

CHISHOLM SHOPPING CENTRE

CONSTRUCTION MANAGEMENT PLAN

1 BACKGROUND

1.1 INTRODUCTION

The project consists of the bulk excavation, new structure, fit-out and commissioning of the proposed new supermarket, retail spaces, medical centre, restaurant and associated external works.

Early works will commence after DA approval. Given the proximity to the St. Aloysius Primary School, The Principal Contractor will implement a strategic plan to minimise the impact on the school and surrounding residents. Careful coordination of access and traffic management will be a priority in liaison with adjacent landowners and other community stakeholders.

1.2 BACKGROUND

The Initial Development Application plan of the site was lodged on 10th July 2018. The site is located in Chisholm. The shopping centre was identified as part of the initial planning adopted by the council in 2003 of the Chisholm Urban Release Area. The overall design has been enhanced, and Revelop is undertaking a new planning approval.

1.3 SITE DESCRIPTION

The site is located within the Waterford County precinct within the newly created suburb of Chisholm. The site is legally described as Part of Lot 1 DP 1224700. **(Recently registered as LOT 11 & 12 DP1280255)**

The site slope is between 3.6% and 5.2%, generally sloping in a northwesterly direction and has a total area of 42,287.6m² (4.23ha) and has the following frontages and dimensions:

- Heritage Drive - 240.3m
- Tigerhawk Drive - 199.5m
- Settlers Boulevard - 173.5m

The site comprises mainly cleared grassland with some existing trees. The surrounding road network has been constructed, which includes the recently completed Settlers Boulevard frontage.

The site is currently vacant.

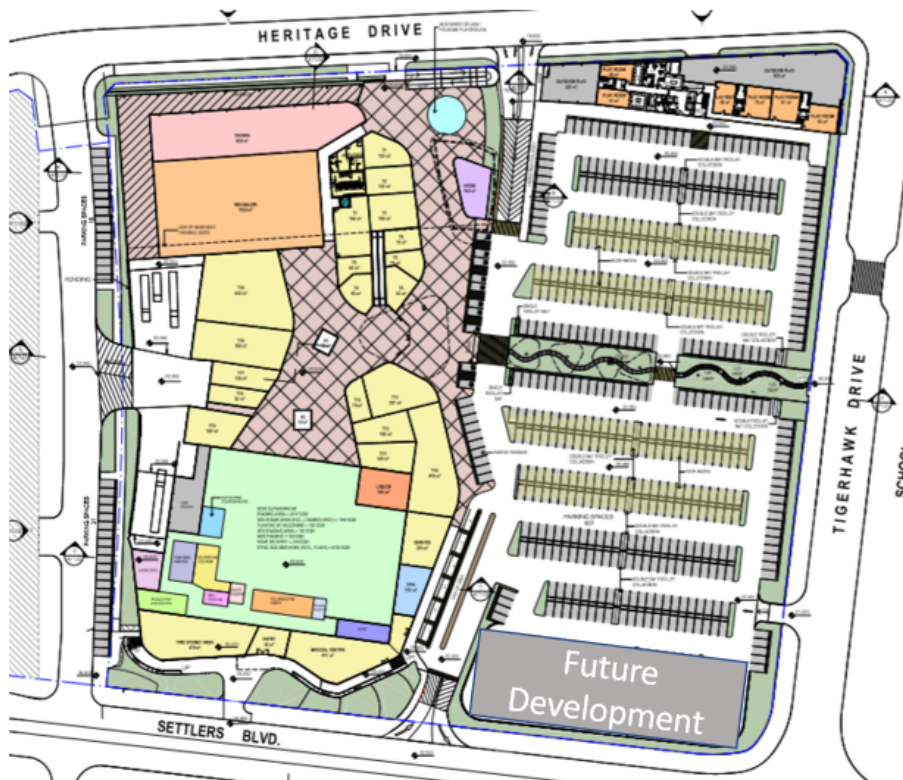


Figure 1: Site Location

1.4 OVERVIEW OF PROPOSED WORKS

The proposed works include a full-service Supermarket, Swim School, Medical/Allied Health Centre, Tavern, Childcare Centre, and 20+ Speciality Shops. Carparking for 640 cars.

The Fast Food outlets indicated on the drawings are excluded from this stage of the works.



