

# Construction Management Plan (CMP)

For

Anglicare Dapto RAC  
4 Lindsay Evans Place,  
Dapto NSW



Project & Development Management

Richard Abbott 3 July 2019

---

# **Preliminary Construction Management Plan (CMP)**

For

4 Lindsay Evans Place, Dapto NSW

Construction of a new residential care facility and the  
Conversion of existing hostel beds to self care dwellings

---

<b>Consent Authority:</b>	<b>Wollongong Council</b>
<b>DA No.:</b>	<b>TBC</b>
<b>Client:</b>	<b>Anglicare</b>
<b>Builder:</b>	<b>TBC</b>
<b>Date:</b>	<b>3 July 2019</b>
<b>Revision:</b>	<b>2 (Preliminary)</b>

---

# CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>6</b>
1.2	OBJECTIVES.....	6
1.3	REFERENCES.....	6
1.4	CONSULTATION .....	7
1.5	CONSTRUCTION HOURS.....	7
1.6	SCOPE OF CONSTRUCTION ACTIVITIES.....	7
1.7	CONNECTION OF SERVICES.....	8
1.8	MATERIALS HANDLING.....	8
1.9	CRANE REQUIREMENTS.....	9
<b>2</b>	<b>PEDESTRIAN AND TRAFFIC METHODOLOGY DURING CONSTRUCTION WORKS .....</b>	<b>10</b>
2.1	TRAFFIC MANAGEMENT.....	10
2.2	PEDESTRIAN TRAFFIC .....	10
2.3	CONSULTATION .....	10
<b>3</b>	<b>EXCAVATION .....</b>	<b>11</b>
3.1	EXCAVATION IMPACT.....	11
3.2	STABILITY OF ADJOINING BUILDINGS AND RMS ROAD.....	11
3.3	HOARDINGS AND SCAFFOLDING.....	11
3.4	EXISTING SERVICES.....	11
3.5	RECYCLING.....	11
3.6	ACOUSTIC CONTROL.....	11
<b>4</b>	<b>REMEDIATION METHODOLOGY .....</b>	<b>12</b>
4.1	REMEDIATION OF SITE.....	12

<b>5</b>	<b>STORM AND WASTE WATER MANAGEMENT PLAN</b>	
	<b>METHODOLOGY DURING CONSTRUCTION.....</b>	<b>12</b>
5.1	INTRODUCTION .....	12
5.2	REFERENCES.....	12
<b>6</b>	<b>WASTE MANAGEMENT METHODOLOGY DURING CONSTRUCTION..</b>	<b>13</b>
6.1	PURPOSE .....	13
6.2	SCOPE .....	13
6.3	MATERIALS SELECTION & ORDERING .....	13
6.4	WASTE RECYCLING.....	13
<b>7</b>	<b>AIR QUALITY MANAGEMENT METHODOLOGY DURING</b>	
	<b>CONSTRUCTION .....</b>	<b>14</b>
7.1	PURPOSE .....	14
7.2	SCOPE .....	14
7.3	MAJOR MEASURES .....	14
<b>8</b>	<b>NOISE MANAGEMENT METHODOLOGY DURING CONSTRUCTION ...</b>	<b>15</b>
8.1	PURPOSE .....	15
8.2	SCOPE .....	15
8.3	COMMUNITY CONSULTATION .....	16
8.4	CORRECTIVE ACTION FOR COMPLAINTS.....	16
8.5	NOISE MONITORING.....	17
8.6	PLANT AND EQUIPMENT .....	17
<b>9</b>	<b>EROSION &amp; SEDIMENT CONTROL.....</b>	<b>17</b>
9.1	PURPOSE.....	17
9.2	SCOPE .....	17
9.3	MAJOR MEASURES.....	17

10 TREE PROTECTION ..... 17

10.1 PURPOSE..... 17

10.2 SCOPE..... 17

## **1 INTRODUCTION**

This Construction Management Plan (CMP) has been prepared by RJA Projects to accompany a Development Application and to address the items denoted within this report as being associated with the proposed development of the subject site and the surrounding environment and community. The CMP will outline procedures that are intended to be implemented to manage construction activities ensuring that unacceptable high levels of environmental or community disturbance do not occur throughout the duration of the works.

