

ENVIRONMENTAL IMPACT STATEMENT



SCARBOROUGH WOMBARRA CEMETERY Maintenance and Upgrade Works

Prepared by Wollongong City September 2019 Council

September 2019

Amended July 2020

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SIGNED DECLARATION

Environmental Assessment prepared by:

I declare that the contents of this Environmental Impact Statement (EIS) to the best of my knowledge and belief, has been prepared:

- in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.
- to include all available information that is relevant to the environmental assessment for the development to which the Statement relates.
- in a manner which is neither false nor misleading

Name(s): Jo Glynn
Address: 41 Burelli St, Wollongong NSW 2500
Qualifications: Bachelor Environmental Science (Honours)
Date: 15/08/2019

Applicant and Land Details

Applicant: Wollongong City Council
Responsible person: Jenny Towers

Applicant Address: 41 Burelli Street
Wollongong NSW 2500

Land to be developed: The site location is identified as *Scarborough Wombarra Cemetery*.
Lot & DP: Lot 7028 Crown DP 1058309
Crown Reserve No: R95895

EXECUTIVE SUMMARY

Purpose of this Report

This Environmental Impact Statement (EIS) has been prepared by Wollongong City Council for upgrades and additions to the Scarborough/Wombarra Cemetery. This EIS should be read in conjunction with the Secretary's Environmental Assessment Requirements (SEARs) dated 18th January 2019 and the supporting documentation provided as Appendix A-I.

The Site

The site is known as Scarborough Wombarra Cemetery and is legally identified as:

- Lot 7028 Crown DP 1058309
- Crown Reserve No: R95895

The Proposal

Currently the Cemetery is at operational capacity, and requires the addition of new ash walls (columbariums) with associated upgrades to landscaping to ensure it can provide a viable future use of the facility.

The development to be undertaken will cover an area of approximately 140 m², allowing for 560 new interments within the cemetery. The proposal is required as the Cemetery is currently at capacity.

Planning context

The project will be undertaken on land which, in part, is mapped as "littoral rainforest area" under State Environmental Planning Policy (Coastal Management) 2018 ('Coastal Management SEPP').

Pursuant to clause 10(2) of the Coastal Management SEPP, development other than development for the purpose of environmental protection works, is declared designated development for the purposes of the *Environmental Planning & Assessment Act 1979* (EP&A Act). Section 4.12(8) of the EP&A Act provides that a development application for designated development is to be accompanied by an EIS.

Wollongong Council requested project specific SEARS from the New South Wales (NSW) Department of Planning Industry and Environment (DPIE) in relation to the EIS, who advised that no specific requirements are applicable to the proposal. DPIE have advised that the EIS is to meet the minimum form and content requirements of Schedule 2 of the NSW *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

Pursuant to clause 4.46 of the EP&A Act and Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act), the development will be considered integrated development as the development works will require an Aboriginal Heritage Impact Permit (AHIP) which has already been issued by the NSW Department of Environment, Energy and Science (EES). As per clause 4.47(3) of the EP&A Act, the proposal must be consistent with the General Terms of Approval provided by NSW EES.

Assessment of impacts and mitigation measures

The proposal will be undertaken within a small area adjacent to the existing developed southern section of the cemetery. There will be no removal of native vegetation or impacts to European or aboriginal cultural heritage. Mitigation and management measures have been developed for the project, these will be detailed in a Construction Environmental Management Plan prior to the project beginning. All potential impacts of the project on the environment have been adequately assessed and addressed in this report.

Community consultation

Community consultation was undertaken as part of this project between 7 June to 8 July 2019 using a variety of engagement methods and activities. A total of 16 submissions, five feedback forms and

six online forms were received and information contained therein formed an integral influencing factor in the final design of the project.

Conclusion and justification

This EIS demonstrates that all relevant potential impacts of the proposal on the environment have been adequately assessed, and that there are sufficient avoidance and mitigation measures in place for the project to be undertaken with negligible predicted residual impact.

1 Introduction

This Environmental Impact Statement (EIS) provides an assessment and analysis of a proposal for landscaping and provision of new columbariums at Wombarra Cemetery (Appendix A), on land which, in part, is mapped as “littoral rainforest area” under State Environmental Planning Policy (Coastal Management) 2018 (Coastal Management SEPP).

Pursuant to clause 10(2) of the Coastal Management SEPP, development other than development for the purpose of environmental protection works, is declared designated development for the purposes of the *Environmental Planning & Assessment Act 1979* (EP&A Act). Section 4.12(8) of the EP&A Act provides that a development application for designated development is to be accompanied by an EIS.

The development works will require an Aboriginal Heritage Impact Permit (AHIP) pursuant to clause 4.46 of the EP&A Act and Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act); therefore, the proposal is also considered Integrated Development for the purposes of the EP&A Act. The proposal must be consistent with NSW EES General Terms of Approval as per clause 4.47(3) of the EP&A Act.

The land upon which works are being undertaken is Crown Reserve. The Reserve is owned by the State of New South Wales and Wollongong City Council has control of the Reserve under s.48 of the *Local Government Act 1993*.

The site is known as Scarborough Wombarra Cemetery and is legally identified as:

- Lot 7028 Crown DP 1058309
- Crown Reserve No: R95895

1.1 PROJECT DESCRIPTION & OBJECTIVES

The objective of this project is to:

- Provide new memorial ash walls and associated landscaping for the continued use and amenity of the facility.

Currently the Cemetery is at operational capacity, and requires the addition of new ash walls (columbariums) with associated upgrades to landscaping to ensure it can provide a viable future use of the facility.

The development to be undertaken will cover an area of approximately 140 m², allowing for 560 new interments within the cemetery. The proposal is required as the Cemetery is currently at capacity.

The proposal does not involve a change of use. There will be no change to working hours, number of staff, or operational waste.

1.2 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The EP&A Regulation lists four principles of Ecologically Sustainable Development (ESD) to be considered in assessing a project, being:

- The precautionary principle
- Intergenerational equity
- Conservation of biological diversity and ecological integrity
- Improved valuation and pricing of environmental resources

ESD requires the effective integration of economic, environmental, social and equity considerations in decision-making processes. ESD aims to provide for the needs of present generations without compromising the ability of future generations to meet their own needs. Table 1 provides a summary of how the proposal meets the principles of ESD.

Table 1 How the proposal meets the principles of ESD

Principle	Detail	Project
Precautionary principle	The precautionary principle is to be utilised when uncertainty exists about potential environmental impacts. It ensures that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever possible, serious or irreversible damage to the environment.	The EA undertaken for this proposal considered a careful evaluation of all potential environmental impacts and has not identified any threats of serious or irreversible damage to the environment.
<i>Intergenerational equity</i>	Intergenerational equity ensures that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	<p>The proposal has been designed to benefit both the existing and future generations by:</p> <ul style="list-style-type: none"> • Allowing for over 500 new interments to provide the local community with ongoing opportunity to memorialise their loved ones in an area where they have lived. • Providing for landscaping and columbariums with a high level of amenity for future use of the site, combining good amenity and design. • Ensuring that the impacts of the development are adequately managed so that there would be no long term adverse impacts arising from the continued operation of the Cemetery. <p>The proposal has integrated short and long-term considerations in order to ensure that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long-term implications such as waste disposal would be avoided and / or minimised through construction planning and the application of the safeguards and management measures described in this EIS (Chapter 6).</p>

<i>Conservation of biological diversity and ecological integrity</i>	The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.	<p>The proposal has been designed to be located without impacting areas of native vegetation and would not result in any significant impacts on the biological diversity and ecological integrity of the Cemetery.</p> <p>In addition, safeguards such as those provided in Chapter 6 will form part of the Construction Environmental Management Plan for this development.</p>
<i>Improved valuation, pricing and incentive mechanisms</i>	The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things.	<p>Mitigation measures for avoiding, reducing, and managing waste during the design phase, and construction and operation will be implemented to ensure resources are used responsibly through the future development. A variety of interment options will be made available including gardens and niche walls.</p> <p>The costs of the proposal will be funded by users of the service and on-going costs will be internalised by ensuring that the costs of interment will fund ongoing management of the cemetery.</p>

1.3 PROJECT HISTORY AND BACKGROUND

The works proposed at Wombarra Cemetery are necessary to meet the growing need for interments within the Wollongong area. The works were initially proposed to be undertaken by Council under Part 5 of the EP&A Act, with a Review of Environmental Factors (REF) being prepared for the works. However, the Coastal Management SEPP mapping shows part of the works area as being within an area of 'Littoral Rainforests', and the development was deemed designated development and an EIS was required.

Council raised the fact that the Coastal Management SEPP mapping was inaccurate with DPIE. Despite this, the requirement for an EIS was confirmed. Figure 1 shows that the area mapped under the Coastal Management SEPP as Littoral Rainforests is inaccurate and the works area does not contain any native vegetation.

Figure 1 Mapping of Littoral Rainforests at the site

1.4 ALTERNATIVES

The cemetery is the only parcel of land that is zoned for Cemetery purposes in the local area. As the Cemetery is at capacity, and the area available to expand is very limited, the current project is the only viable alternative to provide further provision of interment.

The design is in response to the existing character of the cemetery, and that it is a current working cemetery. The design chosen has been developed in response to the more recent cultural shift to creating opportunities for ash installations and memorials.

Given these constraints, the only alternative would be a do-nothing approach, which would not be in the community's best interest.

1.5 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The NSW DPIE was consulted regarding the SEARs for the project (see Appendix B).

DPIE advised that no specific requirements are applicable to the proposal, but that the EIS is to meet the minimum form and content requirements outlined in Schedule 2 of the EP&A Regulation. This EIS has therefore been prepared in accordance with Schedule 2 of the EP&A Regulation and *Preparing an Environmental Impact Statement Draft Environmental Impact Assessment Guidance Series* (DPE 2017).

The consultation process that informed the preparation of this EIS is presented in Chapter 4.

1.6 STRUCTURE OF THIS EIS

This EIS has the following structure:

- Chapter 1 Introduction to the project
- Chapter 2 Project description
- Chapter 3 Relevant legislative requirements
- Chapter 4 Stakeholder and community engagement
- Chapter 5 Environmental Impact Assessment
- Chapter 6 Avoidance and mitigation measures
- Appendices A-H Supporting documents and information

1.7 PROPONENT DETAILS

The proponent for these works is: Wollongong City Council

Address: 41 Burelli Street, Wollongong
Email: jtowers@wollongong.nsw.gov.au
Phone: 02 4227 7523

2.0 Project Description

2.1 SITE DESCRIPTION AND EXISTING DEVELOPMENT

Located in the suburb of Wombarra, the cemetery is located on the top of a steep coastal embankment, approximately 25 m in height, sloping towards the sea (see Plate 1). Sandstone cliffs immediately to the north are vertical and show evidence of coastal weathering and erosion due to wave attack.

The cemetery is zoned SP1: Special Activities, pursuant to *Wollongong Local Environmental Plan 2009* (the LEP) (see Plate 2).

Existing development on site comprises the cemetery and associated infrastructure (see Plate 3).

The site is also associated with known Aboriginal Heritage, and an Aboriginal Cultural Heritage Assessment Report has been prepared (Biosis 2018).



Plate 1 Aerial photograph of the cemetery site



Plate 2 Zoning map of the local area



Plate 3 Existing development at the site

Council records list the site as being affected by the following constraints:

- Coastal Management
- Heritage Item
- Littoral Rainforest and Proximity Area for Littoral Rainforest
- Natural Resources Sensitivity - Biodiversity / Endangered Ecological Community
- Foreshore Building Line
- Coastal Geotechnical Risk
- Unstable Land
- Riparian Land

Figure 1 demonstrates that the project site does not contain any area of native vegetation, and that the Coastal Management SEPP mapping is inaccurate in this area.

The site is not identified as being affected by the following constraints:

- Contaminated Land
- Filled Land
- Bushfire

2.2 SURROUNDING DEVELOPMENT

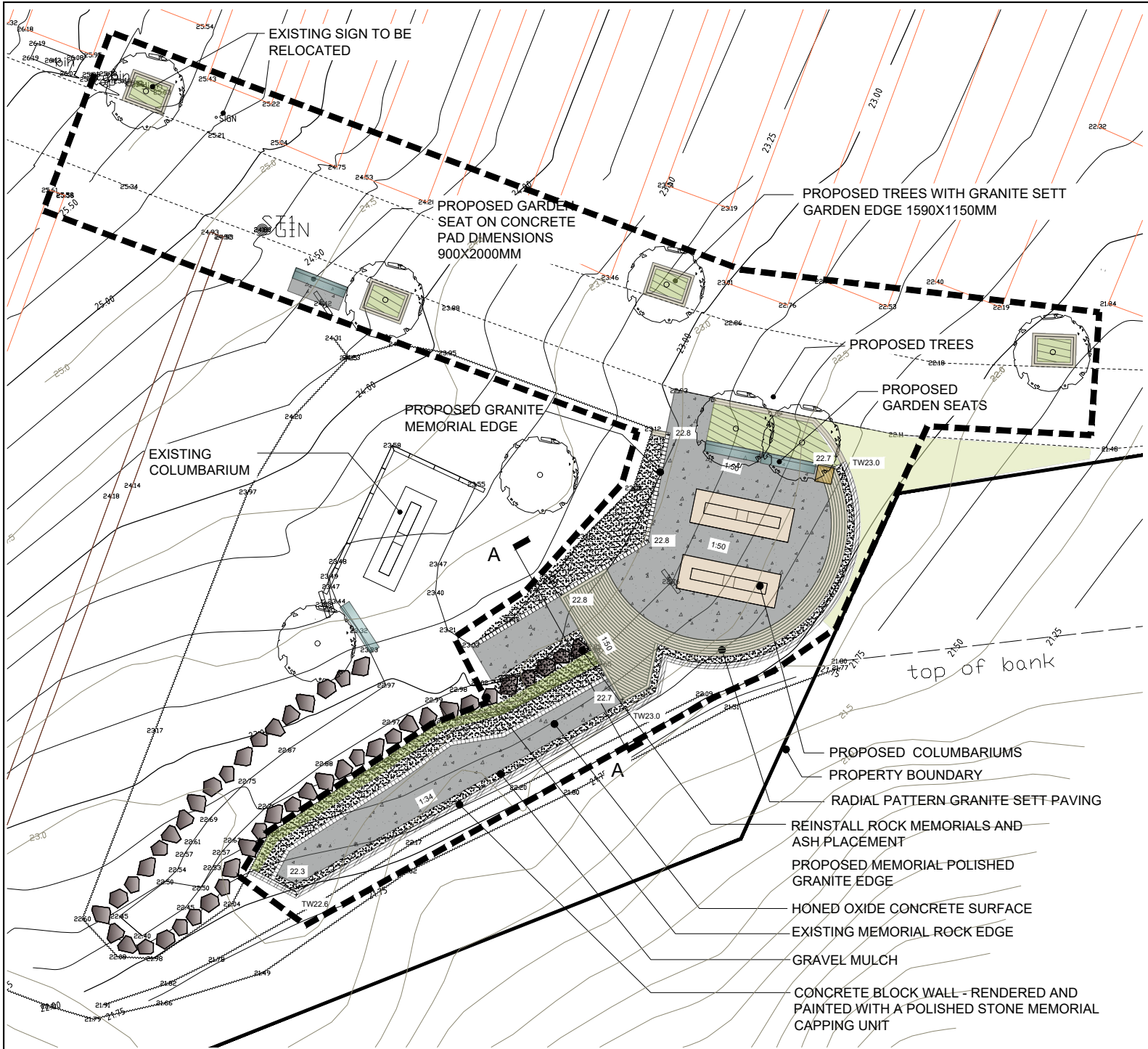
Surrounding development includes:

- To the east and south is coastal cliff face, and Crown Land, containing the intertidal zone.
- To the west is Lawrence Hargrave Drive road reserve and residential development.
- To the north is an area zoned E2: Environmental Conservation, which contains disturbed native vegetation of Coastal Headland Banksia Scrub.
- To the south is a substantial area of Endangered Ecological Community Coastal Littoral Rainforest.

2.3 DETAILED DESCRIPTION

The proposed design is consistent with the current use of the cemetery and the existing infrastructure of ash placement opportunities. The proposal consists of upgrade and maintenance works at the Cemetery, consisting of the following elements:

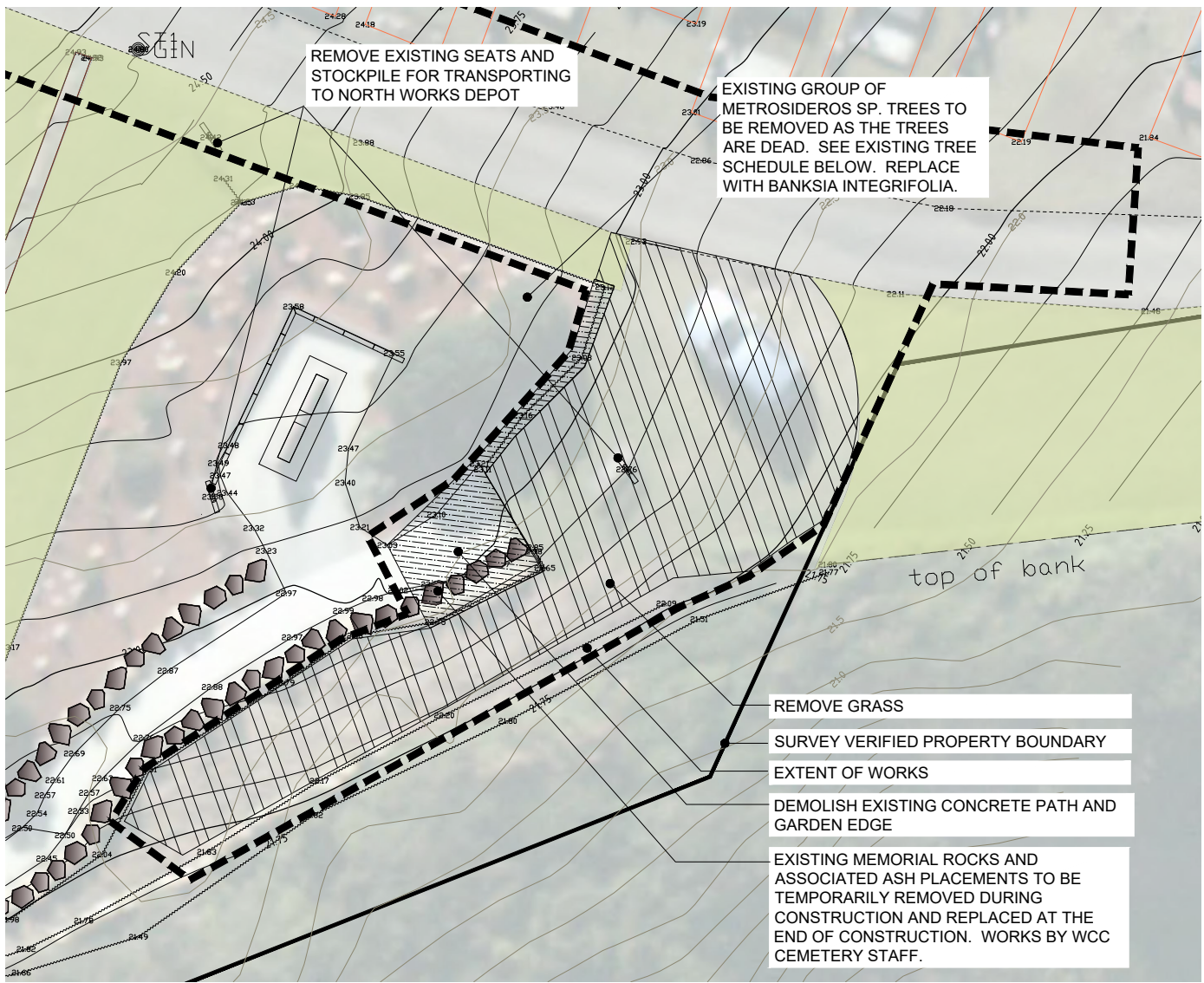
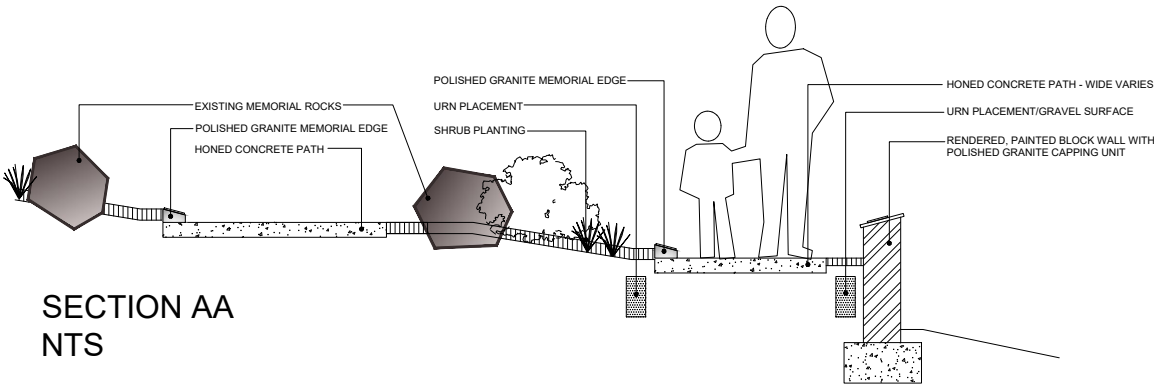
- Site establishment
- Demolition:
 - Remove existing seats and stockpile for transporting to WCC Depot
 - Removal of Kikuyu grass *Cenchrus clandestinus* (approximately 140 m²)
 - Demolish existing concrete path and garden edges
 - Existing memorial rocks and associated ash placements to be temporarily removed during construction and replaced at the conclusion of construction
- Construction as per Landscape Plan (
- Figure 2):
 - Construction of concrete block wall to approximately 700 mm in height– rendered and painted, with a polished stone memorial capping
 - Construction of honed concrete footpath with varying widths from 1.0 m to 1.6 m
 - Placement of memorial polished granite edging
 - Placement of new columbariums
 - Placement of new garden seating and bin enclosures
 - New concrete pads (approximately 1.8 m²) with new garden seating
 - Existing signage to be relocated
- Associated landscaping as per Landscape Plan (Figure 2):
 - Re-establishment of Littoral Windshear Thicket vegetation along boundary edge
 - Planting of new trees with granite set garden edging
 - Mulched garden area



LANDSCAPE PLAN
1:100@A1 1:200@A3

LEGEND		
	PROPOSED SELECTED TREE	09 Y10 LD05/LD05
	GRANITE COLUMBARIUM	01 Y02 LD06/LD06
	EXISTING MEMORIAL ROCK PLACEMENTS	
	MULCHED GARDEN AREA	11 LD05
	HONED CONCRETE PATH	01 Y02 LD05/LD05

	RADIAL PATTERN GRANITE SETT PAVING	02 03 04 LD05/LD05/LD05
	75MM DEPTH GRAVEL SURFACE - ROUND RIVER PEBBLE 40MM	
	CONCRETE BLOCK RETAINING WALL WITH GRANITE CAPPING UNIT	05 LD05
	MEMORIAL GARDEN EDGE	01 LD05
	GRANITE SETT GARDEN EDGE	08 LD05
	SEAT	07 LD05
	SULO BIN ENCLOSURE	06 LD05



DEMOLITION PLAN
1:100@A1 1:200@A3

EXISTING TREE					
NO.	DESCRIPTION	SPECIES	HEIGHT	CANOPY SPREAD	HEALTH
1	GROUP OF 3 TREES	METROSIDEROS EXCELSA	4m	3m	DEAD

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	DRAWN	APPR'D	DATE
3	DA SUBMISSION	NDR	AG	06/20
2	MINOR AMENDMENTS - ISSUED FOR DA SUBMISSION	NDR	AG	11/19
1	ISSUED FOR DA SUBMISSION - DA-2018/1237	NDR	AG	07/16

DATUM AHD	SURVEYOR	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)
AZIMUTH MGA	FIELD BOOK	DESIGNED NDR	DATE 06/16	SENIOR LANDSCAPE ARCHITECT
RELATED PLANS 4686, 5312		CHECKED AG	DATE 06/16	DATE



SCALES	NORTH POINT
AS NOTED	

CITY OF WOLLONGONG
EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN
SCARBOROUGH WOMBARRA CEMETERY
LAWRENCE HARGRAVE DRIVE WOMBARRA
LANDSCAPE PLAN / DEMOLITION AND SEDIMENT CONTROL PLAN



PJ or TR No.	PJ-2069	A1 ORIGINAL
SHEET 2 OF 7 SHEETS		
DRAWING No.	5815	ISSUE
	LD02	3

3.0 Statutory Requirements and Planning Controls

3.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Australian Government's key piece of environmental legislation. The EPBC Act applies to developments and associated activities that have the potential to significantly impact on Matters of National Environmental Significance (NES) protected under the Act.

Nine Matters of NES are identified under the EPBC Act:

- World heritage properties.
- National heritage places.
- Wetlands of international importance (also known as 'Ramsar' wetlands).
- Nationally threatened species and ecological communities.
- Migratory species.
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development

Under the EPBC Act, activities that have potential to result in significant impacts on Matters of NES must be referred to the Commonwealth Minister for the Environment for assessment.

Matters of NES that could be relevant to the current project include nationally threatened species and ecological communities, migratory species, Ramsar wetlands, world heritage places and national heritage places.

There are no Commonwealth Matters of NES within the project site or with potential to be indirectly impacted by the proposed works. There is no requirement for preparation of a referral to the Commonwealth Minister for the Environment.

3.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The EP&A Act was enacted to encourage the proper consideration and management of impacts of proposed development or land-use changes on the environment (both natural and built) and the community. The EP&A Act is administered by DPIE.

The EP&A Act provides the overarching structure for planning in NSW and is supported by other statutory environmental planning instruments. Sections of the EP&A Act of relevance to the project are outlined further below.

Test of Significance

Section 1.7 of the EP&A Act requires proponents and consent authorities to consider if a development will have a significant effect on threatened species, populations or communities listed under the BC Act or the NSW *Fisheries Management Act 1994* (FM Act).

Section 1.7 (Section 7.3 of the BC Act and Part 7A of the FM Act) outlines factors that must be taken into account in a Test of Significance (ToS). Where any ToS determines that a development will result in a significant effect to a threatened species, population or community a Species Impact Statement (SIS) or entry into the Biodiversity Offsets Scheme (BOS) is required (dependent on the approval pathway).

There are no BC Act or FM Act species, populations or communities to be removed or indirectly impacted by this proposal.

State Environmental Planning Policies

State Environmental Planning Policies (SEPPs) are environmental planning instruments under the EP&A Act that outline policy objectives relevant to State or regional environmental planning issues. There are over 65 SEPPs; however, only those relevant to the proposed development have been considered and are detailed below.

SEPP (Infrastructure) 2007

SEPP (Infrastructure) 2007 (ISEPP) was enacted to assist State and Local Government and private infrastructure providers deliver infrastructure works by simplifying the development approval process.

Infrastructure covered under ISEPP includes hospitals and health service facilities, roads, railways, emergency services, water supply, electricity delivery, public administration buildings, state sports and recreation centres in addition to lead-in sewer and water infrastructure. ISEPP contains clauses which facilitate Council management and maintenance of public and operational lands as well as allow for optimised use of commuter hubs.

The project scope involves alterations and additions/ancillary works to the existing Wombarra Cemetery which are permissible with development consent; however, the project site is to be accessed from Lawrence Hargrave Drive which is identified as a classified road.

Clause 101 of ISEPP contains provisions to ensure development does not compromise the effective and ongoing operation and function of classified roads and prevents or reduces the potential impact of traffic noise and vehicle emissions on development adjacent to classified roads. Pursuant to Clause 101(2) of ISEPP, a consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied of the following:

- Vehicular access to the land is provided by an alternative road, and
- The safety, efficiency and ongoing operation of the classified road will not be adversely impacted by the development as a result of:
 - The design of the vehicular access to the land, or
 - The emission of smoke or dust from the development, or
 - The nature, volume or frequency of vehicles using the classified road to gain access to the land, and
- The development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

Lawrence Hargrave Drive forms the only available access route to Wombarra Cemetery and an alternative road has not been identified. The proposed development consists of an upgrade to an operational Cemetery to allow for an up to 560 new interments and is sited approximately 50 m east of the classified road.

Traffic associated with the construction and operational phase of the proposed development is expected to have a negligible impact on the operation of the classified road. Smoke or dust emissions arising from the development are to be minimised and mitigated in accordance with the Construction Environmental Management Plan to be prepared for the project. Traffic noise and vehicle emissions originating from the operation of Lawrence Hargrave Drive do not affect the day

to day operation of the existing Wombarra Cemetery and based on the distance of proposed works from the classified road, are not expected to impact on the construction or operational phases of the proposal.

Based on the above, the proposal is considered to be consistent with the requirements of ISEPP.

SEPP (Koala Habitat Protection) 2019

SEPP (Koala Habitat Protection) 2019 aims to encourage the conservation and management of natural vegetation areas that provide habitat for Koalas to ensure permanent free-living populations will be maintained over their present range and to reverse the current trend of Koala population decline. It applies to land located in a council listed in Schedule 1 to the SEPP.

The project is within the Wollongong Local Government Area, a Schedule 1 listed Council and is located within the South Coast Koala Management Area (KMA). Currently, no Koala Management Plan for Wollongong Council LGA has been prepared therefore, clause 8 of the SEPP does not apply. The study area is over one hectare in size (includes adjoining land within the same ownership); however, it is not identified on the Koala Development Application Map; therefore, clause 9 of the SEPP does not apply.

The subject site does not contain any of the Koala feed tree species listed under Schedule 2 of the SEPP, comprising understorey vegetation and three ornamental trees (New Zealand Christmas Tree *Metrosideros excelsa*) only. Therefore, the study area does not contain, and the project will not impact, any highly suitable Koala habitat.

Therefore further consideration of SEPP (Koala Habitat Protection) 2019 is not warranted.

SEPP (Coastal Management) 2018

The Coastal Management SEPP aims to promote a co-ordinated approach to land use planning in the coastal zone of NSW in a manner consistent with the objects of the *Coastal Management Act 2016* (CM Act). The SEPP has replaced the now repealed:

- SEPP No. 14 Coastal Wetlands
- SEPP No. 26 Littoral Rainforests
- SEPP No. 71 Coastal Protection

The subject site is located on land containing three coastal management areas mapped as Littoral Rainforest, Proximity Area for Littoral Rainforest and Coastal Use Area under the Coastal Management SEPP. Section 18 of the Coastal Management SEPP outlines the following hierarchy of coastal management areas, with highest coastal management area ranked as (a):

- (a) The coastal wetlands and littoral rainforests area
- (b) The coastal vulnerability area
- (c) The coastal environment area
- (d) The coastal use area

In the event that a development control for a coastal management area is inconsistent with a control from a separate coastal management area, the controls of the higher coastal management area prevail.

Littoral Rainforest

The site has been mapped as containing Littoral Rainforest as mapped on the Coastal Management SEPP Coastal Wetlands and Littoral Rainforests Area Map. The Littoral Rainforest in the lot containing Wombarra Cemetery is inaccurate as it overlays modified land containing burial plots in

addition to the subject site which contains an operational columbarium (refer to Figure 1). Littoral Rainforest occurs along the south and south-west border of the lot, which is adjacent to the proposed development and is to be protected by actions outlined in the Construction Environmental Management Plan to be prepared for the proposal.

The proposed works includes the following, and therefore a development consent is required in accordance with clause 10.2 and the development is declared to be designated development and an EIS is required:

(c) The carrying out of any of the following:

(i) Earthworks (including the depositing of material on land)

(d) Any other development

The EP&A Act is applied to determine the type of planning approval and environmental impact assessment that is required. The Act provides a definition of development and environmental planning instruments (such as the LEP) and prescribes the types of development for which consent is required.

Pursuant to clause 10(2) of the Coastal Management SEPP, development other than development for the purpose of environmental protection works, is declared designated development for the purposes of the EP&A Act. Section 4.12(8) of the EP&A Act provides that a development application for designated development is to be accompanied by an EIS. This EIS fulfils the requirement for the current project. See Appendix C for further assessment of the project against the Coastal Management SEPP.

Proximity to Littoral Rainforest

The site has been mapped within the Proximity to Littoral Rainforest as mapped on the Coastal Management SEPP Coastal Wetlands and Littoral Rainforests Area Map. Pursuant to clause 11(1), development consent must not be granted to development on land identified as proximity area for Littoral Rainforest unless the consent authority is satisfied that the development will not significantly impact on:

- (e) the biophysical, hydrological or ecological integrity of the adjacent Littoral Rainforest, or
- (f) the quantity and quality of surface and ground water flows to and from the adjacent littoral rainforest.

Avoidance and mitigation measures designed to protect the biophysical, hydrological and ecological integrity and avoid impacts on the quantity and quality of surface and groundwater flows to adjacent Littoral Rainforest are outlined in Section 6.0 of the EIS. The recommendations are to be incorporated into the Construction Environmental Management Plan to be prepared for this proposal. Therefore, this proposal is considered consistent with the provisions outlined in Clause 11 of the Coastal Management SEPP. See Appendix C for further assessment of the project against the Coastal Management SEPP.

Coastal Use Area

The site has been mapped within the Coastal Use Area as mapped under the Coastal Management SEPP. Pursuant to clause 14(1), development consent must not be granted to development on land that is within the coastal use area unless the consent authority has considered whether the development is likely to adversely impact on:

- existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public including persons with a disability
- overshadowing, wind funnelling and the loss of views from public places to foreshores
- the visual amenity and scenic qualities of the coast, including coastal headlands

- Aboriginal cultural heritage, practices and places
- Cultural and built environmental heritage.

In addition, clause 14(1)(b) requires that the consent authority is to be satisfied that the development is designed, sited and managed to avoid the above adverse impacts or, if impacts are unavoidable, that they are minimised and mitigated. Clause 14(1)(c) requires the consent authority to take into account the surrounding coastal and built environment in relation to the bulk, scale and size of the proposed development.

Appendix C of this EIS contains the information required by the consent authority to determine the consistency of the proposal with the requirements outlined in clause 14(1) of the Coastal Management SEPP. Based on the environmental impact assessment (refer to section 5) and avoidance and mitigation measures (refer to section 6), the proposal is considered to be consistent with clause 14 of the Coastal management SEPP.

SEPP No 55 – Remediation of Land

SEPP No 55 – Remediation of Land aims to promote a co-ordinated approach to the remediation of contaminated land for reducing the risk of harm to human health or any other aspects of the environment. Clause 7(1) of SEPP No 55 states that a consent authority must not consent to development on land unless consideration has been accorded to the following:

- (a) It has considered whether the land is contaminated, and
- (b) If the land is contaminated, it is satisfied that the land is suitable in its contaminated site (or will be suitable, after remediation) for the purpose for which the development is to be proposed, and
- (c) If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Preliminary geotechnical investigations (refer to Appendix D) have determined that the land contains fill to a depth of around 0.6 m, comprising previously excavated local soils from the previous excavation of graves. The fill did not contain any evidence of contamination or known hazardous waste. See Section 5.12 of the EIS and Appendix D for further information on the results of geotechnical investigation.

The study area and local region was largely unoccupied until 1835, after which, the study area was initially granted to William Barton and was then subsequently owned by the Illawarra Coal Company (Biosis 2016). The land was purchased by the Minister of Lands, Mr Lysaght subsequent to April 1886, for the express purpose of creating a cemetery for the local community (Biosis 2016). Activities associated with land tenure prior to the use of the study area as an operational cemetery, are highly unlikely to have contributed to contamination of the land. See Section 5.3 and Appendix E for further information on historical land use.

Based on the above, the subject land is not considered contaminated land, does not require remediation and therefore, the proposal is consistent with the objectives of SEPP No 55.

Wollongong Local Environmental Plan

Local Environmental Plans (LEPs) are created by Councils in consultation with their community and guide planning decisions for LGAs. They apply either to the whole or part of a LGA and make provision for the protection or utilisation of the environment through zoning of land and development controls.

Section 2.2: Land Use Zone and Objectives

The study area is subject to the Wollongong LEP and is located on land zoned SP1 - Special Activities.

The Objectives of zone SP1 are:

- To provide for special land uses that are not provided for in other zones
- To provide for sites with special natural characteristics that are not provided for in other zones
- To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land

The following uses are permitted with consent within the SP1 zone: Advertising structures, Centre-based child care facilities, Community facilities, Information and education facilities, Recreation areas, Recreation facilities (indoor), Recreation facilities (major), Recreation facilities (outdoor), Respite day care centres.

The proposal consists of an upgrade of Wombarra Cemetery, specifically, new memorial ash walls and associated landscaping allowing for up to 560 new internments. The proposal falls within the definition of community facilities and is considered to be consistent with the LEP land use zone objectives.

Schedule 5: Local heritage

Under the Wollongong LEP, the Cemetery is listed as a heritage item (Item 6142) of local significance:

Wombarra general cemetery is of significance for Wollongong area for historical, aesthetic, scientific and social reasons. The cemetery is associated with creation of the adjacent mining village and has the ability to interpret history of the area. It has significant associations with the interred and commemorated persons, and social importance for the wider community. It meets aesthetic criterion as a local landmark, and it comprises a representative collections of monuments that make a major contribution to local area character and community's sense of place. The cemeteries generally are of major importance for those local community members who have family members interred in the grounds. The site has potential to reveal further information about the past of the area.