1.5 CONSTRUCTION MANAGEMENT PLAN

This Construction Management Plan (CMP) outlines the approach to construction management of the Chisholm Shopping Centre. The CMP will be updated by the appointed contractor, engaged for the works and prior to works commencing.

All tasks are undertaken concerning the project, whether they be physical construction activities, office duties or procedural tasks. Tasks are to be undertaken in accordance with the following:

1. Suppliers and contractors shall provide assurance of the quality of all goods, materials, and services to be provided; and
2. All materials and works are to be undertaken to the manufacturer's specification or industry standards.

A liaison will be established with relevant authorities to coordinate the works.

The Client has engaged various consultants to assist in the Relevant Planning process. Those relevant to the CMP may include:

- Noise and Vibration Impact Assessment
- Construction Pedestrian & Traffic Management Plan
- Air Quality
- Infrastructure Servicing Strategy
- Aboriginal Cultural Heritage Assessment Report
- Environmentally Sustainable Design Strategy
- Stormwater and Flooding Assessment
- Arboricultural Impact Assessment
- Geotechnical
- Environmental incl Hazardous Material

The contractor will adhere to the Protection of the Environment Operations Act 1997 (POEO Act). The principles that underpin the POEO Act are:

- To protect, restore and enhance the quality of the environment in New South Wales, having regard for the need to maintain ecologically sustainable development
- To provide increased opportunities for public involvement and participation in environmental protection
- To ensure that the community has access to relevant and meaningful information about pollution;
- Pollution prevention and cleaner production; Reduction to harmless levels of the discharge of substances likely to cause harm to the environment;
- Reduction in the use of materials and the reuse or recycling of materials;
- Making progressive improvements, including the reduction of pollution;
- To rationalise, simplify and strengthen the regulatory framework for environmental protection;
- To improve the efficiency of administration of the environment protection legislation; and
- To assist in the achievement of the objectives of the Waste Minimisation and Management Act 1995.

2 HOURS OF WORK

All work on-site will only occur between:

7am to 6pm Monday to Friday, and 8am to 5pm Saturday

Unless otherwise approved in writing by Consent Authority due to extenuating circumstances, the extension of works outside of standard hours (i.e. 1pm - 5pm Saturday) is proposed in order to:

- Maximise productivity on Saturdays to offset losses in productivity due to the COVID-19 situation, WH&S and social distancing requirements; and
- Take advantage of reduced road traffic on Saturdays for truck routes and deliveries.

3 INVESTIGATION

3.1 INFRASTRUCTURE SERVICES

- Infrastructure services are provided to the perimeter of the site as part of the Subdivision generally. The site is serviced by
 - Potable Water (Settlers Boulevard & Heritage Drive)
 - Natural Gas (Boulevard & Heritage Drive)
 - Stormwater (Boulevard & Heritage Drive)
 - Waste Water (Heritage Drive)

Ausgrid provides electricity to the site

Any services diversion or removal will need to consider impacts on neighbouring properties.

4 SITE ESTABLISHMENT

Before commencement of works on site, the site will be formally established. This includes addressing the following areas:

- Temporary site fencing to secure areas not already secured by fencing
- Onsite storage, compounds, site office etc.
- Connection to temporary services
- Site amenities
- Sediment & erosion control measures
- Identification and marking of trees to be retained and removed
- Protection of trees that are to be kept.
- Statutory and contact signage.

The contractor will ensure the security of all active work areas, including the car park, to ensure the public's safety and protection of the works.

Early site establishment will take approximately two weeks and will be maintained for the duration of the works. Refer to below.

