

SYDNEY NORTH PLANNING PANEL

Panel Reference	PPS-2019SNH025
DA Number	DA/101/2019
LGA	Hornsby Shire Council
Proposed Development	Rehabilitation of the existing Hornsby Quarry involving bulk earthworks (and associated civil works including construction of access tracks, drainage and retaining walls), site remediation, tree removal, revegetation work and site rehabilitation
Street Address	1X Quarry Road, 14B Dural Street, 203X Peats Ferry Road, 1X Bridge Road, 82X-98X Manor Road, 36X-38X Summers Avenue Hornsby
Applicant	Hornsby Shire Council
Owner	Hornsby Shire Council
Date of DA Lodgement	18/02/2019
Number of Submissions	46 submission in relation to initial notification 319 submissions in relation to notification of amended plans 240 email comments from the mountain bike community
Recommendation	Approval
Regional Development Criteria (Schedule 4A of the EP&A Act)	Designated Development - Crushing, grinding or separating works within 250m of a residential zone not associated with the development. Item 16 of Schedule 3 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)
List of All Relevant s4.15(1)(a) Matters	<ul style="list-style-type: none"> • State Environmental Planning Policy No. 19 - Bushland in Urban Areas • State Environmental Planning Policy No. 33 - Hazardous and Offensive Development • State Environmental Planning Policy No. 44 - Koala Habitat Protection • State Environmental Planning Policy No. 55 - Remediation of Land • State Environmental Planning Policy (Mining, Petroleum, Production and Extractive Industries) 2007 • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 • Sydney Regional Environmental Plan No. 20 - Hawkesbury Nepean (No. 2 - 1997) • Hornsby Local Environmental Plan 2013 • Hornsby Development Control Plan 2013 • Hornsby Shire Council Section 94 Development Contributions Plan 2014 - 2024 and s7.12 Contributions Plan 2019 - 2029 • Draft State Environmental Planning Policy (Environment)

List all documents submitted with this report for the panel's consideration	<ul style="list-style-type: none">• Location Plan – Attachment 1• Figures - Attachment 2• Vegetation Map – Attachment 3
Report prepared by	Ellen Robertshaw, DFP Planning
Report date	6 May 2020

 Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? YES

 Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? YES

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

 Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? N/A

 Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.22)? N/A

Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

 Conditions

Have draft conditions been provided to the applicant for comment? YES

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

ASSESSMENT REPORT AND RECOMMENDATION

EXECUTIVE SUMMARY

- The Hornsby Quarry and Old Mans Valley site is located at:
 - Old Mans Valley (Hornsby Quarry) 1X Quarry Road Hornsby
 - Old Mans Valley 14B Dural Street Hornsby
 - Hornsby Park (R52588) 203X Peats Ferry Road Hornsby
 - Old Mans Valley (Council Access) 1X Bridge Road Hornsby
 - Manor Road Bushland 82X-98X Manor Road Hornsby
 - Summers Avenue Bushland 38X Summers Avenue Hornsby
 - Summers Avenue Bushland 36X Summers Avenue Hornsby
- Hornsby Quarry is a former breccia hard rock quarry that was operated by private business from the early 1900s and ceased in the late 1990s.
- Hornsby Shire Council (Council) acquired the site in 2002 and has undertaken a number of investigations and studies with regard to the future use of the site and the environmental and technical constraints that the site poses. As a result of these studies, Council identified the need to:
 - stabilise the quarry and in particular the northern spoil mound which is at risk of collapse;
 - manage the site in a safe and environmentally sustainable manner; and
 - actively seek opportunities to fill the quarry void with spoil arising from major infrastructure projects in the region.
- The quarry site is Council owned land and is zoned for public recreation purposes, however public access to the quarry could not be provided due to safety reasons.
- In 2016, approval was granted by the (then) NSW Department of Planning and Environment to Roads and Maritime Services (Roads and Maritime), to beneficially reuse up to 1.5 million cubic of excavated rock and soil (spoil) from the construction of the NorthConnex tunnel to partially fill the Hornsby Quarry.
- The filling of the quarry from the NorthConnex rock and soil is now completed.
- Council is proposing to rehabilitate and reshape the site to ensure public safety and allow future development into a parkland for community use.
- The project involves:
 - Bulk earthworks, including redistribution of NorthConnex fill (and associated civil works including construction of access tracks, drainage and retaining walls);
 - Site remediation;
 - Tree removal; and
 - Revegetation work and site rehabilitation.

- The proposed development is designated development, pursuant to clause 16 of Schedule 3 of the *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation) as it involves:
 - Crushing, grinding or separating works, being works that process materials (such as sand, gravel, rock or minerals) or materials for recycling or reuse (such as slag, road base, concrete, bricks, tiles, bituminous material, metal or timber) by crushing, grinding or separating into different sizes—*
 - (a) *..., or*
 - (b) *that are located—*
 - (i) *within 40 metres of a natural waterbody or wetland, or*
 - (ii) *within 250 metres of a residential zone or dwelling not associated with the development.*
- Pursuant to clause 50 of the *EP&A Regulation*, an Environmental Impact Statement (EIS) is required to accompany an application for designated development.
- The content of an EIS is informed by the Secretary's Environmental Assessment Requirements (SEARs). The SEARs for the proposed rehabilitation works in Hornsby Quarry were issued by NSW Department of Planning and Environment on 6 September 2017.
- Following receipt of the SEARs, Elton Consulting (on behalf of Council) undertook consultation in order to gauge the level of community support for the project and to understand if the community had any particular concerns or issues.
- Initial feedback from the community was taken into account during the preparation of the DA and additional consultation was also undertaken during the preparation of the DA.
- 46 submissions were received following initial statutory exhibition of the DA and accompanying documentation. This exhibition was undertaken in accordance with the *EP&A Regulation*.
- Following initial assessment of the DA, the applicant submitted additional information. This additional information also responded to matters raised in the submissions.
- Following submission of the additional information, the application was renotified. As a result of that consultation, 319 submissions were received in relation to the amended application and an additional 240 submissions from the Mountain Biking community.
- In accordance with Council's adopted Policy '*Proposed Council Developments*' an independent assessment of the development application has been undertaken by Ellen Robertshaw of DFP Planning Pty Ltd (DFP).
- The proposed development is permissible pursuant to *Hornsby Local Environmental Plan 2013*.
- Assessment of the application has been undertaken against the relevant planning framework and consideration of various design matters by Council's technical departments. In addition, separate expert advice has been sought in relation to heritage, geotechnical and ecological considerations.
- Assessment of the proposal by Council's own experts and the external specialist consultants, did not identify any issues of concern that cannot be addressed by way of conditions.

- The NSW Environment Protection Authority (EPA) provided feedback in relation to noise generation and water quality and has issued General Terms of Approval (GTAs) which have been imposed as recommended conditions of consent.
- The submissions received do not warrant refusal of the application, however conditions of consent are recommended in order to address issues raised in the submissions.
- Consequently, this report recommends that consent be granted to this application in accordance with the attached plans and conditions.

RECOMMENDATION THAT the Sydney North Planning Panel grant Deferred Commencement Consent to Development Application No. DA/101/2019 for rehabilitation of the existing Hornsby Quarry involving bulk earthworks (and associated civil works including construction of access tracks, drainage and retaining walls), site remediation, tree removal, revegetation work and site rehabilitation on Lots A, B, C, D and E in Deposited Plan (DP) 318676; Lot 1 DP 926103; Lot 1 DP 926449; Lot 1 DP 114323; Lots 1 and 2 in DP 169188; Lot 7306 DP 1157797; Lot 1 DP 859646; Lot 13 DP 734459; Lot 114 DP 749606; Lot 213 DP 713249; Summers Avenue, Hornsby partly formed and Old Mans Valley Trail pursuant to Section 4.16(1)(a) and 4.16(4)(b) of the *Environmental Planning and Assessment Act, 1979* subject to the conditions of consent detailed in Schedule 1 of this report.

BACKGROUND

Hornsby Quarry is a former breccia hard rock quarry that was operated by private business from the early 1900s and ceased in the late 1990s.

Hornsby Shire Council (Council) acquired the site in 2002 and has undertaken a number of investigations and studies with regard to the future use of the site and the environmental and technical constraints that the site poses. Through these studies, Council identified the need to:

- stabilise the quarry, and in particular the northern spoil mound;
- manage the site in a safe and environmentally sustainable manner; and
- actively seek opportunities to fill the quarry void with spoil arising from major infrastructure projects in the region.

In 2016 approval was granted to (then) Roads and Maritime Services (Roads and Maritime), to beneficially reuse up to 1.5 million cubic metres of excavated rock and soil (spoil) from the construction of the NorthConnex tunnel to partially fill the Hornsby Quarry (the '2016 Planning Approval'). Filling has been completed at the site under this approval.

This application seeks approval to stabilise those parts of the quarry which have been identified as being at risk of collapse to ensure public safety. Rehabilitation and reshaping of the NorthConnex fill, as well as other spoil mounds within the site in a suitable way to allow future development of the quarry into a parkland for community use is also proposed. The parkland use will be subject to a separate development application.

DEVELOPMENT APPLICATION PROCESS

The proposed development is designated development, pursuant to clause 16 of Schedule 3 of the *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation) as it involves:

Crushing, grinding or separating works, being works that process materials (such as sand, gravel, rock or minerals) or materials for recycling or reuse (such as slag, road base, concrete, bricks, tiles, bituminous material, metal or timber) by crushing, grinding or separating into different sizes—

(a) ..., or

(b) that are located—

(i) within 40 metres of a natural waterbody or wetland, or

(ii) within 250 metres of a residential zone or dwelling not associated with the development.

Pursuant to clause 50 of the EP&A Regulation, an Environmental Impact Statement (EIS) is required to accompany an application for designated development.

The content of an EIS is informed by the Secretary's Environmental Assessment Requirements (SEARs). The SEARs for the proposed rehabilitation works in Hornsby Quarry were issued by NSW Department of Planning and Environment on 6 September 2017.

The development application (DA) was lodged with Hornsby Shire Council (Council) on 18 February 2019.

The DA was exhibited for a period of thirty days commencing 21 March 2019.

The applicant submitted additional material in the form of a response to submissions on 19 November 2019. The response to submissions documentation was in response to the feedback provided to the applicant following initial assessment of the DA and following submissions received during public notification of the DA, as well as responses provided by public authorities during the initial notification period.

The response to submissions documentation, together with the original DA documentation, was renotified to relevant authorities and the public for a further 30 days commencing 21 November 2019.

SITE

Site Address

The site is located on land known colloquially as Hornsby Quarry and Old Mans Valley.

The address of Hornsby Quarry and Old Mans Valley is 1X Quarry Road, 203X Peats Ferry Road, 1X Bridge Road, 96A Manor Road, 38 Summers Avenue and 36X Summers Avenue. The site is also located over part of the road reserve of (an unmade section of) Summers Avenue, Hornsby and Old Mans Valley Trail.

The real property description of the lots that comprise the site is:

- Lots A, B, C, D and E in Deposited Plan (DP) 318676 (1X Quarry Road);
- Lot 1 DP 926103 (1X Quarry Road);
- Lot 1 DP 926449 (1X Quarry Road);
- Lot 1 DP 114323 (Summers Avenue);
- Lots 1 and 2 in DP 169188 (Summers Avenue);
- Lot 7306 DP 1157797 (203X Peats Ferry Road);
- Lot 1 DP 859646 (1X Bridge Road);
- Lot 13 DP 734459 (96A Manor Road);
- Lot 114 DP 749606 (38 Summers Avenue); and
- Lot 213 DP 713249 (36X Summers Avenue).

Site Description

The site has a total area of just over 62 hectares¹. This is the approximate combined area of all lots that comprise the site. Attachment A to this report is a site plan (with cadastral boundaries) of the land to which this DA relates.

The most distinctive and dominant feature of the site is the quarry void, which covers an area of approximately 6.5ha. The quarry pit is approximately 300m wide (from east to west) and, prior to the commencement of filling by NorthConnex, was more than 100m deep (approximately RL8 at its deepest). As a result of the NorthConnex filling, the level of the quarry void has risen to be generally RL53 with a surcharge area with a height of RL58 at the eastern end of the void.

To the east of the void is a plateau area which is known locally as Old Mans Valley.

¹ This area includes the whole of Lot 7306 DP1157797. Only part of Lot 7306 is within the area on which the development is proposed to be undertaken. No works are proposed to be undertaken on that part of Lot 7306 on which the Hornsby Aquatic Centre is located.

The works will be confined to specific sectors, or works zones, within the site. These works zones are:

- Northern spoil mound
- South west fill area
- Quarry void
- Old Mans Valley

The location of the works zones in relation to the site area is shown on Plan No. Figure 04/E, a copy of which is included at Attachment 2 to this report.

Vehicular Access

There is a vehicular access to the site from Quarry Road (off Dural Street) from the south and Bridge Road from the north east. Dural Street and Bridge Road both link to Peats Ferry Road, which is an arterial road that connects with the state road network, including the M1 Sydney-Newcastle Freeway.

The eastern access off Quarry Road leads to Old Mans Valley and ultimately links with Bridge Road to the north.

At the western end of Quarry Road, an access track continues onto the quarry site and ultimately traverses around the eastern and northern edges of the quarry void before terminating at the western edge adjacent to an area previously used for fuel storage associated with the former quarry activities.

Site Topography

The topography of the site is varied and has been highly modified as a result of the historical quarrying activities and more recently, as a result of the NorthConnex filling. There is a gentle fall from the eastern boundary (to the rear of Hornsby TAFE) across Old Mans Valley to the eastern edge of the quarry void.

The northern section of the site, beyond the quarry void, is steeply sloping with gradients in excess of 25%. The northern spoil mound area is the area that has been identified as being highly unstable from a geotechnical perspective.

There is a spoil mound in the south-western part of the site (the south west spoil mound) which rises steeply from Old Mans Creek towards the southern boundary. The topography of that part of the site to the west of the quarry void and to the north west of the south west spoil mound, i.e. in the vicinity of Old Mans Creek, is gently sloping.

The southern sector of the site slopes down from Quarry Road towards the quarry.

At the eastern face of the quarry void is a volcanic diatreme. Diatremes are the remains of Maar Volcanos. Maar Volcanos are formed when hot magma extrudes up through overlying strata and meets with groundwater, resulting in stream pressure driven explosions that eject rock from below the Earth's crust upwards.

As a result of historic quarrying activities, a cross-section of the structure of the diatreme has been exposed in the eastern face of the quarry. The Hornsby Quarry is the largest diatreme known in the Sydney Basin, and is understood to be the only cross section through a diatreme in the State. The Hornsby Quarry Diatreme is listed as a heritage item of local significance in *Hornsby Local Environmental Plan 2013* (the LEP).

Site Improvements

There are very few buildings on the Quarry site, particularly since the cessation of quarrying activities and completion of filling in conjunction with the NorthConnex approval.

The crusher plant facility (associated with the previous quarrying activities) is located at the end of Quarry Road, at the southern edge of the site. This building is no longer in use.

The remnants of the workshop area and fuel dispensing facilities, including storage tanks, are located near the western side of the quarry void, adjacent to an access track around the quarry. There are two 28,000 litre above-ground storage tanks, one of which was used for storage of diesel for groundwater maintenance pumping. There is also a 10,000 litre below ground tank adjacent to the above ground tanks. These tanks, together with other structures (no longer physically present on the site) associated with the previous quarrying activities, e.g. – detonator magazine, are potential sources of contamination that will need to be managed as part of the proposed works.

The Higgins family cemetery is located adjacent to the access track which leads down from the end of Quarry Road to the eastern side of the quarry void. The Higgins family cemetery is listed as a State significant heritage item. The cemetery is not located within any of the works zone areas.

Other man-made features within the site (aside from the quarry void) include access roads and tracks and drainage works.

Site Vegetation

The majority of the site has been highly modified as a result of historical quarrying and this has resulted in significant changes to the landform and soil profile. The majority of vegetation within the site is a mixture of remnant, regrowth, revegetation and rehabilitation.

Two native plant community types are present at the site:

- Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest which is commensurate with Blue Gum High Forest in the Sydney Basin Bioregion (BGHF). BGHF is a critically endangered ecological community (CEEC) listed under the *Biodiversity Conservation Act, 2016*.

The vegetation within this community has been assessed as being moderate/good to poor in quality.

This form of the community (i.e. Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest) does not meet the condition criteria for inclusion as the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

- Blackbutt Gully Forest (HN648), which is not a threatened community.

In addition to these two plants communities, the site also contains exotic vegetation, including a number of weed species. There are three weed species which have been declared as priority weeds for the Greater Sydney region (including the Hornsby Shire LGA). These are Ground Asparagus (*Asparagus aethiopicus*), Pampas Grass (*Cortaderia selloana*), Lantana (*Lantana camara*). These species occur in low to moderate densities throughout the site.

The distribution of weeds at the site is closely tied to those parts of the site which have been previously modified through works associated with the previous quarrying activities.

Drainage

The site contains one named watercourse, Old Mans Creek, which drains from the south west of the site to the west. Old Mans Creek is a tributary of Waitara Creek which ultimately flows into Berowra Creek. There are also some smaller drainage lines within the site. Due to the topography of the

surrounding land in relation to the quarry, these drainage lines convey stormwater from beyond the site into the quarry.

Council has been pumping water from the base of the quarry since late 2009 (in order to keep the water level below RL 40m AHD as recommended by geotechnical consultants) for stability reasons.

There is a trapped low point adjacent to the northern boundary (along the alignment of the unmade section of Summers Avenue). The water from this low point used to drain the northern spoil mound via a corrugated steel pipe. That pipe however has collapsed (prior to Council taking ownership of the quarry) and the northern spoil mound is now not been drained properly which has affected the stability of the northern spoil mound, placing it at risk of failure.

Adjoining development

Development on land surrounding the site is predominantly low density residential to the north and south. There are educational (Hornsby TAFE), commercial/light industrial and recreational (Hornsby Aquatic Centre) land uses along Peats Ferry Road to the east of the site. To the west is the Berowra Valley National Park.

Residential areas are located to the south of the site and on the southern side of Quarry Road. The residential development to the north of the site is off Fern Tree Close and Manor Road and to the east on Bridge Road and Peats Ferry Road.

The Mt Wilga hospital is located off Rosamond Street, to the north of Manor Road.

There are a number of walking trails on land around the site, including part of the Great North Walk which is located to the west of the site.

The Hornsby mountain bike trail is located on the eastern and southern parts of the site. The mountain bike trail can be accessed from Quarry Road or adjacent to the aquatic centre.

PROPOSAL

Summary

The primary objectives of the proposed development are:

- To undertake stabilisation works, particularly to the northern spoil mound which has been assessed as being subject to potential failure due to drainage issues;
- To rehabilitate the land to manage potential contaminated areas and weed infestation; and
- To create a landform that will facilitate future use of the quarry site for the purposes of a recreational area.

