Permit[1]

Environmental Protection Act 1994

Environmental authority – EPPR00906913

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

Permit[1] number: EPPR00906913

Environmental authority takes effect on 6 January 2017.

The anniversary date of this environmental authority remains as 23 January. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Cashmere Village Pty Ltd	2 Coolum Place YOWIE BAY NSW 2228

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	1 Warra Lane, Cashmere - Lot 20 Plan SP261376

Additional information for applicants

Environmentally relevant activities

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

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority 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 land give written notice to the chief executive if they become aware of the following:

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Queensland Government

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

For further information, including the form for giving written notice, refer to the Queensland Government website http://www.qld.gov.au/ (using the search term 'managing contaminated land').

Ruth Brown

Signature

06/01/2017

Date

Ruth Brown
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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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)

Conditions of environmental authority

Location: 1 Warra Lane, Cashmere, QLD, 4500

Lot 20 Plan SP261376

Relevant activity/ies:

63-(1a) (i) Sewage treatment >21 to 100EP - IT or IR

The environmentally relevant activity(ies) 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**
	Prevent and/or minimise likelihood of environmental harm
G1-1	In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
	Maintenance of measures, plant and equipment
G2-1	The operator of an ERA to which this approval relates must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and b) maintain such measures, plant and equipment in a proper and efficient condition; and c) operate such measures, plant and equipment in a proper and efficient manner.

	Site Based Management Plan
G3-1	From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out. The SBMP must address the following matters: a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals. b) Identification of environmental issues and potential impacts. c) Control measures for routine operations to minimise likelihood of environmental harm. d) Contingency plans and emergency procedures for non-routine situations. e) Organisational structure and responsibility. f) Effective communication. g) Monitoring of contaminant releases. h) Conducting environmental impact assessments. i) Staff training. j) Record keeping. k) Periodic review of environmental performance and continual improvement.
G4-1	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
	Alterations
G5-1	No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided for by this approval.
	Records
G6-1	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
G6-2	All records required by this approval must be kept for 5 years.

G6-3	A record of all waste must be kept detailing the following information: a) date of pickup of waste; b) description of waste; c) quantity of waste; d) origin of the waste; and e) destination of the waste.
	Notification
G7-1	Telephone the administering authority's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
G7-2	A written notice detailing the following information must be provided to the administering authority within 24 hours of any advice provided in accordance with condition (G7-1): a) the name of the operator, including their approval / registration number; b) the name and telephone number of a designated contact person; c) quantity and substance released; d) vehicle and registration details; e) person/s involved (driver and any others); f) the location and time of the release; g) the suspected cause of the release; h) a description of the effects of the release; i) the results of any sampling performed in relation to the release, j) actions taken to mitigate any environmental harm caused by the release; and k) proposed actions to prevent a recurrence of the release.
	Trained operators
G8-1	All persons engaged in the conduct of the ERA, including but not limited to employees and contract staff, must be: a) trained in the procedures and practices necessary to: • comply with the development conditions, and • prevent environmental harm during normal operation and emergencies; or b) under the close supervision of such a trained person.
Agency interest: Air	

Condition number	Condition
	Nuisance
A1-1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.
Agency interest: Land	
Condition number	**Condition**
	Land Disposal
L1-1	The only contaminants permitted to be released to land are treated sewage effluent to the areas defined in Attachment 1 – Drawing titled "IRRIGATION AREA" in compliance with the limits stated in Table 1.
L1-2	Prior to irrigation of recycled water or reuse on the site, a "commissioning" phase must be undertaken. This will consist of the taking of at least 1 sample per business day. Irrigation and/or reuse is not to occur until 5 consecutive samples (taken at not less than 30 minutes apart) are taken that meet both the median and maximum criteria in Table 1 (Contaminant release limits to land). Following this 'commissioning' phase, testing for E.coli is required on a weekly basis as a single sample.

