

Construction Management Plan

Opal Residential Aged Care Facility – St Clair

Explorers Way, St Clair

Opal St Clair Explorers Way

Construction Management Plan prepared for:
Opal Aged Care

Prepared by:

Pact PM

Corey Taylor

GPO Box 892, Sydney NSW 2001

e: coreyt@pactpm.com.au

m: +61 400 661 617

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1.0 Introduction

This Preliminary Construction Management Plan (CMP) has been prepared by Pact PM to accompany a development application to Penrith City Council for the development of Opal St Clair: Lot 36 in DP 239503, Explorers Way, St Clair (Site).

This preliminary CMP addresses the construction related activities sufficiently for Council to assess the development application. The CMP has been prepared at an early stage in the design and planning of the project. The CMP will be revised by the appointed construction contractor (s) after the detailed design is complete and will incorporate the specific conditions identified within the Development Application approval.

This CMP outlines the 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. It also outlines a methodology within which the excavation and construction activities may be completed in a manner which will not cause environmental or community disturbances above agreed levels. The CMP also outlines a framework for procedures to be adopted when monitoring the construction performance against agreed criteria.

1.1 Site Location

The site is located at Lot 36 in DP 239503, Explorers Way, St Clair. A new residential aged care facility development is proposed for the land parcel – refer below site image.



Figure 1 – Site Plan

1.2 Project Description

The Project consists of:

- Removal of vegetation;
- Demolition of Existing dwelling;
- Bulk earthworks;
- Erection of 2 storey facility with 154 aged care beds with on grade car parking;
- Associated infrastructure works, landscaping, paving and fences.

1.3 Consultation and Legislative Requirements

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

- Penrith City Council
- Environmental Protection Authority (EPA)
- Sydney Water
- Ausgrid
- Roads and Traffic Authority
- Workcover Authority

The Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with in undertaking the Works as required:

- Protection of the Environment Operations Act and Regulations;
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
- Environmentally Hazardous Chemicals Act 1985;
- Protection of the Environment Administration Act and Regulations;
- Work Health & Safety Act 2012 and relevant codes of practice and Standards
- WHS Regulation 2012 and relevant codes of practice and Standards;
- Australian Standard AS 2601-2001: Demolition of Structures;
- Australian Standard 2436-2010 “Guide to noise and vibration control on construction, demolition and maintenance sites”
- Australian Standard AS 4970-2009: Protection of Tress on Development Sites;
- Australian Standard AS 4373-1996: Pruning of Amenity Trees;
- WorkCover NSW and the National Occupational Health and Safety Commission (NOHSC) Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)];
- Code of Practice for Asbestos Work (Excluding Removal);
- Guide to the Control of Asbestos Hazards in Buildings and Structures (NOHSC:3002 (1998));
- Resource and Recovery Act 2001;
- Environmental Planning and Assessment Act 1979, including clause 109R for the compliance of the current Building Code of Australia;
- Heritage Act 1997;

- Local Government Act 1993;
- Disability Discrimination Act 1992 (DDA);
- Disability (Access to Premises – Buildings) Standards 2010 (Premises Standard);
- Applicable aviation standards e.g. CASA requirements; and
- Soil Conservation Act 1983.

2.0 Works Description

The proposed redevelopment is one (1) residential aged care building of two (2) levels including 154 resident rooms with associated facilities for the care of residents including kitchen and laundry facilities, dining rooms, lounge rooms, activity areas, an allied health facility, nurse stations, utility rooms, staff facilities, café for residents and their visitors, landscaping and on grade car parking. Major activities associated with the construction will include (in approximate order of occurrence):

| Stage | Description |
|---------|--|
| Stage 1 | <ul style="list-style-type: none"> • Site establishment, hoarding erection, fencing, scaffolding, pedestrian control etc |
| Stage 2 | <ul style="list-style-type: none"> • Demolition of Existing Dwelling • Excavation • Footing construction • Crane erection |
| Stage 3 | <ul style="list-style-type: none"> • Construction of new residential aged care building |
| Stage 4 | <ul style="list-style-type: none"> • Remove crane, hoardings and pedestrian control. • Fit out and occupying building • Landscaping |

2.1 Demolition

The site comprises Lot 36 in DP 239503, having an area of approximately 1.057 hectares, a frontage to Explorers Way of approximately 79.5 metres. The site is generally rectangular in shape oriented north south. The site consists of mown lawn and remnant trees. The site has been cleared of understory vegetation for several decades, most likely since the surrounding area was subdivided. There is a 2 storey residential dwelling on the site. The demolition of this existing dwelling will form part of the Development Application.

