

Permit

Environmental Protection Act 1994

Environmental authority EA0002622

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

Environmental authority number: EA0002622

Environmental authority takes effect on the day the activities commence on Lot 1 Plan SP299361 (associated with MCU/2019/3624A) and you have given written notification to the administering authority of the occurrence.

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. The payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name(s)	Registered address
Quarry Products Pty. Ltd.	3-13A Munro Street HARLAXTON QLD 4350

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 19 - Metal forming - Hot forming a total of 10,000t or more of metal in a year	Lot 1 on SP299361 Lot 2 on RP844703 Lot 293 on CC1475
ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t	Lot 3 on SP299361 Lot 374 on SP272172 Lot 75 on RP17514 Lot 76 on RP17514
ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t	Lot 77 on RP17514 Lot 78 on RP17514 Lot 79 on RP17514 Lot 80 on RP17514 Lot 81 on RP17514 Lot 82 on RP17514 Lot 83 on RP17514 Lot 84 on RP17514 Lot 85 on RP17514

Environmentally relevant activity/activities	Location(s)
	Lot 86 on RP17514 Lot 87 on RP17514 Lot 88 on RP17514 Lot 918 on RP844703

Additional information for applicants

Environmentally relevant activities

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

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

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

Contaminated land

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

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

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

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

Take effect

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

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority - on the nominated day; or
- b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
- c) otherwise on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the original take effect date unless you apply to change the anniversary day. The payment of the annual fee will be due each year on this day.

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.



Signature

1 April 2022

Date

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

Enquiries:
GPO Box 2454, BRISBANE QLD 4001
Phone: (07) 3330 5715
Email: EnergyandExtractive@des.qld.gov.au

Privacy statement

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able to take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

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 Resources (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 Mine Safety and Health at <https://www.rshq.qld.gov.au/>, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. If you are unsure that you have the most current version of the environmental authority relating to this site please visit <https://apps.des.qld.gov.au/env-authorities/> to access all environmental authorities currently approved.

Conditions of environmental authority

Table of Contents:

Agency Interest – General 6

Agency Interest – Air 7

Agency Interest – Water 9

Agency Interest – Noise 10

Agency Interest – Land 11

Agency Interest – Waste 12

Definitions 13

Attachment 1 – Extent of Extraction Pit 16

Attachment 2 – Hot Metal Forming (Workshop) Location 17

Attachment 3 – Extraction Pit boundary GPS coordinates 18

Attachment 4 – Drawing 381.DRG.088..... 19

Attachment 5 – Drillhole Locations and GPS Points..... 20

Attachment 6 – Long-term Quarry Development Plan Cross Section 21

Agency Interest – General	
Condition Number	Condition
G1	Activities conducted under this environmental authority must be conducted in accordance with the following limitation: 1. The activities (extractive and screening activities) must not exceed 1,000,000t in a year. 2. Extraction must not exceed the depths displayed in Attachments 5 and 6 of this permit. 3. Extraction must not intercept groundwater or impact groundwater values. 4. All activities must be in accordance with the following site layout plans and GPS coordinates: a. Attachment 1 – Extent of Extraction Pit b. Attachment 2 – Hot Metal Forming Location c. Attachment 3 – Extraction Pit boundary GPS coordinates d. Attachment 4 – Drawing 381.DRG.088 e. Attachment 5 – Drillhole locations and GPS points f. Attachment 6 – Long-term Quarry Development Plan Cross Section
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	Within 10 business days following the initial notification unless a longer time is agreed to by the administering authority, a written report must be provided to the administering authority, including the following: 1. Full details of the breach; and 2. Any subsequent actions to prevent a recurrence of the breach; and 3. Outcomes of actions taken at the time to prevent or minimise environmental harm and/or environmental nuisance.
G5	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G6	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.
G7	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.
G8	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 <i>in situ</i> monitoring of pH.
G9	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.
G10	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 <i>Environmental Protection Act 1994</i>; and 6. ensure that reviews of environmental performance are undertaken at least annually.																	
G11	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system .																	
Agency Interest – Air																		
Condition Number	Condition																	
A1	Other than as permitted within this environmental authority, 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 .																	
A2	Dust deposition and particulate matter suspended in the atmosphere must not exceed the limits in <i>Table 1 – Dust Limits and Monitoring Requirements</i> at any sensitive place when monitored in accordance with the requirements of <i>Table 1 – Dust Limits and Monitoring Requirements</i>. Table 1 – Dust Limits and Monitoring Requirements <table><tr><th>Contaminant</th><th>Averaging Period</th><th>Limit</th><th>Relevant Australian Standard</th><th>Monitoring Frequency</th></tr><tr><td>Dust deposition</td><td>30 days $\pm$2 days</td><td>120 mg/m²/day</td><td>AS/NZS3580.10.1</td><td>Ongoing, monthly</td></tr><tr><td rowspan="2">PM₁₀</td><td>24 Hour Average</td><td>50 µg/m³</td><td rowspan="2">AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11</td><td rowspan="2">For a minimum of 1 month prior to and 12 months after the day of commencement of extractive activities on Lot 1 on SP299361.</td></tr><tr><td>Annual Average</td><td>25 µg/m³</td></tr></table> Note: 1. The required Dust Deposition monitoring must be undertaken at the monitoring locations outlined below: ML1 – 2-6 Munro Street, Harlaxton ML2 – 13 Prince Street Harlaxton ML5 – 13 Gregory St, Harlaxton ML9 – 25-29 Stuart Street, Harlaxton 2. The required PM₁₀ monitoring must be undertaken at the monitoring locations outlined below: ML 2 – 13 Prince Street, Harlaxton	Contaminant	Averaging Period	Limit	Relevant Australian Standard	Monitoring Frequency	Dust deposition	30 days $\pm$ 2 days	120 mg/m ² /day	AS/NZS3580.10.1	Ongoing, monthly	PM ₁₀	24 Hour Average	50 µg/m ³	AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11	For a minimum of 1 month prior to and 12 months after the day of commencement of extractive activities on Lot 1 on SP299361.	Annual Average	25 µg/m ³
Contaminant	Averaging Period	Limit	Relevant Australian Standard	Monitoring Frequency														
Dust deposition	30 days $\pm$ 2 days	120 mg/m ² /day	AS/NZS3580.10.1	Ongoing, monthly														
PM ₁₀	24 Hour Average	50 µg/m ³	AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11	For a minimum of 1 month prior to and 12 months after the day of commencement of extractive activities on Lot 1 on SP299361.														
	Annual Average	25 µg/m ³																