L1-3

During any sampling for E.coli, should a single sample return a result greater than the maximum value in Table 1 (Contaminant release limits to land), a follow up sample must be taken immediately. Should this follow up sample return a value greater than the median criteria value in Table 1 (Contaminant release limits to land), the 'commissioning' phase referred to in condition L1-2 will begin again and irrigation will not commence until 5 consecutive samples meet the criteria from Table 1 (Contaminant release limits to land).

Table 1 - Contaminant release limits to land

Parameters		**Release Limit**			**Initial 3 months of STP Operation**	**Ongoing STP Operation**
Quality characteristics	**Units**	**Minimum**	**Median**	**Maximum**	**Monitoring frequency 1**	**Monitoring frequency2[a]**
5-day Biological Oxygen Demand (inhibited)	mg/L			20	Monthly	Quarterly
Total Suspended Solids	mg/L			30	Monthly	Quarterly
E. coli	Colony forming units/100mL		<100[c]	150	[b]	Monthly
pH	scale	6.0		8.5	Monthly	Quarterly
Total Dissolved Solids or Electrical Conductivity	mg/L/µs/cm			1000/1600	Monthly	Quarterly
Total Nitrogen	mg/L			30	Monthly	Quarterly
Total Phosphorus	mg/L			15	Monthly	Quarterly

[a] Reverts to Monitoring frequency 1 if non-compliance occurs. After 5 consecutive compliant samples, reverts to monitoring frequency 2.
[b] Prior to irrigation of recycled water or reuse on the site, a "commissioning" phase must be undertaken. This will consist of the taking of at least 1 sample per business day. Irrigation and/or reuse is not to occur until 5 consecutive samples (taken at not less than 30 minutes apart) are taken that meet both the median and maximum criteria in Table 1 (Contaminant release limits to land). Following this 'commissioning' phase, testing for E.coli is required on a monthly basis as a single sample.
[c] Means rolling median of the last five consecutive samples taken at no less than 30 minute intervals. "<" indicates less than.

L1-4

Notwithstanding the quality characteristics limits specified in Table 1 – Contaminant release limits to land, releases of treated sewage effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

L1-5	Monitoring must be undertaken and records kept of contaminant releases to land for the parameters and not less frequently than specified in Table 1 – Contaminant release limits to land. All determinations of the quality of contaminants released must be: a) made in accordance with methods prescribed in the latest edition of the Department's Water Quality Sampling Manual; and b) carried out on samples that are representative of the discharge.
	Quantity of Contaminants Released from the Sewage Treatment Plant
L2-1	The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter and records kept of such determinations and estimates.
	Effluent Irrigation
L2-2	The daily maximum volume of effluent irrigated must not be more than 8.7 cubic metres.
L3-1	A minimum of 3,200m² of land, excluding any necessary buffers, must be provided for the irrigation of treated effluent to land.
L3-2	All grass/vegetation clippings must be removed from the contaminant release area upon harvesting.
L3-3	Irrigation of treated effluent must be by subsurface means only.
L3-4	The irrigation of effluent must be carried out in a manner such that: a) vegetation is not damaged; b) soil erosion and soil structure damage is avoided; c) there is no surface ponding of effluent; d) percolation of effluent beyond the plant root zone is minimised; e) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by biochemical oxygen demand and water is not exceeded; and f) the quality of ground water is not adversely affected.
L3-5	When conditions prevent the irrigation of effluent to land (such as during or following rain events), the effluent must be directed to a wet-weather storage, or alternative measures must be taken to store or lawfully dispose of effluent (such as wet weather storage or tanking off-site to another treatment plant or sewer).
L3-6	A minimum wet weather storage capacity of 22,000 litres must be provided.
L3-7	Excess effluent beyond the wet weather storage capacity must be removed from site by a licensed liquid waste contractor.

