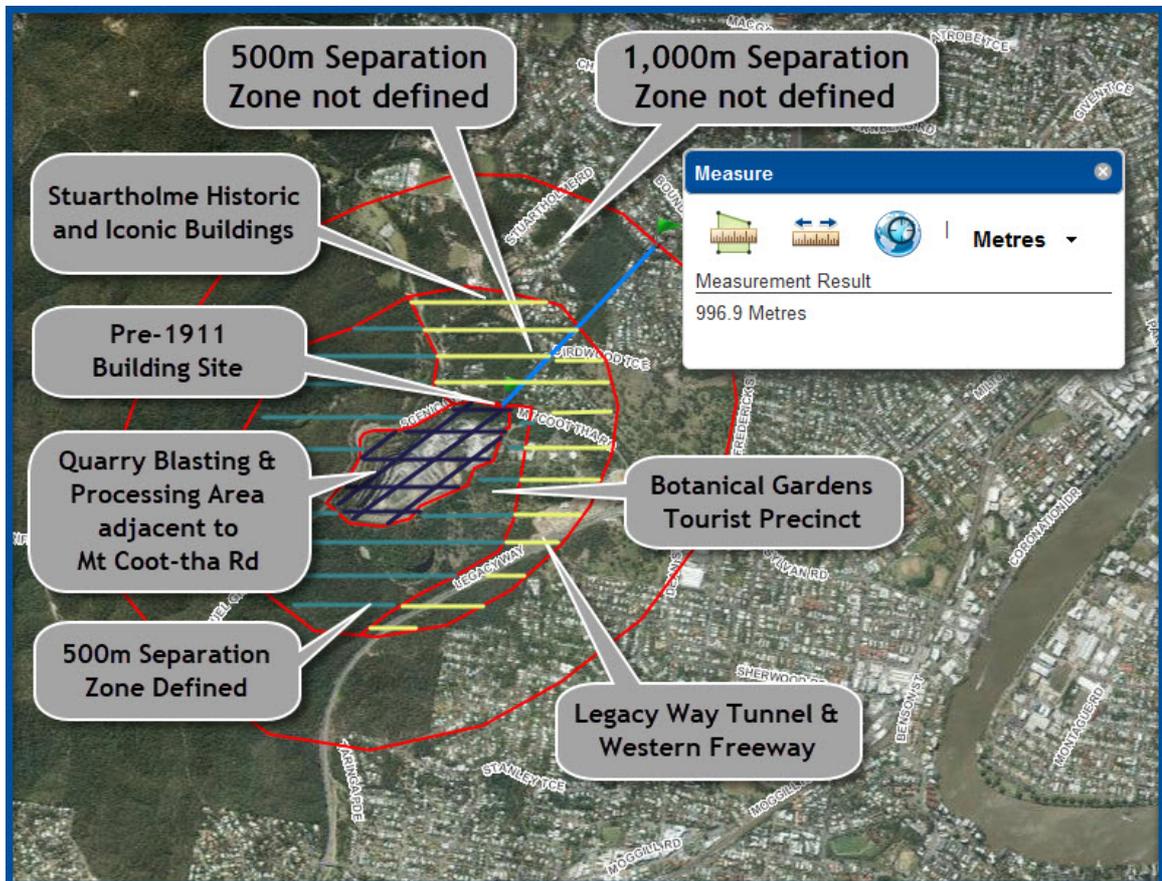


The Mount Coot-tha Quarry History, Present Status and the Future Way

A Proposal to the Stakeholders



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001	2.11.2017	Local Residents	final draft for resident comments
002	13.11.17	Stakeholders	requesting a response

Executive Summary

1. The Mount Coot-tha Quarry (MCQ), owned and operated by the Brisbane City Council (BCC), is a **Key Resource Area** (KRA 42) with almost nil Separation Distance between the defined Resource/Processing Area and Local Residents.
2. About 2277 people live within 1000 metres of the quarry, the officially recommended **Separation Distance**. Of these, about 337 people live within 500 metres and 83 within 100 metres of the approved **Transport Route** used by quarry trucks. The shortest distance from the MCQ to the closest residential property is only 36 metres and a pre-1911 historic home is located within 65 metres.
3. Successive BCC administrations have emphasized that the quarry provides an economic benefit to the City and Region and that it will continue to be operated along current lines, thereby overriding the environmental impact-related objections of Local Residents. The Local Residents consider that the **financial gains** of the quarry products to the City ought to be carefully balanced against the **costs of continuing impacts** of noise, blasting vibration, dust, traffic and visual amenity on the liveability of their homes.
4. The Mount Coot-tha quarry does not comply with current standards because it has a '**legacy approval**' - a licence to operate which dates back to 2000, based on an even earlier 1995 development application. Other Brisbane quarries at Ferny Grove (Hanson) and Mt Gravatt (BCC) and the BCC's quarry at Bracalba, licensed in 2013, 2007 and 2015 respectively, operate for the most part under current standards and model conditions.
5. Announcements about proposed quarry closing dates are usually made informally and there is a history of the likely closing date being regularly extended. BCC voted at an extraordinary Council meeting on 18 December 2002 to extend quarry life from 2015 to 2032. In view of the ongoing impacts, and in recognition that the quarry resource is finite, Local Residents seek to be consulted and have some certainty about the likely closure process, timeframe and ultimate incorporation of the quarry into the Mt Coot-tha Botanic Gardens.
6. The standards of design and operation of quarries have improved significantly over the past few decades in response to improved technologies and higher community expectations. DEHP, the regulatory agency, has adjusted its model conditions of operation (ERA16, 2013-2017) to reflect these changes. BCC has refused a request by DEHP to comply with these standards in regard to the MCQ.
7. BCC itself expects (Brisbane City Plan 2000 and 2014) quarry development will '*minimise potential adverse impacts on sensitive receiving environments and amenity to acceptable levels*'. Local Residents expect that Council, as a model quarry operator, will work along 'best practice' lines, upgrading equipment and standards as these become available in the industry.