	3. Wind speed and wind direction must be measured at the PM ₁₀ monitoring location daily over the monitoring period in accordance with Australian Standard AS 2923: Ambient air - Guide for measurement of horizontal wind for air quality applications.																												
A3	If required by the department to investigate environmental nuisance arising from the activity, monitoring must be undertaken in accordance with the Australian Standards prescribed in condition A4 for the contaminants and at location(s) required by the department.																												
A4	If required to undertake monitoring in accordance with condition A3, dust and particulate matter suspended in the atmosphere must not exceed the limits identified in <i>Table 2 – Particulate Limits</i> at any sensitive place or commercial place and be monitored in accordance with the requirements of <i>Table 2 – Particulate Limits</i>. Table 2 – Particulate Limits <table><tr><th>Contaminant</th><th>Averaging Period</th><th>Limit</th><th>Relevant Australian Standard</th></tr><tr><td>Dust deposition</td><td>30 days ±2 days</td><td>120 mg/m²/day</td><td>AS/NZS3580.10.1</td></tr><tr><td>PM_{TSP}</td><td>Annual Average</td><td>90 µg/m³</td><td>AS/NZS3580.9.3</td></tr><tr><td rowspan="2">PM₁₀</td><td>24 Hour Average</td><td>50 µg/m³</td><td rowspan="2">AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11</td></tr><tr><td>Annual Average</td><td>25 µg/m³</td></tr><tr><td rowspan="2">PM_{2.5}</td><td>24 Hour Average</td><td>25 µg/m³</td><td rowspan="2">AS/NZS3580.9.10 or AS/NZS3580.9.12 or AS/NZS3580.9.13 or AS/NZS3580.9.14</td></tr><tr><td>Annual Average</td><td>8 µg/m³</td></tr><tr><td>Silica (PM_{2.5})</td><td>Annual Average</td><td>3 µg/m³</td><td>AS/NZS3580.9.10 or AS/NZS3580.9.14</td></tr></table> Note: 1. Australian Standard AS3580.10.1 – Methods for sampling and analysis of ambient air: Determination of particulate matter – deposited matter – gravimetric method. 2. Australian Standard AS3580.9.3 – Methods for sampling and analysis of ambient air: Determination of suspended particulate matter - total suspended particulate matter – High volume sampler gravimetric method. 3. Australian Standard AS3580.9.6 - Methods for sampling and analysis of ambient air: Determination of suspended particulate matter - PM₁₀ high volume sampler with size selective inlet – gravimetric method. 4. Australian standard AS3580.9.8 – Methods for sampling and analysis of ambient air: Determination of suspended particulate matter- PM₁₀ continuous direct mass method using tapered element oscillating microbalance analyser. 5. Australian Standard AS3580.9.9 – Methods for sampling and analysis of ambient air: Determination of suspended particulate matter- PM₁₀ low volume sampler – Gravimetric method. 6. Australian Standard AS3580.9.11 - Methods for sampling and analysis of ambient air Determination of suspended particulate matter - PM₁₀ beta attenuation monitors.	Contaminant	Averaging Period	Limit	Relevant Australian Standard	Dust deposition	30 days ±2 days	120 mg/m ² /day	AS/NZS3580.10.1	PM _{TSP}	Annual Average	90 µg/m ³	AS/NZS3580.9.3	PM ₁₀	24 Hour Average	50 µg/m ³	AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11	Annual Average	25 µg/m ³	PM _{2.5}	24 Hour Average	25 µg/m ³	AS/NZS3580.9.10 or AS/NZS3580.9.12 or AS/NZS3580.9.13 or AS/NZS3580.9.14	Annual Average	8 µg/m ³	Silica (PM _{2.5})	Annual Average	3 µg/m ³	AS/NZS3580.9.10 or AS/NZS3580.9.14
Contaminant	Averaging Period	Limit	Relevant Australian Standard																										
Dust deposition	30 days ±2 days	120 mg/m ² /day	AS/NZS3580.10.1																										
PM _{TSP}	Annual Average	90 µg/m ³	AS/NZS3580.9.3																										
PM ₁₀	24 Hour Average	50 µg/m ³	AS/NZS3580.9.6 or AS/NZS3580.9.8 or AS/NZS3580.9.9 or AS/NZS3580.9.11																										
	Annual Average	25 µg/m ³																											
PM _{2.5}	24 Hour Average	25 µg/m ³	AS/NZS3580.9.10 or AS/NZS3580.9.12 or AS/NZS3580.9.13 or AS/NZS3580.9.14																										
	Annual Average	8 µg/m ³																											
Silica (PM _{2.5})	Annual Average	3 µg/m ³	AS/NZS3580.9.10 or AS/NZS3580.9.14																										

