# **Project Approval**

#### Section 75J of the Environmental Planning & Assessment Act 1979

As delegate of the Minister for Planning and Infrastructure, I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Richard Pearson Deputy Director-General, Development Assessment and Systems Performance

Sydney	2011
	SCHEDULE 1
Application Number:	10_0014
Applicant:	CSR Building Products Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	See Appendix 1
Development:	Badgerys Creek Quarry and Brick Making Project

Navy text shows Modification 2 May 2018 Green Type shows Modification 3 and 4 August 2020 Red Type shows Modification 5 January 2022 Purple Type shows Modification December 2024

The Department has prepared a consolidated version of the consent which is intended to include all modifications to the original determination instrument.

The consolidated version of the consent has been prepared by the Department with all due care. This consolidated version is intended to aid the consent holder by combining all consents relating to the original determination instrument but it does not relieve a consent holder of its obligation to be aware of and fully comply with all consent obligations as they are set out in the legal instruments, including the original determination instrument and all subsequent modification instruments.

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DEFINITIONS Aboriginal object or place Have the same meaning as the definitions of the terms in section 5 of the NP&W Act Annual Review The review required by condition 12 of Schedule 5 CSR Building Products Limited (or its successors) or any person carrying out Applicant any development to which this consent applies BCA Building Code of Australia BCS Biodiversity Conservation and Science Group of NSW Department of Climate Change, Energy, the Environment and Water The manufacturing, storage and sale of brick products, and associated **Brickmaking Activities** operation of the innovation centre and laboratory described in EA (Mod 3 and 4) Calendar year A period of 12 months from 1 January to 31 December CCC **Community Consultative Committee** Conditions of this consent Conditions contained in Schedules 2 to 5 (inclusive) of this document **Construction Activities** All physical works to enable mining operations to be carried out, including demolition and removal of buildings or works, and erection of buildings and other infrastructure permitted by this consent Council Liverpool City Council Day The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays Department NSW Department of Planning, Housing and Infrastructure Demolition The deconstruction and removal of buildings, sheds and other structures on the site Development The development described in the documents listed in condition 3 of Schedule 2 and includes Quarrying Operations, Brickmaking Activities and rehabilitation activities **Development layout** The plans in Appendix 3 of this consent Removal of accumulated water from Pits 2 and 3 into Pit 1, and removal of Dewatering water accumulated in Pit 1 Environmental Assessment titled Boral Badgerys Creek Continued EA Operation of Quarry and Brick Making Facility (Volumes 1 – 3), prepared by AECOM and dated November 2010, and associated Response to Submissions titled Boral Badgerys Creek Continued Operation of Quarry and Brick Making Facility - Submissions Report, prepared by AECOM and dated June 2011 EA (Mod 1) Environmental Assessment titled Boral Badgerys Creek Quarry and Brick Making Project, Application Number: 10 0014, prepared by Boral Property Group and dated 5 November 2012 Environmental Assessment titled Badgerys Creek Brick Making Facility EA (Mod 2) Modification 2 Environmental Assessment prepared by Element Environment and dated November 2017, the associated the Response to Submissions prepared by Element Environment and dated February 2018, and additional information provided by Element Environment dated 8 March 2018 EA (Mod 3 and 4) Environmental Assessment titled CSR Advanced manufacturing hub Modification 3 Environmental Assessment prepared by Element Environment and dated March 2019, Environmental Assessment titled CSR Advanced manufacturing hub – Modification 4 Environmental Assessment prepared by Element Environment and dated March 2019, the associated Response to Submissions Reports prepared by Element Environment and dated October 2019, and additional information provided by CSR Limited and dated 5 May 2020 Eastern Airport Ring Road Transport corridor associated with development of the WSA and depicted in the draft Western Sydney Aerotropolis Plan (or later version) Excavated Natural Material, as defined in the EPA's resource recovery ENM orders (ENM Order) and exemptions (ENM Exemption) under clauses 91, 92, and 93 of the Waste Regulation **ENM Exemption** 'The excavated natural material exemption 2014' under clauses 91 and 92 of Waste Regulation **ENM Order** 'The excavated natural material order 2014' under clause 93 of the Waste Regulation **FPA NSW Environment Protection Authority** Environmental Planning and Assessment Act 1979 EP&A Act **EP&A Regulation** Environmental Planning and Assessment Regulation 2000 EPL Environment Protection Licence under the POEO Act Evening The period from 6 pm to 10 pm Fill Includes VENM, ENM and soils in the form of tunnel spoil that meet the requirements of a specific resource recovery order and resource recovery

	exemption granted by the NSW EPA and approved by the EPA to be applied
Finished Building Products	to land within Lot 2 DP1278780 Building products prepared or manufactured on site and off site, as described
Ğ	in EA (Mod 3 and 4) and EA (Mod 2), respectively.
Heritage NSW Incident	Heritage NSW within the Department of Premier and Cabinet An occurrence or set of circumstances that:
moldent	causes or threatens to cause material harm to the environment; and/or
	breaches or exceeds the limits or performance measures/criteria in this
Laden trucks	consent Trucks transporting bricks, quarry products or finished building products to
L and	or from the site
Land	Has the same meaning as the definition of the term in section 4 of the EP&A Act, except where the term is used in the noise and air quality conditions in
	Schedules 3 and 4 of this consent, where it is defined as the whole of a lot,
	or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
m	Metres
Martin Road – Elizabeth Road Intersection Upgrade	The upgrade of the Martin Road – Elizabeth Drive Intersection to a standard required by Condition 25A of Schedule 3
Material harm	Is unauthorised harm that:
	<ul> <li>involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</li> </ul>
	<ul> <li>results in actual or potential loss or property damage of an amount, or</li> </ul>
	amounts in aggregate, exceeding \$10,000, (such loss includes the
	reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good
	harm to the environment)
MEG Minimise	Regional NSW – Mining, Exploration & Geoscience Implement all reasonable and feasible mitigation measures to reduce the
Minimise	impacts of the development
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Modification 3 and 4	The modifications to the development, as described in EA (Mod 3 and 4)
Modification Report (Mod 5)	The Modification Report titled Badgerys Creek Quarry and Brick Making
	<i>Project</i>   <i>Modification 5</i> prepared by Element Environment dated October 2021 and further response prepared by CSR Building Products Limited dated
	December 2021
Modification Report 6	Modification Report titled "Badgerys Creek Quarry and Brick Making Project
	Modification 6", dated 3 September 2024. Prepared by Element Environment and letter dated 7 November 2024
Morning Shoulder Period	The period from 5 am to 7 am Monday to Saturday
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
NP&W Act	National Parks and Wildlife Act 1974
NRAR	NSW Natural Resources Access Regulator
NSW Water Group	NSW Department of Climate Change, Energy, the Environment and Water – Water Group
Phase 1	The initial phase of development associated with Modification 3 and 4, that
	comprises: • construction activities;
	<ul> <li>brickmaking activities;</li> </ul>
	• dewatering of Pits 1, 2 and 3;
	• quarrying activities in Pit 3.
	• Fill import for quarry rehabilitation activities and preferential backfilling of Pits 1, 2 and 3.
Phase 2	The phase of the development associated with Modification 3 and 4 that
	commences from the date of completion of backfilling of Pits 1 and 2 and comprises:
	construction activities;
	brickmaking activities;
	• quarrying activities in Pit 3;
	• Fill import for quarry rehabilitation activities and progressive backfilling of Pit 3.
Phase 3	The phase of the development associated with Modification 3 and 4 that
	commences from the date of completion of extraction activities in Pit 3 and comprises:
	brickmaking activities;
	• Fill import for quarry rehabilitation activities and backfilling of Pit 3.

Phase 4	<ul> <li>The phase of development associated with Modification 3 and 4 that commences from the date of completion Fill import to site and the backfilling of Pit 3, and comprises:</li> <li>brickmaking activities; and</li> </ul>
	• residual rehabilitation activities (excluding Fill import).
PMF	Probable Maximum Flood event
POEO Act	Protection of the Environment Operations Act 1997
Privately-owned land	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary)
Public infrastructure	Linear and other infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
Quarrying operations	The extraction, processing, stockpiling and transportation of extractive materials carried out on the site and the associated removal and/or emplacement of vegetation, topsoil and overburden
Quarry products	Includes all saleable quarry products, including raw materials, but excludes bricks, tailings, other wastes and rehabilitation material for use on the site
Quarry water	Water that accumulates within active quarrying areas, overburden emplacement areas and infrastructure areas, synonymous with dirty water
Raw materials	Extractive materials used in making brick, tiles, clay pipes or similar
Registered Aboriginal Parties	As described in the National Parks and Wildlife Regulation 2009
Rehabilitation	The restoration of land disturbed by the <b>development</b> to a good condition, to ensure it is safe, stable and non-polluting
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Resources Regulator	NSW Resources Regulator within the Department of Regional NSW
Secretary	Planning Secretary under the EP&A Act, or nominee
Site	The land defined in Appendix 1
Statement of Commitments	The Applicant's commitments in Appendix 6
TfNSW	Transport for New South Wales
VENM	Virgin Excavated Natural Material, as defined in clause 50 of Schedule 1 of the POEO Act
Waste	Has the same meaning as defined in the Dictionary to the POEO Act
Waste Regulation	Protection of the Environment (Waste) Regulation 2014
WSA	Western Sydney Airport