The CMP is to be read in conjunction with all other reports submitted with the development application.

### **1.2 OBJECTIVES**

The objectives of the CMP are to:

- Avoid potential pollution and minimize waste through effective management of all construction processes;
- Maintain public safety in all areas affected by construction activity;
- Minimize the disruption to existing vehicular and pedestrian thoroughfares;
- Reinforce the principle that persons engaged to undertake or supervise or manage the development works are responsible for environmental damage, injury and property damage arising from the activities at the site;
- Provide a framework for procedures to be adopted when undertaking the construction activities;
- Provide a framework for procedures to be adopted when monitoring the construction performance against agreed criteria, including but not limited to any Wollongong Council guidelines for construction, RMS and council traffic and pedestrian management and the applicable DA conditions for the development;

### **1.3 REFERENCES**

- Any associated Wollongong Council regulations and guidelines including;
- Urban Erosion and Sediment Control 1992 (CALM);
- Applicable Development Control Plans;
- Applicable Environmental Specification;
- Applicable Australian Standards;
- Environment Protection Legislation;
- Clean Waters Act 1970;
- Clean Air Act 1961;
- Waste Minimization Act 1995 (NSW);

## 1.4 CONSULTATION

The planning and implementation of the construction works will be completed in consultation with the following statutory authorities where applicable:

- Wollongong Council control plans;
- Environmental Protection Authority (EPA);
- Sydney Water;
- The energy authority;
- Sydney Trains;
- Telstra;
- RMS; and
- Work cover Authority

## 1.5 CONSTRUCTION HOURS

Subject to development consent condition, the intended working days for construction are;

Monday to Friday (All Building, demolition and the site work, including site deliveries, excavating of rock, use of jackhammers, pile drivers or the like)

Saturday (All Building, demolition and the site work, including site deliveries, excavating of rock, use of jackhammers, pile drivers or the like)

Sundays and public holidays - no work

Hours per day will be as per the development consent.

Excavation or the removal of any materials involving the use of machinery of any kind, including but not limited to compressors and jack hammers, will comply with the Code of practice 1992 Sites Noise Code and Australian Standard 2436-1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites".

## 1.6 SCOPE OF CONSTRUCTION ACTIVITIES

The development will include;

- Site Establishment;
- Demolition of existing structures;
- Removal of ground materials;
- The excavation for correct RLs and retaining walls;
- Installation of crane/s;
- The completion of core building elements, completion of undercroft/basement carparks and external works including hard and soft landscaping; and
- The completion of external civil, electrical and stormwater works.

## 1.7 CONNECTION OF SERVICES

The requirements for any 'road openings' to connect services etc has been addressed by our Consulting Engineers. . They have advised that the following infrastructure requirements will be:

- **Sewer Drainage**

The new sewer connection of the site will be integrated into the existing main sewer.

- **Storm water Drainage**

The storm water drainage system is to be connected into the existing stormwater system.

- **Domestic Water & Fire Services**

Domestic water and fire services for the development will make connection to the existing water main service. The relevant authority applications, fees and the like shall be sought and a suitable Work Methodology shall be implemented to minimize construction impact on surrounding infrastructure.

- **Electrical**

The electrical supply to the development will be via a upgrade to the existing substation network. All cabling works will be underground infrastructure. The relevant authority applications are to be sought, fees and the like shall be sought and a suitable Work Methodology shall be implemented by the certified Level 1 electrical subcontractor to minimize construction impact on surrounding infrastructure in the disconnection / reconnection of the service. Council permits and openings will be sought for the road works.

