Permit

Environmental Protection Act 1994

Environmental Authority

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

Environmental authority number: P-EA-101052127

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.

Environmental authority holder

Name	Registered address
RULES BEACH HOLDINGS PTY LTD	50 Hunter Street Newcastle NSW 2300

Environmentally relevant activity and location details

Environmentally relevant activity	Location
ERA 63 Sewage Treatment Works 1 operating sewage treatment works, other than no-release works, with a total daily peak design capacity of—(b) more than 100 but not more than1,500EP—(i) if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.	Lot 200 on SP291732. Rules Beach Road, Rules Beach QLD.

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).

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Contaminated land

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

- the presence of, or happening of an event involving, a hazardous contaminant on the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- if the land is contaminated land – a change in the condition of the land that is causing, or is reasonably likely to cause, serious or material environmental harm (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 land (notice must be given within 20 business days).

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(1) 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, in accordance with section 200(2) of the EP Act, the day that the EA takes effect may not be before:

(a) if the authority is for a resource activity—the day the relevant tenure is granted to the applicant; or

(b) if a development permit for a material change of use of premises under the *Planning Act 2016* is necessary for carrying out an activity that related to the authority—the day the development permit takes effect; or

(c) if an SDA Approval under the *State Development and Public Works Organisation Act 1971* is necessary for carrying out an activity that relates to the authority—the day the approval takes 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.

The anniversary day of this EA is the same day each year as the effective date.

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 EA.



Signature

15/04/2026

Date

Rebecca Griffiths

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

Enquiries:

Industry and Development Business Centre
GPO Box 2454, Brisbane QLD 4001
Phone: 1300 130 372 (select option 4)
Email: palm@detsi.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this EA, 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 restore the environment (section 319C)
- 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 EP Act. 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 and Federal Government agencies prior to commencing any activity at the site. For example, this may include permits or 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 and Mines, Manufacturing, and Regional and Rural Development (to clear vegetation), and the Department of Primary Industries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Matters of national environmental significance (MNES) are regulated under the Commonwealth EPBC Act rather than under state legislation. You may need to submit a referral if your project potentially impacts any matters protected under the EPBC Act. For more information on self-assessments, and referral and assessment processes, please visit the Australian Government Department of Climate Change, Energy, the Environment and Water's website at www.dcceew.gov.au/environment/epbc/advice.

Development approval

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

Obligations under the *Aboriginal Cultural Heritage Act 2003* and *Torres Strait Islander Cultural Heritage Act 2003* (the Cultural Heritage Acts)

The Cultural Heritage Acts require anyone who carries out a land-use activity to exercise a duty of care. This 'duty of care' means land users must take all reasonable and practicable measures to ensure their activity does not harm Aboriginal or Torres Strait Islander cultural heritage, and applies to any activity where Aboriginal or Torres Strait Islander cultural heritage is located. For more information on your obligations under this legislation, please visit the Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism webpage at, www.dwatsipm.qld.gov.au

Conditions of Environmental Authority

Environmentally relevant activity	Location
ERA 63 Sewage Treatment Works 1 operating sewage treatment works, other than no-release works, with a total daily peak design capacity of—(b) more than 100 but not more than1,500EP—(i) if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.	Lot 200 on SP291732. Rules Beach Road, Rules Beach.

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

Condition number	Conditions
Schedule A - Activity	
1	**Scale and Intensity** The environmentally relevant activity (ERA) to which this development approval relates must not be carried out in a manner which exceeds the following approved development stages of scale and intensity: <u>Stage 1</u> a) Maximum plant inflow over any 24 hour period: 16,580 litres. b) Maximum release of recycled water to land over any 24 hour period, through the approved irrigation area: 16,580 litres. c) Maximum release of recycled water to land in any year (any 365 day period), through the approved irrigation area: 5.14 mega litres. d) The mean average daily release of recycled water to land, through the approved irrigation area must not exceed 14,082 litres for any three month period. <u>Stage 2</u> a) Maximum plant inflow over any 24 hour period: 28,640 litres. b) Maximum release of recycled water to land over any 24 hour period, through the approved irrigation area: 28,640 litres. c) Maximum release of recycled water to land in any year (any 365 day period), through the approved irrigation area: 8.9 mega litres. d) The mean average daily release of recycled water to land, through the approved irrigation area must not exceed 24,383 litres for any three month period. <u>Stage 3</u> a) Maximum plant inflow over any 24 hour period: 40,070 litres. b) Maximum release of recycled water to land over any 24 hour period, through the approved irrigation area: 40,070 litres. c) Maximum release of recycled water to land in any year (any 365 day period), through the approved irrigation area: 12.4 mega litres. d) The mean average daily release of recycled water to land, through the approved irrigation area must not exceed 34,059 litres for any three month period. <u>Stage 4</u> a) Maximum plant inflow over any 24 hour period: 66,620 litres.

	b) Maximum release of recycled water to land over any 24 hours period, through the approved irrigation area: 49,965 litres. c) Maximum release of recycled water to land in any year (any 365 day period), through the approved irrigation area: 15.38 mega litres. d) The mean average daily release of recycled water to land, through the approved irrigation area must not exceed 42,100 litres for any three month period.
2	**Prevent and / or Minimise Likelihood of Environmental Harm** 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.
3	**Maintenance of Measures, Plant and Equipment** 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. b) Maintain such measures, plant and equipment in a proper and efficient condition. c) Operate such measures, plant and equipment in a proper and efficient manner.
4	**Alterations** No change, replacement, alteration or operation of any plant or equipment is permitted if the change replacement alteration or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm, beyond that provided for by this approval.
5	**Site Based Management Plan** 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 ERA's that are carried out.
6	The SBMP must address the following matters: a) Environmental commitments – a commitment by senior management to achieve specific 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.
7	The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.
8	The activity must be conducted in accordance with commitments made in the document authored by Future-plus Environmental and titled Site Based Management Plan, Proposed Tourist Development – ERA 15(B), Rules Beach Road, Rules Beach, November 2008.

