Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPPR01766213

Environmental authority takes effect 02 September 2016.

The anniversary date of this environmental authority remains as 1 March. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Principal address
Hanson Construction Materials Pty Ltd	Level 10 35 Clarence Street SYDNEY NSW 2000

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
16-(2c) Extracting, other than by dredging, more than 1,000,000t of material in a year 16-(3c) Screening more than 1,000,000t of material in a year 33-Crushing, milling, grinding or screening more than 5,000t of material in a year.	Harts Road, LUSCOMBE - Lot 117 Plan CP893560, Lot 80 Plan CP893560, Lot 1 Plan CP893562, Lot 2 Plan RP813599, Lot 2 Plan RP167150, Lot 7 Plan CP893561, Lot 2 Plan RP15903, Lot 5 Plan CP893561, Lot 67 Plan WD1009, Lot 1 Plan CP893559 and Lot 101 Plan CP893561 Stanmore Road and LUSCOMBE - Lot 1 Plan SP244693

Additional information for applicants

Environmentally relevant activities

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

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

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

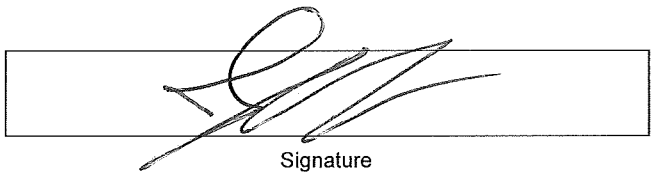
A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

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

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

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



Signature

2/9/2016

Date

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

Enquiries:
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: 07 3330 6037
palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

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

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

Conditions of environmental authority

Location: Harts-Luscombe Gold Coast

Lot 117 Plan CP893560, Lot 80 Plan CP893560, Lot 1 Plan CP893562, Lot 67 Plan WD1009, Lot 2 Plan RP813599, Lot 2 Plan RP167150, Lot 7 Plan CP893561, Lot 2 Plan RP15903, Lot 5 Plan CP893561 and Lot 1 Plan CP893559 and Lot 101 Plan CP893561

Stanmore- Luscombe Gold Coast

Lot 1 Plan SP244693

Relevant activity/ies:

16-(2c) Extracting, other than by dredging, more than 1,000,000t of material in a year
16-(3c) Screening more than 1,000,000t of material in a year
33-Crushing, milling, grinding or screening more than 5,000t of material in a year.

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

Agency interest: General	
Condition number	**Condition**
G1	Activities conducted under this environmental authority must not be conducted contrary to any of the following limitations: 1. The **activity** is to occur only within the nominated area identified in plan 1001.278 Revision 4 dated 31 August 2016 attached herein (Attachment 1); and 2. The only material permitted to be crushed and screened under ERA 33 on site is waste concrete; and 3. Crushing and screening of waste concrete on site must not exceed 25,000 tonnes per annum.
G2	All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused.

G3	Any breach of a condition of this environmental authority, must be reported to the **administering authority** as soon as practicable, or at most, within 24 hours of **you** becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G4	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
G5	All information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the **administering authority** upon request.
G6	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G7	All analyses required under this environmental authority must be carried out by a laboratory that has **NATA** certification, or an equivalent certification, for such analyses. The only exception to this condition is for *in situ* monitoring of pH and Dissolved Oxygen.
G8	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority**, to investigate a complaint that is not considered by the **administering authority** to be frivolous or vexatious, of environmental nuisance arising from the **activity**. The monitoring results must be provided to the **administering authority** upon request.
G9	The **activity** must be undertaken in accordance with written procedures that: 1. identify potential risks to the environment from the **activity** during routine operations, closure and an emergency 2. establish and maintain control **measures** that minimise the potential for environmental harm 3. ensure plant, equipment and **measures** are maintained in a proper and effective condition 4. ensure plant, equipment and **measures** are operated in a proper and effective manner 5. ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994* 6. ensure that reviews of environmental performance are undertaken at least annually.
G10	Except for the nominated areas identified within condition G1, a minimum buffer distance of 50m must be maintained between extraction areas and the high banks of any watercourse, lake or wetland.

Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants which are **noxious** or **offensive** or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any **sensitive place** or **commercial place**.