Key features of the project include:

- Bulk earthworks (and associated civil works including construction of roads, access tracks, drainage and retaining walls).
- Site remediation.
- Tree removal.
- Revegetation work and site rehabilitation works.

Approximately 240,000m³ of spoil is expected to be generated onsite from earthworks. The majority of this material will be placed on the NorthConnex spoil to allow for the creation of a new parkland within the quarry void. The landform will include an area that will ultimately be developed into a lake directly below the exposed eastern face of the quarry.

There will also be cut and fill works on Old Mans Valley to create a landform suitable for future development into playing fields and other recreational activities.

A combination of ripping, rock breaking and rock sawing will be required to shift the material. Rock fragments will be crushed onsite using a mobile crusher or rock breaker prior to placement as fill.

No additional spoil is proposed be imported to the site for filling purposes nor will any excavated material be transported off the site.

The following sections describe the project in further detail.

Works Zones

The design for the proposed reshaping and stabilisation works has been developed having regard to the proposed future use of the site as a parkland. The design has taken into consideration the various requirements for the future parkland, site safety, geological and geotechnical challenges, constructability and environmental constraints.

As a result of further design refinement, the extent of earthworks has been reduced from that proposed as part of the original DA submission. The extent of proposed earthworks and associated civil works now proposed will be concentrated in the four main works areas on the site:

- Northern spoil mound works area
- South-west fill works area
- Quarry void works area
- Old Mans Valley works area

Construction fencing and erosion and sediment control measures (silt fences) will be located up to 5m outside the designated works zones. In addition, access to these works zones will be beyond the designated works zones. These associated activities will contribute to the area of the disturbance footprint.

The majority of vegetation within these works zones will be required to be removed to allow bulk earthworks and associated civil and geotechnical safety management works to be undertaken.

Bulk Earthworks and associated civil works, including access tracks, drainage and retaining walls

The bulk earthworks that are proposed to be undertaken will create a landform suitable for development into a future parkland - refer Cut and Fill Details attached to this report. This plan shows the proposed landform design surface.

The bulk earthworks will occur across all of the four work areas.

The following volumes of spoil material will be involved in relation to the bulk earthworks:

VOLUMES

AREA	CUT (m ³)	FILL (m ³)
QUARRY VOID AND SW FILL AREA	135,800	182,300
OLD MANS VALLEY	62,900	48,700
NORTHERN SPOIL MOUND	42,900	6,400
TOTAL	241,600	237,400

MEASURED FROM ASSUMED NORTHCONNEX FILL SURFACE AS ILLUSTRATED ON FIGURE 1

Associated civil and geotechnical safety management works that will be undertaken in conjunction with the earthworks include:

- Engineering works to improve stability issues in the northern spoil mound works area including regrading to a shallower angle and slope reinforcement. This includes:
 - Drainage works to release a trapped low point to the north of the northern spoil mound.
 - Works to address a section of spoil to the eastern end of the northern spoil mound. This area of the northern spoil mound is excessively steep and geotechnically unstable.
- Construction of a micropile wall with a capping beam and edge protection along a section of the southern access track (at the crest of the southern quarry wall). This section of the track has localised instability issues associated with residual soils and fill material eroding and 'slipping off' the rock profile beneath.
- Widening, re-alignment and extension of access tracks to improve access into the quarry in the vicinity of the northern spoil mound works area and quarry void works area.
- Construction of reinforced earth retaining walls or steep reinforced earth slopes with gabion facings (or similar) and earthworks to form the foundation for retaining walls in the quarry void works area.
- Formalisation of existing access tracks and construction of new access tracks (with associated dish drains) around the northern, eastern and western edges of the quarry void.
- Mapping of existing and proposed new cut slopes in rock during and post excavation to identify any rock reinforcement that may be required for further geotechnical safety investigation. This assessment will be on a case by case basis and might result in additional works such as rock bolts, shotcreting or mesh facings in the quarry void works area and Old Mans Valley works area being undertaken.

Plans detailing the associated civil works including locations of access tracks, retaining walls and the micropile wall on the existing southern access track have been submitted with the DA.

Site Remediation

It is also proposed to remove the existing underground storage tank (UST) located in the old quarry workshop area in the north west corner of the site as part of this DA. The removal of the UST will be undertaken in accordance with the *Department of Environment, Climate Change and Water NSW, 'Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008'*.

A Remedial Action Plan (RAP) has been submitted in relation to the removal of the UST. A condition of consent requiring the removal to be undertaken in accordance with the RAP and relevant guidelines has been recommended.

Revegetation and Site Rehabilitation

In order to manage the unstable areas and make the site safe, part of the Blue Gum High Forest (BGHF) which is located on the northern spoil mound will be required to be removed. The BGHF to be removed has been assessed as being of moderate/good to poor in quality. A total of 0.68ha of BGHF will be removed as part of the proposed works. In addition to the BGHF, 0.06ha of moderate/good to high Blackbutt Gully Forest and 0.8ha of moderate/good to poor Blackbutt Gully Forest will be required to be removed.

In addition to these vegetation communities, 2.31ha of exotic vegetation, including grasses will also be removed.

Cleared vegetation will be shredded and mulched/composted and used for soil manufacture or reused on site.

A Preliminary Vegetation Management Plan (Preliminary VMP) has been submitted with the DA to guide and manage the short and long term rehabilitation of the vegetation within that part of the quarry within which the works are occurring and within the broader area. The Preliminary VMP includes a recommendation that a Habitat Creation and Enhancement Plan be prepared.

ASSESSMENT

The development application has been assessed having regard to *the Greater Sydney Region Plan, 'A Metropolis of Three Cities', the 'North District Plan'* and the matters for consideration prescribed under Section 4.15 of the *Environmental Planning and Assessment Act 1979* (the Act). The following issues have been identified for further consideration.

1. STRATEGIC CONTEXT

1.1 Greater Sydney Region Plan – A Metropolis of Three Cities and North District Plan

A Metropolis of Three Cities has been prepared by the NSW State Government to guide land use planning decisions to the year 2056. The population of Greater Sydney is expected to grow by 3.2 million people by 2056. The Plan sets a strategy for accommodating Sydney's future population growth and demographic change, while improving liveability.

A Metropolis of Three Cities - Greater Sydney Region Plan outlines the NSW Government's vision for Greater Sydney as a metropolis of three cities: the Western Parkland City, the Central River City and the Eastern Harbour City. The Hornsby local government area is located within Eastern Harbour City and the North District and Hornsby is identified as a Strategic Centre.

The North District Plan identifies directions and priorities for improving lifestyle and environmental assets in the District.

Consistent with the North District Plan, the proposed development is an important step towards the future use of the site as a community parkland and which will allow all members of the community to enjoy the scenic and culturally significant landscape of an area that is currently closed to the public. The proposed works will also result in significant rehabilitation of the site.

The project will assist in delivering:

- Planning Priority N2: Working through collaboration
- Planning Priority N6: Creating and renewing great places and local centres, and respecting the District's heritage
- Planning Priority N17: Protecting and enhancing scenic and cultural landscapes
- Planning Priority N20: Delivering high quality open space

The proposed development is consistent with 'A Metropolis of Three Cities', as it will facilitate the development of the site for the purposes of parkland which will provide for a growing population.

2. STATUTORY CONTROLS

Section 4.15(1)(a) requires Council to consider "any relevant environmental planning instruments, draft environmental planning instruments, development control plans, planning agreements and regulations".

2.1 Hornsby Local Environmental Plan 2013

The proposed development has been assessed having regard to the provisions of the *Hornsby Local Environmental Plan 2013 (the LEP)*.

2.1.1 Zoning of Land and Permissibility

The majority of the subject land is zoned RE1 - Public Recreation under the *LEP*. A small section of the unmade road reserve of Summers Avenue is zoned R2 – Low Density Residential

The objectives of the RE1 zone are:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To protect and maintain areas of bushland that have ecological value.*

The objectives of the R2 zone are:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The purpose of the development is to stabilise the quarry and rehabilitate the site to develop the final landform for the use of the site as a parkland. Therefore, these works are to facilitate development for the purposes of a recreation area. A recreation area is defined in the *LEP* as:

recreation area means a place used for outdoor recreation that is normally open to the public, and includes:

- (a) a children's playground, or

- (b) *an area used for community sporting activities, or*
- (c) *a public park, reserve or garden or the like,*
- and any ancillary buildings, but does not include a recreation facility (indoor), recreation facility (major) or recreation facility (outdoor).*

Development for the purposes of a recreation area is permissible with consent in both the RE1 and R2 zones.

Pursuant to clause 6.2 of the *LEP*, development consent is required for the proposed earthworks.

2.1.2 Height of Buildings

Clause 4.3 of the *LEP* provides that the height of a building on any land should not exceed the maximum height shown for the land on the Height of Buildings Map. The maximum permissible height of buildings on that part of the site zoned R2 is 8.5m. There are no buildings proposed on that part of the site zoned R2.

There are no height controls on that part of the site zoned RE1.

2.1.3 Floor Space Ratio

The site is not subject to a floor space ratio development standard.

2.1.4 Heritage Conservation

Clause 5.10 of the *LEP* sets out heritage conservation provisions for Council. Parts of the site are mapped as being a Landscape heritage item. There are also two items of environmental heritage located on the site:

- Item 538 – *Diatreme Hornsby Quarry and surrounding vegetation*. This is an item of Local significance.
- Item A55 - *Old Man's Valley Cemetery, including Higgins' Family Cemetery, sandstone receptacle, cool room and site of Higgins homestead on which the Higgins Family Memorial is located*. Item A55 is an item of State significance.

Item A55 is located at 1X Quarry Road, Hornsby (Lot D, DP 318676; Lots 1 and 2, DP 169188). Notwithstanding that these lots are included as lots on which the development is proposed to occur, there are no works proposed on the land on which these items are located. Therefore, pursuant to section 4.47 of the EP&A Act, 1979, the development is not integrated development (for the purposes of section 57(1) of the *Heritage Act 1977*) and referral to Heritage NSW is not required.

That part of Lot 7306 DP 1157797 (203X Peats Ferry Road) on which the Hornsby Aquatic Centre is located is mapped as being within a heritage conservation area. That part of Lot 7306 DP1157797 which is mapped as being within a heritage conservation area is not part of the site on which the works will occur.

There are items of environmental heritage on land surrounding the site. These include:

- Hornsby Park—Lone Pine and sandstone steps (Item 513). This is located within the site but outside the earthworks design area.
- Sandstone steps (Item 537). The steps are located within the site but outside earthworks design extent.

- Mount Errington Precinct, Hornsby West Side Heritage Conservation Area (Area C3). This conservation area is located adjacent to the site.
- Peats Ferry Road Precinct, Hornsby West Side Heritage Conservation Area (Area C5). This conservation area is located adjacent to the site.
- *Norwood* (Item 469) is located adjacent to the site at 6 Dural Street, Hornsby.
- Road median, lights and palms (Item 500) - adjacent to the site on Pacific Highway (now Peats Ferry Road), Hornsby.
- *Birklands* (Item 824) is adjacent to the site at 52 Dural Street, Hornsby.

The impacts of the works in the context of the provisions of Clause 5.10 of the *LEP* are assessed in Section 3.2.3 of this report.

2.1.5 Acid Sulfate Soils

The site is not mapped as being constrained as a result of acid sulfate soils. Therefore, the provisions of clause 6.1 of the *LEP* do not apply in this instance.

2.1.6 Earthworks

Clause 6.2 of the *LEP* states that consent is required for proposed earthworks on site. Before granting consent for earthworks, the impacts of the works on adjoining properties, drainage patterns and soil stability of the locality are required to be assessed.

An assessment against to relevant provisions of clause 6.2 is provided below and in Section 3 of this assessment report.

Relevant provision of clause 6.2(3)	Assessment
(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development	<p>As assessment of water impacts including consideration of the potential impacts of the project on watercourse stability and morphology is provided in Section 3.1.2 of this report.</p> <p>No change to the proposed upstream or downstream diversion/drainage is proposed. Water will continue to be pumped from the quarry void and discharged as per the current arrangements. A large portion of the site is 'inwards draining' and minor changes to drainage patterns within the site will not affect drainage patterns in the locality.</p> <p>NSW EPA has issued GTAs for the proposed works and the terms of the approval require additional investigations to be made in relation to the quality of water discharging the site. These investigations will be required to be undertaken and submitted to EPA for approval prior to the commencement of any works on site.</p>

Relevant provision of clause 6.2(3)	Assessment
	The purpose of the works is to improve soil stability within the site by regrading, slope reinforcement and drainage measures to address sections of the site that are excessively steep with significant likelihood of instability.
b) the effect of the development on the likely future use or redevelopment of the land,	The project will facilitate the future development of the site into a parkland. Should the works the subject of this application not proceed, the site would be unsuitable for development into a parkland for community use and would remain closed to the public indefinitely for safety reasons
(c) the quality of the fill or the soil to be excavated, or both,	No fill is proposed to be imported as part of the project. The works involve earthworks and site stabilisation using spoil within the site.
(d) the effect of the development on the existing and likely amenity of adjoining properties,	An assessment of potential amenity impacts on surrounding receivers is included in Section 3 of this report.
(e) the source of any fill material and the destination of any excavated material,	No fill is proposed to be imported or exported as part of the project.
(f) the likelihood of disturbing relics	An assessment of the potential impacts on heritage items (known and unknown) is included in Section 3 of this assessment report.
(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,	See response to (a) above and Section 3.1.2
(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.	Conditions of consent (in Schedule 2) are recommended in order to minimise and mitigate impacts

2.1.7 Terrestrial Biodiversity

Part of the site is mapped as Terrestrial Biodiversity under the *LEP* and therefore the provisions of clause 6.4 of the *LEP* are relevant.

The area in which the works are proposed to be undertaken is NOT mapped in the *LEP* as having terrestrial biodiversity values.

Biodiversity impacts of the development have been assessed in Section 3.1.1 of this report.

2.2 State Environmental Planning Policies

The following is an assessment against the relevant SEPPs (including deemed SEPPs) that apply to the site and the proposed development.

2.2.1 State Environmental Planning Policy No. 19 - Bushland in Urban Areas

SEPP 19 aims to protect and preserve bushland within the urban areas to protect its value to the community as part of the natural heritage, its aesthetic value, and its value as a recreational, educational and scientific resource.

Clause 9 applies to land which adjoins bushland zoned or reserved for public open space purposes.

For the purposes of this clause, bushland is defined as follows:

***bushland** means land on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative of the structure and floristics of the natural vegetation.*

The vegetation that will be affected by the proposed works is considered to be bushland for the purposes of SEPP 19 as it is on or adjacent to land zoned for public open space.

Clause 9(2) requires:

(2) *Where a public authority:*

- (a) *proposes to carry out development on land to which this clause applies, or*
- (b) *proposes to grant approval or development consent in relation to development on land to which this clause applies,*

the public authority shall not carry out that development or grant the approval or development consent unless it has taken into account:

- (c) *the need to retain any bushland on the land,*
- (d) *the effect of the proposed development on bushland zoned or reserved for public open space purposes and, in particular, on the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, and*
- (e) *any other matters which, in the opinion of the approving or consent authority, are relevant to the protection and preservation of bushland zoned or reserved for public open space purposes.*

In this instance, the bushland to be removed is a consequence of the need to undertake stabilising earthworks within certain sections of the site and in order to change the landform of the site in order to make it suitable for future use as a parkland.

A preliminary Vegetation Management Plan (VMP) has been prepared. The preliminary VMP identifies how the biodiversity of the site will be protected, enhanced and restored in perpetuity as part of the site rehabilitation and requires that any revegetation that occurs on the site be representative of the vegetation communities currently present.

In this way the objectives of SEPP 19 can be achieved.

2.2.2 State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 restricts consent authorities from issuing development consent on land that may be contaminated, unless the consent authority is satisfied that the land in question is suitable for development or can be made suitable if the appropriate remediation is undertaken.

Preliminary site investigations revealed a number of potential sources of contamination on the site. A detailed site investigation (DSI) was subsequently carried out and based on the findings of that

investigation, it was concluded that the risk of exposure to contaminants of potential concern for on-site and off-site receptors was low.

However there is the potential for contamination associated with the underground storage tank (UST). The investigation includes a recommendation to remove the UST and for a Remedial Action Plan (RAP) to be prepared in relation to its removal.

The DSI also included recommendations in relation to developing an unexpected finds protocol and managing the soil surface during removal and reshaping of the spoil in fill areas.

A RAP has been submitted and will be required to be implemented. Appropriate conditions in relation to remediation have been recommended in Schedule 2.

2.3 State Environmental Planning Policy No 33 - Hazardous and Offensive Development

Clause 8 of *SEPP 33* states that in determining whether a development is hazardous or offensive development, consideration must be given to current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development.

A preliminary risk screening was submitted with the DA which is consistent with the requirements of *SEPP 33* and the publications *Hazardous Industry Planning Advisory Paper No. 6 'Guidelines for Hazard Analysis'* (HIPAP 6) and *HIPAP No. 4 'Risk Criteria for land Use Safety Planning'*.

The results of the preliminary risk screening indicate that a Preliminary Hazard Analysis (PHA) is not required, as all materials, including transportation frequencies of hazardous materials, do not exceed the respective thresholds, and the proposal is not considered potentially hazardous.

Although a fuel truck will be used on site to provide diesel for plant and equipment on site, there will be no onsite 'storage' of fuel².

A hazard identification study has been undertaken to highlight any residual risks associated with the interaction of the project with the surrounding environment. A range of possible hazard scenarios was developed. None of the hazardous scenarios were considered credible for offsite impact and therefore a likelihood assessment was not completed.

Potential hazardous scenarios that were considered included:

- Dust generated during earthworks and vehicle movements
- Vehicle interactions
- Natural hazards
- Diesel contamination
- Noise

The hazard identification process did not identify any significant hazards with the potential for offsite impact that could not be suitably controlled.

² Diesel fuel is a Class 1 Combustible Liquid in accordance with the Australian Code for the Transport of Dangerous Goods by Road & Rail.

According to the Department of Environment and Planning's document *Applying SEPP 33*, if combustible liquids of Class C1 are present on a site and are stored in a separate bund or within a storage area where there are no flammable materials stored they are not considered to be potentially hazardous and accordingly, a Preliminary Hazard Analysis is not required.

Control methodologies will be included in a detailed Construction Environmental Management Plan which will be required to be prepared prior to commencement of works. A condition to this effect has been recommended.

2.3.1 State Environmental Planning Policy 44 - Koala Habitat Protection

Notwithstanding that *SEPP 44* has been repealed and replaced with SEPP Koala Habitat Protection (as of 20 December 2019), the transitional provisions of SEPP Koala Habitat Protection are such that this DA is to be assessed against the provisions of *SEPP 44*.