## 1.8 MATERIALS HANDLING

Materials handling is to be managed with thought and consideration so as not to disturb neighboring residences, traffic and pedestrians. As a result, all loading, unloading, packing and lifting will be carried out on site.

All storage of excavated materials, construction materials and waste containers during the construction period will be within the site boundary.

Material Handling is proposed to be managed by the careful programming and co-ordination of trades and suppliers. Deliveries will be staged for arrival to the site on a daily programmed regime which will minimize disruption to the traffic and pedestrian flows adjacent to the site and within the immediate precinct.

Any deliveries that will impact the street frontage will be done in accordance with prescribed council guideline and be managed/monitored by approved traffic controllers at all times.

Permits to stand plant and storage containers on the street will be duly submitted to council if and when required (not expected but a possibility nonetheless).

For any larger deliveries that might have an impact on surrounding residents/neighbours, 48hours notification will be provided by letterbox drop by the applicant and/or the contractors.

Contact names and numbers for residents/neighbours to utilize at any time will be made available via a site notice sign at the entry to the property.



## 1.9 CRANE REQUIREMENTS

If required, a small fixed onsite crane may be used for this project. It might be a LIEBHERR 32TT CRANE or similar.

The use of the crane is to be within the construction site boundaries and is to assist with maintaining an efficient materials handling program which in turn will assist to minimize the impact of deliveries to site on the surrounding precinct.

Whilst it is highly unlikely, application shall be made to Wollongong Council and all other relevant authorities to ensure that council and the neighboring properties are informed when crane erection and dismantle is being performed on the street.

The following guidelines will apply in the instance of operating a mobile crane.

- All applicable Wollongong council stand plant permits shall be applied for and be in place along with a comprehensive traffic management plan.
- Accredited traffic controllers will be used to manage all traffic whilst the crane delivered or being removed from site. The appropriate Council permits and approvals shall accompany the crane whilst it is in operation, when required.
- When the need for traffic controllers arises pedestrian flow will be maintained at all times when the mobile crane is being set-up, dismantled or accessing the site. This will be achieved by providing temporary controlled lanes as required.
- Temporary traffic lanes and pedestrian walkways will be established with the use of temporary traffic management systems as required to statutory authority requirements and managed by accredited traffic controllers.
- If at any time standing plant is required on public footpath or road, protection shall be placed on the surfaces to displace any static loads. Further any plant that creates wastage such as concrete pumps, will require full protective cover on surface and bunting. Adequate approvals will be sought and approved pedestrian traffic management to ensure safety of public and workers at all times
- All other period of plant standing or materials loading and unloading will be within site.

## **2 PEDESTRIAN AND TRAFFIC METHODOLOGY DURING CONSTRUCTION WORKS**

### **2.1 TRAFFIC MANAGEMENT AND PARKING**

Access to the site will be via Lindsay Evans Place and will be controlled at all time by a permanent traffic officer who will be stationed at the site entry (which is adjacent to the property entry).

The traffic officer will direct and control construction vehicles whilst the site is open.

The main contractor will ensure no delivery vehicles are parked on Lindsay Evans Place whilst they are awaiting site entry. Vehicles will be instructed to arrive at designated times for site entry. Should any vehicle not be able to enter the site due to obstructions from parked cars on either side of Lindsay Evans Place, the vehicle will be sent away from the site until such time as arrangements can be made to relocate the vehicles.

Parking for the construction personnel will be promoted to take place on site where it can be accommodated. Any parking that cannot be accommodated on site will be dispersed through the surrounding public streets (and not on the section of Lindsay Evans place within 50m of the site). This includes for example using only the western side of Timberi Avenue for any required off site parking – this location will be notified to workers during weekly tool box talks.

Construction staff will also be encouraged to car share and utilize public transport.

