



CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Additions and Alterations to Existing Education
Facility

FINAL

July 2024

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Facility

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Prepared by

Umwelt (Australia) Pty Limited

on behalf of

Catholic Education Archdiocese of Canberra and
Goulburn

Project Director: Luke Bettridge
Project Manager: Darragh O'Brien
Report No. 31433/R01
Date: July 2024



QMS Certification Services

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Acknowledgement of Country

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Abbreviations

Abbreviation	Description
CEMP	Construction Environmental Management Plan.
NSW	New South Wales.
RFI	Request for Information.
DPHI	Department of Planning, Housing and Infrastructure.
DCCEEW	Department of Climate Change, Energy, the Environment and Water.
LEP	Local Environmental Plan.
SEPP	State Environmental Planning Policy.
EMS	Environmental Management System.
WWCC	Working with Children Check.
RFS	Rural Fire Service.
TOBAN	Total Fire Ban.
EPA	Environmental Protection Authority.
MSDS	Material Safety Data Sheet.
ERP	Emergency Response Plan.
AHIMS	Aboriginal Heritage Information Management System

Glossary

Term	Description
Umwelt	Umwelt (Australia) Pty Limited.
The Project	Additions and Alterations to existing Education Facility located at 64 Culgoa Crescent, Pambula Beach, NSW, 2549.
The Proponent	Catholic Education Archdiocese of Canberra and Goulburn.
Council	Bega Valley Shire Council.
DA	DA/2023.299 to Bega Valley Shire Council for which this Construction Environmental Management Plan will support.
Environmental objective	Defined by AS/NZS ISO 14001 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental impact	Defined by AS/NZS ISO 14001 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
Non-conformance	Failure to conform to the requirements of project system documentation including this CEMP or supporting documentation.
Non-compliance	Failure to comply with the requirements of the Development Consent or any applicable license, permit or legal requirements.
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Feasible	Means what is possible and practical in the circumstances.

1.0 Introduction

Umwelt was engaged by Catholic Education Archdiocese of Canberra and Goulburn (Catholic Education) to prepare a Construction Environmental Management Plan (CEMP) for Additions and Alterations to an existing Education Facility (the Project).

1.1 Purpose

This CEMP has been prepared for Catholic Education to support a development application (DA/2023.299) for additions and alterations to an existing Education Facility located at 64 Culgoa Crescent, Pambula Beach, NSW, 2549 and to satisfy the requirements of Bega Valley Shire Council's (Council) Request For Information (RFI) dated 28 May 2024 which is outlined in **Section 2.1** below.

This CEMP details the environmental aspects and impacts that may result from construction activities and the associated environmental management, monitoring and corrective action measures which will be implemented during the construction phase of the Project. These form the basis for environmental monitoring, reporting and auditing of the construction activities to be undertaken by Catholic Education and its contractors. All activities will be undertaken in accordance with all relevant State and Commonwealth environmental legislation and regulations.

This CEMP has been prepared by Darragh O'Brien (Senior Environmental Consultant) of Umwelt who is suitably qualified to prepare the CEMP. Darragh is an environmental consulting professional with over 7 years of suitable experience in environmental approvals and management for significant development projects. This CEMP has been reviewed by Luke Bettridge (Environmental Management Lead- NSW, ACT and QLD) of Umwelt who has over 20 years experience in the construction, extractive industries and environmental management sector.

The structure of this CEMP is summarised in **Table 1.1** below.

Table 1.1 Structure of this CEMP

Section	Summary
Section 1.0	Outlines the purpose and objectives of this CEMP.
Section 2.0	A summary of the regulatory and compliance framework within which this CEMP applies.
Section 3.0	Provides a detailed description of the Project and provides a summary of the components and timing of the construction phase.
Section 4.0	An overview of the relevant environmental and risk management systems to be applied during construction.
Section 5.0	Outlines the emergency response procedure and incident response processes.
Section 6.0	Defines the roles and responsibilities of the personnel required for the construction phase, outlines stakeholder consultation and complaints management and details requirements for environmental awareness training.
Section 7.0	A summary of the inspection, auditing, reporting and document review requirements.

1.2 Objectives

The primary objective of this CEMP is to reduce and manage any associated adverse environmental impacts and satisfy regulatory requirements during construction of the Project. This includes the establishment of suitable controls to eliminate or minimise the risks to the environment during construction to a level that is as low as reasonably practicable. This CEMP has been prepared to:

- Provide a single document for managing environmental issues related to the project.
- Identify measures to protect the environment and ensure compliance with environmental legislation.
- Encourage best practice environmental management through planning, commitment and continuous improvement.
- Identify the potential for, and respond to, environmental incidents and emergency situations and take corrective action.
- Define roles and responsibilities for personnel.
- Ensure subcontractors implement the CEMP and supporting documentation.
- Facilitate consultation and communication with external stakeholders such as the local community.
- Establish and maintain programs and procedures for periodic CEMP reviews to be carried out.
- Ensure that environmental monitoring and review occurs to manage environmental components of construction.

2.0 Regulatory and Legislative Requirements

2.1 Bega Valley Shire Council Request for Information (RFI)

Table 2.1 below details the aspects requested by Bega Valley Shire Council to be addressed in the CEMP for DA/2023.299. Bega Valley Shire Council detailed these requirements in an email dated 28 May 2024. This table also identifies in which section of the plan that the requirements have been addressed.