SEPP 44 applies to the Hornsby LGA. The vegetation on the site does not constitute core koala habitat as no preferred feed trees have been identified as being present on the site. Therefore, no further assessment against *SEPP 44* is required.

2.3.2 State Environmental Planning Policy (Infrastructure) 2007

There are no provisions of the *Infrastructure SEPP* which are relevant to these works.

The proposed development does not meet the definition of any categories of development which are able to be undertaken as development without consent pursuant to the provisions of Division 12 – Parks and other public reserves of the SEPP, however, some future works associated with the development of the site for the purposes of a parkland might be work that is able to be undertaken pursuant to Division 12 of the *Infrastructure SEPP*. This would be subject to separate assessment once the scope of this work is known.

The estimate of traffic generation as a result of the proposed works, does not meet the thresholds detailed in Schedule 3 of the *Infrastructure SEPP*.

2.3.3 Sydney Regional Environmental Plan No. 20 - Hawkesbury Nepean

The site is within the Berowra Creek catchment of the Hawkesbury-Nepean River catchment. As such the land is subject to the provisions of *Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (SREP 20)*. The aim of *SREP 20* is to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of development and future land uses are considered in the regional context. *SREP 20* requires consideration of general planning considerations and specific planning policies and recommended strategies listed in Clauses 5 and 6 of the instrument. These include:

- Total management catchment
- Management of environmentally sensitive areas
- Management of water quality
- Management of water quantity
- Management of cultural heritage
- Management of flora and fauna
- Riverine scenic quality
- Management of agriculture/aquaculture and fishing
- Management of rural residential development
- Management of urban development
- Management of recreation and tourism activities
- Consistency with the relevant metropolitan strategy

Assessment against the relevant matters for consideration under *SREP 20* is provided in Section 3 of this assessment report. The proposed development is satisfactory having regard to the general planning considerations listed in *SREP 20*.

2.3.4 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

This SEPP aims to protect the biodiversity values of trees and other vegetation and preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.

The tree removal forms part of the development for which consent is sought. An ecological assessment has been submitted which has assessed the extent of tree removal has been assessed as being satisfactory. Further assessment with respect to tree removal is provided in Section 3 of this assessment report where it is concluded that the proposal is acceptable with regard to vegetation removal and vegetation regeneration works.

2.4 Draft SEPPs

2.4.1 Draft State Environmental Planning Policy (Environment)

The Draft Environment SEPP provides for the protection and management of the natural environment. Among other SEPPs, the draft Environment SEPP will replace *SEPP 19 – Bushland in Urban Areas* and *SREP 20 – Hawkesbury-Nepean River*. The proposed new SEPP will integrate provisions from seven existing SEPPs, including *SEPP 19* and *SREP 20*, relating to catchments, waterways, urban bushland and world heritage.

The draft SEPP was exhibited for public comment from 31 October 2017 until 31 January 2018.

The mapping accompanying the draft SEPP identifies that the site is within an area to which the Urban Bushland provisions relate.

The draft SEPP will simplify the existing provisions with *SEPP 19* by removing duplication with other legislation, removing those provisions relation to the preparation of a Plan of Management, updating the names of Councils in the schedule to reflect the amalgamations with occurred in 2016 and provide a land application map. The references to land zoned or reserved for open space purposes will also be updated to be consistent with the Standard Instrument LEP.

The proposal is not inconsistent with the objectives of the draft SEPP.

2.5 Clause 3.42 Environmental Planning and Assessment Act, 1979 - Purpose and Status of Development Control Plans

Clause 3.42 of the *Environmental Planning and Assessment Act, 1979* states that a DCP provision will have no effect if it prevents or unreasonably restricts development that is otherwise permitted and complies with the development standards in relevant Local Environmental Plans and State Environmental Planning Policies.

The principal purpose of a development control plan is to provide guidance on the aims of any environmental planning instrument that applies to the development; facilitate development that is permissible under any such instrument; and achieve the objectives of land zones. The provisions contained in a DCP are not statutory requirements and are for guidance purposes only. Consent authorities have flexibility to consider innovative solutions when assessing development proposals, to achieve good planning outcomes.

2.6 Hornsby Development Control Plan 2013

The proposed development has been assessed having regard to the relevant desired outcomes and prescriptive requirements within the *Hornsby Development Control Plan 2013* (the *HDCP*).

There are no specific provisions in the *HDCP* that relate to development on land within the RE1 Zone. Section 2 of the *HDCP* relates to development within the Rural area of the Hornsby Shire and Section 2.5 relates to Extractive Industries. The proposed earthworks are not an extractive industry and the site is not in a rural area. Therefore, these controls do not apply.

The development has been assessed against the controls in Part 1 - General of the *HDCP*. General controls relevant to the proposed works include:

- Trees and vegetation
- Biodiversity
- Stormwater management
- Watercourses
- Earthworks and slope
- Transport and parking
- Waste management
- Noise and vibration
- Air quality
- Land contamination

Assessment against the relevant matters is included in Section 3 of this assessment report where it is concluded that the proposal is acceptable.

2.7 Section 7.11/7.12 Contributions Plans

The proposed works, which will be undertaken by Council to facilitate use of the site for the purposes of a recreation area, are not works identified in either the Hornsby Section 94 development contributions plan³ 2014-2024 or Hornsby Section 7.12 Development Contributions Plan 2019- 2029 as being works for which a contribution is payable.

2.8 Other Relevant Statutory Considerations

The project involves processing of materials for recycling and reuse within 250m of residential development not associated with the development and therefore triggers the designated development provisions of Clause 16 of Schedule 3 in the *EP&A Regulation*.

The proposal also triggers the integrated development provisions of the *EP&A Act* and requires additional licences and approvals under a range of relevant NSW legislation including an Environment Protection Licence (EPL) under the *Protection of the Environment and Operations Act 1997* (PoEO Act) and a Controlled Activity Approval under the *Water Management Act 2000*.

Specifically, as works will involve the processing of more than 150 tonnes per day or 30,000 tonnes per year of hard rock and soil materials, they are a scheduled activity under the *Protection of Environment*

³ S94 of the Environmental Planning and Assessment Act 1979 is now s7.11 of the EP&A Act

Operations Act 1997 (POEO Act) for crushing, grinding and separating works and a separate application for an EPL will therefore be required.

The application has been referred to NSW EPA and general terms of approval (GTAs) have been issued. The requirements of the GTAs issued by EPA are discussed in Sections 3.1.2, 3.2.1 and 3.2.2 of this report and have also been included as recommended conditions of consent in Schedule 2.

3. ENVIRONMENTAL IMPACTS

Section 4.15(1)(b) of the Act requires Council to consider “*the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality*”.

3.1 Natural Environment

3.1.1 Biodiversity

Legislative Requirements

In accordance with the requirements of NSW Office of Environment and Heritage (OEH) (in response to the application for SEARs), a Biodiversity Assessment in accordance with the *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities (DEC 2004)* was submitted with the DA. The SEARs also required a Species Impact Statement to be prepared if a significant impact is likely to occur as a result of the proposed works.

It should be noted that although the *Threatened Species Conservation Act 1995* (TSC Act) was repealed on 25 August 2017, and replaced with the *Biodiversity Conservation Act 2016* (BC Act), because the SEARs for this project were requested prior to the change in legislation, the project is being assessed under the TSC Act under the transitional arrangements.

Following liaison with OEH and DPIE, DPIE also confirmed that the proposal was exempt from assessment in accordance with the Biodiversity Assessment Method (BAM) and BC Act.

In summary, the Biodiversity Assessment has been prepared in accordance with the *TSC Act* and has assessed the likely significance of impacts on threatened biota. Surveys were conducted in accordance with the biobanking assessment methodology (BBAM) and that appropriate data has been collected to enable calculation of offset in the event that a significant impact was likely to occur.

The EIS includes an assessment of the potential biodiversity impacts of the project in accordance with the Framework for Biodiversity Assessment, which included field surveys and desktop reviews. The Office of Environment and Heritage (OEH) has provided feedback that the project has addressed the Framework for Biodiversity Assessment methodology satisfactorily. Unless it was determined that a significant impact was likely to occur, OEH advised that it had no further comments to make in relation to the DA.

Notwithstanding that the project has been assessed as unlikely to have a significant impact on threatened biota, given there will be residual impacts on biodiversity that cannot be avoided, an offset package for the project in accordance with Council’s Green Offsets Code is proposed.

The purpose of the Green Offsets Code is to provide guidance on the approach to conducting offsets for the loss of indigenous trees and vegetation in the Hornsby Local Government Area, integrating the regulatory requirements of state planning and environmental legislation and policies.

The objectives of the code are to:

- Ensure that significant vegetation including trees in the shire are protected.
- Facilitate some development, which may have negative impacts.
- Ameliorate negative environmental impacts of development at a regional and local level.
- Provide for environmental enhancement and restoration.

The Code is underpinned by a number of principles:

- The principle of avoid, minimise and mitigate - Offsetting should only be considered once all efforts to avoid, minimise and mitigate any negative impacts have been exhausted.
- The precautionary principle - This should be applied so that a cautious and conservative approach is taken towards risk where there is uncertainty or lack of scientific confidence in an action.
- The principle of net gain - Offsetting should lead to a net gain and improve the condition of the environment. The primary objective of an offset activity should be to create, enhance, or protect in perpetuity ecologically viable habitat for locally endemic species.
- The Principle of Avoiding the Effects of Cumulative Impacts - Offsetting should not be used as a justification for granting approval to developments, where the cumulative environmental impacts of that development are greater than the benefit to be obtained from the offset action.

The preliminary VMP has been prepared with these objectives and principles in mind.

Independent Assessment

The Biodiversity Assessment submitted with the original application was peer reviewed by Eco Logical Australia (ELA).

That peer review revealed a number of inaccuracies and inconsistencies with the original Biodiversity Assessment. The Response to Submissions (RtS) report has provided clarity in relation to the identified inaccuracies and inconsistencies and the assessment is considered to be comprehensive and sufficiently robust for the purposes of assessing potential impacts. Recommendations for minimising or otherwise mitigating identified adverse impacts are also included.

Vegetation Communities

The majority of the area in which the works are proposed to be undertaken has been highly modified as a result of historical quarrying and rehabilitation works, and the landform and soil profile has been significantly altered. Vegetation within these areas is a mixture of remnant, regrowth, revegetation and rehabilitation.

Removal of vegetation is unavoidable as it is required to enable stabilisation and geotechnical safety management works to occur. The areas of vegetation to be removed comprise disturbed and heavily modified edges of larger patches of vegetation. Much of this vegetation has been planted as part of previous rehabilitation activities and comprises regrowth vegetation.

Following initial assessment of the proposal and feedback received in relation to consultation with the community, the scope of the extent of works has been subject to refinement and has been reduced from that originally proposed. The revised extent of works was also informed by a detailed tree survey.

The earthworks design has been refined to reduce the extent of excavation required in the south-west fill works area and Old Mans Valley. As a result, the extent of vegetation to be removed within this part of the site has been reduced.

Overall, the extent of vegetation clearing has been reduced substantially from that originally proposed.

A total of 0.68ha of Blue Gum High Forest (BGHF) will be removed or impacted as a result of the works, principally within the northern spoil mound works area. This has reduced from the 0.74ha of BGHF that was originally proposed to be removed.

Overall, a total of 1.54ha of native vegetation will be removed as a result of the works. This comprises:

- 0.06ha of moderate/good – high quality Blackbutt Gully Forest
- 0.8ha of moderate/good – poor quality Blackbutt Gully Forest
- 0.68ha of moderate/good – poor quality Blue Gum High Forest

In addition, 2.31ha of exotic vegetation will also be removed.

The Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest (HN596, Moderate/good - poor), which is commensurate with Blue Gum High Forest in the Sydney Basin Bioregion (Blue Gum High Forest), is a threatened ecological community (TEC) and is listed as a critically endangered ecological community (CEEC) under the *TSC Act* (and the *BC Act*).

Figure 1 below is an extract from Volume 1 of the GHD Response to Submissions (RtS) report identifying the locations of the various works zones and the vegetation communities within these works zones. The work zones shown in **Figure 1** are the revised works zones which are reduced from that originally proposed. A copy of this plan is also attached to this report.

No threatened flora species have been assessed as being likely to occur within the impact area due to the lack of suitable habitat, highly modified vegetation and modified soil profiles and landforms.

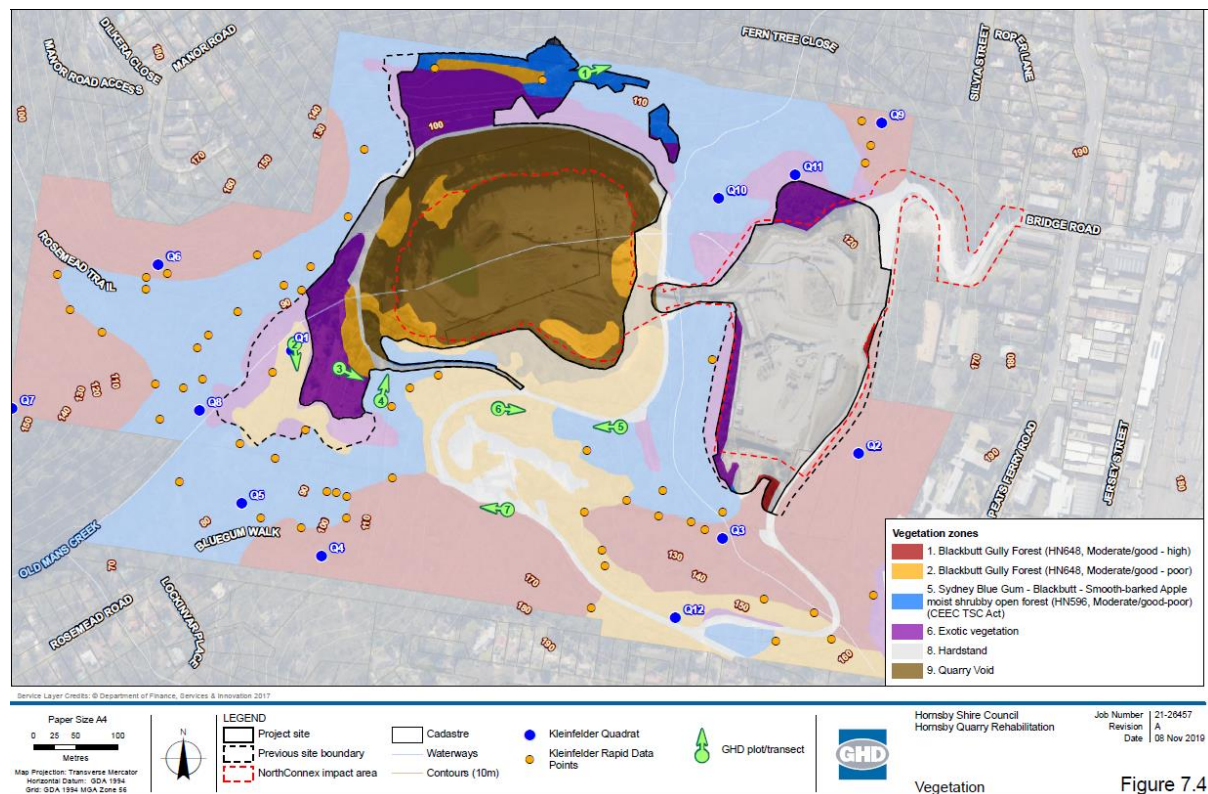


Figure 1 Extract from GHD Response to Submissions Report, Volume 1 showing locations of vegetation communities that will be affected by the proposed works (Figure 7.4 in Volume 1 of RtS)

Fauna Species

A total of 67 fauna species were recorded in the impact area and adjacent areas. The recorded fauna species include 53 bird species, four terrestrial or arboreal mammal species, five bat species, three reptile species, and two frog species. Two introduced species, the European Red Fox (*Vulpes vulpes*) and the Red-whiskered Bulbul (*Pycnonotus jocosus*) were also recorded.

The vegetation on the site, including the eucalypt forests and the exotic grasslands, provide habitat for the fauna species. The drains and culverts as well as a small artificial pond near the diesel pumps provide aquatic habitat for amphibians. No key fish habitat was identified.

Four threatened fauna species have been positively recorded at the site and in the area of the site:

- Powerful Owl (*Ninox strenua*), listed as vulnerable species under the *TSC Act* and was recorded in the area.
- Varied Sittella (*Daphoenositta chrysoptera*), listed as vulnerable species under the *TSC Act* and was recorded in the area.
- Grey-headed Flying-fox (*Pteropus poliocephalus*), listed as vulnerable species under the *TSC Act* and the *EPBC Act*, was recorded in the area.
- Eastern Bentwing Bat (*Miniopterus schreibersii oceanensis*) (possible identification based on anabat analysis), listed as vulnerable species under the *TSC Act* and was recorded in the area.

Impacts on Biodiversity

The proposed works will directly impact 1.54ha of native vegetation, including 0.68ha of BGHF and 0.86ha of Blackbutt Gully Forest. There are extensive areas of comparable vegetation communities in the locality, including elsewhere on the site. There is a 15.75ha of BGHF on the site. 0.68ha represents 4.3% of the total BGHF on the site. And around 8.5% of Blackbutt Gully Forest on the site will be impacted by the works.

The BGHF which is proposed to be removed is located primarily on the northern spoil mound which has been assessed as being geotechnically unstable. Site stabilisation and safety management works are required to make the site safe. The areas of BGHF to be removed comprise the disturbed and heavily modified edges of larger patches of vegetation, and much of this vegetation has been planted as part of previous rehabilitation activities. The patches of BGHF that will be impacted are already exposed to the influences of edge effects, weed invasion and track/access maintenance.

2.31ha of the vegetation that is a mixture of exotic species and planted natives, including a number of priority and/or environmental weeds will be cleared. The works will reduce the source of weed propagules that are currently threatening adjoining areas of intact, better condition native vegetation. Weed management measures are proposed which will result in positive impacts on retained native vegetation adjoining the site by reducing the number of weeds within the site.

The 1.54ha of native vegetation that will be removed provides foraging, breeding, roosting and nesting habitat for a range of fauna species, including threatened species. However, given the historic and recent modifications of the site and the presence of extensive areas of similar habitat in surrounding protected areas, the impacts are somewhat mitigated.

The clearing of native canopy trees will also result in the loss of nectar and foraging resources for a range of arboreal species, such as birds, reptiles, arboreal mammals and bats. The impacts of the loss of these trees will not be significant due to large areas of better quality habitat occurring in surrounding areas.