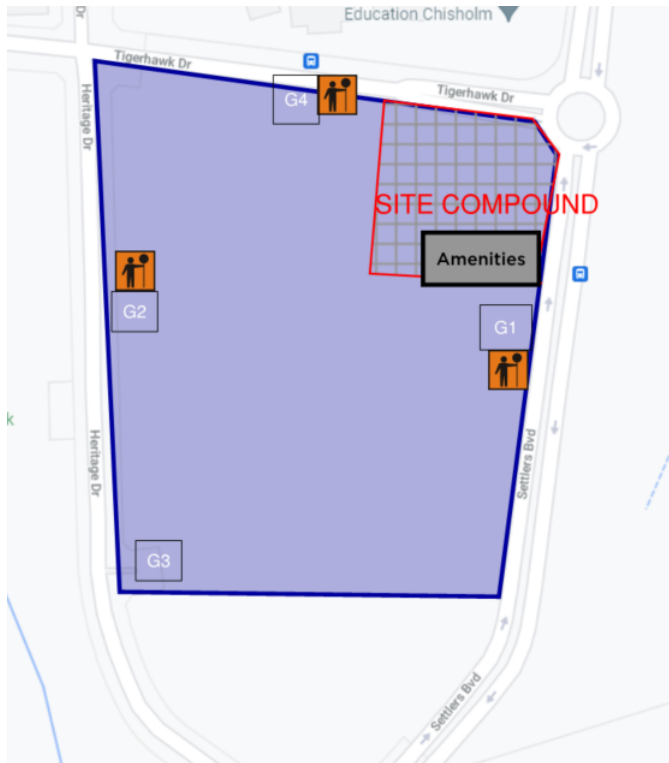


Figure 2: Site Establishment Area

Construction personnel will be advised that there will be limited vehicle parking on the site. Parking in the surrounding streets will be coordinated with the adjacent school to limit congestion. Site establishment, including hoarding installation, is likely to occur in multiple phases to limit disruption to adjoining properties. Temporary fencing and usage of movable barricades would be utilised as required to works along the boundary.

5 PUBLIC & PROPERTY PROTECTION

Before the commencement of works, a dilapidation survey will be undertaken involving all public and private roadways, adjoining and adjacent paving, structures, buildings and residences. Temporary hoarding and fencing will be installed to delineate the site boundary and protect the general public from activities occurring on the site/s. The building site/s will be kept neat and tidy to maintain public safety and local amenity.

Adequate protective perimeter signage will be installed as required. This signage will be needed to identify construction contact points and ensure no unauthorised entry to the site.

5.1 HOARDINGS, FENCES AND BARRIERS

Areas of the Site where works will be undertaken should be securely fenced off using best practice methodology to protect the public. The following indicative issues will be considered concerning site hoarding, fencing and barriers:

- Where possible, maintain the existing perimeter fencing and attach shade cloth, or erect hoardings, to control views and manage dust;
- The site hoardings, perimeter fencing or other site barrier systems will be kept tidy throughout the programme of works;
- Before and during building work, all excavations below 1m in height will have safety barriers delineating potential fall areas;

- Hoardings, barriers, and other perimeter fencing will be suitably lined to limit public viewing to designated viewing areas. This will ensure pedestrian flow is not impeded;
- The hoarding/fences may be adjusted to suit the phases of the development

The fencing for the construction works for each stage of construction will be defined in a Fencing and Security Plan prepared by the contractor. The Fencing Plan will look to identify all access points to the site/s.

Vehicular access/egress gates are proposed through access points off Settlers Boulevard and Heritage Drive. Qualified traffic supervisors will operate these gates during major vehicular access and egress to the site.

These public and property protection measures will be reviewed at the time of commencing works to ensure alignment with proposed preferred methodologies and sequencing developments and ensure that the general public's safety is maintained at all times.

Roads, paths and kerbs likely to be damaged by construction or worker traffic are to be protected by temporary overlays and ramps.

5.2 WORKS IN THE PUBLIC DOMAIN

Works associated with the development/s may occur outside of the main site footprint, such as road works and site services. The contractor will consider the following indicative issues with regards to local authority assets:

- Local authority assets such as roads, kerbing and channels etc., stormwater drains and street furniture will be protected and made good if damaged as a direct result of the building work;
- Priority repair will be given to those areas relied upon by pedestrians, cyclists and motorists' safety; and
- Any services installation such as electrical, drainage that extends over footpaths will be temporarily covered over and pedestrian and disability access facilitated by a ramp until such time as full reinstatement is complete.

5.3 SIGNAGE

The following indicative issues will be considered with regards to signage:

- Signs will be displayed in several areas around the site advising of the 24hr contact details for the site (the phone number may be for a security company or a communications agency);
- All works related signage (including particularly safety-related signage) will comply with the relevant WorkCover NSW Codes of Practice;

6 ENVIRONMENTAL

The contractor shall install environmental and safety controls before the commencement of any onsite works. These will include but not be limited to:

- Security measures (fencing and gate access)
- Occupational health and safety measures (personal protective equipment, first aid supplies, signage and barriers where required; and
- Environmental management measures (spill kits, booms, stormwater control, dust control, silt control)

6.1 NOISE DUST AND VIBRATION PRINCIPAL MEASURES

The impact on adjoining facilities can be extensive, especially during demolition and excavation. It can be a brief intrusion or long term background noise. A systematic approach working closely with the acoustic consultant will establish and monitor noise levels to comply with strict parameters. The use of dust monitors, water suppression and water carts as required will manage dust and maintain a clean site.