	7. Australian Standard AS3580.9.10 – Methods for sampling and analysis of ambient air: Determination of Suspended particulate matter – PM_{2.5} low volume sampler- Gravimetric method. 8. Australian Standard AS3580.9.12 - Methods for sampling and analysis of ambient air Determination of suspended particulate matter – PM_{2.5} beta attenuation monitors. 9. Australian Standard AS3580.9.13 – Methods for sampling and analysis of ambient air: Determination of suspended particulate matter – PM_{2.5} continuous direct mass method using a tapered element oscillating microbalance monitor. 10. Australian Standard AS3580.9.14 - Methods for sampling and analysis of ambient air: Determination of suspended particulate matter - PM_{2.5} high volume sampler with size selective inlet- gravimetric method.																		
A5	Where monitoring at locations identified in condition A2 indicates that the limits detailed in condition A2 have been exceeded, within 14 days the matter must be investigated, and the following information must be reported to the administering authority: 1. the concentration of PM₁₀ and dust deposition rate recorded; 2. a description of meteorological conditions occurring at the time; and 3. dust abatement measures that have or will be implemented to ensure dust from the activity does not exceed the limits in condition A2.																		
A6	Additional information including production rate, operational hours of crushing and screening equipment and quantity of material processed must also be recorded during the monitoring period.																		
Agency Interest – Water																			
Condition Number	Condition																		
WT1	The only contaminants to be released to surface waters are settled treated stormwater runoff waters from areas of the site not likely to be contaminated with waste materials to surface waters in accordance with <i>Table 2—Surface water release limits</i> and the associated monitoring requirements. Table 2 — Surface water release limits <table><tr><th>Release Point</th><th>Quality Characteristic (units)</th><th>Limit</th><th>Limit Type</th><th>Minimum Monitoring Frequency</th></tr><tr><td>RP1</td><td>pH</td><td>6.5-9</td><td>Range</td><td rowspan="3">Within 2 hours of the commencement of any release from stormwater treatment systems and weekly thereafter until 24 hours after cessation of any release.</td></tr><tr><td>RP2</td><td>Total Suspended Solids</td><td>6 mg/L</td><td>Maximum</td></tr><tr><td></td><td>Electrical Conductivity</td><td>750 µS/cm</td><td>Maximum</td></tr></table> Associated monitoring requirements: 1. Monitoring location and release points/areas must be in accordance with Drawing 381.DRG.088 (Attachment 4 of this permit). 2. Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Science Monitoring and Sampling Manual. 3. Samples must be taken using representative samples. 4. 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. 5. All monitoring devices must be correctly calibrated and maintained.	Release Point	Quality Characteristic (units)	Limit	Limit Type	Minimum Monitoring Frequency	RP1	pH	6.5-9	Range	Within 2 hours of the commencement of any release from stormwater treatment systems and weekly thereafter until 24 hours after cessation of any release.	RP2	Total Suspended Solids	6 mg/L	Maximum		Electrical Conductivity	750 µS/cm	Maximum
Release Point	Quality Characteristic (units)	Limit	Limit Type	Minimum Monitoring Frequency															
RP1	pH	6.5-9	Range	Within 2 hours of the commencement of any release from stormwater treatment systems and weekly thereafter until 24 hours after cessation of any release.															
RP2	Total Suspended Solids	6 mg/L	Maximum																
	Electrical Conductivity	750 µS/cm	Maximum																