The Wollongong LEP 5.10 (2)(b) requires development consent where a proposed development will alter a heritage item by making changes to the detail, fabric, finish or appearance. The proposed works will involve direct-partial impacts upon the cemetery with the replacement of some of the existing fabric of the cemetery and installation of new fabric. However, the Statement of Heritage Impact prepared by Biosis (2016) for the proposed works has determined those impacts to the significance of the heritage item will be minimal and will improve and enhance the remaining fabric and prolong the use of the site as a place for the internment and memorialisation of the deceased.

The proposed development would not adversely affect the heritage significance of the heritage item, and its setting, and the proposal is considered to be consistent with the LEP heritage item conservation objectives.

Clause 7.1: Public Utility Infrastructure

The objective of Section 7.1 of the Wollongong LEP is to ensure that sufficient infrastructure is available to service development within the LGA. Pursuant to clause 7.1(2), development must not be granted for development on land unless the consent authority is satisfied that any public utility infrastructure that is essential for the proposed development is available and that arrangements are in place to ensure the infrastructure is available when required.

Public utility infrastructure relevant to the proposal consists of the classified road, Lawrence Hargrave Drive, which provides access to the internal Cemetery road. The construction and operational phase of the proposal is reliant on the access provided by Lawrence Hargrave Road, for ingress and egress of construction vehicles, plant and machinery. The demolition and construction works are small in size and will require a small number of construction vehicles, plant and machinery and will not require any oversize vehicles, resulting in a negligible increase to traffic entering or exiting Lawrence Hargrave Road and the Cemetery. As Lawrence Hargrave Road is available for use by construction vehicles, plant and equipment, and, it is a public road, the proposal is considered to be consistent with clause 7.1 of the LEP.

7.2: Natural Resource Sensitivity - Biodiversity

The objective of clause 7.2 of the Wollongong LEP is to protect, maintain or improve the diversity and condition of native vegetation including flora and fauna habitat, protect ecological processes and to encourage the recovery of threatened species, communities, populations (biota) and their habitats.

The site occurs on land identified on the Wollongong LEP natural resource sensitivity - biodiversity Map. The section of the development site that is mapped as natural resource sensitivity – biodiversity, consists of the existing columbarium and memorial gardens in addition to mown Kikuyu lawn.

Clause 7.2(3) states that development consent must not be granted for development on land mapped as natural resource sensitivity – biodiversity unless the consent authority has considered the impact of the development on native terrestrial and aquatic flora and fauna, the ecological role of the land and threatened biota and their habitats. The proposed works will not result in the clearing of any native vegetation, threatened biota or their habitats or substantially alter the ecological role of the land, therefore, the proposal is consistent with the criteria outlined in Clause 7.2(3).

Clause 7.2(4) states that development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development is:

- Designed, sited and managed to avoid potential adverse environmental impact, or
- If a potential and adverse environmental impact cannot be avoided, the development is designed and sited to ensure minimum adverse environmental impact, incorporates effective measures to minimise adverse environmental impact and mitigates any residual adverse environmental impacts.

The proposal has been sited on land which has been previously developed and is currently used for ash internments, contains a memorial garden and columbarium in addition to surrounding Kikuyu lawn which is regularly maintained. The proposed works do not require the removal of native vegetation and will not substantially increase the existing footprint of the Cemetery. Mitigation measures to minimize adverse environmental impact are provided in Section 6 of this EIS and will be incorporated into a project Construction Environmental Management Plan. Based on the above, the proposal is considered consistent with clause 7.2(4) of the LEP.

7.4: Riparian Lands

The objective of clause 7.4 of the Wollongong LEP is to ensure that development does not adversely impact on riparian lands.

Riparian land, mapped under the LEP, occurs 118 m to the north of the subject site adjacent to the northern boundary between Lot 7028 Crown DP 1058309. The subject site does not contain any geomorphological, hydrological or ecological features of riparian land, comprising an ash monument, memorial garden, pavement and mown Kikuyu lawn. The proposal will not require works within 40 m of riparian land or the removal of riparian vegetation and does not contain habitat to support

rehabilitation with riparian species. Therefore, this proposal is considered consistent with clause 7.4(1) in that it does not adversely impact on riparian lands.

7.5: Acid Sulfate Soils

The objective of clause 7.5 of the Wollongong LEP is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.

The land upon which the Cemetery is located is identified as Class 5 on the Acid Sulfate Soils Map of the Wollongong LEP. Clause 7.5(3) of the LEP states that development consent must not be granted for the carrying out of works unless an acid sulfate soils management plan has been prepared in accordance with the *Acid Sulfate Soils Manual* and has been submitted to the consent authority.

The proposed development requires minor excavation from an existing garden bed for installation of two columbariums, a concrete footpath and concrete pads. The geotechnical investigations did not identify any Acid Sulfate Soils on-site that will affect the proposed construction. Given this, it is considered that a detailed Acid Sulfate Soil Management Plan (ASSMP) is not required at this stage (refer to Section 5.7 and Appendix D of this report for more detailed information on soils).

7.6: Earthworks

The objective of clause 7.6 of the Wollongong LEP is to ensure that any earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features and to allow earth works of a minor nature without separate development consent.

Under clause 7.6(3), before granting development consent for earthworks, the consent authority must consider the following:

- The likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality
- The effect of the proposed development on the likely future use or redevelopment of the land
- The quality of the fill or of the soil to be excavated or both
- The effect of the proposed development on the existing and likely amenity of adjoining properties
- The source of any fill material or distribution of any excavated material.
- The likelihood of disturbing Aboriginal objects or other relics
- Proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.

The EIS and attached appendices have addressed the majority of the above items to be considered under clause 7.6(3) of the LEP. The subject site is highly modified, is an operational cemetery and the proposed works consist of the addition of new memorial ash walls and associated landscaping. Proposed minor earthworks are confined to a 140 m² area.

Soil drainage has been previously modified by historical clearing, construction of existing Cemetery infrastructure and internments throughout the subject site surrounds. The likely and predicted future use of the land is expected to be consistent with current use of the land as an operational Cemetery. Existing soils within the subject site consist of previously excavated local soils with no evidence of contaminants or heavy metals (refer to Appendix D) and a SWMMP has been prepared to address appropriate recycling and/or disposal of excavation materials.

Wombarra Cemetery was consecrated in 1893 and has been in operation for over 120 years (Biosis 2016); therefore, the proposed minor upgrade will not adversely affect the amenity of adjoining properties. An assessment of the potential for disturbance of Aboriginal relics has been undertaken

which identified a lack of intact natural soil profile throughout the subject site and the discovery of one hammer stone in imported fill (Appendix F). To minimise and mitigate impacts to Aboriginal Cultural Heritage, an Aboriginal Heritage Impact Permit (AHIP) has been procured for the proposed works (Appendix G) and recommendations have been made in Section 6 of the EIS in the event of discovery of an unanticipated Aboriginal Object.

The subject site is not located within 40 m of riparian land or mapped waterways, is not in a drinking catchment but is located next to an environmentally sensitive area (mapped Littoral Rainforest and Proximity Area for Littoral Rainforest under the Coastal Management SEPP. An assessment of impact to Littoral Rainforest has been prepared and has determined that the proposal is unlikely to adversely impact Littoral Rainforest adjacent to the subject site either directly, indirectly or cumulatively (Appendix C).

Based on the above, the proposal is consistent with clause 7.6(3) of the LEP.

7.7: Foreshore Building Line

The objective of clause 7.7 of the Wollongong LEP is to ensure that development in the foreshore area will not impact on natural foreshores processes or affect the significance and amenity of the area.

Wombarra Cemetery does not contain mapped Foreshore Building Line; however adjacent lots do contain mapped Foreshore Building Line as outlined in the maps contained within the LEP. The proposal is sited on the top of a steep coastal embankment, approximately 25 m in height, which slopes steeply toward the ocean edge and does not contain any mapped Land Below the Foreshore Building Line as per the LEP. Therefore, clause 7.7 of the LEP does not apply to this proposal.

Wollongong Development Control Plan 2009

Development Control Plans (DCPs) are created by Councils to set out design requirements of developments to ensure consistency with the LEP, SEPPs and State legislation. Chapters within the DCP prescribe planning controls and design criteria for different types of development in addition to specific rules pertaining to precincts.

Chapter E7: Waste Management

The aim of Chapter E7 of the Wollongong DCP is to promote sustainable waste management in the demolition, construction and operational phases of development through adherence to the waste minimisation hierarchy and the principles of ESD.

Chapter E7, Section 4.1 states that all applications for development are to include a Site Waste Minimisation and Management Plan (SWMMP) to ensure compliance with this chapter of the DCP. A SWMMP has been completed and forms Appendix H of the EIS; therefore, the proposal is consistent with the requirements of Chapter E7 of the DCP.

Wollongong City-Wide Development Contributions Plan 2019

The Wollongong City-Wide Development Contributions Plan 2019 assists Wollongong City Council to provide high quality and diverse public facilities to meet the requirements of current and future residents of the Wollongong City Council LGA.

Pursuant to clause 25K(1), the maximum percentage of the proposed cost of carrying out development that may be imposed by a levy under Section 7.12 of the Act is 0.5 percent of that cost, in this instance the proposal has a capital expenditure of \$200,000.00 so the maximum levy is \$10,000.00.

An exemption from the levy is allowable under clause 15(a) as the proposal is for an upgrade to Scarborough Wombarra Cemetery which meets the definition of community infrastructure.

Therefore, this proposal does not require application of the levy if Council choose to request an exemption under clause 15(a).

3.3 NATIONAL PARKS AND WILDLIFE ACT 1974

The NPW Act, administered by EES, is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW. Part 6 of the NPW Act, administered by EES, provides specific protection for Aboriginal objects and declared Aboriginal places by establishing offences of harm. Section 86 of the NPW Act sets out a number of offences about 'harm' or desecration to an Aboriginal object. Harm means any act or omission that:

- Destroys, defaces or damages the object.
- Moves the object from the land on which it had been situated.
- Causes or permits the object to be harmed.

All Aboriginal objects and places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by OEH. There are a number of defences and exemptions to the offence of harming an Aboriginal object or declared Aboriginal place. Under certain circumstances an AHIP may not be required, such as where the activity is trivial, negligible or of low impact. Part 6 of the NPW Act also provides for defences and exemptions.

Should any Aboriginal objects be encountered during works, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the study area must follow these steps:

1. Discovery: If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
2. Notification: Once suspected human skeletal remains have been found, the NSW Police must be notified immediately, and they will subsequently inform the Coroner's Office. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and OEH. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

3.4 HERITAGE ACT 1977

Heritage in NSW is principally protected by the *Heritage Act 1977* (as amended) which was passed for the purpose of conserving items of environmental heritage of NSW. Environmental heritage is broadly defined under Section 4 of the *Heritage Act 1977* as consisting of the following items: 'those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance'.

The Act is administered by the Heritage Council, under delegation by the Heritage Division, Office of Environment and Heritage (OEH). The *Heritage Act 1977* is designed to protect both known heritage items (such as standing structures) and items that may not be immediately obvious (such as potential archaeological remains or 'relics'). Different parts of the *Heritage Act 1977* deal with different situations and types of heritage and the Act provides a number of mechanisms by which items and places of heritage significance may be protected.

Protection of items of State significance is by nomination and listing on the State Heritage Register (SHR) created under Part 3A of the *Heritage Act 1977*. The Register came into effect on 2 April 1999. The Register was established under the Heritage Amendment Act 1998. It replaces the earlier system of Permanent Conservation Orders as a means for protecting items with State significance. A permit under Section 60 of the Heritage Act 1977 is required for works on a site listed on the SHR, except for that work which complies with the conditions for exemptions to the requirement for obtaining a permit.

Section 139 of the *Heritage Act 1977* protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. This section applies to all land in NSW that is not included on the SHR. A 'relic' is defined by the Heritage Act as:

'Any deposit, object or material evidence:

(a) Which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) Which is of State or Local significance'.

Relics cannot be disturbed except with a permit or exception/exemption notification. If an exception has been granted and, during the course of the development, substantial intact archaeological relics of state or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing. Depending on the nature of the discovery, additional assessment and, possibly, an excavation permit may be required prior to the recommencement of excavation in the affected area.

Should unanticipated relics not skeletal in nature be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

3.5 BIODIVERSITY CONSERVATION ACT

The BC Act is the key piece of legislation providing for the protection and conservation of biodiversity in NSW through the listing of threatened species, populations and communities, Key Threatening Processes (KTPs) and critical habitat for threatened species, populations and communities. Impacts to threatened species, populations and communities are assessed under Section 1.7 of the EP&A Act and Section 7.3 (or Section 7.8 for Part 5 projects) of the BC Act. If assessment under the EP&A Act and BC Act determines a project is likely to result in a significant effect to threatened species, populations or communities then a Species Impact Statement (SIS) or consideration of entry into the Biodiversity Offsets Scheme (BOS) (see below) should be undertaken.

The subject site is situated atop a Biodiversity Value (Littoral Rainforest) mapped on the Biodiversity Values Map and Threshold Tool which displays land regulated under the BC Act. The Biodiversity Values Map and Threshold Report states that the minimum lot size is 1.77 ha and the clearing threshold is 0.5 hectares, which is well above the 140 m² of vegetation clearing required to facilitate the proposal (refer to Appendix I).

The vegetation within the subject site is Kikuyu lawn which does not meet the definition of Littoral Rainforest and does not contain any native flora species (refer to Section 5.9 and the Site Plan [Sheet LD01 of Appendix A]).

This project will not result in the removal of, or impact to, any species, population or community listed under the BC Act, therefore, no further assessment is required under the BC Act.

3.6 ABORIGINAL LAND RIGHTS ACT

The NSW *Aboriginal Land Rights Act 1983* (ALRA), administered by the Minister of Aboriginal Affairs, recognises the traditional ownership and occupation of the land by Aboriginal peoples and the importance of their connection to land. This means the ALRA recognises the spiritual, social, cultural and economic importance of land to the state's Aboriginal peoples.

The ALRA also acknowledges that past governments' decisions have progressively reduced the lands set aside for Aboriginal people without compensation. The purposes of the ALRA are set out in section 3:

- To provide land rights for Aboriginal persons in NSW.
- To provide for representative Aboriginal Land Councils in NSW.
- To vest land in those Councils.
- To provide for the acquisition of land, and the management of land and other assets and investments, by or for those Councils and the allocation of funds to and by those Councils.
- To provide for the provision of community benefit schemes by or on behalf of those Councils.

The principle of self-determination underpins the ALRA. Since the introduction of the ALRA many of the powers within its provisions, and the right to make decisions, have been gradually transferred to Aboriginal Land Councils. The ALRA provides for a self-funded and self-regulated network of independent Aboriginal bodies corporate. It also sets out a regulatory framework for Aboriginal Land Councils, including their statutory reporting obligations.

Wollongong Council has undertaken an assessment of the likelihood that the Reserve will be deemed to be claimable within the meaning of section 36 of the ALRA and has determined this risk to be low. Ultimately, the NSW Aboriginal Land Claim Investigation Unit has the authority to determine whether Crown Land is claimable.

4.0 Stakeholder and Community Engagement

4.1 APPROACH TO STAKEHOLDER AND COMMUNITY ENGAGEMENT

Wollongong City Council consulted with the Community and interested stakeholders regarding the proposal. The objective of the stakeholder and community engagement process was to inform and advise the community of the proposal, communicate significant benefits and address any points of concern and encourage community participation through submission of feedback.

The following engagement approach was undertaken throughout the preparation of the EIS:

- Identification of all relevant communities and stakeholders.
- Development of a Community Engagement Strategy.
- Outreach to all identified communities and stakeholders, and
- Evaluate and respond to engagement feedback and outcomes.

A Community Engagement Strategy was developed by Wollongong City Council in accordance with recommendations and requirements of the EIS SEARS to inform and guide the stakeholder and community engagement component of the proposal.

4.2 ENGAGEMENT METHODS

Stakeholder and community engagement was undertaken using a variety of different communication and engagement methods during the consultation period of 7 June to 8 July 2019. Community members were invited to have their say and make submissions on the Concept Plan. Details of the engagement methods used are outlined in Table 2 below.

Table 2 Communication and engagement methods

Communication type	Communication details
The Advertiser	Details of the project including location of the onsite information stand and Engagement HQ webpage were shared in Council's Community Update Page
Social media	A social media post was published informing the community about the project and the location of the onsite information stand.
Media release	A media release was prepared and made available to media outlets.
Email to key stakeholders	An email and FAQ was sent to all stakeholders who participated in previous engagements with Council in addition to stakeholders identified through an analysis process.
Onsite information stand	Community members were encouraged to visit an onsite information stand which was installed at Scarborough Wombarra Cemetery over the duration of the exhibition period.
Letter	A letterbox drop inviting the community to attend the onsite information stand to discuss and provide feedback on the EIS was delivered to nearby residents.

Communication type	Communication details
Meeting	A meeting was held with the Friends of Scarborough Wombarra Cemetery group to inform them of the proposal and provide a map with proposal location and design. Information was provided regarding justification for the proposal and alignment with the Project Masterplan in addition to a discussion about the EIS and the Community Engagement Strategy.
Engagement HQ Website	An online survey tool, hosting the background information and supporting documents for the proposal which used to capture participants feedback.
Feedback Form	A hard copy feedback form was made available online and through engagement activities.

4.3 ENGAGEMENT RESULTS

Formal feedback on the proposed maintenance and upgrade works for the Scarborough Wombarra Cemetery comprised 16 separate submissions including one group submission prepared by the Friends of Scarborough Wombarra Cemetery. Additional feedback was received through the completion of five feedback forms and six online forms. A summary outlining key issues raised during the stakeholder and community engagement process is provided in Table 3 below and the detailed Engagement Report is located in Appendix J.

Table 3 Engagement summary

Issue type	Issue raised	Response provided in EIS
Columbarium's	<p>Concerns were raised regarding the size of the two proposed Columbarium's, specifically, that they may be too large for the area, are not attractive and may disrupt surrounding natural amenity values.</p> <p>Feedback also suggested that the two Columbarium's may detract from the scenic amenity of current memorial placements.</p>	<p>The proposed Columbarium's have been designed to ensure they are sympathetic to the scenic and historical values of the Cemetery and are in accordance with the existing Columbarium.</p> <p>Further detail is provided in Sections 5.3 and 5.12 of this EIS.</p>
Location	<p>Feedback suggested the area is too big and situated close to the cliff.</p> <p>A respondent suggested that the Columbarium's should be relocated to the eastern or northern area of the cemetery where there is ample available space and the ground is more stable.</p>	<p>The proposal location is coincident and congruent with existing Cemetery memorial construction and will result in minimal enlargement of the current structure.</p> <p>Appropriate controls will be undertaken during construction to ensure the proposal does not result in impacts to surrounding soils or ground stability.</p> <p>Further details have been provided in Sections 2.3, 5.1, 5.7 and 5.11 of this EIS.</p>
Memorial Wall	Concerns were raised regarding the potential for the current proposal design to block access and require	Allowance for visitor access and manoeuvrability has been incorporated into the

Issue type	Issue raised	Response provided in EIS
	<p>stepping over recent internments to reach the memorial wall.</p> <p>Opposition was raised to installation of the retaining wall as it involves removal of vegetation. An alternative proposition was raised to replace the proposed memorial wall with a small memorial garden with maintained plantings.</p>	<p>proposal design ensuring accessibility is maintained.</p> <p>The proposed retaining wall has been designed and sited to ensure minimal removal of vegetation and no removal of native vegetation. Temporary loss of scenic amenity resulting from the proposal will be mitigated by the proposed re-establishment of Littoral Windshear Thicket vegetation, and planting of new trees with granite set garden edging.</p> <p>Further details have been provided in Sections 2.3, 5.1, 5.2, 5.3, 5.4 and 5.9 of this EIS.</p>
Landscape	A recommendation was raised to amend the design to incorporate a more natural environmental aesthetic more sympathetic to the surrounding natural environment.	<p>The proposal has been designed to ensure it is sympathetic to existing environmental and heritage values of the Cemetery. Further assessment of the proposal has determined that the design is in accordance with these values.</p> <p>Further details have been provided in Sections 2.3, 5.3, 5.4 and 5.9 of this EIS.</p>
Vegetation and Wildlife	<p>Concerns were raised regarding the removal of native vegetation as past removal has caused erosion issues.</p> <p>A request was made for Council to employ an experienced professional bush regenerator to undertake revegetation to limit associated soil disturbance.</p>	<p>Friends of Scarborough Wombarra Cemetery are supportive of the proposed revegetation of the cliff edge with Littoral Wind Shear Thicket vegetation and planting of new trees with granite set garden edging.</p> <p>Appropriate erosion and sedimentation controls will be included in the project Construction Environmental Management Plan to ensure the proposal does not result in impacts to surrounding soils.</p> <p>Proposed revegetation will be undertaken by a professional contractor in accordance with Wollongong City Council instructions and best practice guidelines.</p> <p>Further details have been provided in Sections 5.9 and 5.11 of this EIS.</p>
Cliff edge	<p>Concerns were raised regarding the proximity of the proposal to the cliff edge and how it will affect the already existing unstable ground.</p> <p>The community also raised additional safety concerns of risk of injury to future workers on site due to loose and slippery ground surfaces.</p>	<p>The proposal location is considered appropriate and will not result in any instability to the cliff edge as it is coincident and congruent with existing Cemetery memorial construction and will result in minimal enlargement of the current structure.</p> <p>Appropriate Work Health and Safety controls for workers on site are to be included in the project Construction Environmental Management Plan.</p>

Issue type	Issue raised	Response provided in EIS
		Further details have been provided in Sections 2.3, 5.1, 5.7 and 5.11 of this EIS.
Water/drainage	<p>Feedback included concerns that the hard surface structure close to the cliff edge could result in drainage problems and resulting water runoff could damage nearby vegetation.</p> <p>A suggestion was raised to construct a drain behind the retaining wall to control and disperse water build up.</p>	<p>The geotechnical investigation determined a high soil moisture content beneath existing fill. Engineered footings are to be constructed to support overlying structures associated with the proposal.</p> <p>Further details have been provided in Sections 5.6 and 5.11 of this EIS.</p>
Erosion	<p>The community raised historical observations of gully erosion and ground instability along the cliff edge resulting from periods of heavy rain.</p> <p>Further historical observations include undermining of the cliff edge during heavy weather events resulting in rock falls and land slippage.</p> <p>Feedback requested that the stability of the headlands be taken into consideration for any upcoming development.</p>	<p>Geotechnical investigations have determined a high soil moisture content beneath existing clay fill. Increase to impermeable surface area as a result of the proposal is minimal and is not likely to impact on surrounding vegetation or natural features such as the cliff edge.</p> <p>Appropriate erosion and sedimentation controls will be included in the project Construction Environmental Management Plan to ensure the proposal does not result in impacts to surrounding soils.</p> <p>Further details have been provided in Sections 2.3, 5.6 and 5.11 of this EIS.</p>
More than a Cemetery	<p>The community volunteered that visitation to the cemetery was undertaken for reasons other than to visit graves, such as for scenic amenity, passive recreation and whale spotting. The community wishes to maintain these activities on the site.</p>	<p>The proposal has been designed to remain sympathetic to existing scenic amenity and allow for continuance of passive recreational use of the Cemetery.</p> <p>Further details have been provided in Sections 2.3, 5.1, 5.2, 5.3, 5.4 and 5.12 of this EIS.</p>
Communication	<p>Concerns regarding lack of consultation regarding the proposal prior to the engagement period were raised.</p> <p>The community requested that relatives of those interned at Scarborough Wombarra Cemetery are included in the consultation process.</p>	<p>Wollongong City Council have undertaken stakeholder and community engagement at the EIS preparation and public exhibition phase of the proposal in accordance with the draft <i>Community and Stakeholder Engagement Guidelines</i> (DPE 2017). Under these guidelines, Wollongong City Council is under no obligation to undertake community and stakeholder engagement during the scoping phase of the EIS.</p> <p>Wollongong City Council has noted the request to include relatives of those interned at Scarborough Wombarra Cemetery in the consultation process.</p>
Other alternative	<p>Suggestions were raised regarding alternative options for memorialising</p>	<p>The proposal has been designed to meet the growing need for interments within the Wollongong area. Alternative options were</p>

Issue type	Issue raised	Response provided in EIS
	<p>loved ones including tree dedications and memorial gardens.</p> <p>A further suggestion to complete improvements outlined in the Masterplan first and redesign the current proposal so that it becomes a smaller development.</p>	<p>considered during the scoping phase of the EIS; however, the current proposal design has been chosen as it is sympathetic to the surrounding environment and allows for the recent cultural shift toward ash installations and memorials.</p> <p>Further details have been provided in Sections 1.3 and 1.4 of this EIS.</p>
Seating	<p>Requests were made to have more adequate seating space within the Cemetery.</p> <p>Further concerns were raised regarding the proximity of the proposed seating to the existing headstone placements and a recommendation was made to relocate the seats further east.</p>	<p>Current seating opportunities are to be increased as a result of the proposal which includes installation of further seatings space in the vicinity of the two Columbarium's. Placement of seating is considered to be an appropriate distance from the headstone placements.</p> <p>Further details have been provided in Section 2.3 and Appendix A of this EIS.</p>
Parking	<p>A suggestion was made to formalise existing parking at the eastern point of the Cemetery. The community observed that persistent rain caused the existing parking area to retain water resulting in excessive mud and diverts resulting from vehicle movements.</p> <p>Further observations were made regarding limited available parking for funerals leaving some attendees to park in surrounding streets.</p>	<p>Wollongong City Council has noted the request to formalise the existing parking area at the eastern point of the Cemetery.</p> <p>Further details have been provided in Appendix J of this EIS.</p>

5.0 Environmental Impact Assessment

This section details the impact assessment undertaken for the project. There were no Key Issue Assessments identified in the project SEARs. Therefore, no specialist reports on any of the following assessments was required for this EIS.

5.1 CONTEXT AND SETTING

The proposed development will support the existing use of the site as a cemetery and is considered to be compatible with the surrounding development and suitable with regards to the zoning of the land.

The design is in keeping with the surrounds and will not detract from the aesthetic significance associated with the cemetery.

5.2 ACCESS, TRANSPORT AND TRAFFIC

Suitable access and manoeuvring areas are provided on site. There will be no operational changes to access to the site, or traffic management on site. The proposed increase in interments is not expected to result in significant increases in traffic, nor require additional or alternative arrangements for access or transport to the site or in the local area.

5.3 EUROPEAN HERITAGE:

A Statement of Heritage Impact was commissioned by Wollongong Council and prepared by Biosis (2016) for the proposed works. The proposed project works contribute towards the continued use and upkeep of the cemetery. The design and implementation of the new structural elements of the works should be made with regards to the heritage landscape of the cemetery and differing architectural styles evident in the cemetery whilst not detracting from the aesthetic significance of the cemetery. This will be achieved through the use of polished stone memorial capping on block walls, honed concrete footpaths, polished granite edging, columbariums, re-establishment of Littoral Windshear Thicket vegetation, and planting of new trees with granite set garden edging. All of these design elements are sympathetic to the site as a place of internment and memorialisation of the deceased.

The Statement of Heritage Impact, concludes on page 28 that the proposed development would not adversely affect the heritage significance of the heritage item, and its setting, and the proposal is considered to be consistent with the LEP heritage item conservation objectives.

5.4 ABORIGINAL HERITAGE:

Wollongong Council commissioned Biosis to prepare an Aboriginal Cultural Heritage Assessment Report. The outcomes of this Report recommended that an Aboriginal Heritage Impact Permit (AHIP) for the proposed works be obtained.

An AHIP was applied for and obtained from the Office of Environment and Heritage – AHIP number C0003611.

The AHIP has been issued subject to Administrative and Operational Conditions (refer to Appendix G), and is for the upgrade and maintenance works consisting of:

- (a) Burials
- (b) Construction of niche walls and small retaining wall/s
- (c) Construction of footpaths
- (d) Tree planting/clearing/mowing
- (e) Garden bed construction and maintenance

- (f) Installation of lighting/CCTV
- (g) Road maintenance/creation
- (h) Installation of seats/bins/tables/other furniture/shelters/shade structures
- (i) Waste collection operations
- (j) Installation and maintenance of amenities and water supply
- (k) Installation and maintenance of fences/vehicle barriers/handrails/signage
- (l) Construction works as noted in Figure 2 of the AHIP

All works within the study area must be conducted in accordance with the conditions outlined in AHIP C0003611.

5.5 OTHER LAND RESOURCES

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon any valuable land resources.

5.6 WATER

The site is presently serviced by Sydney Water. The proposal will not result in an increase in water consumption or output.

Council's geotechnical investigations indicate a very high local moisture content at the natural soil interface beneath the fills.

The presence of excessive uncontrolled and poorly placed clay fill, and excessive moisture in the geotechnical sample columns indicates that engineered footings are required for the support of any structures.

5.7 SOILS

The Wollongong LEP Acid Sulfate Soils Map has identified that this property may be affected by Class 5 Acid Sulfate Soils. Acid Sulfate Soils contain iron sulfides which, when exposed to air due to drainage or disturbance, may produce sulfuric acid and release toxic quantities of iron, aluminium and heavy metals. The Acid Sulfate Soils Map is an indication only and acid sulfate soils may be encountered during the excavation for the proposed development. However, only on a minor amount of excavation is required from an existing garden bed, which is not expected to generate acid sulfate soils.

The geotechnical investigations did not identify any ASS on-site that will affect the proposed construction. Given this, it is considered that a detailed Acid Sulfate Soil Management Plan (ASSMP) is not required at this stage.

The design has considered the stability of the soils and coastal geomorphology, to ensure foundations will be suitable for the site conditions.

5.8 AIR AND MICROCLIMATE

The proposal is not expected to have any negative impact on air or microclimate.

During construction, there is the potential for air emissions to be generated by excavators, cement trucks and other plant and machinery. If applicable, dust generation will be mitigated through use of watering of the stockpiles following delivery.

5.9 FLORA AND FAUNA

The works will not result in removal of native vegetation from the site. The proposed works will occur within an area of the cemetery which contains maintained Kikuyu lawn (see Plates 1-3). A preliminary

assessment of the subject site has determined that there is no evidence of Littoral Rainforest in the area and adjoining vegetation has been assessed as Banksia Scrub (refer to Appendix A). No habitat for flora or fauna species listed as threatened under the BC Act or EPBC Act occur at the site. Any areas disturbed for the works will be reinstated at the conclusion of works in accordance with the project Construction Environmental Management Plan.

Landscaping with native species will also be undertaken at the site. Species to be planted will be consistent with the Coastal Littoral Rainforest and Coastal Headland Grassland vegetation types (see Appendix K for recommended species list).

5.10 NOISE AND VIBRATION

Noise generated by the project will be in the form of construction machinery and delivery trucks for a limited time. This is not expected to adversely impact the adjoining development or the locality as these will be of a small scale, infrequent and intermittent in nature.

Safeguards to minimise noise impacts are included in Chapter 6.

5.11 EROSION AND SEDIMENTATION

The works during construction have the potential to cause minor localised runoff impacts however this will be managed through the implementation of a Construction Environmental Management Plan and the safeguards presented in Chapter 6 in addition to the sediment and erosion controls outlined page 8 of the design (Appendix A).

Excavation will be required to install footings and formwork for columbariums and other concrete landscape features. It is considered that with the implementation of the safeguards in Chapter 6 and the creation of site management plans, that the proposed works will not create significant erosion or sedimentation issues on site or impact any surrounding area.

5.12 OTHER IMPACTS

Public Domain

The proposal is not considered to adversely impact on the public domain, and will be of benefit to the public community.

Utilities

The ongoing use of the site and the outcomes of the project will not place any additional demand on utilities.

Waste

The proposal will not generate any "waste". Small volumes of soil may be stockpiled for future use at the site.

Contaminated Land

Wollongong City Council records indicate there are no known contaminated soils within the proposed development area. Preliminary geotechnical investigations (refer to Appendix D) indicate this site contains fill to a depth of around 0.6 m, most likely to be made up of previously excavated local soils probably from the previous excavation of graves. No direct evidence was found to indicate the presence of any contamination, coal tar or asbestos. These fills are not a known hazardous waste and are therefore preliminarily assessed as General Solid Waste (GSW) – non-putrescible.

Energy

The proposal is not envisaged to have unreasonable energy consumption.

Natural hazards

There are no other natural hazards affecting the site that would prevent the proposal.

Technological hazards

There are no concerns in this regard given the nature of the land use.

Safety, Security and Crime Prevention

This application does not result in any opportunities for criminal or antisocial behaviour.

Social Impact

The proposal is not expected to create any negative social impact.

Economic Impact

The proposal is not expected to create any negative economic impacts.

Site Design and internal Design

The application is considered to be consistent with the applicable development controls.

Construction

It is considered that standard conditions of consent would apply in relation to hours of work, erosion and sedimentation controls and the like. A Construction Environmental Management Plan will also form part of the project.

Cumulative Impacts

The proposal is not expected to have any negative cumulative impacts, as it is a small extension of an existing developed area of the cemetery, which will not result in removal of any natural features.

Visual impact

The project has been designed in keeping with the existing area. During construction there may be some loss of visual amenity, which will be remedied once the project is complete and landscaping has taken effect.

Imported fill

The use of imported fill has the potential to introduce pathogens and weeds. If any imported fill is to be used on site (although this is not expected to be necessary) it should comply with the measures detailed in Chapter 6.

6.0 Avoidance and Mitigation Measures

Table 4 provides a list of avoidance and mitigation and management measures that will be implemented at the site for the duration of the works. All measures will be included in the project Construction Environmental Management Plan.

Table 4 Project avoidance and mitigation measures

Potential impact	Avoidance measure	Mitigation and management	Residual Impact
Access Transport and Traffic		<p>Implement appropriate traffic management controls.</p> <p>Signs and fencing to ensure public safety for access around the site.</p> <p>A traffic route for all site vehicles is to be nominated.</p>	Negligible
European Heritage	The design of the architectural elements and landscape features will be sympathetic to the heritage landscape of the cemetery and will be in-line with conservation principals	<p>Installation of new fabric in the cemetery will be in keeping with the surrounds and will not detract from the aesthetic significance associated with the cemetery.</p> <p>If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately to ensure minimal damage. The remains must be left in place and protected from harm or damage. If any such discovery, the Coroner's Office and Police must be notified immediately.</p> <p>If any unanticipated relics not skeletal in nature are discovered during any part of the project, works in the vicinity must cease and an archaeologist contacted.</p>	Low
Aboriginal Heritage	Avoid areas of significance	<p>All works within the study area must be conducted in accordance with the conditions outlined in AHIP C0003611.</p> <p>All human remains in, on or under the land must not be harmed, other than any human remains identified in Schedule B4 of the AHIP</p> <p>Aboriginal objects described in Schedule C may be harmed</p> <p>A Care Agreement must be detailed for the long-term safe-keeping of the already found hammerstone.</p>	Low

		<p>If any human remains (other than those in Schedule B4 of the AHIP) are discovered and/or harmed, the AHIP holder must:</p> <ul style="list-style-type: none"> • Not further harm these remains • Immediately cease all work at the particular location • Secure the area so as to avoid further harm to the remains • Notify the local police and OEH as soon as practicable • Not recommence any work at the particular location unless authorised by OEH. <p>Additional Conditions are noted in the AHIP.</p>	
Other Land Resources	Ensure all works are undertaken within project site only.	Fence and signpost project site and no go zones.	Negligible
Water		<p>All waste water is to be contained and removed off site for disposal at an approved facility.</p> <p>At no time shall any material, soluble or non-soluble, be allowed to enter the waterway or stormwater system.</p> <p>A spill kit is to be kept on site.</p>	Low
Soils	<p>A geotechnical investigation was undertaken of the soils at the site.</p> <p>The design has considered the stability of the soils and coastal geomorphology, to ensure foundations will be suitable for the site conditions</p>	<p>If Acid Sulfate Soils are found during construction then specific treatment of ASS on site should comprise:</p> <ul style="list-style-type: none"> • Establishment of a 'bundled' treatment area, gently sloping pad with compacted clay base, or designated hardstand area • Placement of a basal layer of lime (CaCO₃) on the surface of the treatment area or pad at a rate 2kg/m² per metre height of the overall stockpile of material to be treated • Placement of excavated soil on the treatment area, pad or hardstand area in loose layers with a thickness not exceeding 300 mm • Lime dosing of all excavated soils at a rate of about 5 kg CaCO₃ per tonne of soil by mixing the lime through the soils whilst not disturbing the base of the treatment pad area or pad • Undertaking of soils screening tests following placement of each 300 mm layer to confirm the appropriateness of the 	Low

		<p>nominated liming rate and neutralisation of the ASS</p> <ul style="list-style-type: none"> Following neutralisation (and confirmation of results), in-situ placement, off-site disposal (to a landfill licensed to receive treated ASS) or removal of the stockpile from the treatment area. 	
Air and Microclimate	The machinery chosen is to have been well maintained and is to be operated in a proper and efficient manner to minimise fumes and energy consumption	If dust pollution is evident then wet down procedures should be implemented immediately.	Low
Flora and Fauna	The site avoids all areas of native vegetation and flora and fauna of significance.	<p>The works site should be fenced and no go zones implemented to ensure no impacts to any surrounding areas.</p> <p>Bins should be provided on site during construction for personnel rubbish.</p> <p>If unexpected fauna are encountered during the works then works should cease and an ecologist should be contacted.</p> <p>Landscaping is to be with native species in keeping with the surrounding native vegetation communities.</p>	Low
Noise and Vibration	The machinery chosen is to have been well maintained and is to be operated in a proper and efficient manner to minimise noise and vibration.	Works should be conducted Monday to Friday during daylight hours only.	Low
Erosion and Sedimentation	Plan for erosion and sediment control concurrently with engineering and landscaping design.	<p>Install erosion and sediment control measures as a first step in the works program to any areas to be disturbed, including access points, prior to any works being carried out.</p> <p>Concentrate on source controls.</p> <p>Minimise onsite traffic movements.</p> <p>Rehabilitate disturbed areas quickly.</p> <p>Maintain all sediment controls in an effective condition throughout the duration of works.</p> <p>Any stockpiling of material needs to be appropriately banded.</p>	Low

Other Impacts - waste		<p>Any waste generated should be removed from the site and disposed of appropriately, according to waste classification.</p> <p>General waste (rubbish) is not to be allowed to lie or accumulate on the site.</p> <p>Provide appropriate receptacles (bins) to store all general wastes generated from the works. The receptacles are to be emptied immediately at works completion. Consideration is to be given to the source separation of recyclable and re-useable materials.</p> <p>All dockets/receipts for waste management/disposal are to be kept and copies forwarded to the project manager and/or site coordinator as proof of disposal for environmental audit purposes.</p> <p>Material/waste is not to be stored in any transit locations.</p>	Low
Other impacts – contaminated land	Preliminary geotechnical investigation has been undertaken.	If the works disturb any potentially unknown contaminated material or asbestos, works should stop and an appropriate specialist should be appointed to investigate the level of risk, and to develop an appropriate management strategy.	Negligible
Other impacts - visual	The design of the project is in keeping with the surrounding area.	During the work period, the site should be maintained in a neat and tidy condition.	Low
Other impacts – imported fill	The use of imported fill is not expected to be required.	<p>Only Virgin Excavated Natural Material (VENM) can be imported on site. VENM is natural material (clay, gravel, sand, soil or rock fines) that has been excavated or quarried from areas that are not contaminated. A Classification Docket with chemical assessment should be undertaken or requested from the supplier prior to importing the fill.</p> <p>Where excavated material cannot be classified as VENM it may be eligible for reuse on site if it is accompanied by appropriate documentation (from a qualified technician) confirming it does not contain any acid sulphate soils, asbestos and/or other potential contaminants.</p> <p>Documents/records of the transport and use of material imported onto site must be kept and submitted to the project manager and/or site coordinator as proof of correct waste management practices and for environmental auditing purposes.</p>	Low

7.0 Conclusion

This EIS has been prepared to consider the environmental, social and economic impacts of the proposed expansion of the Wombarra Cemetery to allow for future interments and landscaping upgrades. The EIS and relevant Appendices have addressed the issues outlined in the SEARs (Appendix B), and in accordance with Schedule 2 of the EP&A Regulation with regards to the consideration of relevant environmental planning instruments and impact assessment.