8. Local Residents would prefer that BCC act in an open and transparent manner in respect of operational 'best practice', acknowledging our concerns, and informing and consulting with their stakeholders. Local Residents want to improve on the current adversarial situation, lack of meaningful consultation, resolve our differences and have stakeholders work together to find a better way forward.

9. In summary, the concerns of the Local Residents include the following:

1. There is no effective separation area between the resource/processing area and nearby sensitive uses (that is, residential and the like) and therefore, no buffer to quarry impacts;
2. Approximately 2277 residents live within 1000 metres of the quarry and 337 within a 500-metre radius. A further 83 residents live within 100 metres of the defined transport route (the route used by quarry rock trucks);
3. The closest residential property to the resource/processing area is approximately 35 metres and 68 metres from a pre-1911 historic house.
4. Despite the proximity of the Local Residents, the MCQ has the highest licensed blasting noise and ground vibration limits of any Brisbane quarry (see comparison in **Table 1** below);
5. MCQ blasting noise and ground vibration limits do not comply with current standards as set out in the State's ERA16 (2013-2017) and BCC's Planning Schemes (2000 and 2014) as well as the standards of the Australian and New Zealand Environment Council (1990);
6. MCQ does not have conditioned hours of operation;
7. MCQ does not have conditioned locations for blast monitoring, ignoring nearby Local Residents, listed historic buildings and the Botanic Gardens; and
8. While the BCC Vision for Mount Coot-tha 2030 includes many admirable objectives, there is a resounding silence on the matter of the MCQ's future.

10. This proposal is being sent to all Stakeholders for their consideration. The Local Residents request that the Stakeholders respond and approve the establishment of and their active participation in an Advisory Committee to resolve the above list of Quarry impact issues.

The most certain test by which we judge whether a country is really free is the amount of security enjoyed by minorities.

Lord Acton, *The History of Freedom in Antiquity*, 1877.

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1.0 Introduction

1.1 The relevant stakeholders for operations of the MCQ include the Local Residents, Brisbane City Council (BCC), The Management and Staff of the Quarry (MCQ), The Department of Environment and Heritage Protection (DEHP), The Department of Infrastructure, Local Government and Planning (DOLGP) and the Department of Natural Resources and Mines (DNRM). All stakeholders will receive a copy of this document.

1.2 The two main objectives of this document are (a) to describe the history and present operational status of the MCQ and its impacts on the Local Residents and (b) to provide a suggested future way for its operation and ultimate closure.

1.3 The document addresses the historical and present concerns by Local Residents about issues of noise, dust, blast vibration and visual impact by the quarry. The document also addresses the history of concerns and complaints by Local Residents and the responses by BCC as well as the data received from BCC and DEHP via the 'Right To Information' process.

1.4 The document is provided in a report format, citing as many sources and authorities as possible. Original data provided by BCC, DEHP and their analysis by Local Resident Engineer, Philip Best (PB), on noise and blast vibration measurements are provided in **APPENDIX I**, with conclusions being summarised in the body of the document.

1.5 **Dedication** This document is dedicated to memory of the late John Higgins JP, community advocate for Local Residents and liaison person with the MCQ. John carried out his duties diligently over more than ten years and he was devoted to achieving fair treatment and outcomes for Local Residents.

1.6 The writers acknowledge all those who have provided assistance and/or information for the compilation of this document, including the following:

Mr Andrew Connor, DEHP
Mr Matt Karle, DEHP
Mr Martin Land, DNRM
Mr Lionel Smith, DNRM
Ms Mica Julien, BCC

2.0 Brief History of Quarry Operations

2.1 The Mount Coot-tha quarry (MCQ), owned and operated by the Brisbane City Council (BCC), has been operating since the late 19th Century. As such, it has been in existence prior to the development of most of the nearby residential properties and to their occupation by the current local residents. Some adjacent properties have been developed more recently.

2.2 Successive BCC administrations, at least since 1988, have consistently emphasized that the quarry provides an economic benefit to the City and Region and that it will continue to be operated on the current basis, thereby overriding and dismissing the environmental objections of Local Residents.

2.3 The more than 2200 affected Local Residents consider that the financial gains to the City ought to be carefully balanced against the continuing impacts of noise, blasting vibration, dust, traffic and visual amenity on the liveability of their homes.