2.2 Hoardings & Scaffolding

The design, approval and erection of fencing and/or hoardings will be compliant with Penrith City Council's policy for the erection and design of fencing and/or hoardings – refer Concept CMP Site Establishment and Sediment Control Plan (Appendix 1) for preliminary hoarding concept.

2.3 Site Stability

Martens Consulting Engineers have prepared a report on Geotechnical Investigation for the site that provides information on subsurface soil and groundwater conditions. The report dated March 2021 (included as part of the Development Application) details the results of various boreholes, test pits and associated testing (where applicable). The recommendations contained within the report will be utilised to ensure that the site remains stable during excavation and construction.

2.4 Excavation

Excavations will be carried out using conventional earthmoving equipment such as tracked hydraulic excavators and dozers. Based on the Geotechnical Investigation report it is not expected the excavation will be below the anticipated groundwater levels.

Further details on anticipated site excavation and retention requirements are outlined in the report on Geotechnical Assessment prepared by Martens Consulting Engineers Douglas Partners Pty Ltd dated March 2021 included as part of the Development Application.

2.5 Structure

The structure type will be determined through the design phase however at this stage it is envisaged that the superstructure to the new building will be of conventional concrete frame and Post Tensioned construction.

2.6 Facade

The facade design is to be detailed through the design stage and will be clarified by the architect.

2.7 Building Services

The new building services will be provided to adequate levels to ensure environmental performances meet the client's targets.

2.8 Site Work Sheds

The location of the site work sheds will be determined once the design, and construction methodology has been finalised – refer Concept CMP Site Establishment and Sediment Control Plan (Appendix 1) for proposed preliminary location).

2.9 Site Remediation

Any site remediation activities, (including soil and groundwater assessment, monitoring, and remediation) necessitated by the works being the subject of the Development Application, will be undertaken in general conformance with any appropriate future remediation plans.

The future detailed Construction Site Management Plan(s) to be prepared by the works contractor(s) will appropriately consider any remediation plans and will be developed accordingly.

Martens & Associates have completed a site inspection and undertaken a review of the Preliminary Site Investigation report prepared by Alliance Geotechnical (April 2015). Based on the review of the available documentation, Martens & Associates concludes that a Detailed Site Investigation is required. The findings of this investigation will be issued as a Post Development Application report. Any required remediation works will be undertaken so that the site will be made fit for the proposed use as the proposed aged care facility.

3.0 Protection of Surrounding Buildings

3.1 Adjacent Buildings, Structures and Infrastructure

At the time of this report there were residential dwellings immediately adjacent to the subject site and standard protection methods will be implemented by the contractor to protect any adjacent buildings, structures, and infrastructure. This will include dilapidation surveys before construction commences and monitoring of noise and dust during construction. Localise protection systems will be employed to provide protection and prevent damage.

4.0 Public Amenity and Safety

4.1 Hours of Work

The hours of construction including delivery of materials to and from the site shall be restricted as per Penrith City Council's requirements forming part of the Development Consent.

Out of hours works may be required from time to time and will be appropriately coordinated. Deliveries of heavy machinery may be required out of the proposed hours of operation will conform to the overriding requirements of the Transport for NSW.

4.2 Disruption Notices

Disruptions will be managed through the process of Disruption Notices. For such stoppages, the Disruption Notice will describe the applicable works, timetable, issues and contingency plans. Disruption Notices will be submitted by the Contractor to stakeholders. Depending on the works, these may be required between 48 hours and 3 weeks prior to commencing works.