6.2 HAZARDOUS MATERIALS

Should site investigation reveal there to be hazardous materials in the existing building or infill ground, formal procedures for specific substances will identify:

- Type of substance
- Location of the substance
- Additional work and resources required to deal with the substance so that the neighbours, members of the public and construction workers may move safely in adjacent areas and without risk to health

6.3 DUST AND AIR CONTROL MEASURES

Dust control measures for site preparation which will remain in place for the duration of the Works, will include:

- Erection of site fencing to provide appropriate barriers at the site boundary
- Erection of effective screens and barriers around dusty activities. Cleaning of the screens and barriers should be completed as necessary.
- Communication with neighbouring properties before undertaking works in proximity to their premises.
- Establishment of a complaints management system to record details of any reason for air quality-based complaints.
- Avoidance of dry sweeping in large areas
- Use of effective water suppression where necessary
- Covering of stockpiles
- Trucks to have payload covered
- Wheel washing system for trucks if necessary
- Limiting plant and equipment idling
- Implement speed limits on site.
- Implementation of a Dust Management Plan by the Contractor

Should these measures be undertaken, it is expected that dust impacts can be kept at acceptable levels throughout the Works.

6.4 STORAGE OF DANGEROUS GOODS

The contractor will minimise the use of hazardous materials stored on site. In the event liquid and gas fuels are needed, they will be instructed to be stored in a segregated, well-ventilated, secure

enclosure with a surrounding fully closed watertight bund to ensure that contamination of the surrounding ground does not occur. Spill kits and appropriate hazmat signage is to be located at the materials stores and project office in the event of spillage. The most commonly required items are:

- Diesel: Limited quantities for onsite portable power generators and portable fuel-powered plant, e.g., handheld concrete saws, compactors and compressors
- Oxy/Acetylene: Limited cylinders for plumbing works and steel cutting, stored in purpose-built racks
- Propane/Butane: Limited quantities for pipe and cable soldering, welding, and gas-charged fastening devices
- Mobile mini-tanker facilities carry out major plant refuelling within an isolated dedicated area to avoid stockpiling and cartage of bulk fuels on site

6.5 EROSION AND SEDIMENT CONTROL

Appropriate erosion and sediment (ERSED) controls shall be in place before starting Works and maintained throughout construction activities until the site is landscaped or suitably revegetated.

The site would be managed under the protection of the Environment Operations Act 1997 (PoEO Act) by implementing appropriate measures to prevent sediment run-off, erosion and excessive dust emanating from the site during construction.

Erosion and sediment control measures will be implemented and maintained throughout the construction period, following the details of the erosion and sediment control details and to the satisfaction of the principal certifying authority. All necessary erosion and sediment control devices will remain in place until the site has been stabilised.

7 TRAFFIC MANAGEMENT

7.1 CONSTRUCTION VEHICLE ACCESS/EGRESS MANAGEMENT

The nominated Traffic consultant will complete a formal Traffic Management plan before the commencement of works on the site. RCC's recommendation for traffic management is an approach route to the site that utilises Raymond Terrace Road, operated by a Roundabout. Vehicles will then turn Right at Settlers Boulevard roundabout that provides a Left turn entry to the site, then Left Turn exit from site departure via alternative exit gate on to Heritage Drive Boulevard, subject to Council approval.

Construction access and interfaces to Tigerhawk Drive will be required, and the principal contractor will coordinate with the council and school along this boundary.

7.2 CONSTRUCTION VEHICLE TRANSPORT ROUTES

It is anticipated that bogie tippers, semi-tippers and truck and trailer type heavy vehicles would be used in undertaking the Works. All trucks will be loaded to their prescribed weight limits within the site boundary and be covered with a tarp (rubbish loads only) before exiting the Site/s.

