Permit

Environmental Protection Act 1994

Environmental authority P-EA-100418419

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: P-EA-100418419

Environmental authority takes effect on the day it is signed by the delegate.

The first annual fee is payable within 20 business days of the take effect date.

The anniversary date of this environmental authority is the same day each year as the take effect date. The payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Registered address
UGL ENGINEERING PTY LIMITED (ACN 096 365 972)	Level 6, 199 Grey Street South Brisbane QLD 4101

Environmentally relevant activity and location details

Environmentally relevant activity	Location
ERA 63 - Sewage Treatment - 1(b)(i) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1,500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 6 on WU50; various locations between Kidston and Mount Fox within the State of Queensland.

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Queensland Government

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days) that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority – on the nominated day; or

b) if the authority states a day or an event for it to take effect – on the stated day or when the stated event happens; or

c) otherwise – on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

	24/08/2023
Signature	Date

Rebecca Griffiths
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Industry and Development Business Centre
Department of Environment and Science
GPO Box 2454 BRISBANE QLD 4001
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activity	Location
ERA 63 - Sewage Treatment - 1(b)(i) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1,500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 6 on WU50; various locations between Kidston and Mount Fox within the State of Queensland.

The environmentally relevant activity conducted at the location as described above must be conducted in accordance with the following site-specific conditions of approval.

Agency interest: General	
Condition number	**Condition**
G1.0	Inflows into the sewage treatment plant must not exceed 25,000 litres on any **day**.
G1.1	The **activity** must cease operating no later than 1 September 2028.
G2.0	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused, or likely to be caused, by the **activity**.
G3.0	Unless specifically authorised by a condition of this environmental authority, this environmental authority does not authorise a relevant act, which is: a) an act that causes serious or material environmental harm or an environmental nuisance; or b) an act that contravenes a noise standard; or c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG of the *Environmental Protection Act 1994*.
G4.0	**Contravention of conditions** Unless specifically authorised by a condition of this environmental authority, details of any contravention of a condition of this environmental authority must: a) be reported to the **administering authority** within 24 hours of becoming aware of the contravention; and b) include the nature and circumstances of the contravention and any immediate actions taken.
G4.1	As soon as reasonably practicable but no later than 20 business days of a report made under condition G4.0 (or a longer period agreed to in writing by the **administering authority**), an investigation must be undertaken to determine: a) the potential circumstances and actions that may have contributed to the contravention; and b) the environmental impact of the contravention; and

	c) reasonable and practicable **measures** that will be implemented to address the cause of the contravention to prevent future contraventions of this nature.
G4.2	As soon as reasonably practicable but no later than 20 business days of investigating a contravention under condition G4.1 (or a longer period agreed to in writing by the **administering authority**), the reasonable and practicable **measures** identified in the investigation must be implemented.
G4.3	The outcome of the investigation carried out under condition G4.1 and the reasonable and practicable **measures** implemented under condition G4.2 must be recorded.
G5.0	**Complaints** The following details must be recorded for all **complaints** received and provided to the **administering authority** upon request: a) date and time the **complaint** was received; and b) if authorised by the person making the **complaint**, their name and contact details; and c) nature and details of the **complaint**.
G5.1	As soon as reasonably practicable but no later than 5 business days of receiving a **complaint** (or a longer period agreed to in writing by the **administering authority**), an investigation must be undertaken to determine: a) the potential circumstances and actions on **site** that may have contributed to the basis of the **complaint**; and b) reasonable and practicable **measures** that will be implemented to address the **complaint**.
G5.2	As soon as reasonably practicable but no later than 5 business days of investigating a **complaint** under condition G5.1 (or a longer period agreed to in writing by the **administering authority**), the reasonable and practicable **measures** identified in the investigation must be implemented.
G5.3	The outcome of the investigation carried out under condition G5.1 and the reasonable and practicable **measures** implemented under condition G5.2 must be recorded.
G6.0	**Environmental risk management procedures** Written procedures must be developed and implemented by an **appropriately qualified person** that ensure: a) all potential risks to the environment from the carrying out of the **activity** are identified and assessed, including: i) during routine operations; and ii) outside routine operations (e.g., maintenance, start up and shut down); and iii) during preparation, rehabilitation, and closure; and iv) in an emergency (e.g., fire, flood or other natural disaster); and b) for each potential risk identified, any necessary **measures** to prevent or minimise the potential for environmental harm are implemented; and c) staff understand their obligations under this environmental authority and the *Environmental Protection Act 1994*; and