The project is considered to be worthy of approval for the following reasons:

- The proposed development will improve the functionality of the existing cemetery by providing future use of the site, and improved facilities for community use.
- The assessment has demonstrated that the development will not generate any significant environmental impacts that cannot be appropriately mitigated and managed, and is generally consistent with the relevant legislation, planning instruments, strategies, guidelines and policies for the site.
- The proposal is considered to be in the public interest as it is providing a necessary public service within the area, and is consistent with the character of the area.
- The proposal is considered appropriate with regards to the zoning of the site and is not expected to have any negative impacts on the amenity of the locality or adjoining development.
- There are no site constraints that would prevent the proposal.
- The proposal is in accordance with the Community Consultation Strategy developed, and community engagement has informed the development and design of the project.

This EIS demonstrates that all relevant potential impacts of the proposal on the environment have been adequately assessed, and that there are sufficient avoidance and mitigation measures in place for the project to be undertaken with negligible predicted residual impact.

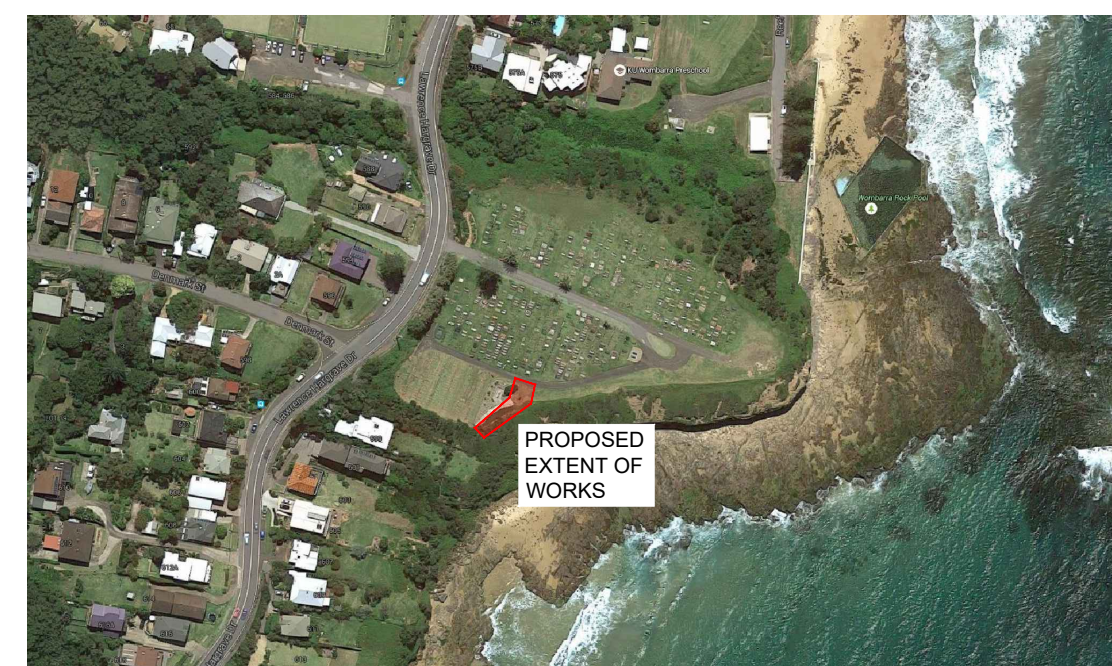
APPENDIX A: DESIGN PLANS

SCARBOROUGH WOMBARRA CEMETERY
LAWRENCE HARGRAVE DRIVE
WOMBARRA
MEMORIAL ASH PLACEMENT GARDEN







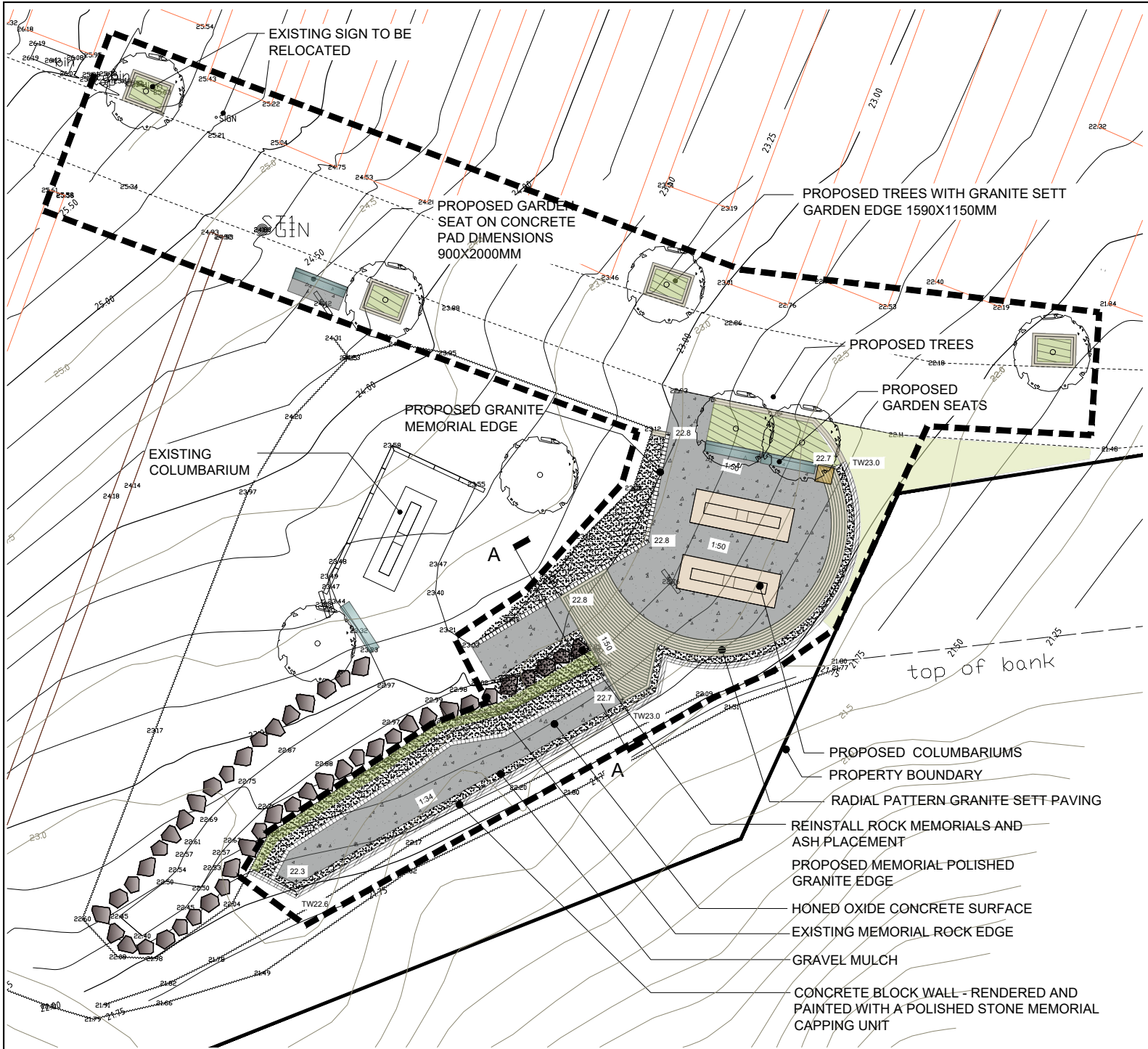
PJ-2069 PLAN No. 5815

LD00	COVER SHEET AND DRAWING SCHEDULE
LD01	SITE PLAN
LD02	LANDSCAPE PLAN / DEMOLITION PLAN / SECTION
LD03	CROSS SECTIONS / LONG SECTION
LD04	PLANTING PLAN
LD05	LANDSCAPE DETAILS
LD06	COLUMBARIUM DETAILS
LD07	ENVIRONMENTAL SITE MANAGEMENT PLAN



ISSUED FOR DA SUBMISSION 06 / 20

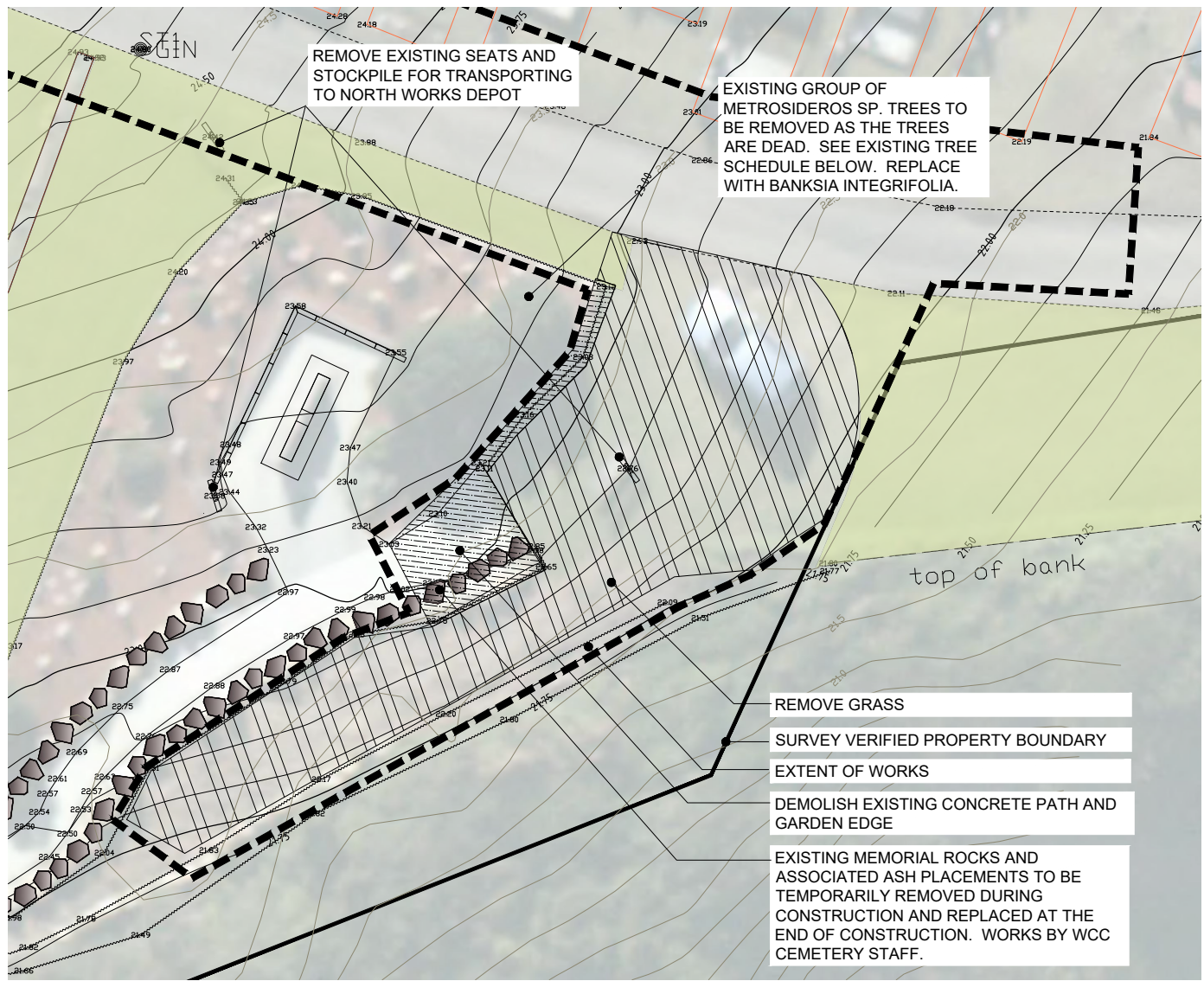
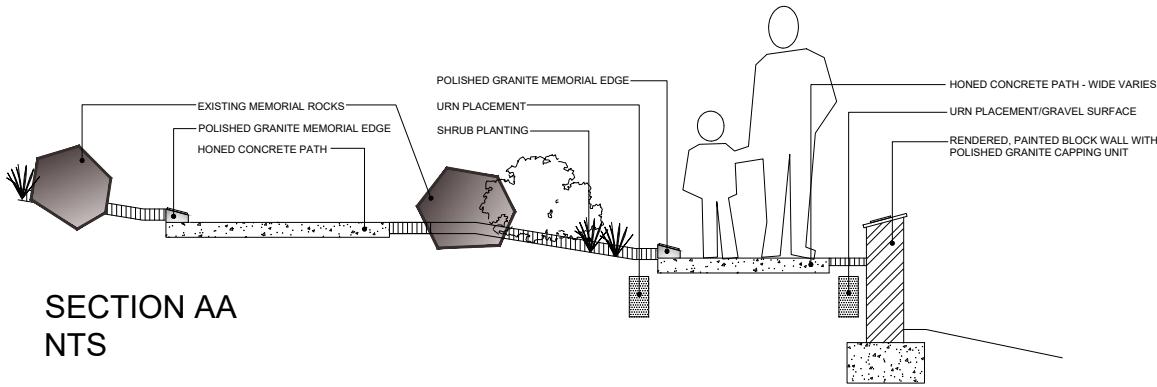
										PRELIMINARY PLAN - NOT FOR CONSTRUCTION									
						DATUM AHD	SURVEYOR	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)		SCALES	NORTH POINT	CITY OF WOLLONGONG	PJ or TR No. PJ-2069		A1		
3	DA SUBMISSION	NDR	AG	06/20	FIELD BOOK	DESIGNED NDR	DATE 06/16	SENIOR LANDSCAPE ARCHITECT		AS NOTED			EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN SCARBOROUGH WOMBARRA CEMETERY LAWRENCE HARGRAVE DRIVE WOMBARRA COVER SHEET AND DRAWING SCHEDULE	SHEET 0 OF 7 SHEETS		ORIGIN			
2	MINOR AMENDMENTS - ISSUED FOR DA SUBMISSION	NDR	AG	11/19	RELATED PLANS 4686, 5312	CHECKED AG	DATE 06/16	DATE						DRAWING No. 5815	SHEET No. LD00	ISSUE 3			
1	ISSUED FOR DA SUBMISSION - DA-2018/1237	NDR	AG	07/16															
ISSUE	DESCRIPTION	DRAWN	APP'D	DATE															
 wollongong city of innovation DESIGN & TECHNICAL SERVICES Ph: 02 4227 2777																			



LANDSCAPE PLAN
1:100@A1 1:200@A3

LEGEND		
	PROPOSED SELECTED TREE	09 Y10 LD05/LD05
	GRANITE COLUMBARIUM	01 Y02 LD06/LD06
	EXISTING MEMORIAL ROCK PLACEMENTS	
	MULCHED GARDEN AREA	11 LD05
	HONED CONCRETE PATH	01 Y02 LD05/LD05

	RADIAL PATTERN GRANITE SETT PAVING	02 03 04 LD05/LD05/LD05
	75MM DEPTH GRAVEL SURFACE - ROUND RIVER PEBBLE 40MM	
	CONCRETE BLOCK RETAINING WALL WITH GRANITE CAPPING UNIT	05 LD05
	MEMORIAL GARDEN EDGE	01 LD05
	GRANITE SETT GARDEN EDGE	08 LD05
	SEAT	07 LD05
	SULO BIN ENCLOSURE	06 LD05

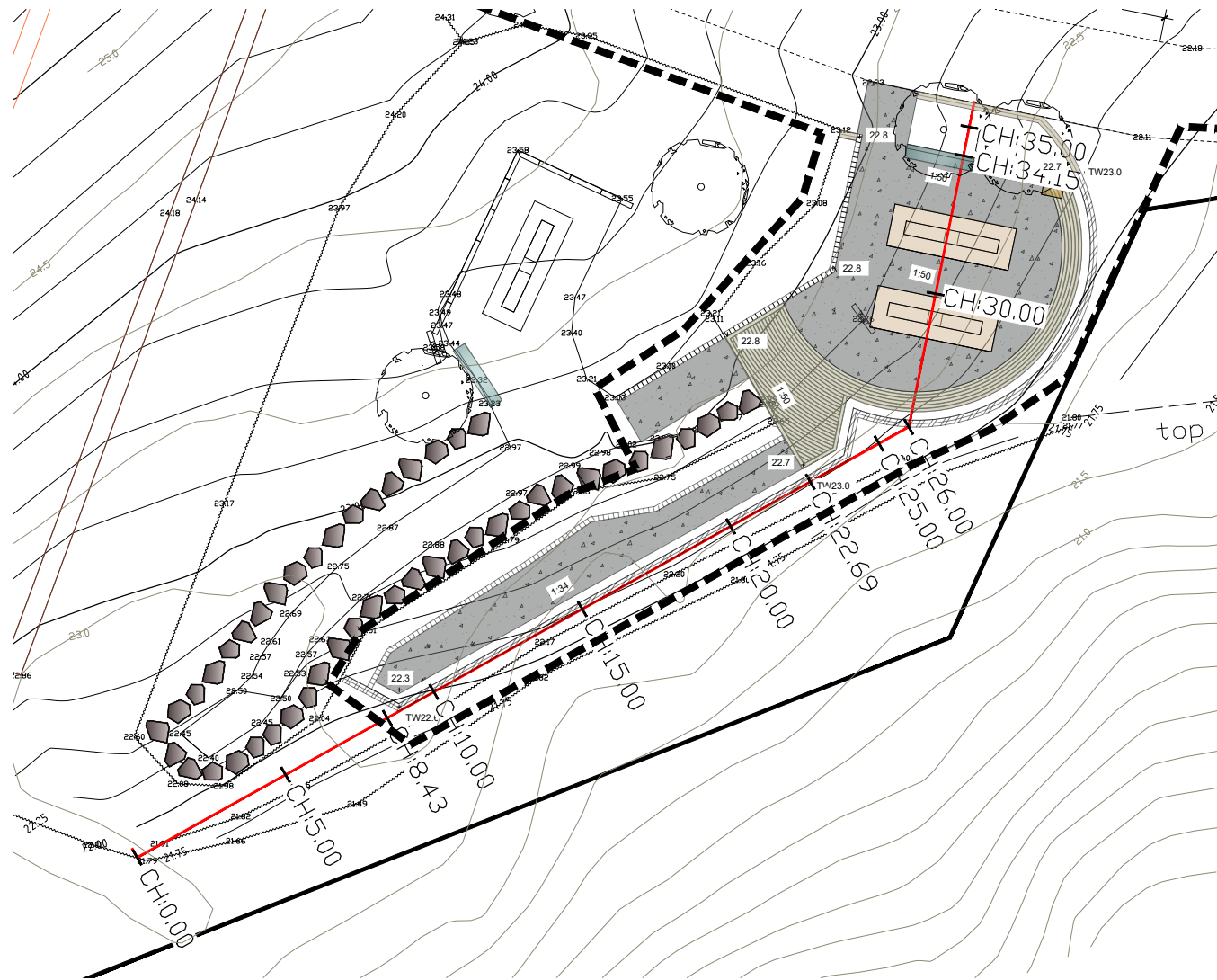


DEMOLITION PLAN
1:100@A1 1:200@A3

EXISTING TREE					
NO.	DESCRIPTION	SPECIES	HEIGHT	CANOPY SPREAD	HEALTH
1	GROUP OF 3 TREES	METROSIDEROS EXCELSA	4m	3m	DEAD

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

						DATUM AHD	SURVEYOR	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)		SCALES	NORTH POINT	CITY OF WOLLONGONG		PJ or TR No. PJ-2069		A1
3	DA SUBMISSION		NDR	AG	06/20	AZIMUTH MGA	FIELD BOOK	DESIGNED NDR	DATE 06/16	SENIOR LANDSCAPE ARCHITECT			AS NOTED		EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN SCARBOROUGH WOMBARRA CEMETERY LAWRENCE HARGRAVE DRIVE WOMBARRA LANDSCAPE PLAN / DEMOLITION AND SEDIMENT CONTROL PLAN	REGULATORY TECHNICAL SERVICES 6214 227744	SHEET 2 OF 7 SHEETS	ISSUE
2	MINOR AMENDMENTS - ISSUED FOR DA SUBMISSION		NDR	AG	11/19	RELATED PLANS 4686, 5312		CHECKED NDR	DATE 06/16									
1	ISSUED FOR DA SUBMISSION - DA-2018/1237		NDR	AG	07/16													
ISSUE		DESCRIPTION		DRAWN	APPR'D	DATE												



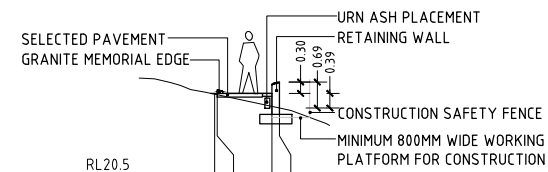
LAYOUT PLAN

SCALE: 1:100@A1 1:200@A3

GRADE		5.52%	2.81%	0%	0.65%	-1.02%
Datum RL16						
FINISHED LEVEL	21834	22.300	22.344	22.625	22.700	22.726
EXISTING LEVEL	21834	21.905	21.986	22.279	22.263	22.544
CUT/FILL	0	0.395	0.358	0.345	0.437	0.182
CHAINAGE	0.00	8.44	10.00	20.00	22.69	30.00

LONGITUDINAL SECTION

SCALE: 1:100@A1 1:200@A3



RL20.5				
FINISHED LEVEL		22.602	22.625	22.625
EXISTING LEVEL		22.588	22.625	22.625
OFFSET		-1.516	-1.449	0

CH 20

RL20.5				
FINISHED LEVEL		22.733	22.484	22.484
EXISTING LEVEL		22.733	22.635	22.484
OFFSET		-2.5	-2.002	0

CH 15

RL20.5				
FINISHED LEVEL		22.378	22.344	22.344
EXISTING LEVEL		22.378	22.363	22.344
OFFSET		-1.726	-1.658	0

CH 10

RL20.5				
FINISHED LEVEL		22.191	22.191	22.191
EXISTING LEVEL		22.118	22.118	22.118
OFFSET		-1.29	-0.964	0

CH 8.44

RL20.5				
FINISHED LEVEL		23.112	22.753	22.753
EXISTING LEVEL		23.112	22.673	22.673
OFFSET		-3.662	-3.038	0

CH 34.13

RL20.5				
FINISHED LEVEL		22.954	22.726	22.726
EXISTING LEVEL		22.954	22.544	22.726
OFFSET		-3.387	-3.078	0

CH 30

RL20.5				
FINISHED LEVEL		22.969	22.726	22.726
EXISTING LEVEL		22.969	22.544	22.726
OFFSET		-5.368	-5.031	0

CH 26

RL20.5				
FINISHED LEVEL		23.111	22.697	22.697
EXISTING LEVEL		23.111	22.264	22.697
OFFSET		-5.548	-4.926	0

CH 22.6

CROSS SECTION

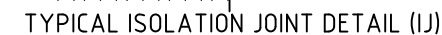
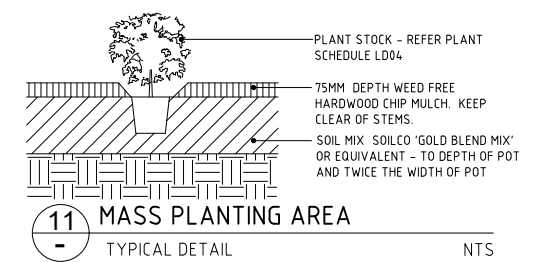
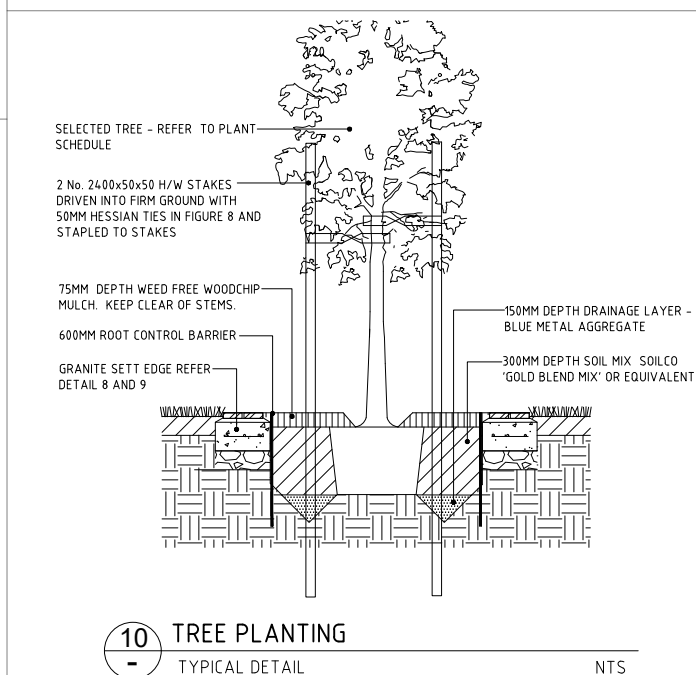
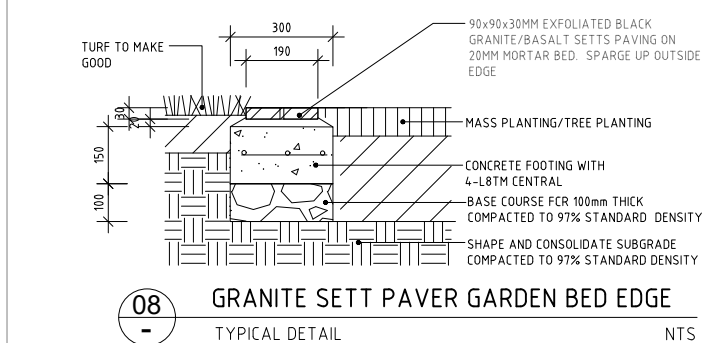
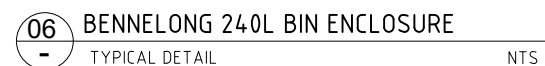
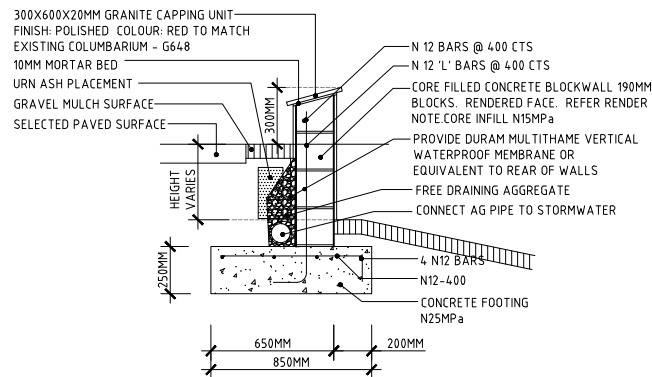
SCALE: 1:100@A1 1:200@A3

RETAINING WALL HEIGHT VARIES - 280MM TO 530MM

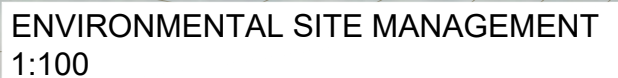
PRELIMINARY PLAN - NOT FOR CONSTRUCTION

CITY OF WOLLONGONG				SHEET 3 OF 7		SHEET No. LD03		A1 ORIGINAL	
EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN				5815		LD03		3	
SCARBOROUGH WOMBARRA CEMETERY				DESIGN & TECHNICAL SERVICES		Ph 02 42277111			
LAWRENCE HARGRAVE DRIVE WOMBARRA									
CROSS SECTION/LONG SECTION									

[illegible]

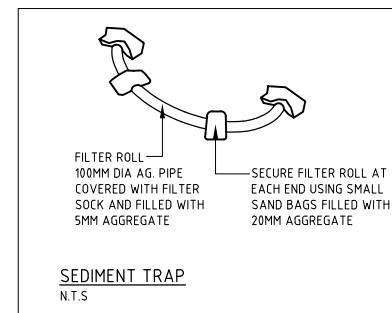


				DATUM AND AZIMUTH MGA	SURVEYOR FIELD BOOK	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)		SCALES	NORTH POINT	CITY OF WOLLONGONG EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN SCARBOROUGH WOMBARRA CEMETERY LAWRENCE HARGRAVE DRIVE WOMBARRA LANDSCAPE DETAILS		PJ or TR No. PJ-2069		A1 ORIGINAL
3		NDR	AG	06/20			SENIOR LANDSCAPE ARCHITECT	AS NOTED			DRAWING No. 5815			SHEET No. LD05	3	
2	MINOR AMENDMENTS - ISSUED FOR DA SUBMISSION	NDR	AG	11/19												
1	ISSUED FOR DA SUBMISSION - DA-2018/1237	NDR	AG	07/16	RELATED PLANS 4686, 5312											
ISSUE	DESCRIPTION	DRAWN	APPR'D	DATE												



1. EROSION & SEDIMENT CONTROLS MUST BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" – SOILS AND CONSTRUCTION – MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS "SD".
2. SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY & FINAL POSITION SHOULD BE DETERMINED ON SITE.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM. SUPERVISING ENGINEER SHALL BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
4. RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE.
5. AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS & STABILISED AS EARLY AS POSSIBLE. COUNCIL'S REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
6. ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE.
7. ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
8. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT. ADJEN WATER UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO S06-H & S06-L2.
9. ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO S06-D & S06-D-9.
10. STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICAADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
11. WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN.
12. NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
13. ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO S06-L4) TO SHAKE OFF SITE CLAY AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.

15. THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.
16. ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
17. PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
18. CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
19. DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME.
20. TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PADS. MATERIAL IS TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS.)
21. ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM COUNCIL'S REPRESENTATIVE.
22. TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOR IS NOT EMITTED.
23. DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPWILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH COUNCIL'S REPRESENTATIVES REQUIREMENT.
24. DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED. MATERIAL IS TO BE RESPAED ON FOOTWAYS AFTER FINAL TRIMMING.
25. UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY COUNCIL'S REPRESENTATIVE AND ACCESS TO THE SEWER OR C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED.
26. TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'
27. PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'



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APPENDIX B: SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS



Planning & Environment

Industry Assessments

Contact: John Booth

Phone: (02) 8275 1281

Email: john.booth@planning.nsw.gov.au

Ms Jo Glynn
Environmental Strategy Officer
Wollongong City Council
41 Burelli Street
WOLLONGONG NSW 2500

SEAR 1298
EF19/1158

Dear Ms Glynn

**Wombarra Cemetery Landscaping and Columbarium Works
Lawrence Hargrave Drive (Lot 7028 Crown DP 1058309) – Wollongong LGA
Planning Secretary's Environmental Assessment Requirements (SEAR) 1298**

I refer to your email of 16 January 2019, seeking the Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above development proposal. I note your proposal would seek development consent to provide a new columbaria and associated landscaping for the continued use and amenity of the Wombarra Cemetery facility.

The Department of Planning and Environment (the Department) has reviewed the documentation submitted and confirms it has no specific requirements applicable to your proposal. You should ensure your EIS meets the minimum form and content requirements outlined in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

In addition, you should ensure your EIS is prepared in consultation with all relevant local, State and Commonwealth government authorities, service providers, community groups and surrounding landowners, and address any issues they raise in the EIS.

If you do not lodge a development application under section 4.12(8) of the *Environmental Planning and Assessment Act 1979* within 2 years of the date of this letter, you must consult with the Planning Secretary in relation to any further requirements for lodgement.

Should you have any further enquiries, please contact John Booth, Planning Services, at the Department on (02) 9274 6273.

