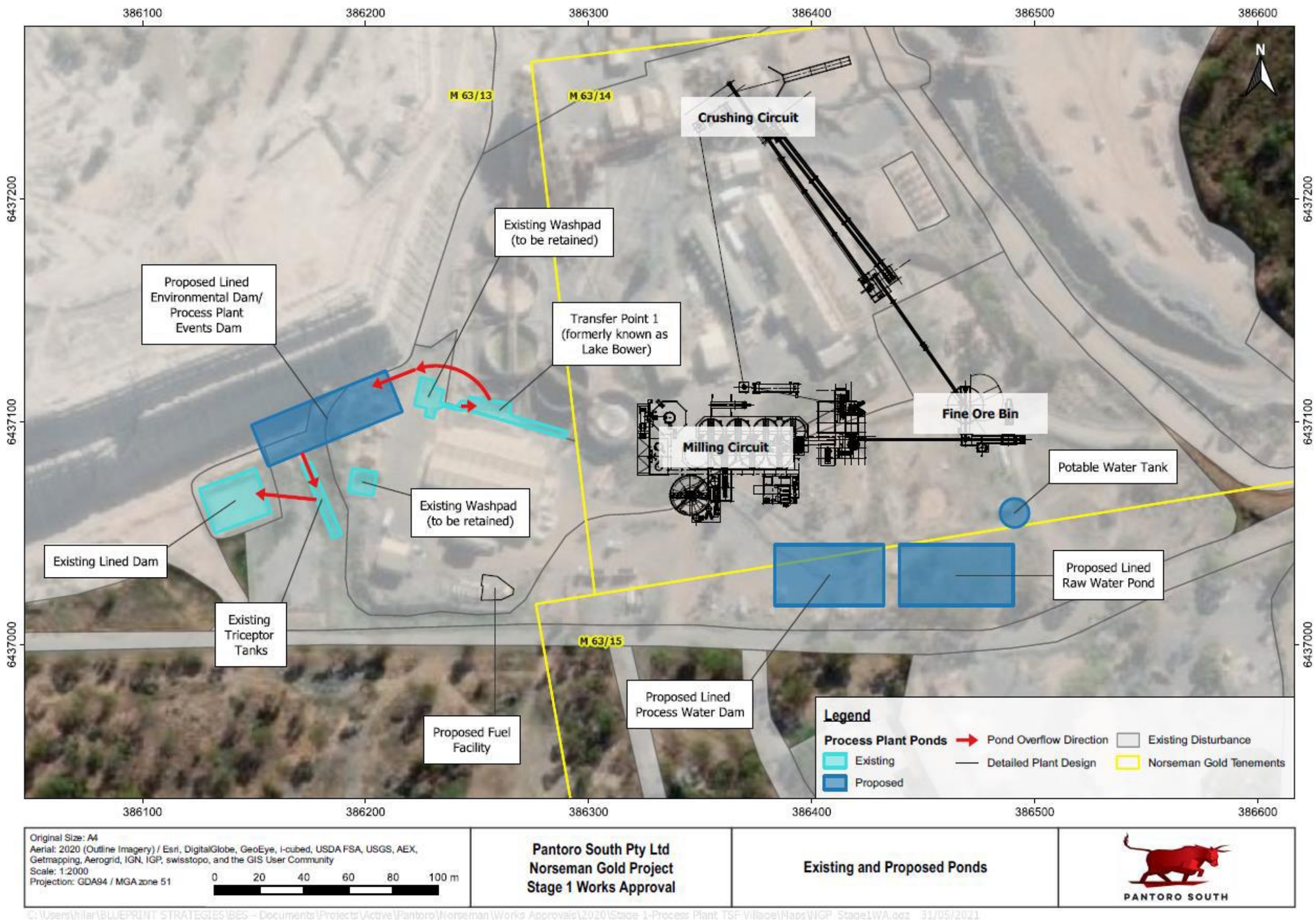

Figure 4: Proposed water storage dams

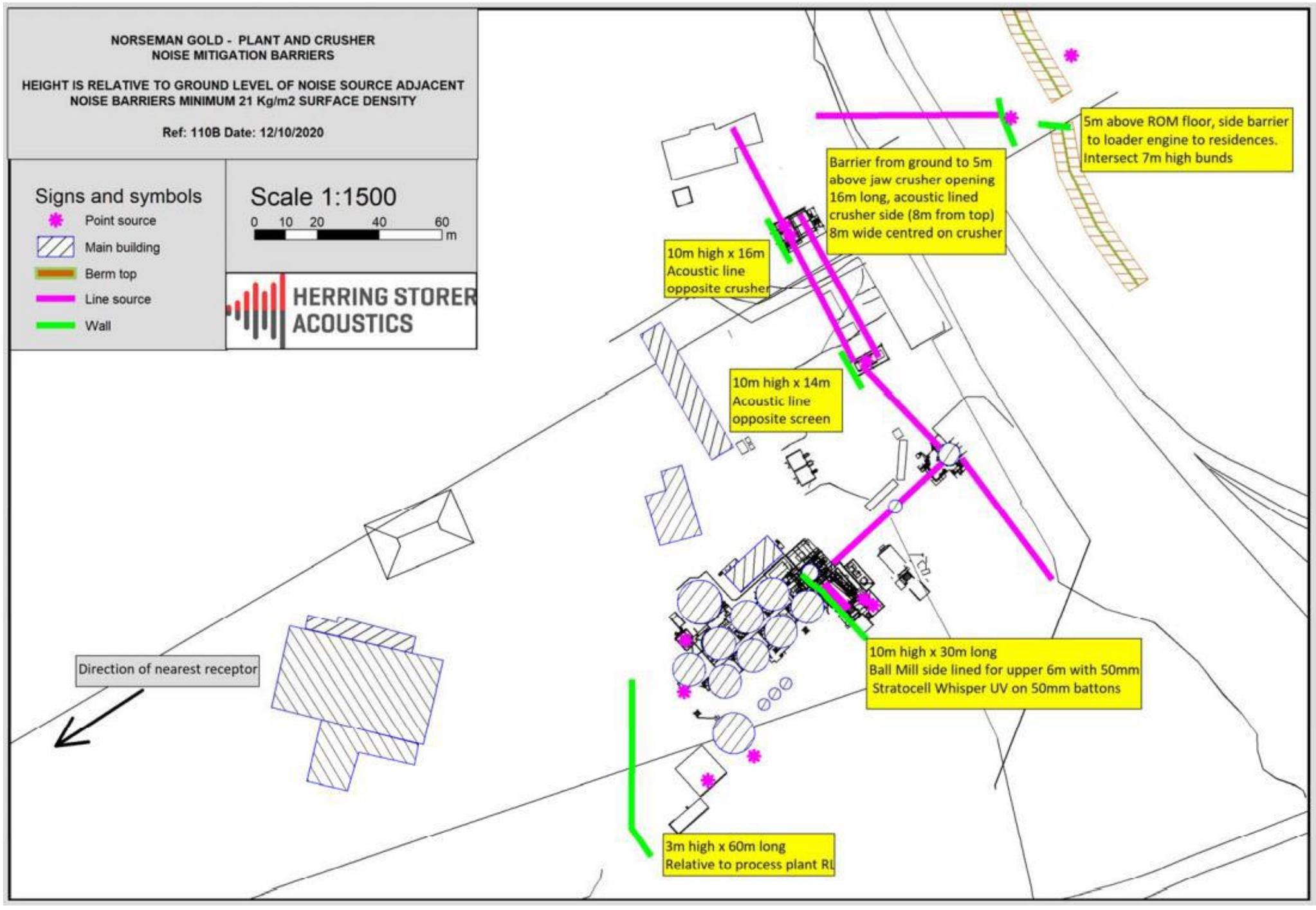

Figure 5: Processing plant acoustic barrier extent and heights

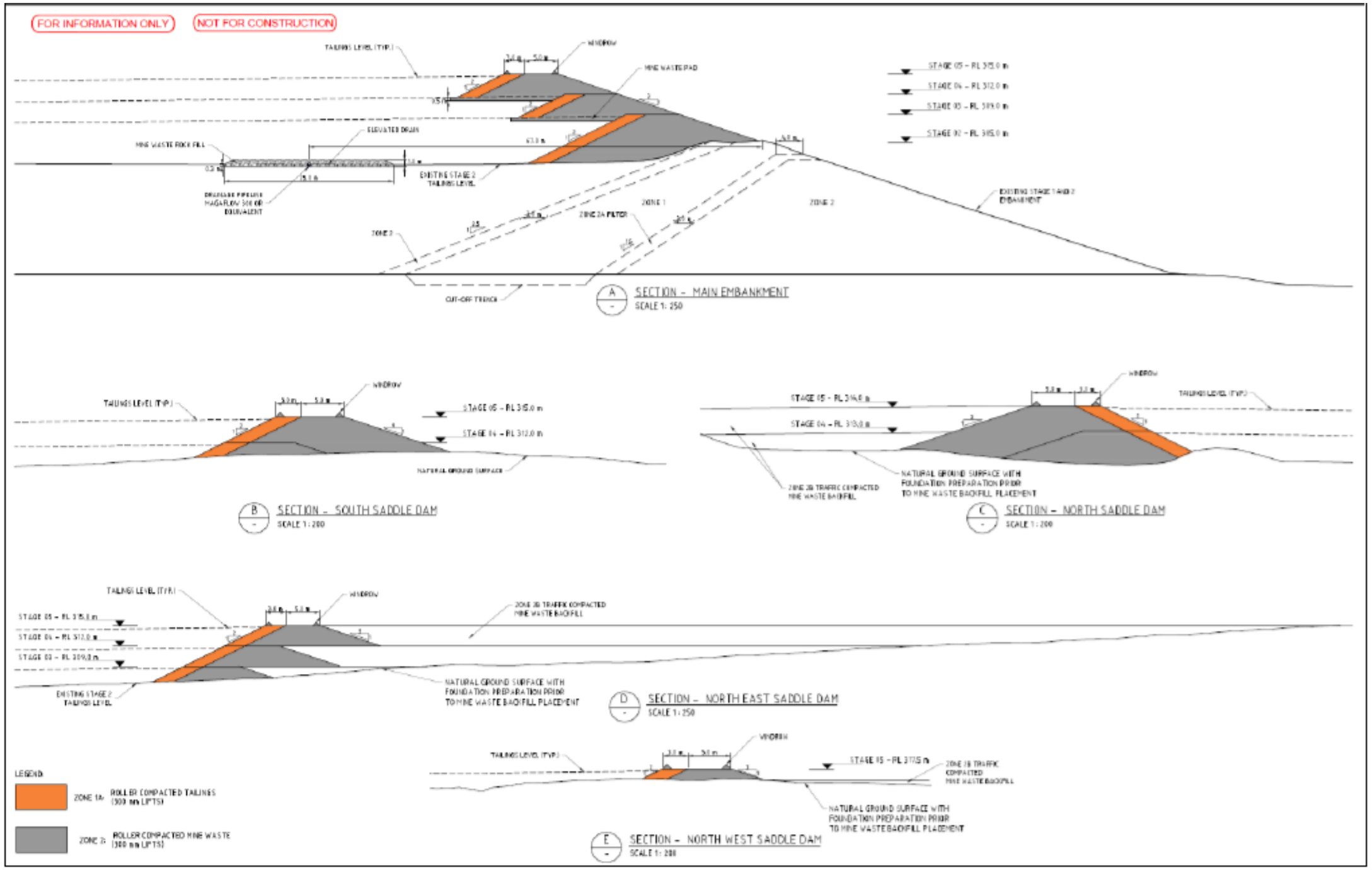

Figure 6: TSF4 embankment raise stages

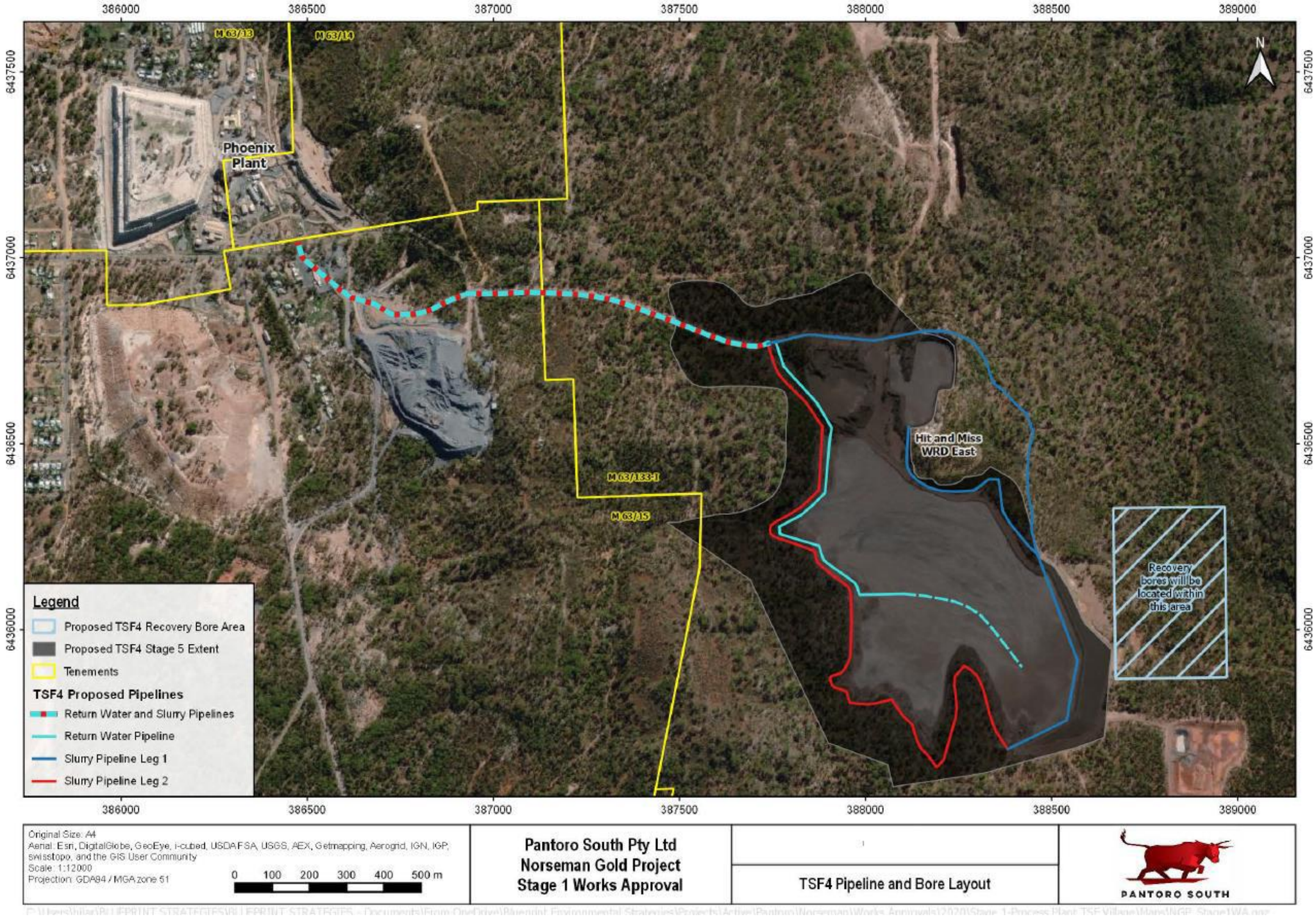

Figure 7: Proposed TSF4 seepage infrastructure

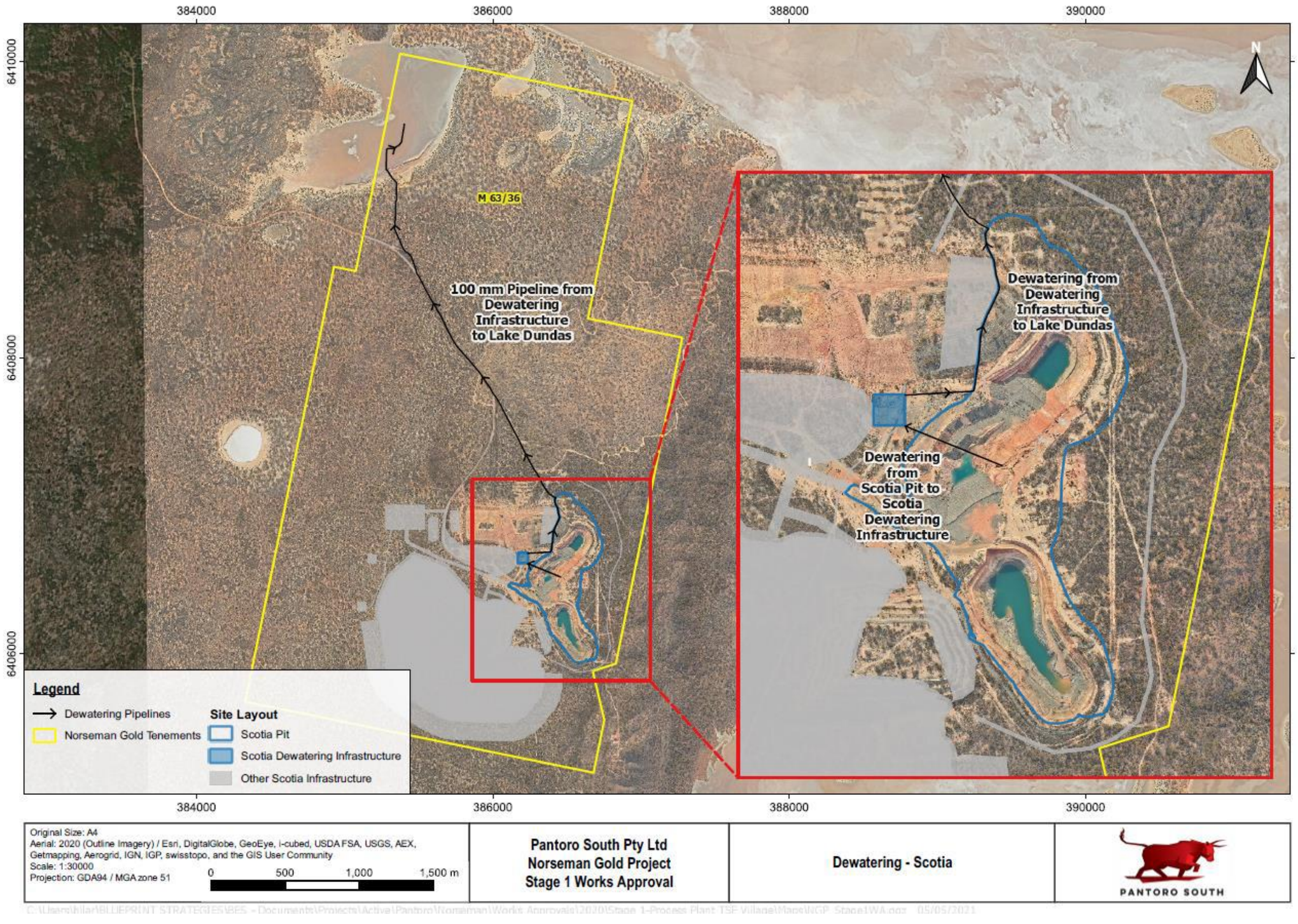

Figure 8: Scotia pit dewatering infrastructure

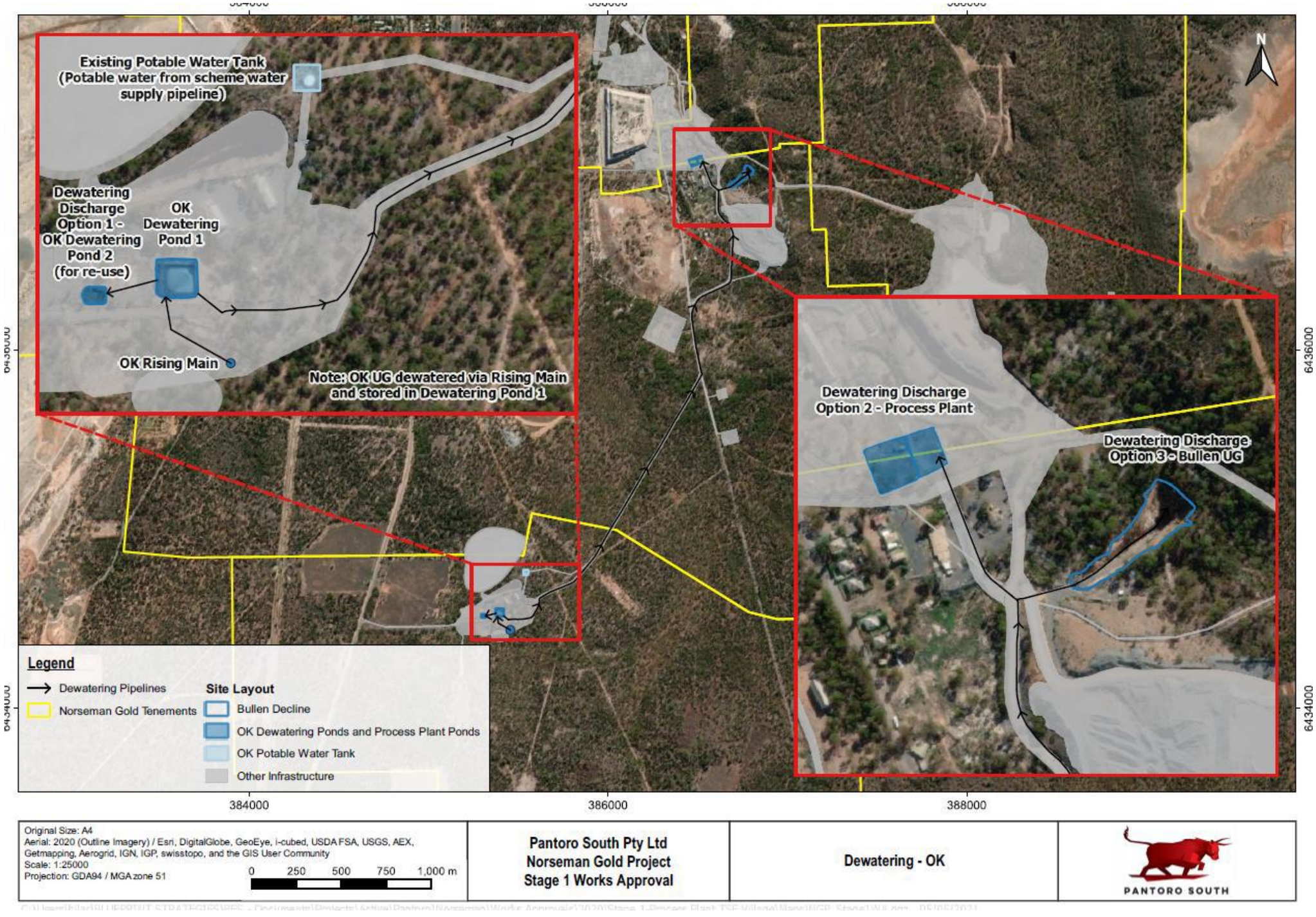

Figure 9: OK dewatering infrastructure

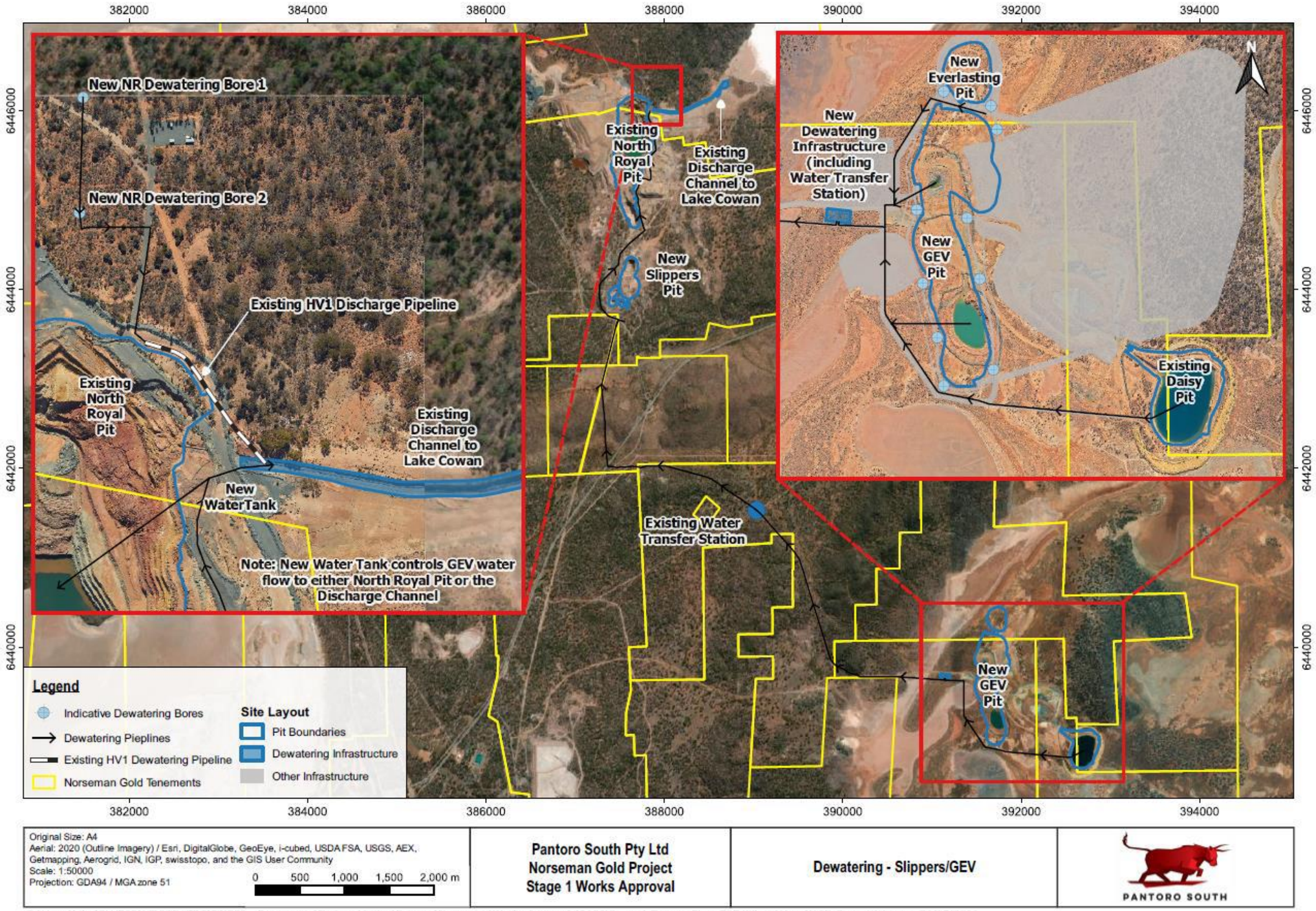

Figure 10: North Royal and Slippers dewatering infrastructure

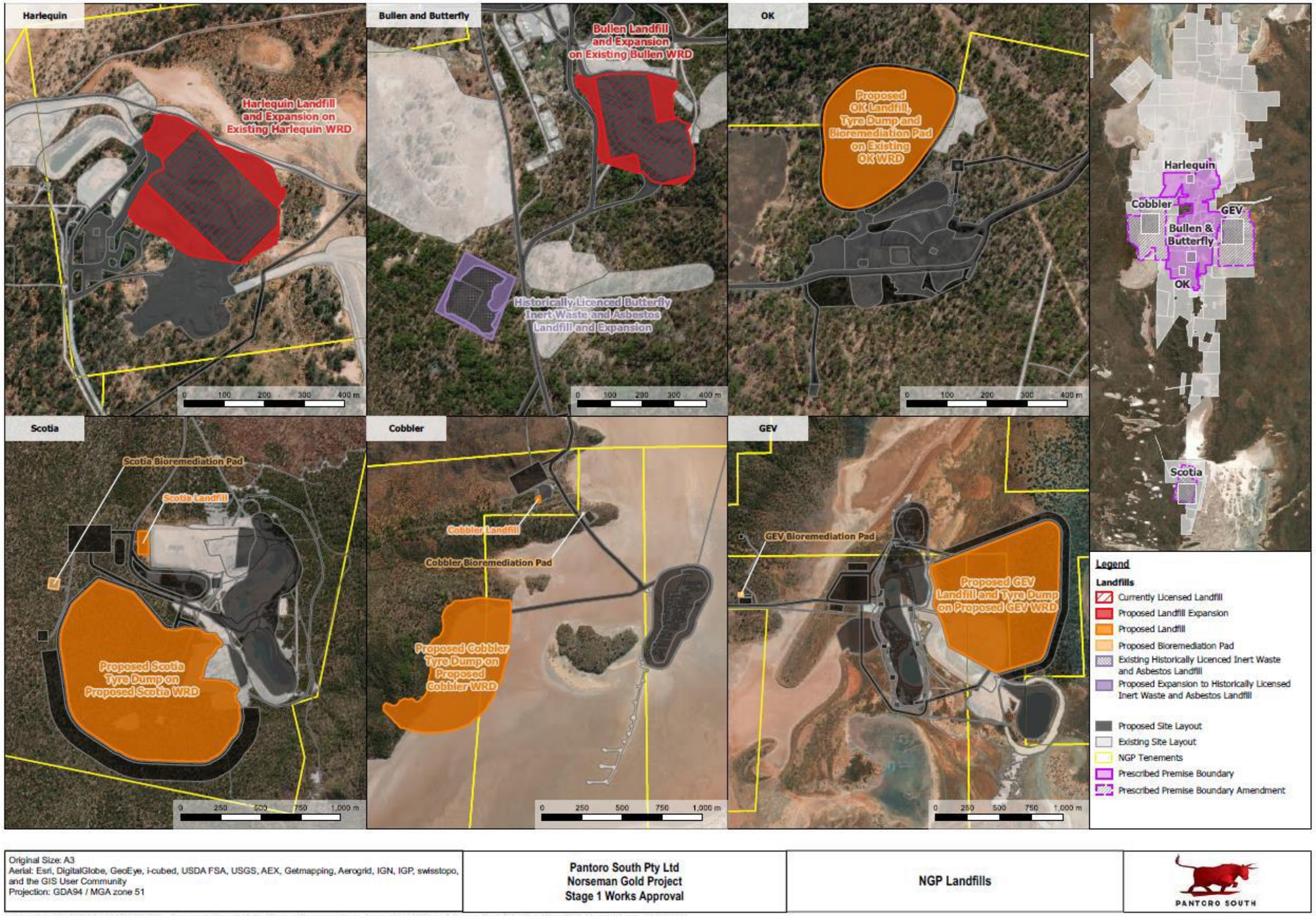

Figure 11: Proposed additional landfills and expansions

