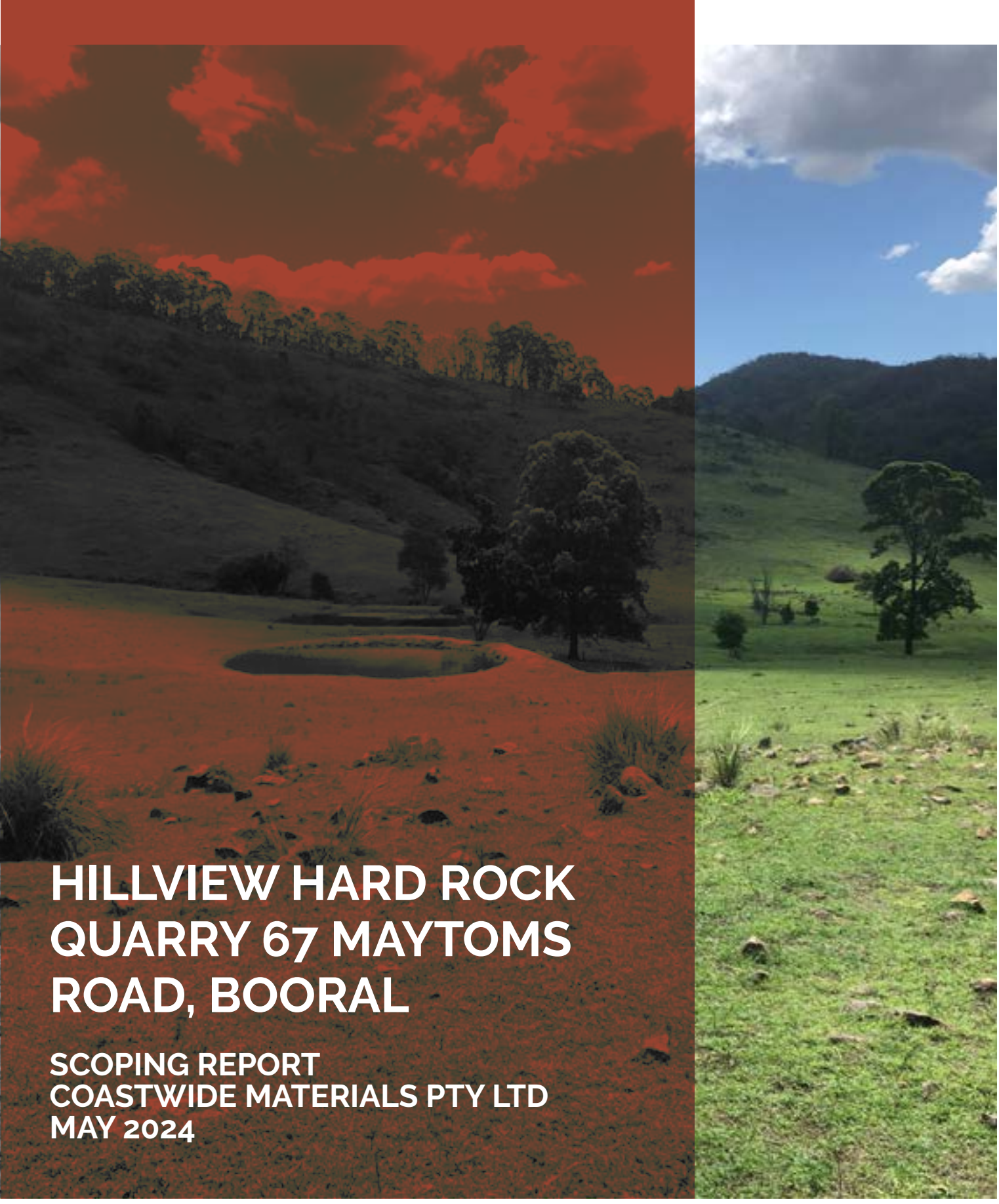

HILLVIEW HARD ROCK QUARRY 67 MAYTOMS ROAD, BOORAL

SCOPING REPORT
COASTWIDE MATERIALS PTY LTD
MAY 2024

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DOCUMENT CONTROL SHEET					
Issue ID.	Amendment	Date of Issue	Prepared By	Reviewed By	Project Ref
A	Draft	11.04.2024	Brooke Sauer	Adam Crampton	240012
B	Initial Issue	02.05.2024	Brooke Sauer	Adam Crampton	240012

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Acknowledgement of Country

We, ADW Johnson, acknowledge the Traditional Custodians of the land where we live and work, the country of Awabakal, Darkinjung & the Eora Nation.

We recognise their continuous connection to the land and waters of our beautiful regions. We pay our respects to Aboriginal and Torres Strait Islanders Elders past, present and emerging.

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GLOSSARY + ABBREVIATIONS	
SEARs	Secretary's Environmental Assessment Requirements
EIS	Environmental Impact Statement
SSD	State Significant Development
OEMP	Operational Environmental Management Plan
EMP	Environmental Management Plan
CEMP	Construction Environmental Management Plan
BDAR	Biodiversity Development Assessment Report
CSP	Mid Coast Community Strategic Plan
RED	Mid Coast Regional Economic Development Strategy
LGA	Local Government Area
REDS	Mid Coast Regional Economic Development Strategies
LEP	Local Environmental Plan
ROM	Run of Mine
RL	Reduced Level
AHD	Australian Height Datum
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPA Act	Environmental Planning and Assessment Act 1979
EPA Regs	Environmental Planning and Assessment Regulations 2021
PoEO Act	Protection of the Environment Operations Act 1997
BC Act	Biodiversity Conservation Act 2016
WM Act	Water Management Act 2000
EPL	Environment Protection Licences
EPA	Environment Protection Authority
TfNSW	Transport for New South Wales
PHA	Preliminary Hazard Analysis
TSP	Total Suspended Particulates

Executive Summary

PURPOSE

This Scoping Report is submitted to the NSW Department of Planning, Housing and Infrastructure (DPHI) in support of a new hard rock quarry at 67 Maytoms Lane, Booral NSW (the site). The report seeks Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) which will accompany a State Significant Development Application.

The development is defined as an *'extractive industry'* and is classified as State Significant Development (SSD) pursuant to *Schedule 1, Section 7 – Extractive Industries* of *State Environmental Planning Policy (Planning Systems) 2021*, as the proposed will extract more than 500,000 tonnes of extractive materials per year.

APPLICATION DETAILS

Applicant:	Coastwide Materials Pty Ltd
Development:	Hillview Hard Rock Quarry
Site Description:	67 Maytoms Lane, Booral NSW Lot 60 DP 1094397, Lot 1 DP 159902, Lot 62 DP 95029, Lot 63 DP 95029, Lot 2 DP 1166923, Lot 3 DP 1166923, Lot 4 DP 1166923 and Lot 64 DP 95030
Owner:	Michael Tripolone
Development Cost:	$6.5 million

SECTION 1
INTRODUCTION

1. Introduction

1.1 THE PROJECT

1.1.1 Project Description

The proponent seeks to develop a hard rock quarry for the extraction of Rhyolite, due to its various uses and demand for the resource as a component for the creation of aggregate, building materials and road base. Whilst the site comprises an area of approximately 400.3ha, the total disturbance footprint for the proposed quarry will be confined to approximately 48ha.

The proposal will require some clearing of vegetation in order to gain access to the processing pad and extraction areas, site preparation works and installation of infrastructure and services to facilitate operations at the site. Road upgrades will also be required to Maytoms Lane and The Bucketts Way to cater for vehicle movements.

The proposed development is to be undertaken over seven key stages, during which approximately 45 million tonnes of resource material is proposed to be extracted at a rate of up to 1.5 million tonnes per annum (tpa) over 30 years. During the initial years of the quarry, it is not expected that extraction amounts will reach 1.5 million tonnes, due to the site establishment works to be completed prior to the main extraction activities commencing. These establishment works will include the new intersection of The Bucketts Way and Maytoms Lane; construction of the main access to the processing pad; creation of the processing pad; and installation of other infrastructure including site office and facilities, weigh bridges, and processing machinery. These construction stages will result in the winning of material; with a portion to be used in site establishment activities and the remainder to be exported from the site. **Table 1** provides a summary of the main elements of the project.

Table 1: Summary of Proposal

Project Element	Summary of Project	
Proposed Development	Har Rock Quarry	
Extraction Method	Traditional drill and blasting over extraction are of 48ha	
Resource	Quarry extraction of Rhyolitic Tuff from RL 205m AHD down to final RL 95m AHD	
Disturbance Areas	Total disturbance area	48ha
	Stage 1 disturbance area	9.5ha
	Stage 2 disturbance area	2.4ha
	Stage 3 disturbance area	10.6ha
	Stage 4 disturbance area	1.1ha
	Stage 5 disturbance area	5.4ha
	Stage 6 disturbance area	9.6ha
	Stage 7 disturbance area	9.4ha
Annual Production	Up to 1.5 million tonnes	
Quarry Life	30 years	
Management of Mining Waste	Managed and minimised by retaining resources that have value for reuse on-site, or collected by an appropriately licensed contractor and transported to appropriately licensed facility for recycling or disposal.	
General Infrastructure	Access roads including intersection works, electricity supply, on-site sewer management, weighbridge and site office.	
Product Transport	Transport by truck with average of 252 movements (126 in and 126 out) a day.	
Water Management	An array of water storages are proposed to contain and control runoff at the project – including sediment dams, water storage dams and pit sump.	
Operational Workforce	25-30 full time employees, anticipated to comprise quarry manager, supervisors, drivers, weighbridge operator and administration clerk.	