2.4 Announcements about proposed MCQ closure dates have often been informal, and the closing dates have a history of having been extended, sometimes well into the future, or they have been couched in vague terms by BCC (adding qualifiers to dates, such as 'there are currently no plans to extend', 'approximately', or 'around'). Current estimated dates for closure vary from 'around 2025' (Brisbane City Plan 2014) to 'approximately 2030' (Brisbane City Plan 2000), even though BCC voted in 2012 to extend quarry life to 2032. The reader is referred to the text of a letter written in December 2002 by Councillor Judy Magub to the Higgins family, summarising this ongoing situation (**APPENDIX II**).

2.5 In view of the ongoing impacts, and in recognition that the quarry resource is finite, Local Residents seek to be consulted and to gain some greater degree of certainty about the likely closure process and timeframe. Some Local Residents have written brief

personal statements about quarry impacts and these are provided in APPENDIX III below.

2.6 The late John Higgins had a long period of involvement as a Local Residents' contact-person with the MCQ. This was especially the case throughout the period of the Inner City Bypass construction between 1998 and 2002 when the MCQ times of operation and rock output were significantly increased in order to supply the aggregate for that project. In 2012, John assigned the advocate and secretarial duties to Philip Best.

2.7 Subsequent to that period, several improvements were made to operations, particularly with respect to the amelioration of dust and traffic impacts on Local Residents . In addition, some Local Residents began to receive email notifications for planned blasting operations. Local Resident requests for text message notifications were refused.

2.8 More recent expressions of concern by Local Residents have focussed on the issues of noise and blasting vibrations from the MCQ. The uncertainties around the future planning for closure of the quarry and its eventual rehabilitation and incorporation into the Botanical Gardens are also a matter of current concern to Local Residents.

3.0 The DILGP State Planning Policy 4.2016 and Mt Cooth-tha Quarry as KRA 42

3.1 Key Resource Areas (KRAs) are '*locations across Queensland that are identified as containing important extractive resources of state or regional significance which the state considers worthy of protection*' (DILGP State Planning Policy Mining and Extractive Resources April 2016) (DILGP SPP). This SPP (2016) was developed from the discontinued version SPP 2 of 2007, the first relevant State Planning Policy.

3.2 There are currently 157 listed KRAs in Queensland, of which the MCQ is listed as KRA 42. A map of KRA 42 is illustrated in **Figure 1** below. KRAs comprise four components, being (a) Resource/processing area, (b) Separation area, (c) Transport route and (d) Transport route separation area.

3.3 It can be seen in **Figure 1** that KRA42 has nil or very little Separation area to part of the Mount Coot-tha Road frontage and further, there is no defined Transport route shown on this map. The latter was more recently illustrated in the Brisbane City Plan 2014 'Extractive Resources Overlay Map'.

3.5 The DILGP SPP defines the Separation area as '*the area surrounding the resource/processing area that is required in order to **maintain separation from people who may be affected by residual impacts** such as noise, dust and ground vibrations of existing or future extractive operations within the resource/processing area*'. (bold text by writers) The separation area is provided for the purpose of buffering residents against quarry operational impacts.

3.6 The DILGP SPP provides guidance on '*determining appropriate separation distances*'. Where the extracting or processing involves blasting and/or crushing rock, **the minimum separation distance is 1000 metres**. (bold text by writers) The guidance goes on to state that '*these are indicative distances only*' and '*may be modified to reflect local circumstances where known*'. There is no explanation of what is meant by 'local circumstances'. These may include intervening ridge topography.