WT2	Monitoring of contaminant releases to surface waters must be undertaken in accordance with condition WT1 and records of the results must be kept.																																						
WT3	In addition to condition WT1, the release to surface 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. 3. result in visible scouring or erosion or pooling or vegetation die-off.																																						
WT4	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	Other than permitted by condition N2, noise generated by the activity must not cause environmental nuisance to any sensitive place .																																						
N2	Noise from the activity is not considered an environmental nuisance if the levels identified in <i>Table 3 - Noise limits</i> are not exceeded, when measured in accordance with associated monitoring requirements. Table 3—Noise limits <table><tr><th rowspan="3">Noise level measured in dB(A)</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sunday and Public Holidays</th></tr><tr><td>7am – 6pm</td><td>6pm – 10pm</td><td>10pm – 7am</td><td>9am – 6pm</td><td>6pm – 10pm</td><td>10pm – 9am</td></tr><tr><th colspan="6">Noise measured at the nearest sensitive place</th></tr><tr><td>L_{Aeq}, adj,1 hr</td><td>54</td><td>40</td><td>35</td><td>45</td><td>40</td><td>35</td></tr><tr><td>L_{Amax}, adj,15 min</td><td>N/A</td><td>49</td><td>49</td><td>N/A</td><td>49</td><td>49</td></tr></table> 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.						Noise level measured in dB(A)	Monday to Saturday			Sunday and Public Holidays			7am – 6pm	6pm – 10pm	10pm – 7am	9am – 6pm	6pm – 10pm	10pm – 9am	Noise measured at the nearest sensitive place						L _{Aeq} , adj,1 hr	54	40	35	45	40	35	L _{Amax} , adj,15 min	N/A	49	49	N/A	49	49
Noise level measured in dB(A)	Monday to Saturday			Sunday and Public Holidays																																			
	7am – 6pm	6pm – 10pm	10pm – 7am	9am – 6pm	6pm – 10pm	10pm – 9am																																	
	Noise measured at the nearest sensitive place																																						
L _{Aeq} , adj,1 hr	54	40	35	45	40	35																																	
L _{Amax} , adj,15 min	N/A	49	49	N/A	49	49																																	
N3	When required by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of <i>Table 3—Noise Limits</i>, 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. L_{Amax}, adj,15 min 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.																																						
N4	Blasting activities must not exceed the limits for peak particle velocity and air blast overpressure in <i>Table 4—Blasting noise limits</i> when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.																																						

	Table 4—Blasting noise limits		
	Blasting criteria	Blasting limits	Monitoring Frequency
	Airblast overpressure	115 dB (Linear) Peak for more than 1 blast out of any 5 consecutive blasts and not greater than 120 dB (Linear) Peak at any one time.	Each blast
	Ground vibration peak particle velocity	For vibrations more than 35 hertz, peak particle velocity of 25 millimetres per second.	
		For vibrations less than 35 hertz, peak particle velocity of 10 millimetres per second.	
	Associated monitoring requirements		
	- Monitoring must be in accordance with the most recent editions of the administering authority's '<i>Noise and Vibration from Blasting</i>' guideline and <i>Noise Measurement Manual</i> and any relevant Australian standard. - All monitoring devices must be correctly calibrated and maintained. - Monitoring locations must be on Lot 58 on Plan RP17732 and adjacent to Lot 73 on Plan RP17514 or alternate locations agreed to by the administering authority.		
N5	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.		
N6	When required by the administering authority, a blast monitoring program must be developed and implemented to monitor compliance with <i>Table 4—Blasting noise limits</i> at any sensitive place .		
N7	Unless prior approval is obtained from the administering authority; blasting is only permitted during the hours of 9am to 3pm Monday to Friday, and from 9am to 1pm on Saturdays. Blasting is not permitted at any time on Sundays or public holidays		
N8	Drilling is only permitted during the hours of 7am to 4pm Monday to Friday.		
Agency Interest – Land			
Condition Number	Condition		
L1	Significant residual impacts to prescribed environmental matters are not authorised under this environmental authority or the <i>Environmental Offsets Act 2014</i> .		
L2	Other than as permitted within this environmental authority, contaminants must not be released to land .		
L3	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: - suitable native species of vegetation for the location are established and sustained for earthen surfaces; - potential for erosion is minimised; - the quality of water released from the site, including seepage, does not cause environmental harm; - potential for environmental nuisance caused by dust is minimised; - the water quality of any residual water body does not have potential to cause environmental harm; and - the final landform is stable and protects public safety.		
L4	Rehabilitation of disturbed areas required under condition L3, must take place progressively as works are staged and new extraction areas are commenced.		