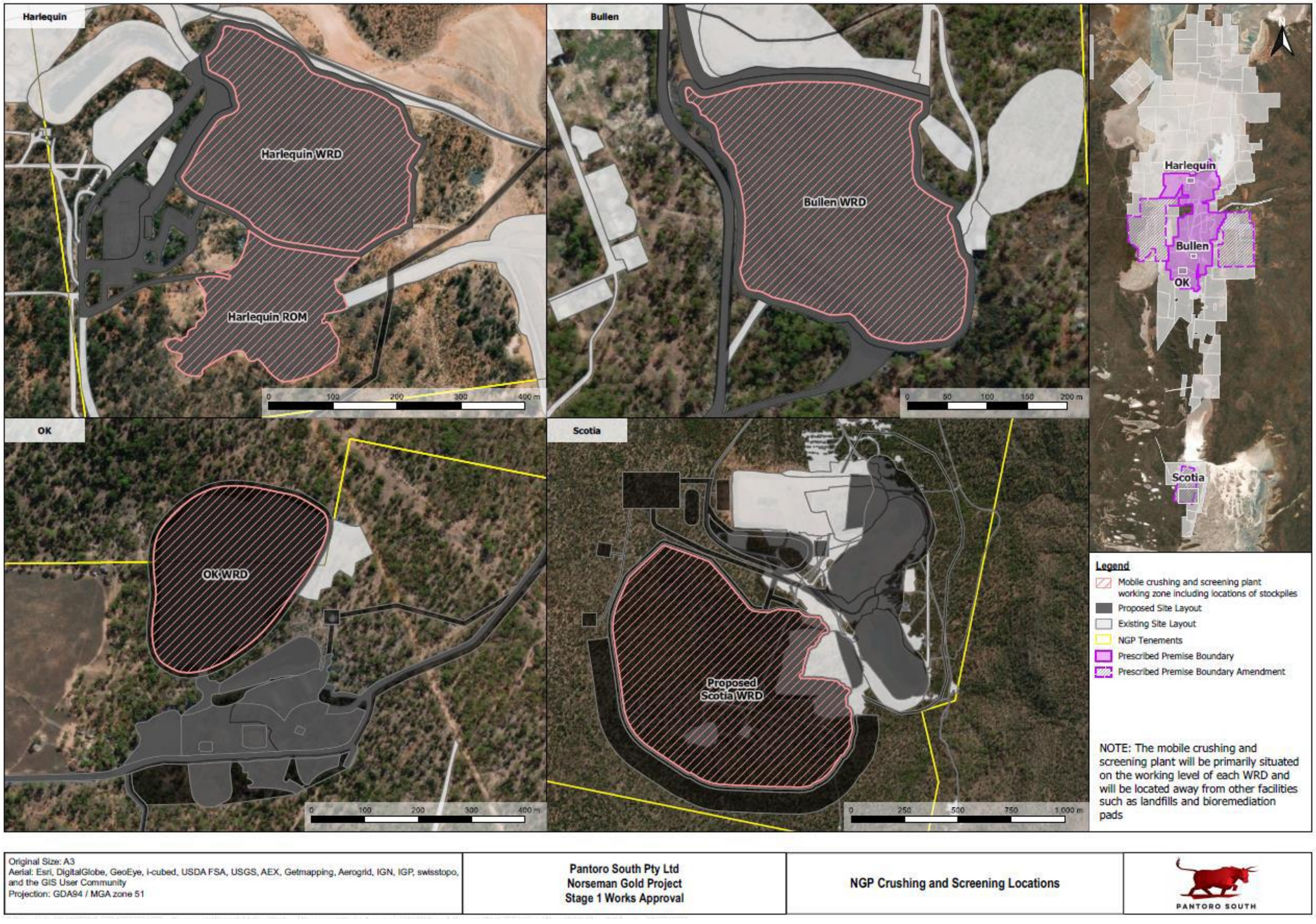

Figure 12: Proposed mobile crushing and screening plant locations

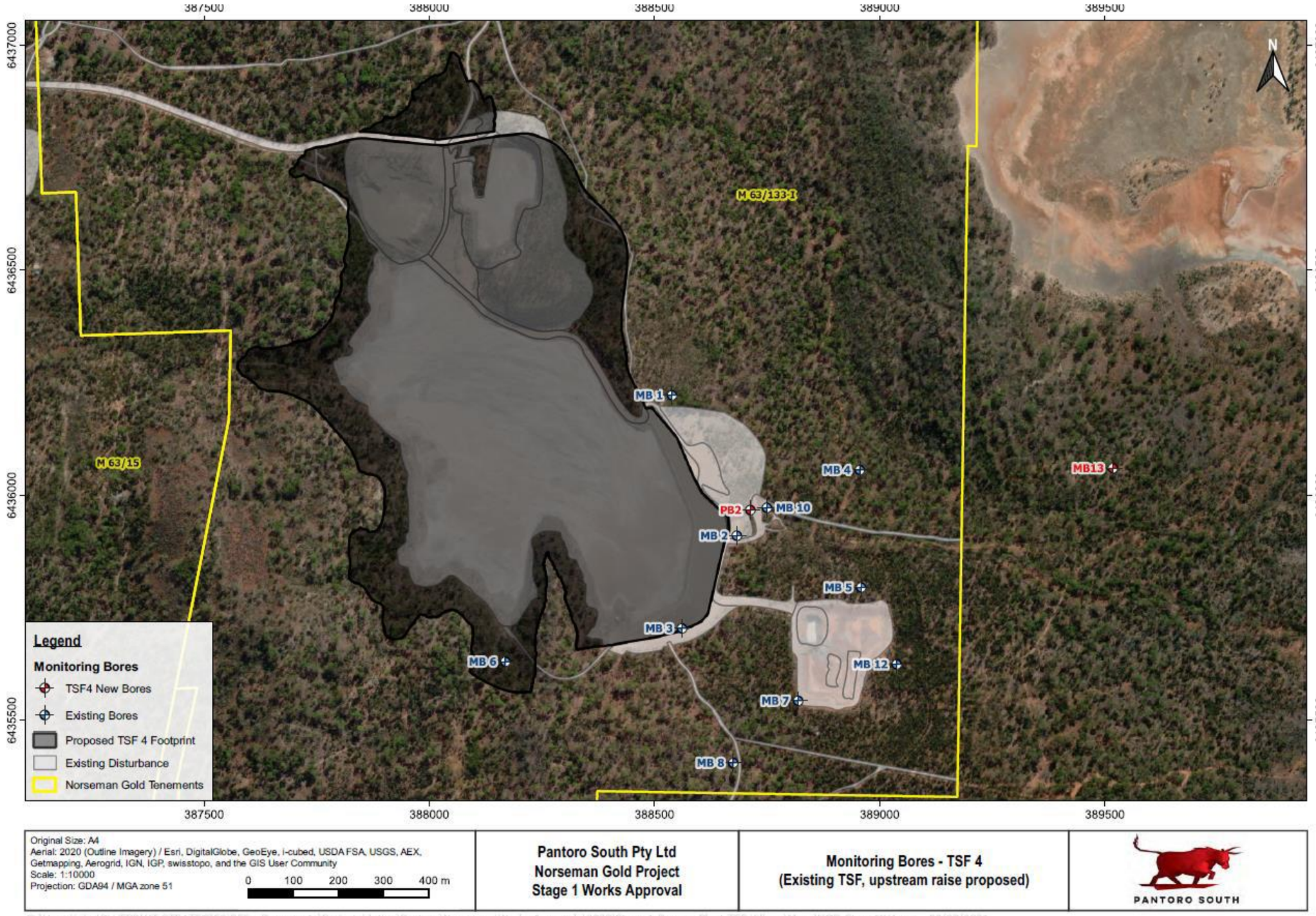

Figure 13: Monitoring bores for TSF4

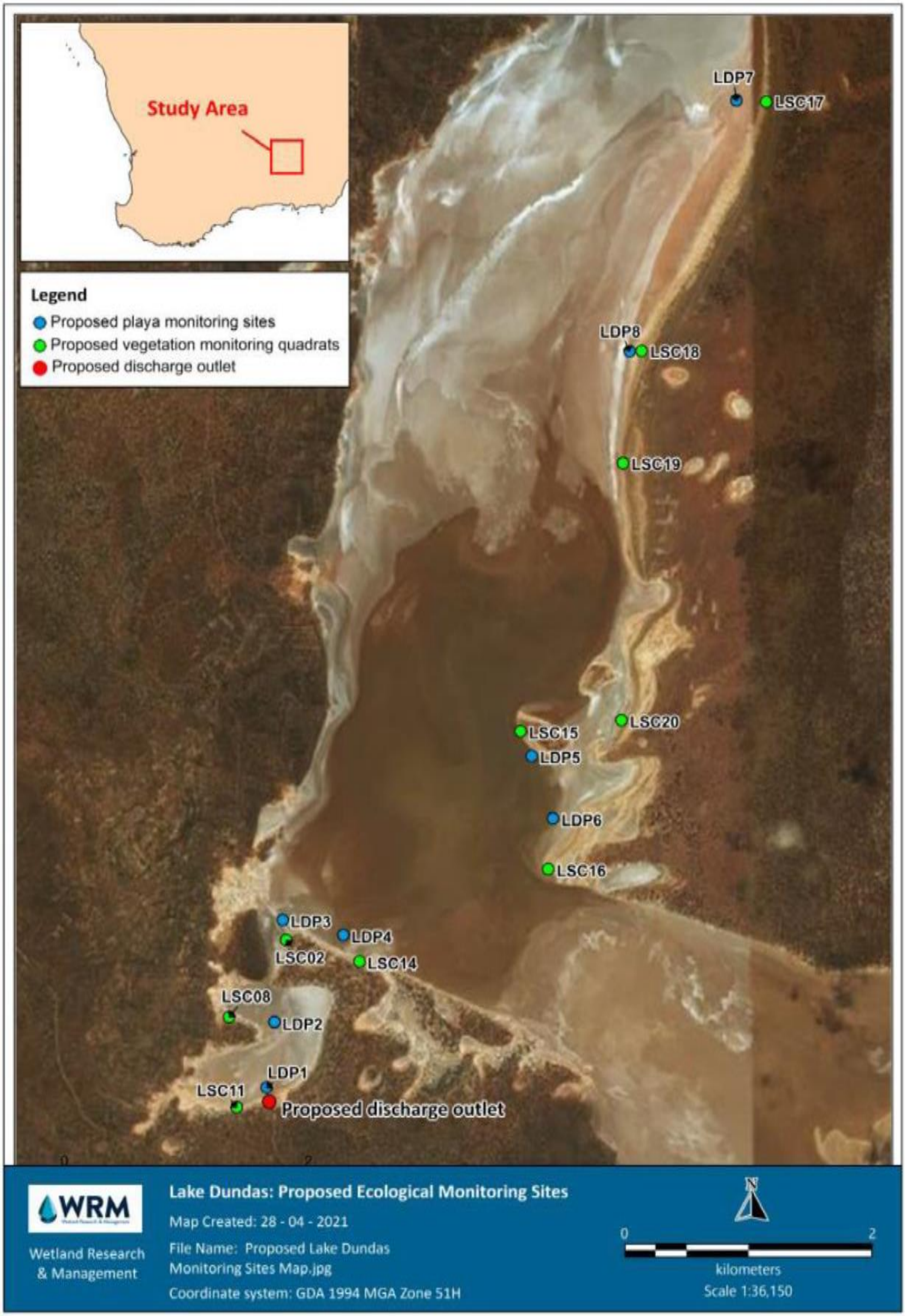

Figure 14: Monitoring locations for sediment, water quality and vegetation

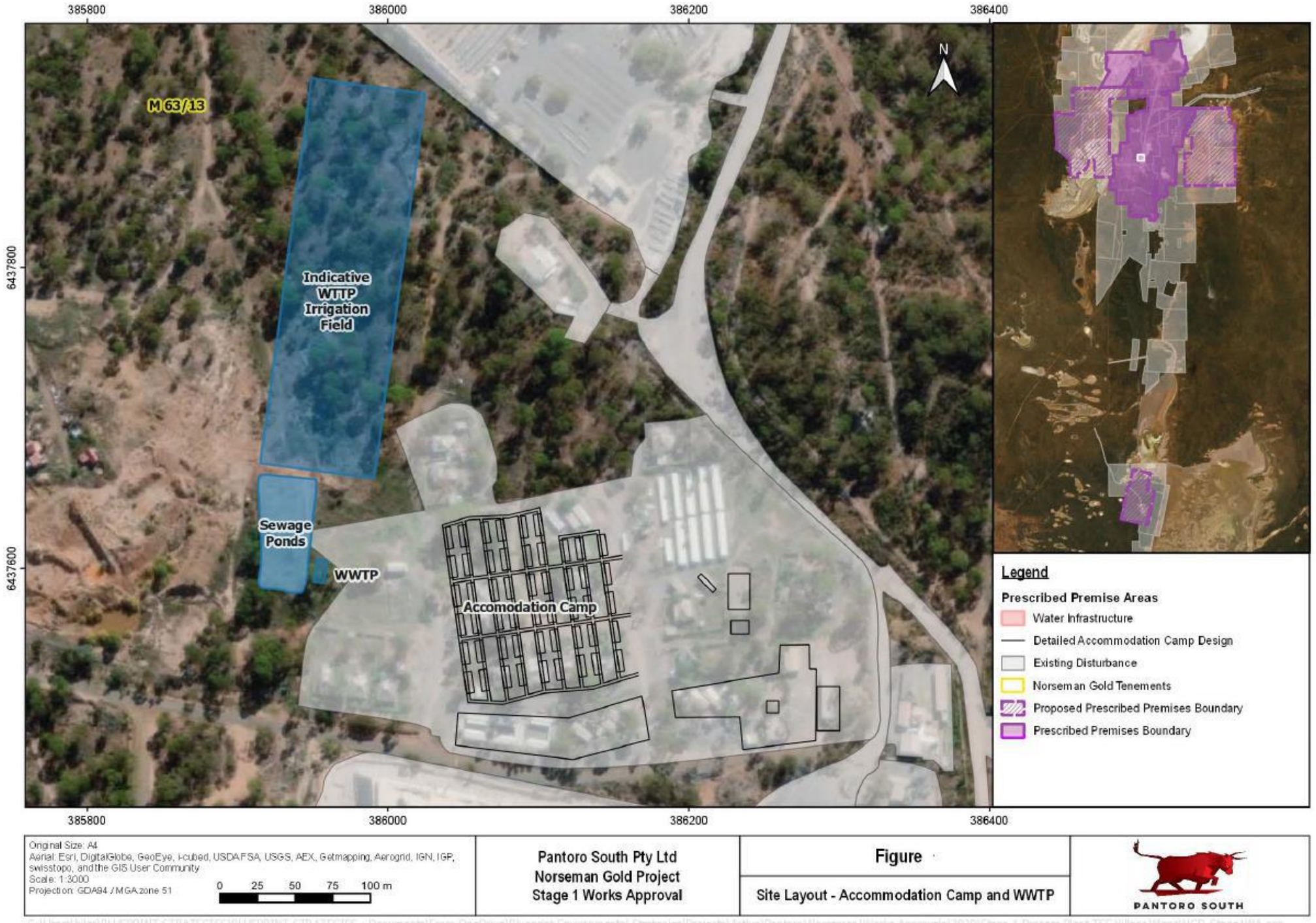

Figure 15: Location of the new WWTP

Schedule 2: Infrastructure and equipment

Table 7: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Process plant and related infrastructure	<u>Process plant</u> • Replacement of primary jaw crusher (primary crusher conveyor retained) • Refurbishment of ROM bin, apron feeder, dribble chute, stacker conveyor, vibrating feeder chute, stockpile discharge