Yours sincerely

Kelly McNicol

A/Director

Industry Assessments

as delegate of the Planning Secretary

APPENDIX C: MATTERS FOR CONSIDERATION UNDER SEPP (COASTAL MANAGEMENT) 2018



Area mapped as Littoral Rainforests (Coastal Management SEPP)

Matters for Consideration under the State Environmental Planning Policy (Coastal Management) 2018	Comments
<p>For maps refer to http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement</p>	
<p>Is the proposal within the Coastal Wetlands and Littoral Rainforests Area? <i>SEPP (Coastal Management) 2018, Division 1, cl 10.</i> Environmental protection works on land identified as “coastal wetlands” or “littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map may be carried out by or on behalf of a public authority without development consent if the development is identified in:</p>	<p>Yes Proposed works will be within the area mapped as Littoral Rainforest. However, the mapping is inaccurate and no rainforest occurs here (see map).</p>
<p>(a) the relevant certified coastal management program, or</p>	<p>Wollongong Coastal Zone Management Plan</p>
<p>(b) a plan of management prepared and adopted under Division 2 of Part 2 of Chapter 6 of the <i>Local Government Act 1993</i>, or</p>	<p>N/A</p>
<p>(c) a plan of management approved and in force under Division 6 of Part 5 of the <i>Crown Lands Act 1989</i>.</p>	<p>N/A</p>

<p>A consent authority must not grant consent for development referred to in subclause (1) of Division 1, cl10, unless the consent authority is satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland or littoral rainforest.</p>	<p>Provisions have been made within the Design to ensure that the area of Littoral Rainforest will be protected:</p> <p>Fencing and signs 'no go zones' will be erected prior to works.</p> <p>Induction for personnel.</p> <p>Management of waste and runoff.</p>
<p>Is the proposal within the Proximity to Coastal Wetlands and Littoral Rainforests Area?</p> <p><i>SEPP (Coastal Management) 2018, Division 1, cl 11.</i></p> <p>Development consent must not be granted to development on land identified as "proximity area for coastal wetlands" or "proximity area for littoral rainforest" on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on:</p>	<p>Yes</p>
<p>(a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or</p>	<p>No significant impact</p> <p>The area of works will only impact directly on already cleared area – Kikuyu grass. No Littoral Rainforest or Coastal Wetlands will be impacted.</p> <p>Safeguards will be in place to ensure the adjacent vegetation will not be harmed in any way (see Chapter 6).</p>
<p>(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.</p>	<p>No significant impact</p> <p>There will be no impact to ground water from the proposed works.</p>
<p>Is the proposal within the Coastal Vulnerability Area?</p> <p><i>SEPP (Coastal Management) 2018, Division 2, cl 12.</i></p> <p>Development consent must not be granted to development on land that is within the area identified as "coastal vulnerability area" on the Coastal Vulnerability Area Map unless the consent authority is satisfied that:</p>	<p>Not mapped yet, but must be considered in all Coastal SEPP areas until mapping is completed. Refer to Wollongong Coastal Zone Management Plan hazard lines in Dekho.</p>
<p>(a) if the proposed development comprises the erection of a building or works—the building or works are engineered to withstand current and projected coastal hazards for the design life of the building or works, and</p>	<p>Yes</p> <p>The design of the proposed works has taken into account the possible coastal hazards presented at this location. The design life of the project is suitable for the use of the structures.</p>
<p>(b) the proposed development:</p> <p>(i) is not likely to alter coastal processes to the detriment of the natural environment or other land, and</p>	<p>Confirmation that the proposed development will not alter any coastal processes. There will be no detriment to the natural environment. The design will further protect the existing natural environment at the site.</p>
<p>(ii) is not likely to reduce the public amenity, access to and use of any beach, foreshore, rock platform or headland adjacent to the proposed development, and</p>	<p>Proposal will improve public amenity and access at the location, and will not impede any access to the beach/foreshore/rock platform/headland.</p>
<p>(iii) incorporates appropriate measures to manage risk to life and public safety from coastal hazards, and</p>	<p>Yes</p>

	The design has taken appropriate measures to mitigate public risk at the location.
(c) measures are in place to ensure that there are appropriate responses to, and management of, anticipated coastal processes and current and future coastal hazards.	Yes Operation of the cemetery will not be changed by the proposed works. The cemetery will be managed appropriately to address hazards at the location.
Is the proposal within the Coastal Environment Area? <i>SEPP (Coastal Management) 2018, Division 3, cl 13.</i> (1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:	Yes
(a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,	Minimal impact The proposed works are contained to within the cemetery and improve integrity and resilience of the area by ensuring the existing natural features are maintained and protected.
(b) coastal environmental values and natural coastal processes,	No impact The proposed works will not create overshadowing or impact or be impacted by coastal processes.
(c) the water quality of the marine estate (within the meaning of the <i>Marine Estate Management Act 2014</i>), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,	No impact The proposed works are approximately 30 m away from the foreshore and is not a waste generating development during operation. Potential waste may be generated during the construction phase, with appropriate safeguards in place to minimise and contain any construction waste.
(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,	No impact The area is currently a developed headland. All native vegetation and fauna will be protected at the location.
(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	Improvements The proposed development will improve the existing public space and access.
(f) Aboriginal cultural heritage, practices and places,	Minimal impact Aboriginal cultural heritage will be protected and managed through an Aboriginal Heritage Impact Permit.
(g) the use of the surf zone.	N/A
(2) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:	

(a) the development is designed, sited and will be managed to avoid an adverse impact referred to in subclause (1), or	Minimal impact Statement of Environmental Effects has been prepared to address site impacts at the location. The design of the proposal has taken into account aspects addressed in subclause (1) above
(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or	N/A
(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.	Yes Statement of Environmental Effects has been prepared to address site impacts at the location.
Is the proposal within the Coastal Use Area? <i>SEPP (Coastal Management) 2018, Division 4, cl 14.</i> Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:	Yes
(a) has considered whether the proposed development is likely to cause an adverse impact on the following: (i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	N/A Proposed works are not along the foreshore.
(ii) overshadowing, wind funneling and the loss of views from public places to foreshores,	No Impact There will be no overshadowing, wind funneling or loss of views.
(iii) the visual amenity and scenic qualities of the coast, including coastal headlands,	Minimal impact There will be no loss of visual amenity or scenic quality. The only vertical element will be the new columbarium which have been designed to have minimal visual impact.
(iv) Aboriginal cultural heritage, practices and places,	Minimal impact Aboriginal cultural heritage will be protected and managed through an Aboriginal Heritage Impact Permit.
(v) cultural and built environment heritage, and	Minimal impact The cultural and built environment has been considered and assessed as not being adversely impacted, as it is a low-impact footpath construction.
(b) is satisfied that: (i) the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or	Minimal impact A Statement of Environmental Effects has been prepared, and safeguards are in place to ensure the proposal does not have an adverse impact on the environment.
(ii) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or	Minimal impact A Statement of Environmental Effects has been prepared, and safeguards are in place to ensure the proposal does not

	have an adverse impact on the environment.
(iii) if that impact cannot be minimised—the development will be managed to mitigate that impact, and	<p>N/A</p> <p>A Statement of Environmental Effects has been prepared, and safeguards are in place to ensure the proposal does not have an adverse impact on the environment.</p>
(d) has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.	<p>Yes</p> <p>The design has considered the bulk, scale and size of the proposal to ensure it aligns with the surrounding coastal and built environment.</p>

APPENDIX D: GEOTECHNICAL INVESTIGATIONS



PLEASE QUOTE

Memo to be Filed ☐

Ref: KB
Ext: 8106
File No: GT16.392 rev1

Wednesday, 27 July 2016

To: WCC LANDSCAPING: Ms Nyrie Davis-Raiss

**Re: SCARBOROUGH CEMETERY MEMORIAL WALLS
GEOTECHNICAL INVESTIGATION**

I refer to an email from your office requesting a geotechnical investigation be performed at the above site. It is understood that the purpose of the investigation is to determine the geotechnical support conditions for a memorial ash wall structure.

The structure consists of two pairs of four (in total) large granite monoliths on two independently piered concrete slab footings estimated from the landscape design 5815 LD06 1 at 1.2m wide by 3.6m long in plan and some 1.3m in height. The weight of each granite unit has been estimated at 3 to 4 tonnes. The design also includes a corefilled blockwork retaining wall to 0.8m in height on a stiffened concrete cantilevered footing some 850mm wide.

A geotechnical investigation was completed on the 11th July 2016.

1.0 SITE DESCRIPTION and GEOLOGICAL PROFILE

The site for the construction is approximately 5m by 4m and is located within a gently sloping (about 3 degrees) grassed area of the south eastern part of the cemetery, in close proximity (about 3m) to the top of the coastal embankment. This embankment is approximately 25m in height and is approximately 45 degrees, sloping down to the sea. The sandstone cliffs immediately to the north are vertical and show evidence of coastal weathering and erosion due to wave attack and column failure.

Reference to the 1:100,000 Geological Landscape Maps supplied by the Department of Mineral resources indicate that the site is underlain by Permian rocks of the Illawarra Coal Measures (Sydney Subgroup, Pis), consisting of interbedded sandstones, siltstones, carbonaceous claystones and coal layers. These rocks are typically weak and prone to weathering on exposure.

Residual soils overlying these rocks are expected to contain sandy and silty clays tending to gravelly clays as rock is encroached. On slopes, colluvial variants of the above are expected.

Uncontrolled fills are expected across the site mainly related to the dumping and regrading of grave sites over time.

METHOD

One (1) test pit (TP 1) was excavated at the approximate centre of the proposed wall construction in order to inspect and characterise the subsurface profile. This test pit was taken to extremely weathered bedrock refusal at 1.57m depth from the local surface..

The site was further investigated by two (2) Dynamic Cone Penetrometer tests (DCPs 1 and 2) in order to assess the underlying soil strength and consistency. Penetrometer tests were taken to a maximum refusal depth of 1.66m, roughly coincident with the determination of rock in the test pit.

The test locations are shown on the attached drawing GT16.392 – D1.

RESULTS

The test pit logs and drawings are attached.

DISCUSSION

Subsurface Conditions

TP1 shows this site has a 0.55m layer of clayey silt and gravelly clays overlying the natural soil profile. This upper material appears to be previously excavated local soils probably from the excavation of graves. There was recent evidence of this practice at other locations within the cemetery. These fills are not controlled, not well placed or compacted, and have become overly moist.

The natural profile began at 0.55m depth consisting of a remnant topsoil layer to 0.8m with a gradually improving layer of sandy to gravelly clay underneath to a depth of around 1.6m where weathered sandstone bedrock was encountered.

DCP tests show consistent very low bearing capacity in the upper 1.0m of the profile.

Groundwater

DCP1 was extracted wet from 0.4m depth, roughly incident with the natural soil interface beneath fills. Tests conducted on sample U50 – 1 indicate a very high local moisture content of 48% and a predisposition to consolidation settlement under a modest 25kPa loading.

Site Reactivity – slabs and footings

An undisturbed U50 tube sample (U50 – 1) recovered from TP1 returned a shrink swell value (AS1289.7.1.1) of 5.37 %e/ Δ pF, typically indicating extreme reactivity. Considering the entire profile, the seasonal vertical movement at this site was calculated at 47mm.

The presence of excessive uncontrolled and poorly placed clay fill and excessive moisture in the column indicates engineered footings are required for the support of any structures on this site.

Instability and Construction Within the Coastal Buffer

The entire site is mapped within the WCC Coastal Geotechnical Risk zone, indicating instability due to the actions of the sea (wave attack, scour) needs to be considered in designing structures built upon the affected land.

The sea cliff below and to the north of the site is weak sandstone and shale laminates with coal layering and clay seams prone to column and stack collapse. The rate of retreat of parts of this headland is variable with an average estimated to be in the range of 0.5 – 1.5m/100 years.

Directly beneath the site, the bedrock shelf is obscured by a veneer of soils at a roughly 45 degree slope and covered in vegetation. The angle of the soils (whether natural or fill) and the saturation of the slope strongly indicate that creep over time will affect this site and will likely be accelerated by scour at the toe due to wave attack.

At this location, and considering the long term and monolithic nature of the structure, it is considered that a ***high risk to assets*** classification would apply to shallow footed developments, which can be reduced to moderate to low by appropriate piercing to rock.

Bearing Capacity

DCP tests indicate the upper 1.0m of fills and natural soils (beneath the topsoil veneer) has an Allowable Bearing Capacity Q_{all} of 50kPa, and may settle between 15 to 40mm over time as the bearing consolidates for loads above 25kPa.

The estimated factored loading at underside of each slab is estimated at 30kPa hence piercing or blockdowns will be required.

Consistent and suitable bearing on sandy and gravelly clays rated to $Q_{all} = 100\text{kPa}$ exists beyond 1.0m depth. Bearing on bedrock is indicated by refusal to medium auger or screw piles at around 1.6m depth and rated to $Q_{all} = 400\text{kPa}$ without further testing.

Bearing on rock using piles should ensure much greater longevity of the structure and negation of any problems associated with settlement.

Suitable Footing Types – monolith ash slabs

It is considered that the relatively low cost to benefit of piercing to rock at 1.6m is very worthwhile at this site. The patterning under concentrated loads and edge beams should be approximately symmetrical and preliminary calculations indicate that suitable support can be provided with as few as 8 piers at 300mm diameter each bearing on rock.

Blockdowns excavated to the 100kPa level at 1.0m depth or greater may also be practicable alternative, patterned as shown on 5815 LD06 however any structure bearing within the soil profile will eventually be more susceptible to the effects of coastal erosion.

Screw piles are also an alternative, however the embedment is on the limit of performance for stability at 1.6m depth. 400mm helix double galvanised 114mm flight screws refusing on rock typically have a rated capacity of 25t (245kN) indicating a minimal amount (say, 6 each) for the support of these structures.

Strip footing – retaining wall

Design cross sections in plan set 5815 show a relatively shallow footed retaining structure, with the footing constructed just below existing surface. The estimated vertical load of this structure is around 15kPa.

Bearing capacity of the upper fills is rated at 50kPa generally. Provision for over excavation by a further 100mm and granular replacement of the subgrade may be required once the footing is inspected following excavation, in order to achieve a relatively uniform bearing.

Waste Classification - preliminary

The fills at this site contain regraded local clayey and silty soils to a depth of around 0.6m. No direct evidence was found to indicate the presence of any contamination, coal tar or asbestos. These fills are not a known hazardous waste and are therefore preliminarily assessed as ***General Solid Waste (GSW) – non-putrescible***

Natural clay, gravelly clay soils and rock underlying the fills at this site are classified as VENM (Virgin Excavated Natural Material).

This preliminary waste classification assessment is based on borehole logs and our available prior site history information. The constructor is responsible for the confirmation of the most appropriate classification at the time of excavation and disposal.

RECOMMENDATIONS

Construct the monoliths on stiffened raft slab pierced to bedrock at 1.6m depth, in order to reduce the effects of coastal instability as much as possible, and differential settlement. Piers may be either bored cast in place concrete at the time of footing construction, or protected steel screw piles.

Preliminary calculations indicate a minimal number (around 8) 300mm diameter bored concrete, or 400mm diameter steel screws are sufficient for support of a suspended slab bearing on rock.

The alternative of blockdowns can meet the structural requirement and are easy to construct however are more susceptible to coastal erosion effects in time.

The design of the retaining wall structure as shown is suitable for this site with a contingency for over excavation and granular replacement where heaving or soft areas of the subgrade trench are detected.

This document is issued on behalf of Wollongong City Council by

Authored

Reviewed

**Kevin Bogie
Geotechnical Engineer
Infrastructure Division**

**Peter Tobin
Senior Geotechnical Engineer
Infrastructure Division**

Dynamic Cone Penetrometer Log Sheet

GT16.392 Scarborough Cemetery Memorial Walls








Date: 11/7/2016

DEPTH (mm)	DCP1 (SE cnr)	DCP2 (NW cnr)
100	SW	1
200	2	3
300	2	3
400	3	3
500	2	2
600	2	2
700	2	4
800	2	6
900	2	7
1000	4	7
1100	4	6
1200	6	7
1300	9	6
1400	14	9
1500	16	12
1600	18	22-80
1700	19-60	B-Ref @ 1.58m
1800	B-Ref @ 1.66m	
NOTES:	Wet from 0.4m	No water found

LEGEND	
<i>Term</i>	Test Terminated
<i>B-Ref.</i>	Bouncing Refusal
<i>V-Ref.</i>	Virtual Refusal
<i>TW</i>	Tip Extracted Wet
<i>RoT</i>	Rock on Tip

Engineering Log - Borehole

Wollongong City Council - Geotechnical Services

Client: WCC Project : Scarborough Cemetery Memorial Walls – Geotechnical Investigation Location : NW corner @ DCP2 – Refer to location map						Lab Number : GT16.392 Borehole No : TP1 Date : 11/07/2016 Logged/Checked by: TH/KB				
Drill Model & Mounting: Hand Auger Slope: 0 deg. Hole Diameter: 100mm Bearing: 90 deg.						R.L. surface: Approx. 23m Datum: AHD				
Method	Groundwater	Samples	Field Tests	Depth or R.L. in meters	Graphic Log	Classification Symbol	MATERIAL DESCRIPTION <small>Soil type, plasticity or particle characteristic, colour secondary and minor components</small>	Moisture Condition	Consistency Density Index	Remarks & additional observations
Hand Equipment	None Detected	U50 - 1	DCP2 – Refer to DCP Log Sheet	0.11		Ts/ F	Topsoil Fill; clayey gravelly silt, bark brown, with grass roots	M to W		
				0.2		F	Fill; topsoil, clayey silt & gravelly clay (high plasticity), dark grey, light grey, red-brown	M to W		Appears variably compacted
				0.4		MH	Clayey SILT; high plasticity, dark brown	M >> PL	F	
				0.55		CH	Silty CLAY; high plasticity, dark brown	M > PL	F to St	
				0.6		CI/ CH	Silty sandy CLAY; medium to high plasticity, orange-brown, light grey bands	M > PL	St	
				0.97		RS/ XW	Claystone residual; medium grey, grey clay bands, extremely low strength, friable			
				1.0			TP1 terminated at 1.57m (limit of hand equipment)			
				1.2						
				1.4						
				1.51						
				1.6						
				1.8						



GT16.392 – D1
Scarborough Cemetery Memorial Walls
Test Location Drawing

INTERNAL USE ONLY

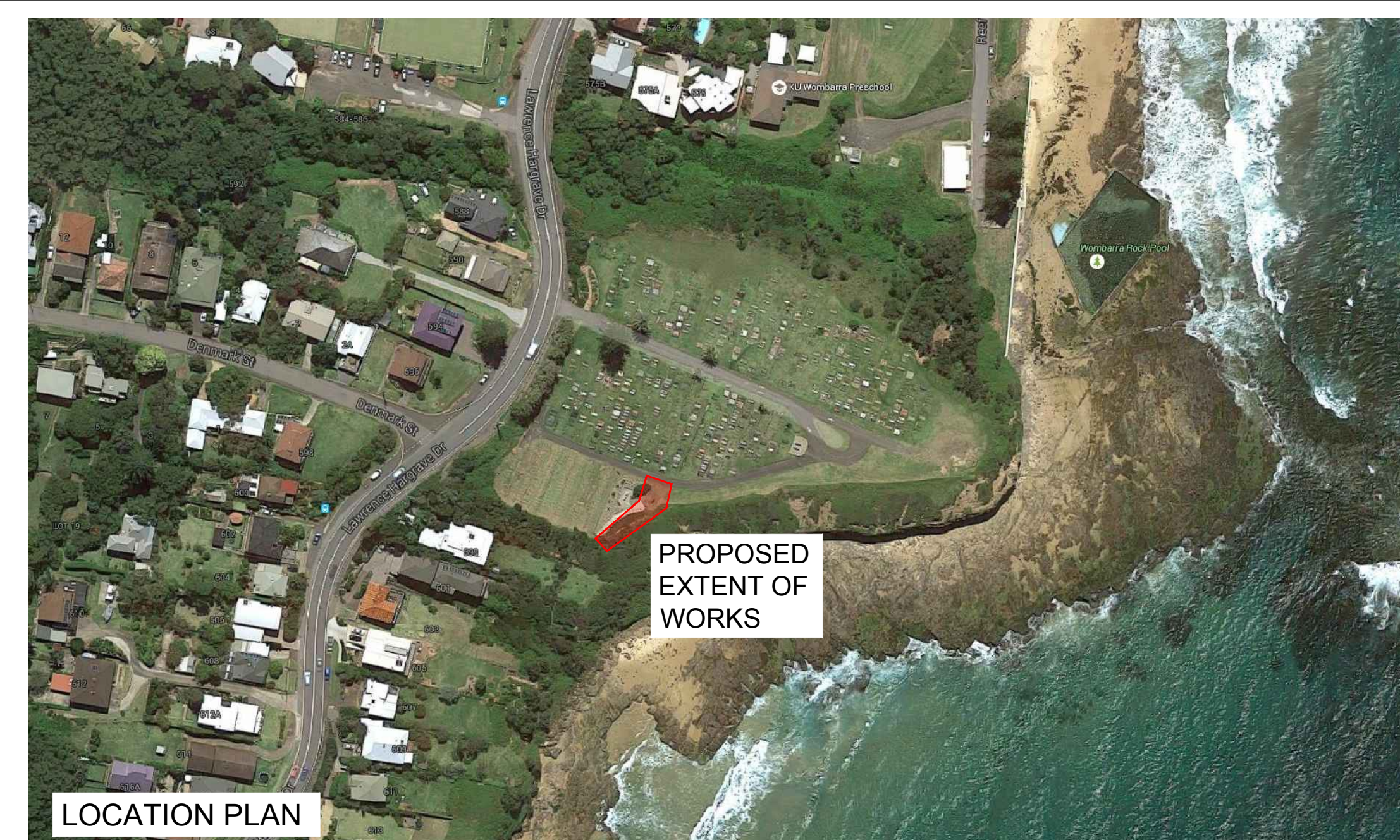
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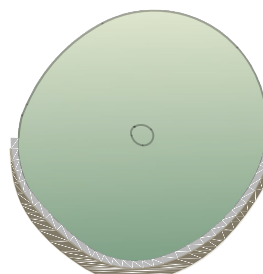
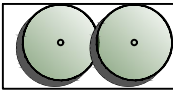

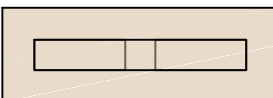

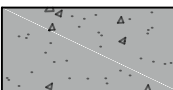
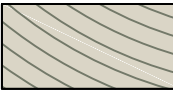

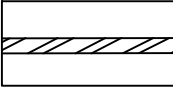

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- # LEGEND
- | | |
|---|--|
|  | PROPOSED TREES |
|  | SHRUB PLANTING |
|  | GARDEN SEATS |
|  | GRANITE COLUMBARIUM |
|  | EXISTING MEMORIAL ROCK PLACEMENTS |
|  | HONED CONCRETE SURFACE |
|  | RADIAL PATTERN BRICK PAVING |
|  | GRAVEL SURFACE TO MATCH EXISTING |
|  | CONCRETE BLOCK RETAINING WALL WITH POLISHED GRANITE CAPPING UNIT |
|  | TURF |

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

					DATUM AHD	SURVEYOR	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)		SCALES	NORTH POINT	CITY OF WOLLONGONG	PJ or TR No. PJ-2069		A1
					AZIMUTH MGA	FIELD BOOK	DESIGNED NDR	DATE 06/16	SENIOR LANDSCAPE ARCHITECT			AS NOTED	EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN SCARBOROUGH WOMBARRA CEMETERY LAWRENCE HARGRAVE DRIVE WOMBARRA LANDSCAPE CONCEPT PLAN	SHEET OF SHEETS		ORIGINAL
					RELATED PLANS 4686, 5312		CHECKED AG	DATE 06/16	DATE					DRAWING No.	SHEET No.	ISSUE
														5815	SK01	1
1	ISSUED FOR REF/SEE AND APPROVALS				NDR	AG										
ISSUE	DESCRIPTION				DRAWN	APP'R'D	DATE									

Kevin Bogie

From: Nyrie Davis-Raiss
Sent: Tuesday, 12 July 2016 8:54 AM
To: Kevin Bogie
Subject: RE: Request for geotechnical report - Scarborough Wombarra Cemetery

Hi Kevin,

W/O is 1359720

Weight of granite ash placement walls approx. 3-4 tonne. And concrete block retaining walls approx. 600mm high.
Photo of granite wall below.



APPENDIX E: HISTORICAL ARCHAEOLOGICAL ASSESSMENT



Wombarra Scarborough Cemetery works Historical archaeological assessment

FINAL REPORT

Prepared for Wollongong City Council

30 September 2016

Document information

Report to:	Wollongong City Council
Prepared by:	Lian Flannery
Biosis project no.:	22990
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- Jo Glynn Wollongong City Council

Biosis staff involved in this project were:

- Ashleigh Pritchard for mapping.
- Alex Beben for quality assurance.

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Glossary

Burra Charter	The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance.
CHL	Commonwealth Heritage List
DoE	Commonwealth Department of the Environment
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GPR	Ground penetrating radar
LEP	Local Environment Plan
LGA	Local Government Area
NHL	National Heritage List
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
RNE	Register of National Estate
SHR	State Heritage Register
study area	The broader area of Observatory Park in which the subject site is located

Executive summary

Biosis Pty Ltd was commissioned by Wollongong City Council to undertake a historical archaeological assessment and statement of heritage impact of the proposed upgrade works to Scarborough Wombarra Cemetery, NSW. This report is intended to support a statement of environmental effects that council is preparing which will accompany a development application.

The proposed development will include landscaping and footpaths, the installation of two granite columbaria. The works will involve subsurface excavations for the planting of new trees, the demolition of concrete paths, garden edging, levelling and removal of soils for the new pathways. As part of the construction activity the relocation and temporary storage of present memorials will be required within the impact zone of works.

The study area has been assessed previously as a heritage item of local significance;

Wombarra general cemetery is of significance for Wollongong area for historical, aesthetic, scientific and social reasons. The cemetery is associated with creation of the adjacent mining village and has the ability to interpret history of the area. It has significant associations with the interred and commemorated persons, and social importance for the wider community. It meets aesthetic criterion as a local landmark, and it comprises a representative collection of monuments that make a major contribution to local area character and community's sense of place. The cemeteries generally are of major importance for those local community members who have family members interred in the grounds. The site has potential to reveal further information about the past of the area.

The archaeological potential for the study area has been assessed as low as there is no evidence of use prior to the early twenty first century. The cemetery was formalised in the late nineteenth century with the first interment in 1893 in the northern portion of the cemetery. The study area was unused and contained indigenous vegetation until the early twenty first century when the cemetery started utilising the area for commemorative columbaria, plantings, sandstone rocks with plaques and formal pathways and seating.

The project will include temporary impacts to the heritage significance of the Scarborough Wombarra Cemetery during works however once finalised will contribute to the local significance of the cemetery to the local community by providing more space for the interment and commemoration of the deceased.

This assessment has not identified any constraints for the project.

The recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable whilst retaining its cultural significance.¹

Recommendation 1 **Sympathetic design of landscaping and architectural features**

¹ Australia ICOMOS 2013

The design of the architectural elements and landscape features of the proposed works should be sympathetic to the heritage landscape of the cemetery and be inline with conservation principals as outlined in the NSW cemeteries guidelines² and the WDCP.³

Recommendation 2 **Chance finds procedure**

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

- **Discovery:** If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
- **Notification:** Once suspected human skeletal remains have been found, the Coroners Office and the NSW Police must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and DECCW NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

Relics are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics not skeletal in nature be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

² Department of Planning Heritage Council New South Wales, 1992

³ Wollongong Development Control Plan, 2009

1 Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by Wollongong City Council to undertake a historical archaeological assessment and statement of heritage impact of the proposed upgrade works to Scarborough Wombarra Cemetery, NSW (Figure 1). This report is intended to support a statement of environmental effects that council is preparing which will accompany a development application.

1.2 Location of the study area

The study area is located within the suburb of Wombarra in the Wollongong Local Government Area (LGA), Parish of Southend, and County of Cumberland (Figure 1). The study area is a small section of the cemetery located on the southern boundary. It includes extant commemorative garden and columbaria and portions of grassed/vegetated areas (Figure 2).

1.3 Scope of assessment

This report was prepared in accordance with current heritage guidelines including *Assessing Heritage Significance*, *Assessing Significance for Historical Archaeological Sites and "Relics"*, the *Burra Charter* and *Cemeteries, guidelines for their care and conservation*.⁴ This report provides a heritage assessment to identify if any heritage items or relics exist within or in the vicinity of the study area. The heritage significance of these heritage items has been investigated and assessed in order to determine the most appropriate management strategy.

The following is a summary of the major objectives of the assessment:

- Identify and assess the heritage values associated with the study area. The assessment aims to achieve this objective through:
 - Providing a brief summary of the principle historical influences that have contributed to creating the archaeological and present-day built environment of the study area using sources already available and some limited new research.
 - Assessment of the heritage significance of sites and features within the study area which are not recognised through statutory heritage listings.
 - Ascertain the potential for significant archaeological remains to be present within the study area.

⁴ NSW Heritage Office 2001, NSW Heritage Branch, Department of Planning 2009, Australia ICOMOS 2013, Department of planning NSW Heritage Council 1992.

- Assess the impact of the proposed works on the archaeological and built resource.
- Identifying statutory context of archaeological remains which through statutory heritage listings.
- Recommend measures for the management of the archaeological and built resource.

1.4 Limitations

This report is based on historical research and field inspections. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the evidence in this report.

Although this report was undertaken to best archaeological practice and its conclusions are based on professional opinion, it does not warrant that there is no possibility that additional archaeological material will be located in subsequent works on the site. This is because limitations in historical documentation and archaeological methods make it difficult to accurately predict what is under the ground.

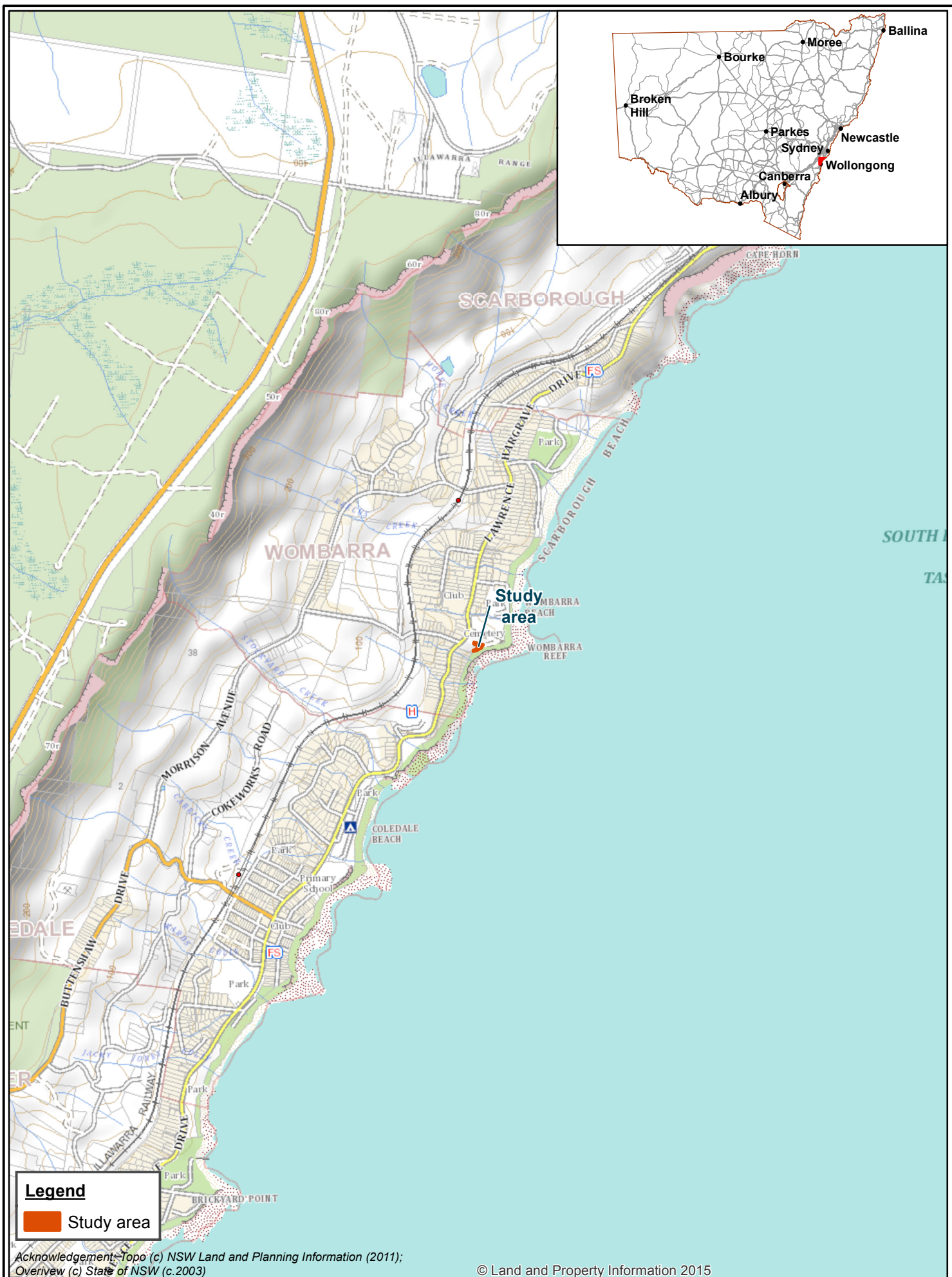
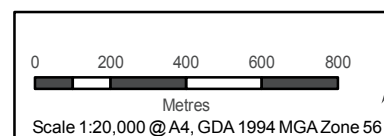


Figure 1: Location of the study area



Biosis Pty Ltd
Ballarat, Brisbane, Canberra, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Matter: 22990
Date: 16 September 2016,
Checked by: LCF. Drawn by: aprichard
Location: P:\22900s\22990\Mapping\22990_SoH1_F1_Locality





Legend


 Study area

Figure 2: Overview of the study area

0 2.5 5 7.5 10 12.5
Metres
Scale: 1:250 @ A3
Coordinate System: GDA 1994 MGA Zone 56

 **biosis**
Biosis Pty Ltd
Ballarat, Brisbane, Canberra, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Matter: 22990
Date: 16 September 2016
Checked by: LCF Drawn by: ANP Last edited by: apritchard
Location: P:\22900s\22990\Mapping\22990_SoH1_F2_Overview

2 Historical context

Historical research has been undertaken to identify the land use history of the study area, to isolate key phases in its history and to identify heritage values associated with the study area. The historical research places the history of the study area into the broader context of the Illawarra region and specifically the Wombarra district.

2.1 Aboriginal past

The region was originally inhabited by the Tharawal (also Dharawal, Darawal, Carawal, Turawal, and Thurawal) linguistic group. The named groups (often referred to as 'clans', 'bands' or 'tribes') belonging to the Tharawal/Dharawal language group included the following: Gweagal, Norongerraga, Illawarra, Threawal, Tagary, Wandeandegga, Wodi Wodi and Ory-ang-ora. In his overview of Australian Aboriginal tribal boundaries, Tindale places the Illawarra area within the territory of the Wodi Wodi tribe (or 'named group').⁵ Tindale describes the Wodi Wodi named group as occupying the area north of the Shoalhaven River to Wollongong.⁶

Ethnographic evidence considered by Sefton indicates population mobility on the Woronora Plateau with frequent contact between the neighbouring Gandangarra, Cobrakall (Liverpool and Cabramatta) and Wodi Wodi (Illawarra).⁷ The traditional Wodi Wodi land extended from around Stanwell Park to the Shoalhaven River and as far inland as Picton, Moss Vale and Marulan. Many of the town and place names of the Illawarra are derived from the Dharawal language.

Historic accounts for the Illawarra region that specifically reference the Aboriginal inhabitants are scarce. Some early ethnographic accounts suggest that at the time of European occupation, a highly mobile, largely dispersed Aboriginal population occupied the region.⁸ It is thought that there were slightly higher populations near Lake Illawarra given the resource base associated with and accessible at the Lake. Based on the varied environmental zones along the south coast it is unlikely that consistent, large scale movement from east to west was prevalent.

The arrival of European colonists wrought swift and catastrophic change to the Aboriginal people of the Illawarra region. Europeans began appearing in the region before the end of the eighteenth century and by the first decades of the nineteenth century a forestry industry had begun. Other industries began to become more prevalent in the region, including pastoralism and dairying, bringing more and more non-Aboriginal people into the area resulting in restricted access to the traditional hunting grounds of the Tharawal and Wodi Wodi. Conflict, disease and dispossession took a terrible toll on the Wodi Wodi and Tharawal peoples. In 1820, approximately 3000 Aboriginal people were living in the Illawarra, but by 1899 their numbers had

⁵ Tindale, N. 1940 p.194-201

⁶ *ibid* p.194-195

⁷ Sefton, C. 1980 p.22-29

⁸ Suggested through research compiled by Sullivan 1982 and Organ 1990

declined to only 33 people of non-mixed descent.⁹ Today many Wodi Wodi and Tharawal people continue to live in the Illawarra.

2.2 Topography and resource exploitation

The study area is located within Wollongong (Coastal) Plain physiographic region and is within the Berry formation of the Shoalhaven group of geological units. It consists of the gentle rises of the Illawarra Coal Measures, rolling to steep low hills of volcanic materials and undulating Budgong Sandstone and Quaternary alluvium. The Illawarra Coal Measures is Permian in age (299 – 251 million years ago) and consists of shale, sandstone, conglomerate, tuff, chert and coal. Quaternary alluvium consists of gravel, swamp and dune deposits that have been forming for the last 2.6 million years. These low lying areas are almost completely cleared of forest and woodland. The Illawarra Coal Measures consist of stratified late Permian coal measures which are inter-bedded ¹⁰with the Hawkesbury Sandstones and these coal measures. These coal measures which were noted since the early colonial period, have been a major resource in stimulating the economic and industrial development of the Illawarra.

The Wollongong Plain region includes Coledale, Thirroul, Woonona, Bellambi, Towradgi and Wollongong Beaches. This physiographic unit has formed from the gradual recession, westward, of the Plateau.¹¹ The Coastal Plain is characterised as a mosaic of foothills, ridges, spurs, hillocks and floodplains with slopes varying from very gently inclined to steep with the occasional low cliff. The Coastal Plain is dissected by easterly flowing streams at intervals that become more frequent towards the north. This unit is geomorphically active and the dunes are subject to deflation and erosion.¹²

⁹ Organ 1990

¹⁰ Hazelton, 1990

¹¹ Bowman, 1971

¹² Dallas, 1995

2.3 The historical development of the Wombarra region

2.3.1 Exploration (1817 to 1872)

The Illawarra district was first noted by Lt James Cook in 1770 when he located the headland of Port Kembla, naming it 'Red Point'.¹³ He also identified a large hill which looked like the crown of a hat. This was Mount Kembla, which was known as Hat Hill in the early days of the settlement.¹⁴ The next recorded Europeans to visit the Illawarra district were Bass and Flinders who in 1796 sailed along the south coast from Sydney in their small boat, *Tom Thumb*.¹⁵ Following their landing near Tom Thumb Lagoon, they entered Lake Illawarra and made the first recorded contact with the Aboriginal people in the Illawarra.¹⁶

In 1797 the ship *Sydney Cove* was wrecked in Bass Strait and survivors made their way through the area to find help, losing several members of their party to 'hostile natives' as they went.¹⁷ Camping overnight at Coal Cliff, the survivors used coal found in a seam to keep warm. The survivors were eventually rescued and taken to Sydney, where their report of the coal led Bass to be sent back to the area to investigate the report.¹⁸ The location of the six foot thick coal seam recorded by Bass has since been identified as the 'No. 1' or Bulli seam.¹⁹ This resource was not utilised for a further 80 years. During this visit Bass also located and named the Shoals-haven and the Shoalhaven River.²⁰



Plate 1: 'Coal Cliffs, Illawarra NSW' by R.M. Westmacott c.1840. Stratified coal seams are visible in the headland. (Source: NLA)

The first settlement in the Illawarra region was established by Charles Throsby, who cut a cattle track from Glenfield to just behind South Beach, Wollongong, where he constructed a stockman's hut and cattle yard in

¹³ Lindsay et al. 1994 p.1; McDonald 1966 p.5

¹⁴ McDonald 1966 p. 5

¹⁵ Lindsay et al. 1994: 1

¹⁶ McDonald 1966: 10

¹⁷ McDonald 1966 p.17

¹⁸ Lindsay et al. 1994 p.2

¹⁹ Harper 1916

²⁰ *ibid*

1815.²¹ Joe Wild was Throsby's stockman, and was also made constable of the district of Five Islands in 1815.²² The following year, Surveyor-General John Oxley was sent to the Illawarra region to make a general survey of the area and to connect it to the known parts of the colony, as well as identify specific lands for prospective grantees.²³

2.3.2 Early settlement in the region

The earliest settlements in the Colony were generally located in areas such as rivers and coastal areas which could be easily accessed by boat. Transport by water was vital for the development of the colony as passengers and goods could be moved with little requirement for capital works. The south coast of New South Wales was settled following this pattern with coastal or riverine locations chosen for the earliest settlements.