L5	The release of treated stormwater to land must be in accordance with the requirements of Condition WT1, <i>Table 2 — Surface water release limits</i> .
L6	The release of treated stormwater to land 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. 3. result in visible scouring or erosion or pooling or vegetation die-off.
Agency Interest — Waste	
Condition Number	Condition
W1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept 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.

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

Administering authority means the Department of Environment and Science or its 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.

Environmental harm has the meaning in section 14 of the *Environmental Protection Act 1994* and means any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.

Environmental harm may be caused by an activity—

- (a) whether the harm is a direct or indirect result of the activity; or
- (b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

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

$L_{Aeq\ adj,T}$ 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.

Land means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes **tidal land**).

$L_{A,max,15}$ 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 environmental matters has the meaning in section 10 of the *Environmental Offsets Act 2014*, limited to the matters of State environmental significant listed in schedule 2 of the Environmental Offsets Regulation 2014.

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

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.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to **land**, groundwater, or surface **waters**.

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

- 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 /992 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 2019.

Significant residual impact has the meaning in section 8 *Environmental Offsets Act 2014*.

Stable has the meaning in Schedule 8 of the *Environmental Protection Regulation 2019* and, for a site, means the rehabilitation and restoration of the site is enduring or permanent so that the site is unlikely to collapse, erode or subside.

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).

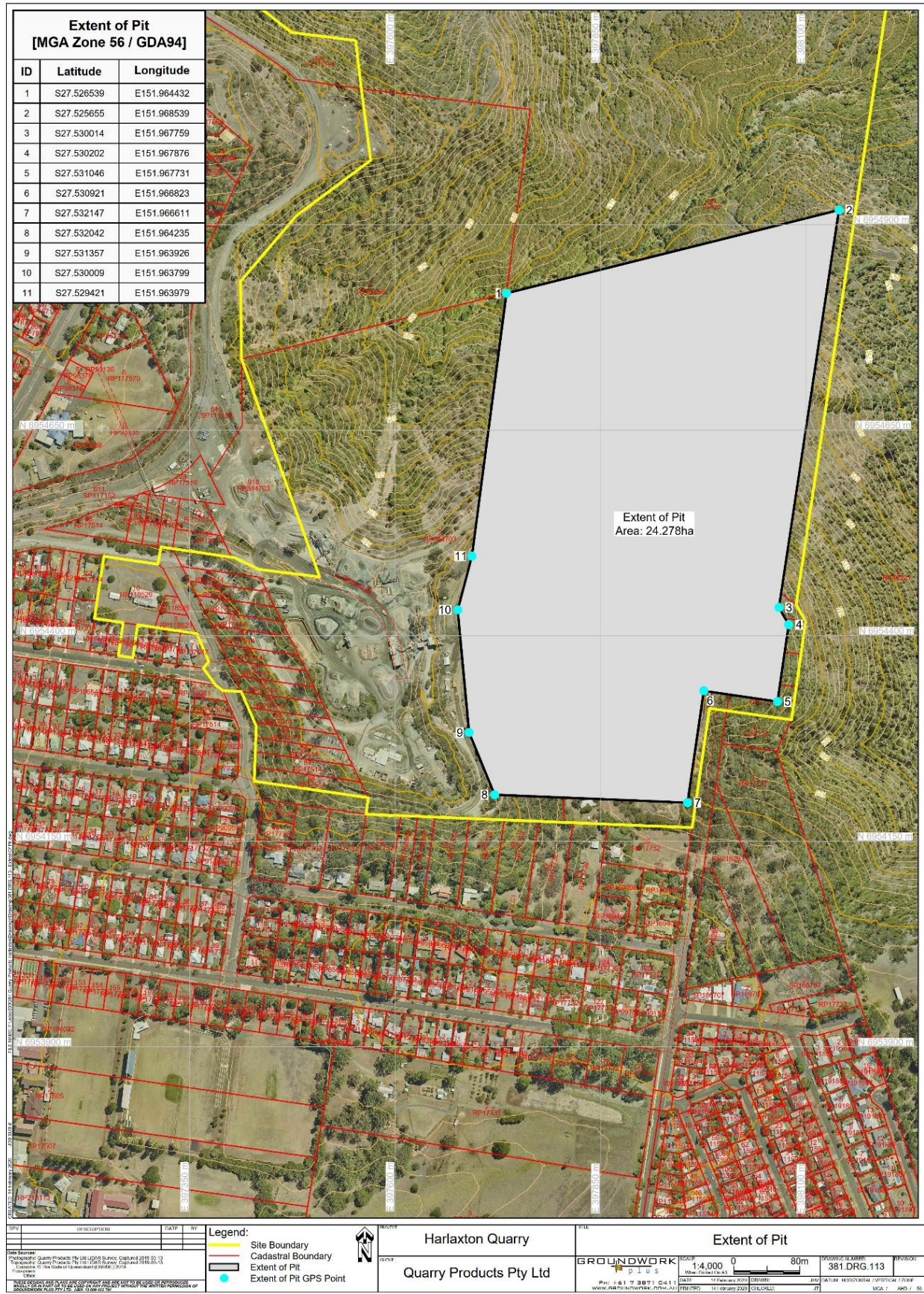
24 hour storm event with an average recurrence interval of 1 in 5 years means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 5 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average 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