	Should any conflict arise between the above-mentioned document and conditions contained within this approval, the conditions of this approval prevail to the extent of the inconsistency.
9	**Display of Development Approval** A copy of conditions of this development approval must be kept in a location readily accessible to personnel carrying out the activity.
10	**Records** Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
11	Unless otherwise stated as a condition of this approval, all records required by this approval must be kept for 15 years.
12	Written records of all training required under this approval must be kept and available to the administering authority upon request. Records must include the date training was undertaken, contents covered, details of the training provider including their suitability and personnel trained.
13	A record of all regulated waste must be kept detailing the following information: a) Date of pickup b) Description of the waste c) Quantity of the waste d) Origin of the waste e) Destination of the waste f) Contact details of the transporter of the waste.
14	**Cease Activities in the Event of Material or Serious Environmental Harm** If an operator of an ERA to which this approval relates becomes aware of material or serious environmental harm as a result of carrying out the activity, then the said activity must cease immediately, and remedial measures be implemented forthwith.
15	**Security** Appropriate measures must be taken to prevent unauthorised access to the site where the sewerage treatment works will be located.
16	**Firebreak** An effective fire break must be provided and maintained around sewerage treatment infrastructure.
17	**Acid Sulphate Soils** When treating and managing acid sulfate soils the development approval holder must comply with; a) The latest edition of the Queensland Government's *Instructions For The Treatment And Management Of Acid Sulfate Soils*, 2001; and/or b) Queensland Acid Sulfate Soils Technical Manual: Soil Management Guidelines (version 3.8) published by the Department of Natural Resources and Mines or more recent editions or supplements.
18	Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters.
19	**Annual Monitoring Report** An annual monitoring report must be prepared each year and submitted to the administering authority with each annual return. The report shall include but not be limited to: a) Details of the monitoring undertaken, including details of the sampling framework applied b) Details of the analysis undertaken and quality assurance and quality control measures applied;

	c) A summary of the monitoring results obtained. Results must be presented in numerical and graphical form, showing relevant limits and a comparison made with the previous twelve (12) months monitoring data. d) An interpretation, evaluation and explanation of the monitoring results and programs: i. In relation to groundwater, this section of the report must be prepared by an expert in the field of groundwater monitoring and determinations made as to the presence of contamination and if so the level of environmental harm caused ii. In relation to soils, this section of the report must be prepared by an expert in the field of soils monitoring and determinations made as to the presence of contamination and if so the level of environmental harm caused. e) A summary of any record of releases and quantities required to be kept under this approval. f) A summary of any record of equipment failures or event for any site under this approval. g) An outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs. h) The number of domestic tenements newly connected to the sewerage treatment works during the previous twelve (12) months. i) The progressive total number of connections j) A summary of any trade waste agreements entered into or amended during the year.
20	**Third Party Environmental Auditing** Compliance with the conditions of this approval and with the requirements of the SBMP required in Condition 5 must be independently audited; a) Within 60 days of commencement of stage one; and b) At the completion of plant validation. Validation is to occur prior to the supply of recycled water for purposes other than land irrigation.
21	The audits detailed in condition 20 must be conducted by a suitably qualified third party auditor/s, nominated by the development approval holder and accepted by the administering authority.
22	In relation to the audits required by condition 20, the auditor must submit a final version of the auditor's report to the **administering authority** within 28 days of completing the audit.
23	The total financial cost of the third part audits will be the responsibility of the holder of this approval.
24	**Notification** The holder of this approval must notify the administering authority by phone or facsimile as soon as practicable after, but within 24 hours of, any emergency, incident or event, which results in the release of contaminants not in accordance with, or reasonably expected to be not in accordance with, the conditions of this approval.
25	Within 10 days of any notification provided under condition 24, the holder of this approval must provide written information on the emergency, incident or event, including but not limited to: a) The name of the holder and the approval number b) The name and telephone number of a designated contact person c) The nature of the emergency, incident, event and/or non-compliance and the time and date of the release d) The quantity and nature of the substance released e) The location of the release f) The names of the person(s) involved in the release and/or clean up g) The suspected cause of the release

	h) A description of the effects of the release i) Details of the area of impact j) The results of any sampling performed in relation to the release k) The actions taken to mitigate any environmental harm caused by the release l) The success of any actions taken to mitigate the risk or extent of environmental harm; and m) The proposed actions to prevent a recurrence of the release.
26	**Monitoring** A competent person(s), experienced and qualified must conduct any monitoring required by this approval.
27	**Sampling** All analysis and tests required to be conducted under this approval must be carried out by a laboratory that has National Association Testing Authorities (NATA) certification for such analysis and tests, except as otherwise prior approved by the administering authority.
28	**Equipment Calibration** All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated and appropriately operated and maintained.
29	**Trained / Experience Operator** The operation of the sewer infrastructure, sewerage treatment works and pollution control equipment must be carried out by a person(s) with appropriate experience and qualifications to ensure the effective operation of that infrastructure, treatment works and control equipment.
30	All persons engaged in the conduct of the ERA, including but not limited to employees and contract staff must: a) Be trained in the procedures and practices necessary to i. Comply with the conditions of this approval; and ii. Prevent environmental harm during normal operation and emergencies; or b) Be under the close supervision of such a trained person.
31	**Spill Kit** An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides, for the management of wastes and chemicals associated with the ERA, must be kept at the site.
32	**Spill Kit Training** Anyone operating under this development approval must be trained in the use of the spill kit and procedural guides.
33	**Wastewater Spillage Abatement Strategy** The operator of the ERA to which this approval relates must operate and maintain a wastewater spillage abatement strategy to minimise the impact of any spills and overflows from wastewater infrastructure. The wastewater spillage abatement strategy must address but not be limited to the following; a) The location of each sewerage pump station and overflow b) Procedures to be implemented to reduce the likelihood of any pump failure and likelihood of any releases of contaminants. c) Response procedures to prevent any further release, or if such is not practical minimise the extent and duration of any release to the greatest extent practicable.