The first settlement in the Illawarra region was established by Charles Throsby Smith (C.T. Smith), who cut a cattle track from Glenfield to just behind South Beach, Wollongong, where he constructed a stockman's hut and cattle yard in 1815.²⁴ Joe Wild was Throsby's stockman, and was also made constable of the district of Five Islands in 1815.²⁵ The following year, Surveyor-General John Oxley was sent to the Illawarra region to make a general survey of the area and to connect it to the known parts of the colony, as well as identify specific lands for prospective grantees.²⁶ Although C.T. Smith was the first to pasture cattle in the Illawarra, closely followed by John Oxley, neither received land grants in the Illawarra region.²⁷ The first five grants in the area were made in 1821 to absentee landlords, who ran cattle on their lands with a few stockmen present.²⁸ C.T. Smith was promised Bustle Farm in 1821; however, the deed of grant for his 300 acres, which would eventually become the site for the Town of Wollongong, was not issued until the 20 December 1835.

The Illawarra region was attractive not only for its rich pasture, but also for its Red Cedar, which was exploited by the early timber cutters. Between the cattlemen and the cedar cutters, passage into the Illawarra region was found.²⁹ Grants continued to be made in the Illawarra region, comprising essentially free grants with easy terms, until August 1831, when land could only be purchased at auction.³⁰ Following the gazetting of the Crown Lands Act 1861 any un-alienated land was taken up as Conditional Purchase holdings.³¹

The first settlements along the fertile strip of coastal land between the mountains and the sea along the northern Illawarra coastline was collectively known as Bulli.³² An 1835 surveyor's map (Plate 2) shows the

²¹ Osbourne, 2000 p.1

²² McDonald 1966 p.28

²³ Osbourne 2000 p.6

²⁴ Osbourne 2000, one

²⁵ McDonald 1966, 28

²⁶ Osbourne 2000, 6

²⁷ Dowd 1977, 2

²⁸ McDonald McPhee Pty Ltd 1991, 21

²⁹ Lindsay 1994, 4

³⁰ *ibid* p.32

³¹ *ibid* p.41

³² Bayley, 1989

study area and the local region was largely unoccupied, with only three land grants. William Chippendale's grant of 300 acres, Jane Rose's grant of 60 acres and Matthew Gibbons 1000 acres called Stanwell Park.

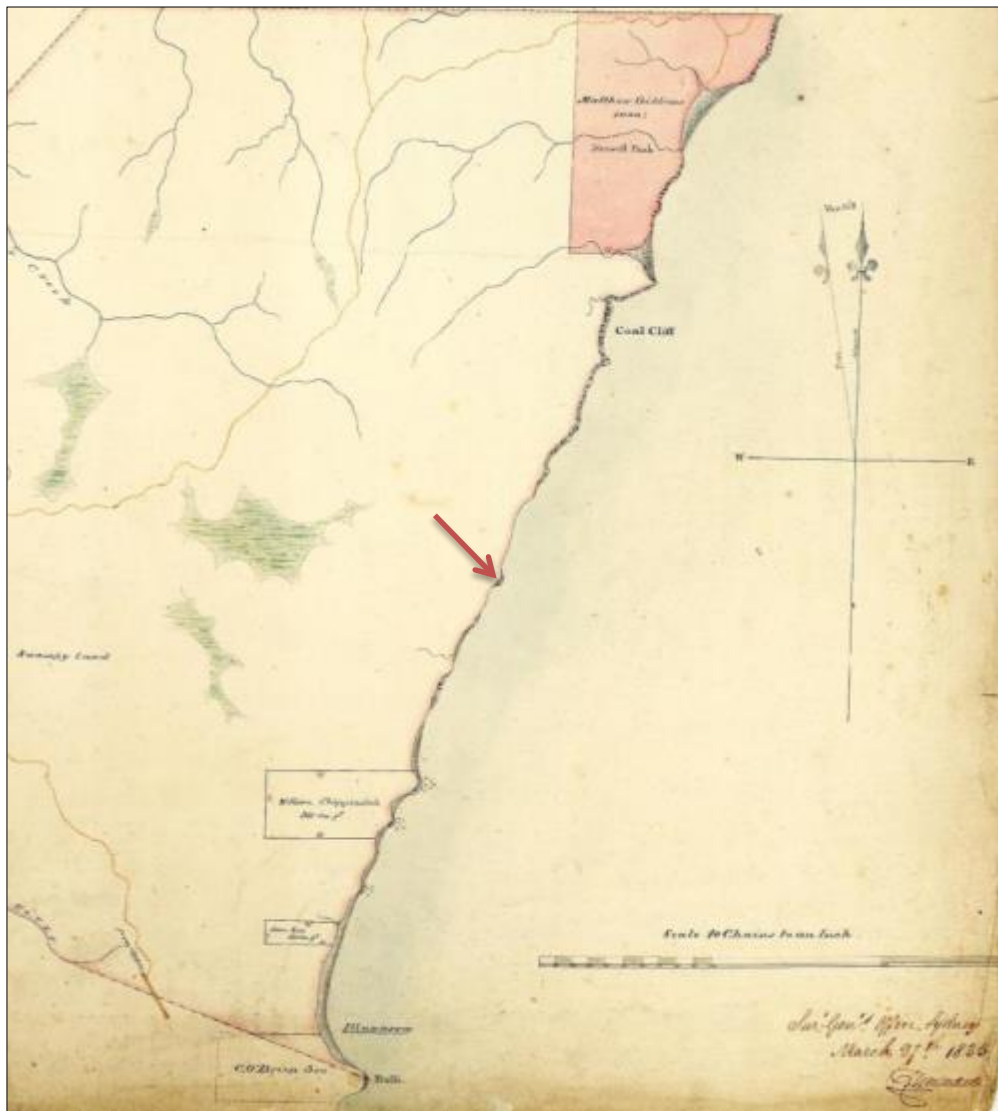


Plate 2 1835 Surveyors plan of the area between Coalcliff and Bulli. The approximate location of the study area is indicated by the red arrow. (Source LPI, Parish of Southend, Image # 14073601.jp2)

The study area was unoccupied until its use as a cemetery in the later 1800's. One of the early settlers of the 'Bulli' region was a Matthew Gibbons. In 1792, Matthew Gibbons arrived in Australia as steward to Major Francis Grose, after a few brief absences from Australia he returned and remained until his death in 1835. He was promised 'Little Bullie' in 1824 which he later renamed Stanwell Park although he didn't receive the grant

until 1833. Five years after his death upon the death of his wife Stanwell Park was left to his daughter, Esther Smith. Her husband then went onto meet Sir Thomas Mitchell on his last exploration towards Port Essington and subsequently sold him Stanwell Park in 1848.³³ Mitchell had previously bought the coal bearing cliff between Clifton and Stanwell Park. He built the first property at Stanwell Park on 'The Dress Circle' which was completed by his son and later used as Hopkins' Stanwell House guesthouse.³⁴

2.3.3 Mining and Industry

The small villages that started to appear along the Illawarra coast from the mid 1800's were the result of the opening of several coal mines along this coast. "Bulli Coal" was declared as superior to any other for steaming purposes and by the end of the 1870's all British warships stationed in Australia used Illawarra coal.³⁵

The first discovery of coal in the Illawarra was made at Coal Cliff. Several attempts were made to open up the Illawarra coal fields in the early 1800's but the Australian Agricultural Company had a monopoly on the procurement of coal and quickly shut down any early attempts.³⁶ However by 1849 James Shoobert had succeeded in his second attempt in opening a mine on Mount Keira and the first coal shipped from Wollongong Harbour was from this small coal mine, heralding the commencement of an important Illawarra industry. Several other industries had operated in the area during this time (e.g. ship building had been established at Wollongong Harbour since 1831, whaling operated from Bulli Point that same year); however, agriculture and mining were to dominate the economic development of the Illawarra for the next 50 years.

During the 1860's and 1870's the demand for coal rose as industries developed in Sydney. The increase in steam shipping allowed more frequent and reliable shipment and jetties were developed in association with coal mines to service the trade.³⁷

The South Clifton mine opened in 1891 and by 1905 the output of the mine was 63,750 tons. In 1906 it was reported that the South Clifton Coal Mining Co Ltd held about 2000 acres of land. This land included the Bulli seam which had a height of 4 feet to 5 feet 6 inches. "The mine is worked from a shaft sunk 200 feet, the old method of pick and shovel being employed for the getting out of the coal. The miners are paid on a tonnage basis. The electric light is installed throughout the mine".³⁸

2.3.4 The villages of Wombarra, Scarborough and Colecliff

Wombarra is a small village situated between Scarborough and Coledale. The first documented mention of the name appears in the naming of the miners' platform at Browns Bridge as 'Wombarra' located near South Clifton Tunnel Colliery in 1917 however Wombarra wasn't officially assigned under the Geographical names act until 1976.^{39 40} Originally small settlements along the coast were collectively known as Bulli in the early

³³ Adams M. , 1982

³⁴ Adams M. , Thomas Mitchell & Son, 1983

³⁵ Bayley, 1989

³⁶ Cousins, 1948

³⁷ Ibid.

³⁸ 1906 'BULLI A[?] WOONONA.', *South Coast Times and Wollongong Argus (NSW : 1900 - 1954)*, 24 November, p. 12. , viewed 19 Sep 2016, <http://nla.gov.au/nla.news-article141919892>

³⁹ Singleton, 1984

⁴⁰ http://www.gnb.nsw.gov.au/place_naming/placename_search/extract?id=SYbjzqblt

nineteenth century as populations were sparse and spread out along the coastline. The study area was initially granted to William Barton (Plate 3 & Plate 4) and was situated between what was then known as Clifton (or South Clifton, now known as Scarborough) and Coaldale (now spelt Coledale). It is unlikely however that Barton ever took up residence on his lands as many grants were unoccupied in the early 1800's, partly due to the inaccessibility of the region.

Coaldale, like many of the other small settlements in the area grew as a result of the mining industry. With this increasing population in the area a railway platform was opened in 1902 and incorporated a post and telegraph office. In 1903 a new mine opened, known as Coledale mine, and the formal township of Coledale was laid out and allotments sold.⁴¹

By 1877 another of the small settlements in the area, Clifton (now called Scarborough) had emerged. The small township was made up of miners' cottages and the mine managers' villa, located almost on the edge of the cliff. In 1878 a school was established in a building previously used by the mine and in 1879 the Education Department opened a public school. This small township was for a time a very busy centre being the terminus for the Illawarra rail line while the tunnels between Clifton and Waterfall were being constructed.⁴²

It was only when populations grew, as a result of the local mining industry, small towns began to require more public facilities such as postal and telegraph offices. Initially the Wombarra station platform was a miner's platform as it was situated near the South Clifton Tunnel Colliery; it was however made a public utility only 9 months after opening. Council records record the formation of the Wombarra progress association in 1922, a post office opening in 1924 and a community hall in 1954.⁴³ The decline of the mining industry resulted in many small towns in the Illawarra to decline; many smaller settlements became subsumed into larger towns. The picturesque locality of the coastal region between Stanwell Park and Bulli became a popular tourist destination and the increase in passing trade resulted in small village centres flourishing with popular places to stop and take refreshments. Public facilities such as the post office were closed down as a result. Population statistics from 1933 show the population of Wombarra was 657 with a steady increase to 778 by 1961.⁴⁴ Records taken from 2011 show that Wombarra was subsumed into the Wombarra-Coledale-Scarborough-Clifton district and the population overall has seen a decline.⁴⁵ With no real industry in these local areas small villages and towns such as Wombarra become holiday and retirement destinations.

⁴¹ <http://www.wollongong.nsw.gov.au/library/onlineresources/suburbprofiles/pages/coledale.aspx>

⁴² Cousins, 1948

⁴³ <http://www.wollongong.nsw.gov.au/library/onlineresources/suburbprofiles/pages/wombarra.aspx>

⁴⁴ Bayley, 1989

⁴⁵ <http://forecast.id.com.au/wollongong/Population-households-dwellings>



Plate 3 Parish map of the area between Coalcliff and Bulli. Post 1835, approximate location of the study area is indicated by the red arrow. (Source: LPI, Parish of Southend, Image #14062407.jp2)



Plate 4 1882 Surveyors map of the Bulli to Coalcliff proposed plan for the new road. Approximate location of the study area indicated by the red arrow.

2.3.5 Wombarra Scarborough Cemetery

The cemetery is situated on the cliffs between Scarborough and Colecliff and is a multid denominational servicing cemetery. The need for the cemetery was first documented in 1881 in the Illawarra Mercury;

*...deaths at Coal-Cliff involved the bodies having to be conveyed to Bulli, which was a great hardship. The Chairman suggested that the Committee appointed to look after the road matter might deal with the cemetery question also. He might mention that some years ago Judge Hargrave had an intention to give a piece of land beyond the Cliff or a Church. Perhaps it might be well that the Committee should ascertain if the worthy Judge was still of the same opinion. At any rate, a burial-ground should be obtained for Coal-Cliff and it should be a general cemetery, where people of all denominations would have portions of it. It was finally resolved the Committee should attend to the matter.*⁴⁶

Initially land was sought in Clifton for the site of the new cemetery by a deputation introduced to the Minister of Lands by Mr. Lysaght in April 1886, however it was decided that there was no crown land available that was suitable for this purpose. A piece of land on the coast approximately a mile and half from Clifton, fronting a portion of land formerly held by William Barton, now the property of the Illawarra Coal Company was proposed as an alternative. The Minister of Lands replied that he would endeavour to meet the wishes of the deputation if the land proved suitable.⁴⁷

The promise of the Minister did not seem to satisfy the local population when only a few months later in June a letter was published in the Illawarra Mercury regarding the acquisition of land;

Sir,— I have the honour to inform you that it was some time ago proposed to purchase about seven acres at Bulli, at a cost of £315, for a cemetery at that place, but owing to the delay in completing the arrangements the offer was withdrawn.' From a report of the District Surveyors it appears that 11 acres could be obtained in a position which it would probably meet both the requirements of Bulli and Clifton. The site suggested is situated about five miles from the latter place and one and a half from the former, is on the railway line, and distant about half a mile, from Robbinsville platform. 'I am therefore directed by the Secretary for Lands to request that you will favour me with an opinion as to—whether the site proposed will be acceptable for both places before action is taken to purchase the land in question.

"Charles Oliver"

'Under-Secretary.

*"Mr. A. Lysaght, M.P."*⁴⁸

The Church of England section of the cemetery was consecrated in May 1893 shortly after its completion.⁴⁹ The first recorded burial was reported in the Illawarra Mercury in 1893;

⁴⁶ 1881 'CEMETERY FOR CLIFTON.', *Illawarra Mercury* (Wollongong, NSW : 1856 - 1950), 1 November, p. 2. , viewed 15 Sep 2016, <http://nla.gov.au/nla.news-article135942196>

⁴⁷ 1886 'CEMETERY FOR CLIFTON.', *The Sydney Morning Herald* (NSW : 1842 - 1954), 3 April, p. 10. , viewed 15 Sep 2016, <http://nla.gov.au/nla.news-article28356250>

⁴⁸ 1886 'THE BULLI AND CLIFTON CEMETERY QUESTIONS.', *Illawarra Mercury* (Wollongong, NSW : 1856 - 1950), 29 June, p. 2. , viewed 15 Sep 2016, <http://nla.gov.au/nla.news-article135873110>

⁴⁹ 1893 'AT CLIFTON.', *Illawarra Mercury* (Wollongong, NSW : 1856 - 1950), 27 May, p. 2. , viewed 15 Sep 2016, <http://nla.gov.au/nla.news-article132292174>

The rather picturesque promontory which forms the ' God's Acre,' near to South Clifton was on Friday morning last first used for the solemn purpose for which it was dedicated. The youngest daughter (a little girl nearly two years of age) of Mr. W. McLaren, the worthy teacher of the Public School, at Clifton, after a very short illness passed away on Wednesday evening, and its mortal remains were born to their last resting place by a number of school-children, accompanied by a number of friends. Much sympathy has been expressed with Mr. and Mrs. McLaren in their sad loss.⁵⁰

The development of the study area can be observed through historic aerials taken since 1948 (Plate 5, Plate 6 and Plate 7). The 1948 aerial shows a large portion of the cemetery has been utilised with the study area located in an unused southern portion of the cemetery that is still vegetated. By 1977 the cemetery has continued to progress across the southern portion of the site however the study area remains unused. It was not uncommon for unmarked graves to be present within cemeteries. Many could not afford a proper burial and would take it upon themselves to bury loved one as close to consecrated ground as possible. Most Often these burials contain the remains of babies and infants. It is possible that there are unmarked graves within the cemetery and its surrounds.

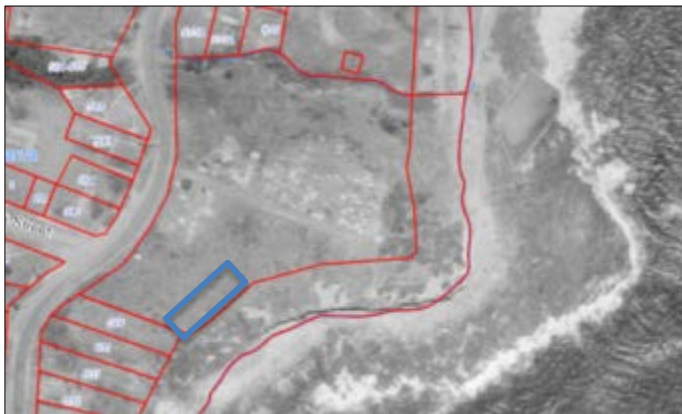


Plate 5 1948 aerial of the study area. The approximate location of the study area is indicated by the blue rectangle.



Plate 6 1977 aerial of the study area. The approximate location of the study area is indicated by the blue rectangle.

⁵⁰ 1893 'CLIFTON CEMETERY.', *Illawarra Mercury (Wollongong, NSW : 1856 - 1950)*, 17 January, p. 2. , viewed 15 Sep 2016, <http://nla.gov.au/nla.news-article132292728>

By 2006 the study area has been utilised and the vegetation reduced. The roads and paths have been formalised and columbarium's and plaques have started to populate the cemetery.



Plate 7 2006 aerial of the study area. The approximate location of the study area is indicated y the blue rectangle.

2.4 Research themes

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to gauge how typical or unique the history of a particular site actually is. This is usually ascertained by gaining an understanding of the history of a site in relation to the broad historical themes characterising Australia at the time. Such themes have been established by the Australian Heritage Commission and the NSW Heritage Office and are outlined in synoptic form in New South Wales Historical Themes.⁵¹

There are 38 State Historical Themes, which have been developed for New South Wales, as well as nine National Historical Themes. These broader themes are usually referred to when developing sub-themes for a local area to ensure they compliment the overall thematic framework for the broader region.

A review of the contextual history in conjunction with the regional historical thematic history for the Illawarra New South Wales has identified historical themes which relate to the occupational history of the study area.⁵² This is summarised in Table 1.

Table 1 Identified historical themes for the study area.

AUSTRALIAN THEME	NEW SOUTH WALES THEME	REGIONAL THEME
Marking the phases of life	Birth and death	Activities associated with the initial stages of human life and the bearing of children, and with the final stages of human life and disposal of the dead.

⁵¹ NSW Heritage Council 2001

⁵² Kass 2003

3 Physical inspection

A field inspection of the study area was undertaken on 31 August 2016, attended by Lian Flannery, Samantha Keats and Mathew Smith. The aims of the survey were to identify heritage values associated with the study area and assess the potential for archaeological remains to be present within the study area.

3.1 Site setting

The study area is located in the southern corner of the Scarborough Wombarra cemetery which is situated on the picturesque cliffs overlooking the sea at Wombarra. There are residential buildings beyond the vegetation to the north and west of the cemetery and the western boundary is delineated by Lawrence Hargrave Drive with residential buildings on the western side of the road. The study area contains introduced grasses, concrete pathways, ornamental plantings, columbarium's, and ornamental sandstone rocks with metal plaques (Plate 8 and Plate 9). The proposed works will be located in the foreground of Plate 8 and includes the ornamental garden edging and concrete pathway which will be demolished to make way for new edging and pathway. Appendix A contains mapping of the proposed works. The extant memorial rocks and associated ash placements will be temporarily moved during works and will be replaced at the completion of works.

The site survey did not identify any additional items of heritage significance. The plaques and memorial plantings are of significance to the local people for their associations with interred or cremated persons; often being planted or placed at the time of commemoration and these are contributory to the heritage values and significance of the cemetery.

The views and vistas associated with the cemetery that include the ocean to the east and escarpment to the west also contribute to the cemetery's heritage significance (Plate 10 and Plate 11). This setting on the picturesque cliff at Wombarra contributes to the significance by providing a peaceful place for the commemoration of the deceased. The commemoration of the dead is respected by all societies and the provision of such a place is a fundamental aspect of our society. Places of rest are required to offer a sense of peace and a comfortable environment in which to remember the deceased.



Plate 8 North west aspect of the study area.



Plate 9 Western aspect of the study area.



Plate 10 Eastern aspect of the cemetery with the study area in the far distance of the picture, indicated by the red arrow.



Plate 11 South eastern view from the study area.

3.2 Built fabric

The Scarborough Wombarra cemetery contains information relating to the physical changes of fabric over time and physical evidence of past attitudes to death and the evolution of cultural landscapes. Information pertaining to the social, structural and health of past societies are contained within the physical remains of the people interred. The architectural styles provide a permanent record of preferred styles over time and changing religious preferences. Personal items associated with internments and memorials reflect personal relationships and how they are memorialised by those people and values associated with these items and how those have changed over time.

Cemeteries provide a direct and permanently accessible record of our history and culture. The management of the cemetery and ongoing maintenance should respect the significant attributes of the cemetery and retain these elements in accordance with basic conservation principals.

3.3 Archaeological assessment

The site survey and historical research has not indicated any previous occupation/use of the study area prior to the designation of the land for the use as a cemetery. The cemetery has been in use since the late nineteenth century with records of the first internment in 1893. Historical records document (Plate 5, Plate 6 and Plate 7) the progression of the formal burials starting in the northern sections of the cemetery and progressing towards the south. The study area was first used in the early twenty first century with the clearing of vegetation for the commemorative garden, columbarium, sandstone rocks and formal pathways and seating. There are no recorded internments or records of physical fabric relating to the use of the cemetery within the study area. It is however likely that the cemetery may contain unmarked graves or disused/discarded items (such as headstones). The practice of unofficial burials was not uncommon in the eighteenth and nineteenth centuries as the infant mortality rate was high, most infants succumbing to what are now treatable illnesses. Costs of official burials could not be met by all and so the practice of unofficial burials in or within close proximity to consecrated ground was common.

However due to the nature of the unofficial burials historical sources documenting them very rarely, if at all exist. Therefore the potential for archaeological remains to be present within the study area is assessed as low.

4 Significance assessment

The study area has been assessed previously as a heritage item of local significance. Whilst the current assessment has identified new historical evidence it has not found any information that suggests that the existing statement of significance needs to be readdressed. The following statement of significance for Scarborough Wombarra cemetery is from the WLEP listing as of September 2016;

Wombarra general cemetery is of significance for Wollongong area for historical, aesthetic, scientific and social reasons. The cemetery is associated with creation of the adjacent mining village and has the ability to interpret history of the area. It has significant associations with the interred and commemorated persons, and social importance for the wider community. It meets aesthetic criterion as a local landmark, and it comprises a representative collections of monuments that make a major contribution to local area character and community's sense of place. The cemeteries generally are of major importance for those local community members who have family members interred in the grounds. The site has potential to reveal further information about the past of the area.

5 Impact assessment

The following section outlines the proposed development and the extent to which it may impact upon the heritage significance of the project area.

This assessment has been prepared to address the proposed impacts to the Scarborough Wombarra Cemetery. The site is listed on the Wollongong LEP 2009 as having local significance. The values identified in the listing as being significant include historic, aesthetic and social.

The assessment identifies the level of impact of the proposal and the steps taken to avoid or reduce those impacts. This section of the report has been prepared in accordance with the Heritage Manual *Statements of Heritage Impact* published by the Heritage Office and the Department of Urban Affairs & Planning 1996, revised 2002.

5.1 The proposed development

The proposed development will include landscaping and footpaths and the installation of two granite columbaria. The works will involve subsurface excavations for the planting of new trees, demolition of extant concrete path and garden edging, the levelling and removal of soils for the new pathways and the relocation and temporary storage of present memorials within the impact zone of works.

5.2 Assessment of impact

The principal impact to heritage significance by the proposed development is posed through the landscaping and installation of new materials. This will result in the removal of the majority of archaeological material from the study area, should they be present. As a result, an archaeological methodology which considers all potential archaeology within the study area will need to be considered. Impacts upon the archaeological resource can be quantified using the following criteria:

- Direct impact - whole: where the development will have a whole impact on an item resulting in the complete physical loss of significance attributed to the item.
- Direct impact - partial: where the project will have a partial impact on an item which could result in the loss or reduction in heritage significance. The degree of impact through partial impacts is dependent on the location of the item, where it may only be partially within the impact footprint or is part of a larger series of archaeological features.
- No impact: where the assessment has determined that the item is outside of the project footprint.

An assessment of impacts based upon the heritage item using this criterion is presented in Table 3.

Table 2 Assessment of impacts to heritage significance

NO.	DESCRIPTION	PROBABLE IMPACT
1	Demolition of extant footpaths and concrete edging	Direct-partial
2	Installation of new footpaths and seating	Direct-partial
3	Installation of new plantings	Direct-partial

NO.	DESCRIPTION	PROBABLE IMPACT
4	Installation of new columbaria	Direct-partial

5.3 Discussion of impacts

The project will involve direct-partial impacts upon the Scarborough Wombarra Cemetery with the replacement of some of the existing fabric of the cemetery and installation of new fabric. However this assessment has determined those impacts as minimal with regard to the overall significance of the heritage item. The proposed works will improve and enhance the remaining fabric and prolong the use of the site as a place for the internment and memorialization of the deceased. The installation of new fabric within the cemetery must be in keeping with the surrounds and not detract from the aesthetic significance associated with the cemetery.

There will be minimal loss of significance to the heritage item through the implementation of the proposed works.

5.4 Statement of heritage impact

The proposed project works towards the continued use and upkeep of the cemetery. The design and implementation of the new structural elements of the works should be made with regards to the heritage landscape of the cemetery and differing architectural styles evident in the cemetery whilst not detracting from the aesthetic significance of the cemetery.

6 Statutory framework

Relevant planning instruments and statutory acts are discussed below in order to frame the approval mechanisms outlined in Section 7. In NSW cultural heritage is managed in a three-tiered system: national, state and local. Certain sites and items may require management under all three systems or only under one or two. The following discussion aims to outline the various levels of protection and approvals required to make changes to cultural heritage in the state.

6.1 Environmental Protection and Biodiversity Conservation Act 1999

The *Environmental Protection and Biodiversity Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. The EPBC Act is administered by the Department of the Environment (DoE). The EPBC Act establishes two heritage lists for the management of the natural and cultural environment:

The National Heritage List (NHL) contains items listed on the NHL have been assessed to be of outstanding significance and define "critical moments in our development as a nation".⁵³

The Commonwealth Heritage List (CHL) contains items listed on the CHL are natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing "significant" heritage value.⁵⁴

A search of the NHL and CHL did not yield any results associated with the study area.

6.2 NSW Heritage Act 1977

Heritage in New South Wales is principally protected by the *Heritage Act 1977* (as amended) which was passed for the purpose of conserving items of environmental heritage of NSW. Environmental heritage is broadly defined under Section 4 of the Heritage Act as consisting of the following items: "*those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance*". The Act is administered by the NSW Heritage Council, under delegation by the Heritage Division, Office of Environment and Heritage. The Heritage Act is designed to protect both known heritage items (such as standing structures) and items that may not be immediately obvious (such as potential archaeological remains or 'relics'). Different parts of the Heritage Act deal with different situations and types of heritage and the Act provides a number of mechanisms by which items and places of heritage significance may be protected.

6.2.1 State Heritage Register

Protection of items of State significance is by nomination and listing on the State Heritage Register (SHR) created under Part 3A of the NSW *Heritage Act 1977*. The Register came into effect on 2 April 1999. The Register was

⁵³ "About National Heritage" <http://www.environment.gov.au/heritage/about/national/index.html>

⁵⁴ "Commonwealth Heritage List Criteria"

<http://www.environment.gov.au/heritage/about/commonwealth/criteria.html>

established under the *Heritage Amendment Act 1998*. It replaces the earlier system of Permanent Conservation Orders as a means for protecting items with State significance.

A permit under Section 60 of the *Heritage Act 1977* (NSW) is required for works on a site listed on the SHR, except for that work which complies with the conditions for exemptions to the requirement for obtaining a permit. Details of which minor works are exempted from the requirements to submit a Section 60 Application can be found in the Guideline "Standard Exemptions for Works requiring Heritage Council Approval". These exemptions came into force on 5 September 2008 and replace all previous exemptions.

There are no items/conservation areas listed on the SHR within or adjacent to the study area.

6.2.2 Archaeological relics

Section 139 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. This section applies to all land in New South Wales that is not included on the State Heritage Register.

Amendments to the Heritage Act made in 2009 changed the definition of an archaeological 'relic' under the Act. A 'relic' is defined by the Heritage Act as:

"Any deposit, object or material evidence:

(a) which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) which is of State or Local significance"

It should be noted that not all remains that would be considered archaeological are relics under the NSW Heritage Act. Advice given in the Archaeological Significance Assessment Guidelines is that a "relic" would be viewed as a chattel and it is stated that *"In practice, an important historical archaeological site will be likely to contain a range of different elements as vestiges and remnants of the past. Such sites will include 'relics' of significance in the form of deposits, artefacts, objects and usually also other material evidence from demolished buildings, works or former structures which provide evidence of prior occupations but may not be 'relics'."*

If a relic, including shipwrecks in NSW waters (that is rivers, harbours, lakes and enclosed bays) is located, the discoverer is required to notify the NSW Heritage Council.

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140 of the Act), unless there is an applicable exception (pursuant to Section 139(4)). Excavation permits are issued by the Heritage Council of New South Wales in accordance with sections 60 or 140 of the Heritage Act 1977. It is an offence to disturb or excavate land to discover, expose or move a relic without obtaining a permit. Excavation permits are usually issued subject to a range of conditions. These conditions will relate to matters such as reporting requirements and artefact cataloguing, storage and curation.

Exceptions under Section 139(4) to the standard Section 140 process exist for applications that meet the appropriate criterion. An application is still required to be made. The Section 139(4) permit is an exception from the requirement to obtain a Section 140 permit and reflects the nature of the impact and the significance of the relics or potential relics being impacted upon.

If an exception has been granted and, during the course of the development, substantial intact archaeological relics of state or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the

Heritage Office must be notified in writing in accordance with section 146 of the *Heritage Act 1977*. Depending on the nature of the discovery, additional assessment and, possibly, an excavation permit may be required prior to the recommencement of excavation in the affected area.

6.2.3 Section 170 Heritage and Conservation Registers

Section 170 of the Heritage Act 1977 requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Division guidelines.

Statutory obligations for archaeological sites that are listed on a Section 170 Register include notification to the Heritage Council in addition to relic's provision obligations.

There are no items within or adjacent to the Study area that are entered on a State government instrumentality Section 170 Register.

6.3 Environmental Planning and Assessment Act 1979

6.3.1 Wollongong Local Environmental Plan 2009 and Development Control Plan

The Wollongong LEP 2009 contains schedules of heritage items that are managed by the controls in the instrument. As the project is being undertaken under Part 4 of the *EP&A Act*, council is responsible for approving controlled work via the development application system. Heritage items in the vicinity of the study area are identified in Table 3 and Figure 3.

There is one item within the study area listed on the Wollongong LEP 2009 Schedule 5.

Relics are still protected by the *Heritage Act* and Aboriginal sites are protected by the *National Parks and Wildlife Act 1979* regardless of their status on an LEP or despite the fact that they are unregistered. Section 5.10 of the LEP outlines responsibilities with regards to heritage conservation. Specifically, development consent is required where demolishing, removing or altering a heritage item. Where council suspects that a development may result in a loss of significance to an item, it may require a heritage assessment or management plan to be prepared.

With reference to archaeological sites a development consent is required when proposing to disturb or excavate an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed. Section 5.10.7 elaborates upon this stating:

The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):

(a) notify the Heritage Council of its intention to grant consent, and

(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

This assessment indicates that there is low potential for archaeological relics to be present within the study area.

The Wollongong development control plan (DCP) contains development controls for listed heritage items. Chapter 9 of the DCP contains guidelines for the design and assessment of development proposals upon land containing an item of environmental heritage or land within a heritage conservation area.

The objectives of this chapter of the DCP are:

- To conserve the environmental heritage of the City in accordance with the principles contained in the Burra Charter;
- To consider the potential heritage significance of all properties identified on the Wollongong LEP 2009 Heritage Map and other applications as a matter to be taken into account in the assessment of Development Applications affecting those properties;
- To integrate conservation issues and management into the planning and development control process;
- To ensure that any development with respect to a heritage site is undertaken in a manner that is sympathetic to, and does not detract from the identified significance of the site;
- To encourage innovative approaches to the conservation of Wollongong's heritage and to provide incentives for good management practice;
- To promote Wollongong's cultural heritage as a valuable resource that must be conserved for future generations.
- To encourage and guide recording and interpretation of significant heritage throughout the development process.

The study area is within a listed heritage item listed on the WLEP 2009.

6.3.2 National Trust of Australia

The National Trust of Australia is a community-based, non-government organisation, committed to promoting and conserving Australia's indigenous, natural and historic heritage through its advocacy work and its custodianship of heritage places and objects.

The study area is not listed on the National Trust of Australia heritage list.

6.3.3 Register of National Estate

The Register of National Estate (RNE) was originally established under *the Australian Heritage Commission Act 1975* (repealed). The Register of the National Estate was closed in 2007 and is no longer a statutory list. All references to the Register of the National Estate were removed from the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 19 February 2012. However, the list remains an archive and an item that was once listed on the RNE may have been transferred to the NHL or the CHL. Listing on the RNE is an indication that the site or item has significance.

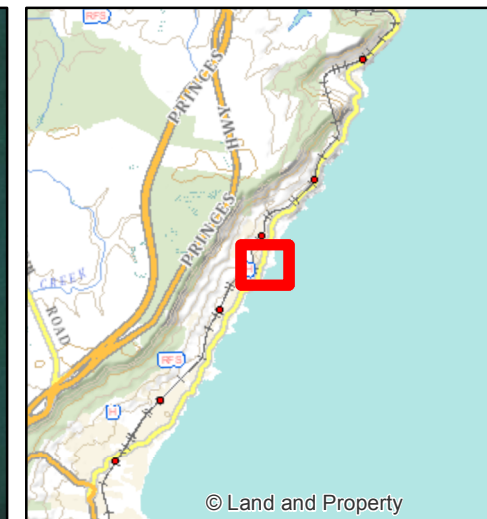
The study area is not listed on the RNE.

6.4 Summary of heritage listings

A summary of heritage listings within and in the vicinity of the study area is presented in Table 3.

Table 3 Summary of heritage listings within and adjacent to the study area

Site Name	Address / Property Description	Listings		Significance
		Individual Item	Conservation Area	
Scarborough Wombarra Cemetery	Lawrence Hargrave Drive	Wollongong LEP	N/A	Local



Legend

- Study area
- LEP - Listed items**
- Item - Landscape

Figure 3: Heritage Items within vicinity of study area

0 30 60 90 120 150
Metres
Scale: 1:3,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



Matter: 22990
Date: 16 September 2016
Checked by: LCF Drawn by: ANP Last edited by: apritchard
Location: P:\22900s\22990\Mapping\22990_SoH_F3_HeritageItems

7 Conclusions and recommendations

7.1 Conclusions

The historical research undertaken as part of this assessment has identified that the study area had not previously been utilised before its use as a cemetery. The cemetery was formalised in the late nineteenth century with the first interment in 1893 in the northern portion of the cemetery. The study area was unused and contained indigenous vegetation until the early twenty first century when the cemetery started utilising the area for commemorative columbaria, plantings, sandstone rocks with plaques and formal pathways and seating. The significance of the Scarborough Wombarra cemetery is linked to the internments and the memorials associated with deceased people. The setting of the cemetery on the picturesque cliff at Wombarra contributes to the significance by providing a peaceful place for the commemoration of the deceased. Although the project will include temporary impacts to the heritage significance of the Scarborough Wombarra Cemetery the works once finalised will continue to contribute to the local significance of the cemetery to the local community by providing more space for the internment and commemoration of the deceased.