Five hollow-bearing trees are located within the works area and will be affected by the proposed works. The loss of five hollow bearing trees has been assessed as insignificant given the total area of the site and the number of hollows available elsewhere on the site. Notwithstanding, the preliminary Vegetation Management Plan (VMP), recommends that hollows which will be impacted are dismantled and relocated to the nearby buffer area at the site interface (after they have been examined for any occupants and prior to works commencing).

Furthermore, one of the recommended mitigation measures requires fallen logs and rock outcrops, which represent potential habitat for the Spotted-tailed Quoll, to be removed from the works areas and relocated to areas of the site which will remain undisturbed, prior to work commencing.

In order to minimise injury or mortality of fauna during clearing of native vegetation or removal of potential fauna habitat, a trained ecologist will be present during these works. Actions to minimise impacts could include:

- Inspections of native vegetation for resident fauna and/or nests or other signs of fauna occupancy prior to removal of vegetation.
- Inspection of culverts proposed for demolition/removal for roosting microbats prior to works commencing.
- Inspection and identification/marketing of hollow-bearing trees and termite mounds.
- Developing protocols for the removal of hollow-bearing trees and termite mounds prior to removal to minimise mortality or injury of native fauna.
- Capture and relocation or captive rearing of less mobile fauna (such as nestling birds) by a trained fauna handler and with assistance from Wildlife Information Rescue and Education Service (WIRES) as required.
- Salvage of habitat features such as mature tree trunks and woody debris from the project area for future use in the parkland or surrounding areas.
- Minimise clearing of mature, native trees where possible and set up exclusion barriers to prevent indirect impacts.

Vegetation Management Plan

A preliminary VMP has been prepared. The aim of VMP is to identify how the site's biodiversity will be protected, enhanced and restored in perpetuity as part of the site rehabilitation. The recommendations contained in the VMP have been derived from best practice site rehabilitation, habitat protection and ecosystem enhancement. They are based on the mapped vegetation condition and take into account previous and proposed levels of disturbance and the resilience of the vegetation to recover from that disturbance.

It has been observed that where soils have been heavily disturbed through modification, vegetation resilience is intrinsically low, and revegetation is the best option.

There are three locations within the works areas where extensive soil modification has occurred and where revegetation is recommended: the eastern fill area, the northern spoil mound and the south western mound.

The VMP recommends that any revegetation should include a representation of the floristic properties from the existing plant communities using locally sourced plant material. The objective of the works

proposed in the VMP are to improve the condition of the existing plant community types and increase the area and quality of native vegetation present on the site.

The VMP provides directives in relation to the following actions in order to achieve the aim of rehabilitating the vegetation on the site:

- Weed treatment
- Bush regeneration and revegetation
- Earthworks and soil preparation
- Retention, enhancement and restoration of habitat
- Management of edges, interface zones and buffers to maintain high levels of habitat connectivity in the region.

The VMP also recommends that a Habitat Creation and Enhancement Management Plan be developed to manage any direct or indirect impacts on fauna recorded within the area.

The mitigation measures included in the biodiversity assessment and in the VMP will be required to be incorporated into a Construction Environmental Management Plan (CEMP). A condition of consent which requires the CEMP to be prepared prior to commencement of works is recommended in Schedule 2.

Priority will be given to managing impacts on the natural area from the threatening process of fragmentation, edge effects and loss of habitat. This will be achieved by increasing areas of core native vegetation, connectivity and appropriate access. The final detail on management actions for the site will be developed in accordance with the principles of the Preliminary VMP.

Biodiversity Impacts Conclusion

Subject to the imposition of appropriate conditions, it is considered that biodiversity impacts are capable of being managed in such a way that adverse impacts can be minimised.

3.1.2 Water Management

EPA Review

As the development triggers the integrated development provisions of the *EP&A Act* in relation to the *Water Management Act, 2000*, the DA and supporting documentation was referred to NSW EPA for comment.

EPA undertook an initial review of the EIS in relation to water management, particularly in relation to quality treatment methodology and management, and requested additional information be provided. The RtS included a response to the issues raised by EPA (following their initial review).

Upon review of the RtS response, EPA requested further information which has been subject to further review by EPA. Additional information was provided to EPA however, on 6 January 2020, EPA provided a further request for additional details in relation to:

- The potential impacts of discharge of water from the quarry on receiving waters;
- Proposed erosion and sediment controls;
- The proposed water quality monitoring program.

A further response to the matters raised by EPA in their letter of 6 January 2020 was provided and on 13 February 2020, EPA issued General Terms of Approval (GTAs) in relation to the project. The conditions of the GTAs require further additional testing and monitoring to be undertaken before, during and after the works proposed under this application are undertaken.

Current Water Management

The site is located within the upper reaches of the Berowra Creek sub-catchment of the Hawkesbury-Nepean catchment. The quarry is located in Old Mans Valley. This valley collects surface runoff from the east including urban areas within the suburb of Hornsby as well as vegetated areas surrounding the quarry site. Upstream water flows through the valley have been diverted around the quarry via constructed channels and culverts. The quarry only receives surface runoff from the immediate vicinity. Ultimately, water from the quarry site discharges to Old Mans Creek, being the closest downstream water course to the west of the quarry void.

There are also two groundwater systems impacting the quarry void. This groundwater, together with some surface runoff, results in filling of the quarry void which is pumped out under a groundwater licence for dewatering issued under the *Water Management Act 2000* (WM Act). The license allows for up to 370ML/year of dewatering and requires that the volumes of dewatering be recorded. On average, Council dewateres around 200 ML/year. Under the licence, water from the quarry void is discharged to Old Mans Creek, subject to water quality parameters being met.

Council currently undertakes monthly water quality testing at two locations. The results of these tests were used as a benchmark for water quality for the purposes of this project.

Water Quality Impacts

The proposed development has the potential to impact on the water quality of Old Mans Creek and downstream waterways as a result of the discharge of potentially polluted water from the site. Potential pollutants could include sediment from spoil removal and placement activities, erosion associated with the removal of spoil, particularly following removal of vegetation, and fuels and chemicals associated with the operation of plant and equipment and storage and handling of fuels and chemicals on the site.

Any water to be discharged to Old Mans Creek will be required to be treated to an appropriate standard and Council will be required to obtain an updated Environment Protection Licence (EPL) to regulate the discharge of water quantity and quality from the site in conjunction with these works.

The key impacts of the project on the groundwater system would be due the changes caused by the changes to levels as a result of the placement of material. It is proposed to reposition spoil material placed on site as a result of the NorthConnex approval within the quarry void as well as other spoil from within the site. The spoil material associated with the NorthConnex approval was required to meet the classification of VENM/ENM prior to disposal on the site. On this basis, it is concluded that the works are unlikely to impact on groundwater quality.

Mitigation Measures

It is considered that the water related risks associated with the project can be appropriately managed through the implementation of the following mitigation measures, as well as compliance with the GTAs issued by EPA:

- Preparation of a Soil and Water Management Plan prior to commencement of works. The Soil and Water Management Plan is to be prepared in accordance with Landcom Blue Book (2015). The Soil and Water Management Plan is to include procedures for the maintenance of erosion and sediment control measures.
- Continued measurement of pumped dewatering volumes using the existing flow measurement data available to Council. Data is to be maintained for the duration of the project.

- Obtaining any additional licensing requirements as required by EPA and adhering to the requirements of the licenses.
- Monitoring of the quality of the water in the void at the location of the point of dewatering extraction.
- Developing of procedures for the management of water quality with respect to human health.

These mitigation measures have been included as recommended conditions of consent in Schedule 2 to this report.

3.1.3 Land Resources

One of the primary objectives of the works proposed as part of this DA is to stabilise those sections of the quarry void walls which have been identified as being unstable and at risk of collapse. One of the areas of most concern is the northern spoil mound the stability of which has been impacted as a result of failure of a previous drainage line. The stability of the southern access track has also been identified as an area of concern from a geotechnical perspective.

The other objective of the project is to undertake earthworks and to change the landform (topography of the site) for the purposes of creating a landform suitable for future development of a parkland with the flexibility to host a range of recreational activities. The future parkland design will be subject to a separate approval and will be developed in consultation with the community.

A geotechnical assessment and analysis was submitted with the DA. That assessment informed the design of the proposed works including the development of geotechnical solutions to address slope stability concerns, retaining wall design, access track location and design, earthworks staging and spoil placement.

The submitted geotechnical assessment was peer reviewed by JK Environments who advised (following clarification of some issues by the applicant) that the proposed assessment was satisfactory, subject to conditions.

During design development, the extent of earthworks has been refined and reduced from that originally proposed, particularly within the south west fill works zone. This has resulted in a number of trees previously identified as trees to be removed now being able to be retained.

Assessment of Impacts

Due to the nature of the works proposed, there is the potential for disturbed soils to have moderate to high erosion hazard potential, particularly following removal of stabilising vegetation.

It will therefore be critical to ensure erosion and sediment control measures are implemented prior to any works commencing on site and maintained following completion of works until the land is appropriately stabilised. The implementation of these measures, together with a robust water quality monitoring program will ensure the quality of water downstream from the quarry is not affected by the works. The erosion and sediment control measures will form part of the Soil and Water Management Plan which will be required to be prepared prior to commencement of works on site. A condition requiring the preparation of a Soil and Water Management Plan is including in the recommended conditions at Schedule 2. The Soil and Water Management Plan will form part of the required Construction Environmental Management Plan (CEMP).

Regular monitoring of the installed erosion and sediment controls measures will also be required to be implemented to ensure they are functioning appropriately.

The CEMP will also be required to include procedures for managing potential contaminants or other hazardous materials that might be encountered during the works, procedures for refuelling and procedures for managing spills and leaks.

3.2 Built Environment

3.2.1 Noise and Vibration

Introduction

The nature of the activities associated with the proposed works will result in noise and vibration impacts. Due to the nature of the proposed development, the noise and vibration impacts will be wholly associated with the construction phase of the project as there will be no “operational” phase associated with this development proposal.

Typically, noise impacts due to construction works are temporary and do not represent a continuous impact on the community and surrounding environment. It is not unusual for projects to exceed the construction noise management levels. The predicted noise levels for the proposed works will also only be experienced for limited periods during construction.

Identified impacts are able to be reduced through the introduction of reasonable mitigation measures.

EPA Responses

Initial feedback received from EPA on 10 May 2019 and 15 July 2019 required additional information to be provided in relation to potential impacts on identified noise sensitive receivers.

That further information was submitted as part of the RtS documentation and EPA issued GTAs on 13 February 2020. The GTAs include conditions that are required to be complied with in relation to the management and mitigation of noise generation and vibration impacts. Schedule 2 includes the EPA's GTAs as conditions.

Independent Assessment

The noise and vibration assessment report submitted with the DA was referred to an independent consultant, Renzo Tonin and Associates, for peer review. The applicant provided responses to the questions raised as a result of that peer review and further information was provided. The independent consultant subsequently advised that the noise and vibration assessment was satisfactory in terms of the methodology that had been applied and the recommended mitigation measures.

Noise Impact Assessment

The Noise Policy for Industry (NPI) is generally used to assess permanent noise impacts to sensitive receivers due to the operation of industrial premises or developments. Construction activities are excluded from the NPI as they are temporary in nature.

Notwithstanding, potential noise impacts associated with the proposed works have been assessed against both the NPI and Interim Construction Noise Guideline (ICNG) criteria to satisfy the acoustic requirements detailed within the SEARs.

It is acknowledged that the project is likely to result in elevated noise at receivers around the site, with a number of receivers predicted to experience noise greater than the recommended levels established under the ICNG. Noise impacts associated with works such as those proposed in an urban setting are unavoidable, and will need to be managed, as they cannot be completely mitigated.

Based on the recommended hours of work, the impacts would only be experienced during day time hours and would generally be below the threshold for high noise impacts established by the relevant noise guidelines. The residential noise management levels (NMLs) are predicted to be exceeded at the majority of residences located within 800 metres of the quarry works zones at some stage during construction. This includes the TAFE which is within 800m of the quarry works zone. All other construction scenarios are predicted to result in lower exceedances of the NMLs. No exceedances of the highly noise affected criteria of 75 dBA have been predicted at any residential receivers.

The predicted noise exceedances at sensitive receivers are predicted to be highest during activities such as rock breaking works and when the distance between the location of these activities and receiver is the shortest.

The predicted noise levels are a maximum noise level at the closest receiver. For the majority of the time, it is anticipated that noise levels at more distant receivers will be much lower than the predicted maximum.

In order to comply with the road traffic noise levels, a maximum of one vehicle per hour during the night time period would be able to use Dural Street and Quarry Road as more than one heavy vehicle per hour in the night period will likely result in an exceedance of the road noise policy (RNP) noise criteria. In reality, traffic on these streets is predicted to be significantly less than one heavy vehicle per hour, as discussed in Section 3.2.5.

It is anticipated that Dural Street and Quarry Road will only be used to bring equipment onto the site if the vehicles are unable to negotiate the gradient of Bridge Road. This would need to occur during the night time period which would be outside the recommended construction hours and would require a variation to the hours of construction. This equipment would remain on site for the duration of its use (i.e. – it would not be transported to and from the site on a daily basis).

It is considered that the noise from the project can be managed effectively through the mitigation measures detailed in the EIS and recommended measures stemming from the preparation of the required Construction Noise and Vibration Management Plan and a Construction Traffic Management Plan which will include a range of traffic management measures to manage road noise from vehicles associated with the proposed works.

It is considered that the overall long term benefits of the project for the community outweigh the temporary noise impacts on nearby sensitive receivers.

Vibration Assessment

The noise and vibration impact assessment identified safe working distances for vibration activities for structural damage to existing buildings as well as heritage structures and for human comfort. No adverse structural damage impacts to buildings or heritage items are anticipated as a result of the project.

One building within Hornsby TAFE has been identified within the safe working distance for human comfort. Mitigation measures have been recommended to reduce potential construction vibration impacts.

One heritage structure (being the headstones within the Higgins family cemetery) has been identified within the 50 metre structural damage buffer. This item is only marginally within the calculated structural damage buffer zone. This item is not considered to be structurally unsound and as such, no adverse structural damage impacts are anticipated as a result of rolling/compacting works within the Old Mans Valley works area.

Notwithstanding, and as recommended in the Statement of Heritage Impact, a condition of consent requiring the preparation of a Heritage Management Plan (which will be required to address potential vibration impacts, as well as other matters) is recommended – refer Schedule 2.

3.2.2 Air Quality

An Air Quality Assessment was submitted with the EIS. Air quality goals are based on the protection of human health and well-being that have been established by National Environment Protection Council (NEPC) (NEPC 2002, 2003) and takes into consideration the air quality goals/guidelines in the Approved Methods (EPA, 2016).

The air quality assessment focused on dust and particulate matter, as they are the primary emissions in terms of impacting air quality.

The air quality assessment undertaken for the EIS found that the project is not expected to exceed the air quality goals identified in accordance with the Approval Methods (EPA, 2016) at any nearby private receptors.

The EPA has raised no objection to the proposal with respect to dust emissions. The GTAs which are included in the conditions in Schedule 2 include requirements for dust emissions to be minimised.

While the project is not expected to exceed air quality goals, a number of mitigation measures are also proposed to further reduce dust emissions associated with the project. These measures include:

- Where appropriate, material is to be watered prior to it being loaded for on-site haulage.
- The size of storage piles/stock piles is to be minimised where possible.
- Cleared areas of land are to be limited where practicable and only cleared when necessary to reduce dust emissions.
- On-site traffic is to be controlled by designating specific routes for haulage and access and limiting vehicle speeds to below 25 km/h.
- Operations are to be suspended during high wind speed events or water sprays are to be used.
- Rock saws are to be equipped with in built wet control systems that reduce dust generation.

These mitigation measures are to be included in the CEMP which will be required to be prepared prior to commencement of works on the site. Subject to implementation of these measures, the project is not expected to result in any significant air quality impacts.

3.2.3 Heritage

A Statement of Heritage Impact (SoHI) prepared by Artefact was submitted with the EIS. This SoHI has also been independently peer reviewed by Godden MacKay Logan (GML) heritage consultants. The SoHI addressed impacts on both Aboriginal and non-Aboriginal heritage.

There are no listed heritage items within the areas within which works are proposed. In this regard, there are no works proposed within that part of the site within which the diatrema is located.

Aboriginal Heritage

Artefact Heritage undertook an Aboriginal Archaeological Survey Report (ASR) to assess and identify any Aboriginal sites or areas of archaeological potential that might be impacted by the project.

The ASR concluded that the project is unlikely to impact any intact archaeological remains and therefore no further archaeological investigation or mitigation was required. However, it is recommended that an unexpected finds policy be implemented in the event of Aboriginal archaeological deposits being

identified during ground works and excavation. GML also agrees with the assessment and conclusions of the ASR.

Non-Aboriginal Heritage

The Artefact Heritage SoHI includes historical analysis and a review of heritage listed items in the study area being the quarry site and surrounds. The report has concluded that a small proportion of the study area has the potential for significant historical archaeological remains.

GML agreed with the conclusions contained within the Statement of Heritage Impact (SoHI), i.e. that the listed heritage items would not be impacted by the proposed works and an archaeological research design should be prepared to inform a program of archaeological investigation to mitigate impacts to significant archaeological remains.

With respect to local items, GML identified that earthworks in the eastern fill area have the potential to disturb the former site of the 1880s Harrington Family Homestead and recommended that an Archaeological Research Design be undertaken to ascertain if a s140 permit to excavate or a s139 exception permit should be obtained prior to works commencing to comply with the *Heritage Act 1977*, Part 6, Division 9. A condition to this effect has been included in Schedule 1.

GML also noted that the proposal complies with the general aims and objectives of the HSDCP and substantially regenerates the currently disused Hornsby Quarry. The proposed redevelopment effectively avoids extant heritage sites and will return those sites to a condition more sympathetic to their original setting and heritage significance. Accordingly, the proposal is considered to be acceptable on heritage grounds, subject to the imposition of conditions of consent as recommended. These conditions have been included in Schedule 2.

3.2.4 Contamination

There are sources of potential contamination on the site which have been subject to additional detailed contamination investigations.

The proposed works include site remediation, including removal of the existing UST in accordance with the Remedial Action Plan (RAP). The Remedial Action Plan identifies measures and procedures to be implemented during the works to manage potential contamination.

Following implementation of the measures and procedures as detailed in the RAP, the site can be made suitable for future use as a public recreation area.

Schedule 2 includes conditions to ensure site remediation is undertaken in accordance with relevant standards and also conditions to address the potential for unexpected finds to be encountered during the works. At the completion of the remediation works (and in accordance with the RAP) a validation report is required to be prepared.

3.2.5 Traffic

A traffic impact assessment (TIA) was submitted with the EIS however that was based on outdated traffic data. The RtS included updated traffic data based on traffic counts conducted in August 2019. The revised TIA also considered potential impacts associated with the delivery of construction materials for civil works.