#### SCHEDULE 2 ADMINISTRATIVE CONDITIONS

#### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

#### TERMS OF CONSENT

- 2. The Applicant, in acting on this consent, must carry out the development:
  - (a) in compliance with the conditions of this consent;
  - (b) in accordance with all written directions of the Secretary; and
  - (c) in accordance with the development layout.
- 3. The Applicant, in acting on this consent, must carry out the development in general accordance with the:
  - (a) EA and Statement of Commitments;
  - (b) EA (Mod 1);
  - (c) EA (Mod 2);
  - (d) EA (Mod 3 and 4)'
  - (e) Modification Report (Mod 5); and
  - (f) Modification Report 6.
- 4. The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document referenced in condition 3 of this Schedule. In the event of an inconsistency, ambiguity or conflict between any of the documents referenced in condition 3 of this Schedule, the most recent document prevails.
  - Note: For the purposes of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of consent or direction of the Secretary, and a document, if it is not possible to comply with both the condition or direction, and the document.
- 5. Consistent with the requirements of this consent, the Secretary may make written directions to the Applicant in relation to:
  - (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and
  - (b) the implementation of any actions or measures contained in any such document referred to in (a) above.
  - Note: For the purposes of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of consent or direction of the Secretary, and a document, if it is not possible to comply with both the condition or direction, and the document.

#### STAGED DEVELOPMENT

- 5A. The development as modified by EA Mod 3 and 4, must be undertaken sequentially in the following stages:
  - (a) Phase 1;
  - (b) Phase 2;
  - (c) Phase 3; and
  - (d) Phase 4.

Note: Each of these phases is listed in the definitions and shown in Appendix 3.

- 5B. The Applicant must notify the Department in writing, at least two weeks before the date of:
  - (a) the commencement of each Phase of the development;
  - (b) the completion of extraction in Pit 3;
  - (c) cessation of Brickmaking Activities; and
  - (d) decommissioning.

#### COMPLIANCE

6. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

#### **APPLICABILITY OF GUIDELINES**

References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to 7. such guidelines, protocols, standards or policies in the form they are in as at the date of this consent.

However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, standard or policy, or a replacement of them.

#### LIMITS OF CONSENT

- 8. The Applicant may carry out quarrying operations on the site until 27 September 2031.
  - Note: Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out additional requirements. Consequently, this consent will continue to apply in all respects other than to permit the carrying the development, until the rehabilitation of the site and those requirements and undertakings have been carried out to the required standard.
- 9. (Deleted).
- The Applicant may receive, store, and dispatch finished building products at the site until brick making at the 9A. site commences.
- 10. The Applicant must not exceed the limits in Table 1 during any calendar year.

Activity	Development Phase	Total Volume (tonnes per calendar year)
Extraction from Pit 3	Phase 1 and 2	420,000
Receive raw materials for brickmaking	Phase 1 and 2	215,000
	Phase 3 onwards	360,000
Dispatch raw materials	Phase 1,2 and 3	275,000
Brick production	All Phases	300,000
Dispatch finished building products	All Phases	330,000

Table 1: Limits on extraction, production, received and dispatch volumes per colorder voor

- The Total Volume limits in Table 1 do not apply to the import of Fill for the purpose of backfilling voids. The import Note<sup>.</sup> of Fill is separately managed under the restrictions on truck movements contained in Conditions 12, of this Schedule.
- 11. The Applicant must not transport bricks or quarry products to or from the site, other than by road.
- The Applicant must not exceed the total truck movements detailed in Table 2. 12.

Transport Route Stage	Development Phases	Day	Total truck movements <sup>a</sup>
Prior to the upgrade of the Martin Road-		Monday to Friday	120
Elizabeth Drive Intersection	1,2 and 3	Saturday	40
		Sundays	40
	1,2 and 3	Monday to Friday	800
		Saturday	358
Following completion of the Martin Road- Elizabeth Drive Intersection upgrade		Sundays	200
Enzabelin Drive intersection upgrade	4	Monday to Friday	366
		Saturday	98
		Sunday	0

Table 2: Total Truck Mayomonto

- 12A. Truck movements entering or exiting the site on Sundays are restricted to the importation of Fill for the purpose of backfilling quarry pits and rehabilitation activities.
  - Note: Truck movements are also controlled, further restricted by the limits in condition 10 of this Schedule and operating hours in condition 1 of Schedule 3.

#### STRUCTURAL ADEQUACY

**13**. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the **development**, must be constructed in accordance with the BCA.

Notes:

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any
  proposed building works;
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development
- A detailed stormwater drainage design, prepared by a qualified practicing civil engineer, is to be submitted to Council prior to the issue of a construction certificate.

#### **BRICK KILN STACKS**

13A. The brick kiln stacks must not exceed 41 m above natural ground level.

#### DEMOLITION

14. All demolition work must be carried out in accordance with the Australian Standard AS 2601-2001: The Demolition of Structures (Standards Australia, 2001).

#### **PROTECTION OF PUBLIC INFRASTRUCTURE**

- 15. Unless the Applicant and the applicable authority agree otherwise the Applicant must:
  - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.
  - Note: This condition does not apply to damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition 25 of Schedule 3.

#### **OPERATION OF PLANT AND EQUIPMENT**

- 16. All plant and equipment used on the site, or to monitor the performance of the development, must be:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.
- 16A. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA. Before the issue of a Construction Certificate and an Occupation Certificate, the Applicant must provide the Certifying Authority with documented evidence that the products and systems proposed for use or used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the BCA. The Applicant must provide a copy of the documentation given to the Certifying Authority to the Secretary within seven days after the Certifying Authority accepts it.

#### **PRODUCTION DATA**

- 17. The Applicant must:
  - (a) provide calendar year annual quarry production data to MEG using the standard form for that purpose; and
  - (b) include a copy of this data in the Annual Review.

#### LIMITS OF EXTRACTION

#### Identification of Approved Extraction Limits

- 18. Within 3 months of the determination of Modification 3 and 4, the Applicant must:
  - (a) engage a registered surveyor to mark out the boundary of the approved area of extraction within Pit 3; and
  - (b) provide the Secretary with a survey plan of the boundary.

The boundary of the approved area of extraction within Pit 3 must be clearly marked in a manner that allows them to be easily identified at all times during the carrying out of quarrying operations.

#### **Maximum Extraction Depth**

19. The Applicant must not extract any extractive materials or carry out any work in the extraction area below 35 m below the pre-existing natural surface of the ground, other than construction of bores approved by NSW Water Group or in-pit sumps approved by the Secretary.

#### SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

#### NOISE

#### **Hours of Operation**

1. The Applicant must comply with the operating hours set out in Table 1.

Activity	Permissible Hours		
Quarrying operations (excluding	7.00 am to 6.00 pm Monday to Saturday		
truck arrival, loading and dispatch)	At no time on Sundays or public holidays		
Brickmaking Activities	24 hours per day, 7 days per week		
	6.00 am to 10.00 pm Monday to Friday		
Truck arrival and dispatch (raw materials only)	6.00 am to 6.00 pm Saturday		
	At no time on Sundays or public holidays		
	5.00 am to 10.00 pm Monday to Friday		
Truck arrival and dispatch (finished building products only)	6.00 am to 6.00 pm Saturday		
	At no time on Sundays or public holidays		
Truck arrival and dispatch (Fill import only)	7.00 am to 6.00 pm Monday to Saturday		
	9.00 am to 6.00 pm Sunday		
	At no time on public holidays		
Cash sales	6.00 am to 6.00 pm Monday to Saturday		
	At no time on Sundays or public holidays		
Sales selection/Customer Display Centre	8.00 am to 5.00 pm Monday to Sunday		
Maintenance	At any time, provided that these activities are not audible at any privately-owned residence outside of permissible hours for quarrying operations		

- 1A. With the written agreement of the Secretary, the Applicant may undertake limited campaign trucking (within the limits imposed under conditions 10 and 12 of Schedule 2) for the import of Fill outside of the operating hours prescribed in condition 1 of this Schedule.
- 2. The following activities may be carried out outside the hours specified in condition 1 of this Schedule:
  - (a) activities that are inaudible at residences on privately-owned land;
  - (b) the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; or
  - (c) emergency work to avoid the loss of life, property or to prevent material harm to the environment.

In such circumstances, the Applicant must notify the Department and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

#### **Construction Noise**

- 3. Approved construction works must only be undertaken during standard construction hours (7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays), unless the Secretary agrees otherwise.
- 4. (Deleted).

#### **Operational Noise Criteria**

5. The Applicant must ensure that operational noise generated by the development (including construction activities) does not exceed the criteria in Table 2 at any residence on privately-owned land.

Receiver ID	Morning Shoulder	Day	Evening	Night	
	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LAFmax
R9, R25, R35	43	45	40	38	52
R5, R26, R27, R28, R29, R30, R31, R32, R34, R42, R43, R44, R45, R46	42	42	41	38	52
R11, R12, R13, R14, R15	43	43	43	38	52
All other residences	-	40	35	35	52

Table 2:	Operational	noise	criteria	dB(A)
10010 2.	oporational	110100	0///0///4	ab() ()

Noise generated by the development must be monitored and measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry (NSW EPA 2017)*.