4.3 Complaints Mechanism and Neighbour Management

Careful management of site to minimise disruption and inconvenience to neighbouring buildings and their occupants is of highest importance. From the commencement of construction until completion of the works, the Contractor will be required to maintain a community liaison point of contact. This officer will be contactable by both a mobile phone and email and the contact details will be clearly advertised on site hoardings, community updates and the like.

The Contractor will be required to maintain a register of complaints and to report on the status of complaints on a monthly basis. For complaints that cannot be addressed by the Contractor, these will be presented to the appointed client representative for resolution of the issues and for decisions to be made.

The contractor will provide site signage that clearly indicates the relevant contact within the site with responsibility for addressing complaints during the construction phase.

4.4 Noise and Vibration levels

All practicable measures will be taken to reduce the noise arising from the excavation and Construction Works. Noise from the Site shall not exceed the limits set out in the Interim Construction Noise Guidelines (ICNG), Environmental Protection Authority (EPA) and any requirements that may be included in the DA determination or NSW legislation. No machine work will occur outside normal working hours unless approval has been given by the consent authority through the Disruption Notice process. The following measures are proposed with reference to the ICNG:

- Use Noise Management Levels (NML's) to identify demolition, excavation and construction noise sources or scenarios that require engineering controls or administrative management;
- Promote clear understanding of ways to identify and minimise noise from construction works;
- Focus on applying all feasible and reasonable work practices to minimize construction noise impacts;
- Provide flexibility in the selection of site-specific and reasonable work practices to minimize noise impacts;
- Encourage construction work to be undertaken within approved standard hours where reasonably practicable with noise that is audible to other premises. Approval is required for works undertaken outside standard hours; and
- The use of noise reduction techniques including, but not limited to, barriers, enclosures and silencers shall be employed to ensure compliance with construction and demolition noise criteria.

As part of the noise mitigation treatment for the project, the Contractor will be responsible for the checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works are checked for defective exhaust systems and general servicing.

The Contractor will be required to commission an acoustic assessment by a qualified practitioner in accordance with the requirements of the NSW Environmental Protection Authority (EPA) 'NSW Industrial Noise Policy' (INP) which will establish Project Specific Noise Criteria for the site.

Noise emissions from all mechanical services and plant equipment proposed onsite will be selected to meet the project specific noise criteria detailed in the Noise Impact Assessment. As such, noise impacts from the proposed development on the surrounding commercial or residential receivers will be managed within the specific noise criteria.

Traffic is not anticipated to substantially increase during the construction of the development and it is considered unlikely any mitigation measures will be required due to the increase in road traffic volume.

The noise mitigation treatment proposed by the Contractor will be included in the detailed Construction Management Plan which will also highlight noise ratings of particular machinery. A noise and vibration management plan will be implemented to ensure ongoing compliance with these requirements.

4.5 Odour Control

Odour problems will be minimal for activity on site. All plant and machinery involved in the Works will house catalytic converters, and be regularly serviced and checked for exhaust emissions.

4.6 Public Safety

Works will be undertaken with Public Safety as a significant consideration. Appropriate fencing and hoardings will generally be erected along the boundaries of the Site. General safety measures shall be undertaken as standard practice. These include scaffolding around demolition and construction works, adequate lighting, safety signage, provision of site security and controlled construction traffic crossings.

5.0 Materials Handling

5.1 Materials Deliveries

The predominant means of materials deliveries to the site will be via trucks entering the site from Explorers Way. Larger deliveries may require temporary closure of sections of the road to accommodate larger vehicles. This will be reviewed and agreed with Council and Transport for NSW by the appointed Contractor – refer Concept CMP Site Establishment and Sediment Control Plan (Appendix 1) for proposed preliminary location for site access, materials laydown areas etc.

5.2 Waste Management

A preliminary Waste Management Plan, prepared by Universal Foodservice Designs (UFD), and dealing with future operational waste management, has been submitted as part of the Development Application.