	d) The practices and procedures to be employed to restore the environment, or if such is not practicable, mitigate any environmental impacts of the release (including in both dry and wet conditions). e) A description of the resources to be used in response to a release. f) The training of staff that will be called upon to respond to the release. g) Procedures to investigate the cause of any releases, and where necessary, implement remedial actions to reduce the likelihood of recurrence of a similar event. h) The provision and availability of documented procedures to staff attending any release too enable them to effectively respond; and i) Timely and accurate reporting of the circumstances and nature of the release and events to the administering authority.
34	**Minimise Infiltration/Exfiltration** All reasonable and practicable measures must be taken to prevent and/or minimise the infiltration of stormwater and/or groundwater to sewer and exfiltration of sewerage to groundwater and/or surface waters and/or land from the sewerage system.
35	For the purposes of demonstrating compliance with condition 34 the operator to which this development approval relates must establish and maintain a system that addresses the following matters: a) The estimated level of infiltration/exfiltration b) The reasonable and practicable measures intended to minimise infiltration/exfiltration. c) Actions taken to minimise infiltration/exfiltration. d) Periodic re-estimations of the level of infiltration/exfiltration and by comparison with previous infiltration/exfiltration estimates and connected population, an assessment of the effectiveness of actions taken to minimise infiltration/exfiltration. e) Where infiltration/exfiltration has been identified as a cause for overflows/spills/unplanned releases from sewerage infrastructure; and f) Details of the system must be provided to the administering authority upon request.
36	**Exception Reporting** The operator of the ERA must notify the administering authority in writing of any monitoring result which indicates an exceedance of this approval within 7 days of completion of analysis. The written notification must include: a) The full analysis results; b) Details of investigation or corrective actions taken; and c) Any subsequent analysis.
37	**Sewage Treatment Works** The sewerage treatment works is to be designed, constructed and operation consistent with an advanced wastewater treatment plant, with treatment quality achieving Class A+ standard consistent with the specification provided in the Queensland Water Recycling Guidelines 2005.
Schedule B - Air	
38	**Nuisance** Notwithstanding any other condition of this development approval, the release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive place.

39	**Dust Nuisance** The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive place.
40	When requested by the administering authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 7 days to the administering authority.
41	Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: a) For a complaint alleging dust nuisance, dust deposition; and b) For a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (PM10) suspended in the atmosphere over a 24hr averaging time.
42	Release of dust or particulate matter, exceeding the following levels, when measured at any nuisance sensitive place, is considered as an environmental nuisance; a) Dust deposition of 120 milligrams per square metre per day, when measured in accordance with Australian Standard AS3580.10:2003 Methods of sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric method (or more recent edition); or b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging period, at a nuisance sensitive place downwind of the site, when monitored in accordance with: i. Australian Standard AS3580.9.6 'Ambient Air – Particulate Matter – Determination of suspended particulate PM10 high-volume sampler size – selective inlet – gravimetric method; or ii. Any alternative method of monitoring PM10 that may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.
43	**Monitoring** When requested by the administering authority, stated monitoring must be undertaken to investigate any complaint of environmental nuisance caused by a release to air from the ERA, and the results notified to the administering authority within 7 days.
44	**Infrastructure Design** All sewerage infrastructure including but not limited to pumping stations, storage and treatment components, must be designed so as not to create or potentially create an odour nuisance at any nuisance sensitive place. Such designs for example include the sealing of odour sensitive components and the discharge of air emissions through activated carbon filters.
Schedule C - Water	
45	**Monitoring Generally** All determinations of water quality must be: a) Made in accordance with methods prescribed in the latest edition of the Monitoring and Sampling Manual, dated 2009, published by the Department of Environment and Heritage Protection; and b) Carried out on samples that are representative of the media being tested.
46	**Release to Waters** Contaminants must not be directly or indirectly released to any waters, including groundwaters, or the bed or banks of any waters, except as specifically authorised under a water conditions of this approval.
47	Notwithstanding condition 46, no releases of contaminants to any waters are permitted to cause environmental harm.

48	**Stormwater Management** From commencement of an ERA to which this approval relates, a Stormwater Management Plan (SWMP) must be implemented. The SWMP must be conducted in accordance with commitments made in the document authored by Covey and Associates Pty Ltd and titles Stormwater Management Plan, Proposed Rural Service Centre and Residential and Tourist Development, January 2009. Should any conflict arise between the above mentioned document and conditions contained within this approval, the conditions of this approval prevail to the extent of the inconsistency. The SWMP 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.
49	The SWMP must not be implemented or amended in a way that contravenes any condition of this approval.
50	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
51	Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping to otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.
52	**Groundwater Monitoring** The operator of the ERA to which this approval relates must implement an on-going groundwater monitoring program (GMP), including the development of a suitable monitoring network, to monitor the quality of groundwater potentially impacted by any direct or indirect release of contaminants.
53	The groundwater monitoring network referred to in condition 52 must at a minimum: a) Be designed, installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design and who is able to competently make recommendations about these matter, and b) Include a sufficient number of 'bore(s) of compliance' (minimum 3) that provide the following; i. Representative groundwater samples from the aquifer/s; and ii. Background groundwater quality, hydraulically up-gradient or from background bore(s) that have not be affected by any release of contaminants to groundwaters; and iii. The quality of groundwater down gradient of any irrigation release area.
54	Groundwater monitoring wells must be constructed in accordance with the Agriculture and Resource Management Council of Australia and New Zealand manual titled *Minimum Construction Requirements for Water Bores in Australia*, or more recent versions or supplements as they become available.