However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Note: Should an agreement with a landowner be terminated for any reason, the Applicant must comply with the noise criteria in Table 2.

#### **Road Traffic Noise Criteria**

6. The Applicant must ensure that the road traffic noise generated by the development does not exceed the criteria in Table 3 at any privately-owned residence.

T	Table 3: Road traffic noise criteria dB(A)				
	Road Noise Receiver ID	Day / Evening LAeq (1 hour)	Night LAeq (1 hour)		
	Prior to Martin Road – Elizabeth Road Ir	ntersection Upgrade			
	Residents on Martin Road	60	55		
	Following Martin Road – Elizabeth Road	I Intersection Upgrade			
	RN5	61	55		
	RN9, RN21	62	55		
	RN14, RN22	63	55		
	RN16	64	55		
	All other residences on Martin Road	60	55		

Traffic noise generated by the **development** is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy (Department of Environment, Climate Change and Water NSW).

However, the noise criteria in Table 3 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

6A. Upon receiving a written request from the owner of residences RN5, RN9, RN14, RN16, RN21 or RN22, the Applicant must implement noise mitigation treatment packages as described in the EA (Mod 3 and 4) and as set out in the *RMS Draft At-Receiver Treatment Packages*.

If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

#### **Noise Operating Conditions**

- 7. The Applicant must:
  - (a) take all reasonable steps to minimise the construction, operational, low frequency and road transportation noise of the development;
  - (b) take all reasonable steps to minimise the noise impacts of the development during noise enhancing meteorological conditions;
  - (c) operate a noise management system to guide the day to day planning of quarrying operations and the implementation of noise mitigation measures to ensure compliance with the relevant conditions of this consent;
  - (d) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and
  - (e) modify or stop operations on the site to comply with the relevant conditions of this consent.

Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.

#### **Noise Management Plan**

- 8. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval prior to commencing Modification 3 and 4, unless otherwise agreed by the Secretary;
  - (b) describe the measures to be implemented to ensure:
    - compliance with the noise criteria and operating conditions of this consent;
    - best practice management is being employed;
    - residences listed in condition 6A of this Schedule are notified of their rights to request road noise mitigation measures;
    - vibration impacts are minimised; and
    - the construction and operational noise impacts of the development are minimised during noise enhancing meteorological conditions;
  - (c) describe measures to ensure that all the commitments in the EA (Mod 3 and 4) in relation to noise are implemented;
  - (d) include a consultation plan detailing:
    - procedures for notifying and consulting nearby residents prior to the recommencement of quarrying and brick making activities;
    - procedures for notifying and consulting nearby residents prior to the commencement of construction activities;
    - details of a telephone complaints line (operated at all hours) and relevant site persons responsible for following up complaints;
    - procedures for handling and monitoring all complaints received; and
    - contingency measures that would be implemented where complaints are received;
  - (e) describe the proposed noise management system; and

(f) include a noise monitoring program that:

- is capable of evaluating the performance of the development;
- includes a protocol for determining any exceedances of the relevant conditions of this consent; and
- effectively supports the noise management system.

The Applicant must implement the Noise Management Plan as approved by the Secretary.

#### AIR QUALITY

#### Air Quality Impact Assessment Criteria

9. The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.

Table 4: Air quality criteria				
Pollutant	Averaging Period	Criterion		
Particulate matter < 2.5 µm (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 8 μg/m³		
Particulate matter < 2.5 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 25 μg/m³		
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 25 μg/m <sup>3</sup>		
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 μg/m³		
Total suspended particulates (TSP)	Annual	<sup>a,d</sup> 90 µg/m <sup>3</sup>		
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month <sup>a,d</sup> 4 g/m <sup>2</sup> /month		

#### Notes to Table 4:

a Total impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (ie increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development.

<sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

<sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

#### **Operating Conditions**

- 10. The Applicant must:
  - (a) implement best practice management to minimise the dust emissions of the development;
  - (b) implement all air quality management and mitigation measures that were committed to in the EA (Mod 3 and 4);
  - (c) implement real-time monitoring of 24-hour average PM<sub>10</sub> and meteorological conditions;
  - (d) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;
  - (e) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 4);
  - (f) monitor and report on compliance with the relevant air quality conditions in this consent; and

(g) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.

- 10A. During Phase 4, the Applicant may request the Secretary's agreement to reduce or waive certain air quality monitoring requirements if the Applicant can demonstrate that they are no longer necessary.
- 11. The Applicant must ensure compliance with stack emission limits and gaseous pollutant load limits included in any EPL applicable to the site.
- 12. Within 14 months of commencement of increased production of bricks to 300,000 tonnes per year, or as otherwise required by the EPA, the Applicant must submit an Air Quality Verification Assessment to the EPA, and must provide a copy of this assessment to the Secretary. The Air Quality Verification Assessment must be completed in accordance with the requirements of the EPL for the premises.

#### Air Quality Management Plan

- 13. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with relevant WSA authorities;
  - (b) be submitted to the Secretary for approval prior to commencing Phase 1, unless otherwise agreed by the Secretary;
  - (c) describe the proposed air quality management system;
  - (d) describe the measures to be implemented to ensure:
    - compliance with the air quality criteria and operating conditions of this consent;
    - best practice management is being employed; and
    - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
  - (e) describe measures to ensure that all the commitments in the EA (Mod 3 and 4) in relation to air quality are implemented;
  - (f) include a program to ensure surface disturbance associated with quarrying operations is minimised;

- (g) include an air quality monitoring program that:
  - is capable of evaluating the performance of the development and informing day to day operational decisions;
  - includes a protocol for determining any exceedances of the relevant conditions of this consent; and
  - effectively supports the air quality management system; and
- (h) include a program to:
  - notify affected landowners of the potential health-related impacts associated with dust;
  - respond effectively to enquiries or complaints.

The Applicant must implement the Air Quality Management Plan as approved by the Secretary.

#### **Meteorological Monitoring**

14. For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales guideline and is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017).

#### Odour

15. The Applicant must ensure that no offensive odours, as defined by the POEO Act, are emitted from the site.

#### **Greenhouse Gas Emissions**

16. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

#### SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary approvals and/or water licences for the development.

#### Water Supply

- 17. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary.
- 17A. The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.

#### Water Discharges

- 18. The Applicant must ensure that all quarry water from the site is contained wholly within the site except where discharges are otherwise authorised by condition 19 and 19A of this Schedule.
- 19. The Applicant must ensure that all surface water discharges from the site comply with the limits (both volume and quality) set in any EPL applicable to the site.

#### Dewatering of Pits 1, 2 and 3

- 19A. All water that is dewatered from Pit 1 (including any water transferred into Pit 1 from Pit 2 and Pit 3) must be transferred from the site in accordance with the Dewatering Management Plan required under Condition 23A of this Schedule.
- 19B. All dewatering activities from Pit 1 must be completed within Phase 1 unless otherwise agreed by the Secretary.

#### **Riparian Buffer Distance**

- 20. The Applicant must maintain a minimum setback width of 60 metres (measured from the top of bank) between extraction areas and both Badgerys Creek and Badgerys Creek tributary.
  - Note: This condition does not prohibit overburden emplacement or rehabilitation works in accordance with the Development Layout Plan.

#### **Alluvial Aquifers**

- 21. The Applicant must ensure that the development has no impact on alluvial aquifers associated with South Creek, Badgerys Creek or their tributaries.
- 22. (Deleted)

#### Soil and Water Management Plan

- 23. The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s approved by the Secretary;
  - (b) be prepared in consultation with Council and NSW Water Group;
  - (c) be submitted to the Secretary for approval prior to commencing Phase 1, unless otherwise agreed by the Secretary; and
  - (d) include a:
  - (i) Site Water Balance that includes:
    - details of:
      - sources and security of water supply;
      - o water use and management on site;
      - o adequacy of water storage facilities to contain all surface water runoff;
      - all existing Water Access Licences and potential Water Access Licences, including information on the relevant Water Sharing Plan and Water Sources;
      - any off-site water transfers, including those described in condition 23A of this Schedule; and
      - reporting procedures; and
    - measures to be implemented to minimise clean water use on site;
  - (ii) Surface Water Management Plan, that includes:
    - a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development;
    - a detailed description of the surface water management system on site including the:
      - o clean water diversion system;
      - erosion and sediment controls;
      - o dirty water management system; and
      - o water storages, including the area, depth and capacity of any in-pit sumps;
    - detailed plans, including design objectives and performance criteria, for:
      - reinstatement of drainage lines on the rehabilitated areas of the site; and
      - · control of any potential water pollution from rehabilitated areas of the site;
    - performance criteria for the following, including trigger levels for investigating any potentially adverse impacts on:
      - o the water management system;
      - surface water quality in creeks and other water bodies that could potentially affected by the development (including Badgerys Creek and Badgerys Creek tributary); and
      - the stream health, vegetation health and channel stability of water bodies that could potentially affected by the development;
    - a program to monitor and report on:
      - any surface water discharges;
      - o the effectiveness of the water management system;
      - $\circ$   $\;$  the quality of water discharged from the site to the environment;
      - $\circ$   $\,$  surface water flows and quality in local watercourses; and
      - the stream health, riparian vegetation health and channel stability of creeks and other water bodies that could potentially be affected by the development; and
    - a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and
  - (iii) Groundwater Management Plan that includes:
    - measures to ensure that the maximum extraction depth is not exceeded (see condition 19 of Schedule 2);
    - a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the quarry from the quarry face or floor;
    - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; and

- a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:
  - monitoring of boreholes within the alluvial sediments adjacent to Badgerys and South Creeks and their tributaries, and in the Bringelly Shale bedrock aquifer;
  - monitoring of groundwater inflows into the quarry from the quarry face or floor, or into any in-pit sumps;
  - monitoring the impacts of the development on baseflows to Badgerys and South Creeks and their tributaries;
  - o identification of a methodology for determining exceedances of the assessment criteria;
  - o a plan to respond to any exceedances of the performance criteria; and
    - a program to regularly report on monitoring.

