Permit

Environmental Protection Act 1994

Environmental authority BRID0052

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

Environmental authority number: BRID0052

Environmental authority takes effect upon commencement of the activity. Prior to the commencement of the activity the administering authority must be given written notice of the proposed date of commencement.

Environmental authority holder(s)

Name(s)	Registered address
Riverstone Resources Pty Ltd	28, 2 Photinia Crescent, Mountain Creek, Qld 4557

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16(2)(b) - extracting, other than by dredging, more than 100,000t but not more than 1,000,000t of material in a year. ERA 16(3)(b) - screening more than 100,000t but not more than 1,000,000t of material in a year.	2878 Cheltenham Rd, Eidsvold QLD 4627 – Lot 5 Plan WK96, Lot 6 Plan WK96, Lot 7 Plan WK149, Lot 8 Plan WK149.

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).

ABN 46 640 294 485

Contaminated land

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

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise- one 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.

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

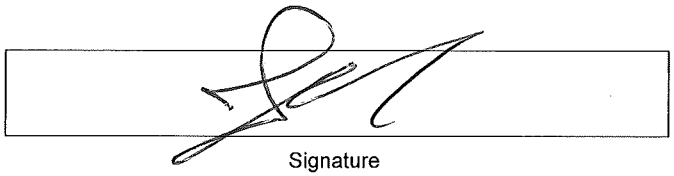
This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. 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 and Mines (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mifne Safety and Health at www.dnrm.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
PG1	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.
PG2	Extraction must only be undertaken within the areas indicated as Stage 1, Stage 2 and Stage 3 extraction areas on *Figure 5 – Conceptual Quarry Development Plan* attached.
PG3	The total amount of material extracted in any *year* (as defined under section 16 of the *Environmental Protection Regulation 2008*) must not exceed 350,000 tonnes



Signature

19/10/2017

Date

Tariq Khan
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane QLD 4001
Phone: 1300 130 372
Email: palm@ehp.qld.gov.au

PG4	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.
PG5	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.
PG6	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
PG7	Telephone the Department of Environment and Resource Management'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.
PG8	A written notice detailing the following information must be provided to the Department of Environment and Resource Management within 14 days of any advice provided in accordance with condition PG7: 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.
PG9	A competent person(s) must conduct any monitoring required by this approval.
PG10	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.
PG11	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

PG12	All records required by this approval must be kept for 5 years.
PG13	The daily operation of the pollution control equipment must be carried out or overseen by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of that equipment.
PG14	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.
PG15	Anyone operating under this approval must be trained in the use of the spill kit.
Agency interest: Air	
Condition number	**Condition**
PA1	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.
PA2	The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.
PA3	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 14 days to the administering authority following completion of monitoring. 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 (monitored in accordance with Australian Standard AS 3580.10.1:2003 or more recent editions); 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 (µm) (PM10) suspended in the atmosphere over a 24hr averaging time (monitored in accordance with Australian Standard AS 3580.9.6:2003 or more recent editions or AS 3580.9.9:2006 or more recent editions).
PA4	In the event of a complaint about dust, and at the request of the administering authority, the Registered suitable operator must, within four weeks, develop a dust management plan. The dust management plan must address at least, but not be limited to, the following matters: a) identification of dust sources and activities at the place(s) which impact on nuisance sensitive places; b) the control or abatement measures that can be undertaken to reduce identified dust sources; c) the expected reduction of dust emissions at the dust sensitive place that would be achieved from implementing the proposed measures; d) the handling of future dust complaints; e) community liaison and consultation; and f) training of staff in dust management practices.
PA5	Upon the completion of the dust management plan it must be submitted to the Administering Authority within 5 days for its review and comment.