<table>
<tr><td></td><td>d) environmental risk management procedures are continually reviewed and improved, based on a reasonable risk-management approach.</td></tr>
<tr><td>G7.0</td><td>Plant and equipment

An appropriately qualified person must install, operate, calibrate, and maintain the plant and equipment required to carry out the activity (including monitoring devices) in a proper and effective manner.</td></tr>
<tr><td>G7.1</td><td>Records of installation, calibration and maintenance carried out under condition G7.0 must be kept.</td></tr>
<tr><td>G8.0</td><td>Record keeping

Unless otherwise specified by a condition of this environmental authority, records must be:

a) kept for the period outlined in Table 1 – Record keeping requirements; and
b) provided to the administering authority upon request and in the format requested.

Table 1 – Record keeping requirements
<table>
<tr><th>Description of records</th><th>Retention requirement</th></tr>
<tr><td>Monitoring results</td><td>Retain for 10 years.</td></tr>
<tr><td>All other records</td><td>Retain for 5 years.</td></tr>
</table>
</td></tr>
<tr><td>G9.0</td><td>Chemical storage

Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system.</td></tr>
<tr><td>G10.0</td><td>Monitoring and sampling

All monitoring and sampling required by the conditions of this environmental authority must be carried out, interpreted, and recorded by an appropriately qualified person in accordance with the methods prescribed in the latest edition of the administering authority's Monitoring and sampling manual (available of the Queensland Government website) unless otherwise approved by the administering authority.</td></tr>
<tr><td>G10.1</td><td>Unless otherwise authorised in writing by the administering authority, all laboratory analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) accreditation for such analyses.

The only exception to this condition is for in situ monitoring of pH, electronic conductivity, and total chlorine.</td></tr>
<tr><td>G11.0</td><td>Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.</td></tr>
<tr><td colspan="2">Schedule: Air</td></tr>
<tr><td>A1.0</td><td>Odours or airborne contaminants from the activity must not cause environmental nuisance at a sensitive place or commercial place.</td></tr>
<tr><td>A2.0</td><td>Effluent spray must not move beyond Operational Areas.</td></tr>
</table>

A3.0	Effluent must only be applied to **Operational Areas** via low pressure dispersion (e.g., gravity-fed dribble bars or sprays).
A4.0	Warning signs must be installed and maintained on any vehicle used for transport, storage or application of effluent with clearly visible wording that states 'Recycled Water – Avoid Contact – Do Not Drink'.
A5.0	Contaminants must not be released within 25 metres of: a) a footpath; or b) a recreational area; or c) a motorist and/or heavy vehicle rest area.
Schedule: Noise	
N1.0	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
Schedule: Waste	
W1.0	All waste generated in carrying out the **activity** must be lawfully reused, recycled or lawfully removed to a facility that can lawfully accept the waste.
Schedule: Land	
L1.0	Contaminants generated by the **activity** must only be released to **Operational Areas** of the **Genex Kidston Connection Project**.
L1.1	Contaminants generated by the **activity** must only be released to **Operational Areas** where the following requirements are complied with: a) the release limits for each parameter are complied with at the **monitoring** location as specified in *Table 2 – Contaminant limits for releases to land*; and b) releases are **monitored** at the **monitoring** location and at the minimum **monitoring** frequency for each parameter specified in *Table 2 – Contaminant limits for releases to land*.

Table 2 – Contaminant limits for releases to land

Monitoring location	**Parameter**	**Release limits**			**Minimum monitoring frequency**
		Minimum	**Mean**	**Maximum**	
Sample point located at the turbidity meter within the polishing container; GPS	Application volume (L/day)	-	25,000	-	Daily
	Application rate (mm/day)	-	2	5	Daily
	Total Nitrogen, TN (mg/L as N)	-	30	-	Monthly
	Total Phosphorus, TP (mg/L as P)	-	10	-	Monthly