The revised TIA considered the existing road network in the vicinity of the site as well as the operation of intersections likely to be impacted as a result of traffic generated by the proposed activities.

In terms of traffic generation, it was assumed that during each of the peak hour periods per day, 30 light vehicle movements and 15 heavy vehicle movements could occur. This is considered to be a worst case scenario for assessment purposes. The TIA also noted that most of the movements associated with the activities will occur outside the road network peak periods (i.e. prior to 7 am and before 5 pm.). As previously noted, any truck movements to and from the site during these times will be a variation to the recommended construction hours and will require separate approval.

It is expected that large plant and equipment will be transported to the site and remain on site for the duration of the project (or for the duration for which that equipment is required). Large plant and equipment will not be transported to and from the site on a daily basis.

A total of 650 trucks is anticipated over the life cycle of the project which is estimated to be 1.5 to 2 years. Of these 650 trucks:

- 50 trucks would be for concrete delivery (from local operators);
- 50 would be flat bed trucks carrying steel + a further 5 trucks carrying geofabric material.
- An estimated 250 fuel trucks will attend the site
- The balance of trucks (250) would be miscellaneous trucks associated with the works.

The majority of truck movements will occur via the Bridge Road entry to the site. The Quarry Road entry will only be used to transport plant or equipment on vehicles unable to negotiate the steep grade of Bridge Road.

It is concluded that the expected increase in construction traffic associated with the proposed activities will have negligible impacts to the operation of surrounding intersections compared to the existing scenario and will certainly be significantly less than the construction vehicle movements experienced in association with the NorthConnex approval.

The DA was referred to Roads and Maritime Service (RMS) for comment. RMS has no objection to the proposed development and had no requirements.

In order to mitigate potential impacts associated with traffic generated as a result of the proposed works, a condition requiring the preparation of a construction traffic management plan is recommended.

3.2.6 Visual

The quarry void is characterised by dramatic topography including near vertical/steep walls. Manor Road is located on a ridge line to the north and west of the site. Residential properties along Manor Road are likely to be the most affected together with users of nearby educational and recreational facilities and visitors to recreational biking and walking trails in the vicinity of the site.

At its closest, the Blue Gum Walking Track is located more than 100m from the southern-most extent of proposed earthworks (as revised). The area between the walking track and the location and extent of earthworks is heavily vegetated with trees. The vegetation between the edge of the earthworks and the walking track will be retained and therefore will continue to screen views to the site. Rosemead Road Picnic Area is located even further away than the walking track and vegetation between the picnic area and the works zones will also be retained. This will provide significant screening.

Some residents along Manor Road might be impacted by the loss of trees within the northern spoil area works zone, however following works, a program of bush regeneration and site rehabilitation will be undertaken and this assist in providing further vegetation in areas of earthworks in the medium to long term.

The retaining walls will be consistent with the existing character of the site which comprises steep rock faces within the quarry void.

It is considered that the potential visual impacts of removal of vegetation are not unreasonable and will be mitigated once works in accordance with the required Habitat and Vegetation Restoration Plan are undertaken.

3.2.7 Waste Management

The following waste streams will be generated during the project:

- Vegetation from clearing activities.
- Top soil and spoil from earthworks/excavations.
- General waste from site personnel (such as food scraps, aluminium cans, glass bottles, plastic and paper containers, paper, cardboard and other office wastes).
- Wastewater and sewage from site office/compounds and amenities.

The project has been designed so that top soil and spoil from earthworks will be reused on site. Top soil will be retained for use on other parts of the site as part of proposed rehabilitation and regeneration programs/activities. Vegetation that is removed will be mulched on site and blended with retained top soil or directly reused as part of rehabilitation works.

Waste generated by site personnel will be collected in separate bins (general waste and recyclable waste) and collected by a waste contractor.

Waste water from site amenities will be stored pending collection and transport for disposal at a licensed facility.

Given the nature of the proposed activities it is considered unlikely that there will be any adverse impacts as a result of waste generation and waste management.

A construction waste management plan will be required to be prepared as part of the CEMP prior to commencement of works and a condition to this effect has been recommended in Schedule 2.

3.2.8 Construction Management

Given the nature of the proposed works, there will be no 'operational phase' per se; the works are all associated with the 'construction' phase of the project.

To ensure there are appropriate methodologies in place to address potential impacts that could occur during the life of the proposed works, a condition requiring a comprehensive construction environmental management plan (CEMP) to be prepared prior to commencement of works has been recommended. The applicant has prepared a preliminary CEMP and this can be used as a guide for the preparation of the comprehensive CEMP following engagement of the works contractor.

Among other things the CEMP will need to include the following sub-plans:

- Noise and vibration management plan
- Construction traffic management plan
- Soil and water management plan
- Construction management site plan
- Construction waste management plan
- Tree protection plan

- Post construction site management plan

3.3 Social Impacts

Despite the fact that the quarry is publicly owned land, access to the public cannot be provided due to safety and land stability issues.

The proposed works will result in a landform suitable for future development into a community parkland and make the site safe for the community. These works are a critical step in the process of opening the site up to the public for recreational use.

The change in land use from quarry to community park will result in a number of social benefits including improvements to mental and physical well being for the community.

By improving the safety and accessibility of the site, the project will allow for enhanced community visitation and engagement with the heritage items located within the site, and provide opportunities for greater understanding of the significant value of these items.

These positive long-term social benefits of development of the future parkland need to be considered in the context of the potential short-term social and amenity impacts associated with the construction phase of the project

3.4 Economic Impacts

The project is expected to provide the direct employment of up to 30 full time equivalent staff on site during the construction works. There will also be indirect employment benefits related to detailed design, investigations, procurement and tendering and supply of materials and equipment.

The project will facilitate the development of a parkland for community use in the future. The parkland could result in additional tourist visits to the Hornsby region once the park has opened. These benefits will be permanent due to ongoing future parkland visitation.

4. SITE SUITABILITY

Section 4.15(1)(c) of the Act requires Council to consider “*the suitability of the site for the development*”.

The site is considered suitable for the project for the following reasons:

- The project is consistent with strategic land use plans including the Greater Sydney Region Plan, the North District Plan and Plans of Management and other investigations undertaken by and on behalf of Council for the site.
- The majority of the site is zoned RE1 Public Recreation under the LEP. The project is permissible with consent and is considered to be consistent with the objectives of the zone. Only a small portion of the site is R2 Low Density Residential under the LEP and the project is permissible with consent in the R2 zone.
- It is located close to major transport routes.
- The environmental constraints of the site do not negate the use of the site for the purposes of a public recreation area. These works are a necessary precursor to the future development of the site for the purposes of a public recreation area. Potential impacts that could arise as a result of the proposed works are capable of being mitigated or minimised where they cannot be avoided.

5. PUBLIC PARTICIPATION

Section 4.15(1)(d) of the Act requires Council to consider “any submissions made in accordance with this Act”.

5.1 Community Consultation

Preliminary/Non-Statutory Consultation

Hornsby Council has been consulting with the local community in relation to the Hornsby Quarry project over a number of years.

In 2015, Hornsby Council announced that they would transform the quarry and surrounding area into a parkland. Importantly, Council also committed to ensuring it would be “designed, owned, used and loved by residents”. In 2017, the community was asked to “Plan Your Parkland” by providing their blue sky aspirations for the site.

At the conclusion of the ‘Plan Your Parkland’ round of engagement, Council embarked on preparing an EIS and Development Application.

EIS Consultation

In accordance with the SEARs, during the preparation of the EIS, Council consulted immediate neighbours. Approximately 600 households around the Quarry site were directly notified of the project by a letter and fact sheet. In addition to this consultation, Council expanded engagement to also include the following activities:

- Email ‘blast’ to 40,000 residents
- Letters and emails to stakeholders
- Project website updates
- Community Deliberative Forum & Stakeholder meeting presentations
- Social media posts, media release

Other engagement activities included:

- Presentation to Hornsby Shire Councillors
- Reconvene the Community Deliberative Forum
- Stakeholder meeting with Environmental and Bushwalking Stakeholder groups
- Community Swing-By Session in Hornsby Mall

Issues raised during the pre-EIS engagement included:

- The scope of the engineering earthworks
- The provision of an accessible path as part of the future parkland
- Impacts on the BGHF CEEC and any offset planting that will be undertaken
- Further information in relation to the geotechnical instability issues
- Duration of the works
- Impacts on the diatreme
- How the future parkland will be funded
- Car parking and vehicular access for the future parkland
- Impacts in relation to noise, lights and parking (associated with the future parkland)
- Visual impacts
- Impacts on vegetation/tree removal

- Dust and air pollution
- Construction traffic impacts.

The feedback as a result of the swing by sessions in Hornsby Mall were overwhelmingly supportive, and respondents were excited about the EIS and the future of the park. Of the 220 people actively engaged during the swing by sessions, less than 5 people expressed a negative reaction. These were not about the EIS itself, but rather about the history of the site’s operations, Council’s purchase and lack of public access.


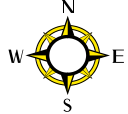
The EIS was placed on public exhibition and was also notified to adjoining and nearby landowners between 5 March 2019 to 17 May 2019 in accordance with the Notification and Exhibition requirements of the *HDCP* and the *Environmental Planning and Assessment Regulation 2000*. In addition to this statutory notification, addition engagement with the broader community was also undertaken. This included:

- Updates of the project page on Council’s website, including encouraging feedback via a direct link to the DA documentation.
- Emails to the community deliberative forum and stakeholders.
- Further community swing-by sessions in Hornsby Mall
- A site tour for Manor Road and Ferntree Close residents

During this period, Council received 46 submissions. The map below illustrates the location of those nearby landowners in close proximity to the development site who were notified of the application.



NOTIFICATION PLAN

<ul style="list-style-type: none"> • PROPERTIES NOTIFIED 	 PROPERTY SUBJECT OF DEVELOPMENT	
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Most submissions raised more than one issue. The table below is a summary of the main issue, the main points raised in the submissions in relation to that issue and the number of submissions that included the issues following initial statutory notification of the DA and accompanying EIS. The table also provides a response to the submissions:

ISSUE	MAIN POINTS	No. of submissions wherein this issue is mentioned	Response to submission
Concern over tree removal	<ul style="list-style-type: none"> - Removal of Blue Gum High Forest as the Forrest in protected under both the Commonwealth and State Legislation - Concern over the number of large trees being removed - Resident are concerned because a large number of trees are marked with pink tape (usually an indication of trees being removed. - Pink tape is seen on trees where no works supposed to be undertaken in these areas 	31	<p>The EIS provided a detailed assessment of the potential biodiversity impacts of the project including removal of Blue Gum High Forest. The assessment found that the project is will not have a significant adverse effect on the local occurrence of Blue Gum High Forest.</p> <p>The removal of BGHF is necessary in order to make the site safe. The BGHF to be removed has been assessed as being of moderate/good – poor quality.</p> <p>A preliminary VMP has been prepared to guide how the site's biodiversity will be restored, enhanced and protected in perpetuity.</p> <p>Tree surveys were undertaken to further inform the design. Trees that were surveyed were marked with pink tape. The tape was not an indication of trees that will be removed.</p> <p>The extent of works in the SW fill area has been refined and reduced. As a result a significant number of trees will be able to be retained.</p>
Funding	<ul style="list-style-type: none"> - It will cost around \$31 million to part-fill the quarry - Ensure the parkland project is properly funded 	1	<p>This is not relevant to this DA, however, contributions collected by Council in relation to other developments, in conjunction with funding from the State Government will be used to fund future development of the parkland.</p>

ISSUE	MAIN POINTS	No. of submissions wherein this issue is mentioned	Response to submission
			<p>the earthworks design has been developed to provide a cost effective way of stabilising the site and providing a final earthworks landform suitable for public access and future park development.</p> <p>Sufficient financial resources will be made available to implement the revegetation and rehabilitation measures as outlined in the Preliminary Vegetation Management Plan.</p> <p>The State Government has also provided significant funding to support the preparation and development of the site into parkland.</p> <p>Future development of the site beyond this DA will consider opportunities for minimising on-going maintenance costs.</p>
Unwanted weeds and flora	<ul style="list-style-type: none"> - Concerns over future weeds and unwanted flora growing in the possible future park 	1	Weed control methods are discussed in the Preliminary Vegetation Management Plan
Resident opposed to having mountains bike track built	<ul style="list-style-type: none"> - Disturbance towards wildlife and possibly drive them away 	3	<p>The project covered by this DA does not include construction of mountain bike tracks. The creation of the future parkland (including any potential for future mountain bike tracks) will be subject to a separate Development Application, if required.</p> <p>As part of any future DA process, Council will engage with the community.</p>
Objections made against having any stadiums or large	<ul style="list-style-type: none"> - Will create noise and pollution 	2	The project covered by this DA does not include construction of stadiums or grandstands. The creation of the future parkland (including any potential for future active recreation

ISSUE	MAIN POINTS	No. of submissions wherein this issue is mentioned	Response to submission
grandstands or professional football use			uses and associated infrastructure) will be subject to a separate Development Application, if required. As part of any future DA process, Council will engage with the community
During the Construction period	<ul style="list-style-type: none"> - J and H blocks are close to the vibration and noise areas on the DA - How long will it take - Will council close off Bridge Road to access the site? - If Bridge Road is closed off a two-storey car park will be closed off 	1	The CEMP will include methodologies to manage vibration, noise and dust associated with construction activities. The TAFE carpark access will be maintained throughout the works. The construction period is anticipated to be approximately 21 months.
Preservation of the soil	<ul style="list-style-type: none"> - Emphasis on appropriate soil properties throughout the soil profiles - Maintaining soil quality 	4	All topsoil from the proposed earthworks will be retained on site for reuse in bush regeneration work. To supplement retained topsoils, it is proposed to 'manufacture' soils that replicate the natural soils of the area blending removed fill with mulch or compost generated from onsite cleared vegetation. A soil assessment report has been prepared to identify the requirements for engineering the site soil to re-establish and support Blue Gum High Forest and Blackbutt Gully Forest vegetation.
Noise	<ul style="list-style-type: none"> - Noise has an effect on the wildlife - Irritating for the nearby residents 	5	The EIS provided a detailed assessment of the potential biodiversity impacts of the project including consideration of noise impacts on wildlife. The assessment found that any localised and temporary increases in noise levels during construction activities are

ISSUE	MAIN POINTS	No. of submissions wherein this issue is mentioned	Response to submission
			<p>unlikely to substantially impact on native biota.</p> <p>Noise impacts during construction will be temporary. Impacts will be reduced by implementation of recommended environmental controls as required by the Noise and Vibration Management Plan for the project. This will be required to be prepared prior to commencement of works.</p>
Question need for works in the SW fill area	<ul style="list-style-type: none"> - Unnecessary loss of trees - Need for works has not been adequately demonstrated 	6	The design of the project has been significantly to reduced (from that first contemplated in the EIS) to reduce amount of tree removal required in the south west fill works area and Old Mans Valley.
Objections to cafes and restaurants in the park	<ul style="list-style-type: none"> - This will create more general waste that may end up in the bush land - Because of this rubbish it will attract unwanted animals like rats 	1	The project covered by this DA does not include cafes or restaurants. The creation of the future parkland (including any potential for future café or restaurant) will be subject to a separate Development Application, if required. As part of any future DA process, Council will engage with the community
Biodiversity	<ul style="list-style-type: none"> - No SIS - Loss of habitat - Impacts on fauna - Threatened species such as the Powerful Owl and the Stella and Grey-headed flying fox - Tree preservation - The tree removal will affect the habitats of the fauna and especially the threatened species 	18	<p>See response to Issue 1 – Concern over tree removal.</p> <p>The preliminary VMP includes a recommendation that a Habitat Creation and Enhancement Plan be prepared. The preparation of this plan has been included as a condition of consent.</p> <p>In addition to the revegetation and rehabilitation that will occur following completion of works, a range of mitigation measures have been proposed to ameliorate potential impacts of the project on habitat both on the site and on surrounding land,</p>

ISSUE	MAIN POINTS	No. of submissions wherein this issue is mentioned	Response to submission
	<ul style="list-style-type: none"> - They would like it to be a sanctuary 		as well as downstream of the proposed works. These include provision of no-go zones to protect native vegetation, fauna management protocols, and erosion and sedimentation management strategies.
Aboriginal remains and heritage	<ul style="list-style-type: none"> - The project is likely to impact any archaeological aboriginal remains - Need to preserve heritage 	3	The EIS included assessment of Aboriginal heritage. The Aboriginal Survey Report concluded that no significant impact to Aboriginal heritage is expected. Mitigation measures have been identified to further minimise any potential heritage impacts.
Replacing bike track with walking track	<ul style="list-style-type: none"> - Close proximity to home/ noise and privacy 	1	The project covered by this DA does not include mountain bike tracks or walking tracks. The creation of the future parkland (including any potential for future tracks and/or trails) will be subject to a separate Development Application, if required. As part of any future DA process, Council will engage with the community

Following initial assessment of the DA documentation, including the EIS, and following initial consultation with the community in relation to the DA as originally submitted, the applicant reviewed the project scope and also provided additional information to assist with the assessment of the project. The description of works to be undertaken on the site was also revised to include the full scope of works proposed to be undertaken as part of this DA.

The main change between the originally submitted proposal and the revised proposal (as a result of design development) is the reduction in the earthworks to reduce the intensity and duration of construction activities in the south-west fill works area and quarry void.

Not only will this reduce the estimated construction timeframe down to an estimated 21 months (from approximately 24 months) (and a consequent reduction in associated air quality (dust) and noise impacts as a result of reduced construction activities), the number of trees proposed to be removed has also reduced significantly.

The revised project was renotified to nearby and adjoining residents as the scope of works had been modified from that originally notified and additional information had been provided.

The revised project was notified to affected property owners and objectors from 22 November 2019 until 13 January 2020. As a result of that notification 319 submissions in relation to notification of amended plans and 240 comments were received from the mountain bike community.

