Permit

Environmental Protection Act 1994

Environmental authority EA0002422

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

Environmental authority number: EA0002422

The anniversary day of this environmental authority remains **30 July.** The payment of the annual fee will be due each year on this day**.** An **annual return** will be due each year on **01 March.**

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

Environmental authority holder(s)

Name(s)	Registered address
DEPARTMENT OF EDUCATION	Asset Maintenance Unit 30 Mary Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (a-i) 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 116 on Plan CP816505

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).

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.

E Clarke

Liz Clarke
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Utilities and Government Organisations Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.qld.gov.au

Date issued: 30 July 2020

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.

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/s
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (a-i) 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 116 on Plan CP816505

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

Agency interest: General	
Condition number	**Condition**
G1	**Activities** conducted under this environmental authority must not be conducted contrary to any of the following limitations: 1. Inflows to the sewage treatment plant must not exceed 3.4**ML** per calendar year; 2. Releases of treated effluent to the environment must only occur within the **land application area** as shown in *Appendix 1: Land application area*; 3. Releases of treated effluent to land must be spread out evenly across a minimum **land application area** of 6,500m^2; and 4. Releases of treated effluent to the environment must only occur by use of surface irrigation sprinklers or subsurface irrigation.
G2	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the **activities**.
G3	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G4	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
G5	All information and records required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the **administering authority** upon request and in the format requested.
G6	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.

G7	A **receiving environment monitoring program** must be designed and implemented by an **appropriately qualified person(s)** to monitor the effects of the **activity** on land.
G8	The **receiving environment monitoring program** required by condition G7**,** must include at least the following: 1. soil and sub-soil analysis, including assessment of the soils from representative locations, including type, structure, pH, phosphorus adsorption level and capacity, nutrient status, salinity and sodicity, and cation exchange capacity of the irrigation release areas; 2. determination of the quantity and quality of contaminants applied to the soils from the recycled water irrigation; 3. periodic re-assessment including modelling of the water, nutrient and salt balances and irrigation rate and return period to ensure sustainable use of the irrigation area; 4. reporting of monitoring results and an assessment of the impact of the releases on the irrigation areas; 5. determination of the ongoing capacity of the **land application area** to sustainably assimilate nutrient loads from the release of treated wastewater; 6. identification of trigger levels that are suitable for early detection of salinity, sodicity and hydraulic overloading within the **land application area**; and 7. development of trigger action response procedures to reduce nutrient, toxicant and hydraulic overloading to levels below trigger values specified in item 6 of this condition.
G9	Where the **receiving environment monitoring program** required by condition G7 shows that indicator levels have been triggered, trigger action response procedures developed under condition G8 must be implemented within four weeks of the holder of this environmental authority receiving the results of the program.
G10	Where the **receiving environment monitoring program** required by condition G7 shows that indicators have been triggered, the **administering authority** must be notified of the indicators that have been triggered within seven days of receiving the results of the program.
G11	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (**NATA**) certification, or an equivalent certification, for such analyses. The only exception to this condition is for *in situ* monitoring of electrical conductivity, pH and chlorine.
G12	An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.
G13	**You** must record the following details for all environmental complaints received: 1. date and time complaint was received; 2. name and contact details of the complainant when provided and authorised by the complainant; 3. nature of the complaint; 4. investigations undertaken; 5. conclusions formed; and 6. actions taken.
G14	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the administering authority to investigate a complaint of

	environmental nuisance arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G15	The **activity** must be undertaken in accordance with written procedures that: 1. identify potential risks to the environment from the **activity** during routine operations, closure and an emergency; 2. establish and maintain control **measures** that minimise the potential for environmental harm; 3. ensure plant, equipment and **measures** are maintained in a proper and effective condition; 4. ensure plant, equipment and **measures** are operated in a proper and effective manner; 5. ensure that staff are trained in and aware of their obligations under the *Environmental Protection Act 1994*; and 6. ensure that reviews of environmental performance are undertaken at least annually.
G16	**You** must install and maintain wet weather storage with a volume of at least 85,000L for storage of treated wastewater.
Agency interest: Air	
Condition number	**Condition**
A1	Other than as permitted within this environmental authority, odours or airborne contaminants, must not cause **environmental nuisance** at a **sensitive place** or **commercial place**.
Agency interest: Water	
Condition number	**Condition**
WT1	Stormwater contaminated by the **activity** must be managed to minimise or prevent environmental harm.
WT2	Contaminants must not be released to **groundwater** or at a location where they are likely to release to **groundwater**.
WT3	Contaminants must not be released to **waters**.
Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
Agency interest: Waste	
Condition number	**Condition**
W1	Unless otherwise permitted by this environmental authority, all waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