Table 2.1 Council Request for Information

Condition	Section Addressed
A Construction Environmental Management Plan (CEMP) is to be prepared and submitted for review. The CEMP is also to specifically address how the proposed construction activities will impact on the following matters, with strategies to reduce or mitigate potential impacts	This CEMP
1. Protection of students, staff and visitors.	Section 4.3
2. The delivery of goods and materials including likely vehicle sizes, access points, traffic management strategies/ control measures/ controllers.	Section 4.6.2
3. The location of work zones, materials storage areas, site offices and facilities for construction workers, car parking for construction staff	Section 4.4
4. Security Lighting	Section 4.6.8
5. Noise, Water, Air pollution control	Section 4.6.4 Section 4.6.7 Section 4.6.5
6. Management of activities during exam times (including NAPLAN/ Trial and actual School Certificate and HSC exams).	Section 4.5.1
7. Management of activities /deliveries during school drop off and pickup	Section 4.5.2

2.2 Summary of Relevant Legislation Requirements

This CEMP was prepared in accordance with:

- Statement of Environmental Effects - Proposed Additions and Alterations to existing Education Facility (SET Consultants, 29 September 2023).
- Applicable legislation and regulatory requirements.

The key legislation, policies and standards relevant to the Project and the implementation of the CEMP are provided in **Table 2.2** below.

Table 2.2 Environmental Legislation, Policies and Standards Relevant to the Project

Legislation	Relevant Authority	Relevance to the Project
<i>Environmental Planning & Assessment Act 1979</i>	NSW Department of Planning, Housing and Infrastructure (DPHI)	The Bushfire Prone Land Map included as part of the DA indicates that the subject site is bushfire prone. A Bushfire Assessment Report has been prepared by SET Consultants Pty Ltd and has been submitted to Bega Valley Shire Council demonstrating the development conforms with the specifications and requirements of Planning for Bush Fire Protection as required under s4.14(1(a)) of the Act.
<i>Biodiversity Conservation Act 2016</i>	Department of Climate Change, Energy, the Environment and Water (DCCEEW)	<p>The purpose of the Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development (described in section 6(2) of the <i>Protection of the Environment Administration Act 1991</i>).</p> <p>This project will not require the removal of any existing native vegetation or significant trees. The proposal requires the removal of planted vegetation adjacent to the existing building to deliver the project.</p> <p>A Biodiversity Values Map and Threshold (BMAT) Report which was provided as part of the DA application shows the site does not contain vegetation mapped as being of biodiversity valuable. The area of impact is also below the trigger threshold and does not require further assessment.</p>
<i>National Parks and Wildlife Act 1974</i>	Office of Environment and Heritage (OEH)	<p>The Act establishes the legal protection and management of places and objects within New South Wales that are of Aboriginal significance. The Act makes it an offence to willingly and knowingly destroy, damage or deface any Aboriginal relic without a permit. The Act also incorporates provisions for the protection and conservation of items or places with high cultural significance.</p> <p>The proposed alterations and additions to the school are located within the existing footprint of the school and in an area that has been previously disturbed to provide the existing buildings and associated infrastructure. If any unexpected archaeological items or items of Indigenous heritage significance are found or disturbed during any of the proposed works, then all work will cease immediately. Permission will be sought from the National Parks and Wildlife Service and consultation with Traditional Landowner Groups will be undertaken before work can continue.</p>
<i>Bega Valley Local Environmental Plan 2013</i>	NSW Department of Planning, Housing and Infrastructure (DPHI)	The site is subject to the provisions of Bega Valley LEP 2013, under which the lot is zoned R3 Medium Density Residential.

Legislation	Relevant Authority	Relevance to the Project
<p><i>SEPP – Biodiversity and Conservation 2021</i></p> <p><i>Chapter 2</i></p> <p><i>Vegetation in Non-Rural Areas</i></p>	NSW Department of Planning, Housing and Infrastructure (DPHI)	<p>The aim of this Chapter of the SEPP is to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.</p> <p>The site is largely cleared, with no additional native trees proposed to be removed as part of this application. A number of non-native planted trees adjacent to the existing building are required to be removed, these are indicated on the architectural plans which have been submitted as part of the DA. The site is not mapped as containing significant vegetation. There is terrestrial biodiversity on the southern boundary of the site and the north-west corner of the site which will not be impacted by the project.</p>
<p><i>SEPP Transport and Infrastructure (2021)</i></p> <p><i>Part 3.4 Schools – specific development controls</i></p>	NSW Department of Planning, Housing and Infrastructure (DPHI)	<p>This development application is for the construction of a new building and requires consent as it is not a demountable building classroom or replacing a demountable building classroom.</p>
<p><i>SEPP Resilience and Hazards</i></p>	NSW Department of Planning, Housing and Infrastructure (DPHI)	<p>The State Environmental Planning Policy (Resilience and Hazards) 2021 commenced on 1 March 2022. The Chapter introduces planning controls for the remediation of contaminated land and requires an investigation to be made if land contamination is suspected.</p> <p>The site includes a school and was previously used as a bowling club. Due to this historical land use, the site is not expected to contain contaminants. An historic photographic assessment has been undertaken as part of the SEE and identified no evidence of major landscape change at the site. A site visit was also undertaken as part of the SEE and it was noted that there was no observed bulk storage of dangerous goods or chemicals, underground fuel storage tanks, asbestos or potential contaminating land uses sighted. There was also no evidence of any spillage of dangerous goods.</p> <p>A review of NSW Office of Environment and Heritage (OEEH) contaminated land - Record of Notices listed by the NSW EPA under the <i>Contaminated Land Management Act 1997</i>, carried out as part of the SEE, identified no former or current notices within the 100m data buffer. Therefore, there is no reason to suspect that this property is subject to any contamination.</p>

3.0 Project Details

3.1 Project Background

This project includes for alterations and additions to the existing Educational Establishment at 64 Culgoa Crescent. Further details of the development are provided as follows:

Block B Learning Spaces - Addition of 1st floor to accommodate:

- Classrooms general learning areas
- Break out spaces.