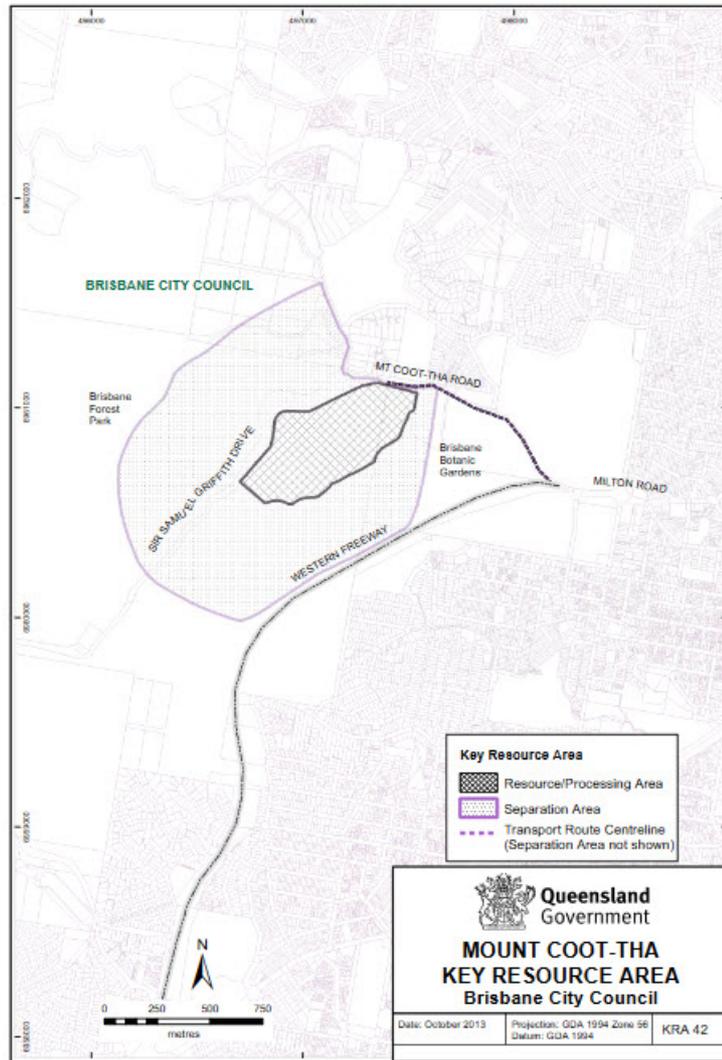
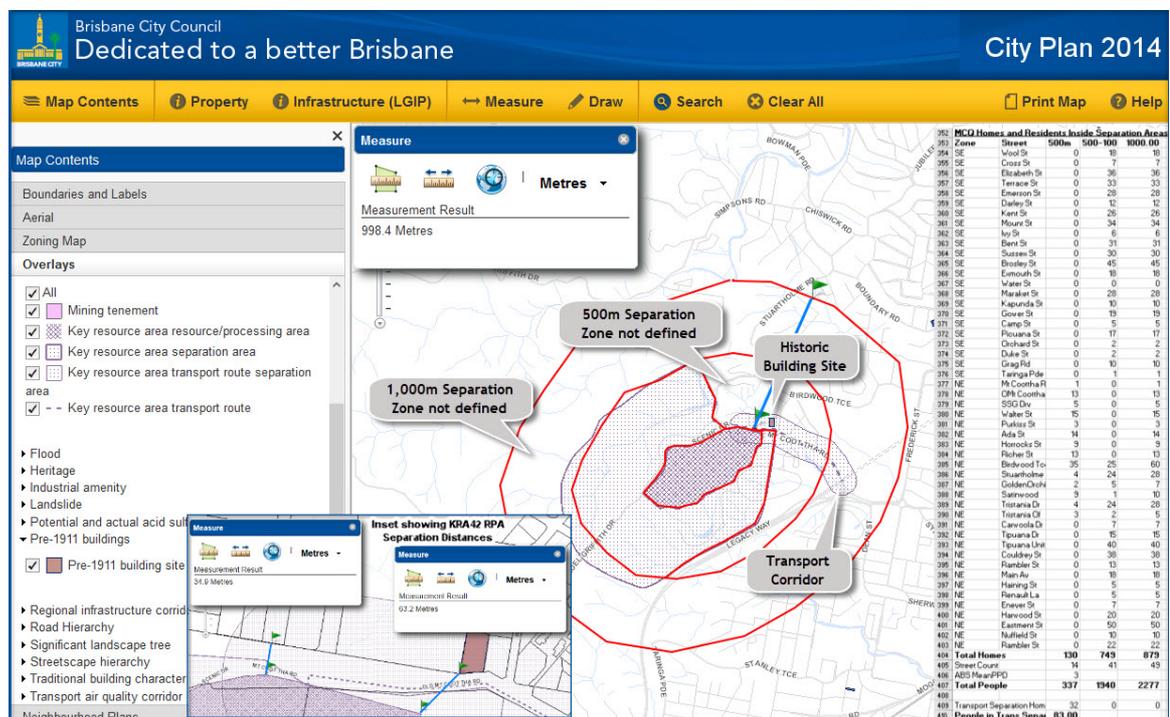


Figure 1 Mount Coot-tha Key Resource Area KRA 42

3.7 A brief review of the 157 KRAs shows that the large majority of quarries throughout Queensland have mapped separation distances of 1000 metres. There are three KRAs in Brisbane, being Mt Coot-tha KRA42, Ferny Grove KRA 39 and Kholo Creek KRA41. Ferny Grove is operated by Hanson Quarries and includes approximately 100 to 500 metre separation distances to neighbouring low-density residential areas, with intervening ridge topography. Kholo Creek is in the planning stage only but has designed separation distances of approximately 1000 metres to rural land, 500 metres to large-lot residential land and between 200 and 850 metres to low density residential areas along different boundaries.

3.8 The MCQ is **unique in that there is nil or very little separation distance** provided to low density residential areas to the northeast and northwest, across Mount Coot-tha Road. There is no effective buffer to the quarry impacts.

3.9 A survey of residential dwellings within 1000 and 500 metres of the MCQ resource/processing area is illustrated in **Figure 2**. When the numbers of dwellings (households) are multiplied by the ABS mean number of people per household of 2.59 (www.abs.gov.au), it is estimated that there are **2277 people living within 1000 metres and 337 people within 500 metres of the MCQ**.



able to approve recent subdivisions of land at Old Mt Coot-tha Road and Birdwood Terrace, thereby bringing 20 new allotments (and thus, an estimated 52 people) to live within 500 metres of the quarry.

3.12 It appears that the declaration of MCQ KRA42 has failed to properly provide for a minimum separation distance as a buffer to quarry operations or the transport corridor. As a result of this historical circumstance, the 2277 Local Residents have been and are continuing to be exposed to on-going noise, dust, vibration and visual impacts. **No separation distance means un-buffered impacts.** The 337 people living within 500 metres are those who are more severely impacted. Those 83 people who are also within the transport corridor separation distance are the most severely affected.