Agency interest: Water

Condition number	Condition
WT1	The only contaminants to be released to surface **waters** are at Release Point W1 as identified in Attachment 1 *Plan 1001.278 Revision 4 dated 31 August 2016* – in accordance with *Table 1—Surface water release limits* and the associated monitoring requirements. **Table 1—Surface water release limits**[1]

Release Point(s) Description	Quality characteristic (units)	Limit	Limit Type	Minimum Monitoring Frequency
Release Point W1	pH. (pH Units)	6.5-8.5	Range	Prior to discharge and daily during discharge.
	Suspended Solids. (mg/L)	50	Maximum	Prior to discharge and daily during discharge.
	Dissolved Oxygen (mg/L)	6	Minimum	Prior to discharge and daily during discharge.

Associated monitoring requirements

1. Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Heritage Protection *Water Quality Sampling Manual.*
2. Samples must be taken using representative samples.
3. All determinations must employ analytical practical quantification limits sufficiently low enough to enable comparisons to be made against water quality objectives/limits relevant to the particular water quality characteristic.
4. Monitoring must be undertaken during a release as per the frequency stated.
5. All monitoring devices must be correctly calibrated and maintained.

WT2	In addition to WT1, the release to **waters** must not: 1. have any other properties at a concentration that is capable of causing environmental harm 2. produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
WT3	The stormwater runoff from disturbed areas, generated by (up to and including) a **24 hour storm event with an average recurrence interval of 1 in 5 years** must be retained on site or managed to remove contaminants before release.

Agency interest: Noise

Condition number	Condition
N1	Noise from the **activity** must not exceed the levels identified in *Table 2—Noise limits* when measured in accordance with the associated monitoring requirements. The Zones identified within the Table 2 are those represented in Attachment 2 *–Noise Criteria* for *Wolffdene Noise and Dust Impact Assessment, Wolffdene Quarry Proposed Expansion*

Table 2—Noise limits

	Monday - Saturday				Other Times and Public Holidays	Monday - Saturday				Other Times and Public Holiday
	6am-7am	7am–6pm	6pm–10pm	10pm–6am		6am - 7am	7am–6pm	6pm–10pm	10pm–6am	
	Noise measured at a Sensitive Place in proximity to Stanmore Road - Zone 1					Noise measured at a Commercial Place in proximity to Stanmore Road – Zone 1				
$L_{Aeq, adj, T}$	48dB(A)	46dB(A)	42dB(A)	35dB(A)	35dB(A)	53dB(A)	51dB(A)	47dB(A)	40dB(A)	40dB(A)
	Noise measured at a Sensitive Place in proximity to Harts Road - Zone 2					Noise measured at a Commercial Place in proximity to Harts Road - Zone 2				
$L_{Aeq, adj, T}$	46dB(A)	44dB(A)	39dB(A)	32dB(A)	32dB(A)	51dB(A)	49dB(A)	44dB(A)	37dB(A)	37dB(A)
	Noise measured at a Sensitive Place setback from major roadways - Zone 3					Noise measured at a Commercial Place setback from major roadways - Zone 3				
$L_{Aeq, adj, T}$	42dB(A)	43dB(A)	36dB(A)	30dB(A)	30dB(A)	47dB(A)	48dB(A)	41dB(A)	35dB(A)	35dB(A)

Associated monitoring requirements

1. All monitoring devices must be correctly calibrated and maintained.
2. Any monitoring must be in accordance with the most recent version of the **administering authority's** Noise Measurement Manual.
3. Any monitoring of noise emissions from the **activity** must be undertaken when the **activity** is in operation.

N2	When required by the **administering authority**, noise monitoring must be undertaken in accordance with the associated monitoring requirements of *Table 2—Noise Limits*, and the results notified within 14 days to the **administering authority**. Monitoring must include: 1. $L_{Aeq, adj, T}$ 2. **Background** noise (Background) as $L_{A\ 90, adj, T}$ 3. $MaxL_{pA,T}$ 4. the level and frequency of occurrence of any impulsive or tonal noise 5. atmospheric conditions including wind speed and direction 6. effects due to extraneous factors such as traffic noise 7. location, date and time of recording.