Block C Learning space:

- Extension to southern elevation of the building.
- Extension to western elevation of the building to extend the first-floor extension.
- New workshops and machine rooms.
- Materials handling space.
- Classrooms and adaptable spaces.

The alterations and additions are not to increase the capacity of the school but will create adaptable and flexible learning spaces and staff facilities which will better utilise the site. This will provide modern learning facilities for students, teachers and the school community and will meet the expectation of staff, students and carers.

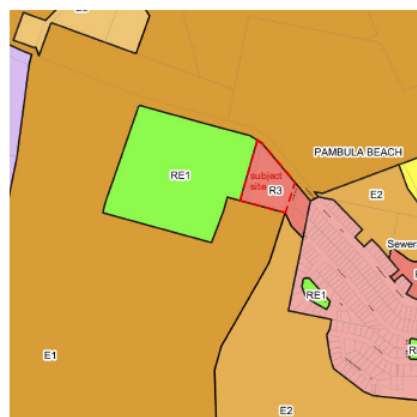
3.2 Site Description and Location

The site is described as Lot 388 DP750227 and Lot 485 DP728071, and known as 64 Culgoa Crescent, Pambula. The site is located to the south of Pambula Beach Road and west of Culgoa Crescent. The site has an area of approximately 2.68 hectares. **Figure 3.1** shows a location image of the site and its immediate surroundings.

The site accommodates the existing School - Lumen Christi Catholic College which is a co-educational kindergarten to year 12 College for students with a maximum of 700 students and 64 staff (full time equivalent). The site is developed with the College buildings being classrooms, halls, staff rooms, administration, open space (covered and uncovered) onsite carparking, drop off/pick up zones and access roads and landscaping. The site has two access points with vehicles entering from Pambula Beach Road and exiting onto Culgoa Crescent. Access and egress to Culgoa Crescent is along the southern boundary which provides access to the car park and administration building, with alternative access to Pambula Beach Road along the western side boundary.

The site is located within the township of Pambula Beach, a coastal village with many tourist facilities as well as low density residential housing, located 3.4 km from Pambula which is between Merimbula and Eden on the Sapphire Coast within the local government area of Bega Valley. The school is located on the north-eastern outskirts of Pambula Beach in the transition zone from the residential area and the industrial area of Pambula. There is a local sports field and complex to the west of the site. The surrounding developments in the immediate vicinity to the west include a public sporting complex with playing fields, a skate park and the Sapphire Aquatic Centre. To the east there is residential development with the remainder of surrounding lands vegetated. The site adjoins the Pambula Beach Road which provides access to Pambula and the Princes Highway.

Figure 3.1 Site Plan (Austin McFarland Architects - Image submitted as part of project Statement of Environmental Effects)



Zoning
E1 - National Park and Nature Reserves
R3 - Medium Density Residential
RE - Public Recreation

1 ZONING DIAGRAM



2 AERIAL PHOTO PLAN
Scale: 1:2000



3 SITE PLAN
Scale: 1:500

3.3 Indicative Construction Activities

Construction of the Project will be carried out in stages to be identified by the nominated construction contractor (hereinafter referred to as the contractor). The construction activities set out in **Table 3.1** below are indicative only and will be confirmed by the contractor prior to commencement of construction.

Table 3.1 Indicative Activities to be Carried Out During Construction

Activity	Sub-Activity
Site establishment and mobilisation	<ul style="list-style-type: none"> • Install environmental controls and delineate site • Traffic control • Ancillary construction works • Plant and equipment delivery
Delivery of materials	<ul style="list-style-type: none"> • Delivery of plant/equipment and materials throughout construction
Demolition of existing structures	<ul style="list-style-type: none"> • Demolition of existing structures • Stockpiling of demolition waste • Removal of demolition waste offsite
Earthworks	<ul style="list-style-type: none"> • Minor cut and fill works
Structural Construction	<ul style="list-style-type: none"> • Formwork, steel fixing and concrete pours • Blockwork • Structural element installation
Fitout	<ul style="list-style-type: none"> • Mechanical and Electrical Fitout works
Landscaping and Rehabilitation	<ul style="list-style-type: none"> • Planting of trees

4.0 Environmental Management

4.1 EMS Framework and Environmental Policy

The construction of the Project will be undertaken by a reputable contractor with a proven track record in environmental performance on similar projects. As part of the selection process for the contractor, the bidding contractors may be required to provide details of their corporation's environmental policy and environment management system, along with supporting evidence of its environmental performance.

4.2 Risk Management System

A risk assessment will be developed by the contractor prior to construction commencing to ensure all aspects, impacts and mitigation measures are up to date with those elements identified within this CEMP and the current industry standards.

4.3 Protection of Students, Staff and Visitors

Prior to construction, the site will be defined and clearly demarcated by a secure scrim lined perimeter construction fence. Furthermore, all works at height will be covered by scrim lined scaffolding to minimise the potential for items to fall outside the fenced work zone.

Unnecessary interaction between construction workers and students or school staff will be minimised through the adoption of measures such as prohibition of communication through the perimeter fence and the insistence for all personnel to hold current Working with Children Checks (WWCC).