3.13 This circumstance of environmental impacts clearly demonstrates that the Local Residents ought to have the status of acknowledged stakeholders in the operation and future of the quarry and we request that BCC recognises this fact..

4.0 Regulation of MCQ - Development Permit & Licence Conditions

4.1 The presence of a KRA designation does not confer the right to undertake extractive activities and present legislation requires that prospective operators make a Development Application to the State, for which the DEHP is the designated Assessment Manager and Administering Authority.

4.2 Following commencement of the Environment Protection Act (EPA) 1994, a Development Application for an Extraction and Screening Licence was made by BCC in October 1995, followed by a supporting document titled 'Integrated Environment Management System', dated January 1996. The Licence SR41 for ERAs 20(c) and 22(c) - *extraction and screening of rock products* - was granted by the then EPA on 22nd December 2000. This Licence listed Conditions of Approval, including, *inter alia*, Schedule F - Noise, Schedule H - Self Monitoring and Reporting and Schedule I - Approved Documents.

4.3 Subsequent legislative changes resulted in BCC making a second Development Application in 2010, although the same documents were used as for the first application, dated 1995 and 1996. This second application was given approval by DEHP on 8th December 2010, which listed several Conditions of operation, including the same Schedules as those listed in the original 2000 approval.

4.4 In summary, a second Development Permit for MCQ (IPDE00920708) was granted by DEHP in 2010, based on 15-year-old BCC 1995 and 1996 application documents and identical Conditions of Approval were granted by DEHP. The Registration Certificate was subsequently provided on 5th September 2012 for ERA16 - *extracting and screening rock products*. This permit is described by Local Residents as a '**legacy approval**' that falls short of complying with the current ERA16 (2013-17) Model Conditions of Operation for quarries.

4.5 **Schedule F** of the Development Permit addresses the relevant issues of noise and blasting vibration. To summarise, the 2000 and 2010 permits for blasting noise

require that 90% of blasts should not exceed an over-pressure level of 125dB(A) (linear peak) and that the remaining 10% should not exceed 130dB(A) (linear peak), when measured at any noise sensitive place (which includes residential uses).

4.6 These noise limits, when viewed against comparable ERA16 (2013-2017) limits of 115dB(A) for 9 out of 10 consecutive blasts (90%) and not greater than 120dB(A) at any time, indicate a difference of **10 dB(A) less than the MCQ limits**. As decibels are measured in a logarithmic rather than linear scale, the 10dB(A) difference can mean a noise energy level difference of ten times. However, the perception of relative loudness by people is likely to be of the order of two times (www.NoiseHelp.com). It is concluded that the **MCQ blasts are licensed to be twice as loud as those from quarries that comply with ERA16**.

4.7 Further, **Schedule F** of the MCQ Development Permit requires that: *'Ground vibration (peak particle velocity) caused by blasting must not exceed ... 10mm/sec for more than 10% of the total number of blasts carried out over any 12-month period, when measured at any point within one metre of any residential boundary or in or on any other noise sensitive place'*. (underlining by writers)

4.8 These blasting vibration limits compare with the ERA16 limits of 5mm/sec for 9 out of 10 consecutive blasts and not more than 10mm/sec at any time. The MCQ condition does **not** specify limits for 90% of blasts but it can be deduced from **Schedule F** that these must be less than 10mm/sec, or **twice the limit for ERA16 (2013-2017) - compliant quarries. For the remaining 10% of blasts, the level of MCQ blasting appears to be unrestricted**. The latter circumstance is of serious concern to Local Residents and no response has been received to Local Resident requests for estimates of up-coming blasting strength.

4.9 The MCQ conditions of approval did not specify any numbers or locations of monitoring points, as was done for other Brisbane quarries. Up to November 2011, MCQ monitored blasting noise and vibration at two points selected by them, in Sussex Street and Richer Street. These two points are located approximately 602 metres across Legacy Way and 324 metres respectively, measured from Brisbane City Plan 2014 maps, from the resource/processing area of the quarry.

4.10 It was not until persistent requests were made by Local Residents that MCQ agreed to monitor blasting noise and vibration at one of the closest sensitive uses to the quarry, being residential households at 3 Sir Samuel Griffith Drive and Old Mt Coot-tha Road - an approximate distance of 53 metres from the resource/processing area. As the level of sound, moving away from a source, obeys the inverse square law, it is clear that noise and blasting vibration impacts at 50 metres could be four times as high as those at 100 metres and 16 times those at 200 metres. Again, this fact is a matter of great concern to Local Residents.

4.11 Monitoring data between 21.11.2011 and 23.3.2017 at the three stations were obtained through an RTI application to both DEHP and BCC (see correspondence list in references below). These data were re-formatted into an Excel spreadsheet by PB and are provided in **APPENDIX I** below. **Table 1** below summarises the variation in blast levels within and between stations and the number of blasts that exceeded the ERA16 (2013-2017) maximum level of 5mm/sec.