55	The operator of an ERA to which this approval relates must conduct a GMP which complies with the following requirements: a) All determinations of the quality of contaminants released to waters must be made in accordance with, but not limited to, methods prescribed in: i. AS/NZS 5667.11:1988 Water quality – Sampling – Guidance on sampling of groundwater, or more recent editions or supplements as they become available; and/or ii. the Monitoring and Sampling Manual, dated 2009, published by the Department of Environment and Heritage Protection a) Groundwater samples taken from the monitoring wells must be analysed for, but not limited to the water quality parameter required in Schedule C Table 1. b) Standing water levels and total well depths in metres must be measured and recorded during each sampling event. Such measurements must be undertaken prior to any disturbance by sampling activities and must be reported as the depth on metres from the top edge of the highest point of the casing collar to the water surface within the bore. c) Groundwater samples taken from the monitoring wells must be representative of the underlying aquifer. d) Groundwater quality must be monitored as often as necessary but not less frequent than required in Schedule C Table 1. e) Groundwater sampling is to commence within 12 months prior to any irrigation of recycled water to land.
56	Records of the results of groundwater monitoring must be kept for not less than 15 years from the date the record was made.
57	Each groundwater monitoring well must be surveying with the height referenced to the Australian Height Datum.
58	Each groundwater monitoring well must be fitted with a locked cap at all times other than at the time of sampling.
59	**Groundwater Monitoring Analysis Reporting** The operator of the ERA to which this approval relates must ensure that the groundwater monitoring data gathered in accordance with this approval is analysed and interpreted by an expert in the field of groundwater monitoring. The assessment must include, but not be limited to; the location, nature (confined or unconfined) and quality of each aquifer, define groundwater contours, indicate direction of flow and assess the nature and extent of any environmental harm.
60	**Recycled Water Quality** Contaminants in recycled water must not be released to the environment, including from the recycled water storage tank (post sewerage treatments works), in excess of quality characteristics specified in Scheduled C Table 2.
61	Monitoring of contaminants released in recycled water from the sewerage treatment works must be undertaken as specified in Schedule C Table 2, at the prescribed monitoring points, with records kept for the quality characteristics and frequency of monitoring.
62	**Flow Volume** The daily volume and flow rate of sewerage entering the sewerage treatment works must be determined by an appropriate method with an accuracy of +/- 5%, for example through the use of a calibrated flow metre. Records must be kept of such determinations.
63	There must be sufficient back up power available to operate the essential processes of the sewerage treatment works, to prevent the discharge of untreated or poorly treated wastewater to the environment. This shall include any instrumentation and alarms associated with the treatment works and pump stations.
64	**Pump Stations**

	Sewerage pump stations must be fitted with stand-by pumps, a telemetry system (with auto dial) which includes pump failure alarms, as well as high level alarms to warn of imminent pump station overflow. Pump station alarms are also to be connected to a red flashing light on the pump station, which activates when an alarm is triggered. Note: the location of sewerage pump stations must be selected based on the results of a risk assessment that includes considerations of public health and environmental risks. Consideration must also be given to design characteristics which isolate and contain sewerage pump station overflows and allow for effluent to be returned back into the sewerage treatment works.
65	All alarm and telemetry systems identified in condition 64 must be able to raise an alarm should mains power failure occur at the pump station. When triggered the alarm must be reported to the appropriate person to respond to the failure.
66	**Structures, Tanks etc** All structures, tanks and the like, used for the storage or treatment of recycled water at or on the approved place must be constructed, installed and maintained: a) So as to prevent the release of recycled water through the structures, tanks and the like to the environment (including groundwater); b) So that an operational freeboard of not less than 0.5m is maintained at all times; and c) So as to ensure the stability of the structures, tanks and the like.
67	**Recycled Water Management** Prior to the commencement of stage 4 and recycling through a dual water supply system, a Recycled Water Management Plan (as mentioned in the Queensland Water Recycling Guidelines December 2005) must be developed and implemented to manage potential risks to human health and the environment associated with the production and use of recycled water. The Recycled Water Management Plan must embrace every stage of production and use of recycled water, including but not limited to the following: a) Source control b) Treatment c) Disinfection d) Transport e) Storage; and f) Use.
68	Recycled water must not be used for any other purpose at the place to which this approval relates other than for irrigation in the approved irrigation areas or for other non-potable uses in accordance with this approval and consistent with the Queensland Water Recycling Guidelines December 2005.
69	The recycled water system shall be separate and independent of any potable water system.
70	Continuous, on-line, real time monitoring for turbidity must be undertaken for recycled water post disinfection.
71	Continuous, on-line, real time monitoring for pH must be undertaken for recycled water post disinfection.
72	**Erosion Protection Measures** Erosion protection measures and sediment controls must be provided and maintained to effectively minimise any likelihood of erosion and release of sediments from the place to which this approval applies. **Schedule C Table 1: Groundwater Monitoring Requirements** **Water Quality Parameter** | **Trigger Values** | **Frequency**

Water Level	-	Bi-annual until two years post completion of stage 4, then reducing to annual If however, trigger values are exceeded at any stage the monitoring frequency increase to quarterly. When three consecutive quarterly samples are less than trigger values, the monitoring frequency return to the longer period.
pH	20% increase from background	
Electrical Conductivity	20% increase from background	
Total Nitrogen	20% increase from background	
Ammonia (as Nitrogen)	20% increase from background	
Nitrite (as Nitrogen)	20% increase from background	
Nitrate (as Nitrogen)	20% increase from background	
Total phosphorus	20% increase from background	
Chloride	20% increase from background	
Biochemical Oxygen demand (5 day inhibited)	20% increase from background	
E Coli	No change from background	

Schedule C Table 2: Recycled Water Quality Characteristics

Monitoring Point	Quality Characteristics	Minimum	Median	95% percentile	Maximum	Monitoring frequency
MP1	BODs				10 mg/L	Monthly
MP1	Total Suspended Solids				5 mg/L	Monthly
MP1	Electrical conductivity				16000 µS/cm	Monthly
MP1	Total Nitrogen				15 mg/L	Monthly
MP1	Total Phosphorus				1 mg/L	Monthly
MP1	pH units	6.5 pH units			8.5 pH units	Continuous
MP1	Residual Chlorine	0.5 mg/L			2 mg/L	Continuous
MP1	E.Coli		<1 cfu/100 mL [2]	<10 cfu/100 mL [3]		Weekly
MP2	Turbidity			2 NTU [4]	5 NTU	Continuous
MP3	Residual Chlorine	.5 mg/L			2 mg/L	Weekly

MP1 = Release point from recycled water storage tank

MP2 = Prior to disinfection

MP3 = On delivery to the customer at the furthest point in the recycled water system [5]

1. Continuously monitored data to be digitally stored at not less frequently than 5 minute intervals. Digital data is to be retained for not less than 60 months.

2. Means the median of 5 consecutive samples taken at not less than ½ hourly intervals

3. If any single example exceeds the 95%ile limit then the operator shall immediately investigate the cause of the exceedance and take the appropriate remedial action and repeat the sampling event in accordance with not 2 above. For compliance purposes, the 95%ile E.Coli value is to be determined based on all samples taken over the preceding 12 month period, ie including all of the 5 consecutive sample taken on each sampling day.