The Applicant must implement the Soil and Water Management Plan as approved by the Secretary.

#### Dewatering Infrastructure Plan

- 23A. Prior to carrying out any construction activities associated with the dewatering activities on the site, the Applicant must prepare a Dewatering Infrastructure Plan for the development to the satisfaction of the Secretary. This plan must include:
  - (a) detailed designs for:
    - any pipeline infrastructure used for dewatering activities; and
    - the method to be used to cross Badgerys Creek;
  - (b) a flooding assessment which:
    - considers the impacts of any structures (including overland pipelines) to flood flow within the floodplain up to the PMF; and
    - describes the measures that will be implemented to minimise those impacts; and
  - (c) a description of the measures to be implemented for:
    - managing construction and operation of minor surface infrastructure;
    - avoiding significant impacts and minimisation of impacts generally;
    - controlling any potential water pollution from construction;
    - minimising and managing erosion and sedimentation;
    - decommissioning of pipeline infrastructure; and
    - rehabilitating disturbed areas.

The Applicant must implement the Dewatering Management Plan as approved by the Secretary.

#### **Dewatering Management Plan**

- 23B. The Applicant must prepare a Dewatering Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with NSW Water Group and NRAR;
  - (b) be submitted to the Secretary for approval prior to dewatering activities from Pit 1, unless otherwise agreed by the Secretary; and
  - (c) include:
    - details of:
      - o off-site water transfer or discharge arrangements; and
        - procedures for monitoring on volumes transferred off-site and reporting on this as part of Annual Review;
    - a Fauna Relocation Plan regarding the transfer of aquatic fauna from Pits 1, 2 and 3 prepared by a suitably qualified ecologist which includes details on:
      - native fauna species known to inhabit and/or use the pits which require transfer from the pits;
      - methodology proposed to transfer the fauna;
      - location and suitability of the proposed relocation sites;
      - any potential impacts of relocating the fauna top the relocation sites and proposed mitigation measures; and
      - $\circ$   $\;$  details of ecologists to monitor dewatering activities;
    - a Geotechnical Monitoring Program, prepared by a suitably qualified and experience geotechnical engineer, to examine and monitor the faces and high walls of the quarry pits to determine potential geotechnical hazards areas and evaluate risks of potential failures;
    - a program to monitor and report on dewatering that involves any discharge from the site, including:
      - the quality of any water discharged from the site;

- o surface water flows and quality in local watercourses; and
- the stream health, riparian vegetation health and channel stability of creeks and other water bodies that could potentially be affected by the discharges; and
- a plan to respond to any exceedances of the performance criteria and mitigate and/or offset any adverse surface water impacts of the discharges.

The Applicant must implement the Dewatering Management Plan as approved by the Secretary.

#### Flooding

23C. The Applicant must prepare and implement an Evacuation Plan for the site. This Evacuation Plan must be prepared in consultation with the State Emergency Services and include details of the site evacuation and sheltering procedures during flood events.

#### TRANSPORT

#### **Road Haulage**

- 24. Prior to commencing Phase 1, the Applicant must:
  - (a) erect signage on Elizabeth Drive advising of "trucks turning";
  - (b) install a wheel wash on the quarry access road and Fill haul road to prevent material being deposited on Martin Road; and
  - (c) ensure the access driveway from Martin Road is capable of catering for all heavy vehicles associated with the development in accordance with AS2890.2,
  - to the satisfaction of Council.

#### **Road Upgrade and Maintenance Contribution**

- 25. Prior to the recommencement of quarrying operations, the Applicant must enter into a formal agreement with Council for:
  - (a) the repair of historical impacts of trucking from the development on Martin Road; and
  - (b) annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.

The Applicant must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.

If there is any dispute between the Applicant and Council, then either of the parties may refer the matter to the Secretary for resolution.

- 25A. Prior to increasing truck movement limits as specified in condition 12 of Schedule 2, the Applicant must complete an interim upgrade of the Martin Road and Elizabeth Drive Intersection. The final design of intersection must be to the satisfaction of the relevant roads authority/s and must:
  - (a) be designed and constructed in accordance with Austroads Guidelines, Australian Standards and any requirements of the relevant road authority/s;
  - (b) include, at a minimum, a three phase signal operation including a right turn green light and pedestrian crossings on one Martin Road and one Elizabeth Drive approach;
  - (c) be subject to a Works Authorisation Deed (WAD) with TfNSW; and
  - (d) be funded by the Applicant, unless otherwise agreed with TfNSW.
- 25B. With the written agreement of the Secretary, the requirements of condition 25A of this Schedule may be waived if the Applicant can demonstrate that the Martin Road-Elizabeth Drive Intersection has been upgraded to achieve service, capacity and safety standards equivalent to or greater than those required under condition 25A of this Schedule.
- 25C. The Applicant must provide an area for a potential transport corridor associated with an extension of Martin Road through the site (as conceptually shown in Appendix 3). The final design and location of the transport corridor and any associated commercial arrangements must be determined in consultation with TfNSW.

The Applicant must advise the Secretary in writing of the final design and location of the transport corridor as agreed with TfNSW, and update relevant management plans, strategies or programs for the development to reflect the transport corridor.

#### Monitoring of Product Transport

- 26. The Applicant must keep accurate records of:
  - (a) all truck movements to and from the site (including time of arrival and dispatch and nature of material transported);
  - (b) the weight of all bricks, Fill and quarry products transported to and from the site; and
  - (c) publish a summary of these records on its website every 6 months.

#### **Operating Conditions**

- 27. The Applicant must:
  - (a) ensure that all laden trucks carrying quarry products, raw materials or Fill have their loads covered when arriving at or leaving the site;
  - (b) ensure that all trucks are cleaned of material that may fall from vehicles, before leaving the site;
  - (c) use its best endeavours to ensure that appropriate signage is displayed on trucks used to transport finished building materials, quarry products or raw materials to or from the development so they can be easily identified by road users; and
  - (d) continue to engage with TfNSW regarding the detailed planning and design for the Eastern Airport Ring Road.

#### **Traffic Management Plan**

- 28. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with TfNSW, WSA and Council;
  - (b) be submitted to the Secretary for approval prior to commencing Phase 1 operations, unless otherwise agreed by the Secretary;
  - (c) describe the processes in place to control the arrival and dispatch of trucks;
  - (d) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers travelling to and from the site;
  - (e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and
  - (f) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry; and
  - (g) describe the measures to manage construction and cumulative traffic impacts on the surrounding road network;
  - (h) be updated as necessary to reflect the operational phases and truck movement limits specified in condition 12 of Schedule 2 and prior to the commencement of any construction works for the upgrade of the Martin Road – Elizabeth Drive Intersection or the Eastern Airport Ring Road.

The Applicant must implement the Traffic Management Plan as approved by the Secretary.

#### ABORIGINAL HERITAGE

- 29. The Applicant must ensure that:
  - (a) archaeological salvage of site BC-01-09 is undertaken in accordance with Recommendation 1, Section 6.0 of the *Aboriginal Heritage Assessment Addendum* in the EA; and
  - (b) regeneration works, dewatering activities and water discharges in the area of the archaeological deposit identified adjacent to Badgerys Creek (see Appendix 5) are either avoided, or else undertaken in a manner that will minimise harm to Aboriginal objects, to the satisfaction of the Secretary; and
  - (c) measures are implemented prior to the commencement of Phase 1, to conserve and protect the hearth feature within site BCBW18 AS 02 02 (AHIMS ID 45-5-5164).
- 30. The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. The plan must:
  - (a) be prepared by suitably qualified and experienced persons;
  - (b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW;
  - (c) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;
  - (d) include a description of the measures that would be implemented to:
    - (i) protect, monitor and manage identified Aboriginal objects and Aboriginal places on the site (including any proposed archaeological investigations and salvage measures), including specific measures to ensure that the archaeological deposit adjacent to Badgerys Creek (see Appendix 5) is not impacted during regeneration operations;

- (ii) conserve the entire extent of the hearth feature within site BCBW18 AS 02 (AHIMS ID 45-5-5164);
- (iii) manage the discovery of previously unidentified Aboriginal objects or Aboriginal places on the site; and
- (iv) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and
- include a protocol to be implemented in the event that skeletal remains are discovered during the (e) development.

The Applicant must implement the Aboriginal Heritage Management Plan as approved by the Secretary.