conveyor, crusher control room • Construction of secondary and tertiary crushing circuit and associated infrastructure • Construction of new ball mill circuit and associated infrastructure • Dust suppression sprays for: ROM bin, primary crusher, primary crushed ore stockpile, classifying screen, cone crusher, fine ore surge bin reclaim circuit • Stockpile infrastructure equipped with water sprays • Process plant activities placed on bunded hardstand <u>Process plant- noise mitigation</u> • Mufflers and other noise attenuation equipment to be installed on plant • Noise barrier walls must be: - located on the residential side of the primary crusher, secondary crusher, secondary crusher screen, ball mill;	Figure 2 Figure 3 Figure 4 <u>Noise mitigation:</u> Figure 5

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		- located on residential side of processing plant to attenuate ground level equipment such as pumps; - positioned in relation to equipment/infrastructure as per Figure 5; and - built to the heights and dimensions as identified in Figure 5. • Noise barrier wall or bund (or combination) must be: - located to attenuate ROM loader and mine trucks using the ROM; - positioned in relation to equipment/infrastructure as per Figure 5; and - built to the heights and dimensions as identified in Figure 5. <u>Process plant ponds</u> • Raw water pond and Process water dam: ○ HDPE lined ○ equipped telemetry system to control water level ○ equipped with