### **2.2 PEDESTRIAN TRAFFIC**

Pedestrian movement during the construction phase will not be adversely affected by the redevelopment. Pedestrian management considerations are detailed below.

- Protection for pedestrians will be as per statutory requirements with perimeter A Class/security fencing along all boundaries.
- Traffic controllers for construction vehicles entering and leaving the site.
- Diversion of pedestrians away from working areas except where continuity of access is required (protection to be provided to these areas) whilst maintaining existing pedestrian pathways where practical with pedestrian supervision via competent and ticketed controllers and pedestrian management processes. This will be required when working within the site entry road (new services and new surfacing).

### **2.3 CONSULTATION**

Consultation shall be undertaken with the following statutory authorities where required;

- Wollongong Council;
- Neighbouring residents and Anglicare residents;
- Road and Maritime Services (RMS);
- NSW Police
- Neighboring Business Operators
- NSW Workcover

### 3 **EXCAVATION**

Excavation will include reducing current levels to enable construction to take place.

#### 3.1 EXCAVATION IMPACT

- The excavation in overburden will be relatively quiet as this will be removed with conventional excavator buckets. However, where rock is discovered, ripping or hammering and sawing will be required to remove this material.

#### 3.2 STABILITY OF ADJOINING BUILDINGS AND RMS ROAD

- A geotechnical engineer and structural engineer will be commissioned to monitor works during this phase. All required stabilization of site and surrounding zones will be considered at all times.
- **Monitoring and Contingency Action Plan**
- In order to confirm and verify that ground condition and support system performance are consistent with design assumptions, the builder will undertake appropriate monitoring at regular intervals, if required.

#### 3.3 **HOARDINGS & SCAFFOLDING**

- Class A hoarding will be limited to 1.8m high protection fencing on all boundaries with suitable branded shade cloth and marketing banners, in accordance with relevant guidelines.

#### 3.4 EXISTING SERVICES

- Prior to the commencement of works, the position and location of all existing services will be ascertained from drawings received from the relevant authorities (including Dial Before Dig), investigation carried out on site and by other means appropriate; all relevant authorities shall be consulted and employed to provide accurate services searches and information.
- Each existing service affected by the construction work will be disconnected, capped off, removed, altered or re-directed, as necessary for the completion of the works. Any redirection or capping of any services required will not affect any surrounding property.

#### 3.5 RECYCLING

For recycling information refer to Waste Management reports issued separate to this document.

#### 3.6 ACOUSTIC CONTROL

For acoustic control Information refer Noise Methodology.

## **4 REMEDIATION METHODOLOGY**

### **4.1 REMEDIATION OF THE SITE**

- Refer to the separate environmental reports that discuss likely remediation required and associated statutory obligations. The contractor will carry out the defined works using best practice and under the supervision of the relevant supervising Environmental Consultant.

## **5 STORM AND WASTE WATER MANAGEMENT PLAN METHODOLOGY DURING CONSTRUCTION**

### **5.1 INTRODUCTION**

- Water from excavations to be discharged to the existing (yet augmented) site storm water system must meet the following criteria:
- Not contain a concentration of suspended sediment exceeding 50 mg/l, shall have a PH of between 6.5-8 and shall comply with the ANZECC Guidelines for Marine and Freshwater Quality, for protection of Aquatic ecosystems
- Water testing may be required to confirm results and permits may be required to discharge in Council storm water system, upon consultation.
- It is envisaged that the existing storm water systems shall be utilized until such time as the upgrade is programmed within the construction program. Works shall be managed to ensure that there is no impact to the surrounding environment or to the nearest catchment area as per above

### **5.2 REFERENCES**

- All relevant Council regulations;
- Environmental Protection Legislation;
- Clean Waters Act 1970;

## **6 WASTE MANAGEMENT METHODOLOGY DURING CONSTRUCTION**

### **6.1 PURPOSE**

To ensure that resources are conserved, and waste is processed responsibly by minimizing waste generation and maximizing recycling of materials.