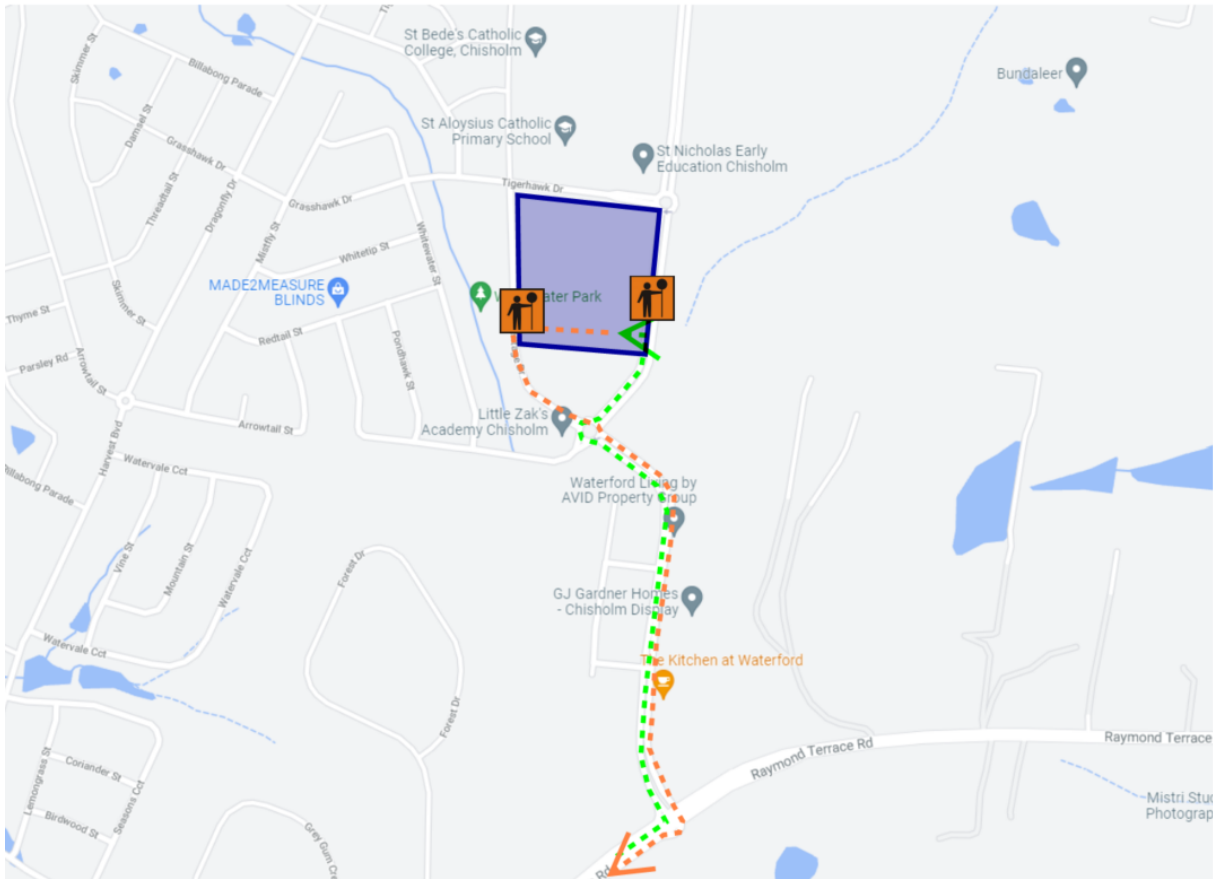


Figure 3: Vehicle transport routes

Vehicles entering and exiting the construction zones will do so in a controlled and planned manner with minimal disruption to local vehicular and pedestrian traffic. The contractor will manage construction, pedestrian and vehicular interactions on all public roads with traffic and pedestrian control to sustain this focus. At all times, the contractor will be mindful of any work being undertaken by local authorities adjacent to and surrounding the site

8 CIVIL & INFRASTRUCTURE WORKS

8.1 INFRASTRUCTURE SCOPE OF WORKS

Civil Infrastructure will include connections to the existing road networks and connections to the Stormwater System. The Service road Connecting Heritage Drive and Settlers Boulevard is highlighted below.