recovery pump • Process plant events dam: ○ HDPE lined ○ store capacity to capture 10% AEP 24 hour rainfall ○ overflow to washdown bay water recovery system and existing HDPE lined dam where it can be reclaimed for reuse • Fauna egress points on all dams	
2.	TSF4 including seepage management infrastructure, tailings and return water pipelines	• Stage 3 to 5 to have an elevated perimeter drainage system that allows the discharge of seepage to sumps.	Indicative location as per Figure 7

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		• Cut off trench for Stage 3 - excavated to a nominal depth of 2.0 m and backfilled with compacted clayey material. • Four downstream recovery bores: (a) positioned according to electric conductivity testing; and (b) approximately to 30 m depth. • All tailings and return water pipelines contained within a designated bunded corridor that is adequate to contain any spill for a period equal to the time between routine inspections in areas where the pipeline does not drain into TSF4. • Tailings and return water pipelines to be fitted with flow sensors.	
3.	Dewatering infrastructure and discharge pipeline(s): • to Lake Cowan from Slippers pit, Daisy pit and GEV (Gladstone/Everlasting) pit; • to Bullen Underground and water storage facility from OK underground; • to Lake Dundas from Scotia pit; and	• Dewatering ponds and tanks: (a) to be lined with high density polyethylene; and (b) equipped with automatic water level