The matters raised in these submissions are detailed in the table below

Key Issues	No. of submissions/comments	Response
<p>Incorporate mountain bike infrastructure. Explore opportunities to link Hornsby Quarry to the Sydney Water redevelopment at Westleigh</p>	<p>240 comments. In addition some of the 319 submissions also related to this issue</p>	<p>The proposed development does not involve any changes to current mountain bike trails around the site. The proposed earthworks subject to the DA do not deal with the final land uses of the site and hence does not preclude any potential uses.</p> <p>Decisions about the final land uses, including access and egress to all areas of the site, will be made during the next stage of the development. These decisions will be made in consultation with the community, including stakeholders such as the mountain biking community.</p>
<p>Habitat loss for Powerful Owl/Wildlife</p>	<p>25</p>	<p>The preliminary VMP includes a recommendation that a Habitat Creation and Enhancement Plan be prepared. The preparation of this plan has been included as a condition of consent. The Habitat Creation and Enhancement Plan is required to be prepared prior to commencement of works.</p> <p>Since exhibition of the DA and the response to submissions, Council has undertaken further consultation with a Powerful Owl officer with Birdlife Australia has been undertaken. The Powerful Owl officer identified the location of a nesting tree that was used by a nesting pair of owls last breeding season. This tree is adjacent to the area in which works are proposed, but is outside the works area.</p>
<p>Park has a outdoor gym</p>	<p>1</p>	<p>The proposed earthworks subject to the DA do not deal with the final land uses of the site and hence does not preclude any potential uses.</p>

Key Issues	No. of submissions/comments	Response
		<p>Decisions about the final land uses will be made during the next stage of the development.</p> <p>These decisions will be made in consultation with the community.</p>
Preservation of Habitat	24	<p>The scope of the project has been reviewed as a result of design development and the extent of earthworks has been significantly reduced. As a result impacts on existing habitat have also been reduced.</p> <p>The works the subject of this DA are necessary in order to stabilise areas of the site which have been identified as being geotechnically unstable and to realise the future use of the site as a public parkland.</p> <p>A preliminary VMP has been prepared and the VMP includes a recommendation that a Habitat Creation and Enhancement Plan be prepared. The preparation of this plan has been included as a condition of consent. The Habitat Creation and Enhancement Plan is required to be prepared prior to commencement of works.</p>
Mountain bike trails impacting the biodiversity	17	<p>The proposed development does not involve any substantive changes to current mountain bike trails around the site.</p> <p>The proposed earthworks subject to the DA do not deal with the final land uses of the site and hence does not preclude any potential uses.</p> <p>Decisions about the final land uses, including access and egress to all areas of the site, will be made during the next stage of the development.</p> <p>These decisions will be made in consultation with the community, including all stakeholders.</p>
Disagree with Vegetation Management Plan	12	The VMP that has been prepared is a preliminary VMP.

Key Issues	No. of submissions/comments	Response
		As a condition of consent, a final VMP, together with a Habitat Creation and Enhancement Plan will be required to be prepared. The VMP and the Habitat Creation and Enhancement Plan will be required to be to the satisfaction of Council.
Pedestrian Access be maintained through the valley	1	The proposed works do not impact on access to those parts of Old Mans Valley which are currently publicly accessible. One of the objectives of the proposed works is to facilitate development of a future parkland on the site which will be available to the public.
Walking track buffer zones	1	The proposed earthworks subject to the DA do not deal with the final land uses on or around the site. Decisions about the final uses, including walking tracks, will be made during the next stage of the development. These decisions will be made in consultation with the community, including adjoining owners.
Excavation of the South West Area	1	The scope of the project has been revised to reduce the extent of works in the SW fill area.
Excavation Plans are vague	1	The plans provided with the DA contain sufficient detail to understand the scope of works and assess the impacts of the proposed works.

Many of the matters raised in the submissions do not relate specifically to this DA. It is considered that the majority of matters raised in the submissions that do relate to this DA have been addressed by the reduced scope of works and/or can be addressed by the imposition of appropriate conditions of consent, including conditions requiring the preparation of detailed management plans prior to works commencing.

5.2 Council Referrals

5.2.1 Traffic

Council's traffic assessment provided feedback in relation to the proposed works and has no objection to the development subject to the imposition of conditions relating to employee parking, loading and unloading activities and access to the site.

Conditions relating to these requirements are recommended.

5.3 Public Agencies

The development application was referred to the following Agencies for comment:

5.3.1 Roads and Maritime Services

The DA was referred to RMS for comment (as formal/statutory referral was not required). RMS advised that it had no objections to the project.

5.3.2 Rural Fire Service

The New South Wales Rural Fire Service (NSW RFS) has reviewed the information and has no specific objections.

RFS noted that they provided separate advice that will need to be considered in relation to the future development of the subject site as a community parkland and any future Vegetation or Fuel Management Plan prepared for the subject site.

5.3.3 Sydney Water

Sydney Water advised that the development does not require assessment by them at this stage however they requested that they be kept informed in relation to future works planned for the site.

5.3.4 Department of Planning, Industry and Environment's Environment, Energy and Science Group (EES)

EES was contacted by a resident action group in relation to the impacts of the development on the BGHF CEEC and the likely impacts to a breeding pair of threatened Powerful Owls.

EES requested that the public submission be taken into consideration as part of the assessment of the DA. The submission has been addressed in Section 5.1 above.

5.3.5 OEH

As noted in Section 3.1.1, OEH has agreed with the methodology applied with respect to the biodiversity assessment and has no issues in relation to biodiversity impacts.

5.3.6 EPA

NSW EPA were consulted in relation to this project as it triggered the integrated development provisions of the *EP&A Act*.

EPA provided comments in relation to noise and vibration impacts, air quality impacts and impacts on water quality.

The responses to the comments of EPA in relation to these issues have been addressed in Sections 3.2.1, 3.2.2 and 3.1.2 of this report.

EPA issued General Terms of Approval (GTAs) for the development on 13 February 2020. The GTAs have been included in the recommended conditions in Schedule 2.

6. THE PUBLIC INTEREST

Section 4.15(1)(e) of the Act requires Council to consider "*the public interest*".

The public interest is an overarching requirement, which includes the consideration of the matters discussed in this report. Implicit to the public interest is the achievement of future outcomes for the site as a result of the development adequately responding to and respecting the future desired outcomes expressed in environmental planning instruments and development control plans.

The application is considered to have satisfactorily addressed Council's and relevant agencies' criteria and will provide a development outcome that, on balance, will result in a positive impact for the community. Accordingly, it is considered that the approval of the proposed development would be in the public interest.

CONCLUSION

Hornsby Shire Council (Council) acquired the Hornsby Quarry site (the site) in 2002 and has undertaken a number of investigations and studies with regard to the future use of the site and the environmental and technical constraints that the site poses. As a result of these studies, Council identified the need to:

- stabilise the quarry and in particular the northern spoil mound which is at risk of collapse;
- manage the site in a safe and environmentally sustainable manner; and
- actively seek opportunities to fill the quarry void with spoil arising from major infrastructure projects in the region.

Council is proposing to rehabilitate and reshape the Hornsby Quarry site to ensure public safety and allow future development into a parkland for community use.

The project the subject of this DA involves:

- Bulk earthworks, including redistribution of NorthConnex fill (and associated civil works including construction of access tracks, drainage and retaining walls);
- Site remediation;
- Tree removal; and
- Revegetation work and site rehabilitation.

The proposed development is designated development, pursuant to clause 16 of Schedule 3 of the *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation).

The works will facilitate development of the quarry site into future parkland. The embellishment of the site to create parkland will be subject to a separate DA.

The submissions received do not warrant refusal of the application, however conditions of consent are recommended in order to address issues raised in the submissions.

It is considered that the environmental impacts of the proposed can be minimised through the imposition of conditions including preparation of a detailed CEMP, appropriate sediment and erosion control measures and site rehabilitation to provide offsets. Accordingly, the application is recommended for approval.

Note: At the time of the completion of this planning report, no persons have made a *Political Donations Disclosure Statement* pursuant to Section 10.4 of the *Environmental Planning and Assessment Act 1979* in respect of the subject planning application.

Attachments:

1. Locality Plan
2. Figures
3. Vegetation Map

GENERAL CONDITIONS

The conditions of consent within this notice of determination have been applied to ensure that the use of the land and/or building is carried out in such a manner that is consistent with the aims and objectives of the relevant legislation, planning instruments and Council policies affecting the land and does not disrupt the amenity of the neighbourhood or impact upon the environment.

Note: For the purpose of this consent, the term 'applicant' means any person who has the authority to act on or the benefit of the development consent.

Note: For the purpose of this consent, any reference to an Act, Regulation, Australian Standard or publication by a public authority shall be taken to mean the gazetted Act or Regulation, or adopted Australian Standard or publication as in force on the date that the application for a construction certificate is made.

SCHEDULE 1**Deferred Commencement Conditions**

Pursuant to Section 4.16(3) of the *Environmental Planning and Assessment Act 1979*, this consent does not operate until the following conditions have been complied with to the written satisfaction of Council. The information required by these conditions is to be submitted within 3 years of the date of this notice of determination.

A. Biodiversity Offset Package

- i) The applicant shall prepare a Biodiversity Offset Package for the development. The Biodiversity Offsets Package must comply with the Secretary's Environmental Assessment Requirements (SEARs) – (EAR 1167) issued by the Office of Environment and Heritage on 31/8/2017. The package shall detail how the ecological values lost as a result of the proposal will be offset. Where possible, specific priority should be given to securing offsets as near to the location of the impact/loss as possible to assist with the preservation of the specific endemic communities of the area. The Biodiversity Offset Package must include the following:
 - a) a detailed Vegetation Management Plan
 - b) a Habitat Creation and Enhancement Plan
- ii) An agreement in relation to offset package is to be entered into with the Biodiversity Conservation Trust. Details of execution of this agreement are to be submitted to Council.

B. Preparation of a Vegetation Management Plan and Habitat Creation and Enhancement Plan

- i) A Vegetation Management Plan and Habitat Creation and Enhancement Plan is to be prepared by a suitably qualified ecologist and submitted to Council for approval. The Vegetation Management Plan and Habitat Creation and Enhancement Plan shall include, but are not limited to, the following:
 - a) A methodology and timeline for the collection of seeds and propagules from areas of Blue Gum High Forest prior to the removal or disturbance of any area mapped as Blue Gum High Forest.

- b) Collected seeds are to be planted in Council's community nursery and seedlings are to be used as part of the vegetation rehabilitation.
 - c) An unexpected finds procedure methodology for any threatened biota or habitat resources detected on site.
 - d) Ground dwelling fauna habitat creation - survey area for location of habitat to be retained, survey for potential material that can be used for habitat creation, develop donor site and storage plan for surveyed material.
 - e) Protocols for the removal of any hollow bearing trees and termite nests and mounds with a view to minimizing mortality or injury to fauna.
 - f) Opportunities for the salvage of habitat features such as tree trunks and woody debris for reuse within the future parkland and/or surrounding areas to be rehabilitated.
 - g) Nesting box strategy including target species (e.g. microbats, arboreal mammals, birds, native bees), design principles, installation/creation location, monitoring and maintenance.
 - h) Foraging, breeding, nesting and shelter habitat - retain, protect, replace protective vegetative cover (evaluate potential of weed plumes as habitat prior to removal – plan to retain sections of weeds on edges prior to replacement habitat creation).
 - i) Retain and protect any water features (including groundwater and water courses).
 - j) Identify likelihood of predation.
 - k) Management of existing tree hollows - Five hollow bearing trees have been recorded in the Impact Area (GHD 2019). Prior to any works being undertaken on site, the hollows should be examined for any occupants. Relocation is to be undertaken by a qualified ecologist and/or wildlife handler. The hollows should then be dismantled and relocated to the nearby buffer area at the interface. A qualified ecologist and/or wildlife handler should be on site for any tree removal activities.
- ii) The Vegetation Management Plan and Habitat Creation and Enhancement Plan must specify works to be undertaken prior to works commencing, during the construction period, during the establishment period and post construction into perpetuity.

C. Archaeological Research Design

- i) An Archaeological Research Design is to be prepared by a qualified archaeologist to inform a program of archaeological investigation to mitigate impacts to any significant archaeological remains.
- ii) The Archaeological Research Design is to identify if any permits under Section 140, or an exception permit under Section 139 of the Heritage Act is required. If a Section 140 permit is required, this will be required to be submitted to Council.

UPON COUNCIL'S WRITTEN SATISFACTION OF THE ABOVE CONDITIONS, THE CONDITIONS IN SCHEDULE 2 OF THE DEVELOPMENT CONSENT APPLY:

SCHEDULE 2

1. Approved Plans and Supporting Documentation

The development must be carried out in accordance with the plans and documentation listed below and endorsed with Council's stamp, except where amended by Council and/or other conditions of this consent:

<i>Plan No.</i>	<i>Plan Title</i>	<i>Drawn by</i>	<i>Dated</i>
Job No. 21-26457 Figure 01, Rev E	Existing Site Plan	GHD	November 2019
Job No. 21-26457 Figure 02, Rev J	Proposed Landform	GHD	November 2019
Job No. 21-26457 Figure 03A, Rev J	Cross Sections, Sheet 1	GHD	November 2019
Job No. 21-26457 Figure 03B, Rev J	Cross Sections, Sheet 2	GHD	November 2019
Job No. 21-26457 Figure 03C, Rev J	Cross Sections, Sheet 3	GHD	November 2019
Job No. 21-26457 Figure 03D, Rev J	Cross Sections, Sheet 4	GHD	November 2019
Job No. 21-26457 Figure 03E, Rev J	Cross Sections, Sheet 5	GHD	November 2019
Job No. 21-26457 Figure 03F, Rev J	Cross Sections, Sheet 6	GHD	November 2019
Job No. 21-26457 Figure 03G, Rev J	Cross Sections, Sheet 7	GHD	November 2019
Job No. 21-26457 Figure 4, Rev E	Extent of Works	GHD	November 2019
Job No. 21-26457 Figure 05, Rev C	Site Management Plan	GHD	November 2019
Job No. 21-26457 Figure 06, Rev D	Cut and Fill Details	GHD	November 2019
Project No. 100125 Sheet 1 of 9	Retaining Wall Details – Overall Site Plan	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 2 of 9	Retaining Wall Details – Perspective View of Proposal	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 3 of 9	Retaining Wall Details – Section A	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 4 of 9	Retaining Wall Details – Section B	Hornsby Shire Council Design and Construction Branch	Undated

Plan No.	Plan Title	Drawn by	Dated
Project No. 100125 Sheet 5 of 9	Retaining Wall Details – Section C	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 6 of 9	Retaining Wall Details – Section D	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 7 of 9	Retaining Wall Details – Section E	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 8 of 9	Retaining Wall Details – Micropile Details	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Sheet 9 of 9	Retaining Wall Details – Overall Site Plan Plan showing work area and general description of proposed works	Hornsby Shire Council Design and Construction Branch	Undated
Project No. 100125 Issue A	Revised extent of Works and Vegetation Mapping	Hornsby Shire Council Design and Construction Branch	Undated

Document Title	Prepared by	Dated
Hornsby Quarry Rehabilitation Environmental Impact Statement - Development Application Summary and Supporting Plans	GHD	February 2019
Hornsby Quarry Rehabilitation Environmental Impact Statement, Volumes 1, 2 and 3	GHD	February 2019
Hornsby Quarry Rehabilitation Response to Submissions, Volumes 1, 2 and 3	GHD	November 2019
Response to additional information in relation to Noise - Ref 2126457-77347	GHD	31 May 2019
Further response to additional information in relation to Noise Vibration Impact Assessment	GHD	20 August 2019
Response to additional information in relation to water quality – Ref 2126457-64006	GHD	5 December 2019
Further response to additional information in relation to water quality	GHD	21 January 2020
EPA General Terms of Approval Notice No: 1585178	EPA	13 February 2020

Document Title	Prepared by	Dated
Hornsby Quarry Rehabilitation Preliminary Vegetation Management Plan	Hornsby Shire Council	2019

2. General Terms of Approval – Environment Protection Authority

The Applicant is to comply with the General Terms of Approval (GTAs) issued by NSW Environment Protection Authority on 13 February 2020.

3. Removal of Vegetation

This development consent permits the removal of:

- a) 0.68 ha of Blue Gum High Diatreme Forest,
- b) 0.86 ha of Blackbutt Gully Forest vegetation; and
- c) 2.31 ha of exotic vegetation.

The location of vegetation permitted to be removed is limited to vegetation within the area identified as 'Revised extent of works line' on plan titled 'Revised Extent of Works and Vegetation Mapping', Project 100125, Sheet 1 of 1, Issue A, dated 07/11/2019

No other vegetation, other than vegetation listed in Table 1B.6(a) *Exempt Tree Species in Hornsby Shire* (in Part 1B6 Tree and Vegetation Preservation of Hornsby Development Control Plan 2013) is to be removed without prior approval being granted.

4. Protection of Fauna

Prior to the removal of any vegetation, a suitably qualified ecologist is required to inspect:

- a) All trees for resident fauna and/or nests or other signs of fauna occupancy;
- b) Identification of all hollow bearing trees and termite mounds; and
- c) All culverts which are to be disturbed for signs of roosting microbats.
- d) If any fauna is identified, the protocols set out in the Habitat Creation and Enhancement Plan are to be implemented prior to the removal or disturbance of any vegetation or soil.

A qualified ecologist is to submit certification to Council that the above inspections have occurred. The certification is also required to document the required actions arising following as a result of these inspections. This certification is required to be submitted prior to the removal of any vegetation on the site.

5. Statutory Requirements

The Applicant shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the approved development. No condition of this approval removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

NOTE:

NSW Environment Protection Authority (EPA) has advised that it cannot issue a licence in relation to the proposed works until the following matters are addressed:

- a) The EIS did not consider all the relevant matters under section 45 of the POEO Act, and a more detailed assessment relating to the proposal's water management is needed. Details required are listed in the GTAs.
- b) A Construction Noise and Vibration Management Plan (CNVMP) is required to manage residual noise and vibration impact risks. (See also Condition 12(q)).

6. Compliance Responsibilities

The Applicant (or the Applicant's appointed contractor) shall implement all appropriate measures to ensure that employees, contractors and sub-contractors are aware of, and comply with, the requirements of the conditions of this approval relevant to their respective activities.

The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.

7. Incident Reporting

The Applicant shall notify the relevant public authority/ies of any incident with actual or potential significant on-site or off-site impacts on the natural and/or built environment within 24 hours of becoming aware of the incident.

REQUIREMENTS PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

8. Construction Certificate

- a) A construction certificate must be issued by a Certifying Authority prior to the commencement of any works relating to the construction certificate on the site approved under this development consent.

NOTE: This does not negate the issue of multiple construction certificates for different phases of work.

- b) The plans submitted with the application for the construction certificate must not be inconsistent with the plans approved under this development consent.

9. Geotechnical Considerations

- a) In areas where public access exclusion zones are required at the base of slopes to meet safety requirements, the geometry of slope and the rockfall models are to be established by a suitably qualified geotechnical engineer incorporating rock fall trial data before issue of the relevant Construction Certificate.
- b) Additional geotechnical investigations and studies are to be undertaken prior to issue of the relevant Construction Certificate under the direction of a suitably qualified geotechnical practitioner to inform the final design and must as a minimum include:
 - i) Additional rock slope mapping to identify whether rock defects of more than 10 m are present which could cause global instability issues in the southern face and to define the level of rock slope treatments required in areas where no toe exclusion zone for public access applies.