One of the greatest potential risks to students, staff and visitors is from construction vehicles. This includes deliveries of materials and movement of machinery and plant to and from the construction site. Catholic Education requires that Construction Management Plans (CMPs) are submitted by each tenderer as part of the non-price selection criteria. The contractors will typically be selected for their experience on similarly scaled education projects and will be assessed on their considerations of these issues and detailed Management Plans provided which will include detailed considerations for Health and Safety.

4.4 Work Zone Locations and Material Storage Areas

The works zone will be contiguous and will include Block B and Block C only. Some work may be carried out outside of the proposed building footprint and main work zone to complete landscaping and interface work. During these occasional times, the site fencing/hoarding will be extended to include this affected area. These interface and landscape works outside of the main work zone will be undertaken during periods of little or no activity and predominantly during school holidays.

Materials handling areas will be located along the perimeter of the work zone along the internal roadway. This will be located along the western edge of the works zone adjacent to the internal 'bus' roadway. There is a large existing grassed area, which will not be impacted as part of the works except for a pergola effecting a small area. This will be utilised for the duration of the project up until the final stage of landscaping. It is proposed that site offices and facilities for construction workers will be located within the adjacent car spaces along the southern extent of the site.

4.5 Management of Construction Activities during Sensitive Times

4.5.1 Exam Times

Exams are considered a highly important part of the educational experience and Catholic Education manages these events amongst the many other activities concurrently occurring through a school day and year. Exams typically involve a select group of students at any one time and so the continuing activities of the greater school population, including high noise generating activities (sport and music), are managed by Catholic Education to mitigate the noise impacts on exam students trying to focus.

Construction activities on site have potential to generate noise disturbance which may be difficult to manage by a third party. However, construction projects of this type in schools are very common and often in much more confined spatial configurations. The spread-out nature of the school campus allows for exams to be held in areas located away from the work zone. NAPLAN is typically conducted in the classroom or in the school hall for the secondary school students. The main area for HSC exams is the school hall which is adjacent to the Primary School building and which has a considerable separation from the work zone. In addition to the site arrangement and selecting spaces for exams away from the works zone, the contractor will liaise regularly with the school about upcoming noise sensitive events, including exams, and mitigate noise impacts to a reasonable level where reasonable and feasible.

In addition to these management measures, Catholic Education can nominate exam times within the construction contract to be “no noise working days” with works programmed around them. During the tender period and tenderer negotiation phases, these issues will be addressed and procedures and programs developed to minimise disturbance and maximise the use of school holiday and out of school hours period for noisy activities.

4.5.2 Drop Off and Pickup Times

Construction activities will be managed on site to minimise impact, particularly around the peak movement period of school drop off and pickup. Commencement of construction activities will typically occur from 7am with the majority of construction personnel arriving on site prior to any student or staff. School drop off is a protracted event due to the varied bus movements and the early timetabling of some classes including extension and some vocation subjects. This period can stretch between 8am and 9:30am depending on the timetable and extracurricular activities occurring on any one day. School pickup is typically a much shorter period with most students leaving site between 3.00pm and 3:30pm. Staff movements extend later but are spread out over a longer period, thereby having reduced intensity of vehicle movements.

The contractor will plan their vehicle movements of personnel as well as construction plant and machinery to avoid these peak movements. This requirement will be included within site inductions and regular toolbox talks.

4.6 Environmental Mitigation and Management Measures

The following sections outline various mitigation measures for environmental risks associated with the project. The responsibility for carrying out these mitigation measures will be with the contractor.

4.6.1 Flora and Fauna

The proposed alterations and additions are located within the existing school site. The site is cleared with the exception of a few native trees to the rear boundary which are to be retained. A number of landscaping trees (non-native) will be removed to deliver this project. These are indicated on the architectural plans which have been submitted to Bega Valley Shire Council as part of the DA. No native trees or vegetation are proposed to be removed as part of this application. The site is not mapped as containing biodiversity valuable vegetation.

Activities during construction which have a potential direct impact on flora and fauna include:

- Vegetation clearing causing destruction of plant species and loss of habitat.
- Vehicle movement causing increased dust and noise.
- General plant operation causing damage to flora and/or fauna.

Mitigation and management measures provided in **Table 4.1** aim to minimise the potential impacts to biodiversity as a result of the project.

Table 4.1 Biodiversity Management Measures

Management Measure ID	Management Measure
BM01	Identification of no-go zones and physical delineation of any vegetation to be cleared and/or protected on site.
BM02	Communicate the following to all construction workers during site induction; <ul style="list-style-type: none"> • Clearing requirements and penalties for over-clearing. • Construction exclusion zones.
BM03	No construction employee on the project shall intentionally damage or injure native flora or fauna.
BM04	No feeding of fauna by project personnel.
BM05	No domestic animals are to be brought to site.
BM06	Orientate temporary construction lighting to prevent light overspill into fauna habitat areas.
BM07	Adhere to designated speed limit whilst on site.
BM08	Limit movement of vehicles and personnel to designated working areas and access routes.
BM09	No disturbance to any vegetation (native and non-native) shall occur outside the project boundary.
BM10	Damage to flora not pre-approved for clearing should be immediately reported to the site supervisor and treated as an incident and as a non-conformance.
BM11	If any damage occurs to vegetation outside of the impact area, stop work and notify the Site Supervisor.
BM12	Stockpile non-weed vegetative cuttings for respreading as mulch, erosion protection, and seed material.
BM13	No burying or burning of cleared vegetation.