Attachment 1 – Extent of Extraction Pit



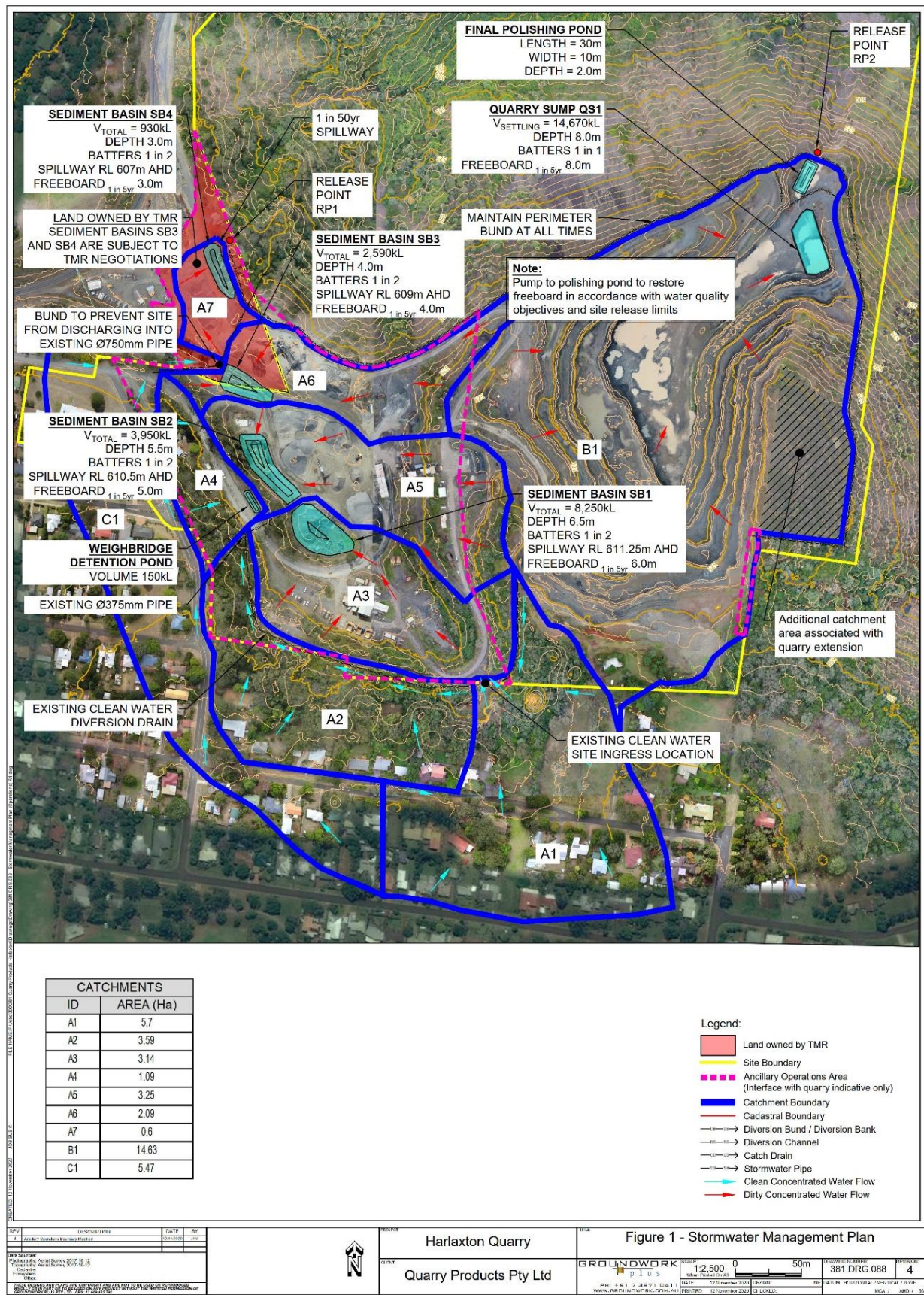
Attachment 2 – Hot Metal Forming (Workshop) Location