<table>
<tr><th colspan="2">Agency interest: Land</th></tr>
<tr><th colspan="2">Condition</th></tr>
<tr><td>L1</td><td>The only contaminants to be released to land are treated effluent in accordance with Table 1 - Treated effluent release limits and the associated requirements.
Table 1 - Treated effluent release limits
<table>
<tr><th>Quality Characteristic (units)</th><th>Release Limit</th><th>Limit Type</th><th>Minimum Frequency</th></tr>
<tr><td>Irrigation rate (mm/day)</td><td>2.5</td><td>maximum</td><td>daily</td></tr>
<tr><td>BOD5 mg/L</td><td>20</td><td>maximum</td><td>monthly</td></tr>
<tr><td>Total Suspended Solids mg/L</td><td>30</td><td>maximum</td><td>monthly</td></tr>
<tr><td>Total Nitrogen (as TN) mg/L</td><td>30</td><td>maximum</td><td>monthly</td></tr>
<tr><td>Total Phosphorus (as TP) mg/L</td><td>15</td><td>maximum</td><td>monthly</td></tr>
<tr><td>pH (pH units)</td><td>6.0-8.5</td><td>range</td><td>monthly</td></tr>
<tr><td>E.coli (CFU/100ml)</td><td><10</td><td>maximum</td><td>monthly</td></tr>
<tr><td>Total Dissolved Salts (mg/L)</td><td>1000</td><td>median</td><td>monthly</td></tr>
</table>
Associated requirements
1) The monitoring point is the release point of the effluent holding tank at GPS co-ordinates: -27.8018, 153.2776, as indicated in drawing Appendix 2: Site plan, reference, 'HOLDING TANK LOCATION (APPROX)'.
2) Monitoring must be in accordance with the administering authority's Monitoring and Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
3) Monitoring must be undertaken when treated sewage effluent is being applied to the land application area, unless effluent application to land has ceased for longer than the relevant parameters specified minimum frequency (e.g. if TSS was only required to be monitored once a week, then a TSS sample would not be required after the first week following cessation of the release).
4) Samples must be representative of the release.
5) Indicators for TN and TP are recommended to be done as grab samples.
6) A suitable flow meter must be installed and operational at the outlet of the treatment system/s to provide an accurate assessment of flows to the land application area.</td></tr>
<tr><td>L2</td><td>When weather conditions or soil conditions preclude the release of treated sewage effluent to land, treated effluent must not be irrigated to land.</td></tr>
<tr><td>L3</td><td>Treated effluent released to land must be done in accordance with documentation that ensures:
1. drainage to groundwater and subsurface flows of contaminants to surface waters are prevented;</td></tr>
</table>

	2. surface pondage and run-off of effluent is prevented; 3. degradation of soil structure is minimised; 4. soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised; 5. spray drift or overspray does not carry beyond **land application** area; 6. effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; 7. any biomass removed from plants growing on irrigated land to be transported and disposed of other than on the irrigated land; and 8. sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

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

BOD5 means the 5 **day** biochemical oxygen demand determined using standard tests (e.g. those used by

NATA laboratories). This test is not inhibited for nitrification, otherwise would be referred to as “carbonaceous” BOD.

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.

Day means any 24 hour period.

Environmental nuisance as defined under Chapter 1 of the *Environmental Protection Act 1994.*

Environmental value as defined under Chapter 1 of the *Environmental Protection Act 1994.*

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Land application means the area as outlined in *Appendix 1: Land application area*.

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

Median means the middle value, where half the data are smaller and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

ML means a unit of volume equivalent to 1000000 litres.