Monitoring Station/Measurement	Sussex Street	Richer Street	159 Mt Coot-tha Road
Approximate Distance from Resource/Processing Area	602 metres	324 metres	53 metres
No. measurements	99	43	120
Highest PPV	4.31mm/sec	3.30 mm/sec	11.5 mm/sec
Lowest PPV	0.77 mm/sec	0.66 mm/sec	0.93 mm/sec
No. >5mm/sec	0	0	44 (37%)
No. >10mm/sec	0	0	3 (2.5%)
Ratio 150 Mt Coot-tha Road/ Sussex St			3.35
Ratio 159 Mt Coot-tha Road /Richer St			3.99

Table 1 Comparison of blasting ground vibration monitored between 21 November 2011 and 23 March 2017 at end of Sussex Street, 58 Richer Street and 159 Mt Coot-tha Road.

4.12 It can be seen from **Table 1** that 37% of the blasts monitored at 159 Mt Coot-tha Road exceeded the current ERA16 standard for maximum vibration, whereas these exceedences were not detected at Sussex or Richer Street stations.

4.13 The MCQ conditions of approval do not address any limits on times of operation, including blasting. All other quarries in Brisbane have limits imposed in their conditions of approval - a reasonable response to operating in the vicinity of sensitive uses. For example, the Hanson Ferny Grove quarry is licensed to blast only between 0700-1800 on Monday-Friday and 0700-1200 on Saturday.

4.14 The Local Residents are concerned about the proximity to blasting, the lack of meaningful noise and blast vibration monitoring in their streets, the high level of blasting, the unregulated hours of blasting and the (perceived) lack of response by BCC to Local Resident enquiries about these matters.

4.15 Other quarries operating in Brisbane, including Ferny Grove (KRA, 39, current development permit EPPR00340013, dated September 2013) and Brisbane City Quarry at Mt Gravatt (not a KRA, EPA Permit IPDE00628507, dated November 2007) have conditions of approval that prescribe lower noise and blasting vibration limits than for MCQ and that are closer to those in the 2013-2016 ERA16 model conditions (see **Table 2** below for comparisons).

4.16 Further, BCC itself has recognised the issue of noise and blasting vibration, addressed within the following parts of its superseded 2000 and current 2014 planning schemes:

Brisbane City Plan 2000

V.1 Chapter 5 *Extractive Industry code*

V.2, Appendix 2 *Noise Impact Assessment Planning Scheme Policy*

Brisbane City Plan 2014

8.2.10 *Extractive resources overlay code*

9.3.9.1 *Extractive industry code*

The maximum blasting noise over-pressure and ground vibration in these documents is also listed, for comparison purposes, in **Table 2** below.

Policy/ Quarry Entity	90% blasting noise over-pressure level	10% blasting noise over-pressure level	Ground Vibration peak particle velocity 90% of blasts	Ground Vibration peak particle velocity 10% of blasts
DEHP ERA16 2013-17	<115dB(A)	<120dB(A)	<5mm/sec	<10mm/sec
Brisbane City Plan 2000	minimise noise impacts	minimise noise impacts	<10mm/sec cosmetic damage & human comfort	<10mm/sec cosmetic damage & human comfort
Brisbane City Plan 2014	<60dB(A) low frequency noise daytime inside sensitive use	undefined	<5mm/sec human comfort (95%) (more than 12 months or 20 blasts)	<5mm/sec human comfort (95%) (more than 12 months or 20 blasts)
BCC Mt Coot- tha Quarry	<125dB(A)	<130dB(A)	<10mm/sec	>10mm/Sec - 'unlimited'
Hanson Ferny Grove Quarry	<120dB(A)	<125dB(A)	<10mm/sec	>10mm/sec - unlimited
BCC Mt Gravatt Quarry	<115dB(A) (80% blasts)	>115dB(A) (20% blasts)	<10mm/sec for <35Hz (100%)	not applicable
BCC Bracalba Quarry	<115dB(A) (80% blasts)	>115dB(A) (20% blasts)	<10mm/sec for <35Hz (100%)	not applicable

Table 2 - Comparison Table for maximum blasting noise over-pressure (decibels, dB(A)) and Ground Vibration criteria (mm/sec) between DEHP ERA16 2013-2017 model conditions, BCC 2000 and 2014 Planning Schemes and the BCC Mt Coot-tha Quarry, Hanson Ferny Grove Quarry, BCC Mt Gravatt Quarry and BCC Bracalba Quarry. (Sources: www.brisbane.gov.qld.au; www.dehp.gov.qld.au)

4.17 It can be seen from **Table 2** that the MCQ has significantly higher maximum blasting noise over-pressure and ground vibration levels than allowed by the current ERA16 model conditions or in BCC Planning Schemes. MCQ has the highest

permitted maximum blasting noise and ground vibration limits of all Brisbane quarries. MCQ regularly exceeds the maximum 5mm/sec when measured at a nearby dwelling and has exceeded 10mm/sec on some occasions.

4.18 The Local Residents are concerned about the relatively high limits for MCQ blasting noise and vibration, especially when considered with the other concerns expressed in paragraphs 4.6 - 4.17 above.

4.19 It is also a matter of concern that BCC has continued to develop the 'Retreat' precinct of the Mt Coot-tha Botanic Gardens within the KRA Separation Area when the definition of a '*noise sensitive place*' in the ERA16 model conditions includes the category of '*a park or gardens*'.