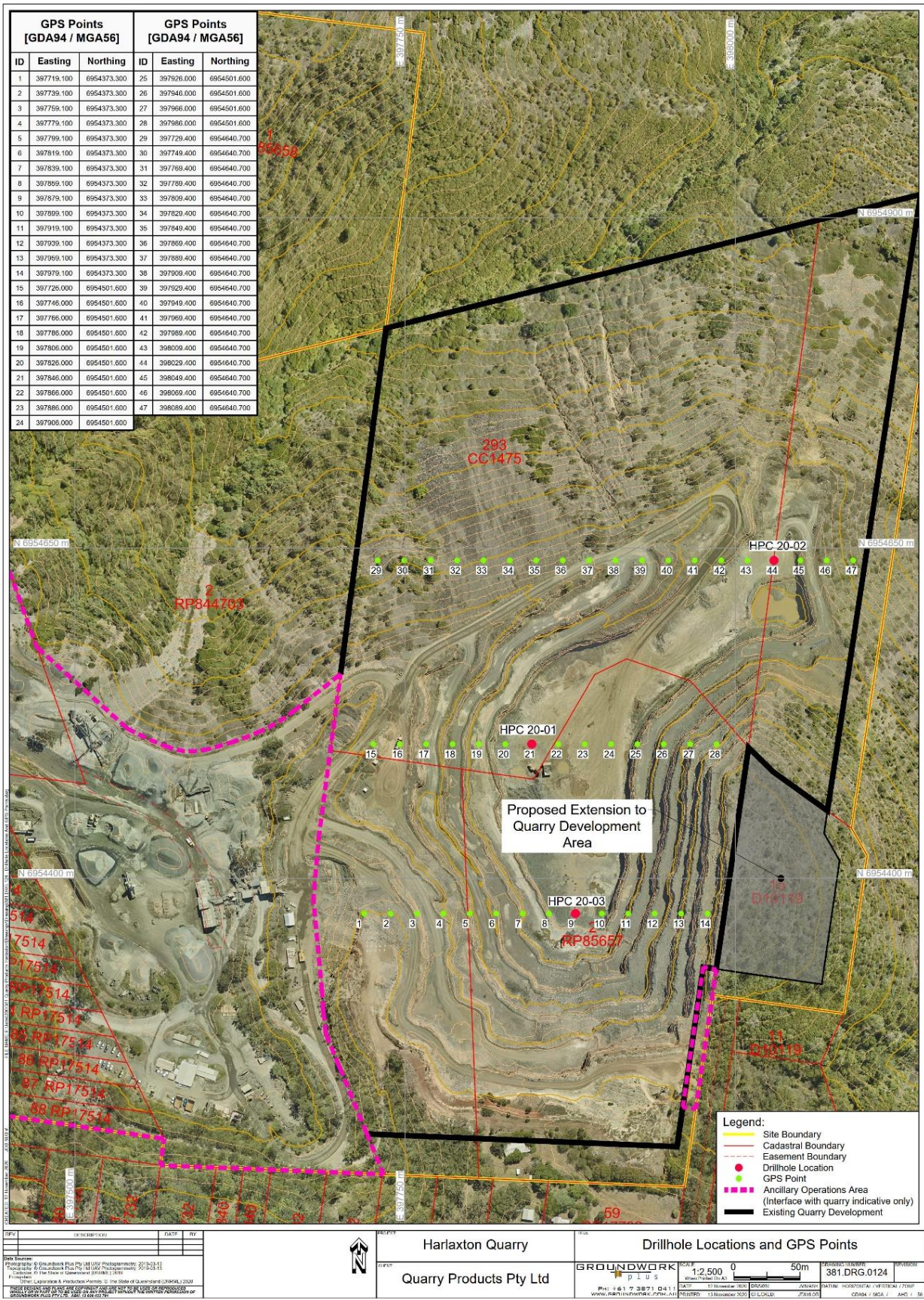
Attachment 3 – Extraction Pit boundary GPS coordinates