Project Element	Summary of Project	
Hours of Operation	Extraction and processing operations	Monday to Saturday 6:00am to 10:00pm
	Internal product transfers to stockpiles	Monday to Saturday 6:00am to 12:00am (midnight)
	Haulage from and to the development site	Monday to Saturday 7:00am to 6:00pm
	Blasting activities	Monday to Friday 9:00am to 4:00pm
	Maintenace activities	24 hours 7 days a week
Site Rehabilitation	Progressive	
Capital Investment Value	$6.5 million	

1.1.2 Objectives of the Development

The objectives of the proposed Hillview Hard Rock Quarry are:

- Provide high quality rhyolite resource to meet demand throughout the Hunter region and across NSW due to its strategic logistical location. The project allows for responsible and sustainable use of a regionally significant resource;
- Provide employment for approximately 25-30 full time employees;
- Provide economic benefit to the State and local community through employment and the purchase of local goods and services.
- To meet the above objectives through extracting the resource via best practice environmental and social approaches.

1.2 BACKGROUND TO THE DEVELOPMENT

1.2.1 Relevant History

SEARs were originally issued for the project on 10th March 2017 (SSD-8239); at which point the proposal also included:

- Installation and operation of a concrete batching plant;
- Importing sand, cement and flay ash for use in the concrete batching plant, and
- Importing concrete waste for blending purposes.

As the project was further developed and assessments commenced; the scope of the project was amended to remove the abovementioned components. Due to project delays, the SEARs were extended and notified between 2017 and 2022, with the SEARs last notified 27th April 2022. Due to ongoing delays, and the level of detailed assessment completed by specialist consultants; the project will not be submitted to DPHI prior to the SEARs expiring on 27th April 2024. A copy of the previous SEARs is provided as **Appendix 2** for reference.

Following discussions with DPHI's James McDonough (Team Leader – Resource Assessment), it was advised that a new scoping report would need to be submitted for assessment in order to obtain new SEARs. As such, the subject scoping report has been issued for consideration.

1.2.2 Capability of the Site

As part of assessing the capability of the site, *VGT Environmental Solutions and Laboratories*, were engaged to review the insitu available resources located within the site – including the amount, type, composition and quality. Resource Assessments conducted to date have determined that there is little overburden on the main resource area and that top soil may consist of up to 45,000m^3.

Whilst material quality within some sections of the quarry footprint is still being investigated, current outcrop and drill data suggests good quantities of Rhyolite. Rhyolite within the main resource area is 14.9 million m^3 and based upon a density of 2.5g/cm^3, a total resource of at least 37.5 million tonnes is available to RL 95m. Further resources could be gained with some bore holes sunken deeper, intersecting Rhyolite to RL 49m. VGT have confirmed that the Rhyolite material available for extraction is suitable for concrete, asphaltic and sealing aggregates, road base, rip rap and rail ballast applications.

1.2.3 Key Strategies to Minimise Impacts

Development specific strategies to minimise the impacts of the proposed quarry will be developed in detail as part of the assessments to be conducted with the engaged specialist consultants. It is noted however, that many of the key strategies which are currently employed throughout the extractive industry sector will be implemented for the proposed development in order to avoid or minimise the impacts of the project.

These will include:

- Mitigation measures related to noise, vehicle movements and emissions, embedded into the design of the project to minimise environmental impacts – such as adhering to strict hours of operation, implementing a dust suppression system and appropriate pollution control devices;
- Preparation and implementation of a site-specific Operational Environmental Management Plan (OEMP) following development consent and implemented to ensure that the commitments made within the EIS, along with the conditions imposed by the development consent and environmental protection licence, are fully implemented and complied with. The OEMP will likely contain the following key components:
    - Environmental management framework, including key contacts, roles and responsibilities and regulatory requirements;
    - Environmental management commitments and responsibilities;
    - Monitoring, inspections and reporting requirements;
    - Complaints management strategy;
    - Environmental incident management strategy;
- An Environmental Management Plan (EMP) prior to operations commencing, with a Construction Environmental Management Plan (CEMP) to manage the construction phase. The EMP and CEMP will provide detail on the implementation of the environmental management and monitoring measures presented throughout the EIS and as required by conditions of consent and licences;
- An Annual Review of the quarry's environmental performance in line with the requirements of the EMP to the relevant agencies;
- Staff, contractor and visitor inductions, covering (where relevant), an overview of management measures and responsibilities including:
    - EMP requirements;
    - Environmental sensitivities;
    - Hazard and risk management;
    - Designated site access;
    - Waste management, spill response and management;
    - Weed and pathogen control;
    - Bushfire prevention;
    - Emergency response;
    - Incident reporting (environmental and safety);
    - Driver code of conduct.

SECTION 2
STRATEGIC CONTEXT

2. Strategic Context

2.1 KEY FEATURES OF THE SITE AND SURROUNDS

2.1.1 Location and Land Uses

The site is located in Booral off the Bucketts Way, approximately 23km from the Pacific Highway intersection. The village of Stroud is located approximately 10km north-east of the site. Raymond Terrace is approximately 30km drive south-west of the site.

The longstanding and existing use of the site is traditional agricultural production, with stock grazing being the predominate use. The surrounding neighbourhood is characterised by a mix of land uses, including traditional agricultural production (primarily stock grazing), small-scale poultry operations and small rural/lifestyle holdings. The Karuah Nature Reserve is located approximately 1.5km to the south.

The nearest populated areas (see **Figure 1**) are the relatively small villages of:

- Booral approximately 2km to the northeast;
- Allworth approximately 5km to the southeast; and
- Stroud approximately 8km to the north.

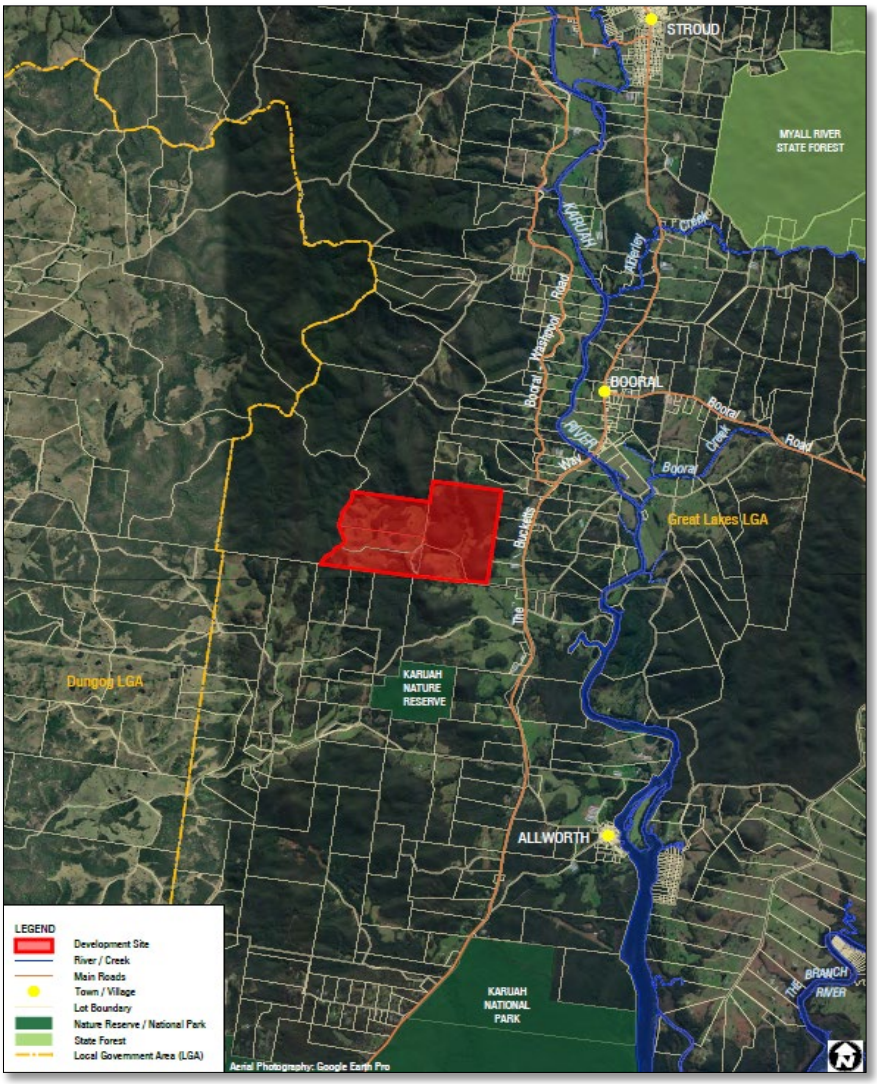

Figure 1: Wider Locality Showing Site Context
(Source: SLR Preliminary Environmental Assessment June 2018)