This assessment has not identified any constraints for the project. The works may proceed with the following condition.

7.2 Recommendations

These recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable whilst retaining its cultural significance.⁵⁵

Recommendation 1 Sympathetic design of landscaping and architectural features

The design of the architectural elements and landscape features of the proposed works should be sympathetic to the heritage landscape of the cemetery and be inline with conservation principals as outlined in the NSW cemeteries guidelines' and the WDCP.^{56 57}

Recommendation 2 Chance finds procedure

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps:

⁵⁵ Australia ICOMOS 2013

⁵⁶ Department of Planning Heritage Council New South Wales, 1992

⁵⁷ Wollongong Development Control Plan, 2009

- Discovery: If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
- Notification: Once suspected human skeletal remains have been found, the Coroners Office and the NSW Police must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and DECCW NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the *Heritage Act 1977*.

Relics are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics not skeletal in nature be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

APPENDIX F: ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

Wombarra Cemetery: Aboriginal cultural heritage assessment report

DRAFT REPORT

Prepared for Wollongong City Council

9 March 2018

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Glossary

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIMS	Aboriginal Heritage Information Management System
DA	Determining Authority
DECCW	Department of Environment, Climate Change and Water (now OEH)
DP	Deposited Plan
EPA	Environment Planning and Assessment
GDA	Geocentric Datum of Australia
GPS	Global Positioning System
GSV	Ground Surface Visibility
ICOMOS	International Council on Monuments and Sites
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
MGA	Map Grid of Australia
NHL	National Heritage List
NPW Act	National Parks and Wildlife Act
NPWS	National Parks and Wildlife Service
NSW	New South Wales
NTSCORP	Native Title Services Corporation
OEH	NSW Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
REP	Regional Environmental Plan
SEPP	State Environmental Planning Policy
NNTT	National Native Title Tribunal
ICOMOS	International Council on Monuments and Sites

Summary

Biosis Pty Ltd was commissioned by Wollongong City Council to undertake an Aboriginal archaeological investigation for the proposed upgrades to Scarborough/Wombarra Cemetery on Lawrence Hargrave Drive, Wombarra, NSW. The study area is located approximately 17 kilometres north of the Wollongong CBD (Figure 1) and encompasses approximately 1.8 hectares of public land and the adjacent road reserves.

There are 83 Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register within a 10 square kilometre radius of the study area.

Consultation

The Aboriginal community was consulted regarding the heritage management of the project throughout its lifespan. Consultation has been undertaken as per the process outlined in the DECCW document, *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a) (consultation requirements). The appropriate government bodies were notified and advertisements placed in the Illawarra Mercury (24 June 2017), which resulted in the following Aboriginal organisations registering their interest:

- Illawarra Local Aboriginal Land Council
- Guunamaa Dreaming Sites and Surveying
- James Davis
- Duncan Falk Consultancy
- Darug Land Observations
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Goobah Development Pty Ltd
- Three Ducks Dreaming Surveying and Consulting
- Warra Bingi Nunda Gurri
- Woronora Plateau Gundungarra Elders Council
- Biamanga (Murrin Clan/Peoples)
- Murramurang (Murrin Clan/Peoples)
- Cullendulla (Murrin Clan/Peoples)

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* listed no Aboriginal Owners with land within the study area. A search conducted by the National Native Title Tribunal listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

Upon registration, the Aboriginal parties were invited to provide their knowledge on the study area and on the proposal provided in the *Wombarra Cemetery Test Excavation Methodology*. The responses identify the study area as an area of high significance due to its position on a headland. Responses from the Registered Aboriginal Parties (RAPs) are included in Appendix 3.

The outcome of the consultation process was that the RAPs considered the study area to have a high level of cultural significance, with Richard Campbell of Guunamaa Dreaming Sites and Surveying indicating it was “very sacred to his people” due to its proximity to the ocean. The results of the consultation process are included in this document.

The results of the testing program that took place under testing AHIP (C003262) on the 5 – 8 February 2018 resulted in 16 test pits being excavated. No subsurface cultural material was revealed during the excavations however one hammer stone was identified on the surface, contained within an imported fill layer, in the car park area. The absence of subsurface cultural material is likely due to the absence of intact natural soil

profiles throughout the study area as a result of substantial subsidence of the landform through the continued use of the study area for a European cemetery.

The recommendations that resulted from the consultation process are provided below.

Management recommendations

Prior to any development impacts occurring within the study area, the following is recommended:

Recommendation 1: Continued consultation with the registered Aboriginal parties regarding the repatriation of Hammer stone

It is recommended that Wollongong City Council consult with these groups about the Aboriginal hammer stone and determine a process of future management.

Recommendation 2: Obtain an Aboriginal Heritage Impact Permit (AHIP) for the proposed works

The proposed works cannot avoid harm at PAD 1 (AHIMS #52-5-0070) and it is recommended that Wollongong City Council apply to the OEH for an AHIP so that the future works can be carried out in the study area and to allow movement of the surface hammer stone identified. A site impact form will also be submitted to AHIMS following impacts to PAD 1 (AHIMS #52-5-0070).

For information about AHIPs and their preparation, see below.

Advice preparing AHIPs

An AHIP is required for any activities likely to have an impact on Aboriginal objects or Places or cause land to be disturbed for the purposes of discovering an Aboriginal object. The Office of Environment and Heritage (OEH) issues AHIPs under Part 6 of the National Parks and Wildlife Act 1974 (NPW Act).

AHIPs should be prepared by a qualified archaeologist and lodged with the OEH. Once the application is lodged processing time can take between 8-12 weeks. It should be noted that there will be an application fee levied by the OEH for the processing of AHIPs, which is dependent on the estimated total cost of the development project.

Where there are multiple sites within one study area an application for an AHIP to cover the entire study area is recommended.

Recommendation 3: Discovery of Unanticipated Aboriginal Objects

All Aboriginal objects and Places are protected under the NSW National Parks and Wildlife Act 1974. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

Recommendation 4: Discovery of Unanticipated Historical Relics

Relics are historical archaeological resources of local or State significance and are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

Recommendation 5: Discovery of Aboriginal Ancestral Remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains
2. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
3. Not recommence work at that location unless authorised in writing by OEH.

1 Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by Wollongong City Council to undertake an Aboriginal archaeological investigation for the proposed upgrades to Scarborough/Wombarra Cemetery on Lawrence Hargrave Drive, Wombarra, NSW (Figure 1). An Aboriginal due diligence assessment did not identify any previously recorded Aboriginal sites within the study area. However, the combination of background research and site survey results identified a part of the study area that had moderate potential to contain sub-surface Aboriginal artefacts. This assessment was made due to the location of the study area on the coastal headland in a relatively undisturbed section of land, within 200 metres of a recorded Aboriginal midden. The due diligence recommended that further investigation in the form of an Aboriginal cultural heritage assessment and test excavation be carried out on the potential archaeological deposit so as to better assess the archaeological significance of the study area.

This investigation has been carried out under Part 4 of the *Environmental Planning and Assessment Act 1979* NSW. It has been undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) ('the code'). The code has been developed to support the process of investigating and assessing Aboriginal cultural heritage by specifying the minimum standards for archaeological investigation undertaken in NSW under the NPW Act. The archaeological investigation must be undertaken in accordance with the requirements of the code.

It is stated in section 1.2 of the code that where the Aboriginal cultural heritage assessment concludes that the proposed activity will result in harm to Aboriginal objects or declared Aboriginal Places, an application for an Aboriginal Heritage Impact Permit (AHIP) will be required. This application must be supported by an Aboriginal Cultural Heritage Assessment Report (ACHAR).

The *Environmental Planning and Assessment Act 1979* (EP&A Act) includes provisions for local government authorities to consider environmental impacts in land-use planning and decision making. Each Local Government Area (LGA) is required to create and maintain an LEP that includes Aboriginal and historical heritage items. Local Councils identify items that are of significance within their LGA, and these items are listed on heritage schedules in the local LEP and are protected under the EP&A Act and *Heritage Act 1977*.

1.2 Study area

The study area is located approximately 17 kilometres north of the Wollongong CBD (Figure 1) and encompasses approximately 1.8 hectares of public land and the adjacent road reserves.

The study area is within the:

- Wollongong Local Government Area (LGA)
- Parish of Southend
- County of Cumberland

The study area (Lot 7028 DP 1058309) is bounded by the Lawrence Hargrave Drive to the west, residential dwellings to the north and south, and the Pacific Ocean to the east (Figure 2).

1.3 Proposed development

The proposed development will include landscaping of the cemetery, upgrades to footpaths, the installation of two granite columbaria, memorial ash placement walls and an art work feature (Figure 3). This will involve:

- Construction of columbaria will require excavation up to 1.6 metres deep.
- Footpath upgrades will require excavation of 100 millimetres.
- Granite sett paver garden bed edging will require excavation of 150 millimetres.
- Block retaining walls will require excavation of 250 millimetres.

1.4 Planning approvals

The proposed development will be assessed against Part 4 of the (EP&A Act). Other relevant legislation and planning instruments that will inform this assessment include:

- NSW *National Parks and Wildlife Act 1974* (NPW Act)
- NSW *National Parks and Wildlife Amendment Act 2010*
- Infrastructure State Environmental Planning Policy 2007
- Wollongong Local Environmental Plan 2009

1.5 Restricted and confidential information

Appendix 1 in the Archaeological Report contains AHIMS information which is confidential and not to be made public. This is clearly marked on the title page for the attachment.

1.6 Aboriginal cultural heritage

1.6.1 General description

According to Allen and O'Connell (2003), Aboriginal people have inhabited the Australian continent for the last 50,000 years. New evidence out of the Northern Territory has pushed this date back to around 60,000 years with the Malakanunja II rock shelter dated at 61,000 +9000/-13,000 BP (Clarkson *et al* 2015) In NSW, according to Bowler *et al* (2003), Aboriginal people have occupied the land for over 42,000 years. However, preliminary evidence presented by Biosis (2016) from a subsurface testing program in south-western NSW suggests Aboriginal people may have occupied the semi-arid zone of the region for 50,000 years.

Without being part of the Aboriginal culture and the productions of this culture, it is not possible for non-Aboriginal people to fully understand the meaning of site, objects and places to Aboriginal people – only to move closer towards understanding this meaning with the help of the Aboriginal community. Similarly, definitions of Aboriginal culture and cultural heritage without this involvement constitute outsider interpretations.

With this preface Aboriginal cultural heritage broadly refers to things that relate to Aboriginal culture and hold cultural meaning and significance to Aboriginal people (DECCW 2010a p.3). There is an understanding in Aboriginal culture that everything is interconnected. In essence Aboriginal cultural heritage can be viewed as potentially encompassing any part of the physical and/or mental landscape, that is, 'Country' (DECCW 2010a p.iii).

Aboriginal people's interpretation of cultural value is based on their "traditions, observance, lore, customs, beliefs and history" (DECCW 2010a p.3). The things associated with Aboriginal cultural heritage are continually and actively being defined by Aboriginal people (DECCW 2010a p.3). These things can be associated with traditional, historical or contemporary Aboriginal culture (DECCW 2010a p.3).

1.6.2 Tangible Aboriginal cultural heritage

Three categories of tangible Aboriginal cultural heritage may be defined:

- Things that have been observably modified by Aboriginal people.
- Things that may have been modified by Aboriginal people but no discernible traces of that activity remain.
- Things never physically modified by Aboriginal people (but associated with Dreamtime Ancestors who shaped those things).

1.6.3 Intangible Aboriginal cultural heritage

Examples of intangible Aboriginal cultural heritage would include memories of stories and 'ways of doing', which would include language and ceremonies (DECCW 2010a p.3).

1.6.4 Statutory

Currently Aboriginal cultural heritage, as statutorily defined by the NPW Act, consists of objects and places which are protected under Part 6 of the Act.

Aboriginal objects are defined as:

"any deposit, object or material evidence...relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains"

Aboriginal places are defined as a place that is or was of special Aboriginal cultural significance. Places are declared under section 84 of the NPW Act.

1.6.5 Values

Aboriginal cultural heritage is valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a p.iii). More specifically it is used:

- To provide a:
 - "connection and sense of belonging to Country" (DECCW 2010a p.iii)
 - Link between the present and the past (DECCW 2010a p.iii).
- As a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010a p.3).
- As further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a p.3).

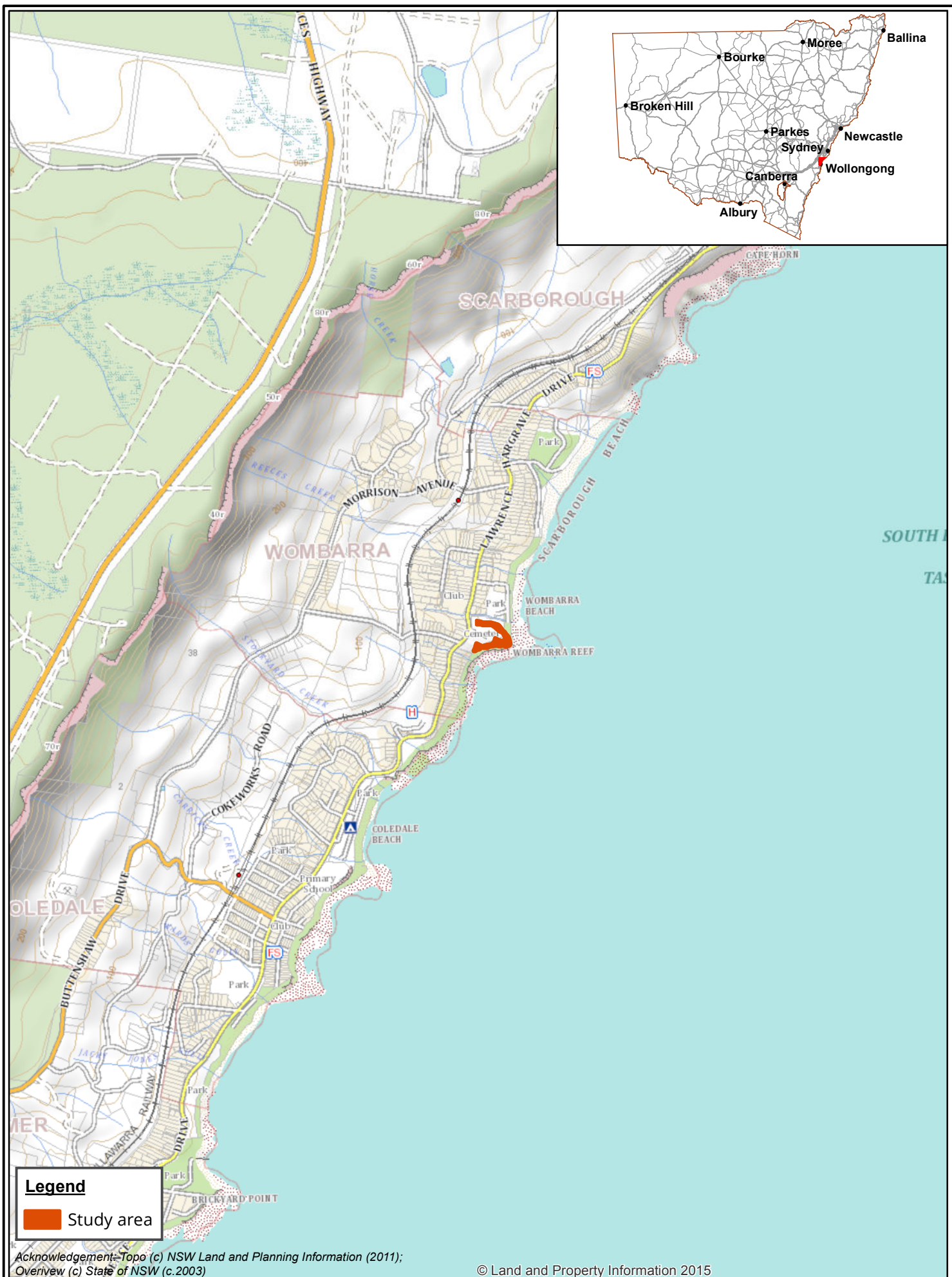
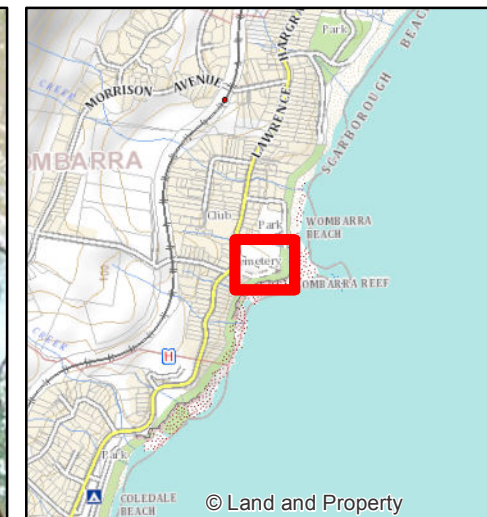
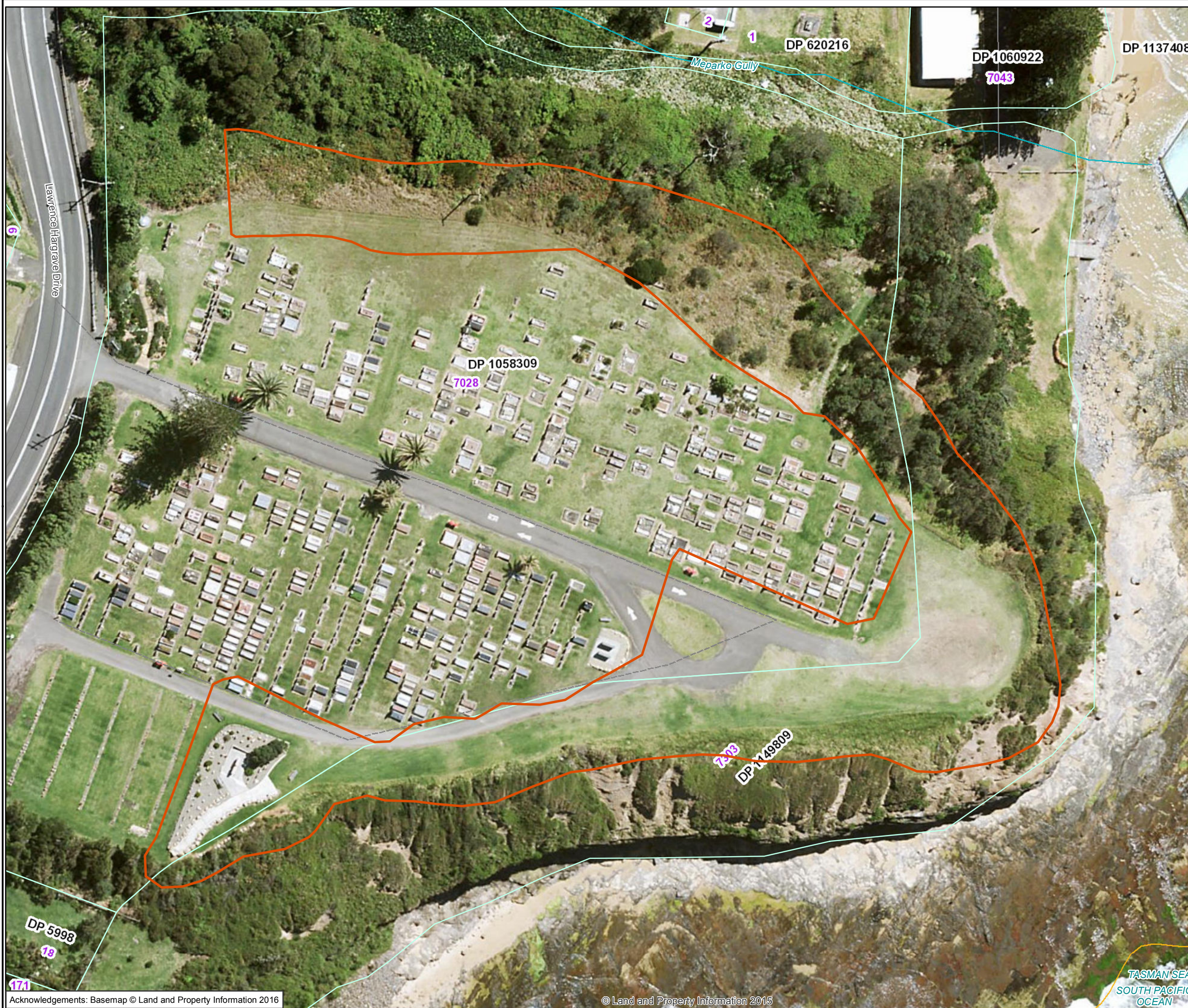


Figure 1: Location of study area in a regional context



Legend

Study area

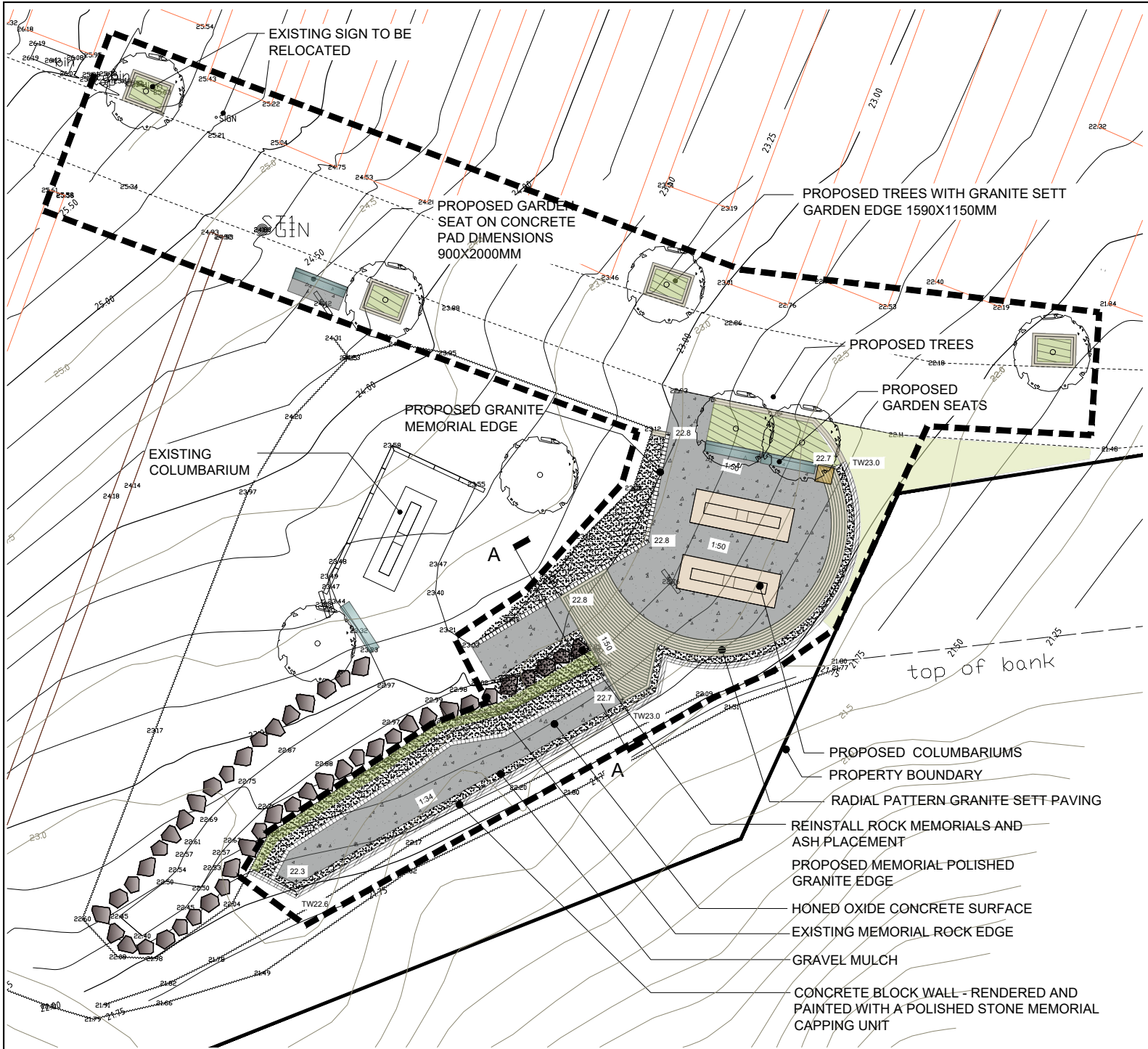
Figure 2: Study area detail

0 6 12 18 24 30
Metres

Scale: 1:600 @ A3
Coordinate System: GDA 1994 MGA Zone 56

biosis
Biosis Pty Ltd
Ballarat, Brisbane, Canberra, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

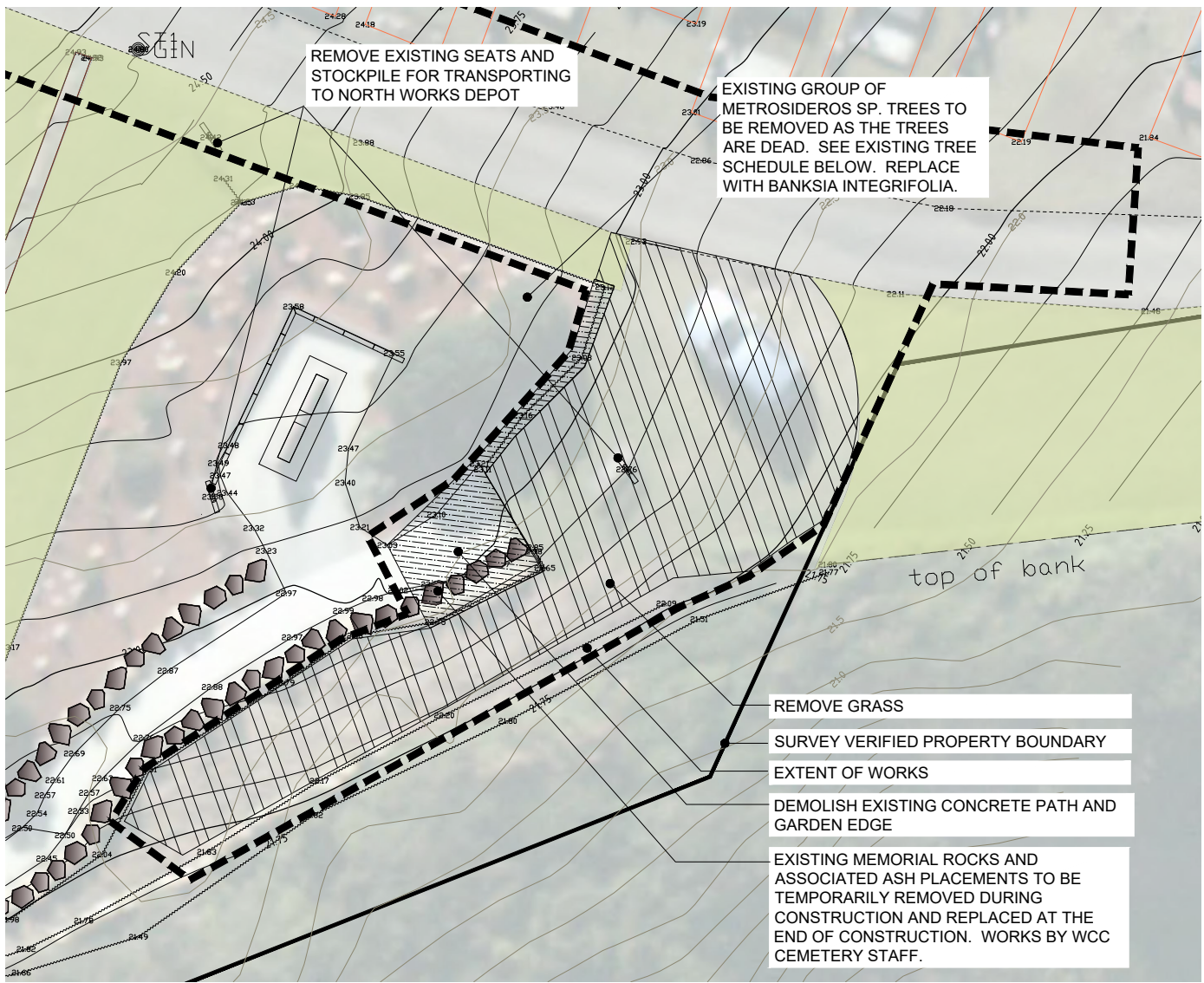
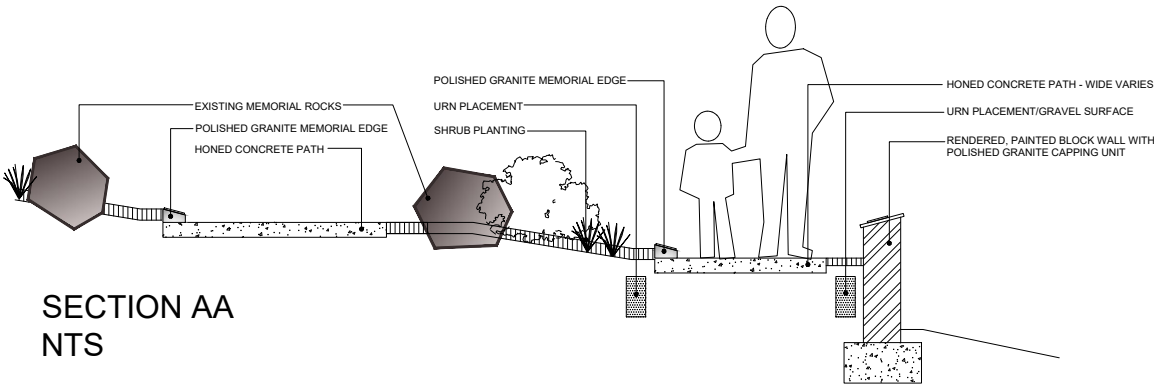
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Checked by: RAM, Drawn by: ANP, Last edited by: Iharley
Location: \biosisresearch\local\BIO-DFS\Matters\23400s\23423\Mapping\23423_AR_F2_StudyArea



LANDSCAPE PLAN
1:100@A1 1:200@A3

LEGEND		
	PROPOSED SELECTED TREE	09 Y10 LD05/LD05
	GRANITE COLUMBARIUM	01 Y02 LD06/LD06
	EXISTING MEMORIAL ROCK PLACEMENTS	
	MULCHED GARDEN AREA	11 LD05
	HONED CONCRETE PATH	01 Y02 LD05/LD05

	RADIAL PATTERN GRANITE SETT PAVING	02 03 04 LD05/LD05/LD05
	75MM DEPTH GRAVEL SURFACE - ROUND RIVER PEBBLE 40MM	
	CONCRETE BLOCK RETAINING WALL WITH GRANITE CAPPING UNIT	05 LD05
	MEMORIAL GARDEN EDGE	01 LD05
	GRANITE SETT GARDEN EDGE	08 LD05
	SEAT	07 LD05
	SULO BIN ENCLOSURE	06 LD05



DEMOLITION PLAN
1:100@A1 1:200@A3

EXISTING TREE					
NO.	DESCRIPTION	SPECIES	HEIGHT	CANOPY SPREAD	HEALTH
1	GROUP OF 3 TREES	METROSIDEROS EXCELSA	4m	3m	DEAD

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	DRAWN	APPR'D	DATE
3	DA SUBMISSION	NDR	AG	06/20
2	MINOR AMENDMENTS - ISSUED FOR DA SUBMISSION	NDR	AG	11/19
1	ISSUED FOR DA SUBMISSION - DA-2018/1237	NDR	AG	07/16

DATUM AHD	SURVEYOR	DRAWN NDR	DATE 06/16	APPROVED (FOR COUNCIL USE ONLY)
AZIMUTH MGA	FIELD BOOK	DESIGNED NDR	DATE 06/16	SENIOR LANDSCAPE ARCHITECT
RELATED PLANS 4686, 5312		CHECKED AG	DATE 06/16	DATE



SCALES	NORTH POINT
AS NOTED	

CITY OF WOLLONGONG
EXTENSION OF ASH PLACEMENT MEMORIAL GARDEN
SCARBOROUGH WOMBARRA CEMETERY
LAWRENCE HARGRAVE DRIVE WOMBARRA
LANDSCAPE PLAN / DEMOLITION AND SEDIMENT CONTROL PLAN



PJ or TR No.	PJ-2069	A1 ORIGINAL
SHEET 2 OF 7 SHEETS		
DRAWING No. 5815	SHEET No. LD02	ISSUE 3

2 Study area context

This section discusses the study area in regards to its landscape, environmental and Aboriginal cultural heritage context. This section should be read in conjunction with the archaeological report attached in Appendix 6. The background research has been undertaken in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b).

The study area (Lot 7028 DP 1058309) is bounded by the Lawrence Hargrave Drive to the west, residential dwellings to the north and south, and the Pacific Ocean to the east (Figure 2).

2.1 Topography and hydrology

The study area is located within the Wollongong Plain physiographic region (Hazelton and Tille 1990, p. 2). It consists of the gentle rises of the Illawarra Coal Measures, rolling to steep low hills of volcanic materials and undulating Budgong Sandstone and Quaternary alluvium (Figure 3). The Illawarra Coal Measures is Permian in age (299 – 251 million years ago) and consists of shale, sandstone, conglomerate, tuff, chert and coal, while the Budgong Sandstone outcrops consist of laminated, dark grey to black, calcareous, carbonaceous and micaceous siltstone and lithic sandstone. Quaternary alluvium deposits of gravel, swamp and dune that have been forming for the last 2.6 million years. These low lying areas of are almost completely cleared of forest and woodland.

The Wollongong Plain is located between the sea and the Illawarra Escarpment. This physiographic unit has formed from the gradual recession westward of the Plateau (Bowman 1971). The Wollongong Plain is widest at the points where Macquarie Rivulet has entrenched into the Plateau at Macquarie Pass and where other waterways which provide the catchment area of Lake Illawarra, such as Duck and Wollingurrie creek systems, have carved themselves into the Escarpment (Bowman 1971).

Stream order is recognised as a factor which helps the development of predictive modelling in Aboriginal archaeology in NSW. Predictive models which have been developed for the region have a tendency to favour permanent water courses as the locations of campsites as they would have been more likely to provide a stable source of water and by extension other resources which would have been used by Aboriginal groups.

The stream order system used for this assessment was originally developed by Strahler (1964). It functions by adding two streams of equal order at their confluence to form a higher order stream, as shown in Plate 1. As stream order increases, so does the likelihood that the stream would be a perennial source of water.

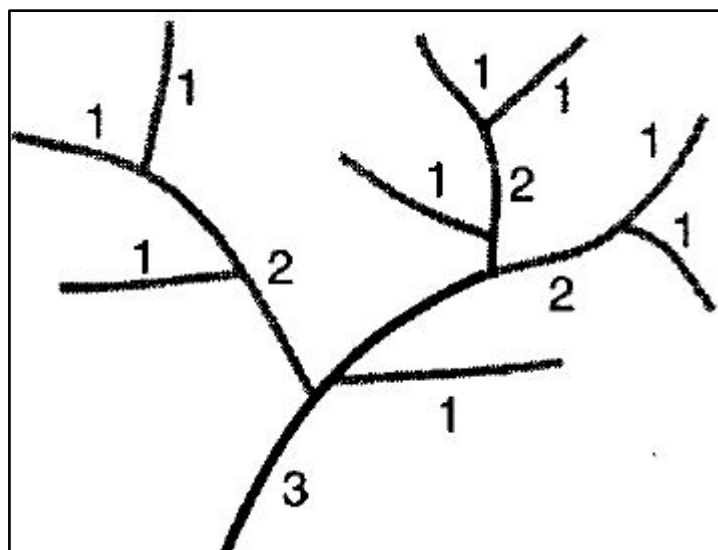


Plate 1 Diagram showing Strahler stream order (Strahler 1964)

There are no permanent watercourses within the study area but two low order natural watercourses run 100 metres and 80 metres to the north and south-west of the study area respectively. The Pacific Ocean lies to the east of the study area and although non-potable would have provided raw materials and food year round. To the north of the study area, Meparko Gully is a non-perennial, first order stream that drains into the ocean and beyond that, 320 metres north of the study area, the second order, non-perennial stream Reece's Creek drains into the ocean. An unnamed, first order stream drains into the ocean 80 metres to the south east of the study area, while the non-perennial, first order Barton's Gully runs 150 metres to the south of the study area. Numerous other low order streams drain into the ocean further to the north and south of these, although the closest perennial water source lies approximately 2.2 kilometres to the north-west of the study area, on the far side of the escarpment. The proximity of the study area to the ocean and numerous low order creek lines, in combination with its raised topography, would have made it an attractive location for Aboriginal occupation.

2.2 Soil landscapes

Soil landscapes have distinct morphological and topological characteristics that result in specific archaeological potential. Because they are defined by a combination of soils, topography, vegetation and weathering conditions, soil landscapes are essentially terrain units that provide a useful way to summarise archaeological potential and exposure.

The Gwynneville Soil Landscape, characterised as a residual landscape (Hazelton and Tille 1990, p. 38-40), is present within the study area. The topography of this soil landscape is one of undulation to steep hills of local relief between 10 and 70 metres and slopes 3 to 25%. The study area is located within the undulating, low relief areas along the coastal plain. In general this landform includes broad to moderate ridges (250 - 800 m), steeply inclined to moderately inclined foot slopes, and isolated rises on the coastal plain. The study area is located on the coastal plain and is situated within a natural gully formed by these low-lying isolated rises.