4. Data may be analysed on a rolling 7 day cycle to monitor the percentage of the time that the turbidity exceeds the 95th%ile limit. If in any 7 day period the turbidity exceeds the 95th%ile limit for greater than 5% of the time then the operator shall immediately investigate the cause of the exceedance and take appropriate remedial action. For compliance purposes the 95th%ile turbidity value shall be calculated based on the full electronic data set taken over the preceding 12 months

5. Monitoring associated with monitoring point MP3 is only require to commence once recycled water is used for purposes other than land irrigation

Schedule D - Noise

73 **Noise**

Noise from the activities must not result in measured levels greater than those specified in the following table:

Noise Limits – Nuisance sensitive place

Noise Level dB(a) measured as:	Monday to Sunday			Sunday and public holidays		
	7am to 5pm	6pm to 10pm	10pm to 7am	9am to 6pm	6pm to 10pm	10pm to 9am
$L_{Aeq, adj, 15 min}$	Lesser of bg+3 or 49	Lesser of bg+0 or 36	Lesser of bg+0 or 36	Lesser of bg+0 or 49	Lesser of bg+0 or 35	Lesser of bg+0 or 30
$L_{A10, adj, 15 min}$	Lesser of bg+5 or 50	Lesser of bg+5 or 40	Lesser of bg+0 or 35	Lesser of bg+5 or 45	Lesser of bg+5 or 40	Lesser of bg+0 or 35
$L_{A1, adj, 15 min}$	Lesser of bg+10 or 65	Lesser of bg+10 or 45	Lesser of bg+5 or 49	Lesser of bg+10 or 50	Lesser of bg+10 or 40	Lesser of bg+5 or 35

bg = Background noise level, LA90, 15mins

In the event that measured bg is less than 25dB (A), then 25 dB (A) is to be used.

The noise levels specified are measured outdoors in the free field at a location at lease 4m from the external facade of a building at the nuisance sensitive place and 1.2m to 1.5m above ground level.

Measured levels include background plus the activity.

*The above table does not purport to set operating hours for the activity.

74 **Noise Nuisance**

Notwithstanding condition 73, noise from activities must not cause an environmental nuisance at any nuisance sensitive place

75 **Noise Monitoring**

When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 7 days to the administering authority.

Monitoring must include:

a) $L_{Aeq, adj, 15 min}$

b) $L_{A10, adj, 15 min}$

c) $L_{A1, adj, 15 min}$

	d) The level and frequency of occurrence of impulsive or tonal noise e) Atmospheric conditions including wind speed and direction f) Effects due to extraneous factors such as traffic noise; and g) Location, date and time of recording The method of measurement and reporting of noise levels must comply with the latest edition of the Department of Environment and Heritage Protection Noise Measurement Manual.
Schedule E - Waste	
76	**Wastes** Regulated waste must be handled and transferred in a proper and efficient manner to prevent any leakage or spillage of waste.
77	Sludge produced by the sewage treatment process (including in septic) must not be disposed of on land that forms part of the irrigation area.
78	Wastes must not be released to the environment, stored, transferred or disposed contrary to any condition of this approval.
79	The operator of the ERA to which this approval relates must not: a) burn waste at or on the site; b) allow waste to burn or be burnt on the site; c) remove the waste from the site and burn such waste elsewhere.
80	All regulated waste removed from the site must be removed by a person who holds a current approval to transport such wastes under the *Environmental Protection Act 1994.*
Schedule F - Land	
81	Contaminants must not be released to land, except where otherwise stated in a condition of this development approval.
82	All chemicals associated with the sewerage treatment works must be contained within an on-site containment system (such as an impervious bund) and controlled in a manner that prevents land contamination and environmental harm.
83	All liquid chemical and waste container storages must be bunded such that the capacity of the bund is sufficient to contain at least 100% of the largest container plus 25% of the second largest container.
84	All bunding must be constructed of materials which are impervious to the materials stored and transferred therein and must be roofed.
85	A collection sump must be provided in the floor of the bunding to facilitate the removal of liquids. The bund floor must be graded so that the fall is towards the collection sump.
86	All pipework to and from the bunded areas must be directed over the bund walls and not directed through them.
87	All empty drums/contains, must be stored on a concrete hardstand with their closures in place.
88	**Recycled Water** Recycled water from the sewerage treatment works must only be used for irrigation, toilet flushing, cold water laundry taps and/or fire fighting.
89	When the quality of recycled water does not meet the specifications in Schedule C, Table 2, and such recycled water must not be used for irrigation, toilet flushing, cold water laundry taps, or fire fighting. When recycled water has been produced that does not meet specifications in Schedule C, Table 2 or beneficial use is not possible, the recycled water supplier and/or user should ensure that alternative methods of either storage or disposal are available to avoid contamination of already treated water.

90	Notwithstanding the quality characteristic limits specified in Schedule C Table 2, recycled water releases must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.
91	Pipelines and fittings associated with the recycled water reticulation system must be clearly identified. Standard household water taps, hoses, cocks and garden fittings must not be fitted to recycled water irrigation pipelines and the irrigation system must not be connected to other service pipelines.
92	The holder of this approval must ensure that all persons potentially exposed to recycled water are instructed in personal hygiene measures and appropriate health and safety procedures associated with using recycled water.
93	**Irrigation** A minimum area of land for each stage of development (stage 1-4) must be available and utilised for the irrigation of recycled water (approved irrigation area). The approved irrigation area must provide for a 1.5m buffer from any site boundary, the coastal management area and any remnant vegetation. a) At commencement of Stage 1: A minimum total area of 5,383 square metres b) At commencement of Stage 2: A minimum total area of 9,299 square metres c) At commencement of Stage 3: A minimum total area of 13,009 square metres d) At commencement of Stage 4: A minimum total area of 16,200 square metres
94	The approved irrigation area identified in condition 93 and nominated in the attached plan must be outside of the Q100 flood level.
95	If filling of land is required to comply with condition 94, the filled material shall be consistent with soil properties modelled inn the document authored by future-plus ENVIRONMENTAL and titled *Rules Beach Development, Revised MEDLI Modelling Scenario* dated 2 July 2009.
96	Irrigation conducted in the area identified in condition 93 must be irrigated using controlled rate sub surface irrigation.
97	The sub surface irrigation system must be connected to an automated system which manages sub surface irrigation events and volume. This system must be capable of ensuring the recycled water is irrigated evenly across the irrigation area.
98	Soil moisture meters and a rainfall recognition system must be used to assist in the sustainable irrigation scheduling for land irrigated with recycled water.
99	The irrigation of recycled water must only be released to the approved irrigation area referred to in condition 95 in accordance with management strategies that achieve the following environmental outcomes: a) Efficient application of recycled water utilising best practice methods; b) Control of sodicity and salinity in the soil; c) Minimal degradation of soil structure; d) Control of the build up of nutrients and heavy metals in the soil and sub soil from recycled water and other sources; e) Prevention of adverse impacts on the groundwater resource; f) Prevention of the run-off of recycled water, for example by limitation of application rates and the use of structures such as drains; g) The prevention of surface ponding; h) Prevention of spray drift or over-spray of recycled water; i) Prevention of damage to vegetation; and j) Maximises the health and safety protection in relation to recycled water handling and irrigation.
100	Plants (including grasses) growing in the approved irrigation area are to be regularly cut and the cut material must be removed and disposed of to an area other than on the irrigated land.