PA6	After the administering authority has provided comment on the dust management plan, the registered suitable operator must have due regard to any comments made by the administering authority, and must implement the plan as soon as practicable.
PA7	Stockpiles must be managed using all reasonable and practicable measures necessary to minimise the release of wind blown dust or particulate matter to the atmosphere. Reasonable and practicable measures must include at least the following: a) watering of stockpiles; and b) maintenance of effective buffers; and c) minimising the size and height of stockpiles: and d) covering the stockpile (when required); and e) containing all stockpiles within a designated area.
PA8	All vehicles associated with the approved activity on the site must be operated and maintained using all reasonable and practicable measures necessary to prevent windblown dust. Reasonable and practicable measures must include but are not limited to: a) damping down materials loaded in the haulage vehicle prior to transport; and b) having the entire load covered with a tarpaulin or similar material prior to departure from the approved site; and c) clearing of spillage from side rails, tail gates and draw bars of trucks prior to departure from the approved site. d) Ensuring access roads and tracks are constructed and maintained in a manner that minimises wind blown dust.
PA9	The Registered suitable operator must take appropriate measures to inform and instruct the drivers of all trucks (including contract transporters) that they must comply with the requirements set out in condition PA8.
PA10	Screening plants and external transfer conveyors must be operated and maintained using all reasonable and practicable measures necessary to minimise the release of wind blown dust to avoid environmental nuisance from the dust. Reasonable and practicable measures may include but are not limited to: a) transfer of materials in a moist state; b) use of water sprays within the plant; and c) use of shielding and wind breaks.
Agency interest: Land	
Condition number	**Condition**
PL1	Contaminants must not be released to land.
PL2	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. *NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.*

PL3	The base and walls of all bunded areas must be maintained free from gaps and cracks.
PL4	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced
PL5	The site (including all disturbed areas such as slopes, borrow pits, stockpile and screening areas) must be rehabilitated in a manner such that: a) suitable species of vegetation are planted and established (where practical, native species should be used); b) potential for erosion of the site is minimised; c) the quality of stormwater, other water and seepage released from the site is such that releases of contaminants such as suspended solids, turbidity, total dissolved salts, pH, total iron, total aluminium, and total manganese are not likely to cause environmental harm; d) the likelihood of environmental nuisance being caused by release of dust is minimised; e) the water quality of any residual water body meets relevant criteria for subsequent uses and does not have potential to cause environmental harm; f) the final landform is stable and not subject to slumping; and g) any actual and potential acid sulfate soils in or on the site are either not disturbed, or are submerged or treated, so as to not be likely to cause environmental harm.
PL6	Within 6 months of the commencement of the approved activities, the Registered suitable operator must develop and implement a Final Land Use and Rehabilitation Plan to ensure that all areas disturbed by the approved activities will be suitably and progressively rehabilitated in accordance with Condition PL4 and PL5. The Plan must include, but not be limited to the following: a) disturbance type and area; b) pre and post ERA landform descriptions; c) pre and post ERA land suitability; d) proposed vegetation species; e) a description of rehabilitation management techniques incorporating a monitoring and reporting program, and timetables; f) indicators for success; and g) keeping of appropriate records of rehabilitation measures implemented including taking of photographs demonstrative of rehabilitation achieved and the preparation of annual rehabilitation progress reports; and h) provision of an annual summary of rehabilitation progress must be submitted to the administering authority with each annual return.
PL7	Within 5 months of the commencement of the approved activities, the registered suitable operator must submit a copy of the Final Land Use and Rehabilitation Plan, as required by condition PL6 to the administering authority, and in finalising the plan must have due regard to comments made by the administering authority.
Agency interest: Noise	
Condition number	**Condition**
PN1	Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

PN2

All noise from the activities must not exceed the levels specified in Table 1 - Noise limits at any nuisance sensitive or commercial place.

Table 1 - Noise limits

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am – 12pm	12pm - 10pm	10pm - 9am
	Noise measured at a 'Noise sensitive place'					
$L_{A10, adj, 10 mins}$	Bkg + 5	Bkg + 0	Bkg + 0	Bkg + 5	Bkg +0	Bkg + 0
$L_{A1, adj, 10 mins}$	Bkg + 10	Bkg + 0	Bkg + 0	Bkg + 10	Bkg + 0	Bkg + 0
	Noise measured at a 'Commercial place'					
$L_{A10, adj, 10 mins}$	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5
$L_{A1, adj, 10 mins}$	Bkg + 15	Bkg + 15	Bkg + 10	Bkg + 15	Bkg + 15	Bkg + 10

PN3

Blasting operations are not to be conducted on site.

