Permit

Environmental Protection Act 1994

Environmental authority EPVX01882714

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

Environmental authority number: EPVX01882714

The anniversary day of this environmental authority remains 25 July

Environmental authority holder(s)

Name(s)	Registered address
North Burnett Regional Council	34 - 36 Capper Street GAYNDAH QLD 4625

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 (b-i) more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Mingo Crossing Sewage Treatment Plant Lot 1 on SP221156, Lot 2 on BN37186, Lot 3 on BN37186

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.

Dorota Rosiak
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 21 August 2019

Enquiries:
Heritage, Utilities and Government Assessment
Department of Environment and Science

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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)

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

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 must not exceed the peak design capacity of 42,000L/**day** on any day; 2. The annual inflows to the sewage treatment plant and released into the Wisconsin Mound System must not exceed 4,270kL/year to be calculated annually based on the daily inflow volume; 3. Storages of contaminants, including influent and effluent storages, must be must be designed to address Q100 flood risks and prevent release of contaminants; and 4. The sewage treatment plant control room and all control panels associated with the activity must be constructed above the Q100 flood level.
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	An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.
G8	**You** must record the following details for all environmental complaints received: a) date and time complaint was received; b) name and contact details of the complainant when provided and authorised by the complainant; c) nature of the complaint; d) investigations undertaken; e) conclusions formed; and f) actions taken.
G9	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.
G10	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency; b) establish and maintain control **measures** that minimise the potential for environmental harm; c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; d) ensure plant, equipment and **measures** are operated in a proper and effective manner; e) *ensure that staff are trained in and aware of their obligations under the Environmental Protection Act 1994;* and f) ensure that reviews of environmental performance are undertaken at least annually.
G11	**Chemicals** and fuels in containers of greater than 15 litres must be stored within a secondary containment system.

G12	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 pH, turbidity and residual chlorine.
G13	Effluent disposal must not be undertaken within 250 metres of any bore used for domestic water supply.
Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause **environmental nuisance** at a **sensitive place** or **commercial place**.
Agency interest: Land	
Condition number	**Condition**
L1	The only contaminants to be released to land are treated sewage effluent in accordance with *Table 1 - Treated effluent release limits* and the associated requirements.

Table 1 - Treated effluent release limits

Monitoring Location	Quality Characteristic (units)	Minimum	Mean*	Maximum	Monitoring frequency
Outflow of the treated water pump well as shown in *Appendix 3 Mingo Crossing Flow Diagram*	Volume (L/day)	-	11,688	42,000	Daily
	Total Nitrogen (mg/L as N)	-	20	30	Monthly**
	Total Phosphorus (mg/L as P)	-	5	10	Monthly**
	pH (pH units)	6.0	-	8.5	Monthly**
	Enterococci /E.coli CFU/100ml)	-	-	<1000	Monthly**
	Electrical Conductivity (µS/cm)	-	-	1000/1600	Monthly**
Base of Mound 1, 2 and 3	**Total Nitrogen** (mg/L as N)	-	-	10	Quarterly
	Total Phosphorus (mg/L as P)	-	-	5	Quarterly

*Mean is to be calculated on a rolling 12-month dataset of monitoring results, with monitoring

	undertaken at the frequency specified in *Table 1 - Treated effluent release limits*. **Monthly for the first six (6) months of operation and then quarterly thereafter. If a release limit is exceeded, monitoring must be undertaken monthly until the limit is not exceeded for 3 consecutive months. **Associated requirements** 1. Monitoring must be in accordance with the **administering authority**'s *Water Quality Sampling Manual* and all monitoring devices must be effectively calibrated and maintained; 2. Monitoring must be undertaken when treated sewage effluent is being released to land; 3. Monitoring must be undertaken at the frequency specified unless releases have ceased for longer than the minimum monitoring frequency; 4. Releases of sewage effluent must not occur outside of the mound system/s specified in condition L2; and 5. Indicators for TN and TP are recommended to be done as grab samples.
L2	Activities conducted under this environmental authority must not be conducted contrary to the following limitations: 1. Treated effluent must be released through an engineered mound system/s; 2. The mound system/s must be located in the designated area depicted in the *Appendix 1 – Lot 2 Plan BN37186 Land Application Area* and coincide with the design as outlined in *Appendix 2 – Mingo Creek Caravan Park Mound Concept Design* of the environmental authority; 3. For activities occurring on Lot 1 on Plan SP221156, Lot 2 on Plan BN37186, and Lot 3 on Plan BN37186, releases of treated effluent must occur over a minimum mound basal area of 2,130m^2 and not be outside of the land application area as shown *Appendix 1 – Lot 2 Plan BN37186 Land Application Area*; 4. The vegetation within the land application area as shown in *Appendix 1 – Lot 2 Plan BN37186 Land Application Area* must be vetiver grass; 5. A 10 metre vegetated buffer must be established around the three mounds constituting a total area of approximately 4000m^2; and 6. Treated effluent must be distributed evenly across the mound system/s.
L3	Treated effluent released to land must be done in accordance with documentation that ensures: a. Drainage to **groundwater** and subsurface flows of contaminants to surface waters are minimised; b. Surface pondage and run-off of effluent is prevented; c. Degradation of soil structure is minimised; d. Soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised; e. Effluent release areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake;