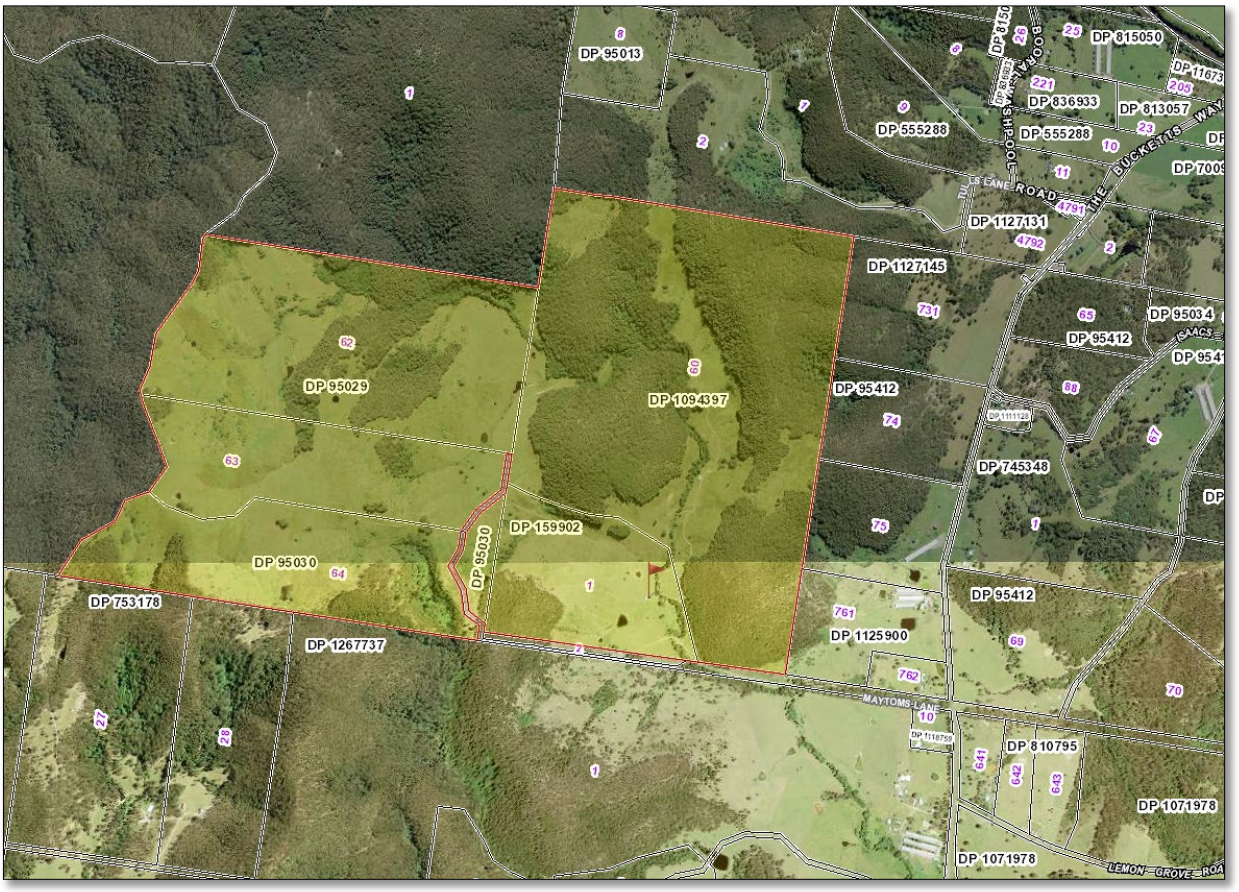

Figure 2: Aerial Image Showing Site Context
Source: Six Map

Photo 1: The site looking north from dwelling toward location of proposed slot

Photo 2: The site looking west at the location of the proposed processing pad

Photo 3: View looking north-east from RL 205m AHD (approximate)

2.1.2 Site Dimensions and Access

The site is irregular in shape; comprised of several lots with a total area of 400.3ha.

Access to the site is via Maytoms Lane which is currently an unsealed public road owned by Mid Coast Council.

2.1.3 Vegetation and Amenity

The site comprises vegetated areas and former pasture land. Vegetated areas are predominantly located on hills within the eastern areas of the site with cleared former pasture areas principally within lower-lying valley areas and in the centre and western areas of the site.

The visual amenity of the general area is that of a river valley surrounded by undulating topography, with significant areas of remnant vegetation interspersed with land that has been cleared or partially cleared and being used for stock grazing, small-scale poultry operations and small rural/lifestyle holdings. While the site has been partially modified and disturbed as a result of past clearing and agricultural activities, there are some significant areas of undisturbed land and native vegetation within the site.

2.1.4 Watercourses and Topography

Double Creek traverses the site in a south-easterly direction draining in to the Karuah River located on the eastern side of Bucketts Way approximately 2km from the site. Several other minor/intermittent drainage lines also traverse the site. Local topography is irregular and undulating. Elevations within the site range between approximately 30m and 200m Australian Height Datum (m AHD), with slopes ranging up to approximately 40%.

2.1.5 Geology

On-site geological investigations have identified that the site is underlain by a Rhyolitic Tuff composed of finely microcrystalline, coarse phenoclasts of feldspar and quartz, as well as other trace minerals. The Rhyolitic Tuff is thought to have originated as an acid ash flow tuff comprised of quartz and feldspars dispersed through a welded matrix of vitric shards and some compressed pumice. The upper 28m (on average) of Rhyolitic Tuff is hematised, with the underlying material being free of haematite mineralisation. Geotechnical aspects of the stratum are suitable for use in concrete and road construction applications.

2.2 POLICY CONTEXT

The proposal aligns with State, District and Local planning objectives as outlined below.

2.2.1 Hunter Regional Plan 2041

The *Hunter Regional Plan (HRP) 2041* sets out the NSW Government's strategic vision for the Hunter region. The plan aims to strengthen the region's economic resilience, maintain its well-established economic and employment bases, and build on its existing strengths to foster greater market and industry diversity. The plan also aims to protect its diverse terrestrial and aquatic ecological systems, conserve its heritage values and create thriving communities that enrich the quality of life and wellbeing of the residents.

The plan emphasises the need to manage different lands uses in pursuit of complementary outcomes and attainment of its overriding goals. Sound management will encourage the Hunter to grow as a healthy, sustainable and thriving place for everyone.

The following objectives of the HRP specifically relate to the proposal:

- ***Objective 1, to diversify the Hunter's mining, energy and industrial capacity and ensuring the Hunter will be a leader in a 21st century industrial economy.***

The proposal will contribute to diversifying the Hunter's industrial capacity by directly promoting jobs to the area as well as ensuring projects and sub-industries which rely on hard rock, can be provided with a stable and readily available resource. The proposal responses well to the characteristics of the site and is appropriately located. The quarry will contribute to the regional economy of the Hunter, into the future.

- ***Objective 9, to sustain and balance productive rural landscapes and acknowledging NSW needs a reliable supply of construction materials to support continued growth including sand and gravel, crushed rock, recycled materials and secondary aggregates created from construction, demolition and excavation.***

The proposal will contribute to and assist with the supply of the provision of crushed rock to the construction industry within New South Wales. The resource will support the continued growth of the Hunter region and the future demand across the state. The location of the quarry is considered protected from encroachment by sensitive uses, thereby ensuring a compatible and sustainable use of the site and locality.

2.2.2 Mid Coast Local Strategic Planning Statement

The *Mid Coast Local Strategic Planning Statement* (LSPS) was designed to assist with guiding decisions on future planning to achieve the community's vision and values. The LSPS demonstrates how strong land use planning will provide the community with a balance between the opportunities for tourism and economic development, contrast with the protection of the environment and local identities. This balance is set within 10 planning priorities to achieve the vision of the strategy in an ongoing basis over the short, medium, and long terms. The statement also aligns with the directions and actions contained in the *Hunter Regional Plan*.

The following planning priorities of the LSPS specifically relate to the proposal:

Planning Priority 6 (P6): Protect and improve our environment

The Mid Coast contains extensive waterways, coastal landscapes, and diverse natural areas with high levels of biodiversity. The protection of these areas is a priority for the community.

This proposal will be supported with a detailed Biodiversity Development Assessment Report (BDAR) that has ensured the ecological values of the land have been comprehensively analysed and any potential environmental impacts towards habitat loss, degradation, and fragmentation of the land, has been sufficiently addressed. The site has a 30-year lifespan to which significant rehabilitation is to be undertaken to restore the land and the return environmental value to the site.

Planning Priority 8 (P8): Managing our land and water assets

Agriculture, aquaculture, forestry and mining are recognised as significant industries in the Mid Coast region. As per the LSPS, these industries account for approximately $478 million in exports, which is over 55% of the region's total exports. They make a Gross Value Added (GVA) contribution to the local economy of $388 million.

This priority outlines that quality agricultural land is to be protected and land use conflicts avoided, whilst providing flexibility to encourage rural tourism, industries and additional development opportunities.

The proposal is consistent with this planning priority, as the development will contribute to the mining industry ensuring the Mid Coast district continues to financially proposer. Due to the nature of the subject site, the proposal avoids land use conflict as there is no expanding urban expansion within the locality, nor significant rural industries on or adjacent to the site. The site is accessed from The Bucketts Way, thereby promoting an additional industry within one of the core inter-regional transport connections to the rural division of the area.

2.2.3 Mid Coast Community Strategic Plan 2022-2032

The *Mid Coast Community Strategic Plan* (CSP) captures the ideas and priorities of the community and will guide decisions and activities over the coming years. These are directed into selective key values and strategic outcomes that shape the communities' interests and desired outcomes.

The following community outcomes and values of the CSP specifically relate to the proposal:

Community Outcome 2 – An Integrated and Considered Approach to Managing our Natural and Built Environments

"We value… our environment"

This outcome focuses on the enhancement and protection of the environment, whilst maintaining urban growth with appropriate management of resources. New development is to complement the existing natural, cultural and heritage assets whilst optimising opportunity to meet environmental, social, economic and development needs. Maintenance and rehabilitation are to be committed to.

Community Outcome 3 – A Thriving and Strong Economy

"We value… our thriving and growing economy"

This value outlines the need for a place where people want to live, work and play. Businesses are to be resilient and adaptable to change by utilising knowledge and expertise that supports innovation. The is strong advocation to identify opportunities for increased workforce participation.

In relation to the desired values, this proposal has arisen through an opportunity to deliver an additional service and resource to the construction and development industry within NSW. The CSP recognises 'construction' as one of the top three industries of the area, with healthcare/social assistance and retail trade also noted. The proposed development will contribute to the locality through employment opportunities and providing local resources to local businesses. Environment values have been strongly considered with detailed recommendations to be provided.

2.2.4 Mid Coast Regional Economic Development Strategy 2023

The *Mid Coast Regional Economic Development Strategy* (RED) 2023, sets out the long-term economic vision for the Mid Coast LGA. The three elements of the strategy relate to:

- *Strengthen the region's infrastructure and services offering to attract and retain businesses, residents and visitors.*
- *Invest in workforce development and create opportunities for local businesses to invest and grow.*
- *Actively pursue opportunities to bring investment, businesses and skilled workers to the region.*

This strategy updates the *Mid Coast Regional Economic Development Strategies* (REDS) 2018. As per the 2018 REDS, the region was noted as having a comparative advantage on several industry sectors including, agriculture, forestry, fishing, tourism, healthcare, social services and mining. These diverse sectors contribute to a $4.3 billion economy of Mid Coast region.

Since 2018, these specialisations remain key strengths with the exception of mining. However, despite this, the sub-sector specialisation of non-metallic mineral mining continues to make a significant economic contribution ($21 million in 2020).