Extent of Pit [MGA Zone 56 / GDA94]		
ID	Latitude	Longitude
1	S27.526539	E151.964432
2	S27.525655	E151.968539
3	S27.530014	E151.967759
4	S27.530202	E151.967876
5	S27.531046	E151.967731
6	S27.530921	E151.966823
7	S27.532147	E151.966611
8	S27.532042	E151.964235
9	S27.531357	E151.963926
10	S27.530009	E151.963799
11	S27.529421	E151.963979

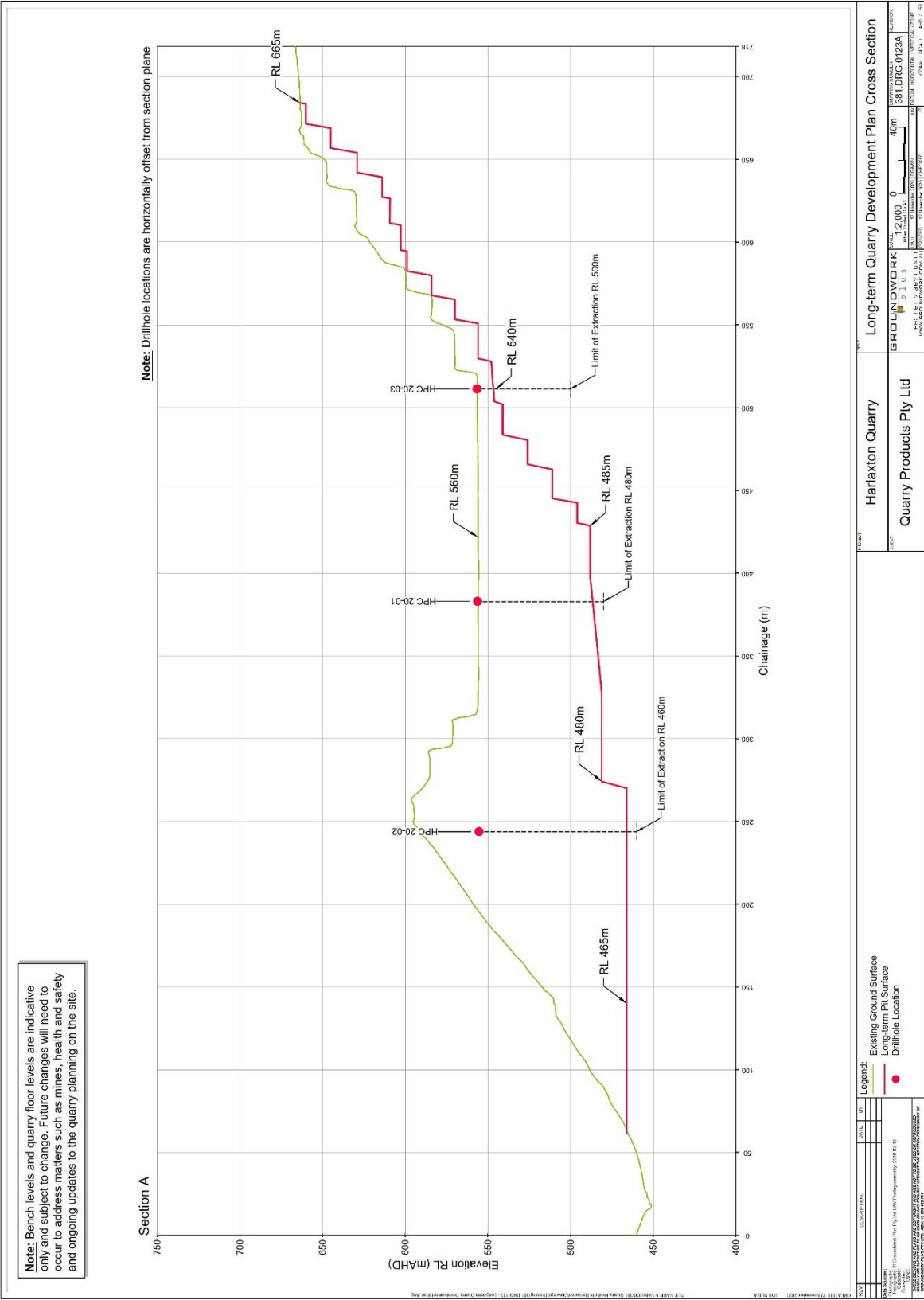
Attachment 4 – Drawing 381.DRG.088



Attachment 5 - Drillhole Locations and GPS Points



Attachment 6 - Long-term Quarry Development Plan Cross Section



END OF ENVIRONMENTAL AUTHORITY