Waste Management during construction will be dealt with through a Contractor's Site Management Plan to be provided prior to issue of a construction certificate and will detail:

- the types and quantities of excess materials generated during demolition and construction,
- how these will be stored and disposed of or reused either on or off site,
- how and where the residual waste will be disposed of, and

- how waste generated by the use of the completed development will be managed

Excavated material will be removed in a manner that minimises impact on surrounding properties. In general all excavated material will be loading onto trucks within the construction site.

Residues from operations such as masonry-cutting, washing tools, and concreting will be;

- contained on the site and treated using sedimentation settling tanks or flocculation and disposed of in accordance with the Waste Management Plan;
- stored well clear of any poorly drained or flood prone areas, stream banks, and channel or stormwater drainage area in a designated area and under cover where possible; and
- provided with containment bunds, constructed around the storage areas which allow salvaging of spilt materials.

5.3 Cranes, Hoists and Loading

Appropriately sized and positioned tower crane(s) will service the constructions activities, with mobile cranes introduced to supplement this as required.

Man and materials hoists will be required to service all levels of the new building. The exact type and location will be determined by the appointed contractor. The contractor will submit details of the crane(s) and the design of the crane footings to the project structural engineer for review prior to the commencement of works – refer Concept CMP Site Establishment and Sediment Control Plan (Appendix 1) for proposed preliminary location for Tower Crane.

6.0 Traffic Management

The Contractor shall prepare a detailed Construction Traffic Management Plan prior to issue of a Construction Certificate. Traffic will generally be managed in the following way:

- Designated transport routes will be communicated to all personnel, and enforced.
- Strict scheduling of vehicle movement will occur to minimise off-site waiting times.
- On-site parking will not be provided, and site workers will utilise public transport and car sharing wherever possible.
- Vehicle movements will be compliant with Conditions of Consent and broader road-use regulations, particularly with regard to hours of work, materials loading and unloading, and over-size deliveries and installations.

6.1 Site Access

Access to the site will be via Explorers Way. This includes access for workers and site deliveries. Certified traffic controllers will be used to ensure smooth operation of the construction zone to avoid traffic queuing – refer Concept CMP Site Establishment and Sediment Control Plan (Appendix 1) for proposed preliminary site access position.

6.2 Ongoing Management

Heavy and wide loads will be coordinated with the relevant authorities for after-hours deliveries, thereby minimising traffic impact during working hours.

On-site traffic management will be finalised with each stage of the works, as appropriate. Ongoing liaison with the relevant authorities will occur throughout.

6.3 Street Closures

The proposed footprint of the works will likely cover the entire land parcel. For this reason, it is likely that a temporary construction zone will be necessary for loading on Explorers Way. The closure of any area of the road will be done so in close consultation with Council and with approvals sought from relevant authorities. All diversions to vehicular and pedestrian traffic will be managed appropriately as to form minimal disruption in accordance with the Construction Traffic Management Plan.

Closure of entire streets is not typically expected however any temporary closures that are necessary will be sought through Council and managed appropriate to the Construction Traffic Management Plan in order to cause minimal disruption to the flow of traffic.

6.4 Pedestrian Movement

Pedestrian movement during the construction phase will most likely not be significantly affected by the redevelopment. Pedestrian management considerations include the following:

- Nature strip/verge along Explorers Way will be fenced / hoarded off from the construction site
- Any temporary construction zones will be supported by sufficient pedestrian protection.
- Traffic controllers for construction vehicles entering and leaving the site.
- Provision of night lighting, protective barriers, overhead protective structures where applicable and traffic barriers if applicable.
- Any diversion of the pedestrian paths on the opposite side of Explorers Way to the site will be agreed with Council prior to being implemented.

7.0 Environmental Management

7.1 Occupational Health and Safety

The Contractor will be nominated as “Principal Contractor” as required under the WHS Act. This role will require the careful and controlled management of worker and public safety. Detailed methodologies are yet to be developed, however typical approaches include job training, toolbox talks, alcohol and substance abuse checks, and implementation of emergency management plans.

The Contractor will be required to report on WHS on a regular basis.