The RED 2023 strategy highlights that there have been supply chain shortages in the construction industry and that there is opportunity for growth in this sub-sector. As such, the proposal responds to the strategy by contributing to this supply chain storage through the provision of hard-rock. Furthermore, the proposal will provide additional local jobs.

2.2.5 Mid Coast Rural Strategy – 'The Way Forward' 2022

The *Mid Coast Rural Strategy* sets out a proposed framework for consistent land use planning principles to sustainably manage the use of lands and resources outside of our towns and villages. The strategy is designed to assist with the preparation of the upcoming *Mid Coast Local Environmental Plan* and *Development Control Plan* and the desired development across the rural landscape.

The *Mid Coast Rural Strategy* planning controls can influence:

- Opportunities to diversify agricultural production on rural lands;
- Protection of environmental lands and waterways;
- Tourism-related development opportunities on rural and environmental land;
- Housing and accommodation opportunities in rural and environmental areas;
- Subdivision and development opportunities in rural and environmental areas.

It is noted that in some areas the proposed changes are minimal, while in other areas there may be a wide range of changes proposed.

The changes may include:

- Land zoning;
- Minimum lot size for subdivision;
- Maximum building height controls;
- New local clauses that provide clear and consistent assessment of subdivision and development in our rural, environmental and waterway zones.

In terms of the subject site; the land is currently zoned *RU2 Rural Landscape* under the *Great Lakes Local Environmental Plan (LEP) 2014*. The site is identified within the 'Mixed Coastal Landscape' – land that predominately tapers down to the coastal floodplains and wetlands. This landscape is also consistent with poor quality soil/land, in regards to primary production.

Furthermore, the draft *RU2 Rural Landscaping* zoning does not prohibit extractive industries rather, is consistent with the current permissibility of the land identified under the *Great Lakes LEP 2014*. In this regard the proposal is thereby considered consistent with the desired land use planning principles; being permissible within the current and draft zoning, whilst being land that is not identified as cleared rural productive soil/land.

2.3 NEED FOR THE PROPOSED DEVELOPMENT

The resource to be extracted is a hard rock known as Rhyolitic Tuff, which has a variety of uses including road base material, construction aggregate, concrete batching aggregate, drainage works, fill, landscaping and various other uses. The proposed quarry will extract and deliver this valuable resource to the construction and infrastructure sectors in the Sydney metropolitan area, Hunter region and Central Coast area. The quarry is essential for the guaranteed supply of construction materials for major/critical infrastructure projects of local, State and National significance. These projects are currently driving strong market demand and this demand is anticipated to remain strong well in to the future.

2.4 SITE SUITABILITY

The site is ideal for the proposed hard rock quarry for the following reasons:

- The resource on site will be appropriate for a wide range of civil and construction projects, with a significant relevance to meeting the anticipated increased demand for high quality road aggregate from government stimulated infrastructure projects in the near future. Demand will be driven by both State and Federal spending on infrastructure projects and private investment.

- Given the site's close proximity to major road networks and key local markets (Hunter, Central Coast, Sydney), it is strategically located to efficiently supply quarry products for road infrastructure both locally and regionally throughout NSW while utilising the established distribution network nearby.
- The site has been the subject of previous logging, leading to the creation of generally cleared areas on site, suitable for extraction, without requiring large areas of clearing.
- The resource onsite is located close to the surface meaning limited fuel burn and associated carbon emissions will be required for extraction as well as virtually no overburden. Similarly; the resource is also present down to at least RL80 AHD, allowing for the extraction area footprint to be reduced, confining impacts to a smaller area.
- The sites topography is also advantageous in that the proposed mining operations can occur without being visible to nearby dwellings, with extraction proposed to take place in a south-west to north east direction, utilising the sites favourable topography for shielding impacts during extraction.

2.5 ALTERNATIVES

2.5.1 Alternate Site

Given the unique beneficial properties of the target resource and its location, there are no feasible alternatives available to the proponent for the development of the proposed quarry. Design mitigations have been applied to target a specific portion of the resource to result in minimised impacts to the receiving environment and the local community when compared to the alternative of targeting the entire resource available.

2.5.2 Alternate Design

The project design has and will continue to change as investigations progress for the site, with the aim to mitigate potential impacts upon nearby receivers and the surrounding environment.

2.5.3 'Do Nothing' Option

The target resource will be used both within the local area and throughout NSW. The extraction of the available Rhyolite will help to meet the volumes for a resource that is in high demand due to its unique properties and variety of uses.

The proposed quarry is ideally located in close proximity to the Pacific Highway, upon land with a favourable topography for shielding impacts during extraction, and contains land previously cleared, for the provision of a viable development footprint. Should the proposed quarry not be approved, supply for the projected demands of resource material will need to be met elsewhere and may result in resources being identified and extracted from alternate sites with greater impacts to the receiving environment. Similarly; should these alternate sites be located further from state-wide infrastructure such as the Pacific Highway, then the cost of transporting the resource and subsequently the cost of the resource itself may increase, leading to an increase in the cost of infrastructure projects themselves.

2.6 BENEFITS OF THE PROPOSAL

The proposed quarry will have multiple benefits, including:

- Contribution to the NSW State Governments infrastructure projects by providing a reliable and strategically located resource stream;
- Socioeconomic benefit – At full operation, the proposed quarry will require around 25-30 full-time equivalent employees. It is anticipated that the majority of the workforce will be drawn from the surrounding region. There will also be several haulage companies contracted for the transport of materials to and from the Development Site. The salaries and wages paid to employees and contractors will support additional flow-on activity in other sectors of the economy;
- Proximity to large infrastructure projects which will generate demand for the resource.

2.7 CUMULATIVE IMPACTS

The potential cumulative impacts of the project will be addressed in the EIS in accordance with the DPIE "*Assessing Cumulative Impacts*" guidelines.

It is however, noted that the Deep Creek Quarry project located approximately 13.7km south from the site has now been approved, and will need to be considered as part of the cumulative impact assessment.

2.8 AGREEMENTS WITH OTHER PARTIES

The applicant is not seeking to enter into any agreements with other parties to facilitate the approval of the proposed development.

SECTION 3
PROJECT

3. Project

3.1 DEFINITION

Under the *Great Lakes Local Environmental Plan (LEP) 2014*, the proposed development is defined as 'Extractive Industry':

> *the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.*

Extractive industries are permissible with development consent, within the sites *RU2 Rural Landscape* zoning.

3.2 DESCRIPTION

3.2.1 Project Overview

The proposed development will extract approximately 45 million tonnes of resource material over the 30-year life of the quarry, at a rate of up to 1.5 million tonnes per year. The disturbance footprint and proposed staging of the quarry are illustrated in **Figure 3.**

3.2.2 Physical Layout and Design

The subject site has been partially modified and disturbed as a result of past clearing and agricultural activities and as such, substantial areas of the site are largely cleared of vegetation. The design and layout of the propsoal will comprise an accessway from Maytoms Lane through the site to the processing pad. An intersection upgrade is proposed for Maytoms Lane and The Bucketts Way which will include a deceleration lane to turn right into the site and widening of The Bucketts Way to allow for overtaking.

The processing pad will be constructed to a final RL of 95m AHD and will accommodate the main operations of the proposal including siting of the site office, tertiary and secondary crushers, sand wash plant, on-site dams, stockpiles and car parking areas. The site office will comprise a demountable building which is considered appropriate given the office building will not be visible from the public domain.

A 20m wide internal haul road will be constructed which will facilitate access to areas of the site for extraction as well as for the Run of Mine (ROM) pad which will allow extracted material to be put through the primary crusher located at RL 105m AHD and then conveyed down to the processing pad (RL 95m AHD) where material will pass through secondary and tertiary crushers and be stockpiled before being transported offsite.

To mitigate impacts associated with the proposal (particularly required blasting); the proposed staging has been designed such that once preparation works have been completed for the proposal, hard rock extraction will geneally take place in a south-easterly direction below the highest RL of the extraction area. This staging has been specifically designed with acoustic and visual mitigation measures in mind. In effect, the operations will commence at the eastern extent of the pit (processing pad), from which a haul road will circle around to to the western extent, with extraction activities then being carried out so as to progress in an easterly direction, back toward the processing pad. This design ensures that operations, and therefore noise, dust, and visual impacts are screened by the working face of the extraction area, to dwellings closest to the site – located adjacent The Bucketts Way, east of the site.

Figure 3: Proposed Development Footprint and Staging
Source: VGT staging plans 2024

3.2.3 Staging

Stage 1 (between years 0-5 of project)
Stage 1 will broadly comprise commencing construction of the haul road from Maytoms Lane to the processing pad.

Stage 2 (between years 0-5 of project)
Stage 2 will broadly comprise increasing the size of the processing pad, continuing the slot and haul road southward, and upgrades to Maytoms Lane and the intersection with The Bucketts Way.

Stage 3 (between years 0-5 of project)
Stage 3 will broadly comprise finalising the processing pad and haul road to Maytoms Lane, completion of the Maytoms Lane upgrades and the intersection with The Bucketts Way, and commencing construction of the internal haul road to the new Run of Mine (ROM) pad to be located 10m above the processing pad.

Stage 4 (between years 0-5 of project)
Stage 4 will broadly comprise continued construction of the haul road and Run of Mine pad.

Stage 5 (Years 5-10 of project)
Stage 5 will involve extraction and processing of material.

Stage 6 (Years 10 to 25 of project)
Stage 6 will involve continued extraction, down the eastern face and when the amount of excavation necessitates lowering of the area. The majority of the drill and blast, load and haul will be maintained behind the eastern face which will continue to limit acoustic impacts to residents adjacent The Bucketts Way.

Stage 7 (Years 25 to 30 of project)
Stage 7 will continue extraction ultimately down to RL 95m which is the same level as the processing pad constructed as part of Stage 3.