<table>
<tr><td>N3</td><td>Blasting activities must not exceed the limits for peak particle velocity and air blast overpressure in Table 3—Blasting noise limits when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.

Table 3—Blasting noise limits
<table>
<tr><th>Blasting criteria</th><th>Blasting limits</th></tr>
<tr><td>Airblast overpressure</td><td>115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.</td></tr>
<tr><td>Ground vibration peak particle velocity</td><td>5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/second peak particle velocity at any time.</td></tr>
</table>
Associated monitoring requirements
1. Monitoring must be in accordance with the most recent editions of the administering authority's 'Noise and Vibration from Blasting' guideline and Noise Measurement Manual and any relevant Australian standard.
2. All monitoring devices must be correctly calibrated and maintained.</td></tr>
<tr><td>N4</td><td>Blasting must be carried out in accordance with the current edition of the administering authority's 'Noise and vibration from blasting guideline' and with Australian Standard 2187.</td></tr>
<tr><td>N5</td><td>Unless prior approval is obtained from the administering authority:
1. blasting is only permitted during the hours of 9am to 5pm Monday to Saturday.
2. blasting is not permitted at any time on Sundays or public holidays.</td></tr>
<tr><td>N6</td><td>When required by the administering authority, a blast monitoring program must be developed and implemented to monitor compliance with Table 3—Blasting noise limits at any sensitive place or commercial place.</td></tr>
<tr><td colspan="2">Agency interest: Land</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>L1</td><td>Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that:
1. suitable native species of vegetation for the location are established and sustained for earthen surfaces
2. potential for erosion is minimised
3. the quality of water, including seepage, released from the site does not cause environmental harm
4. potential for environmental nuisance caused by dust is minimised
5. the water quality of any residual water body does not have potential to cause environmental harm
6. the final landform is stable and protects public safety.</td></tr>
<tr><td>L2</td><td>Rehabilitation of disturbed areas required under condition L1, must take place progressively as works are staged and new areas of extraction are commenced.</td></tr>
</table>

Agency interest: Waste	
Condition number	**Condition**
WS1	All waste generated in carrying out the **activity** must be reused, recycled or removed to a facility that can lawfully accept the waste.
Agency interest: Offset	
Condition number	**Condition**
O1	The Offset Management Plan must be developed in accordance with the requirements of the Q*ueensland Biodiversity Offset Policy, 2011,* (Section A3: Specific requirements for offset area management plans) and with regard to the *Biodiversity Offset Strategy* (28 October, 2014) prepared for this activity and agreed upon with the Department within 4 months of the approval date of this Environmental Authority.
O2	Offsets must not be legally secured without an agreed Offset Management Plan.
O3	Residual impacts on State Significant Biodiversity Values within Lot 2 RP813599 and Lot 80 CP893560 are not permitted to occur until offsets have been legally secured.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Heritage Protection or its successor or predecessors.

Airblast overpressure is the energy transmitted from the blast site within the atmosphere in the form of pressure waves. As these waves pass a given position, the pressure of the air rises very rapidly then falls more slowly then returns to the ambient value after a number of oscillations. The pressure wave consists of both audible (noise) and inaudible (concussion) energy. The maximum excess pressure in this wave is known as the peak air overpressure, generally measured in decibels using the linear frequency-weighting.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

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

Blasting is the use of explosives to fracture:
• rock, coal and other minerals for later recovery; or
• structural components or other items to facilitate removal from a site or for reuse.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

$L_{Aeq\ adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

Max$L_{pA,T}$ means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

Measures has the broadest interpretation and includes plant, equipment, physical objects, bunding, containment systems, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

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

Prescribed contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

Release of a contaminant into the environment means to:
- deposit, discharge, emit or disturb the contaminant

- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- 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
- for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Substantial low frequency noise means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurement, with a predominant component within the frequency range 10 to 200Hz. It includes any noise emission likely to cause an overall sound pressure level at a sensitive place exceeding 55dB(Z).