### **6.2 SCOPE**

To address the waste management procedures for the construction activities to be undertaken during the proposed development

### **6.3 MATERIALS SELECTION & ORDERING;**

- Selection of all materials has been undertaken by architectural designers;
- Materials requirements are to be accurately calculated to minimize waste from over ordering;
- Materials ordering process is to aim at minimization of materials packaging;
- Material Safety Data Sheets (MSDS) are to accompany all materials delivered to site, where required, to ensure that safe handling and storage procedures are implemented;

### **6.4 WASTE RECYCLING**

- Waste generation from construction activities on site will be minimized, reused or recycled where applicable;
- Recyclable materials are to be specified wherever practical;
- Dedicated and secure containers will be provided on site by an approved waste handling company for non-recyclable waste;
- Where practical, dedicated and secure recycling containers will be provided on site by an approved waste handling company, manufactures, or specialist recycling organizations for the following materials;
  - Steel
  - Paper/Cardboard
  - Glass
  - Concrete/Brick/General Rubbish
  - Plasterboard

Refer also to the separate Waste Management Plan submitted as part of the development application.

### **Smoking**

A dedicated staff/contractor smoking area will be agreed with the contractor prior to commencing works. This area will be contained on site and will not be within 20m of the Lindsay Evans Place frontage and will include bins that are emptied on a daily basis.

## **7 AIR QUALITY MANAGEMENT METHODOLOGY DURING CONSTRUCTION**

### **7.1 PURPOSE**

To ensure that construction activities do not lead to the generation of unacceptably high levels of dust or other air pollution.

### **7.2 SCOPE**

Establish air quality management systems and procedures to be implemented during construction activities undertaken during the proposed development.

### **7.3 MAJOR MEASURES**

- All construction plant, equipment and vehicles are to be properly maintained and operated so as to alleviate excessive exhaust emissions;
- Waste loads leaving the site are to be covered at all times;
- All dust generating construction activities are to cease during high wind conditions unless such operations can be controlled by localized watering or other control means;
- The burning of waste materials and the lighting of fires will be strictly prohibited on the site at all times;
- Continual visual monitoring of the site will be undertaken by site management to ensure that works do not generate unacceptably high levels of dust;
- Wherever practical, materials and processes that are non-toxic will be employed to minimize possible harmful affects to air quality;
- Wherever practical any ozone depleting gases in building services installations will be removed prior to deconstruction works;

## **8 NOISE MANAGEMENT METHODOLOGY DURING CONSTRUCTION**

### **8.1 PURPOSE**

To ensure that the construction is in accordance with DA conditions, Noise Management during Construction and Demolition, as a requirement of the Development Consent generally, and to ensure that construction activities do not lead to the generation of unacceptably high levels of noise.

### **8.2 SCOPE**

To establish a noise management procedure to be implemented during construction activities to be undertaken in the proposed development to minimize the impact on surrounding environment.

### **STANDARDS**

- The maximum noise levels of all deconstruction and construction plant and equipment is to generally comply with EPA requirements
- For construction periods of four weeks or less, the LAeq sound pressure level measured over a period of 15 minutes when the construction site is in operation, shall not exceed the ambient background level (LA90 15min) by more than 20dB(A) when measured at the nearest effected premises;
- For construction periods of greater than four weeks, the LAeq sound pressure level measured over a period of 15 minutes when the construction site is in operation, shall not exceed the ambient background level (LA90 15min) by more than 10dB(A) when measured at the nearest effected premises.
- Noise levels to comply with the Code of Practice for Construction hours / noise 1992 and Australian Standard 2436-1981, "Guide to Noise Control on Construction, Maintenance and Demolition Sites."