Typical Gwynneville soil characteristics are detailed in Table 1.

Table 1 Gwynneville soil landscape characteristics (Hazelton and Tille 1990, p. 39)

Soil material	Description
Gwynneville 1 (gw1)	Friable brown sandy loam; occurs as topsoil varying from 10 - 30 cm in depth; high

Soil material	Description
	organic content; brownish black to dull yellowish brown in colour; inclusions consist of sandstone gravels and cobbles to < 2 to 20 %.
Gwynneville 2 (gw2)	Friable sandy clay loam; occurs as either topsoil or subsoil to 50 cm depth; colour ranges from brownish black to dull yellowish brown; sandstone fragments and gravels are common to abundant (10 - 90 %).
Gwynneville 3 (gw3)	Brown pedal clay; light to heavy clay that occurs as subsoil; colour varies from brown to dull yellowish brown with occasional orange mottle; gravel and rocks vary from rare to common.

2.3 Landscape resources

Although only a small amount of scrub vegetation is currently present on the slope of the headland landform due to clearing in the 19th and early 20th century, the study area and its surrounds would likely have originally supported the wet and dry sclerophyll forest common to the Gwynneville soil landscape (Hazelton and Tille 1990, p. 38). Tree species would have included the bangalay, blackbutt, grey ironbark, swamp mahogany, forest red gum, spotted gum, two-veined hickory and black wattle, which in turn would have supported a range of avian and mammal life.

Terrestrial and avian resources were not only used for food, but also provided a significant contribution to the social and ceremonial aspects of Aboriginal life through their use as ritual implements or even simply through fashioning as personal adornments (Attenbrow 2002, p. 107-10). Mammals such as kangaroos and wallabies and arboreal mammals such as possums were used as a food source and also for tool making. Bones and teeth were used as points or barbs for hunting spears and fishing spears. Tail sinews are known to have been used as a fastening cord, whilst 'bone points' frequently occur in rock shelters (Attenbrow 2002, p. 99). Animal skin, fur and sinews were also used for personal adornment and in making cloaks.

Aquatic species such as freshwater crayfish would have been easily accessible in the larger waterways nearby, as well as saltwater fish and shellfish available from the ocean and sandstone outcroppings below the study area. Aquatic vertebrates, fish and eels, would also have been present within larger creeks and waterways. Fishing spears were described as being barbed with fish teeth as well as fish bones (Attenbrow 2002, p. 117).

The Coastal Plain of the Illawarra region provides a number of resources used by Aboriginal inhabitants. A number of plant and animal species would have been available within the immediate coastal resource zone. Local Aboriginal groups would have access to an abundant range of marine, terrestrial and avian species, many of them being available at different seasons of the year. Both floral and faunal species were utilised by Aboriginal people in many ways. They were used not only as a food source, but also for making weapons, utilitarian objects and for ceremonial purposes.

The majority of the information about the Aboriginal use of plants and animals comes from the records of early colonists. They observed and recorded manufacture of canoes, shields, skin cloaks, baskets, fish-hooks and items of personal adornment (Attenbrow 2002, p. 112). Surgeon Worgan in 1788 saw Port Jackson Aboriginal people removing the bark of what was later identified as a Swamp She-Oak that was abundant within the study area to make canoe hulls (Robinson 1991, p. 152). Coastal Wattle was also abundant in the coastal regions of the Illawarra and is a protein-rich food source when the green seed pods are harvested and then steamed. A liquid made from the bark of the Coastal Wattle was also used for tanning skins, fishermen's sails and nets (Maiden 1889; in Stewart and Percival 1997, p. 12). Spiny-headed mat-rush leaves were used to make baskets and the leaf bases are edible with a pea-like flavour, as are the flowers (Stewart and Percival 1997, p. 35).

The geology of the region provides an abundant supply of raw materials. Quartz is the main stone raw-material type suitable for Aboriginal tool manufacture that is likely to occur in the vicinity of the study area in any abundance. This would have been available locally and also from trading with other groups (Donlon and Sefton, 1988, p. 23). Igneous material would have come from the south of the study area in areas like Gerringong (Donlon and Sefton 1988, p. 55) due to its volcanic nature. Some of the other fine grain siliceous material may have come from the Cumberland Plain. Silcrete cobbles are known to have occurred along the Cumberland Plain (McDonald 2003), to the west of the study area. Elsewhere on the Plain, the potential raw materials for stone artefact making include silicified wood, tuff, mudstone, quartz, quartzite and basalt. River gravels and cobbles containing silcrete, chert, and other fine grained volcanic rocks were also used (Attenbrow 2002). While previous archaeological work within the region has not identified any specific stone sources, the presence of the volcanic Dapto Latite Member in the region may have provided a suitable source of raw material, providing lithic material for stone axes. Resources would have been accessible in the outcrops of siltstone, shale and tuffaceous sandstones of the Berry Siltstone formation.

2.4 European land use history

The Church of England portion of the Wombarra Scarborough cemetery was the first consecrated in 1893, following the clearing of the land and completion of cemetery access. The first burial occurred in the same year. By 1948 the northern portion of the cemetery appears to have been filled, as seen in the 1948 aerial photograph (Plate 2). Some burials were located in the southern half of the cemetery in the 1948 aerial photograph, but it only seems to be after this date that the cemetery expanded into this area in truth. The formalised pathways, landscaping and columbaria visible today were constructed following the 1977 aerial photograph.

As evidenced by the aerial photographs, the south-eastern portion of the study area does not appear to have been impacted by any major earthworks after initial land clearance.

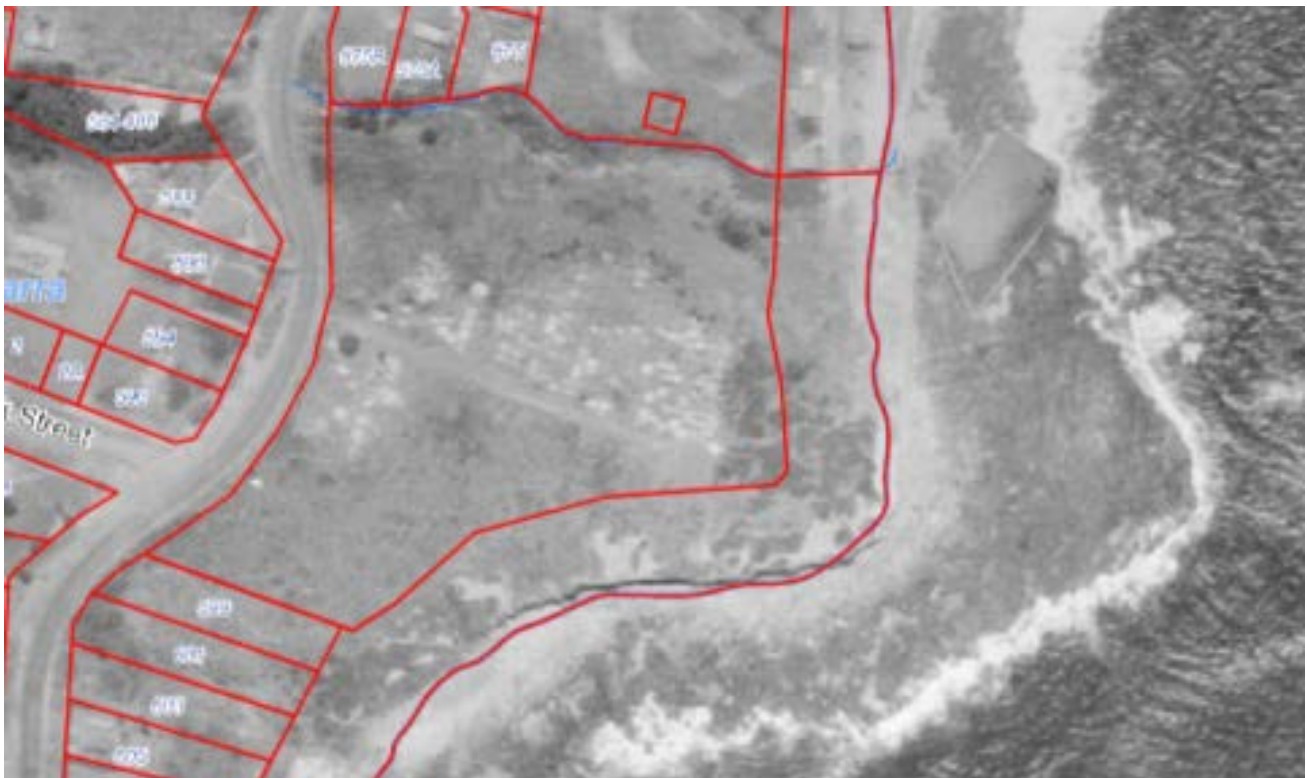


Plate 2 1948 aerial photograph of the study area (NSW LPI 2016)



Plate 3 1977 aerial photograph of the study area (NSW LPI 2016)

3 Aboriginal cultural heritage context

3.1 Ethnohistory

Since European occupation of the Illawarra region in the early 1800's, the Bulli area was of interest and a range of land use activities took place. These activities have resulted in varying but generally significant land modifications and impacts on the original landscape.

The first official load of cedar cuttings came out of Shoalhaven River and arrived in Sydney in December 1811 on board of *HMS Speedwell* (Sydney Gazette January 1812). The name 'Bulli' was first recorded in the Sydney Gazette of April 22 1815 when it was reported that a party searching for lost cedar cutters was at place called 'Boyle' (Therin 2003, p. 31). It is likely that timber getting from the Bulli area commenced soon after. In 1816 Governor Macquarie issued the first five land grants for the Illawarra from where the settlement moved towards south and north. Cornelius O'Brien was the first settler to occupy the land in Bulli. He came from Ireland and managed his uncle's Yallah's property in 1816 only to move out in 1817 and establish a stockman's hut on Sandon Point.

The development of the southern coalfields prompted the government to link the area to Sydney with a rail line. The line reached Helensburgh in 1884 and continued to Lilyvale, Bulgo (Otford) and Stanwell Park. "The Park" became a popular picnic spot with people from Sydney coming for the day and a railway station was completed in 1909 (Helensburgh and District Historical Society *n.d.*). Many small towns emerged from the old coal mining settlements located between Stanwell Park and Bulli. The town of Wombarra was one of these, located between the escarpment and the coast. The Wombarra railway station was constructed in 1917 and referred to as "Brown's Ridge". Wombarra and Scarborough beaches were now more accessible to people visiting for the day and the town further developed.

Previous land use within the study area and sites within the immediate surroundings have contributed towards the destruction or displacement of Aboriginal sites, especially shell middens. From the historical sources it is known that the first European settlers have used the shell from Aboriginal middens for limestone industry. In addition to that, urban development within the immediate west of the study area has caused extensive disturbance to many Aboriginal sites or their total destruction.

3.2 Aboriginal heritage located in the study area

The archaeological assessment of the study area identified the following Aboriginal site in the study area:

- AHIMS #52-5-0070 PAD 1

The archaeological report attached in Appendix 6 provides details for Aboriginal sites identified during the archaeological assessment and shown on Figure 4. A brief description of the site is provided below.

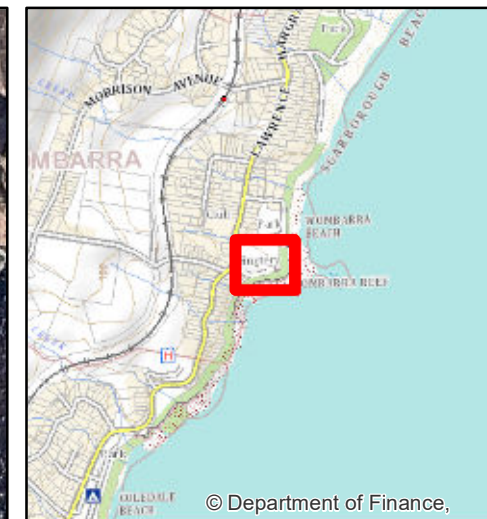
AHIMS #52-5-0070 PAD 1

PAD 1 is located on the headland at Wombarra, approximately 200 metres west of the Pacific Ocean and with close access to the horizontal sandstone outcroppings which surround the headland. The site has been assessed as having the potential to contain subsurface Aboriginal cultural heritage on the basis of its landform and proximity to water resources.

3.3 Interpretation of past Aboriginal land use

The location of the site, in close proximity to watercourses, sandstone outcroppings, and year round resources provided by the ocean would have made the site highly suitable for habitation by Aboriginal groups. Although there is no perennial watercourse in the immediate vicinity of the study area, a large number of non-perennial, first and second order streams drain into the ocean within a kilometer of the study area, and the slope to the north of the study area would have provided easy access to the ocean, beach and sandstone outcroppings below. Numerous studies have identified ridgelines and rises as having a high potential for Aboriginal sites due to the outlook they provide, and the location of the study area on a headland would have enabled observation of the ocean, as well as coastline and watercourses to the north and south.

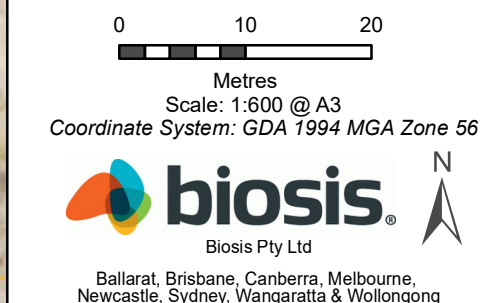
While the construction of tar access roads and columbaria along the northern and western edges of the study area have created subsurface disturbances in these areas, the southern and the eastern portions appear to have remained largely undisturbed beyond superficial grass maintenance and have the potential to contain intact subsurface deposits. This is supported by aerial photography, which indicates that after initial clearing any surface disturbance in this area was only superficial.



Legend

- Study area
- test pit

Figure 4: Excavated test pit locations



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4 Aboriginal community consultation

Consultation with the Aboriginal community has been undertaken in compliance with the consultation requirements as detailed below. A consultation log of all communications with RAPs is provided in Appendix 1.

4.1 Stage 1: Notification of project proposal and registration of interest

4.1.1 Identification of relevant Aboriginal stakeholders

In accordance with the consultation guidelines, Biosis Pty Ltd notified the following bodies regarding the Proposal:

- Wollongong City Council.
- NSW Office of Environment and Water.
- NSW Native Title Services Corporation Limited (NTSCORP Limited).
- Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners.
- National Native Title Tribunal (NNTT).
- South East Local Land Services.
- Illawarra Local Aboriginal Land Council (ILALC).

A list of known Aboriginal stakeholders in the Illawarra was provided by OEH (a copy of this/these responses are provided in Appendix 2 and include:

- | | |
|---|---|
| • Badu (Murrin Clan/Peoples) | • Munyunga Cultural Heritage Technical Services (Mirramajah) |
| • Bellambi Indigenous Corporation
Gandangarra Traditional Owners | • Murramarang (Murrin Clan/Peoples) |
| • Biamanga (Murrin Clan/Peoples) | • Murrumbul (Murrin Clan/Peoples) |
| • Bilinga (Murrin Clan/Peoples) | • Murrumbul Cultural Heritage Technical Services (Mirramajah) |
| • Bilinga Cultural Heritage Technical Services (Mirramajah) | • NIAC |
| • Gary Caines | • Nundagurri (Murrin Clan/Peoples) |
| • Coomaditchie United Aboriginal Corporation | • Pemulwuy (Murrin Clan/Peoples) |
| • Cullendulla (Murrin Clan/Peoples) | • Duncan Falk Consultancy |
| • Dharug (Murrin Clan/Peoples) | • Norma Simms |
| • James Davis | • South West Rocks Corporation |
| • Ken Foster | • Three Ducks Dreaming Surveying and Consulting |
| • Gadhu Dreaming | • The Wadi Wadi Coomaditchie Aboriginal Corporation |

- Garrara Aboriginal Corporation
- Goobah Development Pty Ltd (Murrin Clan/Peoples)
- Gundungurra Tribal Technical Services
- Gunyuu (Murrin Clan/Peoples)
- Gunyuu Cultural Heritage Technical Services (Mirramajah)
- Guunamaa Dreaming Sites and Surveying
- Illawarra Aboriginal Corporation
- Illawarra Local Aboriginal Land Council
- Jerringong (Murrin Clan/Peoples)
- Karrial (Murrin Clan/Peoples)
- Korewal Elouera Jerrungurah Tribal Elders Council
- Kulila Site Consultants & Koori Site Management
- La Perouse Botany Bay Corporation
- Minnamunnung
- Munyunga (Murrin Clan/Peoples)
- Walbunja (Murrin Clan/Peoples)
- Walgalu (Murrin Clan/Peoples)
- Warra Bingi Nunda Gurri
- Wingikara Cultural Heritage Technical Services (Mirramajah)
- The Wodi Wodi Elders Corporation
- The Wodi Wodi Elders Corporation
- The Wodi Wodi Elders Corporation
- The Wodi Wodi Elders Corporation
- Woronora Plateau Gundungara Elders Council
- Woronora Plateau Gundungara Elders Council
- Wullung (Murrin Clan/Peoples)
- Yerramurra (Murrin Clan/Peoples)
- Darug Land Observations
- Tungai Tonghi

A search conducted by the Office of the Registrar, Aboriginal Land Rights Act 1983 (NSW) listed no Aboriginal Owners with land within the study area. A search conducted by the National Native Title Tribunal listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area. A response was received from

4.1.2 Public notice

In accordance with the consultation guidelines, a public notification was placed in the following newspaper:

- *The Illawarra Mercury* (24 June 2017)

The advertisement invited Aboriginal people who hold cultural knowledge to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. A copy of the public notice is provided in Appendix 2.

4.1.3 Registration of Aboriginal parties

Aboriginal groups identified in Section 4.1.1 were sent a letter inviting them to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. In response to the letters and public notice, a total of 13 groups registered their interest in the project. Responses to registration from Aboriginal parties are provided in Appendix 3. A full list of Aboriginal parties who registered for consultation is provided below:

- Illawarra Local Aboriginal Land Council
- Guunamaa Dreaming Sites and Surveying
- James Davis
- Duncan Falk Consultancy
- Darug Land Observations
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Goobah Development Pty Ltd
- Three Ducks Dreaming Surveying and Consulting
- Warra Bingi Nunda Gurri
- Woronora Plateau Gundungarra Elders Council
- Biamanga (Murrin Clan/Peoples)
- Murramurang (Murrin Clan/Peoples)
- Cullendulla (Murrin Clan/Peoples)

4.2 Stage 2: Presentation of information about the proposed project

On 12 July 2017 Biosis provided RAPs with details about the proposed development works (project information pack). A copy of the project information pack is provided in Appendix 3.

4.3 Stage 3: Gathering information about cultural significance

4.3.1 Archaeological assessment methodology information pack

On 12 July 2017, Biosis provided each RAP with a copy of the project methodology pack outlining the proposed Aboriginal cultural heritage assessment process and methodology for this project. RAPs were given 28 days to review and prepare feedback on the proposed methodology. A copy of the project methodology pack is provided in Appendix 4.

Responses were received from Biamanga (Murrin Clan/Peoples), Murramarang (Murrin Clan/Peoples), Cullendulla (Murrin Clan/Peoples), Goobah Development Pty Ltd (Murrin Clan/Peoples), Duncan Falk Consultancy, Darug Land Observations agreeing with the methodology. Warra Bingi Nunda Gurri contacted Biosis to agree with the methodology and asked if dry or wet sieving was being undertaken. Biosis responded that dry sieving would be attempted in order to reduce impacts to the cemetery and coastal landscape. Warra Bingi Nunda Gurri also recommended that artefacts of significance recovered could be used for education and training purposes and handed back to the ILALC for the training of future sites officers. A response was received from Three Ducks Dreaming Surveying and Consulting agreeing with the methodology and asking that when Biosis completes the analysis of any artefacts found that they go to ILALC for further negotiations on what they would like done to them.

4.3.2 Information gathered during fieldwork

A test excavation program was undertaken under testing AHIP (C003262) on the 5 – 8 February 2018 with the assistance of the Illawarra LALC, Woronora Plateau Gundungara Elders Council and Three Ducks Dreaming Surveying and Consulting. No specific comments were received regarding the study area during test excavations.

4.4 Stage 4: Review of draft Aboriginal cultural heritage assessment report

On 11 September 2017, Biosis provided each RAP with a copy of the draft Wombarra Cemetery Aboriginal Cultural Heritage Assessment and Archaeological Report. RAPs were given 28 days to review and provide

feedback on the draft Aboriginal Cultural Heritage Assessment and Archaeological Report. Copies of the responses are provided in Appendix 5.

Responses were received from Duncan Faulk Consultancy, Three Ducks Dreaming, Biamanga (Murrin Clan/Peoples), Murramarang (Murrin Clan/Peoples), Cullendulla (Murrin Clan/Peoples), Goobah Development Pty Ltd (Murrin Clan/Peoples) agreeing with the draft Aboriginal Cultural Heritage Assessment and Archaeological Report with Goobah Development Pty Ltd (Murrin Clan/Peoples) asking to be kept informed regarding further developments. Durag Land Observations agreed with the draft Aboriginal Cultural Heritage Assessment and Archaeological Report and asking to be involved in the excavations.

5 Aboriginal cultural significance assessment

The two main values addressed when assessing the significance of Aboriginal sites are cultural values to the Aboriginal community and archaeological (scientific) values. This report will assess the cultural values of Aboriginal sites in the study area. Details of the scientific significance assessment of Aboriginal sites in the study area are provided in Appendix 6.

5.1 Introduction to the assessment process

Heritage assessment criteria in NSW fall broadly within the significance values outlined in the Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS 2013) ('the Burra Charter'). This approach to heritage has been adopted by cultural heritage managers and government agencies as the set of guidelines for best practice heritage management in Australia. These values are provided as background and include:

- **Historical significance** (evolution and association) refers to historic values and encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Aesthetic significance** (Scenic/architectural qualities, creative accomplishment) refers to the sensory, scenic, architectural and creative aspects of the place. It is often closely linked with social values and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, and the smell and sounds associated with the place and its use.
- **Social significance** (contemporary community esteem) refers to the spiritual, traditional, historical or contemporary associations and attachment that the place or area has for the present-day community. Places of social significance have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events. Communities can experience a sense of loss should a place of social significance be damaged or destroyed. These aspects of heritage significance can only be determined through consultative processes with local communities.
- **Scientific significance** (Archaeological, industrial, educational, research potential and scientific significance values) refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information.

The cultural and archaeological significance of Aboriginal and historic sites and places is assessed on the basis of the significance values outlined above. As well as the Burra Charter significance values guidelines, various government agencies have developed formal criteria and guidelines that have application when assessing the significance of heritage places within NSW. Of primary interest are guidelines prepared by the Australian

Government, the NSW OEH and the Heritage Branch, and the NSW Department of Planning and Environment. The relevant sections of these guidelines are presented below.

These guidelines state that an area may contain evidence and associations which demonstrate one or any combination of the Burra Charter significance values outlined above in reference to Aboriginal heritage. Reference to each of the values should be made when evaluating archaeological and cultural significance for Aboriginal sites and places.

In addition to the previously outlined heritage values, the OEH *Guidelines to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011) also specify the importance of considering cultural landscapes when determining and assessing Aboriginal heritage values. The principle behind a cultural landscape is that 'the significance of individual features is derived from their inter-relatedness within the cultural landscape'. This means that sites or places cannot be 'assessed in isolation' but must be considered as parts of the wider cultural landscape. Hence the site or place will possibly have values derived from its association with other sites and places. By investigating the associations between sites, places, and (for example) natural resources in the cultural landscape the stories behind the features can be told. The context of the cultural landscape can unlock 'better understanding of the cultural meaning and importance' of sites and places.

Although other values may be considered – such as educational or tourism values – the two principal values that are likely to be addressed in consideration of Aboriginal sites and places are the cultural/social significance to Aboriginal people and their archaeological or scientific significance to archaeologists and the Aboriginal community. The determinations of archaeological and cultural significance for sites and places should then be expressed as statements of significance that preface a concise discussion of the contributing factors to Aboriginal cultural heritage significance.

5.2 Cultural (social significance) values

Cultural or social significance refers to the spiritual, traditional, historical and/or contemporary associations and values attached to a place or objects by Aboriginal people. Aboriginal cultural heritage is broadly valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a p.iii). More specifically it provides a:

- "connection and sense of belonging to Country" (DECCW 2010a p.iii).
- Link between the present and the past (DECCW 2010a p.3).
- A learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010 p.3).
- further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a p.3).

It is acknowledged that Aboriginal people are the primary determiners of the cultural significance of Aboriginal cultural heritage.

5.3 Historic values

The study area is located within the Scarborough Wombarra Cemetery and as such holds a high level of significance to the local community.

5.4 Archaeological (scientific significance) values

An archaeological scientific assessment was undertaken for the study area and is presented in detail as part of the attached Archaeological Report (Appendix 6). The scientific

5.5 Aesthetic values

The study area is partially disturbed by the Scarborough Wombarra Cemetery but is representative of the Illawarra coastal landscape. The landscape of the study area is closely linked with Aboriginal cultural values and provides a context for Aboriginal sites that gives a strong sense of place. The Illawarra Aboriginal community strongly identifies with the landscape of the study area.

5.6 Statement of significance

5.6.1 Statement of significance for PAD 1 (AHIMS #52-5-0070)

PAD 1 a potential archaeological deposit, the significance of which is yet to be determined.

Table 2 Significance assessment criteria

Site name	Criteria	Ranking
PAD 1 (AHIMS #52-5-0070)	Cultural – discussions with the local Aboriginal communities reflect that the site is high in value.	High
	Historical – the site is located within the Scarborough Wombarra Cemetery, of historical significance to the local community.	High
	Scientific – PAD 1 presented no subsurface artefactual material and one surface artefact contained within an imported clay fill deposit on the ground surface. The significance of the site can be determined as low due to the only artefact present being not <i>in situ</i> .	Low
	Aesthetic – the site is located on the Illawarra coast. It has been impacted by the Scarborough Wombarra Cemetery but retains high aesthetic values.	High

The significance of sites was assessed in accordance with the following criteria:

- Requirements of the Code
- The Burra Charter
- Guide to Investigating and reporting on Aboriginal Heritage.

The combined use of these guidelines is widely considered to represent the best practice for assessments of Aboriginal cultural heritage. The identification and assessment of cultural heritage values includes the four values of the Burra Charter: social, historical, scientific and aesthetic values. The resultant statement of significance has been constructed for the study area based on the significance ranking criteria assessed in Table 2.

6 Proposed development limitations & mitigation measures

Within the study area, there is one recorded Aboriginal sites that may be subject to harm. It is expected that the potential of harm to Aboriginal archaeological sites from earthworks in the study area is high. Strategies to avoid or minimise harm to Aboriginal heritage in the study area are discussed below.

A summary of the potential impacts of the proposed works on known Aboriginal sites within the study area is provided in Table 3.

Table 3 Summary of potential archaeological impact

AHIMS site no.	Site name	Significance	Type of harm	Degree of harm	Consequence of harm
52-5-0070	PAD 1	Low	Direct	Total	Total loss of value

6.1 Potential risks to Aboriginal cultural heritage

The current proposed works within the study area include activities which could impact Aboriginal heritage sites or objects. If not mitigated the impacts may include:

- vehicle movement within study area with potential compaction of surface soils.
- earthworks, which will involve the removal of topsoil and subsoil.

Left unmitigated, these activities have potential to completely remove or disturb archaeological deposits and Aboriginal objects.

6.2 Avoiding harm to Aboriginal heritage

Harm cannot be avoided to the Aboriginal sites within the study area as a part of the proposed works.

6.3 Management and mitigation measures

Ideally, heritage management involves conservation of sites through the preservation and conservation of fabric and context within a framework of *"doing as much as necessary, as little as possible"* (Marquis-Kyle and Walker 1994, p. 13). In cases where conservation is not practical, several options for management are available. For sites, management often involves the salvage of features or artefacts, retrieval of information through excavation or collection (especially where impact cannot be avoided) and interpretation. The registered site PAD 52-5-0070 has been determined as being of low significance. As one Aboriginal artefact was identified during the test excavations then future approval for the project to proceed will need to be sought.

7 Recommendations

The recommendations below respond specifically to the wishes of the registered Aboriginal parties. Recommendations regarding the archaeological value of the site, and the subsequent management of Aboriginal cultural heritage is provided in the archaeological report (Appendix 6).

Recommendation 1: Continued consultation with the registered Aboriginal parties regarding the repatriation of Hammer stone

It is recommended that Wollongong City Council consult with these groups about the Aboriginal hammer stone and determine a process of future management.

Recommendation 2: Obtain an Aboriginal Heritage Impact Permit (AHIP) for the proposed works

The proposed works cannot avoid harm at PAD 1 (AHIMS #52-5-0070) and it is recommended that Wollongong City Council apply to the OEH for an AHIP so that the future works can be carried out in the study area and to allow movement of the surface hammer stone identified. A site impact form will also be submitted to AHIMS following impacts to PAD 1 (AHIMS #52-5-0070).

For information about AHIPs and their preparation, see below.

Advice preparing AHIPs

An AHIP is required for any activities likely to have an impact on Aboriginal objects or Places or cause land to be disturbed for the purposes of discovering an Aboriginal object. The Office of Environment and Heritage (OEH) issues AHIPs under Part 6 of the National Parks and Wildlife Act 1974 (NPW Act).

AHIPs should be prepared by a qualified archaeologist and lodged with the OEH. Once the application is lodged processing time can take between 8-12 weeks. It should be noted that there will be an application fee levied by the OEH for the processing of AHIPs, which is dependent on the estimated total cost of the development project.

Where there are multiple sites within one study area an application for an AHIP to cover the entire study area is recommended.

Recommendation 3: Discovery of Unanticipated Aboriginal Objects

All Aboriginal objects and Places are protected under the NSW National Parks and Wildlife Act 1974. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

Recommendation 4: Discovery of Unanticipated Historical Relics

Relics are historical archaeological resources of local or State significance and are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

Recommendation 5: Discovery of Aboriginal Ancestral Remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

4. Immediately cease all work at that location and not further move or disturb the remains
5. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
6. Not recommence work at that location unless authorised in writing by OEH.

APPENDIX G: ABORIGINAL HERITAGE IMPACT PERMIT

Issue of Aboriginal Heritage Impact Permit

National Parks and Wildlife Act 1974



Office of
Environment
& Heritage

Your reference: 23423
Our reference: AHIMS No. 4261/ EF18/5792
Notice number: C0003632
Contact: Amy Way amy.way@environment.nsw.gov.au

WOLLONGONG CITY COUNCIL
LOCKED BAG 8821
WOLLONGONG, NSW 2500

NOTICE OF THE ISSUE OF ABORIGINAL HERITAGE IMPACT PERMIT C0003611

Issued pursuant to section 90C(4) of the *National Parks and Wildlife Act 1974*

BACKGROUND

- A. Wollongong City Council (the applicant) applied to the Office of Environment and Heritage (OEH) under section 90A of the *National Parks and Wildlife Act 1974* (NPW Act) for an Aboriginal Heritage Impact Permit (AHIP). The AHIP application was in relation to proposed upgrade works at Wombarra Cemetery.
- B. OEH received the application on 18/4/18 and further information was received on 24/4/18 and 14/5/18.

ISSUE OF ABORIGINAL HERITAGE IMPACT PERMIT

1. OEH has considered the application and supporting information provided, and matters under section 90K of the NPW Act and has decided to issue an AHIP C0003611 subject to conditions.
2. The AHIP is attached.
3. You should read the AHIP carefully and ensure you comply with its conditions. In particular please note the following condition:
 - A Care Agreement is required for the hammerstone. This must be drafted in consultation with the Registered Aboriginal Parties. A copy of the Care Agreement must be provided to OEH within 3 months of the issue of this AHIP.

It is an offence under section 90J NPW Act to fail to comply with the conditions of the AHIP. The maximum penalty that a court may impose on a corporation for failing to comply with this AHIP is \$1.1m. OEH can also issue penalty notices for this offence.

A handwritten signature in blue ink, appearing to read 'Chris Page', written over a dotted line.

Chris Page

Senior Team Leader Planning

Wollongong

(by Delegation)

Date: 15 May 2018

Notice No. C0003632

Application Ref No. A05366-2018

Printed: 1:50:06 PM 15/05/2018

Issue of Aboriginal Heritage Impact Permit

National Parks and Wildlife Act 1974



Office of
Environment
& Heritage

INFORMATION ABOUT THIS NOTICE

- Details provided in this notice will be available on OEH's Public Register in accordance with section 188F of the NPW Act.

Variation of this AHIP

- This AHIP may only be varied on application by the AHIP holder or by OEH to correct typographical errors or resolve inconsistencies between conditions of the AHIP. A permit can only be varied by subsequent variation notices.

Appeals against this decision

- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

Aboriginal Heritage Impact Permit

Section 90 of the *National Parks and Wildlife Act 1974*



Office of
Environment
& Heritage

AHIP number: C0003611

(AHIMS Permit ID:4261)

AHIP Issued To:

WOLLONGONG CITY COUNCIL
LOCKED BAG 8821
WOLLONGONG, NSW 2500
Australia

OEH Office issuing this AHIP

Office of Environment and Heritage

Regional Operations

Southeast Branch, Illawarra Area

84 Crown Street, Wollongong 2520

Telephone number: (02) 4224 4150

Email: rog.illawarra@environment.nsw.gov.au

Additional details for public register

a) Name of development or project	Wombarra Cemetery Works
b) Location	Scarborough/Wombarra Cemetery, Lawrence Hargrave Drive, Wombarra, 2515
c) Local Government Area(s)	Wollongong
d) Description of harm authorised	<ul style="list-style-type: none">Harm to certain Aboriginal objects through the proposed works
e) AHIP commencement date and duration	<i>Commencement:</i> 15/5/18 <i>Duration:</i> 20 years

AHIP TO HARM ABORIGINAL OBJECTS

A. Background

- (a) On 18/4/18 an application was made to the Chief Executive of the Office of Environment and Heritage (OEH) for an Aboriginal Heritage Impact Permit (AHIP) pursuant to s.90 of the *National Parks and Wildlife Act 1974* (the Act).
- (b) On 24/4/18 the associated reports (ACHAR and Archaeological Report) were received via email.
- (c) This AHIP is to cover harm to certain Aboriginal objects through the proposed works.
- (d) The Land to which this AHIP applies is shown in Figure 1.
- (e) The proposed works consist of upgrades to and maintenance of the facilities at Wombarra Cemetery, see Figure 2.
- (f) A testing AHIP has been previously issued (AHIP # C0003262). The test-excavations recovered one Aboriginal object which was in association with imported fill.
- (g) Consultation has been conducted in-line with the DECCW (2010) Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, and in accordance with subclause 80C of the National Parks and Wildlife Regulation 2009.
- (h) OEH considered the application and supporting information provided, and matters under section 90K of the Act and decided to issue an AHIP subject to conditions.

B. AHIP issued subject to conditions

An AHIP is issued to harm Aboriginal objects identified in Schedule C, in accordance with the conditions of this AHIP.

This AHIP is issued pursuant to section 90 of the Act.

C. Commencement and duration of AHIP

This AHIP commences on the date it is signed unless otherwise provided by this AHIP.

Unless otherwise revoked in writing, this AHIP remains in force for:

- (i) 20 years from the date of commencement.

D. Proposed Works

The proposed works consist of upgrade and maintenance works at Wombarra Cemetery. These consist of:

- Burials
- Construction of niche walls and small retaining wall/s
- Construction of footpaths
- Tree planting/clearing/mowing
- Garden bed construction and maintenance
- Installation of lighting/CCTIV
- Road maintenance/creation
- Installation of seats/bins/tables/other furniture/shelters/shade structures
- Waste collection operations

Aboriginal Heritage Impact Permit

Section 90 of the *National Parks and Wildlife Act 1974*



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- Installation and maintenance of amenities and water supply
- Installation and maintenance of fences/vehicle barriers/handrails/signage
- The construction works are shown in Figure 2.



Figure 1 Land to which this AHIP applies (marked in red as 'study area') and location of test-pits

Section 90 of the *National Parks and Wildlife Act 1974*

Note: A Dictionary at the end of the AHIP defines terms used in this document. Further information about this AHIP is also set out after the Dictionary.

Chris Page
Senior Team Leader Planning
Wollongong

(by Delegation) 15 May 2018
DATED:

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LAND TO WHICH THIS AHIP APPLIES

The land to which this AHIP applies is located at the Wombarra Cemetery, Lawrence Hargrave Drive, Wombarra and is identified by a heavy dotted line in Figure 2. The land to which this AHIP applies includes the following lots and DPs: Lot 7028 DP 1058309 and Lot 7303 DP1149809.

CONDITIONS

The conditions of this AHIP specify the actions that are permitted and/or required in relation to areas and Aboriginal objects, which are detailed in the Schedules that follow.

Administrative Conditions

Responsibility for compliance with conditions of AHIP

1. The AHIP holder must ensure that all persons involved in actions or works covered by this AHIP (whether employees, contractors, sub-contractors, agents or invitees) are made aware of and comply with the conditions of this AHIP.