24 hour storm event with an average recurrence interval of 1 in 5 years means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 5 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 5 years, identifies a rainfall intensity of 7.09mm/hour. The rainfall depth for this event is therefore 24 hour x 7.09mm/hour = 170.16mm.*

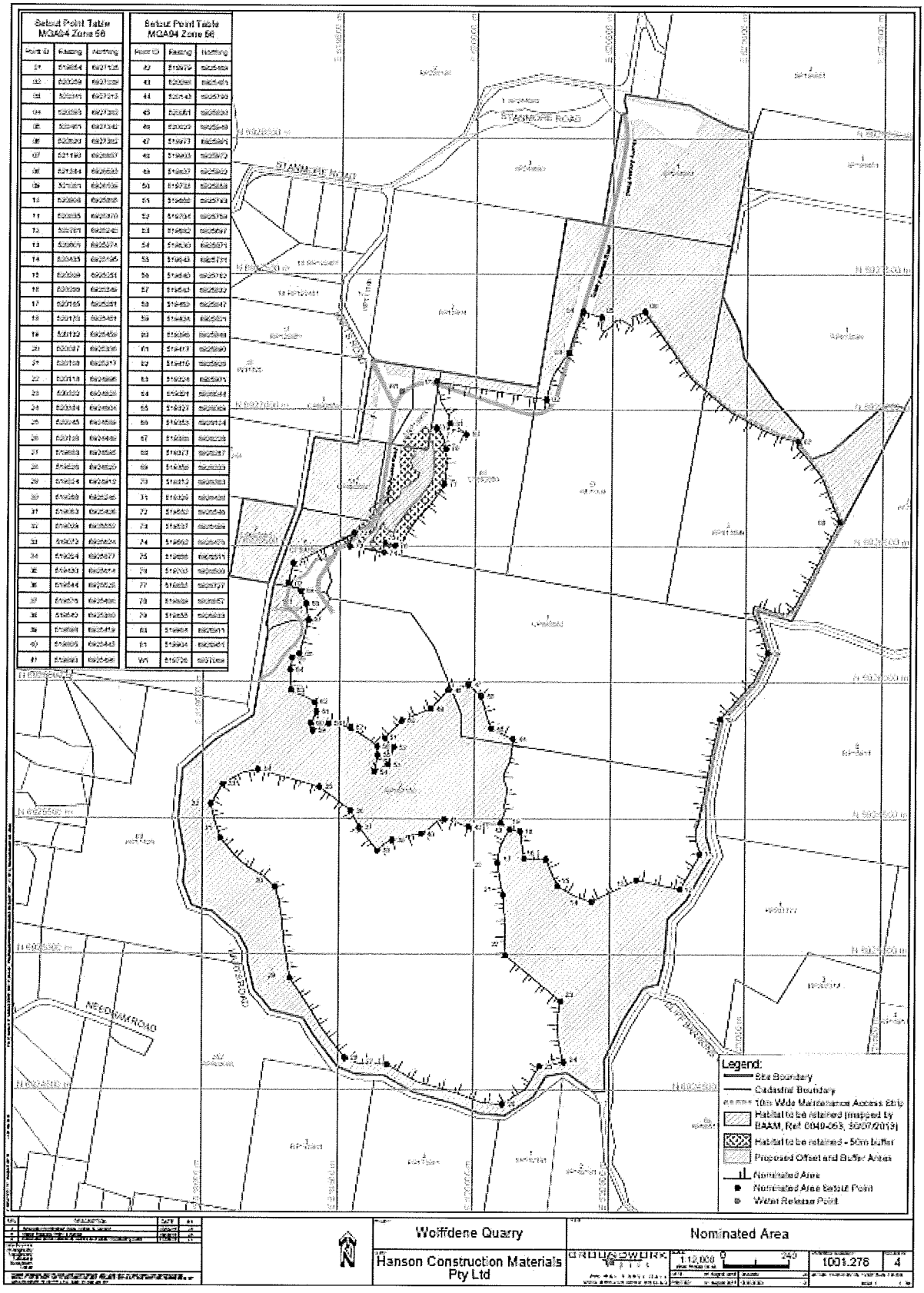
Vibration is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

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.

You means the holder of the environmental authority.

Attachments

Attachment 1 - Plan 1001.278 Revision 4 dated 31 August 2016



Attachment 2–Noise Criteria for Wolffdene Noise and Dust Impact Assessment, Wolffdene Quarry Proposed Expansion



END OF PERMIT