### **Management**

- The maintenance of exhaust silencing attachments on all diesel-powered equipment;
- Only silenced compressors and silenced, bagged jackhammers (if required) will be permitted to be used on site.
- Potential for noise generation to be used is an important criteria in the selection of construction plant and equipment on the site;
- On site periodic checks are to be carried out to ensure that noise suppression devices are installed on all required plant and equipment;
- Where practicable, noise-generated plant is to be located away from residential boundaries;

## Site Induction

The Site Manager will ensure that all employees and sub-contractors are advised of the procedures under the 'Noise Management Methodology' during each Site-Specific Safety Induction prior to commencement of work on the site.

The Site Induction will:

- Explain employee's responsibilities as outlined in the 'Noise Management Methodology'.
- Highlight the sensitivity of the issue of power tool noise to adjoining residents.
- Explain the restrictions of the usage of any equipment or device on site.
- Notify approved hours of work.
- Ensure that the employee is competent and skilled in the tasks to be performed.
- Record certificates of competency to induction records.
- Fortnightly 'Tool Box' meetings to be held on site to ensure consistent monitoring of onsite activities.
- Meetings will identify if the procedures established under this Methodology are being abided and followed by all site personnel.
- A site contact phone number will be issued to surrounding neighbours so they can immediately discuss any concerns they may have regarding noise associated with construction activities on site.

## 8.3 COMMUNITY CONSULTATION

During the course of the works, or on a monthly basis, a status / update on construction works will be issued to the relevant adjoining properties as well as all residents within the St Lukes village so as they are aware of past and future activities that may / or may not affect their amenity.

Prior to activities requiring public/community and Anglicare resident co-ordination e.g. road closures, mobile crane activity, approved after hours works, we will undertake letter box drops to the relevant properties and residents accordingly.

## 8.4 CORRECTIVE ACTION FOR COMPLAINTS

Following receipt of a complaint concerning site noise, dust and vibration, the site manager will hold a tool box talk on site with the relevant party's i.e. excessive dust from demolition contractor, to discuss, agree and implement corrective action that can address the areas of concern in the complaint.

The complaint will be registered and kept on site for the duration of the works. If required, relevant complaints will be introduced to the site inductions for all future workers so as they are aware of the sensitive issues that affective the surrounding neighbours amenity.



## 8.5 NOISE MONITORING

Refer separate section and the Acoustic Report regarding Noise Management.

## 8.6 PLANT & EQUIPMENT

Noisy plant and equipment that tends to generate noise on sites include excavators, hammers, trucks/vehicles, formwork saws, drilling, and ventilation.

Where larger machinery exceeds these noise levels, smaller machines will be used e.g. replacing 20T excavators with two 12T excavators. Any mechanical plant used on the project for the purposes of construction ventilation will be fitted with attenuators to limit noise levels accordingly.

# 9 **EROSION & SEDIMENT CONTROL**

## 9.1 PURPOSE

Ensure that sediment and erosion during the deconstruction and construction activities are controlled and do not effect surrounding roads, footpaths, and neighboring properties.

## 9.2 SCOPE

To establish erosion and sediment control measures to be implemented during construction activities to be undertaken in the proposed development. Refer to the civil design documentation that discusses and details this element of work.

## 9.3 MAJOR MEASURES

All construction plant, equipment and vehicles are to follow sediment control procedures when entering and leaving site. Prior to construction temporary sediment control devices are to be established and maintained throughout construction. All fences will be covered in shade cloth and be bunded to ensure no run off or debris leaves the site in an uncontrolled manner.

# 10 **TREE PROTECTION**

## 10.1 PURPOSE

To ensure the protection and health of trees are maintained throughout the duration of the project. All canopy, trunk and root systems of all trees to be retained on site and neighboring properties shall be protected from damage during excavation.

All proposed removals will be at mutual approval of all owners and in accordance with council approval process.

## 10.2 SCOPE

To establish and maintain the Landscape/Tree Protection Zones, where required via appropriate supervision and reporting throughout the construction activities in accordance with the Arborist report forming part of the development application.