NATA means National Association of Testing Authorities.

Receiving environment monitoring program means a monitoring program designed to monitor and assess the potential impacts of controlled and/or uncontrolled releases of contaminants to the environment from the **activity**.

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 means to:

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

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or a public park or garden; or
6. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

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.

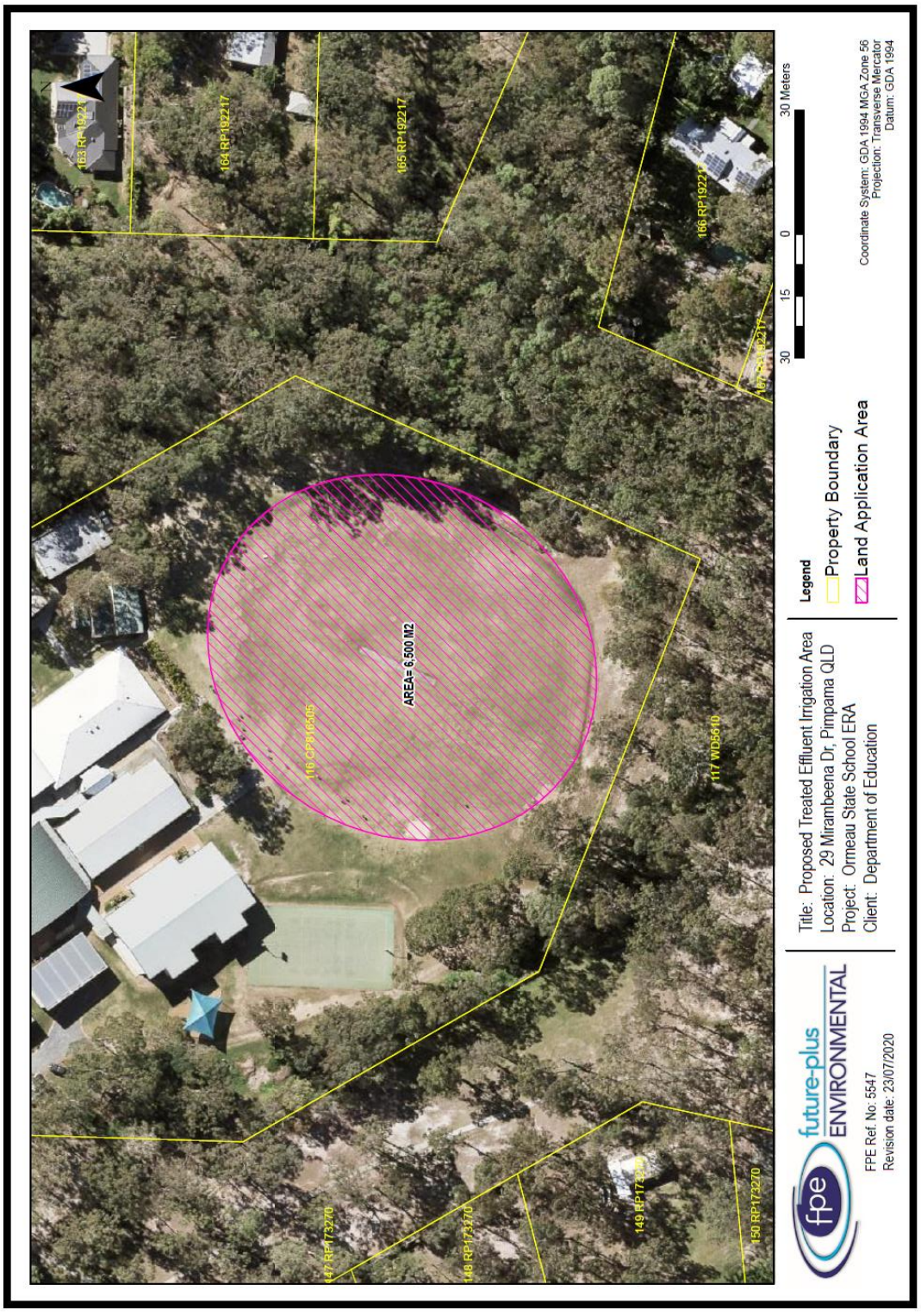
Total Phosphorus (TP) means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus**.**

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.

