



Autorecyclers Pty Ltd

Construction Management Plan

57 Tattersall Road, Kings Park

21 October 2019

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1 Introduction

This Construction Management plan (CMP) outlines the demolition, excavation, building and public domain works process for the proposed development and how the builder and contractors will manage potential impacts caused by the demolition, excavation, building and public domain works.

This CMP is to be adjusted as required by the builder/contractor during the progress of works. Where this plan conflicts with the requirements of the builder/contractors Safe Work Method Statements (SWMS) or Work Health and Safety (WHS) Policy then the SWMS's and WHS and their safety and environmental obligations of the builder/contractors shall override this CMP.

The CMP includes a description of the project, outlines the process and addresses mitigation measures relating to the potential impacts of construction on the environment and the public, including noise and vibration, air pollution, water pollution, waste and recycling measures and traffic management.

2 Project Overview

2.1 Existing Development

The site currently contains a waste metal recycling facility and a car dismantling and auto recycling yard, and includes the sale of second hand motor vehicle parts. The property includes a number of buildings associated with these uses including offices, sales area and sheds.

There are three existing driveways providing vehicular access to the site from Tattersall Road. Car parking for visitors and employees is at the front of the site. The eastern access provides two-way access to the rear of the site and the western driveway provides two-way access to the "Pick n Payless" car park. A staff car park is located along the northern site boundary with entry provided by the eastern driveway and exit provided by an exit only driveway located between the eastern and western driveways.

The heavy vehicle access is via the eastern driveway.

2.2 Proposed Development

The proposed development is for the operation of a waste metal transfer station, receiving approximately 130,000 tonnes of scrap metal per annum.

The components of the development consist of:

- Site regrading and earthworks;
- Construction of an internal ring road; and
- Construction of a concrete slab for the shear.

Associated works installation of stormwater infrastructure and fire protection including extending the fire hydrant system and installation of sprinklers in existing buildings.

3 Project Staging and Program

3.1 Project Staging

This CMP covers the site regrading works and the construction of the concrete slab for the shear and the internal ring road.

3.2 Building and Construction Works

All excavation and building works are to be undertaken in accordance with the conditions of development consent once it is issued.

The following items summarise the aspects of the demolition, excavation and building works that need to be considered in relation to the application of this Construction Management Plan:

- The estimated time frame to complete the site regrading is 3 months
- The estimated time frame to complete the construction and infrastructure works is 10 months.
- All construction vehicles enter and exit the site via the eastern driveway on Tattersall Street.
- Construction Traffic is managed to minimise the impact on the local businesses in the vicinity of the site.
- Heavy Rigid Vehicles (HRV) will be used to import approximately 3,900m³ of fill material to the site, with a combined length of 12.5m.
- Machinery will be floated on HRV's, which are approximately 12.5m in length.
- The estimated maximum heavy vehicle movements (at peak time) is 20 per day.
- Waste materials are to be removed off site and recycled where possible to approved facilities.
- There will be approximately 20 building contractors onsite at any one time to undertake the works. Daily averages will be in the vicinity of approximately 12-15 people.
- It is anticipated that stockpile sites are not required as the material will be progressively loaded and removed from the site on a daily basis.
- One shaker pad will be constructed before egress into Tattersall Road for erosion sediment control.
- Waste and recycling containers are located within the storage area on the site.
- All concrete pumping is to be undertaken within the site.
- Clean stormwater will be directed around the construction site to the existing site stormwater system.
- Council's footpaths and roadways will not be utilised for any storage whatsoever.
- Excavation is to be managed in accordance with the Safe Work Method Statements and Management Plans prepared by the contractors undertaking the demolition and building works.

Please note that all the excavation, building and public domain works, including the removal of hazardous materials and site establishment are to be carried out in accordance with relevant Australian Standards and Work Health and Safety requirements.

4 Construction staff, amenities and machinery

The excavation, building site and public domain works require detailed management of staff, facilities and services. It is important to understand the number and type of staff on site to ensure appropriate facilities, services, parking and training is provided.

The follow table outlines potential issues and the measures adopted by the builders, contractors and construction workers to ensure an adequate and safe working environment for staff.

4.1 Construction staff and amenities

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Staff numbers	<ul style="list-style-type: none"> A maximum of 20 contractors are expected to be onsite during construction works. 	Ongoing	Supervisor
Provide sufficient amenities for both male and female staff	<ul style="list-style-type: none"> The site contains an existing staff amenities block located within the Administration building. Portable facilities including amenities, first aid and a lunch room will be provided during construction works. 	Ongoing	Supervisor
Staff Parking	Staff parking Staff parking areas are located on the site	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring <ul style="list-style-type: none"> Monitoring of the staff amenities cleanliness, security, etc to ensure their effectiveness, safety and compliance is to be carried out by the Supervisor and recorded in the weekly inspection. 	Ongoing	Supervisor