- ii) Additional boreholes near the quarry edges to inform design of the Southern Access Track.
 - iii) Additional settlement investigations and ongoing monitoring of the placed fill material in the quarry void.
 - iv) Investigation to inform a liquefaction assessment of the quarry void materials under earthquake conditions.
 - v) Any other geotechnical investigations and slope stability risk assessments as deemed necessary to inform the design by a suitably qualified geotechnical design consultant employed for the scheme.
- c) A certificate, prepared by a suitably qualified geotechnical engineer verifying that the investigations to inform the design of the retaining walls and micropile walls have been undertaken, is submitted to Council prior to issue of a construction certificate for the retaining walls and/or micropile walls.

10. Retaining Walls

- a) To ensure the stability of the site, structural details of all required retaining walls and micropile walls must be submitted with application for the relevant Construction Certificate.
- b) The designs for the retaining walls and micropile walls must be prepared by a suitably qualified engineer and must have regard to the detailed geotechnical investigations that have been undertaken and are required to be undertaken in accordance with Condition 9.
- c) A certificate, issued by a suitably qualified engineer and confirming that the retaining walls and micropile walls have been designed in accordance with the recommendations and requirements of the geotechnical engineer must be submitted to Council prior to issue of the Construction Certificate for the retaining walls and/or the micropile walls.

11. No Importation of Fill

No approval for the importation of fill onto the site is provided by this consent.

REQUIREMENTS PRIOR TO THE COMMENCEMENT OF ANY WORKS
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12. Construction Environmental Management Plan

To safeguard the public, the environment and Council's assets, a separate Construction Environment Management Plan (CEMP) must be prepared by a suitably qualified consultant in consultation with a qualified traffic engineer, a qualified ecologist and AQF 5 arborist, and submitted to Council's Compliance Team at compliance@hornsby.nsw.gov.au for review and written approval prior to commencement of any works on the site. As a minimum, the CEMP must include the following:

- a) A description of the works to be undertaken, including any staging of works.
- b) A detailed description of the site, including the work zones within the site.
- c) Details of the timeframes for the various stages of work, within each work zone.

- d) Details of the contact information for developers, builder, private certifier and any emergency details during and outside work hours.
- e) Details of induction procedures and any protocols to be implemented during the course of the project, including:
 - i) Unexpected finds protocols for contaminated materials.
 - ii) Unexpected finds protocols for Aboriginal artefacts.
 - iii) Unexpected finds protocols for other heritage artefacts.
 - iv) Protocols for managing injured wildlife.
- f) Details of how public safety will be managed throughout the course of works.
- g) A communications strategy for the purposes of advising nearby or adjoining residents and building occupants/owners of the progress of the project, the nature and timing upcoming actions/works (including a timeframe for those works) and contact details of relevant personnel. As a minimum, communication should be made at least 2 weeks prior to commencement of work within each work zone or 2 weeks prior to each stage of work, as relevant.
- h) Details of incident management
- i) Methodologies to be implemented for managing complaints.
- j) Auditing procedures to be implemented.
- k) Details of the reporting hierarchy to be implemented.
- l) Inspections to be undertaken, including details of personnel who will be responsible for undertaking the inspections, areas/elements (e.g. erosion and sediment controls) to be inspected, frequency of inspections.
- m) Details of any rectification methodologies to be implemented following inspections.
- n) Air quality management on site, including dust suppression measures during works.
- o) Details on the general operating procedures to manage environmental risk throughout all stages of works on the site.
- p) A survey plan including existing survey marks, vehicle entry/ies, surrounding pedestrian footpaths and hoarding (fencing) locations to ensure Council assets are maintained and protected throughout the development.
- q) A Noise and Vibration Management Plan including the following:
 - i) A description of the works likely to generate noise and/or vibration, including a description of the equipment to be used, an estimate of duration of the noise and/or vibration creating activity and a measurement of noise/vibration generation.
 - ii) Methods to be implemented for each construction work phase to minimise noise and vibration impacts, including whether any further noise modelling is required.

- iii) Details of methodologies to be implemented to minimise noise impacts, inclusive of respite periods for high noise activities such as rock breaking, ripping and sawing.
 - iv) Details of the monitoring program to be implemented for the duration of the works.
 - v) The Noise and Vibration Management Plan shall also address the requirements listed at Attachments A and B to the Environmental Protection Authority's General Terms of Approval dated 13 February 2020.
 - vi) The Noise and Vibration Management Plan shall include the mitigation measures detailed in the Table to Sections 3.1 and 3.2 of the Preliminary Construction Environmental Management Plan, Appendix K to the Response to Submissions report prepared by GHD and dated November 2019.
- r) A Construction Traffic Management Plan (CTMP) including the following:
- i) Details of all construction equipment and vehicles being used at the same time during all stages.
 - ii) The CTMP shall be in accordance with all other plans submitted to Council as part of this development proposal.
 - iii) In order to prevent injury, accident and/or damage to property, a statement must be included within the Plan confirming that no building materials, work sheds, vehicles, machines or the like will be installed in any road reserve area without the written consent of Hornsby Shire Council.
 - iv) The CTMP shall be in compliance with the requirements of the Roads and Maritime Services *Traffic control at work sites Manual 2018* and detail:
 - a) Public notification of proposed works;
 - b) Long term signage requirements;
 - c) Short term (during actual works) signage;
 - d) Vehicle Movement Plans, where applicable;
 - e) Traffic Management Plans;
 - f) Pedestrian and Cyclist access and safety.
 - g) Details of any temporary traffic controls to be implemented, including any temporary traffic controls used during non-working hours and those that facilitate pedestrian access and two-way traffic in the public road at all times.
 - h) Confirmation that a street 'scrub and dry' service will be in operation during all stages of works.
 - i) Details of the proposed truck haulage routes to and from the site including details of the frequency of truck movements for all stages of the development.
 - j) Swept path analysis for ingress and egress for all vehicles likely to be required in conjunction with all stages of works.

- k) Details of the total number and size of trucks for all exportation of soil and/or other materials throughout all stages of works inclusive of remedial works, and a breakdown of total numbers of trucks for each stage of works.
- l) The plan must include the location details of the licensed waste facility where excavated material required for removal will be disposed.
- m) The Plan must include a statement that the applicant and all employees of contractors on the site will obey any direction or notice from the Prescribed Certifying Authority or Hornsby Shire Council in order to ensure the above.
- n) If there is a requirement to obtain an Out of Hours permit (where not permitted by condition 47), partial Road Closure or Crane Permit, the Plan must detail these requirements and include a statement that an application to Hornsby Shire Council will be made to obtain such a permit.
- s) A Soil and Water Management Plan is to be prepared in accordance with the Landcom Blue Book (2015 edition). The Soil and Water Management Plan is to address the requirements listed in the Environmental Protection Authority's General Terms of Approval dated 13 February 2020.
- t) A Construction Management Site Plan, detailing:
 - i) The location of site sheds.
 - ii) The location of any site fencing.
 - iii) The location of vehicular entry/exit points to the site and any works zones.
 - iv) The plan shall include site plans for all stages of works including the location of site sheds, equipment storage, fuel storage, unloading and loading areas, concrete pump and crane locations waste and storage areas for all stages of works.
 - v) The location of any stockpiled materials, including stockpiling of vegetation to be processed for soil manufacture or for reuse elsewhere on the site.
 - vi) Details of the location of parking for all employees and contractors, including layover areas for large trucks during all stages of works. The parking or stopping of truck and dog vehicles associated with the development will not be permitted other than on the site and the plan must demonstrate this will be achieved.
 - vii) Details of erosion and sediment controls to be implemented.
- u) A Construction Waste Management Plan detailing the following:
 - i) Procedures for the management of waste in accordance with relevant NSW Legislation and the principles of the waste management hierarchy set out in the NSW Waste Avoidance and Resource Strategy 2014-212 (EPA, 2014a).
 - ii) Management of wastewater and sewerage from site office amenities/site sheds.

- iii) Details of the excavation of soil and or the materials, disposal methods and authorised disposal depots that will be used for exported materials. Asbestos management requirement and procedures for removal and disposal from the site in accordance with AS 2601–2001 – *'The Demolition of Structures'*, and the *Protection of the Environment Operations (Waste) Regulation 2005*.
- iv) General construction waste details including construction waste skip bin locations and litter management for workers.
- v) A Tree Protection Plan (TPP) prepared by an AQF 5 Arborist, in consultation with a qualified ecologist, identifying:
 - i) A plan identifying the location of fencing (or other suitable protection measures to be implemented) to avoid impacts to trees to be retained during construction works.
 - ii) Specifications of tree protection materials used and methods within the TPZ or SRZ.
 - iii) Location of dedicated material storage space on site outside the TPZs and SRZs for retained trees.
- w) A Heritage Management Plan is to be prepared in accordance with the recommended in the Statement of Heritage Impact prepared by Artefact (Project No. 170175, dated 22 November 2018) by a suitably qualified heritage consultant. The Heritage Management Plan is to include details of the management of heritage items on the site and in the vicinity of the site including potential damage to heritage items as a result of activities associated with the works, including but not limited to vibration impacts.
- x) A Post Construction Environmental Management Plan is to be prepared which addresses:
 - i) A program for the maintenance of erosion and sediment control measures that will be required to be maintained on site until vegetation on disturbed areas is established or disturbed areas are otherwise stabilised.
 - ii) A program for rehabilitation works in accordance with the Vegetation Management Plan and Habitat Creation and Enhancement Plan.
 - iii) A program for the removal of equipment associated with the site restoration and earthworks.

13. Council Approval of Construction Environmental Management Plan

No works are to commence on site until Council has provided written approval of the Construction Environmental Management Plan.

14. Compliance with Construction Environmental Management Plan

The Council approved Construction Environmental Management Plan must be complied with for the duration of works, unless otherwise approved by Council.

15. Specialist Certification Details

- a) Details of all specialists who will be providing certification in relation to plans and or works are to be submitted to Council prior to commencement of works. The contact details of the following specialists are required to be provided to Council:
 - i) Qualified ecologist.
 - ii) Qualified environmental consultant.
 - iii) Qualified traffic engineer.
 - iv) AQF 5 arborist.
 - v) Qualified civil and/or structural engineer.
 - vi) Qualified geotechnical engineer.
 - vii) Qualified heritage consultant.
- b) The following details are to be provided in relation to each specialist:
 - i) Name of specialist
 - ii) Company Name
 - iii) Contact Address
 - iv) Contact Telephone Nos.
 - v) Contact Email Address.
 - vi) Details of Specialty

16. Vegetation Removal Certification

- a) A qualified ecologist is to confirm that the areas of vegetation in each of the vegetation communities for which approval to remove has been granted (as detailed in Condition 3).
- b) A certificate verifying the above is to be submitted to Council prior to commencement of works.

17. Habitat and Vegetation Rehabilitation Works

Prior to works commencing, a certificate from a suitably qualified ecologist is to be submitted to Council verifying that all site rehabilitation works identified in the Vegetation Management Plan and Habitat Creation and Enhancement Plan as being required to be undertaken prior to works commencing have been completed.

18. Erection of Construction Sign

- a) A sign must be erected in a prominent position on any site on which any approved work is being carried out:
 - i) Showing the name, address and telephone number of the principal certifying authority for the work;
 - ii) Showing the name of the principal contractor (if any) for any demolition or building work and a telephone number on which that person may be contacted outside working hours; and

- iii) Stating that unauthorised entry to the work site is prohibited.
- b) The sign is to be maintained while the approved work is being carried out and must be removed when the work has been completed.

19. Protection of Adjoining Areas

A temporary hoarding or fence must be erected around each work zone before the works begin in that zone. The hoarding/fencing and must be kept in place until after the completion of the works in the zone. The hoarding/fencing is required if the works:

- a) Could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic;
- b) Could cause damage to adjoining lands by falling objects; and/or
- c) Involve the enclosure of a public place or part of a public place; and/or
- d) Have been identified as requiring a temporary hoarding, fence or awning within the Council approved Construction Management Plan (CMP).

Note: Notwithstanding the above, Council's separate written approval is required prior to the erection of any structure or other obstruction on public land.

20. Toilet Facilities

- a) To provide a safe and hygienic workplace, toilet facilities must be available or be installed at the works site before works begin and must be maintained until the works are completed at a ratio of one toilet for every 20 persons employed at the site.
- b) Each toilet must:
 - i) be a standard flushing toilet connected to a public sewer; or
 - ii) be a temporary chemical closet approved under the *Local Government Act 1993*; or
 - iii) have an on-site effluent disposal system approved under the *Local Government Act 1993*.

21. Erosion and Sediment Control

To protect the water quality of the downstream environment, erosion and sediment control measures must be provided and maintained throughout the construction period in accordance with the manual '*Soils and Construction 2004 (Bluebook)*', the approved plans, Soil and Water Management Plan, Council specifications and to the satisfaction of the principal certifying authority. The erosion and sediment control devices must remain in place until the site has been stabilised and revegetated.

Note: On the spot penalties may be issued for any non-compliance with this requirement without any further notification or warning.

22. Tree Protection Barriers

- a) To safeguard the natural environment during the approved development works, tree protection fencing must be erected around trees to be retained.

- b) A qualified AQF 5 arborist is to provide certification to Council that the tree protection measures (as specified in the Tree Protection Plan) have been installed prior to any works commencing on site.

23. Garbage receptacle

- a) A garbage receptacle(s) must be provided at the work site before works begin and must be maintained until all works are completed.
- b) The garbage receptacle(s) must have a tight fitting lid and be suitable for the reception of food scraps and papers.
- c) The receptacle lid(s) must be kept closed at all times, other than when garbage is being deposited.
- d) Food scraps must be placed in the garbage receptacle(s) and not in demolition and construction waste bins.

24. Archival Recording

An archival photographic record is to be prepared for those parts of the quarry site which will be altered as a result of the approved works, to form a record of that change for the future. The photographic archival recording is to be completed prior to any works commencing on the site. The archival recording is to be in accordance with the requirements of:

- a) The NSW Heritage Office publication "How to Prepare Archival Records of Heritage Items" (1998);
- b) The Department of Planning's "Recording Places of Cultural Significance" (1991).

The record in digital form is to be submitted to Council for approval by Council's Heritage Advisor prior to any works commencing on site.

REQUIREMENTS DURING ALL WORKS

25. Construction Work Hours

Unless permitted by another condition of this consent or a licence issued by NSW EPA, construction works and activities (including rehabilitation) must:

- a) only be undertaken between the hours of 0700 and 1800 Monday to Friday; and
- b) only be undertaken between the hours of 0800 and 1300 Saturday; and
- c) not be undertaken on Sundays or Public Holidays.

Any variation to construction work hours will need separate approval of Council and EPA before proceeding.

NOTE: Refer GTAs issued by EPA for variations to the above hours

26. Compliance with ANZECC Water Quality Guidelines

All water discharge into creeks will be in accordance with National Water Quality Guidelines (ANZG, 2018).

27. Works Near Trees

- a) To protect trees to be retained, all required tree protection measures are to be maintained in good condition for the duration of the construction period.
- b) Every three (3) months and at the completion of works, a certificate prepared by qualified AQF 5 arborist must be submitted to Council verifying that the tree protection measures required by the approved Tree Protection Plan forming part of the Construction Environmental Management Plan have been implemented and maintained during the period of construction works.

28. **Bushland Protection During Construction**

To ensure the protection of bushland during construction, the Applicant must:

- a) ensure no works (other than approved rehabilitation works) are undertaken outside the approved works zones; and
- b) clean machinery of soil and debris before entering/leaving the site to prevent the spread of weeds and fungal pathogens.

Note: The site contains a 'Critically Endangered Ecological Community' under the Biodiversity Conservation Act 2016'. The Act prohibits the disturbance to threatened species, endangered populations and endangered ecological communities, or their habitat, without the approval of the Department of Planning, Industry and Environment where such activities are not authorised by a development consent under the 'Environmental Planning and Assessment Act 1979'.

29. **Excavated Material**

Any excavated material removed from the site including but not limited to the removal of material associated with the decommissioning of the underground storage tanks must be classified by a suitably qualified person in accordance with the NSW Environment Protection Authority's *Waste Classification Guidelines* and *Protection of the Environment Operations (Waste) Regulation 2014* prior to disposal to an approved waste management facility and be reported to the principal certifying authority.

30. **Compliance with Construction Environmental Management Plan**

The Council approved Construction Environmental Management Plan must be complied with for the duration of works, unless otherwise approved by Council.

31. **Site Remediation**

All remediation works are to be undertaken in accordance with a Council approved Remedial Action Plan. Written approval from Council in relation to Remedial Action Plan is required prior to remediation works commencing.

32. **Site Validation**

At the completion of remediation works at the subject site, a Validation Report must be submitted to Council for approval. The Validation Report must be prepared by a certified land contamination consultant as recognised under the Certified Environmental Practitioners Scheme – Site Contamination (CEnvP (SC)) or the Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification, verifying that the site has been remediated in accordance with the NSW Environment Protection Authority's *Contaminated Sites Guidelines*, the *National Environment Protection (Assessment of Site*

Contamination) Measure 2013 (NEPM), and the recommendations of the Remedial Action Plan, and include a statement that the site is suitable for the approved use.

The Validation Report is to be submitted to Council for approval prior to any further development occurring on the site.

33. **Unexpected Finds**

In the event of Aboriginal archaeological deposits being identified during ground works and excavation, the following actions are required to be observed:

- a) Stop work within the affected area, protect the potential archaeological find, and inform environment staff or supervisor;
- b) Contact a suitable qualified archaeologist to assess the potential archaeological find;
- c) If Aboriginal archaeological material is identified, works in the affected area should cease, and the OEH should be informed. Further archaeological mitigation may be required prior to works recommencing;

If human remains are found:

- a) Do not further disturb or move these remains;
- b) Immediately cease all work at the particular location;
- c) Notify NSW Police;
- d) Notify OEH's Environment Line on 131 555 as soon as practicable and provide available details of the remains and their location; and
- e) Do not recommence any work at that location unless authorised in writing by the relevant government agency.

34. **Habitat and Vegetation Rehabilitation Works**

Every three (3) months and at the completion of works, a certificate from a suitably qualified ecologist is to be submitted to Council verifying that all site rehabilitation works identified in the Vegetation Management Plan and Habitat Creation and Enhancement Plan as works required to be implemented and maintained during the construction phases were implemented and maintained as required.

35. **Traffic Management**

- a) All loading and unloading of vehicles is to take place on site.
- b) Unless otherwise authorised by any other condition of this consent, all vehicular access to the site is to be via the Bridge Road access. The prior approval of Council is required if access to the site via Quarry Road is required.
- c) No heavy vehicles are to access the site during peak hours.
- d) Appropriate exclusion barriers, signage and site supervision are to be employed to ensure that the project site is controlled, and that unauthorised vehicles and pedestrians are excluded from the works area.