101	The daily volume of recycled water exiting the recycled water storage tank and the daily volume of recycled water released to land, must be accurately determined by an appropriate method, with an accuracy of +/- 5%, for example a flow meter, and records kept of such determinations.
102	Notices must be prominently displayed on areas undergoing irrigation, warning the public that the area is irrigated with recycled water and not to use or drink the recycled water. These notices must be maintained in a visible and legible condition.
103	**Irrigation Monitoring Program** Prior to commencement of irrigation, the operator of the activity to which this approval relates, must develop and implement an Irrigation Management Plan (IMP) which details how the irrigation will be effectively and appropriately managed so as to ensure that the release of recycled water to land is carried out in a sustainable manner.
104	The IMP must detail how irrigation will be managed and monitored so that the following occur: a) Vegetation is not damaged; b) Soil erosion and soil structure damage is avoided; c) There is no surface ponding of recycled water; d) Recycled water is evenly distributed over the irrigation area; e) Infiltration of recycled water beyond the plant root zone is minimised; f) The capacity of the land to assimilate nitrogen, phosphorous, salts and organic matter is not exceeded; g) The quality of groundwater is not adversely affected; h) How management of recycled water will be carried out to ensure that there are no adverse public health issues; i) How irrigation of land will be carried out to ensure that there are no adverse public health issues; j) Procedures for educating and training staff, residents and guests, about public health issues associated with using recycled water onsite. In addition to the above, the IMP must detail measures to be taken to effectively monitor the condition of the land to which recycled water is applied.
105	As part of the IMP, a soil survey and management report must be prepared and implemented prior to irrigation, and thereafter at 12 month intervals.
106	The soil survey and management report must include: a) Soil and sub-soil analysis, including assessment of the soils from at least 4 representative locations, including type, structure, pH, phosphorous absorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption rate (SAR) of the irrigation release area(s). b) Determination of the quantity and quality of contaminants applied to the soils from the recycled water irrigation; c) Periodic reassessment, including modelling of the water, nutrient and salt balances and irrigation rate and return period, to ensure sustainable use of the irrigation area is being achieved; and d) Reporting of monitoring results, and an assessment of the impact of the releases on the irrigation areas.
107	The soil survey and management report referred to in condition 106 must interpret results and provide expert advice on the sustainable loadings and soil management, based on the recycled water quality, soil types and vegetation being irrigated. This reporting is to be included as part of the annual monitoring reporting as required in condition 19.
108	A copy of the IMP must be kept at the site to which this approval relates.

109	**Wet Weather Storage Capacity** The ERA shall have available to it, a minimum wet weather storage capacity for each stage of development as outlined below: a) Stage 1: A minimum total volume of 74,700L b) Stage 2: A minimum total volume of 129,000L c) Stage 3: A minimum total volume of 180,500L d) Stage 4: A minimum total volume of 300,000L
110	When conditions prevent the irrigation of recycled water to land (such as during or following rain events), the recycled water must be directed to a wet weather storage or alternative measure must be taken to store or lawfully dispose of the recycled water (such as tanking off site to another treatment plant). A record must be kept of any removal or discharge off site, including destination, transporter, dates and volumes.
111	**Provision of recycled water to other persons** The quality of recycled water given to another person for irrigation purposes must comply with the limits specified in Schedule C, Table 2.
112	If responsibility of the recycled waters is given or transferred to another person, the responsibility of such recycled waters must only be given or transferred in accordance with a written agreement (the third party agreement); a) Include in the third party agreement a commitment from the person utilising the recycled waters to use the recycled waters in such a way as to prevent environmental harm or public health incidences and specifically make the persons aware of the General Environmental Duty (GED) under section 319 of the *Environmental Protection Act 1994,* environmental sustainability of any recycled waters disposal and protection of environmental values of waters; and b) Upon being notified or otherwise becoming aware that the person's use of recycled waters is causing or threatens to cause environmental harm or is posing a human health risk and if the person does not rectify the situation upon written request, the giving and transferring responsibility for such recycled waters must cease.
Schedule G - Community	
113	**Complaint Response** The holder of this approval 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; and b) Reasons for the complaint; and c) Any investigations undertaken; and d) Conclusions formed; and e) Any actions taken.
114	When requested by the administering authority, cooperate with and participate in any community environmental liaison committee established in respect of either the site specifically, or the area where the site is located.
Schedule H - Definitions	
	Words and phrases used throughout this permit are defined below. Where a definition for a term used in this permit is sought and the term is not defined within this permit the definitions provided in the relevant legislation shall be used. **Activity** means- An environmentally relevant activity or associated auxiliary activity to which this approval relates.