Consistent with Stage 5 and Stage 6, as the excavation area is lowered, the noise associated with the drill and blast, load and haul will be maintained behind the eastern face which will limit acoustic impacts to residents adjacent The Bucketts Way.

When excavation works are finalised at the end of the life of the project, the final landform design will be a self-draining void with a 100H:1V gradient from the southwest to the northwest toward the main pond. Detail of the proposed final bench and battering designs will be 5m wide flat benches and 15m high batters with a slope of 0.5H:1V (63°).

3.2.4 Operational Details

Construction will involve the erection of temporary buildings and facilities, including light and heavy vehicle access and parking areas, equipment storage compounds, diesel generators, diesel compressors, services and amenities. It is anticipated the construction program will include:

- Site preparation including erosion and sediment control works;
- Road upgrade works to Maytoms Lane and The Bucketts Way;
- Establishment of internal access roads, including several creek crossings;
- Installation and/or upgrades to required infrastructure;
- Establishment of ancillary site infrastructure, amenities and surface water management infrastructure;
- Rehabilitation and revegetation works.

Extraction and Processing

After the site is made ready for extraction activities, these will commence from the highest point of reduced level (RL) 206m Australian Height Datum (AHD) down to RL 95m AHD. Up to 1.5 million tonnes per annum is proposed to be extracted; however, in the initial years after construction commences this may be significantly less.

The quarry process will involve traditional drill and blasting techniques to produce rock fragments suitable for haulage to the crushing and screening plant. The quarry will have one working face that will advance generally in a north-west to south-east direction in 15m bench heights. Extraction will be carried out by mobile plant and equipment, including excavators and dump trucks, with the extracted material hauled from the pit to raw product stockpiles at the processing area. The processing area will include raw material stockpiles and a crushing and screening plant for rock size reduction. The raw material extracted will not be washed and therefore the proposed development does not include a wash plant. The processed rock will be hauled in dump trucks to end product stockpiles in the product storage area.

Hours of Operation

Operating hours have been separated into four key categories described below and with greater detail provided at **Table 2**:

- Extraction and processing, comprising quarrying and crushing of materials on-site;
- Haulage, comprising moving of materials to and from the development site;
- Blasting;
- Maintenance, comprising general maintenance and repair of equipment.

Table 2: Proposed Hours of Operation

Operation	Days	Hours
Extraction and Processing	**Monday to Saturday**	6:00am – 10:00pm
	Sunday/Public Holidays	No extraction/processing
Haulage	**Monday to Saturday**	7:00am – 6:00pm
	Sunday/Public Holidays	No haulage
Blasting	**Monday to Friday**	9:00am – 4:00pm
	Saturday	No blasting
	Sunday/Public Holidays	No blasting
Maintenance	**7 days**	24 hours

Supporting infrastructure

Various items of ancillary infrastructure will be installed and operated to support the quarry, including:

- Two weighbridges;
- Crushing and screening plan for processing extracted hard rock material;
- Pugmill and pre-coat plant for road base products;
- Workshop;
- Site office and amenities;
- Parking areas;
- Product storage areas.

3.2.5 Access and Parking

At full production the quarry is expected to generate a number of light and heavy vehicle movements on a daily basis which are primarily expected to travel south towards Sydney, the Central Coast and Sydney. On this basis, the primary transport route will comprise Maytoms Lane, The Bucketts Way and the Pacific Highway.

Upgrades to the intersection at Maytoms Lane and The Bucketts Way will comprise construction of a short deceleration lane for vehicles travelling south along The Bucketts Way turning right into the site, and construction of a standard right turn out of the site. To ensure adequate sight line distances, several trees are proposed to be removed of trimmed.

3.2.6 Site Servicing

Power

The provision of electricity on-site will be achieved by way of diesel generators and solar panels on the roof of site offices.

Water Supply

Water needs for the operational requirements of the proposal will be met by way of capture and reuse of runoff onsite.

On-site potable water requirements will be met via rainwater collection tanks from the roofs of the site office and workshop. Where required, potable water will be brought in from off-site.

The proponent has also already acquired an aquifer Water Access Licence (number 44439) for 100 units from the New England Fold Belt Coast Groundwater Source.

Further detail on water supply will be provided within the documentation as part of the EIS.

Sewage

An aerated on-site sewage management system will be installed and operated to treat and dispose of the relative low volume of sewage to be generated by staff amenities.

3.2.7 Rehabilitation

Rehabilitation of the site will take place progressively over each stage of the development. The objective of rehabilitating the site will be to return the majority of the excavated area to a revegetated state while leaving provision for an alternative ongoing use at the site. Given the timeframe for the extractive industry use at the site a future post-quarry use is not yet known; however, it is envisaged that a use which is already permitted in the zone will be explored and will be subject to a future DA.

3.3 TIMING AND DELIVERY OF PROJECT

An indicative timeline for the development application process is presented in **Table 3**.

Table 3: Proposed Hours of Operation

Action	Indicative Timing
Submit Scoping Report and SEARs Application	May 2024
Receive SEARs	June 2024
Submit EIS	September 2024
EIS Exhibition	November 2024
Response to submissions	January 2025
Determination	April 2025

SECTION 4
STATUTORY CONTEXT

4. Statutory Context

The following section outlines the key legislation and planning instruments relevant to the proposed development, which include:

- *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act);*
- *Environmental Planning and Assessment Act 1979 (EPA Act);*
- *Environmental Planning and Assessment Regulations 2021 (EPA Regs);*
- *Protection of the Environment Operations Act 1997 (PoEO Act);*
- *Biodiversity Conservation Act 2016 (BC Act);*
- *Water Management Act 2000 (WM Act);*
- *Roads Act 1993;*
- *State Environmental Planning Policy (Planning Systems) 2021;*
- *State Environmental Planning Policy (Resources and Energy) 2021;*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021;*
- *Great Lakes Local Environmental Plan 2014.*

The following table categorises and summarises the relevant requirements in accordance with the DPHI guidelines and confirms the planning pathway for State Significant Development. Each of these matters will be addressed in further detail within the future EIS.

Table 4: Statuary Context

Statutory Reference	Requirements	Relevance
Power to Grant Consent		
Environmental Planning and Assessment Act 1979	The proposal is classed as state significant development subject to *Schedule 1, Section 7 – Extractive Industries* of *State Environmental Planning Policy (Planning Systems) 2021*, as the proposed will extract more than 500,000 tonnes of extractive materials per year.	The Minister for Planning is the determining authority.
Permissibility		
Great Lakes Local Environmental Plan 2014	The site is zoned RU2 Rural Landscape in accordance with the GLEP 2014. The objectives of the zoned are noted below: • *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.* • *To maintain the rural landscape character of the land.* • *To provide for a range of compatible land uses, including extensive agriculture.*	The proposed hard rock quarry is a type of 'Extractive Industry' and is defined by the GLEP 2014 as: *the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.* Extractive industries are listed as permitted with consent in the sites *RU2 Rural Landscape* zoning under the GLEP 2014.

	• *To provide for rural tourism in association with the primary industry capability of the land which is based on the rural attributes of the land.* • *To secure a future for agriculture in the area by minimising the fragmentation of rural land and loss of potential agricultural productivity.*	It is considered that the intent of this type of development is consistent with the defined term discussed above, and matches the proposed works. The proposed quarry is consistent with the objectives of the RU2 zone.
Other Approvals		
Environmental Protection and Biodiversity Conservation Act 1999	The EPBC Act aims to protect matters of national environmental significance. It seeks to promote ESD through conservation and ecologically sustainable use of natural resources and promote the conservation of biodiversity.	An assessment has been commenced by SLR as part of the required BDAR for the proposal.
Protection of the Environment Operations Act 1997	The PoEO Act seeks to reduce risks to human health and prevent the degradation of the environment from development activities. The POEO Act applies to development in NSW and is administered by the Environment Protection Authority (EPA).	Environment Protection Licences (EPLs) are required to be obtained under Chapter 3 to carry out certain work or conduct certain polluting activities that may relate to management of waste, air quality emissions, noise emissions and quality of water. Where required, EPLs are to be obtained following development consent and the licence conditions must be complied with during all activities and operations.
Biodiversity Conservation Act 2016	The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.	An assessment has been commenced by SLR as part of the required BDAR for the proposal.
Roads Act 1993	The Roads Act aims to regulate the carrying out of various activities on public roads.	The Development includes the upgrade of Maytoms Lane and the Maytoms Lane – Bucketts Way intersection and, as such, requires consent under section 138 of the Roads Act 1993 from the appropriate road's authority. The Roads Act 1993 specifies that a local council is generally the roads authority for all roads within its LGA except freeways. As such, Mid Coast Council is the relevant road's authority for the Development in terms of the consent under Section 138.

Water Management Act 2000	The WM Act is intended to ensure that water resources are conserved and properly managed for sustainable use benefitting both present and future generations. Water sharing plans prepared in accordance with the WM Act include rules for protecting the environment and administrating water licencing and trading.	By the operation of Section 4.41 of the EP&A Act, the Development will not require a water use approval under Section 89 of the WM Act, a water management approval under Section 90 or a controlled activity approval under Section 91. However, depending on the expected level of impact on the groundwater aquifer, it may require an aquifer interference approval under Section 91 of the WM Act.
Pre-Condition to Exercising the Power to Grant Approval		
State Environmental Planning Policy (Resources and Energy) 2021	Chapter 2 Mining, petroleum production and extractive industries – aim to ensure proper management and development, and orderly and economic use and development of extractive industry and to promote the development of significant mineral resources.	The SEPP includes the following sections of relevance: • Section 2.9: Enables quarries to be permissible with consent on any land to which agriculture or industry may be carried out. The quarry is therefore permissible with consent. • Section 2.17: Requirement for the Consent Authority to consider the compatibility of the quarry with surrounding land use. The EIS must assess the potential for impacts of adjoining land uses. • Section 2.20: Requirement for the consent authority to consider the potential impacts on water, threatened species and biodiversity and greenhouse gas emissions. The EIS must include assessment on biodiversity and consideration of greenhouse gas emissions. • Section 2.21: Requirement for the consent authority to consider matters relating to efficiency and minimising waste. The EIS will include consideration of efficiencies and waste. • Section 2.22: Requirement for the consent authority consider measures relating to transport of materials on public roads, including the provision of the development application to the road's authority (Council and/or TfNSW).