- 31. If human remains are discovered on the site, then all work in the area surrounding the discovery must cease, and the area must be secured. The Applicant must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.
- 32. If any potential Aboriginal object or Aboriginal place is identified on the site, or suspected to be on the site:
  - (a) all work in the immediate vicinity of the object or place must cease immediately;
  - (b) a 10 m buffer area around the object or place must be cordoned off; and
  - (c) Heritage NSW must be contacted immediately.
- 33. Work in the immediate vicinity of a site identified in condition 32 of this Schedule may only recommence if:
  - (a) the object or place is confirmed by Heritage NSW upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object or Aboriginal Place;
  - (b) the Aboriginal Cultural Heritage Management Plan is revised to include the object or place and appropriate measures in respect of it; or
  - (c) the Secretary is satisfied with the measures to be implemented in respect of the object or place and makes a written direction in that regard.

#### REHABILITATION

#### **Rehabilitation Objectives**

The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) 34. associated with the development under the Mining Act 1992. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (Mod 3 and 4) and shown in Appendix 4, and must comply with the objectives in Table 5.

Feature	Objective		
All areas of the site affected by the development	<ul> <li>Safe</li> <li>Hydraulically and geotechnically stable</li> <li>Non-polluting</li> <li>Fit for the intended final land use(s)</li> <li>Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>		
Surface infrastructure	Decommissioned and removed, unless otherwise agreed by the Secretary		
Landscaping bunds	<ul><li>Hydraulically and geotechnically stable</li><li>Vegetated</li></ul>		
Pits 1, 2 and 3	<ul> <li>Backfilled to a landform that is consistent with natural ground level and is geotechnically stable</li> <li>Free draining</li> </ul>		

Table 5. Dababilitation Objectives

#### **Progressive Rehabilitation**

35. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance. Note:

The Applicant must complete the backfilling of Pits 1 and 2 within 6 years of commencement of Phase 1, or 35A. as otherwise agreed by the Secretary.

35B. The Applicant must complete the backfilling of Pit 3 within 2 years of the date of completion of extraction activities in Pit 3, or as otherwise agreed by the Secretary.

#### **Rehabilitation Management Plan**

- 36. The Applicant must prepare a Rehabilitation Management Plan for the development, in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This plan must:
  - (a) be prepared in consultation with the Department, NSW Water Group, BCS, TfNSW and relevant WSA authorities and Council;
  - (b) build upon the Rehabilitation Objectives in Table 5 and the proposed rehabilitation strategy described in the EA (Mod 3 and 4) and shown in Appendix 4;
  - investigate options for the future use of disturbed areas following the completion of backfilling operations, having regards to the strategic planning associated with the draft Western Sydney Aerotropolis Plan (or subsequently adopted NSW Government strategic plans);
  - (d) describe and justify the proposed rehabilitation strategy for the site, including the landform and use of the site following the completion of quarry operations;
  - (e) include details of the planting of replacement trees in riparian areas consistent with the Statement of Commitments and with vegetation requirements for WSA to minimise wildlife impacts;
  - (f) describe how the rehabilitation of the site would achieve the objectives identified in Table 5 and the requirements of conditions 35A and 35B of this Schedule;
  - (g) include detailed Rehabilitation Objectives, Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan for evaluating the performance of the rehabilitation of the site;
  - (h) include procedures for the use of interim stabilisation and temporary vegetation strategies, where reasonable to minimise the area exposed for dust generation;
  - (i) to the maximum extent practicable, build on and integrate with the other management plans required under this consent;
  - (j) include a life of mine rehabilitation and mining schedule and a protocol for progressive reviews of key progressive rehabilitation milestones from the commencement of operations through to decommissioning and mine closure;
  - (k) an overview of the identified risks to achieving successful rehabilitation and strategies to be implemented to address these risks;
  - (I) include a program to monitor, audit and report on the progress against the Rehabilitation Objectives and Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan; and
  - (m) describe the measures to be implemented to ensure compliance with the relevant conditions of this consent, including intervention and adaptive management techniques that may be required to ensure rehabilitation remains on a trajectory of achieving the Rehabilitation Objectives, Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan as soon as reasonably practical.

**Note**: The Rehabilitation Management Plan may be combined with a Mining Operations Plan, or similar plan, required under the mining lease granted for the development.

#### VISUAL

- 37. The Applicant must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.
- 37A. Within 3 months of commencing quarrying operations in Pit 3, the Applicant must construct landscaped earthen bunds and plant vegetation screens (as shown conceptually in Appendix 3), to minimise the visual impacts of the development. The landscaped earthen bunds and plant vegetation screens must be maintained until Pit 3 area has been fully rehabilitated.
- 37B. Within 6 months of the Secretary being advised of the confirmed Eastern Ring Road alignment, as required under condition 25C of this Schedule, the Applicant must construct landscaped earthen bunds and plant vegetation screens around the brickmaking facility and raw material stockpile (as shown conceptually in Appendix 3), to minimise the visual impacts of the development. The landscaped earthen bunds and plant vegetation screens and must be maintained for the life of the development.

- 37C. The Applicant must ensure that all outdoor and external lighting at the site:
  - (a) complies with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting; and
  - (b) is designed in accordance with any Civil Aviation Safety Authority requirements for the WSA and is mounted, screened and directed in such a manner that it does not cause distraction or confusion to pilots due to light spill above the horizontal plane.

#### Visual Impact Management Plan

- 37D. Within 6 months of approval of Modification 3 and 4, the Applicant must prepare a Visual Impact Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with Council, TfNSW and relevant WSA authorities;
  - (c) describe the measures to be implemented to minimise the visual, landscaping and off-site lighting impacts of the development to the WSA and surrounding community;
  - (d) include a landscaping strategy to shield public views of the development (including views from the Eastern Airport Ring Road) that includes:
    - the measures identified in the EA (Mod 3 and 4);
    - a vegetation strategy utilising a diversity of local provenance tree species from the native vegetation community (or communities) that occur, or once occurred on the site, and would minimise wildlife attraction;
    - a bund vegetation and maintenance schedule; and
    - procedures to notify, consult with and implement site-specific mitigation measures at affected privately-owned residences; and
  - (e) include a program to monitor and report on the implementation and effectiveness of the mitigation measures; and
  - (f) include a protocol to update the plan to include the requirements of condition 37A and 37B of this Schedule, once the Secretary has been advised of the confirmed Eastern Ring Road alignment, as required under condition 25C of this Schedule.

The Applicant must implement the Visual Impact Management Plan as approved by the Secretary.

#### WASTE

- 38. The Applicant must:
  - (a) manage on-site sewage treatment and disposal to the satisfaction of Council;
  - (b) minimise the waste generated by the development;
  - (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
  - (d) report on waste management and minimisation, including management of non-recyclable materials in the Annual Review,

to the satisfaction of the Secretary.

- Note: Approval pursuant to Section 68 of the Local Government Act 1993 is required from Council for onsite sewage management systems.
- 39. Except as expressly permitted in an EPL and/or the conditions of this consent, the Applicant must not receive waste on the site for storage, treatment, processing, reprocessing or disposal.

#### **Fill Management Plan**

- 39A. Prior to the import of Fill to the site, the Applicant must prepare a Fill Management Plan for the
  - development to the satisfaction of the Secretary. This plan must:
  - (a) identify the quantities of Fill to be imported to site;
  - (b) describe:
    - the procedures for monitoring Fill imported to the site to ensure that it meets relevant quality specifications for VENM or ENM;
    - a protocol to prevent materials that fail to meet the requirements of the ENM Exemption and ENM Order from being accepted;
    - the management of reject materials;
    - management measures for the emplacement and temporary stockpiling of Fill;
    - the process for handling Fill for use in rehabilitation;
    - measures for the on-site use of water captured in sediment basins to ensure that the water does not present a contamination risk; and
    - processes for assessing, recording, handling and managing any contamination found on the site; and

(c) provide an indicative schedule of Fill material to be imported to the site for each Phase of the development, in order to achieve the conceptual final landform.

The Applicant must implement the Fill Management Plan as approved by the Secretary.

#### LIQUID STORAGE

40. The Applicant must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.

#### **DANGEROUS GOODS**

41. The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

#### FIRE SAFETY

- 42. The Applicant must:
  - (a) ensure that the development is suitably equipped to respond to any fires on site;
  - (b) assist the emergency services to the extent practicable if there is a fire in the vicinity of the site; and
  - (c) ensure that the development provides for asset protection in accordance with the relevant requirements in *Planning for Bushfire Protection 2019* (NSW RFS 2019).

#### SCHEDULE 4 ADDITIONAL PROCEDURES

#### NOTIFICATION OF LANDOWNERS

- 1. As soon as practicable, and no longer than 7 days, after obtaining monitoring results showing:
  - (a) an exceedance of any criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the development is again complying with the relevant criteria; and
  - (b) an exceedance of any air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privatelyowned).

#### INDEPENDENT REVIEW

2. If a landowner considers the development to be exceeding the relevant criteria in Schedule 3, they may ask the Secretary in writing for an independent review of the impacts of the development on their land.

If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the Secretary is satisfied that an independent review is warranted, within 3 months, or as otherwise agreed by the Secretary and the landowner, of the Secretary's decision, the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and
  - if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria;
- (b) give the Secretary and landowner a copy of the independent review; and
- (c) comply with any written requests made by the Secretary to implement any findings of the review.