4.6.2 Traffic and Transport

The site has vehicle access from Pambula Beach Road to the north and Culgoa Crescent to the east. There is an existing accessway located along the western boundary from Pambula Beach Road and on the southern boundary onto Culgoa Crescent. The site provides access to, drop off/pick up zones and parking for buses. A local private bus company services the school. There is also a public bus service from Merimbula to Pamula Beach via Pambula which has a stop at the school. The existing access arrangements will remain unchanged during construction of this project.

The Construction Site is within the school campus and is generally well served by perimeter private roadways which presently provides managed movements of cars, buses and pedestrians. The current arrangements are safe and well scaled for the school population. Teachers assist with management of these arrangements including with the supervision of bus lines and the kiss and ride.

These movements will be affected during construction as construction vehicles utilise the private internal road for access. Construction activities will not block or restrict access by other road users or pedestrians. Time management will be used to reduce conflict between users. Access and egress of construction related personnel and deliveries to site will occur before school hours and during class periods when there is little or no other vehicle movements. Exact arrangements will be contingent on the stage of construction and relevant plant or machinery movements which are required.

The presence of the internal private roadway will limit the direct effect on the local public roadways except for increase traffic movements outside of the peak movements associated with start and finish of the school day. There is no access into the construction site directly off the public roadways and this will avoid the need for public road traffic control. Buses and passenger vehicles have separate site entrances. Buses currently access the site from Pambula Beach Road via the northwestern corner of the site onto a one-way bus only roadway along the western boundary. There is an access control gate across the bus only roadway which the school closes between morning and afternoon bus movements, to restrict non-authorised vehicle movement along this roadway and provide safe and managed access from the school campus to the Council playing fields to the west by students for sport and recreation.

Passenger vehicles only access the school campus from Culgoa Crescent on the east via a one-way roadway to the parking area. Both bus and passenger vehicles leave the site via the one-way roadway that runs along the southern boundary of the site onto Culgoa Crescent. Heavy construction vehicles will follow the current bus movement arrangement leaving the site in the same one-way loop pattern. The existing access control gate across the western bus only roadway will continue to be utilised to restrict unauthorised access and manage vehicle movements to maintain access by students to the playing fields. During peak construction vehicle movements, such as large concrete pours when concrete trucks and concrete boom pumps will be present, the builder will provide traffic control on the internal 'bus' roadway. These plans will be prepared in conjunction with the school to ensure they are appropriate and acceptable to the executive and staff. It is not proposed that traffic control measures are provided on the public roads.

During construction, key aspects of the project that have the potential to result in an impact to construction traffic and transport are summarised below.

Parking impacts due to:

- Idling and queuing on roads, restricting access to on-street parking spaces.

Construction traffic generation caused by:

- Light vehicles accessing site.
- Heavy vehicles accessing site.

Increased traffic congestion and road user impacts due to:

- Operation of construction vehicles and plant accessing site.
- Transport of spoil, demolition material, and imported construction materials.

Mitigation and management measures provided in **Table 4.2** aim to minimise the potential impacts to traffic and transport as a result of the project.

Table 4.2 Traffic and Transport Management Measures

Management Measure ID	Management Measure
TT01	Key elements of this plan including traffic impacts and mitigation measures will be incorporated into the project induction and other project-specific training material. This will include: <ul style="list-style-type: none"> • Procedures for the safe movement of light vehicles as they enter, drive around and exit from the site. • Ensure that access to all nearby utilities and properties is maintained during construction, where practicable. • Communication about other mitigation measures implemented during construction to eliminate or mitigate against traffic impacts.
TT02	Targeted training and awareness in the form of toolbox talks or specific training will be provided where required to personnel with a key role in the management of potential impacts to traffic and transport.
TT03	Undertake regular visual inspections of onsite activities to: <ul style="list-style-type: none"> • Check compliance with this plan. • Ensure continued emergency vehicle access and access to critical utilities. • Ensure continued safe vehicular and pedestrian/cyclist access to nearby residences, businesses and public facilities. • Confirm that the management arrangements implemented are achieving their intended purpose of maintaining road safety.
TT04	Any maintenance and/or deficiencies in traffic and transport controls will be recorded, including any actions required and an implementation priority. Actions will be closed out in accordance with the identified priority.
TT05	Regular inspections of the work site will be carried out to evaluate the effectiveness of traffic and transport controls.
TT06	Complaints from the community will be investigated, with due consideration given to whether there has been a non-conformance with this plan. Issues raised will be investigated further where necessary. Measures will then be introduced to respond to legitimate complaints.

4.6.3 Bushfire

The site is mapped as bushfire prone land. A Bushfire Assessment Report has been prepared by *SET Consultants* and has been submitted to Bega valley Council as part of the DA. The following measures will be implemented to manage bushfire hazard and risk during the construction stage:

- Ongoing engagement with NSW Rural Fire Service as required.
- Specifically, works that has the potential to ignite flammable materials will be stopped during total fire bans (TOBAN) in accordance with the NSW Rural Fire Service (RFS) recommendations.
- Construction workers to be removed from site during times of High, Extreme or Catastrophic fire ratings in the area as notified by NSW RFS.
- Construction workers to be kept informed of Fire Danger Ratings as notified by NSW RFS during daily pre-start meetings.

4.6.4 Noise and Vibration

Noise and vibration impacts may be associated with the construction works. Noise is typically the greatest form of disturbance from construction projects undertaken in school campuses. Some periods of construction produce greater levels of noise pollution, including but not limited to demolition works, steel frame erection and fit-out works. These impacts will be a temporary inconvenience and it is expected construction hours will be set out in the development consent.