	Administering authority means- For a matter, the administration and enforcement of which has been devolved to a local government under section 514 of the *Environmental Protection Act 1994* – the local government; or for all other matters – the Chief Executive of the Department of Environment and Heritage Protection or another State Government Department, Authority, Storage Operator, Board or Trust, whose role is to administer provisions under another enacted legislation. **Authorised place** means- The place authorised under this development approval for the carrying out of the specified environmentally relevant activities. **Bg** means- Background noise measured as La 90, 15 mins. **Bund** means- An earth mound or similar structure (e.g. a concrete block wall), constructed to contain spilled material (e.g. petrol, diesel, oil etc); or A structure to prevent or reduce soil erosion. **Contaminant** means- (Section 11 of the EP Act) • A gas, liquid or solid; or • An odour; or • An organism (whether alive or dead), including a virus ; or • Energy, including noise, heat, radioactivity and electromagnetic radiation; or • A combination of contaminants. **dB (Lin) peak** means- the maximum reading in decibels (dB) obtained using "P" time-weighting characteristic as specified in AS 1259, 1-1990 with all frequency weighted networks inoperative. **Deposit** means- Drop, place or throw a contaminant in waters or onto a place or releases the contaminant or otherwise cause it to move into waters or onto a place. **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 watercraft in a marina. **Environmental nuisance** means- (Section 15 of the EP Act) Unreasonable interference or likely interference with an environmental value caused by: • noise, dust, odour, light; or • an unhealthy, offensive or unsightly condition because of contamination; or • another way prescribed by regulation (e.g. unreasonable noise or dust emissions). **Exfiltration** means- The loss of sewerage to ground water and/or surface waters and/or land from the sewerage reticulation system. **Impulse adjustment** means- An adjustment applied if impulsiveness is a significant characteristic of the sound within a measurement time interval. If impulsive components are clearly audible, the adjustment will be 5dB (A). If the components are only just detectable, an adjustment of 2 dB (A) will be appropriate.

Infrastructure includes-
Roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, pipelines, power lines, airstrips, helipads etc, which are constructed or installed specifically for the project.

$L_{A1, adj, 15mins}$ means-
The A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of sound) exceeded for 1 percent of any 15 minute measuring period, using “Fast Response”.

$L_{A10, adj, 15mins}$ means-
The A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of sound) exceeded for 10 percent of any 15 minute measuring period, using “Fast Response”.

$L_{A90, adj, 15mins}$ means-
The A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of sound) exceeded for 90 percent of any 15 minute measuring period, using “Fast Response”.

$L_{A90, adj, 15mins}$ means-
The A-weighted sound pressure level, exceeded for 90 percent of any 15 minute measuring period, using “Fast Response”, in the absence of noise from the activities.

$L_{asq, adj, 15mins}$ means-
An A-weighted sound pressure level of a continuous steady sound, adjusted for tonal character that within a measuring period of 15 minutes has the same mean square sound pressure as a sound level that varies with time.

Mg/L means-
Milligrams per litre.

Noxious means-
Harmful or injurious to health or physical wellbeing.

Nuisance sensitive place means-
Any of the following places:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a library, childcare centre, kindergarten, school, college, university or other educational institution; or
- a hospital, surgery or other medical institution; or
- a park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment); or
- a protected area; or
- a place used as an office, business or commercial purposes;

and includes a place within the cartilage of such a place reasonably used by persons at that place.

Offensive means-
Causing offence or displeasure; is disagreeable to the sense; disgusting; nauseous or repulsive.

Prescribed water contaminant-
As per Schedule 9 of the *Environment Protection Regulation 2008*.

Protected area means-

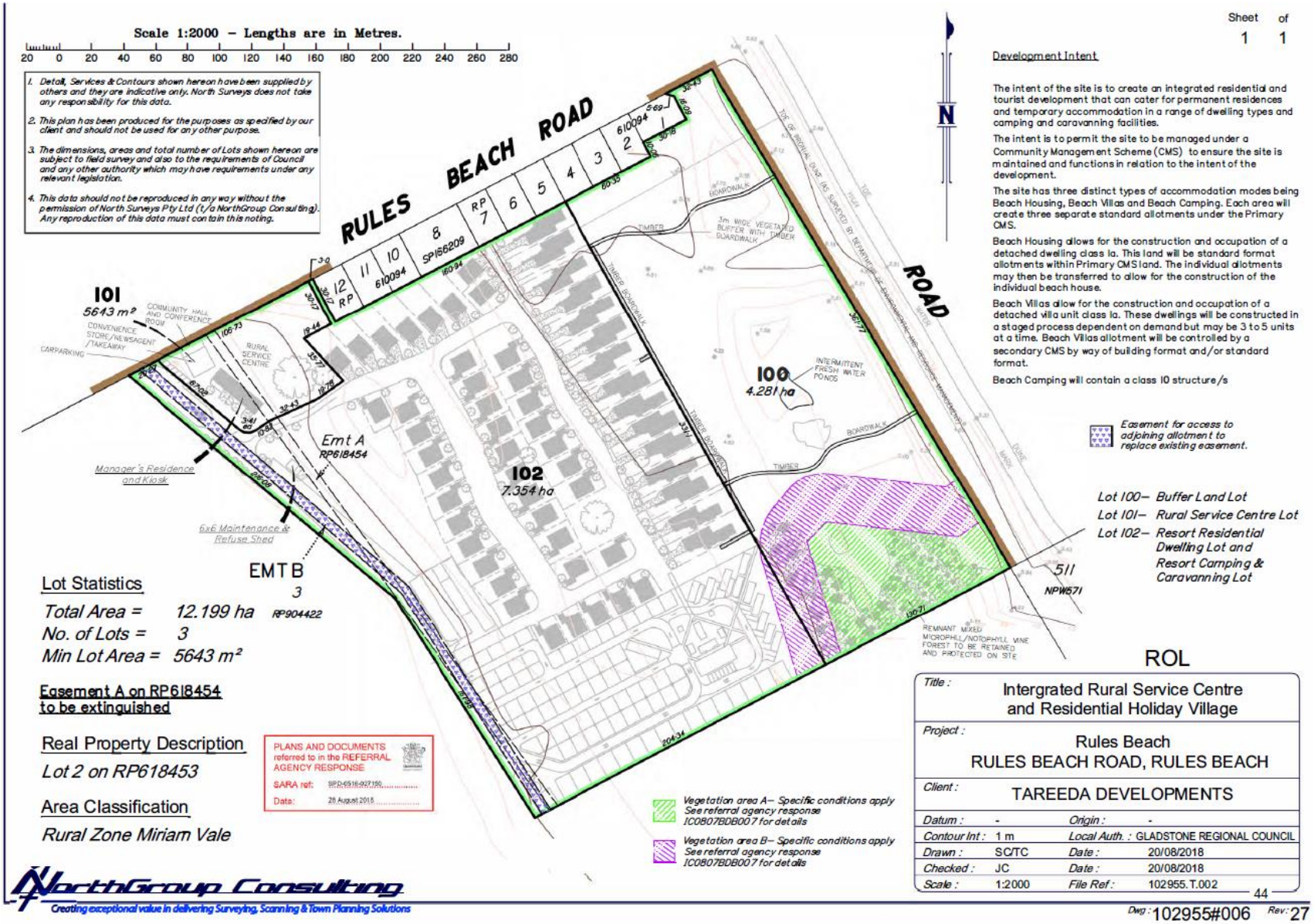
- A protected area under the *Nature Conservation Act 1992*; or
- A marine park under the *Marine Parks Act 2004*; or
- A World Heritage Area.