		The EIS will include an assessment of traffic impacts that will assist in any referral of the application to TfNSW. • Section 2.23: Requirement for the consent authority to consider conditions relating to rehabilitation of the quarry.
State Environmental Planning Policy (Reliance and Hazards) 2021	Chapter 3 Hazardous and Offensive Development - aims to ensure a minimum level of assessment is applied to hazardous and offensive industries and their potential impacts.	The proposed development may be categorised as a potentially hazardous industry. Development proposals for a potentially hazardous industry require a preliminary hazard analysis (PHA) to be prepared by a suitably qualified consultant and submitted with the relevant planning application for approval. Further, the consent authority must consider the matters specified in Section 3.12.
State Environmental Planning Policy (Transport and Infrastructure) 2021	Section 2.122 Traffic Generating Development – requires development specified in Column 1 of the table to schedule 3, to be referred to Transport for NSW as traffic generating development.	The proposed development does not qualify as a traffic generating development with relevant size and/or capacity under Clause 2.122
Mandatory Considerations		
Environmental Planning and Assessment Act 1979	Section 1.3 – The consent authority is to consider the objects of the EP&A Act.	Noted – these will be addressed in the future EIS.
	Section 4.36 – state significant development is development that is declared to be state significant development under this section, being a SEPP or by the Minister.	As outlined above, the proposal is defined as State Significant Development within Schedule 1, Section 7 – Extractive Industries of State Environmental Planning Policy (Planning Systems) 2021, as the proposed will extract more than 500,000 tonnes of extractive materials per year.
	Section 4.15 – In determining a development application, a consent authority is to take into consideration such matters that are of relevance to the development subject of the development application, as stipulated in Section 4.15.	Noted – these will be addressed in the future EIS.
	Section 4.47 – Development that is Integrated Development.	The proposal is Integrated Development, requiring separate approvals under the POEO Act 1997.

In addition to the above; Pursuant to Section 4.41 of the EP&A Act, the following authorisations are not required for approved State Significant Development proposals:

- A permit under Sections 201, 205 or 219 of the Fisheries Management Act 1994;
- An approval under Part 4, or an excavation permit under Section 139, of the Heritage Act 1977;
- An Aboriginal Heritage Impact Permit under Section 90 of the National Parks and Wildlife Act 1974;
- A bushfire safety authority under Section 100B of the Rural Fires Act 1997; and
- A water use approval under Section 89, a water management work approval under Section 90 or an activity approval (other than an aquifer interference approval) under Section 91 of the Water Management Act 2000.

SECTION 5
ENGAGEMENT

5. Engagement

Upon receiving the original SEARs; Dr Mark Sargent of Aigis Group, was appointed to prepare a dedicated engagement strategy for the project. The strategy identified the various stakeholders that may have an interest or be influenced by the development and provided a management framework for consulting with each stakeholder. The strategy was designed to ensure that stakeholders associated with the development have sufficient understanding of how it may affect them, how the Environmental Impact Assessment and Social Impact Assessment processes work and how they can participate in the consultation process.

As such, Dr Sargent has been responsible for monitoring, reviewing and adapting the effectiveness of the engagement strategy to encourage community participation in the project. To date, consultation as occurred with a range of key stakeholders including:

- Government agencies (Federal, State and Local);
- Local community, including nearby residents and landowners;
- Aboriginal groups;
- Any relevant non-government organisations; and
- Service providers.

Two 'drop-in' style information sessions were held at the subject site on:

- Saturday 6th May 2023, 9.00am to 11.00am;
- Thursday 11th May 2023, 4.00pm to 6.00pm.

Upon issue of any new SEARs; consultation with key stakeholders will continue to be undertaken with reference to the *Social Impact Assessment Guideline* (DPIE February 2023) and the *Undertaking Engagement Guidelines for State Significant Projects* (DPHI March 2024). A stakeholder consultation log will be maintained as a record of the consultation activities undertaken and the following information will form part of the EIS:

- Each stakeholder identified and how they were consulted/engaged; and
- The issues raised during consultation activities and how these were addressed (if any issues were not addressed, why not).

SECTION 6
PROPOSED ASSESSMENT OF IMPACTS

6. Proposed Assessment of Impacts

6.1 NOISE AND BLASTING

6.1.1 Noise

Potential sources of noise from the proposed development will be:

- Construction activities, including plant and equipment and traffic;
- Operational noise, including plant and equipment and internal heavy vehicle manoeuvring; and
- Heavy vehicle traffic generation.

Advitech Pty Limited have been engaged to prepare a Noise and Vibration Impact Assessment for the proposed quarry. The proposed development will adopt best practice management and the noise impact assessment will set out suitable environmental management and mitigation measures to further minimise the potential for adverse noise impacts.

6.1.2 Blasting

Advitech Pty Limited have been engaged to assess ground vibration and airblast overpressure associated with blasting activities as part of the Noise and Vibration Impact Assessment.

Through the implementation of appropriate design and procedure safeguards, blast emissions can be limited to a level where:

- The safety of the public, quarry employees and visitors will not be threatened;
- Ground vibration occur at acceptable levels, with no risk to the structural integrity of nearby buildings;
- Noise, ground and air vibrations have no impact on nearby livestock;
- Noise and air vibration levels at nearby residences are within acceptable limits and compatible with the safety and comfort of human beings; and
- The generation of dust is minimised and maintained at acceptable levels.

6.2 AIR QUALITY

The potential sources of particulate matter from the proposed development will be:

- Construction activities, including vegetation clearing, bulk earthworks and traffic;
- Operational activities, including excavation, crushing and stockpiling of rock material, plant and equipment, and heavy vehicle manoeuvring; and
- Wind erosion from exposed surfaces.

The key emissions for consideration are:

- Total suspended particulates (TSP);
- Particulate matter less than 10 microns (PM10);
- Particulate matter less than 2.5 microns (PM2.5); and
- Dust deposition.

Advitech Pty Limited have been engaged to prepare an Air Quality Impact Assessment for the proposed quarry. The proposed development will adopt best practice management and the air quality impact assessment will set out suitable environmental management and mitigation measures to further minimise the potential for adverse dust impacts.

6.3 WATER

6.3.1 Surface Water

The site is located within the Karuah River catchment. The only notable surface water feature within the site is Double Creek, which traverses the site eventually draining in to the Karuah River. There are several ephemeral drainage lines that traverse the site, along with several farm dams.

Given that the proposed development is located upslope of the Karuah River, there is potential to impact on the local waterway system and downstream surface water resources. However, an engineered surface water management system will be designed and installed in order to:

- Capture and reuse runoff for on-site operational requirements and ensure the Development is self-sufficient in terms of water supply; and
- Provide long-term structural controls to mitigate the potential for impact on local water resources.

SLR Consulting Australia have been engaged to prepare a Surface Water Assessment for the proposed quarry.

6.3.2 Ground Water

The site falls within three groundwater management areas:

- North Coast Fractured and Porous Rock Groundwater Sources;
- Karuah River Water Source; and
- Hunter Unregulated and Alluvial Water Sources.

Due to the distance and structural geology in the area, it is anticipated that the proposed development will not result in direct take of groundwater. However, a reduction in baseflow contributions from Double Creek to Karuah River could result in an indirect take.

SLR Consulting Australia have been engaged to prepare a Groundwater Impact Assessment for the proposed quarry. The proposed development will adopt best practice management and the groundwater impact assessment will set out suitable environmental management and mitigation measures to ensure the potential for impact on groundwater resources is negligible.

6.3.3 Flooding

The Karuah River has a relatively narrow valley in the vicinity of the site due to the local topography and, as a result, flooding is largely confined to areas close to the river. The Flood Planning Area for Karuah River, as mapped in the Great Lakes LEP, does not extend to the development. However, there is a narrow strip of Flood Planning Area associated with Double Creek traversing through the site and across Maytoms Lane.

Based on the Flood Planning Area and the proposed siting and layout of the development, no significant impact to downstream flooding is expected as a result of the proposal. There may be minor changes associated with the slightly reduced catchment area to Double Creek and upgrade of the internal access road crossing Double Creek. The design of the Maytoms Lane upgrade will take surface water and flooding issues in to consideration.

Flooding will be addressed as part of the Surface Water Assessment to be prepared by *SLR Consulting Australia.*

6.4 BIODIVERSITY

While the site has been partially modified and disturbed as a result of past clearing and agricultural activities, there are some significant areas of undisturbed land and native vegetation within the property owned by the proponent.

The centre of the site appears largely clear of remnant vegetation, with areas of trees mainly around the boundary of the site and at elevated areas towards the centre of the site. There is limited riparian vegetation along Double Creek traversing the site.

The proposed development will increase disturbance levels within the site as a result of construction activities (vegetation clearing, bulk earthmoving, vehicle movements) and operational activities (excavation), and this will include the removal of some native vegetation. However, the potential for impact to native biota will be reduced through the siting and layout of the development, which, will avoid impact to significant stands of vegetation.

SLR Consulting Australia have been engaged to prepare a Biodiversity Development Assessment Report (BDAR) for the proposed development. The BDAR will set out suitable environmental management and mitigation measures and, if required, an offsetting strategy will be developed and presented in the EIS.

6.5 HERITAGE

While the site has been partially cleared for agricultural production activities, there are some significant areas of undisturbed land and remnant vegetation.

McCardle Cultural Heritage Pty Ltd has been engaged to prepare an Aboriginal Cultural Heritage Impact Assessment as part of the EIS. The presence (or otherwise) of any Aboriginal sites/places within the site will be verified in the field using standard survey methods, and the impact assessment will set out suitable management and mitigation measures.