PN4

When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:

- $L_{A 10, adj, 10 mins}$
- $L_{A 1, adj, 10 mins}$
- the level and frequency of occurrence of impulsive or tonal noise;
- atmospheric conditions including wind speed and direction;
- effects due to extraneous factors such as traffic noise; and
- location, date and time of recording.

PN5

In the event of a complaint about noise, and at the request of the administering authority, the registered suitable operator must, within four weeks, develop a noise management plan. The noise management plan must address at least, but not be limited to, the following matters:

a) identification of component noise sources and activities at the place(s) which impact on nuisance sensitive places;
b) the measured and/or predicted level of these noise sources and activities at nuisance sensitive places;
c) the best practice control or abatement measures that can be undertaken to reduce identified intrusive noise sources;
d) the level of noise at nuisance sensitive places that would be achieved from implementing these measures;
e) identifying the most suitable hours of operation for activities to avoid creation of nuisance noise at nuisance sensitive places;
f) the handling of future noise complaints;
g) community liaison and consultation; and
h) training of staff in noise management practices.

PN6

Upon the completion of the noise management plan it must be submitted to the administering authority.

PN7

After the administering authority has provided comment on the noise management plan, the registered suitable operator must have due regard to any comments made by the administering authority, and must implement the plan as soon as practicably possible.

PN8	The method of measurement and reporting of noise levels must comply with the latest edition of the Department of Environment and Resource Management's Noise Measurement Manual.

Agency interest: Social

Condition number	Condition
PS1	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) conclusions formed; and e) any actions taken.

Agency interest: Water

Condition number	Condition
PW1	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.
PW2	Contaminants other than settled/treated stormwater runoff water released in compliance with condition PW4 must not be released from the site to surface waters or the bed or banks of surface waters.
PW3	Stormwater from any disturbed area on the site, other than settled/treated stormwater runoff water released in compliance with condition PW4, must not be released to surface waters or the bed or banks of surface waters.
PW4	Settled/treated stormwater runoff waters from those areas of the site that drain to the sediment control system must only be released in compliance with the release limits listed in Table 2 - Contaminant release limits to water, from the following discharge locations: - Water Treatment Pond release points - namely release of Settled/treated stormwater from any water treatment pond on the site at the pond overflow point. **Table 2 - Contaminant release limits to water**

Monitoring point	Discharge location	Quality characteristics	Release limit			Monitoring frequency
			Minimum	50th Percentile	Maximum	
M1	Water Treatment Pond release points	pH	6.0	N/A	8.5	Not less than once every week in the event of water being released from the sedimentation dam.
		Suspended Solids (mg/L)	N/A	30	50	Not less than once every week in the event of water being released from the sedimentation dam.

PW5	Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the quality characteristics and not less frequently than specified in Table 2 - Contaminant release limits to water. All determinations of the quality of contaminants released must be: a) made in accordance with methods prescribed in the latest edition of the Department of Environment and Resource Management's Water Quality Sampling Manual; and b) carried out on samples that are representative of the discharge.
PW6	The size of any sedimentation dam must be sufficient to contain runoff expected from a 24 hour storm with an average recurrence interval of 1 in 5 years.
PW7	Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from areas upstream of any disturbed area from entering the disturbed area.
PW8	Activities must be conducted in a manner that, as far as reasonable and practicable, minimises the area of land that is subject to disturbance.
Agency interest: Waste	
Condition number	**Condition**
PWA1	A record of all waste materials generated and removed from the site 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.

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.

Appendices

"administering authority" means the Department of Environment and Resource Management (previously the Environmental Protection Agency or EPA) or its successor.

"annual return" means the return required by the annual notice (under section 308 of the *Environment Protection Act 1994*).

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"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.

"Department of Environment and Resource Management" means the department or agency (whatever called) administering the *Environmental Protection Act 1994*.

"ERA" means Environmentally Relevant Activity as authorised by this approval

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

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

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

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

"mg/L" means milligrams per litre.

"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.

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

"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.
"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.