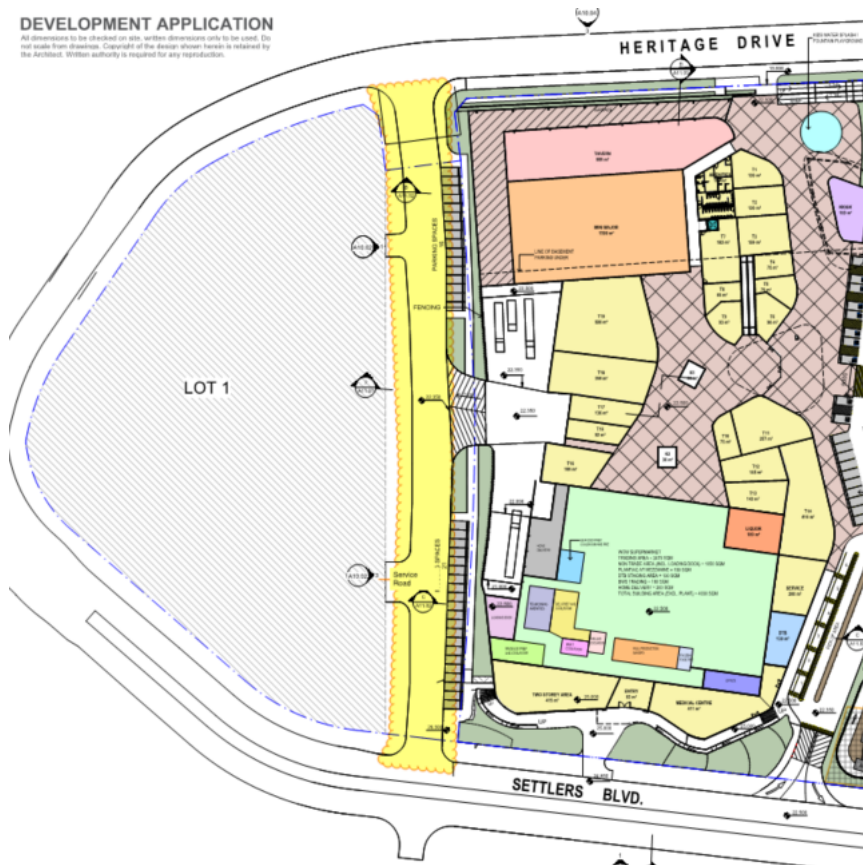


Figure 4: Service Road

8.2 BULK EXCAVATION

Bulk excavation will be as per the civil design documentation, including site preparation for building footprint, foundations and piling. The following Scope of Works would likely take place:

- Scrapping, stockpiling and removal of site topsoil (subject to landscaping design)
- Bulk earthworks cut and fill, including excavation in preparation to 'box' out to building footprint.
- Removal and replacement of any soft spot material
- Compaction of material (subject to further Geotechnical testing)
- Preparation of Piling mats
- Benching and grading of site levels to approx. heights before detailed site grading.

8.2.1 DETAIL EXCAVATION AND SHORING

Detail excavation and shoring/ retaining walls will be required to the Heritage Drive Elevation and Basement. Previous works in the vicinity indicate (St Bede's School) there is high-level weather Sandstone which may require the use of Ripper buckets and Rock Hammers.

8.2.2 DETAIL SITE GRADING

Once the majority of bulk earthworks and excavation works are completed, detailed site grading would take place in preparation for laying the building foundations and footprint. This will include

using smaller plant equipment utilising finely tuned survey equipment to adjust the final subgrade levels in anticipation of foundation preparation.

8.2.3 PILING FOUNDATIONS

Subject to further Geotechnical investigation, foundation design, in particular, proposed piling type and methodology, would be finalised by the contractor.

9 CONSTRUCTION WORKS/ MANAGEMENT

9.1 SCOPE OF WORKS

The Scope includes the construction of single-storey retail and two-storey commercial spaces, swimming and childcare centres. On grade and basement car parking are also included in the scope.

9.2 SITE ACCOMMODATION & AMENITIES

Site establishment will include establishing site contractor's offices, tea rooms and toilet facilities, vehicle access, vehicle loading and unloading, lay down areas, establishment and maintenance of onsite work areas.

The contractor will ensure the security of all active work areas, including the building, to ensure the public's safety and protection of the works.

9.3 CRANES

Mobile cranes will be utilised intermittently throughout construction, with material hoists being utilised for specific trades

9.4 MATERIALS HANDLING AND DELIVERIES

Materials will predominantly be delivered via the dedicated site entrances, managed by the contractor and their traffic control systems.