6.6 TRAFFIC AND TRANSPORT

The proposed development is expected to generate a number of light and heavy vehicle movements on a daily basis. Estimated numbers and a full analysis will be provided in the EIS. The proposed development will include upgrade works to Maytoms Lane and the Maytoms Lane – Bucketts Way intersection. No other road upgrade works should be required.

McLaren Traffic Engineering have been engaged to prepare a Traffic Impact Assessment for the proposed development. The assessment will include the consideration of peak traffic generation, any impacts on the operational efficiency and safety of the public road network, heavy vehicle route(s) and design requirements for the road upgrade works.

6.7 LAND RESOURCES

The site appears to comprise Class 4 and Class 7 land, each covering approximately 50% of the site. LSC Class 4 is defined as land with moderate to high limitations for high-impact land uses, which will restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. LSC Class 7 is defined as very low capability land that is generally incapable of agricultural land use.

A review of the NSW Strategic Agricultural Land Map STA_046 showed no Biophysical Strategic Agricultural Land (BSAL) within the site. The nearest mapped BSAL is located outside the southeast corner of the site, on an alluvial landform associated with Double Creek.

SLR Consulting Australia have been engaged to prepare a Land Resource Assessment for the proposed development. The proposed development will adopt best practice management and commit to a comprehensive suite of environmental management and mitigation measures to minimise the potential for adverse impact on soil and land resources and also to minimise the potential for conflict between the proposed development and the existing surrounding land uses.

6.8 WASTE MANAGEMENT

Appropriate management systems will be implemented to deal with the various general waste streams and production waste that will be generated by the proposed development. The EIS will identify all waste streams to be generated by the proposed development and provide their respective waste classifications, estimated quantities and intended reuse/recycling/disposal method.

MRA Consulting Group have been engaged to prepare a Waste Management Plan for the proposed quarry.

6.9 HAZARD

6.9.1 Bushfire

The site contains areas mapped as “bush fire prone land”. The EIS will address the potential for bush fire and set out appropriate management strategies for minimising the risk in accordance with the NSW Rural Fire Service’s Planning for Bush Fire Protection. While this guideline is aimed at habitable developments, it advises that applications for developments that are not residential/rural residential subdivisions should satisfy the objectives of the guideline and propose an appropriate combination of bush fire protection measures. This is particularly important in terms of ensuring appropriate access, water servicing and vegetation management.

Australian Bushfire Assessment Consultants have been engaged to prepare a Bushfire Assessment for the proposed quarry.

6.9.2 Dangerous Goods

The proposed development will store and use small quantities of a range of dangerous goods.

Advitech Pty Limited have been engaged to undertake a Preliminary Risk Screening and Preliminary Hazard Analysis in accordance with Hazardous and Offensive Development Application Guidelines, as part of the EIS. The outcomes of these will determine if further consequence analysis is necessary.

While explosive materials will be periodically used on site for blasting, there will not be any on-site storage of such materials. Explosives will be brought to the site by the specialist blasting contractor at the time of the scheduled blasting and will be handled and used in accordance with relevant Australian Standards. Through the implementation of appropriate design and procedure safeguards, blasting will be undertaken in a manner that ensures the safety of the public, employees and visitors.

6.10 VISUAL

The visual amenity of the general area is that of a river valley surrounded by undulating topography, with significant areas of remnant vegetation interspersed with land that has been cleared or partially cleared and being used for stock grazing, small-scale poultry operations and small rural/lifestyle holdings.

The quarry and associated infrastructure will be setback from Bucketts Way by a significant distance and there is intervening topography between the proposed development and Bucketts Way and also between the proposed development and surrounding residential dwellings. Quarry development/staging, rehabilitation and revegetation will be scheduled to minimise the extent of clearing/vegetation disturbance at any one time and minimise visual exposure.

Green Bean Design have been engaged to prepare a Visual Impact Assessment for the proposed quarry.

6.11 SOCIAL AND ECONOMIC

The proposed development will extract up to 1.5 million tonnes of hard rock annually and deliver this valuable resource to the construction and infrastructure sectors in the Sydney, Hunter and Central Coast areas. The proposed quarry is essential for the guaranteed supply of construction materials for major infrastructure projects of local, State and National significance.

The proposed development will create positive social and economic outcomes for the local community and surrounding region stemming from job creation directly in terms of employment at the quarry and indirectly in terms of haulage and servicing/maintenance contracts, along with other flow-on benefits. The potential for adverse social impact as a result of the proposed development, including upon local land use and amenity, will be considered as part of the EIS.

AIGIS Group have been engaged to prepare a Social and Economic Impact Assessment for the proposed quarry.

6.12 REHABILITATION

Rehabilitation will be undertaken on a progressive basis to ensure areas of disturbance no longer required for quarry-related operations will be promptly rehabilitated and revegetated.

SLR Consulting Australia have been engaged to prepare a Rehabilitation Strategy for the proposed quarry.

SECTION 7
Conclusion

7. Conclusion

This Scoping Report has been prepared for the proposed 'Extractive Industry' at 67 Maytoms Lane, Booral.

The resource to be extracted is a hard rock known as Rhyolitic Tuff, which has a variety of uses including road base material, construction aggregate, concrete batching aggregate, drainage works, fill, landscaping and various other uses. The proposed quarry will extract and deliver this valuable resource to the construction and infrastructure sectors in the Sydney metropolitan area, Hunter region and Central Coast area. The quarry is essential for the guaranteed supply of construction materials for major/critical infrastructure projects of local, State and National significance. These projects are currently driving strong market demand and this demand is anticipated to remain strong well in to the future.

This scoping report has outlined the relevant environmental, social and economic matters associated with the proposal, which will be investigated and mitigated as part of the preparation of an Environmental Impact Statement.

APPENDIX 1

Scoping Summary Table

ADW JOHNSON

Level of Assessment	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
Detailed	Amenity – noise and blasting	Y	General	• Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DPHI) • NSW Noise Policy for Industry (EPA) • Interim Construction Noise Guideline (EPA) • NSW Road Noise Policy (EPA) • Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)	
Detailed	Air – atmospheric emissions, particulate matter and gases	Y	General	• Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DPHI) • Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) • Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA) • Generic Guidance and Optimum Model settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for Modelling and Assessment of Air Pollutants in NSW Australia' • National Greenhouse Accounts Factors (Commonwealth)	
Detailed	Water – hydrology, water quality, and water availability	N	General	• NSW State Groundwater Policy Framework Document (NOW) • NSW State Groundwater Quality Protection Policy (NOW) • NSW State Groundwater Quantity Management Policy (NOW) • NSW Aquifer Interference Policy 2012 (NOW) • Office of Water Guidelines for Controlled Activities (2012) • Groundwater Monitoring and Modelling Plans – Information for prospective mining and petroleum exploration activities (NOW) • Australian Groundwater Modelling Guidelines 2012 (Commonwealth) • National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC) • NSW Government Water Quality and River Flow Objectives (EPA)	

Level of Assessment	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
				• Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA) • National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ARMCANZ/ANZECC) • National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ARMCANZ/ANZECC) • National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC) • NSW Water Conservation Strategy (2000) • State Water Management Outcomes Plan • NSW State Rivers and Estuary Policy (1993) • Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA) • Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (EPA) • Managing Urban Stormwater: Treatment Techniques (EPA) • Managing Urban Stormwater: Source Control (EPA) • Technical Guidelines: Bunding and Spill Management (EPA) • Environmental Guidelines: Use of Effluent by Irrigation (EPA) • A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH) • NSW Guidelines for Controlled Activities on Waterfront Land (NOW)	
Detailed	Biodiversity – Terrestrial flora and fauna	N	General	• Biodiversity Assessment Method (OEH) • Fisheries NSW Policies and Guidelines • Guidelines for developments adjoining Department of Environment, Climate Change and Water (DECCW 2010) • Guidelines for Threatened Species Assessment (DP&E) • Guidance to assist a decision-maker to determine a serious and irreversible impact (OEH) • NSW State Groundwater Dependent Ecosystem Policy (NOW) • Revocation, recategorization and road adjustment policy (OEH 2012)	

Level of Assessment	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
				• Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW) • State Environmental Planning Policy (Koala Habitat Protection) 2021	
Standard	Heritage – Aboriginal and Historic	N	Specific	• The Burra Charter (The Australia ICOMOS charter for places of cultural significance) • Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW) • Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH) • Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH) • NSW Heritage Manual (OEH) • Statement of Heritage Impact (OEH)	
Detailed	Access – access to property, traffic and parking.	Y	General	• Guide to Traffic Generating Development (RMS) • Road Design Guide (RMS) & relevant Austroads Standards	
Detailed	Land – land capability	N	General	• Soil and Landscape Issues in Environmental Impact Assessment (NOW) • Agricultural Land Classification (DPI) • Agricultural Issues for Extractive Industries (DPI) • Part 4 State Environmental Planning Policy (Resilience and Hazards) 2021 • Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC) • Land Use Conflict Assessment Guide (DPI)	
Detailed	Land – rehabilitation	N	General	• Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth) • Mine Closure and Completion – Leading Practice Sustainable Development Program for Mining Industry (Commonwealth) • Strategic Framework for Mine Closure (ANZMEC-MCA)	

Level of Assessment	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
Standard	Hazards and Risks – waste	N	General	• Waste Classification Guidelines (EPA) • NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA)	
Standard	Hazards and Risks – bushfire	N	General	• Planning for Bushfire Fire Protection 2006 (RFS)	
Standard	Hazards and Risks – hazardous and offensive development	N	General	• Part 2 State Environmental Planning Policy (Resilience and Hazards) 2021 • Hazardous Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis	
Detailed	Social - community	Y	Specific	• Social Impact Assessment Guidelines for State Significant Projects	