#### SCHEDULE 5

#### ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### ENVIRONMENTAL MANAGEMENT

#### **Environmental Management Strategy**

- 1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) set out the procedures to be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, record, handle and respond to complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance and any incident; and
    - respond to emergencies; and
  - (f) include:
    - references to any strategies, plans and programs approved under the conditions of this consent; and
    - a clear plan depicting all the monitoring to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved by the Secretary.

#### **Evidence of Consultation**

- 2. Where the conditions of this consent require consultation with an identified party, the Applicant must:
  - (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
  - (b) provide details of the consultation undertaken, including:
    - the outcome of that consultation, matters resolved and unresolved; and
    - details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed any unresolved matters.

However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this consent.

#### **Management Plan Requirements**

- 3. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) a summary of relevant background or baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the development; and
    - effectiveness of any management measures (see (c) above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (g) a protocol for managing and reporting any:

- incidents;
- complaints; and
- non-compliances with statutory requirements;
- (h) a protocol for periodic review of the plan; and
- (i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.
- Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

#### Application of Existing Strategies, Plans and Programs

4. The Applicant must continue to apply existing management plans, strategies or monitoring programs approved prior to the approval of Modification 3 and 4, until the approval of a similar plan, strategy or program following the approval of Modification 3 and 4.

#### **Revision of Strategies, Plans & Programs**

- 5. Within 3 months of:
  - (a) the submission of an incident report under condition 10 below;
  - (b) the submission of an Annual Review under condition 12 below;
  - (c) the submission of an Independent Environmental Audit report under condition 14 below; and
  - (d) the approval any modifications to this consent,

the Applicant must review the suitability of all strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

Notes:

- The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.
- In the event of an inconsistency between condition 5(d) above and any condition in Schedule 3 of this consent, the latter prevails.

#### Updating and Staging of Strategies, Plans or Programs

- 6. With the approval of the Secretary, the Applicant may:
  - (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
  - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and
  - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

#### **Adaptive Management**

7. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must as soon as becoming aware of any exceedance:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;
- (b) consider all reasonable and feasible options for remediation (where relevant);
- (c) within 14 days of the exceedance occurring, submit a report to the Secretary describing these remediation options and any preferred remediation measures or other course of action; and
- (d) implement remediation measures as directed by the Secretary;
- to the satisfaction of the Secretary.

#### COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. The CCC must be established prior to recommencing quarrying operations and be operated in general accordance with the Department's *Community Consultative Committee Guidelines, November 2016* (or later version).

Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.
- In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.
- The Applicant may, with the approval of the Secretary, combine the function of this CCC with the functions of other CCCs in the area.

#### **REPORTING AND AUDITING**

#### **Incident Notification**

9. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be made in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

#### **Non-Compliance Notification**

10. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be made in writing through the Department's Major Projects website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Note: A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance.

#### **Regular Reporting**

11. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

#### **Annual Review**

- 12. Prior to recommencing quarrying operations or Fill import, and annually thereafter, the Applicant must submit a review to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including any progressive rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the:
    - · relevant statutory requirements, limits or performance measures/criteria;
    - requirements of any plan or program required under this consent;
    - monitoring results of previous years; and
    - relevant predictions in the documents listed in condition 3 of Schedule 2;
  - (c) evaluate and report on:
    - the effectiveness of the air quality and noise management systems; and
    - compliance with the performance measures, criteria and operating conditions in this consent.
  - (d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
  - (e) identify any trends in the monitoring data over the life of the development;
  - (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and

(g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 8 of Schedule 5) and any interested person upon request.

#### INDEPENDENT ENVIRONMENTAL AUDIT

- 13. Within 12 months of the commencement of Phase 1, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies and the CCC;
  - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;
     (e) recommend appropriate measures or actions to improve the environmental performance of the
  - development, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
  - (f) be conducted and reported to the satisfaction of the Secretary.
- 14. Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Applicant must implement these recommendations, to the satisfaction of the Secretary.
- 14A. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.
  - **Note:** For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

#### ACCESS TO INFORMATION

(a)

- 15. Within 3 months of the determination of Modification 3 and 4, until the completion of all works, including rehabilitation and remediation the Applicant must:
  - make the following information publicly available on its website:
  - the documents listed in condition 3 of Schedule 2;
  - current statutory approvals for the development;
  - all approved strategies, plans and programs required under the conditions of this consent;
  - regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;
  - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
  - summary of the current stage and progress of the development;
  - contact details to enquire about the development or to make a complaint;
  - a complaints register, updated at least monthly;
  - the Annual Reviews of the development;
  - any Independent Environmental Audit as described in condition 13 above, and the Applicant's response to the recommendations in any audit; and
  - any other matter required by the Secretary; and
  - (b) keep this information up-to-date,

to the satisfaction of the Secretary.

APPENDIX 1 SCHEDULE OF LAND



APPENDIX 2 LAND OWNERSHIP SURROUNDING THE DEVELOPMENT



Figure 1: Receiver ID



Figure 2: Road Noise Receiver ID



APENDIX 3 DEVELOPMENT LAYOUT PLANS

Figure 1: Development Layout Overview



Figure 2: Phase 1 Development Layout



Figure 3: Phase 2 Development Layout



Figure 4: Phase 3 Development Layout



Figure 5: Phase 4 Development Layout

APPENDIX 4 REHABILITATION PLAN



Figure 1: Phase 2 Rehabilitation



Figure 2: Phase 4 Rehabilitation

IRT TPG TR1 TP5 TR2 TP4 TR2 TP3 TR2 TP2 TR1 TP1 TR3 TP6 TR3 TP5 TR2 TP1 TR3 TP4 TR3 TP3 TRS TP2 TR3 TP1 TR4 TP6 TR5 TP1 TR5 TP. Western stockpil PIT 1 Water storage facility Possible future extraction 1.4.1 PIT 2 Site boundary Eastern stockpil Over burder Approved project boundary **Raw material stockpiles** ------ Noise attenuation bund Central stockpile 60m Badgerys Creek buffer Indicative guarrying direction Active pit Proposed future pit Test pit with artefacts Test pit with no artefacts Sediment basin 2 Southern stocks 2 Sediment basin 1 ams Enterprises Dairy 0 Administration office outh eastern stock pile (East) 6 Gate house South eastern stockpile (West) 0 Carpark 0 Brick product storage area Brick making facility Sediment basin 3 250m CAMBIUM

APPENDIX 5 ARCHAEOLOGICAL DEPOSIT AVOIDANCE ZONE

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	APPENDIX 6 STATEMENT OF COMMITMENTS
Issue	Commitment
General	<ol> <li>The Applicant shall implement all practicable measures to prevent or minimise harm to the environment that may result from the construction, operation or rehabilitation of the development.</li> </ol>
	2. CSR will apply to amend EPL 684 to reflect the development.
	3. The environmental management strategy and sub plans will be amended to reflect
	the development.
Air Quality	4. The Applicant will prepare an Air Quality and Green House Gas Management Plan (AQGHGMP) for the development to the satisfaction of the Secretary. The AQGHGMP will outline the purpose, methodology and expected outcomes of the
	<ul> <li>dust monitoring, and will include the following content:</li> <li>Dust fraction to be measured, i.e. TSP, PM<sub>10</sub>, PM<sub>2.5</sub> etc.;</li> </ul>
	<ul> <li>Equipment to be used to measure selected dust fraction;</li> </ul>
	<ul> <li>Frequency of the monitoring, i.e. sample collection schedule;</li> </ul>
	<ul> <li>Duration of the monitoring program;</li> </ul>
	<ul> <li>Location of the monitoring station/s;</li> <li>Standarde/multiplication that are to be followed for location/construction of the</li> </ul>
	<ul> <li>Standards/guidelines that are to be followed for location/construction of the monitoring station, equipment calibration, collection of samples and analysis of samples;</li> </ul>
	<ul> <li>Calibration methodology and schedule;</li> </ul>
	<ul> <li>Reporting procedure;</li> </ul>
	<ul> <li>Regulatory guidelines and compliance criteria;</li> </ul>
	<ul> <li>Action levels and contingency measures in the event that pollutant concentrations</li> </ul>
	<ul><li>approach or are likely to exceed the relevant compliance criteria; and</li><li>A consultation program that involves nearby agricultural producers and residents, in</li></ul>
	order to determine if the dust mitigation measures are being affective.
	5. The AQGHGMP will detail measures to control dust and emissions from the Project
	Site including the following measures:
	<ul> <li>Haul roads should be watered using water carts such that the road surface has</li> </ul>
	sufficient moisture to minimise visible on-road dust generation but not so much as
	<ul><li>to cause pooling and mud/dirt track out to occur</li><li>Unloading of trucks containing raw or unusable extracted material to be controlled</li></ul>
	using water sprays/dust suppression when generating excessive visible dust.
	<ul> <li>Dust from existing stockpiles of unusable material and open pits to be controlled using water sprays with chemical additives (surfactants);</li> </ul>
	<ul> <li>Completed pits to be revegetated as soon as practicable after completion of</li> </ul>
	<ul> <li>quarrying activities.</li> <li>Disturbed soil surfaces to be revegetated in accordance with the RMP for the Disturbed soil surfaces to be revegetated in accordance with the RMP for the Distance of the second second</li></ul>
	<ul> <li>Project Site.</li> <li>Operational practices to be reviewed to ensure 'best practice' techniques are being</li> </ul>
	<ul><li>employed and that operational equipment is working efficiently.</li><li>6. The existing HVAS will be moved to as close to the northern boundary of the</li></ul>
	property and the closest sensitive receiver as possible. 7. The existing deposited dust gauges will be relocated to appropriate positions as
	close to the property boundaries and nearest sensitive receivers as possible.
	8. If HVAS and deposited dust air quality monitoring identifies ongoing exceedances
	of the relevant air quality criteria then the reactive dust management program may
	need to be reinstated at the site.
Noise	9. The Applicant will implement all practicable measures to undertake the development in a way that minimises the noise generated. The Applicant has made
	the following commitments in relation to operation noise management:
	10. The Applicant will conduct quarrying activities at the Project Site only between the
	following hours:
	<ul> <li>7.00 am to 6.00 pm Monday to Saturday.</li> <li>11 The Applicant will remain a workburday only between the following hours:</li> </ul>
	<ul><li>11. The Applicant will remove overburden only between the following hours:</li><li>7.00 am to 6.00 pm Monday to Saturday.</li></ul>
	12. The Applicant will operate the Brick making facility and storage yard at the Project
	Site 24 hours a day, Monday to Sunday.
	13. The Applicant will receive and dispatch finished building products only between the following hours:
	<ul> <li>5.00 am to 10.00 pm Monday to Friday.</li> </ul>
	<ul> <li>6.00 am to 6.00pm Saturday.</li> </ul>
	14. The Applicant will receive and dispatch raw material only between the following
	hours:
	<ul> <li>6.00 am to 10.00 pm Monday to Friday.</li> </ul>
	6.00 am to 6.00pm Saturday.
	15 The Applicant will conduct each calco only between the following hours:

**APPENDIX 6** 

- 15. The Applicant will conduct cash sales only between the following hours:
  6.00 am to 6.00 pm Monday to Saturday.

Issue	Commitment
10040	16. The Applicant will operate the sales selection/customer display centre only between
	the following hours:
	<ul> <li>8.00 am to 5.00 pm Monday to Sunday.</li> </ul>
	17. Construction works shall be limited to 7am to 6pm Monday to Friday and 8am to
	1pm on Saturdays.
	18. A CNVMP will be prepared and implemented during development construction.
	19. The construction noise mitigation measures described in Chapter 5.5 of the preferred development noise impact assessment report (appended to the RTS) shall be implemented.
	20. Vibration during construction will be managed through the CNVMP to ensure that vibration impacts comply with the limits prescribed in British Standard BS 7385 for structural damage and in Assessing Vibration: a technical guide (DECCW, 2006) for human response.
	<ol> <li>The Applicant and/or its appointed contractors will select and maintain bulk earthwork machinery as specified in the preferred development noise impact assessment report (appended to the RTS).</li> </ol>
	22. Broadband reversing alarms or other non-tonal vehicle movement and warning
	alarms shall be fitted to all machinery on site. The potential noise impact associated
	with reversing alarms shall be managed and minimised via a combination of
	proactive driver/operator training and operational procedures.
	23. The Applicant shall implement a noise monitoring programme which would involve quarterly attended noise monitoring at a number of nearby identified receiver locations for 12 months after all Modification 3 and 4 activities are in full operation. If there are no exceedances of the project noise trigger levels during quarterly noise monitoring during the first year of monitoring then noise monitoring will cease. Additional noise monitoring would be undertaken in response to any noise complaints.
	23. The Applicant shall undertake consultation with identified Martin Road residential receivers predicted to exceed the RNP criteria and conduct further investigation of their residences (as detailed in Section 2.3.3 and 4.1 of the RTS) to determine whether they qualify for and require the 'Type 1' treatment package from RMS's
	(2015) At-receiver Treatment Guideline.
	24. Further investigations of the six residences potentially affected by road noise will be undertaken prior to increasing heavy vehicle movements along Martin Road above the approved heavy vehicle numbers and no greater than 180 truck movements in the daytime period. The investigation will determine whether the residences require the 'Type 1' treatment package from RMS's (2015) At-receiver Treatment Guideline.
	25. Prior to construction of the Martin Road-Elizabeth Drive intersection, existing road noise levels would be qualified to determine if architectural treatment should be offered to receivers along Elizabeth Drive raising complaints about increased road noise levels.
	26. The Applicant will maintain a noise complaint register.
Surface Water	Stormwater management
	27. The Applicant shall manage surface water on the Project Site in accordance with the WMP prepared for the Project Site and revised for the development, including surface water management measures include in the Modification 3 and 4 EA and the RTS.
	28. If during the operational phase of the quarry or on completion of the quarry operations, the Applicant wishes to make use of the water from the pits/dams in the brick making process or for reuse at other premises offsite etc, a licence will be obtained from DPIE.
	29. Sediment basins 4, 5 and 6 and the new basins at the raw material stockpile area
	and Pit 3 will be sized and operated in accordance with Landcom's (2004) Managing Urban Stormwater: Soils & Construction. If any of these basins are to be modified to perform additional stormwater treatment functions in future (other than sediment capture), then appropriate modelling and design of the basins will be required at that time. In this case monitoring of discharges from the basin at Pit 3 to South Creek will be required.
	30. The site WMP will be revised prior to commencement of the modification to include the revised surface water management approach, and monitoring of any water discharged from the site. Monitoring
	31. Electrical conductivity, pH, total nitrogen, total suspended solids, turbidity, total alkalinity, arsenic and copper will be monitored at the discharge points to Badgerys Creek and South Creek. Discharges will be monitored daily during the first month of continuous discharge, then weekly if the first month of data does not exceed concentration limits. Monitoring will revert to daily if any limits are exceeded and/or
SIA/ Covornmont	concentrations are reduced below limits.

Issue	Commitment
15500	
	32. Total dissolved solids, total phosphorus, arsenic, cadmium, chromium, lead, nickel, zinc and mercury will be sampled weekly during the first two months, which will
	reduce to monthly if there are no exceedances.
	33. The analytes previously sampled in Pit 1 will be monitored at three depth levels
	from the surface to 6 m at two locations near the discharge point to Badgerys
	Creek. Water will be monitored weekly for three weeks prior to discharge, then
	monthly. This monitoring will continue for the life of the development, and in the
	perched treatment basin described above.
	34. Similar sampling is also required for the new basin at Pit 3 if the basin is being used to treat Pit 3 water (other than sediment capture). The list of analytes may be able to be reduced according to the future quality of stormwater collected in Pit 3.
	Licensing and approvals
	35. CSR will apply to the EPA to amend the EPL to incorporate the discharge rates and concentration limits for relevant physical and chemical stressors, and toxicants, at the discharge point to Redgen to Creak
	the discharge point to Badgerys Creek.
	36. CSR will apply to the EPA to amend the EPL, if and when required, to incorporate
	appropriate discharge rates and concentration limits for discharges from the basin at Pit 3, for which time the basin provides additional water treatment other than sediment capture.
	37. CSR will consult DPIE Water on the need for water licenses associated with the
	modification.
	38. The EPA will be engaged, post approval, to determine whether the pit water must
	be classified in terms of the Protection of the Environment Operations Act 1997
	(POEO Act) and to include the discharge point in the EPL.
	Erosion and sediment control
	39. Erosion and sediment controls will be implemented at the pit areas once they are
	filled with Fill and rehabilitation has commenced. These measures will remain in
	place until surfaces are fully stabilised.
	40. Erosion and sediment controls will be implemented along the unsealed Fill haul
<b>•</b> • • •	road, which will direct runoff to the pits or local sediment traps. 41. The Applicant shall prepare and implement a Groundwater Monitoring Program for
Groundwater	the Project Site generally in accordance with the methodology provided in Chapter 11 of the 2011 EA, subject to consultation with the DPIE (water, lands and primary
	industry) and the satisfaction of the Director-General of the DP&I.
	42. The WMP will be updated to include the groundwater monitoring network and a
	TARP for exceedances of groundwater criteria, which will be developed based on the baseline groundwater data.
	5
	43. The Applicant shall report the results of the Groundwater Monitoring Program to the Secretary of the DPIE on an annual basis.
	44. The Applicant shall implement appropriate management measures in relation to groundwater as indicated by the Monitoring Program and agreed with the
	Secretary. 45. A licence to authorise any groundwater monitoring installation, required as part of
	this development, shall be obtained from the DPIE Water prior to any drilling commencing.
	46. The Applicant shall implement an alluvial aquifer mapping and assessment program to inform:
	<ul> <li>The definition of the boundaries of the alluvial system.</li> </ul>
	<ul> <li>Adjustment to the extent of proposed pits to avoid impacts to the alluvial aquifer.</li> </ul>
	<ul> <li>Adjustment to the extent of proposed pits to avoid impacts to the anuvariadurer.</li> <li>The establishment of further mitigation measures (if required) to minimise potential</li> </ul>
	impacts upon the alluvial aquifer.
	<ul> <li>This program will commence within 12 months of recommencing quarrying</li> </ul>
	operations and the results will be reported to the Secretary of the DPIE.
Rehabilitation	47. The site will be progressively rehabilitated in accordance with the approved
	rehabilitation strategy and rehabilitation management plan.
	48. The rehabilitation strategy and rehabilitation management plan will be revised to
	incorporate the development, and any additional management strategies to ensure
	temporary stabilisation of exposed surfaces, permanent stabilisation strategies and
	progressive rehabilitation with groundcover vegetation.
	49. The rehabilitation management plan will be revised to exclude plant species that
	are known to attract wildlife and grow to a size which will penetrate the OLS.
	50. The Applicant shall carry out rehabilitation works at the Project Site in accordance
	with the RMP prepared for the Project Site.
	51. The Applicant will prepare a Final Landform Rehabilitation Plan in consultation with the DPIE two years prior to the completion of all approved quarrying activities.
Traffic and Transport	52. The Applicant shall manage traffic movements to and from the Project Site generally in accordance with the following:

1. And the second se	
Issue	Commitment
	<ul> <li>Personnel operating trucks and vehicles to and from the Project Site would be required to undertake a site-specific health and safety induction, specifying operating hours and vehicle speed limits on Martin Road.</li> <li>A heavy vehicle protocol would be developed for the Project Site and distributed to relevant staff and contractors during induction procedures. The protocol would deal</li> </ul>
	with such issues as timing of vehicle movements, idling of vehicles, speed limits and parking.
	<ul> <li>Unnecessary vehicle movements would be minimised where possible.</li> <li>Deliveries would be scheduled on larger capacity 'Truck and Trailer' vehicles rather than 'Truck Only' vehicles where possible to minimise truck movements.</li> </ul>
	<ul> <li>A construction traffic management plan will be prepared and implemented to manage impacts on the road network, including the intersection, from construction vehicles.</li> </ul>
	<ul> <li>Traffic signals and road upgrades will be constructed at the Martin Road-Elizabeth Drive intersection prior to increasing heavy vehicle movements from the development above the approved heavy vehicle numbers.</li> </ul>
	<ul> <li>CSR will contribute to the upgrade and ongoing maintenance of Martin Road in accordance with the deed of agreement with LCC.</li> </ul>
Cultural Heritage	53. The Applicant shall adopt the following measures in relation to the management of cultural heritage on the Project Site:
	<ul> <li>The heat retainer hearth will continue to be protected by a fenced 10m exclusion zone.</li> </ul>
	<ul> <li>All Aboriginal heritage items collected during survey and test excavations will be reburied with the hearth in consultation with the RAPs.</li> </ul>
	<ul> <li>Should Aboriginal heritage items be uncovered during the course of the approved works, works shall cease. In cases where historical items have been uncovered, Heritage NSW is to be advised or should indigenous items be uncovered the Netional Parks and Wildlife Carries about the advised.</li> </ul>
	<ul> <li>National Parks and Wildlife Service shall be advised.</li> <li>Workers/contractors shall be informed of their obligations under the NPW Act 1974, namely that it is illegal to disturb, damage or destroy an Aboriginal object without the prior approval of the Secretary of DPC.</li> </ul>
	<ul> <li>Should human remains be found in, on, or under the land during construction, the responsible party shall:</li> <li>Contact the local police.</li> </ul>
	<ul> <li>Not disturb or excavate the remains.</li> <li>Immediately cease all work at the particular location.</li> </ul>
	<ul> <li>Notify the Heritage NSW (DPC) office as soon as practicable and provide any available details of the remains and their location.</li> </ul>
	<ul> <li>Not recommence any work at the particular location until authorised in writing by the Heritage NSW.</li> </ul>
	54. The AHMP will be updated with the findings of the Modification 4 ACHA.
Ecology	55. The Applicant shall adopt the following measures in relation to the removal of any trees on the Project Site:
	• The canopy of the trees to be visually inspected prior to clearing to assess for the presence of fauna. Where bird species are detected the tree is to be nudged prior to felling to encourage the fauna to vacate the tree prior to felling. Trees to be left in situ until the birds leave the canopy.
	• Felled trees are to be left in-situ for at least 24 hours to allow fauna species to relocate. Qualified personnel are to be on hand to check for wildlife and relocate them.
	<ul> <li>Felled wood is to be relocated to the remnant woodland (and not placed in piles) or chipped and used in rehabilitation areas.</li> <li>Should any wildlife be inadvertently injured during the proposed works. WIRES or</li> </ul>
	an accredited veterinarian shall be contacted.
	<ul> <li>A 60 m buffer area shall be provided along Badgerys Creek and the Badgerys Creek tributary, except where Pit 2 extends into these buffers. Rehabilitation works are to be undertaken in this area in accordance with the RMP.</li> </ul>
	• Five local native trees shall be planted for each mature native tree that is removed. The replacement trees shall consist of a diversity of local provenance tree species from the native vegetation community (or communities) that occur, or once occurred on the site. The plantings shall be located adjacent to the riparian vegetation along South Creek, Badgerys Creek and its tributary.
Aquatic biodiversity	56. A 40 m vegetated riparian zone will be maintained around the wetland adjacent to South Creek and 20 m zone will be maintained around the tributary to Badgerys
	Creek (except over Pit 2). 57. As the hydraulic modelling for the surface water assessment was indicative, geomorphology will be assessed in greater detail to validate the bed and bank materials of Badgerys Creek prior to finalisation of the pit dewatering strategy. This

Issue	Commitment
	<ul> <li>will include quantification of bed and bank material and particle size and calculation of critical shear stress for the bed and bank to determine its sensitivity to erosion.</li> <li>58. If the bed and bank materials are demonstrated to be sensitive to erosion, the optimum flow rate that can be achieved without impacting the creek bed and banks will be determined in a sediment transport model.</li> </ul>
	<ul> <li>59. It will be necessary to gain further water quality and flow data to determine the impact of discharges on Badgerys Creek. Water quality will be monitored every month at the four Badgerys Creek and South Creek monitoring locations as described in Section 6.3.2 of the EA. This will include nitrogen speciation to determine which portion of nitrogen is bioavailable and could impact aquatic</li> </ul>
	<ul> <li>ecosystems.</li> <li>60. A biological monitoring program will be developed to detect if the macroinvertebrate community is changed by exposure to discharge water. An in-stream vegetation monitoring program will be prepared and implemented to detect if the discharge is impacting vegetation community composition and mortality.</li> </ul>
	61. Monitoring for changes to instream vegetation and macroinvertebrates will be incorporated into a pit dewatering plan as a sub-plan to the existing water management plan.
	62. CSR will compile a fauna relocation plan. This plan will develop strategies for aspects such as transferring aquatic fauna, acclimatising aquatic fauna to different water conditions and managing pest species. DPIE will be consulted during the development of this strategy.
Contamination	63. The potential presence of asbestos in the eastern edge of Pit 1 will be added to the site Asbestos Register.
	64. A materials management plan will be prepared to ensure that surface water, backfilled material and imported soils are handled appropriately, do not pose a risk to human health or the environment and will be suitable for the proposed land use. The plan will provide procedures to appropriately quantify, classify, dispose of and
	<ul> <li>report on potential contaminants.</li> <li>65. A UFP will be prepared, providing guidance in the event that future below ground excavations identify contaminated materials (e.g. asbestos, staining, odours). The UFP will outline procedures for handling, assessing and managing any contamination that may be identified as part of Modification 4 works. If previously unidentified contaminated materials are encountered during construction and operation of the proposed modification, relevant statutory requirements, including potential soil testing and waste classification, will need to be complied with, and the material managed and disposed of appropriately.</li> </ul>
	66. Stored/stockpiled materials within the proposed disturbance footprints will be inspected and they will be recycled or disposed at facilities which can legally receive such materials.
	<ul> <li>67. Soil materials within the vicinity of the Modification 3 works will be assessed in accordance with NSW EPA (2014) <i>Waste Classification Guidelines</i> and either reuse them on site where suitable or dispose of them offsite to a landfill which can legally receive such materials.</li> <li>68. Conduct a hazardous material survey on existing site structures prior to</li> </ul>
Waste	<ul><li>demolition/alteration activities.</li><li>69. The Applicant shall manage waste in relation to the development in accordance with</li></ul>
Maste	<ul><li>the existing WMP for the Project Site.</li><li>68. (<i>Deleted</i>).</li></ul>
$\mathcal{L}$	70. All waste generated on site will be managed in accordance with the site's waste management plan that will follow the waste hierarchy of avoid, reduce, re-use, recycle and will be updated to include development works.
Visual amenity	<ol> <li>Proposed lighting at the site will still comply with Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting.</li> </ol>
Mineral Resources	72. The Applicant will provide annual production data to the water, lands and primary industries division of the Department of Planning, Industry and Environment, as and when requested.
Environmental Management	73. The Applicant shall prepare an EMS for the Project Site to provide environmental management practices and procedures to be followed during the operation of the development. The EMS shall include, but not necessarily be limited to:
	<ul> <li>identification of statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development;</li> <li>a description of the roles and responsibilities for all key personnel involved in</li> </ul>
	<ul> <li>environmental management of the development;</li> <li>the environmental policies and principles to be applied to the operation of the development; and</li> </ul>
	<ul> <li>describe in general terms how the environmental performance of the development would be monitored and managed.</li> </ul>

NSW Government Department of Planning, Housing and Infrastructure