	f. The 10-metre vegetated buffer established around the three mounds must be maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; g. Sufficient buffer zones are maintained between effluent release areas and **sensitive environmental receptors**; and h. Periodic harvesting, and harvested biomass must be removed from the effluent release area.
L4	The total volume of storage within the sewage capture and transfer network within the sewage pump wells as shown in *Appendix 3 Mingo Crossing Flow Diagram* must be no less than 35,000 litres.
L5	The total capacity of treated effluent water storage must be no less than 50,000 litres.
L6	Treated sewage effluent may be removed from the site and used for an alternate purpose, with the written consent of any third party involved.
Agency interest: Water	
Condition number	**Condition**
WT1	Before 1 February 2020, a baseline groundwater assessment must be conducted, to determine up-gradient baseline groundwater conditions, and be provided to the **administering authority** upon request.
WT2	A receiving environment monitoring program must be designed and implemented by an **appropriately qualified person(s)** to monitor the effects of the activity on groundwater.
WT3	The receiving environment monitoring program required by condition WT2, must be designed and installed by an **appropriately qualified person(s)** with experience and qualifications in hydrology and **groundwater** monitoring and: a. be able to determine the impacts of the licensed activity on the groundwater quality in the underlying aquifer; b. include, but not be limited to, a sufficient number of bores (minimum of three) installed at locations and depths which yield representative groundwater samples from at least the upper-most aquifer so as to: i. establish the quality of groundwater that has not been affected by seepage or drainage of contaminants to groundwater from the activity; and ii. detect any seepage of contaminants to groundwater from the licensed place; and c. include monitoring of background groundwater quality, hydraulically up-gradient of any release of contaminants to groundwater; d. include monitoring of downstream groundwater quality, hydraulically down gradient of the sewage treatment plant and mound application areas; e. include, but not limited to, requirements that monitoring is undertaken at a frequency of at least monthly for the first six (6) months of operation, six-monthly for the next two (2)

	years) and then annually thereafter, to determine the quality of groundwater to detect any possible release(s) of contaminants; f. require that monitoring must be completed by an **appropriately qualified person**, and as a minimum the following parameters must be analysed by a **NATA** accredited laboratory: i. pH; ii. electrical conductivity; iii. Total chlorine; iv. E.coli; v. Total nitrogen and total phosphorus; and g. determine whether effluent has contaminated groundwater in reference to up-gradient baseline groundwater conditions established under condition WT1; and h. determine if the activity has impacted on environmental values of groundwater considering the potential use of groundwater in the vicinity.
WT4	If results of the receiving environment monitoring program required by condition WT2 determine that downstream contaminant concentrations in groundwater have increased above the determined up-gradient baseline conditions established under condition WT1, an **appropriately qualified person** must undertake necessary measures to reduce the mound application rate or improve treatment quality accordingly to prevent impact to groundwater. Any surplus effluent caused by the reduction in mound application rate must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
WT5	Results from the receiving environment monitoring program as required under condition WT2 must be provided to the **administering authority** annually.
WT6	Stormwater contaminated by the activity must be managed to minimise or prevent any adverse effect on the environmental values of the receiving environment.
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**
WS1	All waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

Key terms and/or phrases bolded in this environmental authority are defined in this section. 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.

Term	Definition
Activity	the environmentally relevant activity to which this environmental authority relates. An activity may be undertaken on the whole or a part of a site.
Appropriately qualified person	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.
Chemical	as defined in Schedule 12, Part 2 of the Environmental Protection Regulation 2008.
Combustion of fuel	does not include fuel used in explosives or by vehicles.
Contaminant(s)	as defined in Section 11 of the *Environmental Protection Act 1994.*
Day	means any 24 hour period.
Design Average Dry Weather Flow (DADWF)	means the average dry weather flow of the treatment plant at the design horizon.
Environmental harm	as defined in Section 14 of the *Environmental Protection Act 1994.*
Environmental nuisance	as defined in Section 15 of the *Environmental Protection Act 1994.*
Facility	the area used for carrying out the ERA including any buildings, disturbed areas or any associated infrastructure.
Land	land excluding waters and the atmosphere. Land includes land on the authorised place.
Minimise	minimise by taking all reasonable and practical measures to minimise the adverse effect having regard to the following matters: (a) the nature of the harm or potential harm (b) the sensitivity of the receiving environment (c) the current state of technical knowledge for the activity (d) the likelihood of successful application of different measures that might be taken to minimise the adverse effects