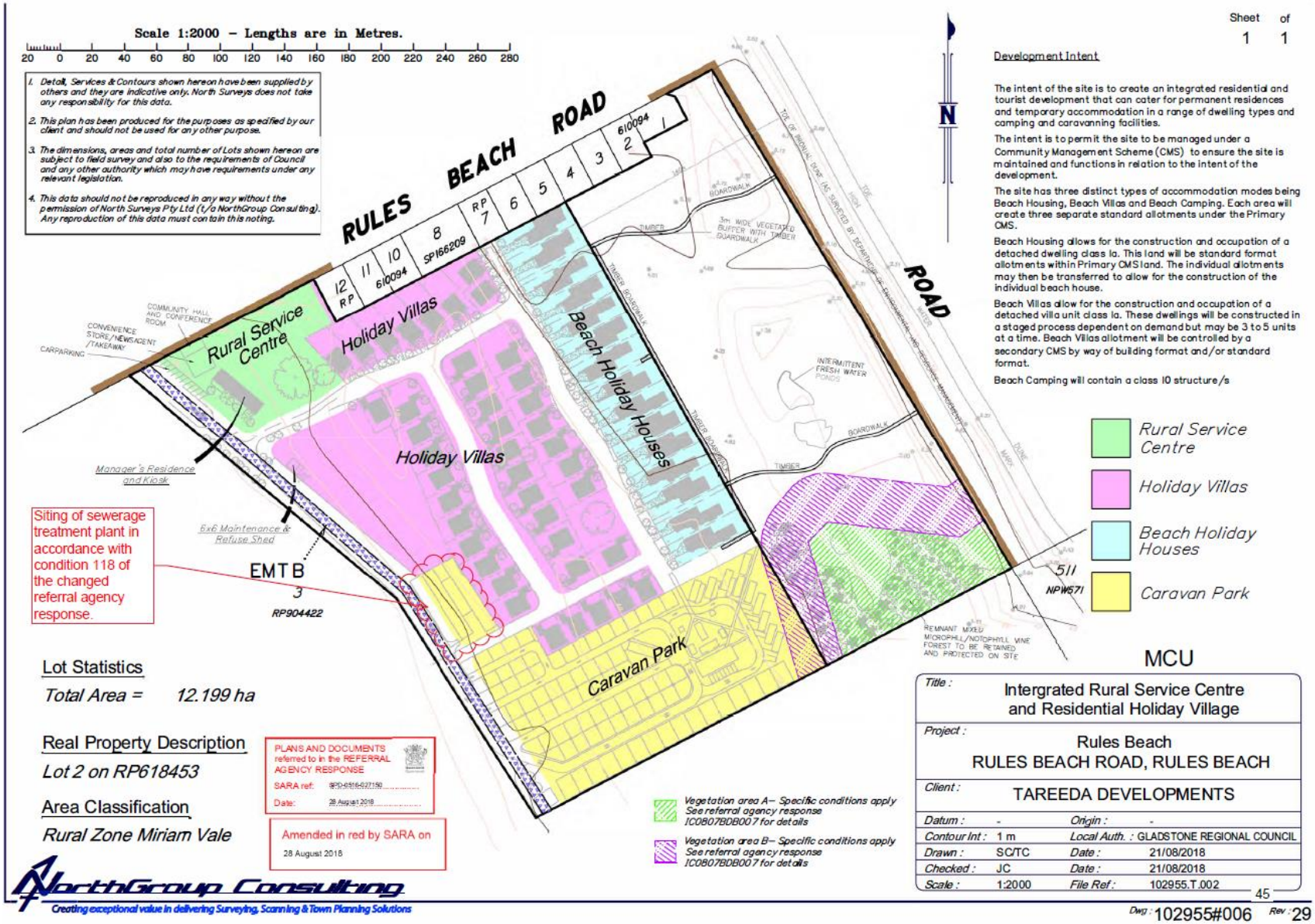
Registration certificate means-
A certificate given under section 73F of the EP Act to the principal hold of an ERA.

Release of a contaminant, includes-

	• to deposit, discharge, emit or disturb the contaminant; and • to cause or allow the contaminant to be deposited, discharged, emitted or disturbed; • to allow the contaminants to escape and • to fail to prevent the contaminant from escaping. **Site** means land on or in which it is proposed to carry out the development approved under this development approval. **Tidal water** means- The sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides. **Tonal adjustment** means- An adjustment applied if tonal components are significant characteristics of the sound within a measurement time interval, if tonal components are clearly audible, the adjustment will be 5dB (A). If the components are only just detectable, an adjustment of 2dB (A) will be appropriate. **Water** includes- • Water in a watercourse, lake or spring; • Underground water • Overland flow water; or • Water that has been collected in a dam. **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.
Plans	
115	The siting of the sewerage treatment plant must be carried out generally in accordance with: Integrated Rural Service Centre and Residential Holiday Village, prepared by NorthGroup Consulting dated 21/08/2018, Drawing No. 102955#006, Revision 29 (MCU), as amended in red by SARA on 28/08/18.

Attachment 1— Plans referred to in the Referral Agency Response





END OF ENVIRONMENTAL AUTHORITY