POST WORKS CONDITIONS**36. Retention of Erosion and Sediment Controls**

Erosion and sediment controls are to be maintained on site until vegetation on disturbed areas is established or disturbed areas are otherwise stabilised.

37. Certification of Retaining Walls

At the completion of works relating to the retaining walls and micropile walls, a certificate is to be issued by a suitably qualified structural engineer, certifying that the retaining walls and micropile walls have been constructed in accordance with relevant standards.

A copy of the certificate is to be provided to the principal certifier within one month of the completion of the retaining walls and micropile walls.

38. Heritage Management Plan

A Heritage Management Plan (HMP) for the site is to be prepared as soon as practical, but before any further development is undertaken on the site. The HMP should provide clear guidance and management strategies for the numerous significant values of the listed items within the study area. The HMP would outline how the state and local heritage items should be integrated into the future design and use of the study area.

39. Interpretation Plan

An Interpretation Plan is to be prepared by an experienced heritage interpretation practitioner and submitted to Council as soon as practical, but before any further development is undertaken on the site. The Interpretation Plan shall be in accordance with the Heritage Council's Interpreting Heritage Places and Items Guidelines, 2005. The plan must make allowance for the display of any potential archaeology uncovered during the works, interpret the multiple uses and history of the various heritage items and contributory buildings on the site, in a way that is engaging, informative and readily accessible to the majority of visitors. Guidance on interpretation should come from the HMP.

40. Habitat and Vegetation Restoration

Works in accordance with the Vegetation Management Plan and Habitat Creation and Enhancement Plan are to commence as soon as practical following the completion of works within each of the works zones. Certificates of completion prepared by a suitably qualified ecologist are required to be submitted to Council at the completion of rehabilitation works within each works zone.

41. Compliance with Construction Environmental Management Plan

- a) The Council approved Post Construction Environmental Management Plan (which is a component of the Construction Environmental Management Plan) must be complied with, unless otherwise approved by Council.
- b) At the completion of works, certificates from relevant specialist consultants verifying that the requirements of each of the management plans, with the exception of the Post Construction Environmental Management Plan, which form part of the Construction Environmental Management Plan (CEMP) have been implemented as

required during the project are to be submitted to Council. With the exception of the certificate verifying compliance with the Post Construction Environmental Management Plan, all other certificates are to be provided within three (3) months of the completion of works.

GENERAL TERMS OF APPROVAL – Environment Protection Authority (EPA)

The conditions of consent as detailed in the approval issued by EPA on 13 February 2020 are General Terms of Approval pursuant to Section 4.47 of the *Environmental Planning and Assessment Act 1979* and must be complied with to the satisfaction of that Agency.

NOTE

In the event of any inconsistency between EPA conditions and any other condition(s) of this consent, the EPA condition(s) will prevail.

42. Information supplied to the EPA (A1)

Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- a) The development application DA/101/2019 submitted to the Hornsby Shire Council on 18 February 2019;
- b) All additional documents supplied to the EPA in relation to the development, including:
 - i) GHD Hornsby Quarry Rehabilitation - Response to Submissions and Revised Project Scope - Volume 1 – Main Report November 2019 (DOC19/276083-31)
 - ii) GHD Hornsby Quarry Rehabilitation Environmental Impact Statement - Volume 1 - Main Report – February 2019 (DOC19/276083-6)
 - iii) GHD Hornsby Quarry Rehabilitation Environmental Impact Statement - Volume 2 - Appendices A to F - February 2019 (DOC19/276083-6)
 - iv) GHD Hornsby Quarry Rehabilitation Environmental Impact Statement - Volume 2 - Appendices G to K - February 2019 (DOC19/276083-6)
 - v) GHD Hornsby Quarry Rehabilitation Environmental Impact Statement - Development Application Summary and Supporting Plans - February 2019 (DOC19/276083-6)
 - vi) GHD Response to additional information in relation to Noise - 31 May 2019 - Ref 2126457-77347 (DOC19/276083-5)
 - vii) Submissions provided by Hornsby Shire Council on 3 July 2019 (DOC19/276083-9, DOC19/276083-10 & DOC19/276083-11)
 - viii) GHD Response to additional information in relation to Noise Vibration Impact Assessment - 20 August 2019 (DOC19/276083-15)
 - ix) Hornsby Shire Council Companion Technical Report - Water Quality Report Card 2012 - 22 October 2019 (DOC19/276083-24)
 - x) GHD Response to Submissions and Revised Project Scope - Volume 1 - Main Report - November 2019 (DOC19/276083-31)

- x) GDH Response to Submissions and Revised Project Scope - Appendices A to K - November 2019 (DOC19/276083-31)
- xii) GHD Response to additional information in relation to water quality - 5 December 2019 – Ref 2126457-64006 (DOC19/276083-32)
- xiii) GHD Response to additional information in relation to water - 21 January 2020 - Ref 21/26457 (DOC19/276083-38)

43. Fit and Proper Person (A2)

The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.

44. Pollution of waters (L1)

Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

45. Waste (L5)

- a) The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.
- b) This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

Note: Condition L5.2 is included to ensure that a premises based activity is not used as a waste facility (unless that scheduled activity is permitted by another condition).

46. Noise limits (L6)

The licensee must implement all feasible and reasonable noise and vibration mitigation measures at the premises to minimise noise and vibration impacts on noise sensitive receivers and seek to achieve, where feasible and reasonable, the noise and vibration management levels in the Interim Construction Noise Guideline (EPA, 2009).

47. Hours of operation (L7)

Note: for the purpose of the Licence, construction works include the rehabilitation works proposed under DA/101/2019, and includes the licensed activity.

Unless permitted by another condition of this licence, construction works and activities (including rehabilitation) must:

- a) only be undertaken between the hours of 0700 and 1800 Monday to Friday; and
- b) only be undertaken between the hours of 0800 and 1300 Saturday; and

- c) not be undertaken on Sundays or Public Holidays.

48. **Exemptions to standard construction hours for low noise impact works (L7.2)**

The following works and activities may be carried out outside of the hours specified in Condition L6.2 if the works and activities do not cause, when measured at the boundary of the most affected noise sensitive receiver:

- a) LAeq(15 minute), dB(A) noise levels greater than 5dB above the day, evening and night rating background level (RBL) as applicable; and
- b) LA1(1 minute), dB(A) or LAmax, dB(A) noise levels greater than 15dB above the night RBL for night works; and
- c) Continuous or impulsive vibration values greater than those for human exposure to vibration, set out for residences in Table 2.2 in “Environmental noise management - Assessing Vibration: a technical guideline” (Department of Environment and Conservation, February 2006); and
- d) Intermittent vibration values greater than those for human exposure to vibration, set out for residences in Table 2.4 in “Environmental noise management - Assessing Vibration: a technical guideline” (Department of Environment and Conservation, February 2006).

Definition

LA10(15 minute) is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period.

Note: Noise measurement

For the purpose of noise measures required for this condition, the LA10 noise level must be measured or computed over a period of 15 minutes using “FAST” response on the sound level meter.

For the purpose of the noise criteria for this condition, 5dBA must be added to the measured level if the noise is substantially tonal or impulsive in character. The location or point of impact can be different for each development, for example, at the closest residential receiver or at the closest boundary of the development.

Measurement locations can be:

- 1 metre from the facade of the residence for night time assessment;
- at the residential boundary;
- 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence.

49. **Noise Emission (L7.3)**

The noise emission limits identified in L7.2 apply for prevailing meteorological conditions (winds up to 3m/s), except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:

- a) documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions;
- b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversions conditions should be developed and implemented.

50. **Exemptions to standard construction hours in exceptional circumstances (L7.4)**

- a) The licensee may undertake works outside of standard construction hours if any of the following applies:
 - i) emergency works is required to avoid the loss of lives or property, or to prevent material harm to the environment;
 - ii) the delivery of oversized plant or structures has been determined by the police or other authorised authorities to require special arrangements to transport along public roads.
- b) The licensee must, on becoming aware of the need to undertake emergency construction work under this condition notify the EPA's Environment Line as soon as practicable and submit a report to the EPA by 2pm on the next business day after the emergency works commenced that describes:
 - i) the cause, time and duration of the emergency; and
 - ii) action taken by or on behalf of the licensee in relation to the emergency; and
 - iii) details of any measures taken or proposed to be taken by the licensee to prevent or mitigate against a recurrence of the emergency.

For the purpose of this condition, "material harm to the environment" has the same meaning as in section 147 of the *POEO Act*.

51. **High Noise Impact Works (L7.5)**

Unless otherwise specified by another condition of this licence, the following applies in relation to high noise impact works:

- a) High noise impact works and activities must only be undertaken:
 - i) between the hours of 8:00am to 6:00pm Monday to Friday;
 - ii) between the hours of 8:00am to 1:00pm Saturday; and
 - iii) in continuous blocks not exceeding 3 hours each with a minimum respite from those activities and works of not less than 1 hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a 1hour respite between ceasing and recommencing any of the work that is the subject of this condition.

NOTE: High noise impact works means jack hammering, rock breaking or hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel or other work occurring on the surface that generates noise with impulsive, intermittent, tonal or low frequency characteristics

Operating Conditions

52. Activities must be carried out in a competent manner (O1)

Licensed activities must be carried out in a competent manner. This includes;

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

53. Maintenance of plant and equipment (O2)

All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

Note: The POEO Act states that no offensive odour may be emitted from particular premises unless potentially offensive odours are identified in the licence and the odours are emitted in accordance with conditions specifically directed at minimising the odours are permitted. Where it is appropriate for a licence to identify and control offensive odours, conditions for the licence should be developed in consultation with Air Policy.

54. Dust (O3)

- a) Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.
- b) Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

Note: For activities that are likely to have major dust impacts (for example, coal mines and extractive industries), additional, more detailed general terms of approval may be appropriate. These may require dust control measures for traffic areas, open stockpiles, processing and loading areas, including ceasing dust generating activities during certain meteorological conditions.)

55. Stormwater/sediment control (O4)

An Erosion and Sediment Control Plan (ESCP) must be prepared and implemented prior to commencement of licensed activities. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing).

Note: ESCPs are required generally for smaller sites, typically involving the disturbance of less than 2,500 square metres. SWMPs are necessary for large scale developments (greater than 2,500 square metres disturbed area).

Monitoring Conditions**56. Monitoring records (M1.1)**

The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions M1.2 and M1.3.

57. Monitoring records (M1.2)

All records required to be kept by the licence must be:

- a) In a legible form, or in a form that can readily be reduced to a legible form;
- b) Kept for at least 4 years after the monitoring or event to which they relate took place; and
- c) Produced in a legible form to any authorised officer of the EPA who asks to see them.

58. Monitoring records (M1.3)

The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken:

- a) The time(s) at which the sample was collected;
- b) The point at which the sample was taken; and
- c) The name of the person who collected the sample.

59. Telephone complaints line (M2)

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until the Environmental Protection Licence takes effect.

60. Notification of Telephone Complaints Line (M2.2)

The Licensee must ensure that the community notification required by condition M2.1 is undertaken:

- a) by including details on the project website on:
 - i) how the public can make a complaint on the telephone complaints line; and
 - ii) how complaints will be processed
- b) by clear signage at the boundary of the work site that contains both the telephone complaints line number and the project website details.

Note: For the purposes of this condition and condition M2.1, the telephone complaints line and notification of the telephone complaints line is operated and undertaken by Hornsby Shire Council. The licensee will have staff available to complaints during hours when works are occurring.

61. Noise and Vibration Complaints (M2.3)

- a) The licensee must investigate noise and vibration complaints within 1 day of the complaint being made.
- b) The licensee must ensure that any investigation referred to in this condition identifies if works or activities, being undertaken on the licensed premises, is the likely source of the complaint.
- c) The licensee must, in respect of each complaint made to the telephone complaints line required by Condition M2.2, advise each complainant of the results of its investigation of their complaint and any proposed remedial action.

62. Noise and Vibration Monitoring (M2.4)

The licensee must undertake noise and vibration monitoring as directed by an authorised officer of the EPA.

63. Recording of complaints (M2.5)

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- a) the date and time of the complaint;
- b) the method by which the complaint was made;
- c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) the nature of the complaint;
- e) the action taken by the licensee in relation to the complaint, including the outcome of the investigation and any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.
- g) the record of a complaint must be kept for at least 4 years after the complaint was made.
- h) the record must be produced to any authorised officer of the EPA who asks to see them.

Reporting Conditions

64. Annual return (R1.1)

The applicant must provide an annual return to the EPA in relation to the development as required by any licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return.

65. Annual Return Documents

What documents must an Annual Return contain?

- a) The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
 - i) A Statement of Compliance; and
 - ii) A Monitoring and Complaints Summary.
- b) A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

66. Period covered by Annual Return

- a) An Annual Return must be prepared in respect of each reporting, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

- b) Where this licence is transferred from the licensee to a new licensee:
 - i) The transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
 - ii) The new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

- c) Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on:
 - i) In relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - ii) In relation to the revocation of the licence - the date from which notice revoking the licence operates.

67. Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

68. Notification where actual load can not be calculated

(Licences with assessable pollutants)

- a) Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to

circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date.

- b) The notification must specify:
 - i) the assessable pollutants for which the actual load could not be calculated; and
 - ii) the relevant circumstances that were beyond the control of the licensee.

69. Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

70. Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

71. Notification of environmental harm (R2)

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

72. Written report (R3)

- a) Where an authorised officer of the EPA suspects on reasonable grounds that:
 - i) where this licence applies to premises, an event has occurred at the premises; or
 - ii) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- b) The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- c) The request may require a report which includes any or all of the following information:

- i) the cause, time and duration of the event;
- ii) the type, volume and concentration of every pollutant discharged as a result of the event;
- iii) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- iv) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- v) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- vi) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- vii) any other relevant matters.

General conditions

73. Copy of licence kept at the premises or on the vehicle or mobile plant (G1)
74. A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies. (G1.1)
75. The licence must be produced to any authorised officer of the EPA who asks to see it. (G1.2)
76. The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant. (G1.3)

Water

77. Additional water quality sampling within the void must be conducted to identify any pollutants with the potential to cause non-trivial harm, including sampling at multiple depths within the void water body. In addition to the analytes already identified, temperature data should be collected.
78. The potential impact discharges from sediment basins must be considered consistent with s45 **POEO Act**. This assessment should include details of the measures that have been considered and those proposed to be implemented to avoid and minimise discharges of pollutants, including but not limited to reuse.

For each proposed discharge point, this assessment should:

- a) estimate the expected frequency and volume of discharges
- b) characterise the expected quality of the discharge in terms of the typical and maximum concentrations of all pollutants likely to be present at non-trivial levels
- c) assess the potential impact of the proposed discharge on the environmental values of the receiving waterway consistent with the national Water Quality Guidelines (ANZG, 2018; including comparison of the predicted water quality to the relevant guideline values for slightly to moderately disturbed ecosystems).

- d) where relevant, identify appropriate measures to mitigate any identified impacts, including but not limited to the use of grassed swales and armoured channels.

Consistent with the principles of the NSW Water Quality Objectives, the discharge impact assessment should demonstrate that the proposal will maintain the environmental values of the receiving waterway where they are currently being achieved or contribute to restoring the environmental values where they are not currently being achieved.

79. Confirm the void offtake is from the surface to avoid thermal pollution downstream.
80. Propose licence limits based on the outcomes of the discharge impact assessment for any pollutants with the potential to cause non-trivial harm.
81. Update the water quality monitoring program based on the outcomes of the discharge impact assessment. The proposed monitoring program should include analytes monitored at a frequency commensurate with the potential risk.
82. The applicant commits to employing enhanced erosion control measures for catchments where sediment basins are sized for 5 day 80th percentile rainfall events.

Note: information required under conditions 1-6 is required to be provided to the EPA as part of the licence application, to EPA to set appropriate discharge limits and monitoring requirements.

Noise

83. Construction Noise and Vibration Management Plan

The proponent must prepare and implement a detailed Construction Noise and Vibration Management Plan (CNVMP), prior to commencement of construction and rehabilitation activities, that includes but is not necessarily limited to;

- a) identification of each work area, site compound and access route (both private and public)
- b) identification of the specific activities that will be carried out and associated noise sources at the premises and access routes, identification of all potentially affected sensitive receivers,
- c) the construction noise and vibration objectives detailed in the EPA Interim Construction Noise Guideline ("ICNG" - EPA, 2009) for all identified sensitive receivers,
- d) assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the EPA Interim Construction Noise Guideline (EPA, 2009),
- e) where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts,
- f) description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction,
- g) a strategy that outlines "additional mitigation measures" to deal with residual noise levels i.e. construction noise levels that exceed the noise management levels in the ICNG after all feasible and reasonable noise mitigation measures have been applied,

- h) a community engagement strategy that provides the community with a clear understanding of the likely impact of construction and how impacts will be managed,
- i) measures to provide the surrounding community with details including the construction activities that will take place, where they will take place, when they will take place, and for how long. Community views should be considered when developing feasible and reasonable mitigation.
- j) measures to monitor noise performance and respond to complaints.
- k) structural and cosmetic damage vibration limits for identified sensitive receivers.

Note: The EPA does not have a regulatory role with respect to structural or cosmetic damage and expects that the consent will include requirements to regulate those aspects of the proposal.

- END OF CONDITIONS -

ADVISORY NOTES

The following information is provided for your assistance to ensure compliance with the *Environmental Planning and Assessment Act, 1979, Environmental Planning and Assessment Regulation 2000*, other relevant legislation and Council's policies and specifications. This information does not form part of the conditions of development consent pursuant to Section 4.17 of the Act.

Environmental Planning and Assessment Act 1979 Requirements

The Environmental Planning and Assessment Act 1979 requires:

- The issue of a construction certificate prior to the commencement of any works. Enquiries can be made to Council's Customer Services Branch on 9847 6760.
- A principal certifying authority to be nominated and Council notified of that appointment prior to the commencement of any works.
- Council to be given at least two days written notice prior to the commencement of any works.
- Mandatory inspections of nominated stages of the construction inspected.
- An occupation certificate to be issued before occupying any building or commencing the use of the land.

Dial Before You Dig

Prior to commencing any works, the applicant is encouraged to contact Dial Before You Dig on 1100 or www.dialbeforeyoudig.com.au for free information on potential underground pipes and cables within the vicinity of the development site.

Asbestos Warning

Should asbestos or asbestos products be encountered during demolition or construction works, you are advised to seek advice and information prior to disturbing this material. It is recommended that a contractor holding an asbestos-handling permit (issued by *SafeWork NSW*) be engaged to manage the



proper handling of this material. Further information regarding the safe handling and removal of asbestos can be found at:

www.environment.nsw.gov.au

www.adfa.org.au

www.safework.nsw.gov.au

Alternatively, telephone the *SafeWork NSW* on 13 10 50.