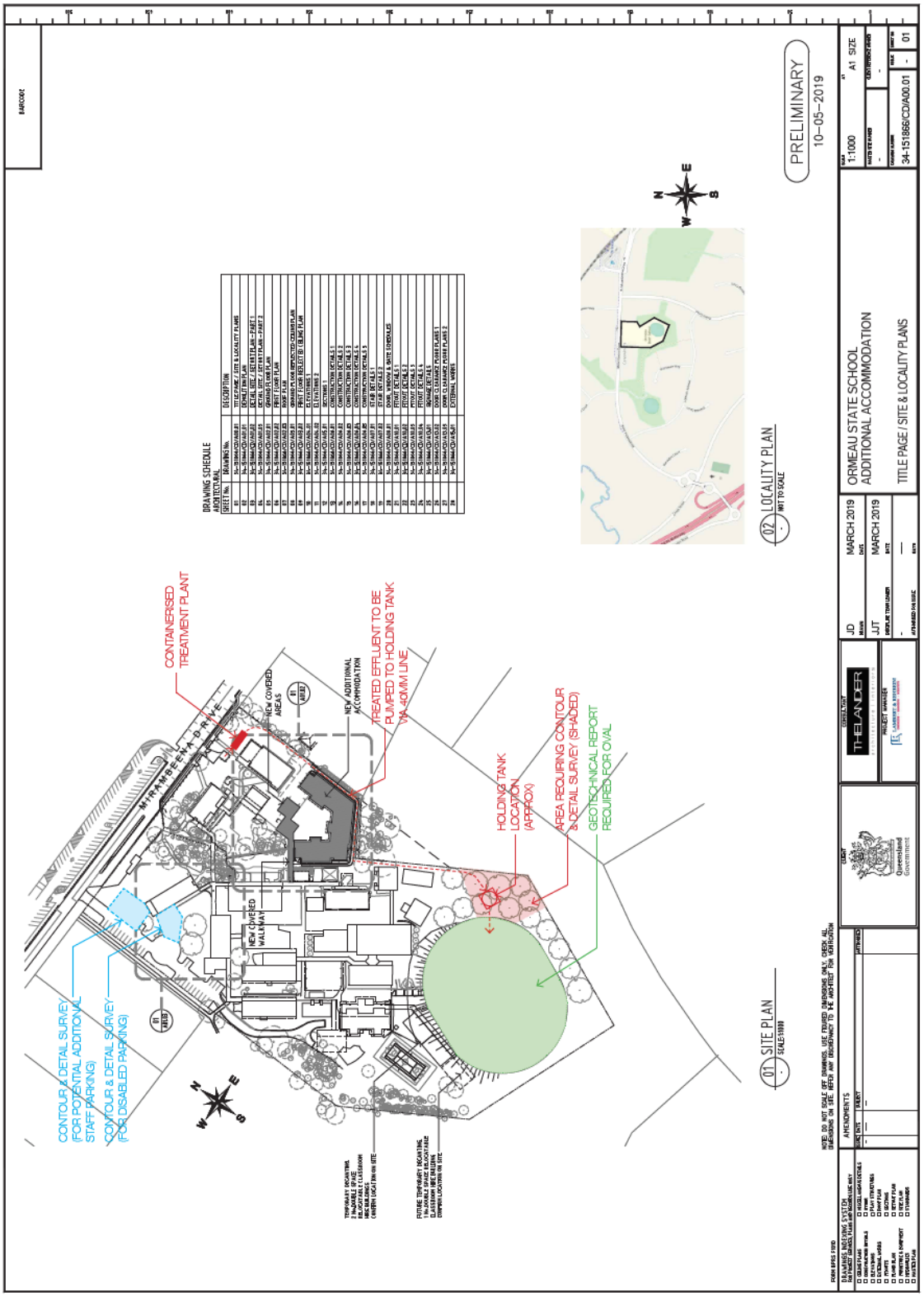
You means the holder of the environmental authority.

Appendix

Appendix 1: Land application area



Appendix 2: Site plan



END OF PERMIT

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