Permit

Environmental Protection Act 1994

Environmental authority EA0001736

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

Environmental authority number: EA0001736

Environmental authority takes effect on 23 May 2019

Environmental authority holder(s)

Name(s)	Registered address
GREEN DISTILLATION TECHNOLOGIES PTY. LTD.	Level 1 429 Toorak Road TOORAK VIC 3142

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Prescribed ERA, ERA 61 - Waste incineration and thermal treatment, 3: Incinerating or thermally treating, (b) other regulated waste	LOT 8/SP296105

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.

ABN 46 640 294 485

Queensland Government

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.

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

Date issued: 28 May 2019

Enquiries:
Waste and Contaminated Land Assessment
Department of Environment and Science
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)

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- 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 Natural Resources, Mines and Energy (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

Location: Toowoomba Cecil Plains Road, WELLCAMP QLD 4350 (Lot 8 SP296105)

Relevant activities:

ERA 61-3(b) - Waste incineration and thermal treatment: Incinerating or thermally treating other regulated waste

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	**Activities** under this environmental authority must be conducted in accordance with the following limitations: a) the only wastes which may be accepted for carrying out the activity are used tyres; and b) the process to be carried out is destructive distillation.
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	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations and emergencies; and b) establish and maintain control **measures** that minimise the potential for environmental harm; and c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; and d) ensure plant, equipment and **measures** are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*; and f) ensure that reviews of environmental performance are undertaken at least annually.
G5	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.
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	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.
G8	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.
G9	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
Agency Interest: Air	
A1	Other than as permitted within this **environmental authority**, odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
A2	Contaminants must only be released to air from the point source in accordance with *Table 1 – Point source air release limits* and the associated requirements.

Table 1 – Point source air release limits

Release point	Minimum release height above ground (m)	Minimum velocity at the sampling plane (m/sec)	Contaminant release	Maximum release limit	Monitoring frequency
Scrubber stack serving gases generated from combustion chamber	13.5	3	Total solid particulates (TSP)	50 mg/Nm^3 dry @ 3% O_2	All stacks must be monitored for the contaminants within three months of commissioning of the facility and six monthly thereafter.
			Carbon monoxide (CO)	125 mg/Nm^3 dry @ 3% O_2	
			Oxides of nitrogen (as NO_2)	350 mg/Nm^3 (dry) @ 3% O_2	
			Oxides of sulphur (sulphur dioxide and sulphur trioxide as SO_2 equivalent)	350 mg/Nm^3 (dry) @ 3% O_2	
			Hydrogen sulphide (H_2S)	5 mg/Nm^3 (dry) @ 3% O_2	
			Volatile organic compounds (as n-propane equivalent)	20 mg/Nm^3 (dry) @ 3% O_2	
			Polycyclic aromatic hydrocarbons (PAH) (as BαP equivalent) (Note 1)	5 µg/Nm^3 (dry) @ 3% O_2	
			Cadmium and its compounds (expressed as Cd)	0.2 mg/Nm^3 (dry) @ 3% O_2	
			Mercury and its compounds (expressed as Hg)	0.2 mg/Nm^3 (dry) @ 3% O_2	
			Total heavy metals (Note 2)	1 mg/Nm^3 (dry) @ 3% O_2	
			Hydrogen chloride (HCl)	20 mg/Nm^3 (dry) @ 3% O_2	
			Hydrogen fluoride (HF)	4 mg/Nm^3 (dry) @ 3% O_2	
			Dioxins and furans	0.1 ng I-TEQ/Nm^3 (dry) @ 11 % O_2	

Note 1: Polycyclic Aromatic Hydrocarbons (PAH) limit is for total of the 16 priority pollutants listed by the United States EPA, namely, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene,

	Anthracene, Fluoranthene, Pyrene, Benz(α) anthracene, Chrysene, Benzo(β)fluoranthene, Benzo(κ)fluoranthene, Benzo(α)pyrene, Indeno[123cd] pyrene, Dibenz[ah]anthracene and Benzo[ghi] perylene, expressed as Benzo(α)pyrene equivalents using the potency equivalence factors specified by the World Health Organisation. Note 2: Total heavy metals limit is for the total of Type 1 and Type 2 Substances as explained in NSW Protection of the Environment Operations (Clean Air) Regulation 2010: (a) *Type 1 Substance* means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements. (b) *Type 2 Substance* means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements. **Associated requirements** 1. The release of contaminants from a point source must be directed vertically upwards without any impedance or hindrance. 2. Monitoring must be undertaken during a release and at the authorised release points, frequency and for the contaminants specified in Table 1. 3. Monitoring must be undertaken when emissions are expected to be representative of actual operating conditions for the sample period. 4. All monitoring devices must be effectively calibrated and maintained in accordance with the manufacturer's instructions and Australian and international standards. 5. Air Monitoring must be in accordance with the current edition of the **administering authority's** Air Quality Sampling Manual. If monitoring requirements are not described in the department's Air Quality Sampling Manual, monitoring protocols must be in accordance with a method as approved by New South Wales EPA, Victorian EPA or United States EPA. 6. Monitoring provision for the release points (stack) listed in Table 1 must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions". 7. All air emission stack monitoring must be conducted by an experienced person or body which holds current National Association of Testing Authorities (**NATA**). 8. The following tests must be performed for each required determination specified in Table 1: (i) gas velocity and volume flow rate; (ii) temperature and oxygen content; and (iii) water vapour concentration. 9. During the sampling period the following additional information must be gathered: (i) plants throughput rate at the time of sampling; (ii) any typical factors that may influence air pollutant emissions; and (iii) reference to the actual test methods and accuracy's.
A3	Dust and particulate matter emissions must not exceed the following concentrations at any **sensitive place** or **commercial place**: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 (or more recent editions), or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.6 (or more recent editions) or any other method approved by the administering authority.
Agency Interest: Water	
WT1	Contaminants must not be released to any **waters**.