	location: Latitude -18.8536, Longitude 145.4965	E. coli (cfu/100mL)	-	-	100	Monthly
		pH (pH units)	6	-	8.5	Quarterly
		Electrical Conductivity (EC) (µS/cm)	-	-	1,600	Quarterly
		Total chlorine (mg/L)	-	-	3	Quarterly
L1.2	**Monitoring** required by condition L1.1 must be undertaken during periods when effluent is being applied to land, unless effluent application has ceased for longer than the relevant parameters specified minimum frequency (e.g., if pH was only required to be **monitored** once a week, then a pH sample would not be required after the first week following cessation of the release).					
L1.3	The application rate **monitoring** required by condition L1.1 must be calculated based on the total area of land to which effluent is applied on that **day**, and the actual volume of effluent applied on that same **day**.					
L1.4	Mean calculations required by condition L1.1 must be taken as a Long-Term Rolling Limit, meaning a limit applied to consecutive samples taken over a 3-month period (on a rolling basis for limit calculations) where consecutive samples are taken at the minimum frequency specified in *Table 2 - Contaminant limits for releases to land*.					
L1.5	Volume **monitoring** required by condition L1.1 must be undertaken using a flow meter or determined by the volume and frequency of effluent removed by a vehicle for application to land.					
L2.0	When soil in an **Operational Area** is **saturated**, effluent must not be released to **land** within that **Operational Area**.					
L3.0	Wet weather storage, with a minimum volume of 92,000 litres, must be installed and maintained within the **Site** for the storage of effluent.					
L4.0	Ponding of effluent within **Operational Areas** must not occur.					
L5.0	Contaminants must not run off to areas beyond **Operational Areas**.					
L6.0	The build-up of nutrients, salinity, sodicity and heavy metals in the soil and subsoil must be minimised.					
Schedule: Water						
WT1.0	Contaminants must not be released to any **waters**.					
WT1.1	Contaminants must not be released within 50 metres of any **waters**.					

Definitions

Key terms and/or phrases used in this document are defined in this section. Where a term is not defined, the definition and meaning given must be in accordance with the following (in order of priority):

1. in the *Environmental Protection Act 1994*, its regulations or environmental protection policies;
2. the *Acts Interpretation Act 1954*;
3. the Macquarie Dictionary (taking account of the context in which the word or phrase is used in this document).

For example, **environmental value**, **environmental harm**, **environmental nuisance**, and **material environmental harm** are defined in the EP Act and **groundwater** is defined in the *Environmental Protection Regulation 2019*. Additionally, **person** is described by the *Acts Interpretation Act 1954*.

Activity means the environmentally relevant activity of sewage treatment and associated effluent application to which this environmental authority relates. An activity may be undertaken on the whole or a part of a **site**.

Administering authority means the Chief Executive administering the *Environmental Protection Act 1994*.

Appropriately qualified person means a person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority (EA) requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods and/or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Complaints means an expression of dissatisfaction, concern or report, whether written or verbal, about the **activity** and/or its impact on the environment.

Day means any 24-hour period of a calendar day.

Genex Kidston Connection Project refers to the project constructing a transmission line and associated towers and substations between Kidston and Mount Fox, Queensland, as shown in *Appendix 1 - Genex Kidston Connection Project*.

Land means land excluding **waters** and the atmosphere.

Measures has the broadest interpretation and includes plant, equipment, physical objects, **monitoring**, procedures, actions, directions and competency.

Monitor, **monitored** and **monitoring** means monitoring the impact of an **activity** on the receiving environment and includes analysing, assessing, examining, inspecting, measuring, modelling or reporting any of the following matters—

(a) the quantity, quality, characteristics, timing and variability of the release of any contaminant; and
(b) the effectiveness of any control measure; and
(c) the characteristics of, and impact on, the receiving environment.

Operational Areas include the following areas of the **Genex Kidston Connection Project**:

(a) construction areas requiring dust suppression;
(b) access tracks and unsealed roads requiring dust suppression and/or **soil conditioning**; and
(c) disturbed areas requiring rehabilitation works.

Person means an individual or a corporation, as per section 32D of the *Acts Interpretation Act 1954*.

Records include breach notifications, written procedures, analysis results, **monitoring** reports and **monitoring** programs required under a condition of this authority.

Release of a contaminant into the environment or **release** means to:

(a) deposit, discharge, emit or disturb the contaminant; or
(b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed; or
(c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed; or
(d) allow the contaminant to escape; or
(e) fail to prevent the contaminant from escaping.

Saturated means the soil moisture level is greater than the soil field capacity. Field capacity means the amount of water retained in soil when the soil has been allowed to drain for 24hrs under normal gravity conditions.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to **land**, **groundwater**, or surface **waters**.