APPENDIX 2

Original SEARs

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

Part 8 of the Environmental Planning and Assessment Regulation 2021

Application Number	SSD-8239
Proposal	Proposal The Hillview Hard Rock Quarry Project, which involves: - establishing a quarry to extract and process up to 1.5 million tonnes of hard rock per annum for up to 30 years; - constructing associated site infrastructure and amenities; - ~~installing and operating a concrete batching plant;~~ - ~~importing up to 70,000 tonnes of sand, 3,750 tonnes of cement and 1,500 tonnes of fly ash per annum for use in the concrete batching plant;~~ - ~~importing up to 30,000 tonnes of concrete waste per annum for blending purposes;~~ - transporting material off-site via public roads; and - progressively rehabilitating the site.
Project	Hillview Hard Rock Quarry
Location	67 Maytoms Lane, Booral NSW within Mid-Coast LGA
Proponent	Coastwide Materials Pty Ltd
Date of Issue	27/04/2022

General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and must have regard to the *State Significant Development Guidelines*.
	Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.
	In particular, the EIS must include:
	- a stand-alone executive summary;
	- a full description of the development, including:
	  o the resource to be extracted, including the amount, type and composition;
	  o the site layout and extraction plan, including cross-sectional plans;
	  o the production process and processing activities, including the in-flow and out-flow of materials and points of discharge to the environment;

	○ surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); ○ a waste (overburden, rejects, tailings etc) management strategy; ○ a water management strategy; ○ a rehabilitation strategy to apply during, and after completion of, extraction operations, and proposed final use of site; and ○ the likely interactions between the development and any existing, approved or proposed development in the vicinity of the site; - a strategic justification of the development focusing on site selection and the suitability of the proposed site; - a list of any approvals that must be obtained before the development may commence; - an assessment of the likely impacts of the development on the environment, focussing on the key issues identified below, including: ○ a description of the existing environment likely to be affected by the development, using sufficient baseline data; ○ an assessment of the likely impacts of all stages of the development, including any cumulative impacts due to other developments in the vicinity (completed, underway or proposed), taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice; ○ a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of: ▪ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; ▪ the likely effectiveness of these measures; and ▪ whether contingency measures would be necessary to manage any residual risks; and ○ a description of the measures that would be implemented to monitor and report on the environmental performance of the development; - a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; - consideration of the development against all relevant environmental planning instruments (including Part 2.3 of the State Environmental Planning Policy (Resources and Energy) 2021); - the reasons why the development should be approved, having regard to: ○ relevant matters for consideration under the Environmental Planning and Assessment Act 1979, including the objects of the Act; ○ the biophysical, economic and social impacts of the project, including the principles of ecologically sustainable development;

	○ the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; ○ feasible alternatives to the development (and its key components), including the consequences of not carrying out the development; - a signed declaration from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: - a detailed calculation of the capital investment value (CIV) (as defined in Schedule 7 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV; - an estimate of jobs that will be created during the construction and operational phases of the proposed development; and - certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following key issues: • **Noise & Blasting** – including: - a detailed assessment of the likely construction, operational and off-site transport noise impacts of the development in accordance with the *Interim Construction Noise Guideline*, *NSW Noise Policy for Industry* and the *NSW Road Noise Policy* respectively, and having regard to the *Voluntary Land Acquisition and Mitigation Policy*; - if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities under the *Interim Construction Noise Guideline*; - proposed blasting hours, frequency and methods; - a detailed assessment of the likely blasting impacts of the development (including noise, vibrations, overpressure, visual and odour) on people, animals, buildings, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines; - reasonable and feasible mitigation measures to minimise noise emissions; and - monitoring and management measures, in particular real-time and attended noise monitoring; • **Air Quality** – including: - a detailed assessment of potential construction and operational impacts, in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW,* and with a particular focus on dust emissions including $PM_{2.5}$ and PM_{10}, and having regard to the *Voluntary Land Acquisition and Mitigation Policy*; - an assessment of potential dust and other emissions generated from processing, operational activities and transportation of quarry products; - reasonable and feasible mitigation measures to minimise dust and emissions; and - monitoring and management measures, in particular, real-time air quality monitoring; • **Water** – including:

	- a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures; - identification of any licensing requirements or other approvals under the *Water Act 1912* and/or *Water Management Act 2000*; - demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP); - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP; - an assessment of any likely flooding impacts of the development; - an assessment of the likely impacts on the quality and quantity of existing surface and ground water resources, including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; and - a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts; • **Biodiversity** – including: - accurate predictions of any vegetation clearing on site; - a detailed assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, undertaken in accordance with the *Biodiversity Assessment Method* and documented in a Biodiversity Development Assessment Report; and - a strategy to offset any residual impacts of the development in accordance with the *Biodiversity Offsets Scheme*; • **Heritage** – including: - an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and - identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1; • **Traffic & Transport** – including: - accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products, concrete and other materials; - a detailed assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road network (as identified above), including a road safety audit; - an assessment of cumulative traffic impacts, having regard to any other proposed developments in the locality; and - a description of the measures that would be implemented to mitigate any impacts, including concept plans of any proposed upgrades, developed in consultation with the relevant road and rail authorities (if required); and - a description of existing and proposed access roads. • **Land Resources** – including a detailed assessment of:

- potential impacts on soils and land capability (including potential erosion, land contamination and biosecurity risks) and the proposed mitigation, management and remedial measures (as appropriate);
- potential impacts on landforms (topography), paying particular attention to the long-term geotechnical stability of any new landforms (such as overburden dumps, bunds etc); and
- the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 2.17 of *State Environmental Planning Policy (Resources and Energy)* 2021, paying particular attention to the agricultural land use in the region;

- **Waste Management –** including:
  - estimates of the quantity and nature of the waste streams that would be generated or received by the development;
  - details of liquid waste and non-liquid waste management, including:
    - the transportation, assessment and handling of waste arriving at or generated at the site;
    - any waste processing related to the proposal, including reuse, recycling, reprocessing or treatment both on- and off-site;
    - the method for disposing of all wastes or recovered materials;
    - concrete and cement/fly ash spillage and clean up arrangements;
    - identification of the history of concrete waste materials arriving on site and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material;
    - the emissions arising from the handling, storage, processing and reprocessing of waste; and
    - the proposed controls for managing the environmental impacts of these activities.
  - any measures that would be implemented to minimise, manage or dispose of these waste streams, in accordance with the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*; and
  - Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- **Hazards –** including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, handling and use of any hazardous or dangerous goods;
- **Visual** – including a detailed assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, including with respect to any new landforms, and to minimising the lighting impacts of the development;
- **Social & Economic** – including:
  - a detailed assessment of the likely social impacts of the development on the local and regional community in accordance with the *Provide a Social Impact Assessment prepared in accordance with the Social Impact Assessment Guideline for State Significant Projects*; and
  - a detailed assessment of the likely economic impacts of the development, paying particular attention to:
    - the significance of the resource;
    - the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates; and
    - the demand for the provision of local infrastructure and services; and
- **Rehabilitation** – including the proposed rehabilitation strategy for the site having regard to the key principles in the *Strategic Framework for Mine Closure*, including:
  - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;

	- nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 8 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site and proposal.
Engagement	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: - affected landowners; - community groups; - MidCoast Council; - Midcoast Water; - Biodiversity and Conservation Division within the Department; - Heritage Council of NSW; - Environment Protection Authority; - Regional NSW – Mining, Exploration and Geoscience; - Department of Primary Industries (including Agriculture and Fisheries); - Crown Lands within the Department; - Forestry Corporation of NSW; - The Water Group within the Department; - Hunter Local Land Services; - NSW Health; - NSW Rural Fire Service; and - Transport for NSW. The EIS must: • describe the consultation process used, demonstrate that effective consultation has occurred and was consistent with the *Undertaking Engagement Guidelines for State Significant Projects*; • describe the issues raised by public authorities, service providers, community groups and landowners; • identify where the design of the development has been amended in response to issues raised; and • otherwise demonstrate that issues raised have been appropriately addressed in the assessment.
Expiry Date	If you do not lodge a Development Application and EIS for the development by 1 July 2023, your SEARs will expire.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.shop.nsw.gov.au/index.jsp
http://www.australia.gov.au/publications
http://www.epa.nsw.gov.au/
http://www.environment.nsw.gov.au/
http://www.dpi.nsw.gov.au/

Policies, Guidelines & Plans

Air	
	Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DPE)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia'
	National Greenhouse Accounts Factors (Commonwealth)
Noise & Blasting	
	Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DPE)
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
Water	
Groundwater	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Office of Water Guidelines for Controlled Activities (2012)
	Groundwater Monitoring and Modelling Plans – Information for prospective mining and petroleum exploration activities (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
Surface Water	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)

	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	NSW Water Conservation Strategy (2000)
	State Water Management Outcomes Plan
	NSW State Rivers and Estuary Policy (1993)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	Environmental Guidelines: Use of Effluent by Irrigation (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	NSW Guidelines for Controlled Activities on Waterfront Land (NOW)
Land	
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	Agricultural Land Classification (DPI)
	Agricultural Issues for Extractive Industries (DPI)
	Part 4 State Environmental Planning Policy (Resilience and Hazards) 2021
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	Land Use Conflict Risk Assessment Guide (DPI)
Traffic	
	Guide to Traffic Generating Development (RMS)
	Road Design Guide (RMS) & relevant Austroads Standards
Biodiversity	
	Biodiversity Assessment Method (OEH)
	Fisheries NSW policies and guidelines
	Guidelines for developments adjoining Department of Environment, Climate Change and Water (DECCW, 2010)
	Guidelines for Threatened Species Assessment (DP&E)
	Guidance to assist a decision-maker to determine a serious and irreversible impact (OEH)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Revocation, recategorisation and road adjustment policy (OEH, 2012)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)
	State Environmental Planning Policy (Koala Habitat Protection) 2021
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW)
	Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH)
	NSW Heritage Manual (OEH)
	Statements of Heritage Impact (OEH)
Hazards	
	Part 2 State Environmental Planning Policy (Resilience and Hazards) 2021
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Planning for Bush Fire Protection 2006 (RFS)
Waste	
	Waste Classification Guidelines (EPA)
	NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA)

Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Strategic Framework for Mine Closure (ANZMEC-MCA)
Social & Economic	
	Social Impact Assessment Guideline for State Significant Projects

ATTACHMENT 2

Government Authority Responses to Request for Key Issues
For Information Only

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