L3-8	Records must be kept of all liquid waste removal events associated with condition L3-7. Records are to include details regarding the dates, volumes, destination and transporter.
L3-9	Mature grasses must be maintained over the 3,200m² of irrigation bed area comprising of modified soil.
	Contaminant Release Area Monitoring Program
L4-1	The registered operator of this development approval must develop and implement a Contaminant Release Area Monitoring Program to effectively monitor the condition of the land to which contaminants are released.
L4-2	Monitoring required by condition L4-1 must include the taking of topsoil and sub-soil samples from random sites within the irrigation area identified in Attachment 1 – drawing entitled Attachment 1 – Irrigation Area of this development approval for the quality characteristics and at the frequency specified in Table 2 – Soil Impact Monitoring.

Table 2 - Soil Impact Monitoring

Quality Characteristics	Units	Monitoring Frequency
pH	pH scale	On commencement and biennially thereafter
Specific Conductance or electrical conductivity (1:5)	µS/cm	On commencement and biennially thereafter
Calcium	mg/kg	On commencement and biennially thereafter
Magnesium	mg/kg	On commencement and biennially thereafter
Potassium	mg/kg	On commencement and biennially thereafter
Cation Exchange capacity	meq/100g	On commencement and biennially thereafter
Exchangeable calcium	meq/100g	On commencement and biennially thereafter
Exchangeable magnesium	meq/100g	On commencement and biennially thereafter
Exchangeable sodium	meq/100g	On commencement and biennially thereafter
Exchangeable potassium	meq/100g	On commencement and biennially thereafter
Exchangeable aluminium	meq/100g	On commencement and biennially thereafter
Sodium Adsorption Ratio		On commencement and biennially thereafter
Total Nitrogen as N	mg/kg	On commencement and biennially thereafter
Extractable Phosphorus	mg/kg	On commencement and biennially thereafter
Boron	mg/kg	On commencement and biennially thereafter

L4-3	Not more than six (6) calendar months after the date of issue of this environmental approval, the registered operator of this development approval must submit a proposal for the Contaminant Release Area Monitoring Program to the administering authority.

L4-4	The proposal for the Contaminant Release Area Monitoring Program must include but not be limited to the following: i) the locations of monitoring stations including soil moisture and soil types, and depths; and ii) the proposed vegetation characteristics to be monitored; and iii) harvesting practice to ensure the proper maintenance of the irrigation area.
L4-5	The registered operator of this development approval must prepare a report on the Contaminant Release Area Monitoring Program within two months of each sampling event including an assessment of the impact and sustainability of the application of treated effluent to the contaminant release area. This report must include an interpretation of the results and conclusions by an expert in the field of effluent land disposal.
L4-6	The operator of the ERA must monitor and keep records of the soil characteristics and at the frequency specified in Table 2 – Soil Impact Monitoring.
Agency interest: Noise	
Condition number	**Condition**
	Noise nuisance
N1-1	Noise from activities must not cause an environmental nuisance at any nuisance sensitive place or any commercial place.

N1-2

In the event of a complaint about noise that constitutes annoyance being made to the administering authority, that the administering authority considers is not frivolous or vexatious or based on a mistaken belief, then the emission of noise from the site must not result in levels greater than those specified in Table 1 – Noise Limits.

Table 1 – Noise Limits

Time period	**Noise level at a 'Nuisance sensitive place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, max\ adj\ T}$** Note 1
7am - 6pm	Background noise level plus 5 dB(A)
6pm - 10pm	Background noise level plus 5 dB(A)
10pm - 7am	Background noise level plus 3 dB(A)
Time period	**Noise level at a 'Commercial place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, max\ adj\ T}$**
7am - 6pm	Background noise level plus 10 dB(A)
6pm - 10pm	Background noise level plus 10 dB(A)
10pm - 7am	Background noise level plus 8 dB(A)

Note 1: LA 15, adj, 15 mins levels may be substituted for LAmax, adj, 15 mins levels if evidence is provided that LA 15, adj, 15 mins levels are representative of component noise levels from source(s)/premises under investigation.