Agency Interest: Noise	
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency Interest: Land	
L1	Contaminants must not be released to **land**.
Agency Interest: Waste Management	
W1	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
W2	**Incompatible wastes** must not be mixed in the same container or waste storage area.

Definitions

Key terms and/or phrases used in this document 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.

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 successors or predecessors.

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

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

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

Incompatible waste means waste that may chemically react when:
1. placed in proximity to other wastes; and/or
2. mixed with other wastes.

Land does not include **waters**.

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

NATA means National Association of Testing Authorities.

Normal cubic metre (Nm^3) means the volume of dry gaseous contaminant which occupies 1 cubic metre at a temperature of zero degrees Celsius and at an absolute pressure of 101.3 kilopascals.

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

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 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
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

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 A - Site Plans

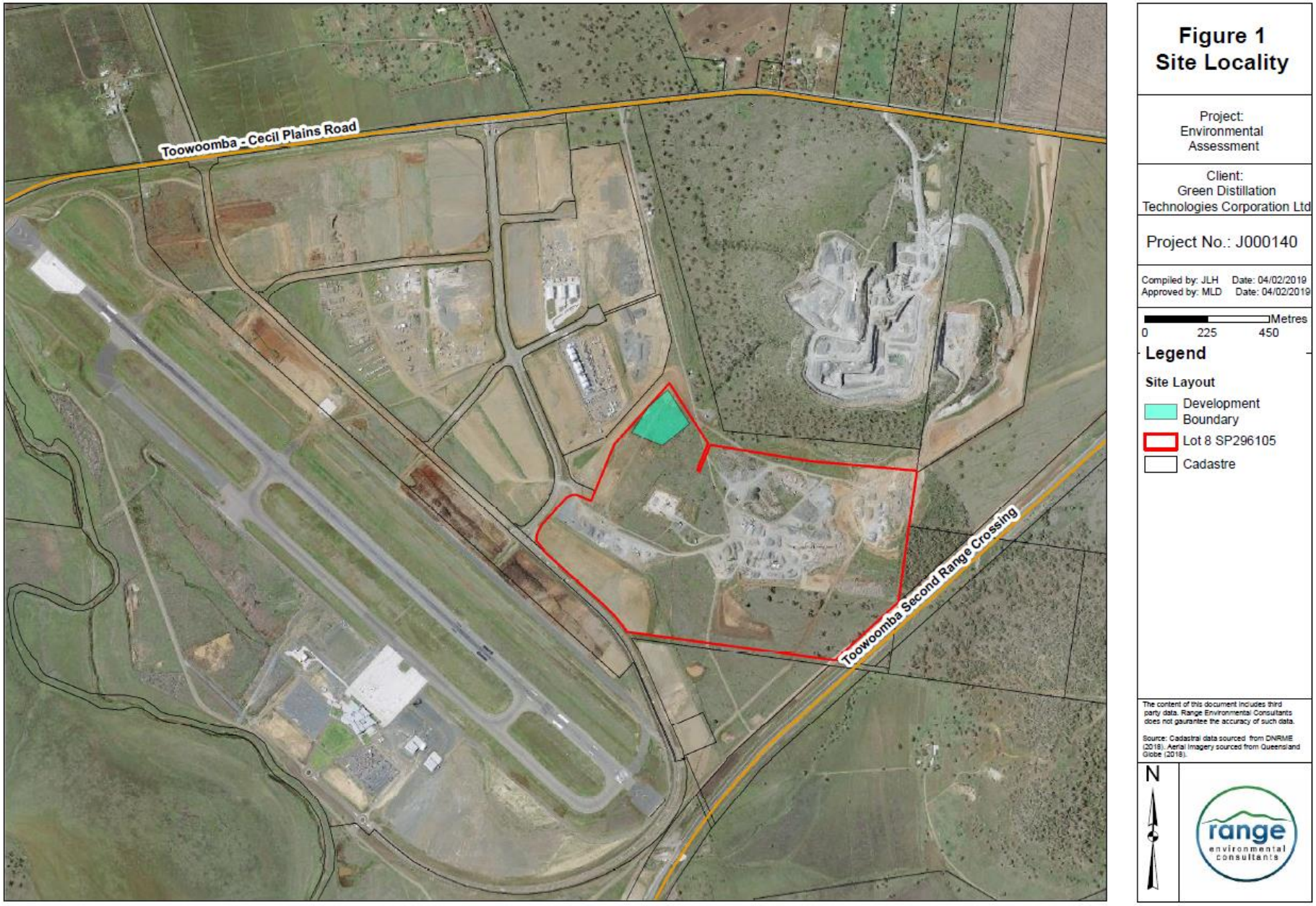


Figure 1
Site Locality

Project:
Environmental
Assessment

Client:
Green Distillation
Technologies Corporation Ltd

Project No.: J000140

Compiled by: JLH Date: 04/02/2019
Approved by: MLD Date: 04/02/2019

Metres
0 225 450

Legend

Site Layout

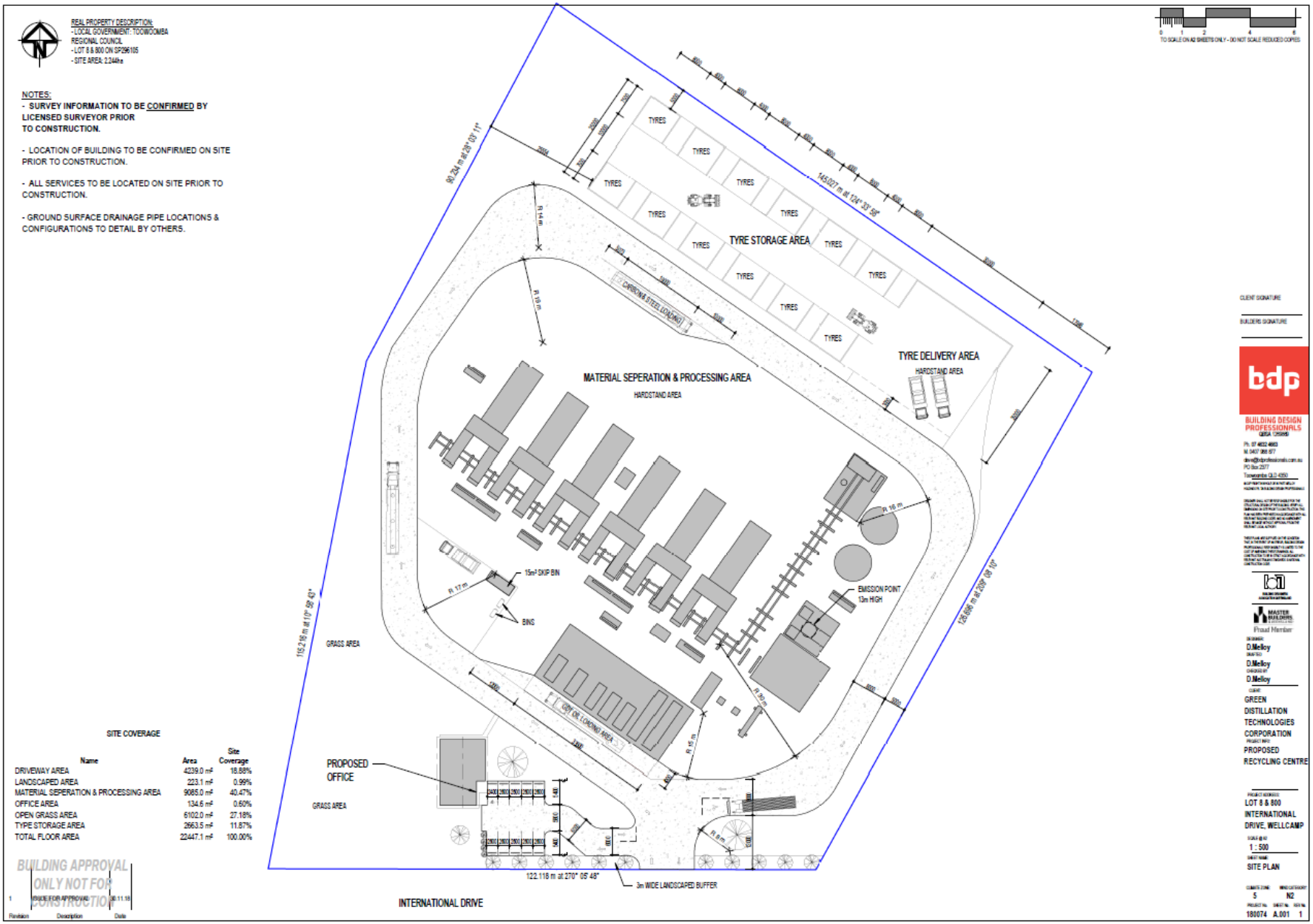
- Development Boundary
- Lot 8 SP296105
- Cadastre

The content of this document includes third party data. Range Environmental Consultants does not gaurantee the accuracy of such data.

Source: Cadastral data sourced from DNRME (2018). Aerial Imagery sourced from Queensland Globe (2018).

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END OF ENVIRONMENTAL AUTHORITY