Project manager to oversee the actions relating to this AHIP

2. A suitably qualified and experienced individual must be appointed as a project manager who is responsible for overseeing, for and on behalf of the AHIP holder, all the actions relating to this AHIP.
3. The individual appointed as project manager must be the project manager nominated in the application form.
4. If an alternative to the nominated project manager is appointed, OEH must be notified of their contact details within 14 days of this appointment.

Actions must be in accordance with AHIP application

5. All actions on the land must be carried out in accordance with the application except as otherwise expressly provided by a condition of this AHIP.

Operational Conditions

Certain Aboriginal objects must not be harmed

6. All human remains in, on or under the land must not be harmed, other than any human remains identified in Schedule B4.

Harm of certain Aboriginal objects through the proposed works

7. The Aboriginal objects described in Schedule C may be harmed. Nothing in this condition authorised harm to Aboriginal objects described in Schedule A (whether human remains, Aboriginal objects or 'no-harm areas').

Management of certain Aboriginal objects

8. A Care Agreement must be detailed for the long-term safe-keeping of the hammerstone. This must be drafted in consultation with the Registered Aboriginal Parties. Information on the

creation of a Care Agreement can be found at:

<http://www.environment.nsw.gov.au/licences/careagreements.htm>

9. A copy of the Care Agreement must be provided to OEH within 3 months of the issue of this AHIP.

Notification and Reporting Conditions

Notification of commencement and completion of actions

10. Written notice must be provided to the OEH office at least 7 days prior to the commencement of actions authorised by this AHIP.
11. Written notice must be provided to the OEH office within 7 days of the completion of actions authorised by this AHIP.

Copy of this AHIP and notices to be provided to Registered Aboriginal Parties

12. A copy of this AHIP must be provided to each Registered Aboriginal Party, within 14 days of receipt of the AHIP from OEH.
13. Where this AHIP is varied or transferred, a copy of the AHIP variation or transfer notice must be provided to each Registered Aboriginal Party, within 14 days of receipt of the notice.

Human remains

14. If any human remains (other than any human remains described in Schedule B4) are discovered and/or harmed in, on or under the land, the AHIP holder must:
 - (a) not further harm these remains
 - (b) immediately cease all work at the particular location
 - (c) secure the area so as to avoid further harm to the remains
 - (d) notify the local police and OEH's Environment Line on 131 555 as soon as practicable and provide any available details of the remains and their location, and
 - (e) not recommence any work at the particular location unless authorised in writing by OEH.

Incidents which may breach the Act or AHIP

15. The AHIP holder must notify the OEH office in writing as soon as practicable after becoming aware of:
 - (a) any contravention of s.86 of the Act not authorised by an AHIP, and/or
 - (b) any contravention of the conditions of this AHIP.

Reports about incidents which may breach the Act or AHIP

16. Where OEH suspects that an incident has occurred which may have breached the Act or AHIP, OEH may request a written incident report, which includes the following:
 - (a) the nature of the incident
 - (b) the actual or likely impact of the incident on Aboriginal objects and/or Aboriginal places
 - (c) the nature and location of these Aboriginal objects and/or Aboriginal places, referring to and providing maps and photos where appropriate
 - (d) any conditions of an AHIP which may have been breached, and
 - (e) the measures which have been taken or will be taken to prevent a recurrence of the incident.

17. The incident report must be provided to the OEH office within the timeframe specified in the request.

Provision of Aboriginal Site Impact Recording Form

18. An Aboriginal Site Impact Recording Form must be completed and submitted to the AHIMS Registrar, for each AHIMS site identified in Schedules B and C, within 4 months of the completion of the construction actions authorised by this AHIP.

Note:

- (i) The Aboriginal Site Impact Recording Form can be found on the OEH website:
<http://www.environment.nsw.gov.au/licences/DECCAHISSiteRecordingForm.htm>
- (ii) Contact details for the AHIMS Registrar can be found on the OEH website:
<http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm>

General Conditions

Indemnity

19. The AHIP holder agrees to indemnify and keep indemnified, the Crown in right of NSW, the Minister administering the Act, the Chief Executive of OEH, and their employees, agents and contractors, in the absence of any willful misconduct or negligence on their part, from and against all actions, demands, claims, proceedings, losses, damages, costs (including legal costs), charges or expenses suffered or incurred by them resulting from:
- (a) any damage or destruction to any real or personal property; and
 - (b) injury suffered or sustained (including death) by any persons arising out of or in connection with any actions undertaken pursuant to this AHIP.

Release

20. The AHIP holder agrees to release to the full extent permitted by law, the Crown in right of NSW, the Minister administering the Act, the Chief Executive of OEH, and their employees, agents and contractors, in the absence of any willful misconduct or negligence on their part, from all suits, actions, demands and claims of every kind resulting from:
- (a) any damage or destruction to any real or personal property; and
 - (b) injury suffered or sustained (including death) by any persons arising from or in connection with any actions undertaken pursuant to this AHIP.

Written notice

21. Any requirement to provide written notice to the OEH office in this AHIP may be complied with by emailing or by sending by registered post to the OEH office's address. The OEH office's contact details are specified at the front of this AHIP.

SCHEDULES

The following schedules identify the areas and Aboriginal objects that are subject to the conditions of this AHIP.

Schedule A: Aboriginal objects which must not be harmed

A1 Human remains

All human remains in, on or under the land must not be harmed, other than any human remains identified in Schedule B4, as specified by the conditions of this AHIP.

A2 Aboriginal objects that are identified on AHIMS

NA

A3 No-harm areas

NA

Schedule B: Aboriginal objects that may be harmed through the certain actions

NA

Schedule C: Aboriginal objects which may be harmed through the proposed works

The Aboriginal objects described in this schedule may be harmed, but only in accordance with the conditions of this AHIP (excluding any Aboriginal objects described in Schedule A).

C1 Harm of Aboriginal objects identified on AHIMS

Portion of Site (whole or part)	AHIMS Site ID	Site Feature	Site Name	Information access restriction? (Y/N)	Easting	Northing	Datum
Whole	52-2-4458	PAD/Artefact	Wombarra Cemetery PAD 1	N	864013	6199618	GDA
Whole	52-2-4477	Hammerstone	Wombarra Cemetery ISO	N	864013	6199618	GDA

DICTIONARY

In this AHIP, unless the contrary is indicated the terms below have the following meanings:

Aboriginal object	has the same meaning as in the Act.
Act	means the <i>National Parks and Wildlife Act 1974</i> .
AHIMS	means the Aboriginal Heritage Information Management System maintained by OEH, as defined in s.90Q of the Act.
AHIP	means Aboriginal Heritage Impact Permit
AHIP holder	means the entity or person listed on the cover page under the heading "AHIP issued to".
Application	means the completed application form and all other documents in written or electronic form which accompanied the application when it was lodged or which were subsequently submitted in support of the application.
Community collection	means the collection of Aboriginal objects by one or all Registered Aboriginal Parties or their representatives.
Community collection area	means an area described as a community collection area in Schedule B3
Harm	has the same meaning as in the Act. In relation to Aboriginal objects, harm means the movement, damage, defacement and/or destruction of Aboriginal objects. In relation to an Aboriginal place, harm means the damage, defacement and/or destruction of the Aboriginal place.
Land	means the land described under the heading "Land to which this AHIP applies".
No-harm areas	means those areas described in Schedule A3.
OEH	Office of Environment and Heritage (NSW).
OEH office	means the office listed on the cover page of this AHIP.
Proposed works	means the works described under the heading "D. Proposed Works" at the front of this AHIP.
Public register	means the public register established under s.188F of the Act, that contains details of AHIPs issued by the Chief Executive of OEH, as described under the heading "Information about this AHIP".
Registered Aboriginal Parties	means the Registered Aboriginal Parties listed in the application.
Salvage excavation	means an archaeological excavation carried out in accordance with the methodology accompanying the application, as modified by the conditions of this AHIP. The purpose of salvage excavation is to recover a sample of Aboriginal objects as an archival record of Aboriginal life from a site that will be destroyed.
Salvage excavation area	means any area described as a salvage excavation area in Schedule B2.
Test excavation	means an archaeological excavation carried out in accordance with

Aboriginal Heritage Impact Permit

Section 90 of the *National Parks and Wildlife Act 1974*



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methodology accompanying the application, as modified by the conditions of this AHIP. The purpose of test excavation is to collect a sample of Aboriginal objects, in order to establish the nature and extent of sub-surface Aboriginal objects and to assist in the assessment of management options for the site.

Test excavation area means any area described as a test excavation area in Schedule B2

INFORMATION ABOUT THIS AHIP

Public Register

Under section 188F of the Act, the Chief Executive of OEH is required to keep a public register containing the details of each AHIP issued. The details of this AHIP that will be published on the public register are outlined on the front page of this AHIP.

The public register is available online at www.environment.nsw.gov.au

Appeals

Under section 90L of the Act, the AHIP holder may appeal to the Land and Environment Court if they are dissatisfied with any condition of this AHIP. The appeal must be lodged within 21 days of the date this AHIP was issued.

Penalties for breach of the Act or AHIP condition

Significant penalties can be imposed by the Land and Environment Court for harm to an Aboriginal object or Aboriginal Place other than as authorised by a condition of an AHIP, or for a breach of an AHIP condition. OEH can also issue penalty notices for a breach of the Act or AHIP condition.

Responsibility for obtaining all approvals and compliance with applicable laws

The AHIP holder is responsible for obtaining and complying with all approvals necessary to lawfully carry out the work referred to in this AHIP, including but not limited to development consents.

Other relevant provisions of the *National Parks and Wildlife Act*

Newly identified Aboriginal objects must be notified to the Chief Executive of OEH under s.89A of the Act using the form available online at www.environment.nsw.gov.au

Stop work orders, interim protection orders and remediation directions may be issued in certain circumstances to protect Aboriginal objects or places.

Obligation to report Aboriginal remains under Commonwealth laws

The AHIP holder may have additional obligations to report any discovery of Aboriginal remains under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

Exercise of investigation and compliance powers

Officers appointed or authorised under the Act may exercise certain powers and functions, including the power to enter land.

Duration of AHIP

This AHIP remains in force for the period specified in the AHIP.

Variation of AHIP

The AHIP holder may apply to the OEH office for a variation of any conditions of an AHIP, using the AHIP variation application form available online at www.environment.nsw.gov.au. Requests for significant variations must be accompanied by evidence of further consultation with Registered Aboriginal Parties and may include payment of fees.

The conditions of an AHIP may be varied at any time by the Chief Executive of OEH in order to correct a typographical error or to resolve an inconsistency between conditions. The AHIP holder may appeal a decision of the Chief Executive of OEH to vary the conditions of the AHIP.

Transfer of AHIP

The AHIP holder may apply to transfer this AHIP to another person by using the AHIP transfer application form available online at www.environment.nsw.gov.au.

Surrender of AHIP

The AHIP holder may apply to surrender this AHIP by using the AHIP surrender application form available online at www.environment.nsw.gov.au. The surrender must be approved by the Chief Executive of OEH and may be subject to conditions.

Suspension and revocation of AHIP

An AHIP may be suspended or revoked at any time at the discretion of the Chief Executive of OEH. Prior to suspending or revoking the AHIP, the AHIP holder will be given notice and an opportunity to make submissions. The AHIP holder will be notified in writing of the final decision. The AHIP holder may appeal a decision to revoke the AHIP.

Entry to land

An AHIP does not automatically entitle its holder to enter land for the purpose of conducting work related to the AHIP. The AHIP holder is responsible for obtaining permission to enter land from the owner and/or occupier of the land.

Disclosure of information pursuant to lawful requirement

This AHIP does not prevent the disclosure of any information or document in OEH's possession in accordance with any lawful requirement.

Making copies of reports

By providing a report, the AHIP holder acknowledges that OEH can use the information in that report to inform its regulatory functions, note details of that report in AHIMS and include a copy of the report in its library which may be available to members of the public.

OEH is able to make copies of any reports provided to OEH under this AHIP.

APPENDIX H: SITE WASTE MINIMISATION PLAN

Site Waste Minimisation and Management Plan

Applicant and Project Details (All Developments)	
Applicant Details	
Application No.	
Name	Wollongong City Council
Address	
Phone number(s)	
Email	
Project Details	
Address of development	Scarborough Wombarra Cemetery - maintenance and upgrade works
Existing buildings and other structures currently on the site	Scarborough Wombarra Cemetery
Description of proposed development	Addition of new ash walls (columbariums) with associated upgrades to landscaping
<i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Wollongong City Council, NSW DECC or NSW WorkCover..</i>	
Name	
Signature	
Date	

(Source: NSW Department of Environment and Climate Change. Model Waste Not DCP Chapter 2008)

Demolition (All Types of Development)

Address of development: _____

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m ³) or Weight (t)	Estimate Volume (m ³) or Weight (t)	Estimate Volume (m ³) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks/pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste e.g. asbestos (specify)				
Other (specify)				

(Source: NSW Department of Environment and Climate Change. Waste Not DCP Chapter 2008)

Construction (All Types of Development)

Address of development: _____

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m ³) or Weight (t)	Estimate Volume (m ³) or Weight (t)	Estimate Volume (m ³) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and/or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				
Glass				
Plasterboard (offcuts)				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste (specify)				

(Source: NSW Department of Environment and Climate Change Model Waste Not DCP Chapter 2008)

Ongoing Operation (Residential, Multi Unit, Commercial, Mixed Use and Industrial)

Address of development: _____

Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

	RECYCLABLES		COMPOSTABLES	RESIDUAL WASTE*	OTHER
	Paper/ cardboard	Metals/ plastics/glass			
Amount generated (L per unit per day)					
Amount generated (L per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number and size of storage bins required ⁷					
Floor area required for storage bins (m ²)					
Floor area required for manoeuvrability (m ²)					
Height required for manoeuvrability (m)					

* Current "non-recyclables" waste generation rates typically include food waste that might be further separated for composting.

Construction Design (All Types of Developments)

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development:

Materials

Lifecycle

Detail the arrangements that would be appropriate for the ongoing use of waste facilities as provided in the development. Identify each stage of waste transfer between residents' units/commercial tenancies and loading into the collection vehicle, detailing the responsibility for and location and frequency of, transfer and collection.

Plans and Drawings (All Developments)

The following checklists are designed to help ensure SWMMPs are accompanied by sufficient information to allow assessment of the application.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:

- Demolition
- Construction
- Ongoing operation.

DEMOLITION

Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

CONSTRUCTION

Do the site plans detail/indicate:\

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

On-Going Operational Phases of The Development

Do the site plans detail/indicate:

	Tick Yes
Space	
Size and location(s) of waste storage areas	
Recycling bins placed next to residual waste bins	
Space provided for access to and the manoeuvring of bins/equipment	
Any additional facilities	
Access	
Access route(s) to deposit waste in storage room/area	
Access route(s) to collect waste from storage room/area	
Bin carting grade	
Location of final collection point	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
Amenity	
Aesthetic design of waste storage areas	
Signage – type and location	
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	

APPENDIX I: BIODIVERSITY VALUES MAP AND THRESHOLD REPORT

Biodiversity Offset Scheme (BOS) Entry Threshold Map



491.8 0 245.91 491.8 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days

Notes

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NSW Environment & Heritage

Biodiversity Values Map and Threshold Report

Results Summary

Date of Calculation	25/02/2020 12:02 PM	BDAR Required*
Total Digitised Area	0.02 ha	
Minimum Lot Size Method	Lot size	
Minimum Lot Size	1.77 ha	
Area Clearing Threshold	0.5 ha	
Area clearing trigger Area of native vegetation cleared	Unknown [#]	Unknown [#]
Biodiversity values map trigger Impact on biodiversity values map(not including values added within the last 90 days)?	yes	yes
Date of the 90 day Expiry	N/A	

*If BDAR required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor> to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species" as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared - refer to the BOSET user guide for how to do this.

On and after the 90 day expiry date a BDAR will be required.

Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies with all aspects of the *Biodiversity Conservation Act 2016*.

The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature _____ Date: 25/02/2020 12:02 PM

APPENDIX J: ENGAGEMENT REPORT: SCARBOROUGH WOMBARRA CEMETERY MAINTENANCE AND UPGRADE WORKS

OUR PLACE
our voice
OUR FUTURE



SCARBOROUGH WOMBARRA CEMETERY MAINTENANCE & UPGRADE WORKS

ENGAGEMENT REPORT

July 2019

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The information in this report is based on data collected from community members who chose to be involved in engagement activities and therefore should not be considered representative.

This report is intended to provide a high-level analysis of the most prominent themes and issues. While it's not possible to include all the details of feedback we received, feedback that was relevant to the project has been provided to technical experts for review and consideration.

Executive Summary

The Scarborough Wombarra Cemetery is currently at capacity with no space for future burials and internments. A plan to extend the existing ash placement garden has been developed. The plan is to extend the southern end of the cemetery with the proposal of two, new columbarium's and additional landscaping. An environmental impact statement has to be developed to determine the impact the proposed works will have on the environment. To inform this process, we asked the community to provide their feedback and share their knowledge about the area's significance, natural environment and heritage from 7 June to 8 July 2019.

The communication process included a media release, social media posts, and Council's Community Update in the Advertiser. Information was distributed to key stakeholders and letters were sent to residents and property owners inviting them to the information stand held onsite on 15 June 2019. Also attached to the letter were a FAQ (Appendix A), feedback form (Appendix B) and Concept Plan (Appendix C). A project page on Council's Engagement HQ website provided copies of the concept plan, frequently asked questions and link to an online survey.

A total 16 community members attended the information stand. 16 submissions were received.

There was general support for the proposed works for Scarborough Wombarra Cemetery with some feedback acknowledging that additional space is required and would benefit the community.

A range of suggestions were made including: concerns that the proposed columbarium's will disrupt the natural aesthetics, the area is too big and too close to the cliff edge; and the placement will result in the new interments being stepped over.

There were some concerns removal of vegetation from the cliff edge will cause erosion. It was requested that any vegetation removed be reinstated and an experienced professional bush carer be involved. There were also concerns that the hard surface structure close to the edge would result in drainage problems and concerns about the stability of the cliff due to erosion were presented.

The importance of maintaining access to the site for activities such as whale spotting, walking, looking at the surf and family picnics was presented. Requests were received for more seating in the cemetery and for parking issues to be addressed.

Background

Scarborough Wombarra Cemetery is currently at capacity and has no available space for future burials. Council has proposed to complete minor demolition works and maintenance works, and extension of an ash placement garden including new columbariums, paths and landscaping. As part of the Scarborough Wombarra Cemetery's masterplan to improve accessibility, area maintenance, vegetation, seating and shading, we engaged key stakeholders to reassure them that the cemetery's heritage significance to the area and its residents are valued.



Council commissioned a consultant to prepare an Aboriginal Cultural Heritage Assessment Report. The outcomes of this Report recommended that an Aboriginal Heritage Impact Permit (AHIP) for the proposed works be obtained. The AHIP has been issued for the upgrade and maintenance works at the Cemetery, including the proposed works.

Council commissioned a Historical Archaeological Assessment to inform the planning and design process. An Environmental Impact Statement (EIS) had to be developed by Council to address boundary and mapping issues for the proposed construction area. An EIS will provide an assessment and analysis of the proposal for landscaping and provision of new columbariums, a key requirement in the development of the EIS is the implementation of strategies to allow community feedback.

An engagement strategy was developed using recommendations and requirements of the EIS Secretary's Environmental Assessment Requirements (SEARs) for engaging with community and key stakeholders. The strategy was used throughout the scope of the Scarborough Wombarra Cemetery project to obtain relevant feedback, and to demonstrate to community that we have listened, considered and addressed any defined issues.

Methodology

The following section outlines the various activities undertaken during the community engagement period 7 June – 8 July 2019.

Table 1: Details of Communication and Engagement Methods

Methods	Details of Methods
Communication Methods	
The Advertiser	Details of the project, onsite information stand and Engagement HQ webpage were included in Council's Community Update pages.
Social Media	A post was put on social media informing community about the project and information stand
Media release	A media release was made available for media outlets.
Email to key stakeholders	An email and FAQ were sent to all stakeholders who participated in previous engagements and stakeholders identified through an analysis process.
Onsite Information Stand	Stakeholders interested in the project were encouraged to visit our onsite information stand to ask questions and discuss the proposal.
Letter	A letter inviting community to attend onsite information stand to discuss and provide feedback on Environmental Impact Statement (EIS)
Meeting	<p>A meeting was held with the Friends of Scarborough Wombarra Cemetery group to provide them with the following information;</p> <ul style="list-style-type: none"> - Description of project - Map with project location and planning design - Information about the reasoning and how it aligns with the projects masterplan - Discuss Environmental Impact Statement (EIS) and why this report has to be incorporated
Engagement Methods	
Engagement HQ Website	An online survey tool was used to capture participant's feedback. The page also hosted background info and supporting documents.
Feedback Form	A hard copy feedback form was made available at online and through engagement activities.

Results

This section provides details on the participation and engagement activities and the feedback received during the engagement and communication period. Formal feedback on the proposed maintenance and upgrade works for Scarborough Wombarra Cemetery came from 16 submissions; 5 open submission, 5 feedback forms and 6 online feedback forms. One group submission was received from the Friends of Scarborough Wombarra Cemetery.

Engagement Participation

Details of the number of participants for each engagement activity are presented in Table 2.

Table 2: Engagement Participation Results

Engagement Activities	Participation
Onsite information stand	16
Total submissions	16
Online Participation	
Aware – Total number of users who viewed the project page	77
Informed - Total number of users who opened a hyperlink or read a document	37
Engaged –Total number of users who have actively contributed to the project	6

Feedback Results

Formal feedback on the proposed maintenance and upgrade works for Scarborough Wombarra Cemetery came from 16 submissions, which included feedback from the Friends of Scarborough Wombarra Cemetery Group.

There was general support for the proposed works for Scarborough Wombarra Cemetery with some feedback acknowledging that additional space is required and would benefit the community. The following information provides an overview of the suggestions and recommendations presented through the feedback.

Design

Columbarium's: It was suggested that the proposed columbarium's (ash walls) are too big for the area. Concerns were raised that they will disrupt the natural blend of the environment around them and be a standalone concrete block that is not attractive. It was also suggested that they will affect the natural beauty and aspect that characterises the current memorial placements in the area. It was recommended that one columbarium would be more suitable for the area as two ash walls will cause issues with blockage and accessibility of current placements.

Location: It was suggested the area is too big and too close to the cliff edge and that a smaller circular area would be more appropriate for the location. A respondent suggested that the columbarium's be relocated either to the eastern or northern area of the cemetery where there is stable ground and more room for development.

Memorial Wall: The current design has the path and memorial edge being extended at the northern end at an angle off set to the current garden edge. It was proposed that current placements will block access and will require the disrespectful act of stepping over the new interments to reach them. There was opposition to installing the retaining wall going from the south as it would require the removal of vegetation (prostrate casuarina). It was proposed that instead of a memorial retaining wall a small memorial garden with well-maintained plants would be more appropriate.

Landscape: It was recommended that the design have a more natural environmental look, suitable for the surrounding area.

Environment

Vegetation and Wildlife: It was suggested that the removal of natural/native vegetation from the circle south would be unwise. It was presented that natural vegetation in the past was removed from the cliff edge which caused erosion problems. Friends of Scarborough Wombarra cemetery were supportive of the proposed revegetation of the cliff edge with 'littoral wind shear thicket and banksia integrifolia' (local native species). It was acknowledged that the re-establishment of this vegetation's is viable food source for local wildlife. A request was also made that an experienced professional bush carer be involved with re-planting to limit disturbing the ground and soil.

Cliff Edge: It was suggested that the proposed works are too close to the cliff edge and the proximity of the works will affect the already existing unstable ground on the cliff edge. Concerns the workers onsite could be at risk of injuring themselves due to loose or slippery surface was also raised.

Water/Drainage: Concerns were raised that the hard surface structure close to the edge would result in drainage problems and that water runoff could cause damage to the vegetation that holds the soil. It was suggested that a drain behind the retaining wall will control and disperse water build up.

Erosion: It was proposed that when there is heavy rain, gullies are formed causing erosion and the cliff edge becomes very unstable. Further, recent heavy weather had caused waves to further undermine the cliff edge resulting in rock falls and land slippage. It was recommended that stability of the headlands is to be taken into consideration for any upcoming development to prevent future erosion.

Social

More than a Cemetery: It was shared that lots of people visit the cemetery for reasons other than to visit graves. The local community and tourists stop at the cemetery to take in its 'amazing views'. The site was recognised as a great place for whale spotting, looking at the surf and family


picnics. There is also a walking track for locals and their pets that have access to Wombarra rock pools and the beach. The importance of these activities being maintained was presented.

Communication: Concerns about not being contacted about the proposed works were raised. It was requested that family of those buried are provided the opportunity to have input towards to the development.

Other Alternatives: Suggestions were made that Council look into other ways of memorialising loved ones, for example a tree dedication, more memorial gardens. It was also suggested that it would be better to do the improvements proposed in the masterplan first and leave the current proposal for a much smaller development.

Seating: There were requests to have more adequate seating space within the cemetery. It was suggested that the proposed seats in the design were too close to the existing placements and a recommendation made to relocate the seats further east of the proposed retaining wall.

Parking: It was suggested that parking at the eastern point of the cemetery be formalised suggesting that when there is persistent rain the water builds up and forms puddles causing cars to churn up mud and create diverts. It was suggested that there is limited space for parking when there are large funerals and that people are sometimes required to park in surrounding streets or at times along Lawrence Hargrave Drive.



Scarborough Wombarra Cemetery Landscape Plan

We're planning to do some maintenance and upgrade works at the Scarborough Wombarra Cemetery. This cemetery is currently at capacity and has no available space for future burials or memorial ash placements, so we've developed a plan to extend an existing ash placement garden. The plans will improve accessibility and provide ash placement opportunities, new spaces for storing urns, paths, seats and landscaping. Before we can start work, we're asking the community to share their knowledge about this area's natural environment and heritage. This will allow us to consider any matters as part of our planning for the work.

Let us know your thoughts before 5pm 8 July 2019

How was the landscape plan developed?

We worked with key stakeholders, including the Friends of Scarborough Wombarra Cemetery Group, to understand what was important to them. A draft Masterplan Plan was developed and reviewed by the group.

Why do you want heritage and environmental information from the community?

As part of our planning for this work, we need to create an Environmental Impact Statement (EIS). This will provide information on the project's potential environmental impacts and detail how Council will control or reduce any adverse effects. The EIS will be used by the NSW Department of Planning & Environment to inform the development consent decision for the plan.

Why is an Environmental Impact Statement required for these proposed works?

The reason we are undertaking the EIS is to meet our requirements under the State Environmental Planning Policy (Coastal Management). As this area has been mapped as Coastal Littoral Rainforest under this SEPP, it requires an EIS to be prepared to assess the impacts on this area. Land near the area we are proposing for the ash wall has been incorrectly mapped as littoral rainforest. Littoral rainforests in eastern Australia are listed as critically

endangered under the Environment Protection and Biodiversity Conservation Act 1999, so we are required to formally assess how we will ensure we do not have any impact on this endangered ecosystem, even though it is not present on site.

What work is proposed?

The proposed upgrade and maintenance works include:

- New concrete walls rendered and painted with a polished stone memorial covering
- New footpath
- Stonework/brickwork memorial edging
- New columbariums (structures with space for storing urns)
- New garden seating and bin enclosure
- Re-establishment of vegetation along the boundary edge
- New trees with stonework, brickwork or sandstone garden edging and a mulched garden area

What will happen with the memorial rocks and associated ash placements?

The majority of memorial rocks and ash placements will not be disturbed during construction. A small number will require temporary removal, but will be put back in the same position before the work is finished.

How else will you assess this site's heritage?

Council commissioned a heritage consultant to do an archaeological investigation for this site. An Aboriginal Heritage Impact Permit has been granted for this work, which means that we have planned to conserve any Aboriginal cultural heritage on this site.

How will my feedback be considered?

At the end of the engagement period, all feedback is read and considered. Your local knowledge of the area will be used to inform the EIS. The EIS will be sent to the NSW Department of Planning & Environment for consideration. They will then exhibit the EIS and invite the community to provide feedback directly to them.

When will works start?

Works will start when all feedback and information on the EIS has been provided to the NSW Department of Planning & Environment for review. The start date will be pending their approval.

How can I find out more?

Drop In Information Stand

Come along to our drop in information stand and talk to one of the project team.

Where: Scarborough Wombarra Cemetery,
Lawrence Hargrave Drive, Wombarra

When: 15 June, drop by anytime between 10am - 11.30am

You can also join the conversation online, over the phone or write to us. See details below.

Join the conversation

Visit www.wollongong.nsw.gov.au

Email engagement@wollongong.nsw.gov.au

Write Locked Bag 8821, Wollongong DC 2500

Phone 4227 7111

Are there any other matters that you believe should be considered in the Environmental Impact Statement (EIS)?

Do you think the proposed maintenance and upgrades works for the cemetery will benefit the local community and residents?

If you would like a reply to your submission and to be kept informed of progress, please fill in the section below.

Name:	
Address:	
Suburb:	Email:

The purpose for seeking your submission on advertised matters is to better assist Council in its decision making processes. The intended recipients of your submission are officers within Council and those granted lawful access to the information. Your submission may be exhibited on Council's website and included in publicly accessible registers. If you make an anonymous submission, Council will be unable to contact you further.

If your submission relates to a development proposal or other relevant planning application, Council is required to disclose on its website all relevant details of political donations or gifts made by you, including your name and address.

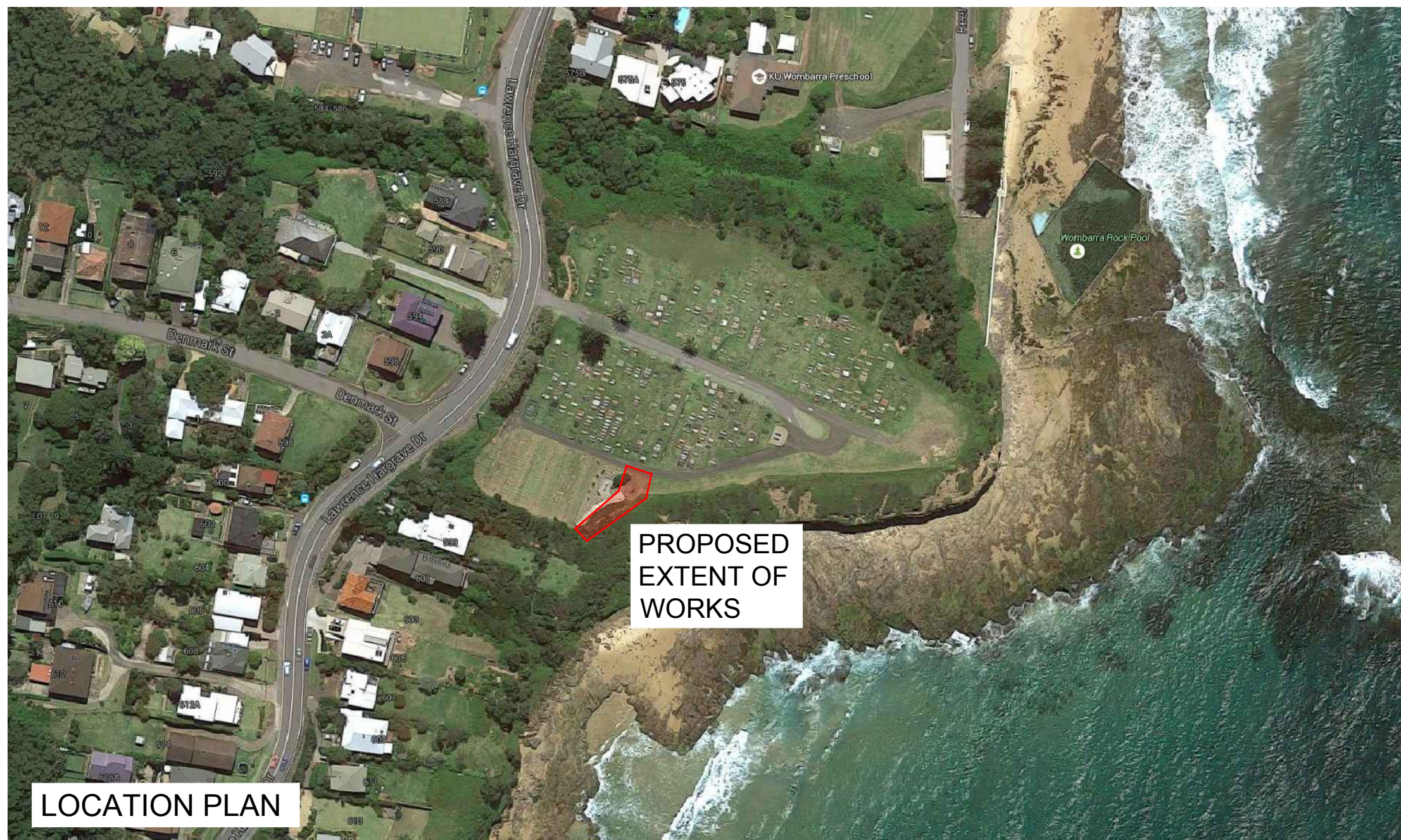
In limited circumstances, you may apply for suppression of your personal information from a publicly accessible register. Further information is available on Council's website at www.wollongong.nsw.gov.au/pages/privacy.aspx or by phoning Council on (02) 4227 7111.



SITE PHOTO - APRIL 2016



SITE PHOTO - APRIL 2016



LOCATION PLAN

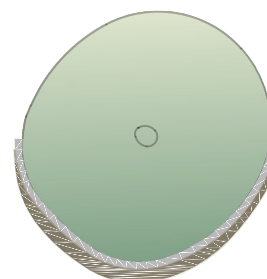


PATH AND MEMORIAL EDGE

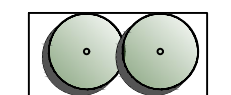


PATH AND MEMORIAL EDGE

LEGEND



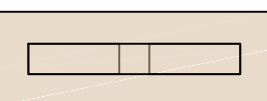
PROPOSED TREES



SHRUB PLANTING



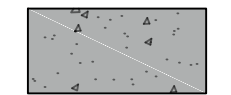
GARDEN SEATS



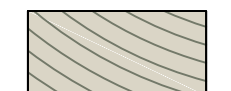
GRANITE COLUMBARIUM



EXISTING MEMORIAL ROCK PLACEMENTS



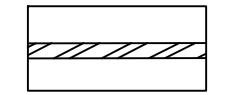
HONED CONCRETE SURFACE



RADIAL PATTERN BRICK PAVING



GRAVEL SURFACE TO MATCH EXISTING



CONCRETE BLOCK RETAINING WALL WITH POLISHED GRANITE CAPPING UNIT



TURF

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

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Appendix D: Letter to Residents



WOLLONGONG CITY COUNCIL

Address 41 Burelli Street Wollongong • Post Locked Bag 8821 Wollongong DC NSW 2500

Phone (02) 4227 7111 • Fax (02) 4227 7277 • Email council@wollongong.nsw.gov.au

Web www.wollongong.nsw.gov.au • ABN 92 139 529 108 • GST Registered



FORM 104B – NOTIFICATION LETTER RESIDENTS



Our Ref
File
Date

Z19/118417
CCE-040.010.01.344
7 June 2019

Dear Resident/Owner

SCARBOROUGH WOMBARRA CEMETERY MAINTENANCE AND UPGRADE WORKS

I'm writing to let you know about some maintenance and upgrade works Council is planning for the Scarborough Wombarra Cemetery. This cemetery is currently at capacity and has no available space for future burials or memorial ash placements, so we've developed a plan to extend an existing ash placement garden. The plans will improve accessibility and provide ash placement opportunities, new spaces for storing urns, paths, seats and landscaping.

The proposed work will include the development of new ash walls, minor construction work, new footpaths, planting trees and vegetation, and landscaping of approximately 120 square metres located at the south eastern part of the cemetery. The design of the new ash walls will allow for 560 new interments. Enclosed is a landscape plan showing the proposed design and a Frequently Asked Questions sheet with more information about this project.

Before we can start work, we need to create an Environment Impact Statement (EIS) that provides information on the project's potential environmental impacts and how these will be controlled. As part of this process, we're inviting residents and property owners in the area to share their knowledge about this area's natural environment and heritage. This will allow us to consider any matters as part of our planning for the work.

Come along to our drop-in information stand to speak with Council staff about what's involved in the process, the work we have planned and share your knowledge of this location.

Where: Scarborough Wombarra Cemetery, Lawrence Hargrave Drive, Wombarra

When: Saturday 15 June 2019, 10:00am – 11:30am

If you're unable to attend, you can learn more about the project and join the conversation by visiting www.wollongong.nsw.gov.au or phoning (02) 4227 7111.

This letter is authorised by

Alison Bradford
Engagement Coordinator
Wollongong City Council

Species list for landscaping

Species name	Common name	Plant form
<i>Allocasuarina verticillata</i>	Drooping She-Oak	Small tree
<i>Banksia integrifolia</i> subsp. <i>integrifolia</i> .	Coast Banksia	Small – large tree
<i>Carpobrotus glaucescens</i>	Pigface	Groundcover
<i>Dianella caerulea</i>	Paroo Lily	Grass like
<i>Lomandra longifolia</i>	Long-leaved Mat-Rush	Grass like
<i>Melaleuca hypericifolia</i>	Honey Myrtle	Shrub
<i>Poa labillardieri</i> var. <i>labillardieri</i>	Tussock	Grass
<i>Westringia fruticosa</i>	Coast Rosemary	Shrub