7.2 Contamination / Hazardous Materials

Martens & Associates have completed a site inspection and undertaken a review of the Preliminary Site Investigation report prepared by Alliance Geotechnical (April 2015). Based on the review of the available documentation, Martens & Associates concludes that a Detailed Site Investigation is required. The findings of this investigation will be issued as a Post Development Application report. Any required remediation works will be undertaken so that the site will be made fit for the proposed use as the proposed aged care facility.

7.3 Dust Control

To control dust generation where necessary, water will be sprayed at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment. Management of dust prevention is to be developed by the Contractor and agreed by the project stakeholders.

Additional precautions that will be implemented during the Works include the covering of all haulage trucks with tarpaulins, monitoring of weather conditions (including wind). Management and contingency plans will be developed to prevent any foreseeable impacts from dust.

7.4 Recycling

Recycling programs will be developed for both demolition and construction phases of the works. The Contractor will be required to report on extent of recycling achieved.

7.5 Vegetation Protection

There is zero vegetation present on the subject lot of land as a result of bulk earthworks and minor land contouring work as part of the subdivision works to create the site therefore no tree protection will be required to form part of the Contractor's Construction Management Plan.

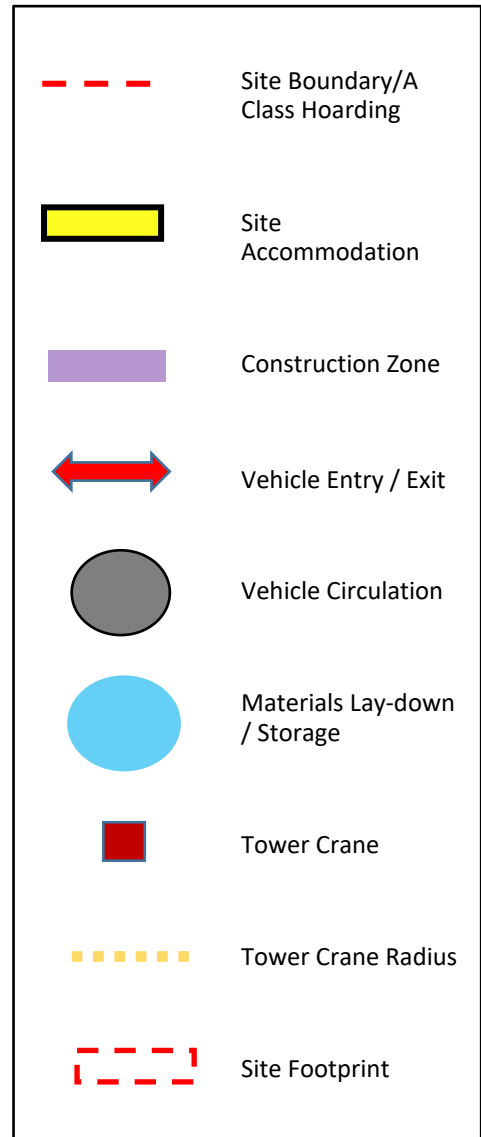
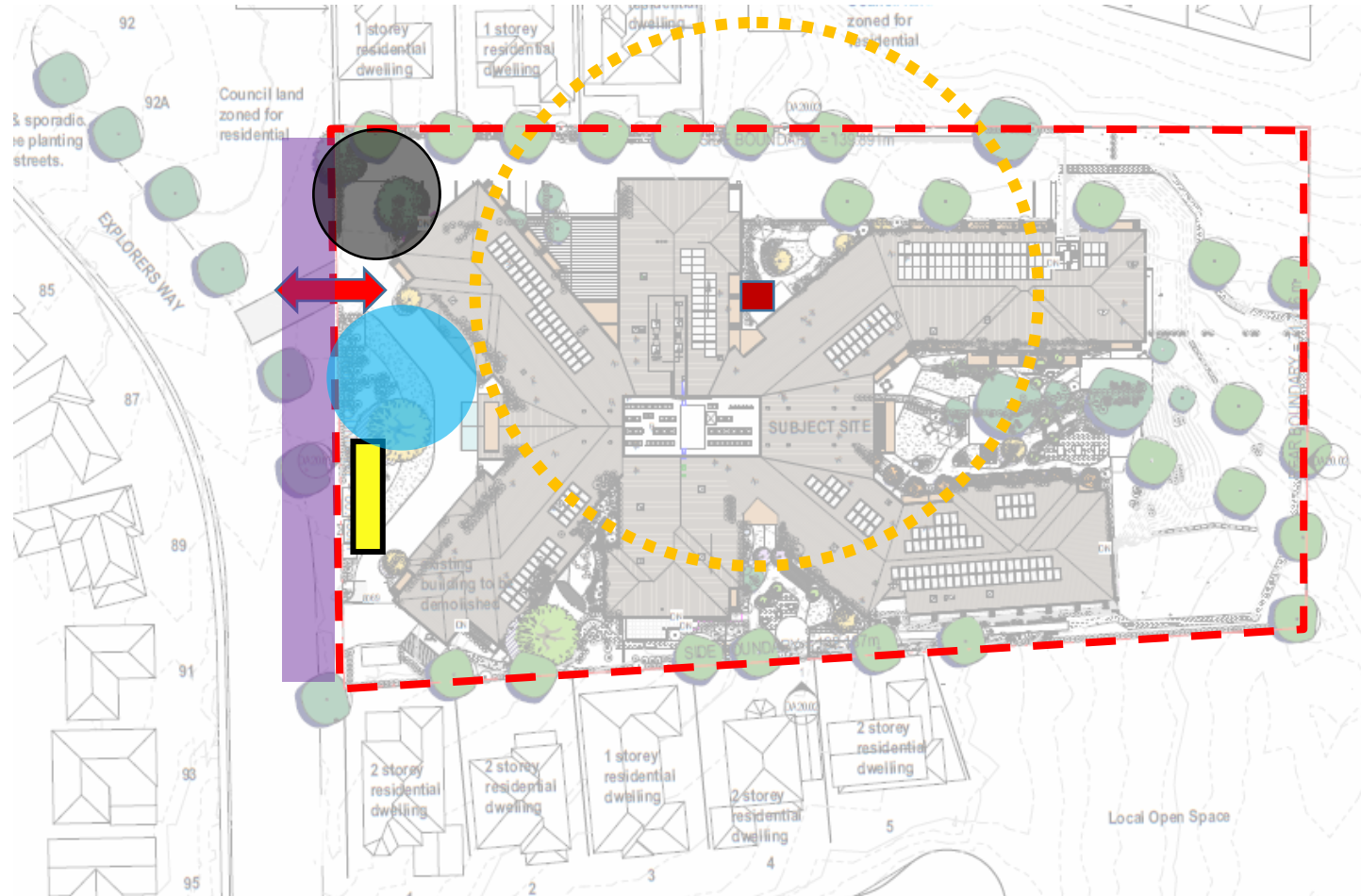
7.6 Stormwater and Sediment Control

The future contractor will prepare a Sediment and Erosion Control Plan to ensure that all works are carried out in accordance with; local authority requirements, EPA – Pollution Control Manual for Urban Stormwater, and Department of Conversation and Land Management Manual – “Urban Erosion & Sediment Control”. A preliminary Sediment Control Plan is also contained in the Stormwater Report prepared by Henry & Hymas Consulting Engineers that accompanies the Development Application

Appendix

Appendix 1 – Concept CMP Site Establishment and Sediment Control Plan – Explorers Way, St Clair

Concept CMP Site Establishment and Sediment Control Plan – Explorers Way, St Clair



Sediment and Erosion Control - The future contractor will prepare a Sediment and Erosion Control Plan to ensure that all works are carried out in accordance with; local authority requirements, EPA – Pollution Control Manual for Urban Stormwater, and Department of Conversation and Land Management Manual – “Urban Erosion & Sediment Control”. A preliminary Sediment Control Plan is also contained in the Stormwater Report prepared by Henry & Hymas that accompanies the Development Application. Sediment and Erosion control measures will be appropriately implemented along the complete perimeter of the site during the demolition, excavation and construction stages.