	(e) the financial implications of the different measures as they would relate to the type of activity (f) if the adverse effect is caused by the location of the activity being carrying out, whether it is feasible to carry out the activity at another location.
NATA	means National Association of Testing Authorities.
Nuisance sensitive place	nuisance sensitive place includes: • within or outside of a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises • within or outside of a motel, hotel or hostel • within or outside of a kindergarten, school, university or other educational institution • within or outside of a medical centre or hospital • within a protected area under the *Nature Conservation Act 1992*, within a marine park under the *Marine Parks Act 2004* or a world heritage area • within a public thoroughfare, park or gardens • within or outside of 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.
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.
Release of a contaminant into the environment	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.
Spring	the land to which water rises naturally from below the ground and the land over which the water then flows.
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	all or any part of a creek, river, stream, lake, lagoon, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and underground water.
Watercourse	as defined in Section 8, Schedule 12 of the *Environmental Protection Regulation 2008*.
Wetland	as defined in Schedule 12 of the *Environmental Protection Regulation 2008*, means an area shown as a wetland on the map of referable wetlands.

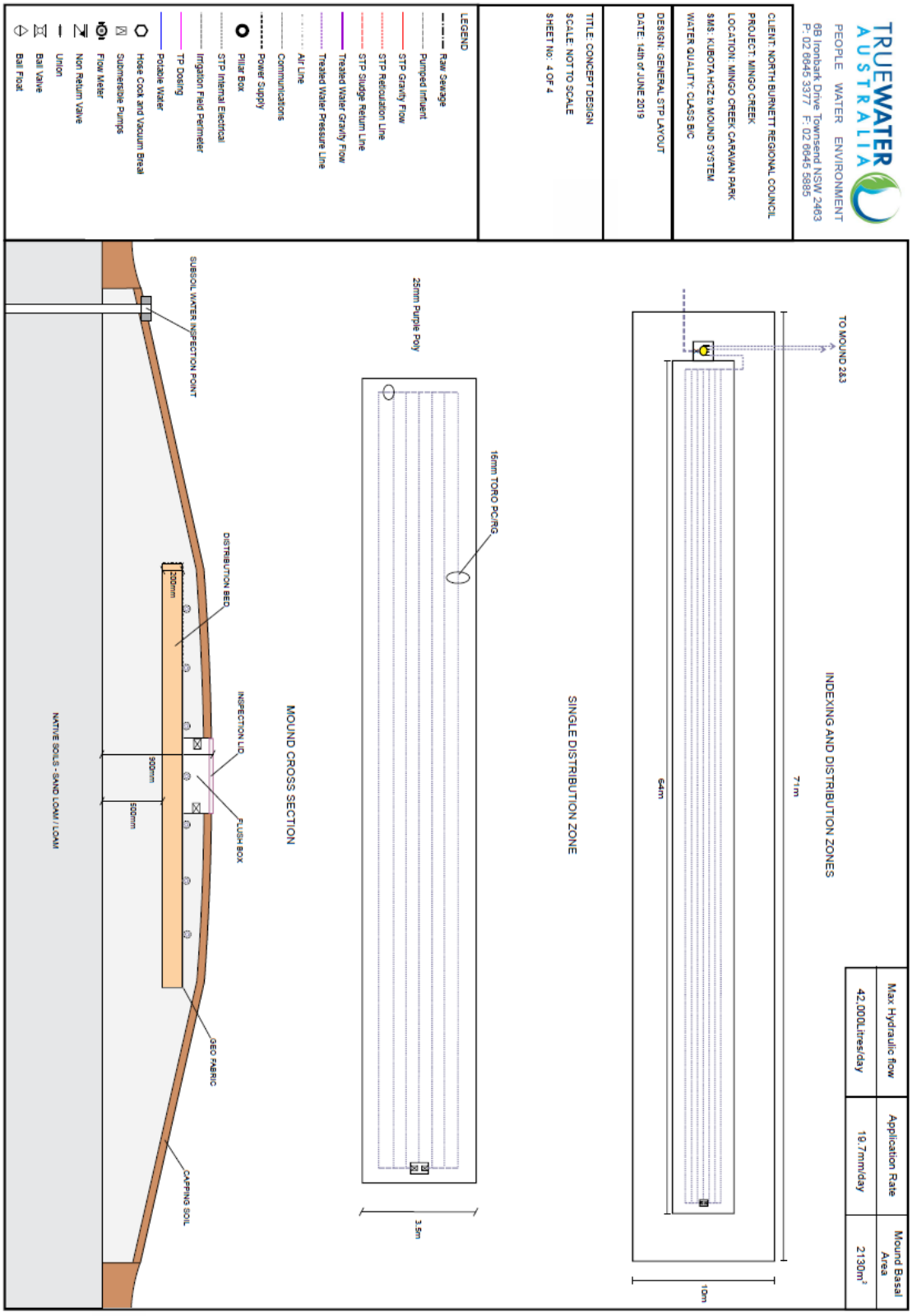
Appendices

Appendix 1 – Lot 2 Plan BN37186 Land Application Area

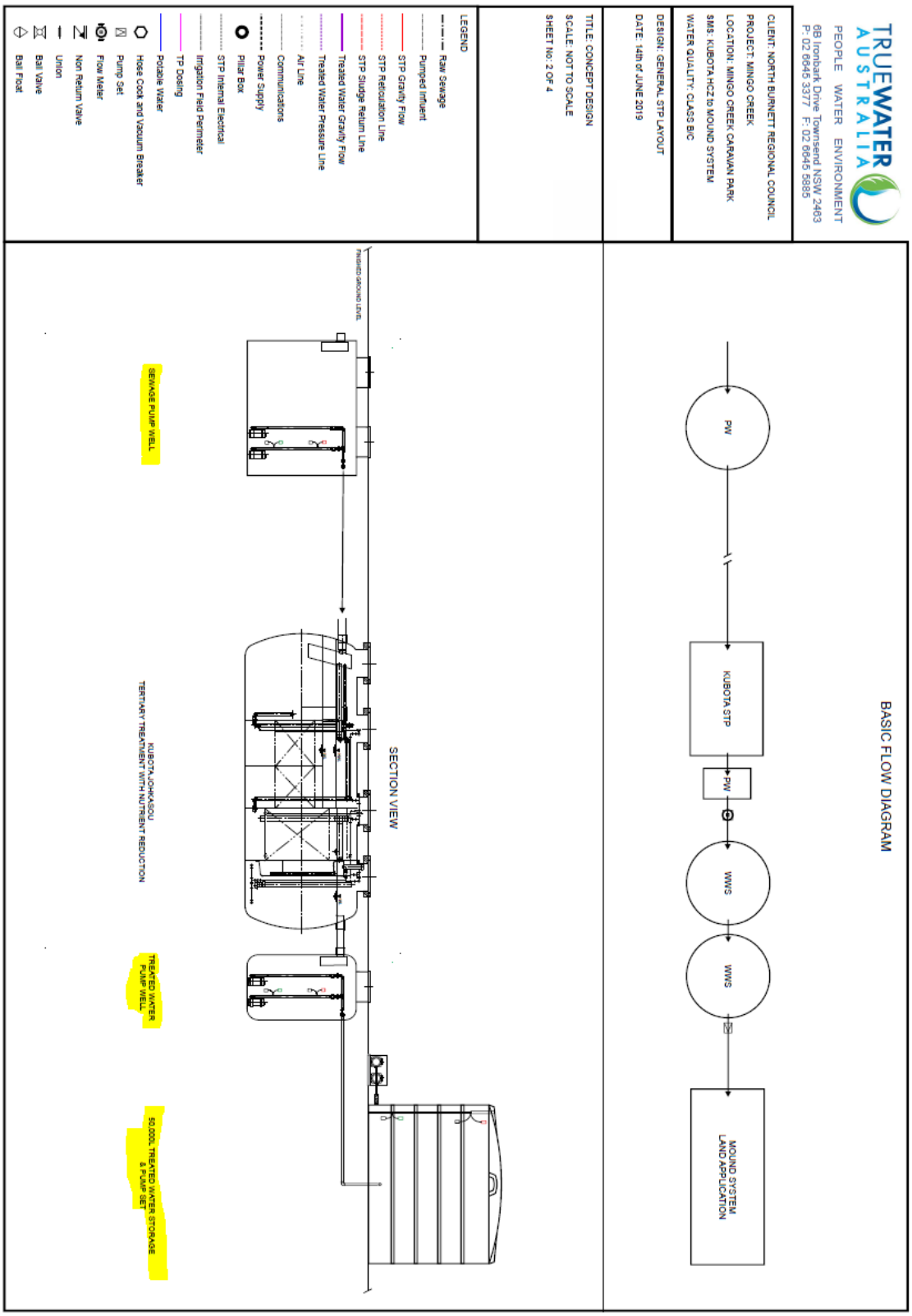


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Appendix 2 – Mingo Creek Caravan Park Mound Concept Design



Appendix 3 Mingo Crossing Flow Diagram



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END OF ENVIRONMENTAL AUTHORITY