A detailed CTPMP by the contractor will be prepared before construction. Traffic will generally be managed in the following way:

- Designated transport routes will be communicated to all personal and enforced.
- Designated non-peak hour deliveries.
- Strict scheduling of vehicle movement will occur to minimise off-site waiting times. Minimal onsite parking would be envisaged with site workers encouraged to utilise existing public transport and car-sharing wherever possible.
- Vehicle movements will be compliant with Conditions of Consent and broader road-use regulations, particularly concerning hours of work, materials loading and unloading.
- Stakeholder feedback, especially with adjoining neighbours (Schools) and relevant Authorities.

The predominant means of materials deliveries to the project will be via Heritage Drive, supervised by Traffic controllers holding appropriate RTA accreditations, OH&S White Card, and Traffic Controllers Blue Card.

A manitu or all-terrain forklift will be available to off-load materials delivered to the site, resulting in a cut down on the number of visits from mobile cranes and other heavy vehicles entering the site.

9.5 CONCRETE PUMPING

Mobile concrete boom pumps and associated concrete delivery trucks will frequent the project as required following the construction program.

Locations for concrete pumps will be determined based on the construction programme however will be positioned within the site at all times to service individual buildings as required suitably.

9.6 WASTE MINIMISATION AND MANAGEMENT PLAN

All waste collected from the site during construction will be removed and processed by an accredited contractor responsible for improving waste separation and recycling efficiencies. Waste reports will be produced monthly, and reuse and recycle volumes will be tracked.

9.7 STRUCTURE/S

The Structures will likely include

- Reinforced concrete piles and capping foundations
- Precast/ tilt panel walls
- Structural steel and metal deck roofs
- Glazed and FC panel facades

Given the overall footprint of the development, there would be concurrent activities undertaken across the different construction Zones