Sensitive place includes any of the following places:

(a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
(b) a motel, hotel or hostel; or
(c) a kindergarten, school, university or other educational institution; or
(d) a medical centre or hospital; or
(e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
(f) a public park or garden; or
(g) for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2019*; or
(h) the area within the curtilage of any of the above places.

Soil conditioning in this context means grading and compaction of soil for the construction of access tracks.

The site means the area of **land** identified as being approved for the carrying out of the **activity** as per *Appendix 2 – Site Plan* of this environmental authority and any **Operational Areas** to which effluent is applied.

Total Nitrogen (TN) means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

Total Phosphorus (TP) means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus**.**

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and **groundwater** and any part thereof.

Appendix 1 – Genex Kidston Connection Project

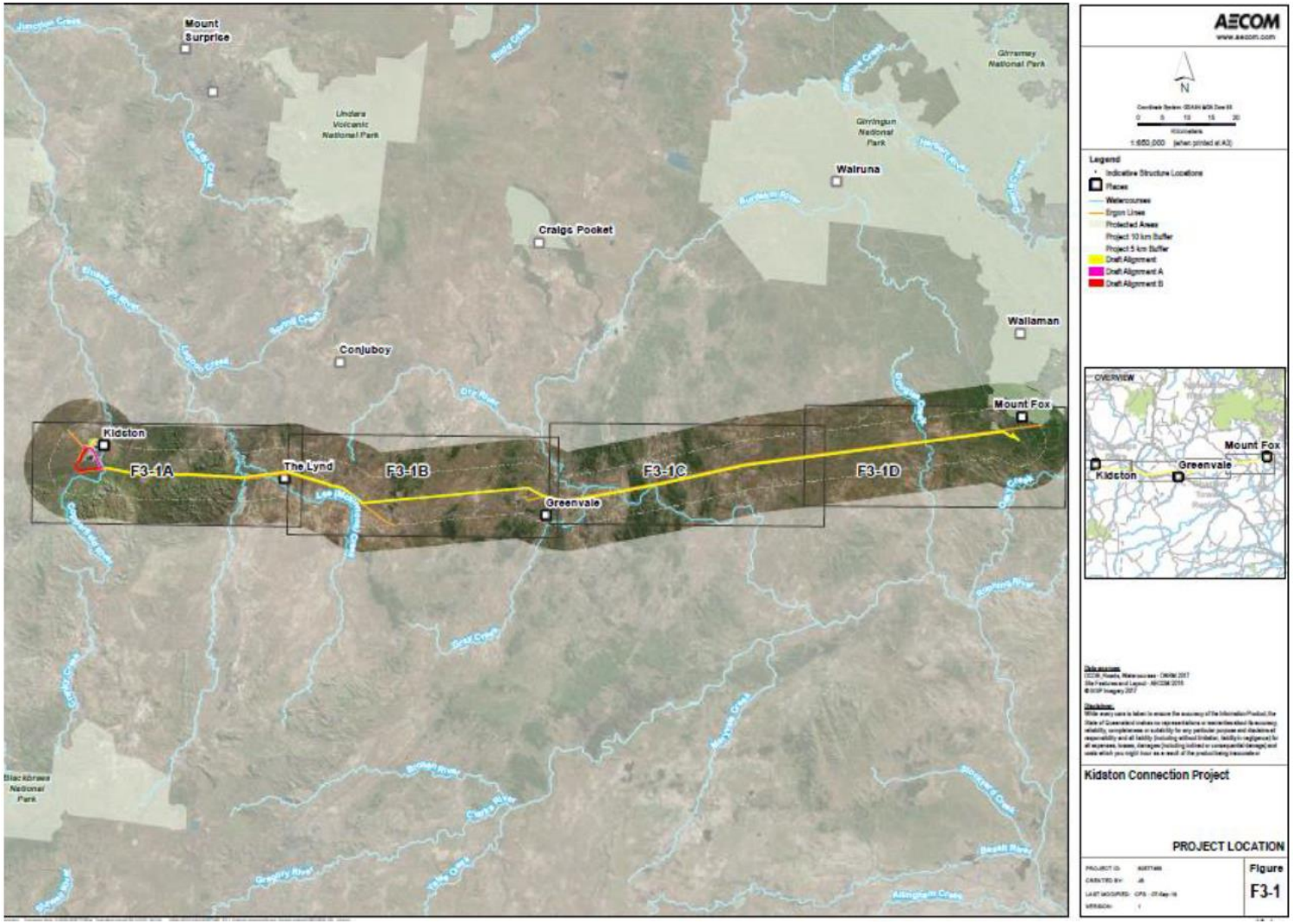


Figure 1 - Genex Kidston Connection Project

Appendix 2 – Site Plan

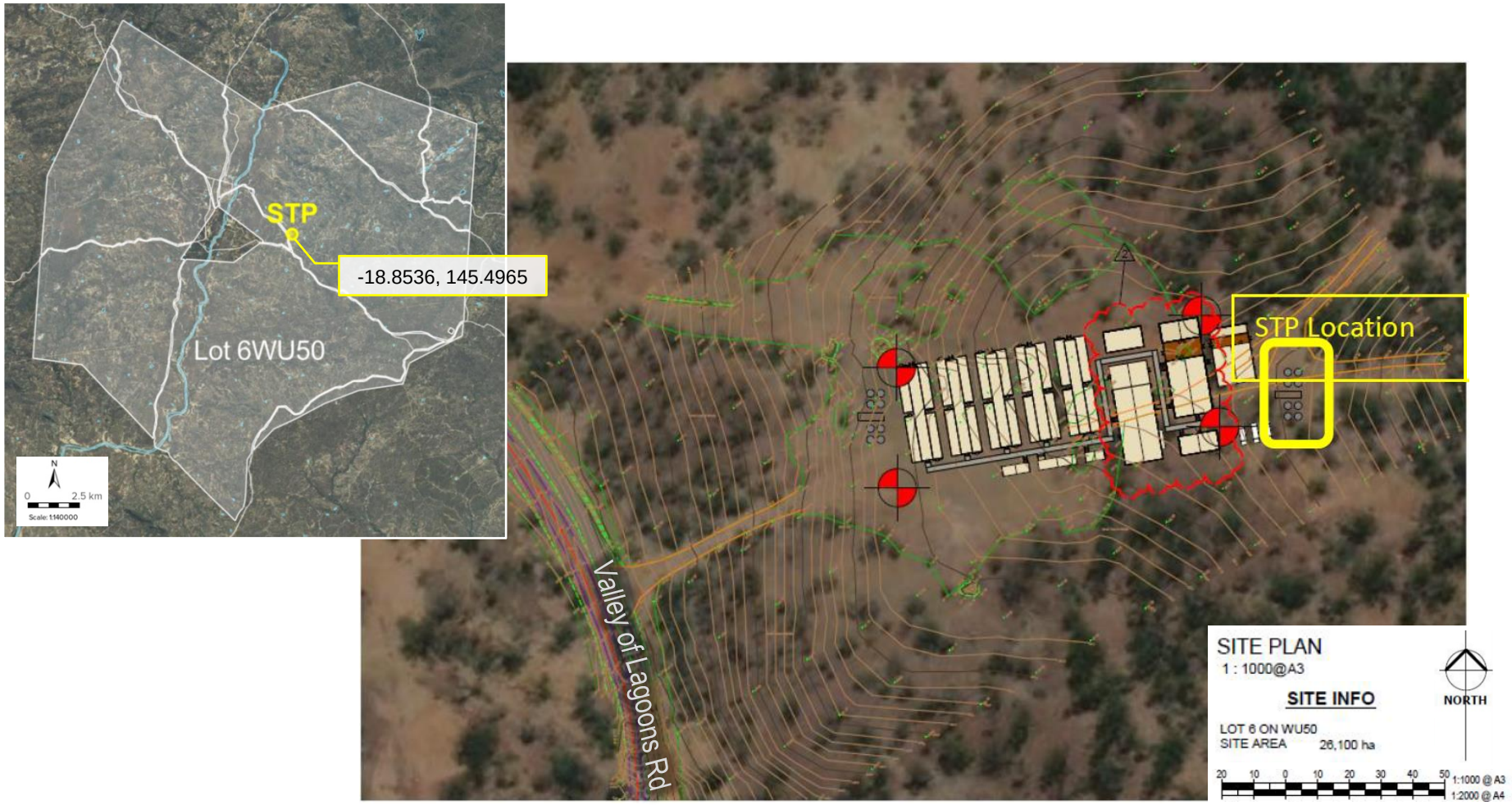


Figure 2 – Site Plan

END OF ENVIRONMENTAL AUTHORITY