4.20 Further, BCC has stated in the 2014 *Mt Coot-tha Neighbourhood Plan* of the BCP 2014, that:

*'Under current extraction operations, Council estimates the remaining life of the facility until **around 2025**. Council intends to commence planning for post-quarry use **around 2015**. Detailed planning will seek to implement the Mt Coot-tha 2030 Vision for the Brisbane City Council quarry site'*.(bold type by writers)

4.21 Unfortunately, the *Mt Coot-tha 2030 Vision* does not directly address the role of the quarry site, although this is implied above in the BCP 2014. Surprisingly, nor is the quarry referred to in the *draft Brisbane Botanic Gardens Mt Coot-tha Masterplan 2017*, where the five plans on pages 15,17, 19, 23 and 25 indicate that there may be minimal new road development close to the existing boundary with the gardens, but nothing further is planned within the quarry. Perhaps not surprisingly, Quarry consultants and management consider that the '*Mt Coot-tha Quarry is an excellent long term Resource to **2032 and onwards***' (Bayooke, A & R Bell, 2012). (bold type by writers)

4.22 In view of the above discussion, the questions remains as to what future is being planned for the quarry, are there alternatives to its being incorporated into the Botanic Gardens and when will the planning commence?

5.0 The Future Way

5.1 The Need for Change

5.1.1 The above discussion concluded that Local Residents have justifiable concerns about the MCQ because:

- a) There is no effective separation area between the resource/processing area and nearby sensitive uses and therefore no buffer to quarry impacts;
- b) Approximately 2277 residents live within 1000 metres and 337 within 500 metres of the quarry. A further 83 residents live within 100 metres of the mapped Transport Route;
- c) In spite of the proximity of the Local Residents, the MCQ has the highest licensed blasting noise and ground vibration limits of any Brisbane quarry;
- d) MCQ blasting noise and ground vibration limits do not comply with current standards in both ERA16 and Council's own Planning Schemes;
- e) MCQ does not have conditioned hours of operation;
- f) MCQ does not have conditioned locations for blast monitoring and only monitored blasting at relatively distant locations up until 2011; and
- g) As a result, BCC and MCQ are not sufficiently aware of the possible damage to homes that may have been caused by blasting vibration, over a long period of time.

5.1.1 If future major road-building or other civil infrastructure projects are being planned for Brisbane, operational hours at the Mount Coot-tha quarry may be significantly increased to meet the demand for aggregates, leading to higher impacts on the Local Residents. This occurred during the construction of the Inner City By-pass during 1999-2002.

5.1.2 BCC stated, in a letter to the DEHP dated 14 September 2016 and obtained by PB under an RTI application, that '*Council operates Mt Coot-tha quarry with a self-imposed production cap of 410,000 tonnes per annum.....since 2002*'. This cap is a

voluntary one and is therefore subject to increase to 1,000,000 tonnes per annum, at the upper end of the Licensed range of production, should the economic need arise.

5.1.3 Later in the above letter, Council stated that it '*cannot agree to voluntarily reducing existing environmental limits*' as requested by DEHP in their letter dated 26 July 2016, also obtained by PB under the same RTI application.

5.1.4 The Local Residents consider that an ERA16 (2013-2017) model set of conditions is published by DEHP because the people of Brisbane and Queensland do not allow quarry operators the freedom to decide their own environmental limits. However, MCQ recently refused (refer to the above letter to DEHP) to comply with current blasting noise and ground vibration standards.

5.1.5 The impression of Local Residents is that their concerns have not been adequately heard or addressed by MCQ or BCC and that they have sometimes been treated as an unfortunate nuisance. In view of this circumstance and the above list of real concerns, the Local Residents who are also ratepayers claim that they are legitimate stakeholders in the operation of MCQ and consider that BCC should formally recognise this fact by agreeing to participate in an Advisory Committee.

5.2 Need for Effective Consultation

5.2.1 The writers consider that consultation is never effective if undertaken after decisions have already been made. Communications by BCC tend to be of the nature of advising Local Residents of their decisions after which no meaningful discussion is entered into. One example of this was the initial decision to locate the Legacy Way Control Station in Ada Park. It was only by considerable effort on the part of the Local Residents to petition the State that this decision was overturned.

5.2.2 The writers also consider that, as representatives of all Brisbane residents, elected Councillors should ensure that their business units operate as model businesses, using best practice, truly balancing the need for economic gain against the environmental nuisance that their operations may cause.

5.2.3 It is very difficult for decisions such as the above to be reversed, taking much time and cost expenditure on the part of all stakeholders. The writers consider that local issues can best be dealt with by prior consultation, through meeting on a regular basis. The last community meeting with BCC and Local Residents was held in 2013.

5.3 Near-Term Achievable Outcomes

5.3.1 The following discussion is proposed with a view to achieving a future scenario characterised by transparent cooperation between the various stakeholders with special interests in the operations of the MCQ.

5.3.2 Agree and formally acknowledge the valid roles of all stakeholder groups including BCC, MCQ staff and management, DEHP, DILGP, DNRM and the Local Residents.

5.3.3 All stakeholders nominate a representative to attend meetings and provide active input to an Advisory Committee to MCQ Management. MCQ Management will act as Convenor and Secretary to the Advisory Group.