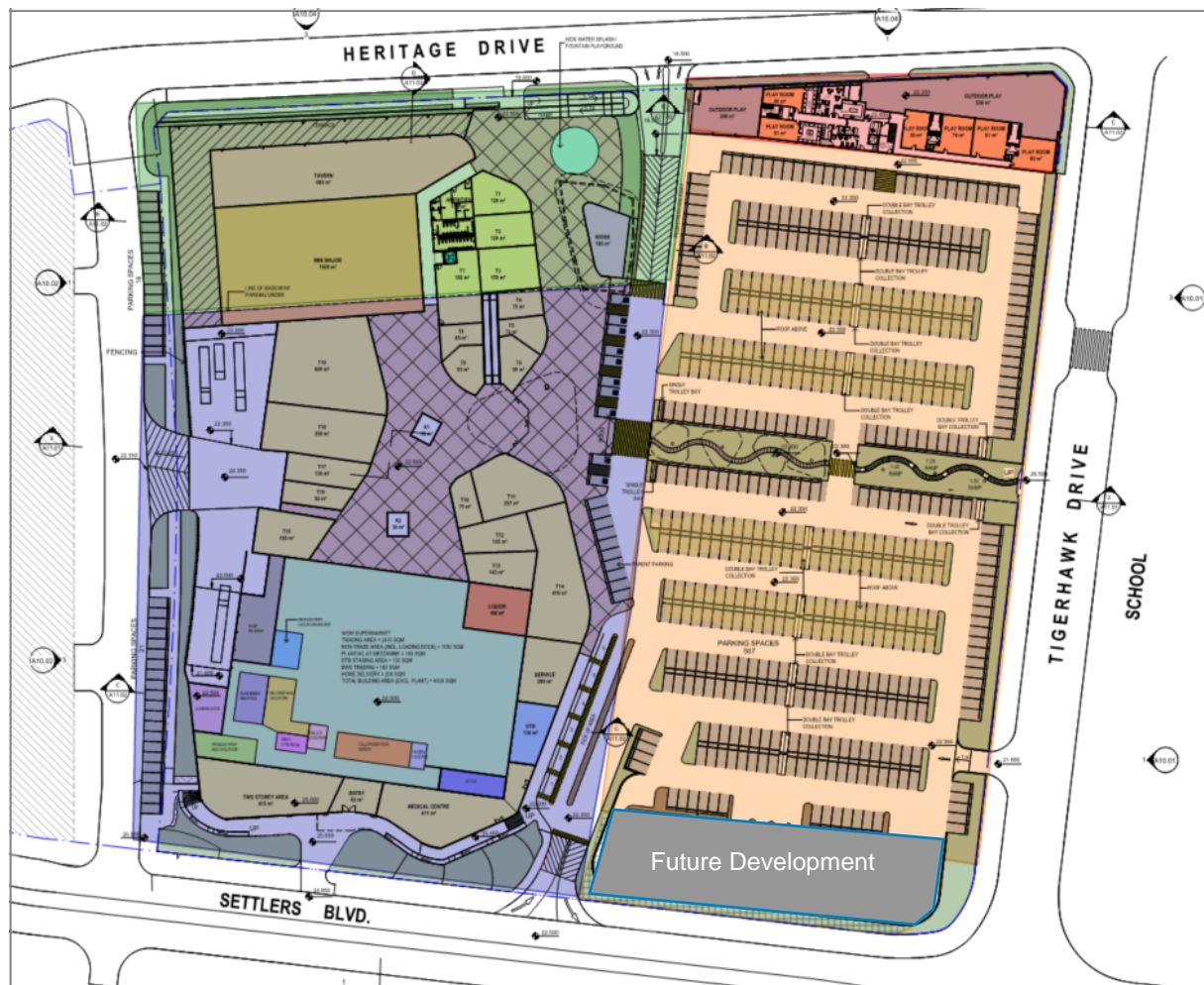


Figure 5: Zones

9.8 SCAFFOLDING

Scaffolding is likely to be erected to the perimeter of all buildings for the staged erection of the typical floor structures and façade elements. The extent and time at which it is erected will be at the discretion of the Construction Manager.

Scaffolding will provide access, fall protection and working platforms for the erection and completion of walls, facades, roofing and fit off.

9.9 SERVICES

9.9.1 WATER

A formal application to Hunter Water will need to be submitted to assess the detailed servicing requirements for the site.

9.9.2 WASTEWATER

A formal application to Hunter Water will need to be submitted to assess the detailed servicing requirements for the site.

9.9.3 POWER

Design and construction details will be prepared and formal applications made to Ausgrid following receipt of DA consent.

9.9.4 GAS

Design and construction details will be prepared and formal applications made to Jemena following receipt of DA consent.

9.9.5 TELECOMMUNICATIONS

Design and construction details will be prepared, and formal applications made to the appropriate carrier/s following receipt of DA consent.

9.9.6 COMPLETION

Completion of the works will include but not be limited to:

- Removal of all Plant, Machinery, Equipment, Storage, Amenities etc
- Removal of temporary Stormwater Management Controls
- Removal of temporary Fencing, shade-cloth and signage
- Make-good of any damaged Public or Private Infrastructure as a result of the works
- Obtain Occupation Certificate
- Landscaping (both internal and Public Domain area)

10 OTHER SPECIFIC MANAGEMENT PLAN PRINCIPLES

10.1 WORK OCCUPATIONAL HEALTH & SAFETY MANAGEMENT PRINCIPLES

A project-specific WHS Management Plan will be developed for the project before commencing site works. The WHSMP will address the following:

- Safety in Design
- Management of WHS including the roles and responsibilities of all workers, training requirements, incident reporting and corrective actions
- Management of site safety, including the risk assessment process,
- induction requirements
- Safe work method statements and compliance processes
- Management of project hazards

10.2 ENVIRONMENTAL MANAGEMENT PRINCIPLES

The Environmental Management Plan (EMP) will establish procedures, guidelines and controls for all activities on the project. The EMP will encompass activities that may impact the immediate and

surrounding environment. These may include air, water, land, natural resources, flora, fauna, and humans and interrelation.

The importance of implementing environmental management procedures is recognised to preserve the immediate and surrounding environment during construction, especially the environment for residents, staff and students at the nearby schools.

These procedures shall include all controls, inductions and training, incident response, monitoring and reporting processes.

A project-specific EMP will be developed for the project before commencing site works.

10.3 QUALITY MANAGEMENT PRINCIPLES

The Quality Management Plan (QMP) will set out how to manage the quality of work by the various trades and to ensure that the end product meets the requirements of:

- Statutory Regulations
- The Building Code of Australia
- Australian Standards

11 CONCLUSION

This Construction Management Plan has been produced for Revelop Plt Ltd to support the Development Application and outline the general approach to construction management of the Chisholm Shopping Centre. A detailed and comprehensive Project Management Plan will be produced for the relevant stage of the project covering the entire Management of the project, including:

- Site Inductions
- Safety Work Method Statements where construction methodology and its potential effect on the surrounding properties will be detailed and addressed
- Traffic Management during construction
- Risk Management with a view of the impact on neighbours
- Change Management again addressing possible interaction with neighbours