The school population and nearby sensitive receivers will be informed of the proposed works prior to commencement of construction.

Catholic Education have undertaken to communicate with relevant stakeholders to ensure the most sensitive activities, such as exams, can be accommodated with minimal noise interruptions. Furthermore, the main building used for exams within the school is the School Hall which is located over 50 metres from the closest part of the works zone, on the lower level of the site.

The management of construction-related noise and vibration is a key focus for construction activities to ensure works can be completed with minimal disturbance to background noise levels. Mitigation and management measures provided in **Table 4.3** aim to minimise the potential impacts of noise and vibration to nearby sensitive receivers as a result of the project.

Table 4.3 Noise and Vibration Management Measures

Management Measure ID	Management Measure
NV01	<p>Training will be provided to relevant project personnel on noise and vibration requirements from this plan through inductions, toolboxes or targeted training. Training will cover the following:</p> <ul style="list-style-type: none"> • Nominated construction hours • Avoiding use of radios or stereos outdoors • Avoiding shouting and minimise talking loudly and slamming vehicle doors • Avoiding communicating and signalling using horns

Management Measure ID	Management Measure
	<ul style="list-style-type: none"> Where practical, operate machines at low speed or power and switch off when not used rather than left idling for prolonged periods Minimising reversing Avoiding dropping materials from height and avoiding metal to metal contact on material
NV02	Additional at source mitigation will be considered where construction noise levels may result in cumulative construction noise impacts.
NV03	Where reasonable and feasible, noise and vibration impacts will be reduced through the selection of less noise intensive equipment and methods.
NV04	The distance between noisy plant items and nearby noise sensitive receivers will be maximised where possible.
NV05	Stationary noisy equipment will be shielded where reasonably practicable.
NV06	Plant and equipment will be used and maintained in a proper and efficient manner, in accordance with the manufacturers' specification.
NV07	Equipment with non-tonal movement alarms will be used wherever practicable.
NV08	Consultation will be carried out with affected receivers in response to a complaint relating to construction noise and/or vibration impacts.

4.6.5 Air Quality and Dust

The project is not expected to have a measurable impact on air quality. Dust generation is required to be managed by the contractor for the duration of the construction period. Activities that may result in increased dust generation throughout the construction phase of the Project include:

- Vegetation clearing.
- Vehicle movements.
- Operation of heavy machinery associated with earthworks and demolition.

Dust impacts will be mitigated through the implementation of the management measures outlined in **Table 4.4** below.

Table 4.4 Air Quality and Dust Management Measures to be Implemented Throughout Construction

Management Measure ID	Management Measure
AQD01	Incorporate information on dust sources, impacts and mitigation measures into the site Induction, training and on-going Toolbox Talks.

Management Measure ID	Management Measure
AQD02	Dust minimisation measures will be developed and implemented prior to commencement of construction. These measures can include, but are not limited to: <ul style="list-style-type: none"> • Soil Binder. • Water application. • Compaction of topsoil/ roads. • Boundary screening.
AQD03	Construction site layout and placement of plant would consider air quality impacts to nearby receivers.
AQD04	Temporary spoil stockpiles managed to minimise dust, e.g. hosed down, covered, compaction, use of soil binder.
AQD05	The insides of buildings will be stripped where feasible and reasonable before demolition of structure undertaken to reduce the potential of excess dust being generated.
AQD06	Undertake on-going visual monitoring for dust (e.g. site inspections) to assess the effectiveness of mitigation measures.
AQD07	Plant, vehicles and machinery to be maintained in good working order.
AQD08	Engines will be switched off when vehicles and plant are not in use.
AQD09	All vehicles carrying loose or potentially dusty material to and/or from the site must be covered.

4.6.6 Waste

Waste Management will be carried out in accordance with the Waste Management Plan which has been provided to council as part of the DA. The contractor will facilitate that all generated waste is minimised, handled and disposed of in accordance with the *NSW EPA Waste Classification Guidelines* and in the interest of general good-practice site management.

The overall aim of waste management for construction of the Project is to minimise waste generation through adherence to the waste management hierarchy, which is as follows:

1. Avoid.
2. Reduce.
3. Re-use.
4. Recycle.
5. Recover.
6. Treat.
7. Dispose.

Table 4.5 below identifies the measures to be implemented to manage waste during construction of the Project.

Table 4.5 Waste Management Measures to be Implemented Throughout Construction

Management Measure ID	Management Measure
W01	<ul style="list-style-type: none"> All general refuse and food wastes to be collected and transported to an appropriately licensed waste facility.
	<ul style="list-style-type: none"> Portable toilets will be made available at all site offices and work sites and will be supplied and managed by licenced contractors.
	<ul style="list-style-type: none"> All construction waste will be kept in an appropriately secured, stacked area.
	<ul style="list-style-type: none"> Regulated waste will be stored and appropriately marked, identifying their contents and collected by a licensed waste contractor to be disposed at an appropriately licensed facility.
	<ul style="list-style-type: none"> No waste will be burnt or buried on site.
	<ul style="list-style-type: none"> Excavated soils will be reused on site where possible.
W02	<ul style="list-style-type: none"> All Project personnel will be informed of applicable waste management practices as part of the generic site induction.