Noise monitoring

N1-1

When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within **seven (7) days** to the administering authority. Monitoring must include:

a) background noise $L_{A0, 15mins}$;

b) $L_{A, max\ adj, T}$ or where established as being appropriate $L_{A10, adj\ 15mins}$;

c) the level and frequency of occurrence of impulsive or tonal noise;

d) atmospheric conditions including wind speed and direction;

e) effects due to extraneous factors such as traffic noise; and

f) location, date and time of recording.

Agency interest: Social	
Condition number	**Condition**
	Complaint response
S1-1	The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request: a) Time, date, name and contact details of the complainant; b) reasons for the complaint; c) any investigations undertaken; d) results and conclusions formed; and e) any actions taken to address the complaint.
Agency interest: Water	
Condition number	**Condition**
	Release to waters
W1-1	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
	Storm water management
W2-1	Except as otherwise provided by the conditions of this development approval, the ERA must be carried out by such reasonable and practicable means necessary to prevent the contact of incident rainfall and storm water runoff with waste or other contaminants.
W2-2	Where it is not practical to prevent contact as required by condition W2-1, the ERA must be carried out by such reasonable and practicable means necessary to minimise such contact.
W2-3	Any spillage of waste, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any storm water drainage system, roadside gutter or waters.
	Treated Effluent
W3-1	Pipelines and fittings associated with the effluent irrigation system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.

	Contaminant Releases Caused by Rainfall
W3-2	Erosion and sediment controls that minimise off-site removal of sediments and divert other storm water from entering the site, must be provided and maintained during site construction works. Such measures must include, but not be limited to, diversion drainage works, siltation fences and temporary sediment traps.
Agency interest: Waste	
Condition number	**Condition**
	Waste handling
WA1-1	All regulated waste removal from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994*.
	Off site movement of waste
WA2-1	Where regulated waste is removed from site (other than by a release as permitted under another condition of this development approval), the registered operator must monitor and keep records of the following: a) the date, quantity and type of waste removed; and b) name of the waste transporter and/or disposal operator that removed the waste; and c) the intended treatment/disposal destination of the waste.

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.

administering authority means the Department of Environment and Heritage Protection, or its successor, administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994*.

annual return means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

approval means 'notice of development application decision' or 'notice of concurrence agency response' under the *Sustainable Planning Act* 2009.

authorised place means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

commercial place means a place used as an office or for business or commercial purposes.

dwelling means any of the following structures or vehicles that is principally used as a residence –
- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.
-

land in the "land schedule" of this document means land excluding waters and the atmosphere.

offensive means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

regulated waste means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (whether or not it has been treated or immobilised), and includes -
- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

site means land or tidal waters on or in which it is proposed to carry out the development approved under this development approval.

watercourse means a river, creek or stream in which water flows permanently or intermittently-
- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

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.

works or operation means the development approved under this development approval.

Noise Definitions

Background noise level means noise, measured in the absence of the noise under investigation as $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period of not less than 15 minutes, using Fast response.

$L_{A\ 10,\ adj,\ 15\ mins}$ means – the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 15 minute measurement period, using Fast response.

$L_{Amax\ adj,T}$ means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

noise sensitive place means –

a legal dwelling, caravan park, residential marina or other residential premises; or
a motel, hotel or hostel; or
a kindergarten, school, university or other educational institution; or
a medical centre or hospital; or
a protected area; or
a public park or gardens.
and includes the curtilage of any such place.

noxious means harmful or injurious to health or physical well being

commercial place means a place used as an office or for business or commercial purposes, other than a place within the boundaries of the operational land.