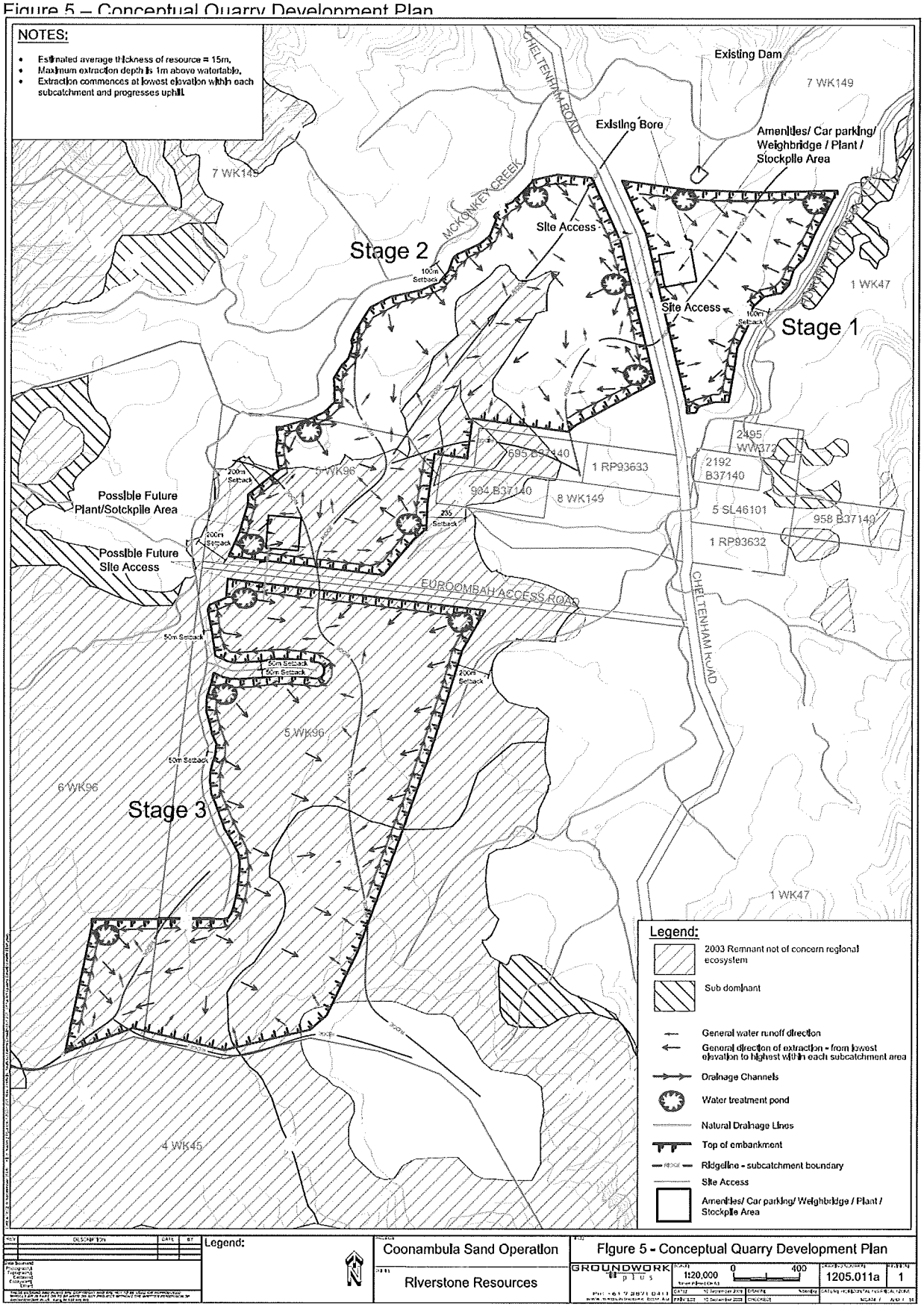
"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part-thereof.

"works" or "operation" means the development approved under this environmental authority.

"you" means the holder of this environmental authority or owner / occupier of the land which is the subject of this environmental authority.

"50th percentile" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

Figure 5 – Conceptual Quarry Development Plan



END OF ENVIRONMENTAL AUTHORITY