4.6.7 Soil, Surface Water and Erosion Control

The site has access to reticulated water. A concept Stormwater Plan prepared by Austin McFarland Architects was submitted as part of the DA. This plan demonstrates how stormwater will be managed onsite. The following adverse impacts to soil and water resources may arise during construction activities:

- Soil erosion.
- Soil and water contamination.
- Surface water quality impact.
- Changes to existing stormwater flows.

No impact to groundwater is anticipated as part of these works. Prior to the commencement of any work, erosion and sediment controls will be installed and maintained in accordance with the publication *Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004)* commonly referred to as the 'Blue Book'. Impacts to soil and water will be mitigated through the implementation of the management measures outlined in **Table 4.6** below.

Table 4.6 Soil and Water Management Measures to be Implemented Throughout Construction

Management Measure ID	Management Measure
SW01	Staff induction to include soil and contamination risks and measures to mitigate impacts.
SW02	Implement control measures such as sediment controls developed in accordance with the 'Bluebook'.
SW03	All loads will be securely covered and may be lightly wetted, if required, to ensure that no materials or dust are dropped or deposited outside or within the site.
SW04	Inspections will occur to ensure that all soil stabilisation controls are in place and in effective working order.

Management Measure ID	Management Measure
SW05	Staff induction to include information about the specific surface water risks of the project works and measures to mitigate impacts.
SW06	Surface water, erosion & sediment control toolbox talks will be implemented as relevant.
SW07	Mobile plant and vehicles must be clean of any mud or organic material prior to arriving or departing from site.
SW08	Washout facilities must be in place and used for cleaning plant and equipment.
SW09	Sediment controls that are damaged or otherwise rendered ineffective will be immediately replaced.
SW10	Spill kits and fire response equipment must be located where chemicals and fuelled plant or equipment is being stored, operated or maintained.
SW11	Refuelling shall wherever practicable occur in designated hardstand areas or over appropriate bunds.

4.6.8 Landscape and Visual

During construction, there would be a temporary minor landscape impact to the surrounding area. This impact would be primarily due to removal of non-native trees at the project site and landscape character normally associated with construction sites.

The existing security lighting for the site is mainly building mounted including on the buildings proposed for alterations. The lighting will be removed from the subject buildings during the construction and unavailable until new lighting is installed upon completion, thereby reducing the light towards the adjacent roadways, pathways and internal courtyard. There are existing wall lights mounted on the adjacent existing shed including a spotlight directed back towards the subject building. Additional light will be installed on the eastern corner of the shed to supplement lighting to the carpark area towards the east. Additional temporary lighting will need to be installed to provide light along the western extent of the works zone and on to the adjacent roadway. Power is not available along the fence/boundary line to the west.

The following controls in **Table 4.7** below will be utilised to manage landscape and visual impacts during construction.

Table 4.7 Landscape and Visual Management Measures to be Implemented Throughout Construction

Management Measure ID	Management Measure
LV01	Where feasible and reasonable, the elements within construction sites would be located to minimise visual impacts, for example materials and machinery would be stored behind fencing.
LV02	Lighting of construction sites would be oriented to minimise glare and light spill impact on adjacent receivers.
LV03	Visual mitigation would be implemented as soon as feasible and reasonable after the commencement of construction and remain for the duration of the construction period.

4.6.9 Hazardous Materials and Spills

Construction activities have the potential to result in the uncontrolled release of hazardous materials (such as diesel, hydrocarbons and oils) through the following aspects of Project construction:

- Storage, handling and disposal of hydrocarbons and hazardous materials.
- Refuelling activities.
- Vehicle and equipment maintenance.
- Construction and earthworks activities.

Uncontrolled spillages of hazardous materials may result in contamination of soil and water resources, degradation or loss of vegetation and/or fauna habitat and poses a risk to personnel work health and safety.

The management measures that will be implemented to manage the risk of hazardous material contamination during Project construction are outlined in **Table 4.8** below.

Table 4.8 Hazardous Materials Management Measures to be Implemented Throughout Construction

Management Measure ID	Management Measure
HM01	<ul style="list-style-type: none"> • All personnel involved in hazardous materials handling shall be adequately trained.
HM02	<ul style="list-style-type: none"> • All storage locations shall maintain a Material Safety Data Sheet (MSDS) manifest and inventory. MSDSs for all stored hazardous materials shall be readily accessible. • All chemicals used during operations shall be transported, stored, handled and disposed of in accordance with statutory requirements, codes of practice and industry standards. • Dangerous goods shall be transported by an appropriately licensed contractor. • Hazardous materials shall be stored in containment facilities (e.g. bunded areas, leak-proof trays) designed to hold 110% of the capacity of the largest tank or 25% of the total combined volume of stored materials (whichever is greater) and be impervious to prevent the release of spilt substances to the environment. • On-site fuel/chemical storage areas shall be clearly signed and designated. • Hazardous materials are to be provided and stored in sealed, labelled containers, without leaks. • Fuels and chemicals shall not be stored or handled within 200 m of waterbodies.
HM03	<ul style="list-style-type: none"> • Spills kits will be available on site. • Spill containment facilities such as drip trays are to be provided at refuelling stations and chemical storage areas.

4.6.10 Aboriginal and Non-Aboriginal Heritage

The site is not mapped under the BVLEP 2014 as containing or being located in the immediate vicinity of a Heritage Item. An Aboriginal Heritage Information Management System (AHIMS) Report submitted as part of the DA did not identify any known Aboriginal sites or places within a 200m buffer around the site.