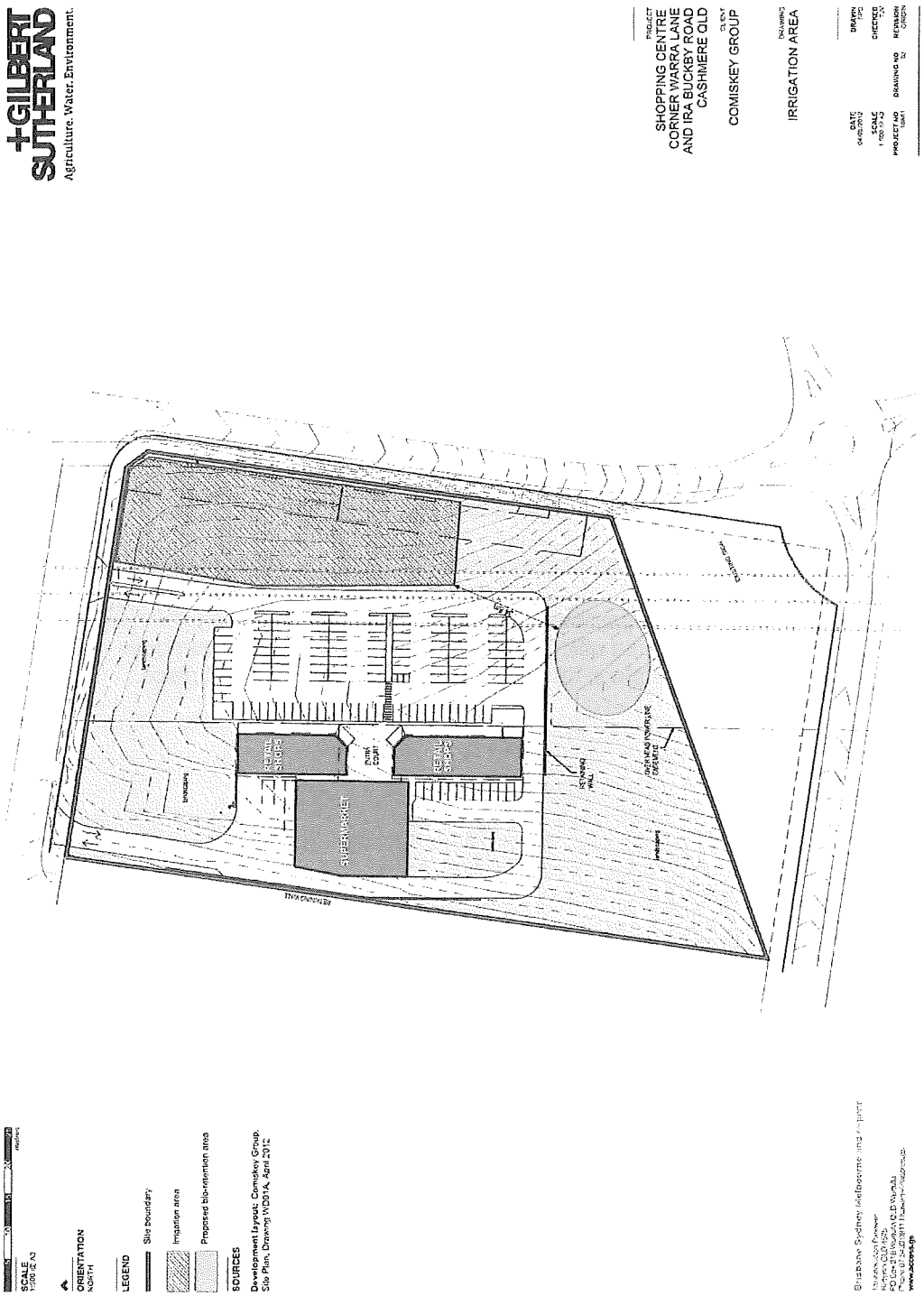
nuisance sensitive place includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- 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.

Schedules

Schedule 1—Approved plans

Attachment 1 – Irrigation Area



END OF PERMIT