controls. • Dewatering pipelines to be: (a) Constructed of high density polyethylene; and (b) Meet the following standards at a minimum: (i) AS/NZS 2033: Installation of polyethylene pipe systems; (ii) AS/NZS 4129: Fittings for polyethylene (PE) pipes for pressure applications; (iii) AS/NZS 4130: Polyethylene (PE) pipes for pressure applications; and (iv) AS/NZS 4131: Polyethylene (PE) compounds for pressure pipes and fittings.	Figure 8 Figure 9 Figure 10

	Infrastructure	Design and construction / installation requirements	Infrastructure location
	• from pit to pit.	• Dewater pipeline at final discharge point to Lake Dundas to be fitted with a dispersion manifold.	
4.	Landfill trenches: Butterfly, Cobbler, GEV, OK, Harlequin, and Scotia	Constructed to the dimensions of: (a) 30 m in length, 2 m in depth and 10 m in width	Figure 11
5.	Landfill trenches: Bullen	Constructed to the dimensions of: (a) 60 m in length, 5 m in depth and 15 m in width	Figure 11
6.	Crushing and Screening plant	• Must be: (a) located in bunded areas on working levels of Harlequin, Bullen, OK or Scotia waste rock dump; and	Figure 12
7.	Containerised aerobic treatment wastewater treatment plant (WWTP)	• Designed to achieve a 100 m^3 per day treatment capacity • Added to the existing wastewater treatment system which consists of two septic tanks, pipelines and two evaporation ponds. • Installed so that treated wastewater can be discharged to the existing ponds or to an irrigation field.	Figure 15