5.3.4 In particular, all stakeholders acknowledge the presence of environmental impacts by MCQ on Local Residents due to the very narrow KRA Separation buffer zone from the mapped KRA Resource/Processing Area and the 'legacy approval' with relatively lenient, out-dated conditions of operation, resulting in significant actual and/or potential dust, noise, traffic, blasting vibration and visual impacts.

5.3.5 All stakeholders cooperate to ensure that MCQ operations will comply with current standards including, but not necessarily limited to, compliance with current ERA16 and all current BCC requirements for noise and blasting impacts.

5.3.6 Agree and confirm a medium-term program by BCC, with a range of probable dates, to close and rehabilitate the Quarry and replace its product with alternative sources of hard rock in the City of Brisbane (Ferny Grove, Mt Gravatt, Kholo Creek, Bracalba and other possible, nearby KRAs). This outcome is important in order to resolve the high degree of uncertainty about closure dates and recognises that, with

uncertain forward demand and reserves, a reasonable range of dates is the likely best practical outcome.

5.3.7 Undertake a regular program of consultation with Local Resident stakeholders through existing email list used to advise of forthcoming blasts and their likely size and force.

5.3.8 Extend the consultation program to report non-compliances, mistakes and agreed remedial actions.

5.4 Long-Term Aspirational Outcomes

5.4.1 Bring forward and confirm the closure and rehabilitation of the MCQ to incorporate the Resource/Processing Area into the *Mount Coot-tha Botanical Garden Masterplan*, becoming an integral part of this Metro Tourist and Visitor Destination Precinct.

5.4.2 Acknowledge that any future development may result in significant new impacts to Local Residents and therefore, plan and design the above inclusion of the Resource/Processing Area with the active, continuing consultation with interested Local Resident stakeholders.

References

Bayooke, A & R Bell (2012) *Extractive Innovation at Mt Coot-tha Quarry - an Integrated Quarry and Tunnel Project*, presented at IQA-CCAA Conference on 21 September 2012.

Brisbane City Council (2000) *Brisbane City Plan 2000, particularly:*
V.1 Chapter 4 *Mt Coot-tha Local Plan*
V.1 Chapter 5 *Extractive Industry code*
V.2 Appendix 2 *Noise Impact Assessment Planning Scheme Policy*

Brisbane city Council (2014) *Brisbane City Plan 2014, particularly*
part 7.2.13.10 *Mt Coot-tha Neighbourhood Plan*
part 8.2.10 *Extractive resources overlay code*
part 9.3.9.1 *Extractive industry code*

Brisbane City Council (2016) *draft Masterplan Botanic Gardens Mount Coot-tha*

Brisbane City Council (2017) *Our Shared Vision Vision 2030*

Cement Concrete & Aggregates Australia & Groundworks Plus (2012) *Extractive Industry Model Codes version 1.0 and Guidelines for the Extractive Industry Model Codes version 1.0*

Department of Environment & Heritage Protection (2013-2017) *Model Operating Conditions ERA 16 - Extractive and screening activities*

Department of Environment & Heritage Protection at:

<https://environment.ehp.qld.gov.au/env-authorities/pdf/eppr00671613.pdf>
particularly:

BCC Bracalba Quarry - EPPR00671613
Hanson Ferny Grove Quarry - EPPR00340013
BCC Mt Coot-tha Quarry - EPPR00447313
BCC Mt Gravatt Quarry - EPPR00952413

Department of Industry, Local Government & Planning (2016) *State Planning Policy Mining & Extractive Resources April 2016*

Key Resource Area maps and descriptions at:
<http://www.dilgp.qld.gov.au/planning/state-planning-instruments/spp-interactive-mapping-system.html>

particularly:

Ferny Grove Key Resource Area - KRA 39
Kholo Creek Key Resource Area - KRA41
Mount Coot-tha Key Resource Area - KRA 42
Bracalba Key Resource Area - KRA 44

Web:

www.NoiseHelp.com

Correspondence:

Councillor Judy Magub (19 December 2002) to Messrs JM, PV & GP Higgins;
Brisbane City Council (24 February 2010) letter to P Best, 51 Adsett St Taringa;
DEHP (26 July 2016) letter to Mt Coot-tha Quarry, BCC, 152-170 Mt Coot-tha Road;
and
Brisbane City Council (14 September 2016) letter to DEHP via email

Right To Information requests

Applications by Philip Best to BCC and DEHP
Response to Philip Best from BCC
Response to Philip Best from DEHP

APPENDICES

I - Analysis by Philip Best of the MCQ Monitoring Data from western end of Sussex Street (2001-2017), outside 58 Richer Street (2001-2017) and 159 Mt Coot-tha Road (2011-2017) (selected screenshots only are provided here to summarise. The entire spread-sheet is available on application)

See attached document

II - letter by Councillor Judy Magub (19 December 2002) to Mr J M & Mrs P V Higgins & Mr G P Higgins

See attached document

III - Local Resident personal statements

See attached statements from Phil Best, Di Glynn, Lea Greenaway, Natasha Kokhanovska, Adam Luck, Joanne Robertson and Willem & Annelies Vanderiet.