The proposed alterations and additions to the school are located within the existing footprint of the school and in an area that has been previously disturbed to provide the existing buildings and associated infrastructure. If any unexpected archaeological items or items of Indigenous heritage significance sites are found or disturbed during any of the proposed works, then all work will cease immediately. Permission will be sought from the National Parks and Wildlife Service and consultation with Traditional Landowner Groups will be undertaken before work can continue.

5.0 Emergency Preparedness and Incident Response

5.1 Environment Emergency Management

An Emergency Response Plan (ERP) will be prepared by the Contractor prior to construction of the Project which will outline the actions to be taken for potential activity-specific scenarios (e.g., spills or leaks, fire, fatality, etc). The ERP will also identify the key emergency contacts responsible for managing environmental emergencies associated with the Project and their contact details. Communication requirements will be defined to ensure that appropriate external stakeholders are notified of incidents when necessary.

All Project personnel will receive basic training, which will be incorporated into the Project induction, regarding the prevention, the communication activities and the escalation, planning, response to and recovery from incident or emergency.

5.2 Environmental Incidents and Non-Conformances

Environmental incident reporting is a requirement under Section 148 of the *Protection of Environmental Operations Act 1997* (POEO Act). In the event an environmental incident has occurred, site personnel must report the incident to the relevant contractor delegate (e.g. site supervisor) immediately after becoming aware of the incident. Any external reporting of incidents, if required, is to be undertaken by the Project Manager

6.0 Communication, Consultation and Complaints

6.1 Roles and Responsibilities

Catholic Education holds overall responsibility and accountability for environmental management, compliance with environmental legislation, conditions of consent and will facilitate that adequate resources are provided for the implementation of this CEMP. All Project staff are responsible for the environmental performance of their activities and for reporting any environmental hazards and incidents.

Catholic Education intends to engage a contractor to construct the Project. Ensuring that the contractors understand and adhere to the environmental controls established for the Project will be critical to achieving high environmental performance.

Environmental responsibilities for staff are contained within position descriptions, relevant procedures and work instructions. Overarching environmental roles are described in **Table 6.1** below.

Table 6.1 Roles and Responsibilities for Environmental Management for the Construction Phase

Role	Responsibilities
Project Manager (Catholic Education)	<ul style="list-style-type: none"> Handover of design and approvals requirements to the contractor. Ongoing oversight and accountability across Project delivery. Responsible for managing the construction work timetable in consultation with Project personnel listed below. Completes external incident reporting if required.
Site supervisor (Contractor)	<ul style="list-style-type: none"> Responsible for overall site environmental management and CEMP compliance. Issues stop work orders, if required. Manages community complaints and notifies Project Manager. Participate in the development and facilitation of induction material and toolbox talks. Initiates corrective actions. Reports CEMP non-conformances to the Project Manager. Notifies the Project Manager if the CEMP needs revising.
All Personnel (Contractor)	<ul style="list-style-type: none"> Respond to environmental incidents or community complaints and notify the Site Supervisor. Undertakes inductions and training as outlined by this CEMP. Implements environmental controls and procedures as per the CEMP. Undertakes environmental monitoring where required.

6.2 Training and Awareness

The contractor will ensure all employees and subcontractors involved with the Project receive environmental training appropriate to their role. An environmental induction will be provided when personnel commence on the project. Environmental topics will also be included in toolbox talks during construction. This environmental induction and toolbox talks will include environmental aspects such as:

- Environmental control measures as outlined in this CEMP.
- Any restricted or 'no-go' areas.
- Responsibilities for environmental monitoring and reporting.
- Procedures for responding to environmental incidents and emergencies.

7.0 Auditing, Reporting and Review

7.1 Environmental Inspections, Auditing and Monitoring

Inspections and audits will be utilised to determine whether environmental performance outcomes are being met and specified mitigation measures are in place to manage environmental risks. At a minimum, monitoring records should contain the following information:

- Date and time of monitoring event.
- Name of personnel performing monitoring.
- Features being monitored.
- Outcomes of monitoring and details of compliance / non-conformance.
- Requirement for corrective actions.
- Photographic records detailing evidence of monitoring.

Any non-conformances or opportunities for improvement identified at the time of an inspection or audit will be communicated to the Site Supervisor and relevant contractor personnel.

7.2 Record Keeping

The Project shall maintain a documentation and record system in support of this CEMP and any Project reporting requirements to enable review and auditing of environmental management systems and procedures. The following records are expected to be generated through the construction of the Project and as guided by this CEMP:

- Environmental monitoring and inspection / audit records.
- Correspondence with stakeholders.
- Induction, training and awareness records.
- Waste management records.
- Reporting of environmental incidents, non-conformances and corrective actions.

7.3 Reporting

To demonstrate and maintain compliance against legislative requirements, routine external reporting to key regulatory agencies shall be conducted in accordance with **Table 7.1** below.

Table 7.1 External Reporting Requirements during Construction

Report	Details	Frequency	Responsibility
CEMP	External reporting of incidents (if required)	If required	Project Manager

7.4 Document Review and Control

This CEMP is a 'live document' and will be revised as relevant to ensure the information is kept up to date. A review of the CEMP should assess whether the plan is achieving its objectives and the requirements of any relevant development consent conditions. The CEMP will continue to reflect the plan of construction and ensure that the document addresses environmental issues, changes in legislation, policies, guidelines and work practices. Any revisions to the CEMP will be approved by the Project Manager. All stakeholders and construction staff will be informed of any important changes to the CEMP prior to any changes required, commencing. A hard copy will always be available on site where it can be viewed upon request. A register of review and updates to the CEMP will be maintained for audit purposes by the Site Supervisor.