4.2 Construction machinery

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Use of machinery resulting in a negative impact on neighbouring properties	Machinery <ul style="list-style-type: none"> • Unloading of machinery to occur within the site. • The machinery will be secured during non-operating times. • All staff are to have undertaken training with appropriate accreditation in the use of the machinery. • When using cranes or mobile lifting equipment, the following steps are to be taken to prevent disruption to public areas: <ul style="list-style-type: none"> ○ Ensure equipment does not restrict public thoroughfares and pedestrian access or, where restricted access is unavoidable, use gantries or other overhead protection ○ Determine lifting zones for medium to long term use of the equipment ○ Protect pavements and streets and conduct dilapidation surveys before and after works have taken place ○ Implement procedures and lifting techniques to ensure safety on adjoining streets and footpaths ○ Use traffic management controls and signage. 	Ongoing	Supervisor
Concrete pumping location	Concrete pumping <ul style="list-style-type: none"> • Concrete pumping will be commonly pumped from on site in the construction/work zone. 	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring <ul style="list-style-type: none"> • Monitoring of the crane, hoist and concrete pouring facilities to ensure their effectiveness, safety and compliance is to be carried out by the Supervisor on a regular basis. 	Ongoing	Supervisor

5 Construction Traffic Management

The follow table summarises the potential issues and how they are to be controlled and managed.

IMPACT	CONTROL MEASURES	TIMING	OFFICER
Altered traffic conditions	Control Measures <ul style="list-style-type: none"> A range of traffic control measures will be implemented to provide safe movement of traffic. Truck control within the site and on Tattersall Road will be signed to control operation and mitigate any congestion. Where required, RMS accredited traffic controllers are to manage traffic. 	Ongoing	Supervisor and RMS accredited traffic controllers
Vehicular queueing at entrances	Access <ul style="list-style-type: none"> Where required, RMS accredited traffic controllers are to manage traffic. Access into and out of the site will be via the eastern driveway at Tattersall Road. Adjacent public roads will be maintained free of construction material. Loaded trucks leaving the site will have tray covers and tailgates closed to prevent dust during transport. 	Ongoing	Supervisor and RMS accredited traffic controllers
Limited access and parking impacting traffic and parking on the local road network	General Public <ul style="list-style-type: none"> The western carpark servicing Pick n' payless is not to be used for storage of construction material. Appropriate fencing and gates to restrict access to the construction area. 	Ongoing	Supervisor
Reduced safety due to altered traffic conditions and increased rates of heavy vehicles	Safety <ul style="list-style-type: none"> Where required, RMS accredited traffic controllers are to manage traffic. Loading and unloading is to be undertaken on site or within the construction zone. The use of mobile phones will be banned on site whilst operating machinery. 	Ongoing	Supervisor and RMS accredited traffic controllers
Dispersal of dust from site	Cleanliness <ul style="list-style-type: none"> Shaker pad on exit will be maintained to ensure wheel cleanliness. Tattersall Road adjoining the site shall be monitored to ensure pavements are kept clean and safe. 	Ongoing	Supervisor
Staff movements impact traffic and parking on the local road network	Construction workers parking <ul style="list-style-type: none"> During both stages 1 and 2 construction staff will park off site. 	Ongoing	Supervisor
Regular deliveries impacting traffic and safety on the local road network.	Delivery of goods and materials <ul style="list-style-type: none"> Construction vehicles will enter the site via the eastern driveway in Tattersall Road. Loading and unloading will occur on site. 	Ongoing	Supervisor
Increased traffic congestion impacting	Adjacent properties	Ongoing	Supervisor

IMPACT	CONTROL MEASURES	TIMING	OFFICER
movements into and out of the neighbouring properties	<ul style="list-style-type: none"> Appropriate traffic management procedures will be in place to minimise the impact of increased traffic and queueing vehicles on neighbouring properties. Special attention is to be given to not detrimentally impacting on the adjacent vehicle crossings in Tattersall Road. 		
	Crane and Hoist Locations NOTE: outlined in other sections		
Ongoing supervision	Measurement and Monitoring Monitoring of the traffic control measures to ensure their effectiveness and compliance with TMP's is to be carried out by the Supervisor on a regular basis.	Ongoing	Supervisor

6 Public Safety, Amenity and Site Security

The excavation, building and public domain works raises a number of concerns and potential risks. These risks include damage to neighbouring properties, injury to local residents, staff and visitors, a decrease in amenity for locals and site security for the builders and contractors.

The following table outlines potential impacts and mitigation measures adopted by the builders, sub-contractors and construction workers to ensure a safe and secure working site for the community and workers.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Restricting public access to the site.	Hoarding/Fencing <ul style="list-style-type: none"> Gates will be secured after work hours to prevent unauthorised entry. The construction area will be fenced to prevent entry. 	Ongoing	Supervisor
Impacts of Piling	Piling <ul style="list-style-type: none"> The impacts of piling are to be mitigated in accordance with the requirements outlined in the Safe Work Method Statement prepared by the contractors that will undertake the building works. 	Ongoing	Supervisor
Impacts of Excavation	Excavation <ul style="list-style-type: none"> The Impacts of excavation are to be mitigated in accordance with the requirements outlined in the Safe Work Method Statement and Management Plan prepared by the contractors that will undertake the building works. 	Ongoing	Supervisor
Reduced way finding and unauthorised access to the site	Safety & Security <ul style="list-style-type: none"> The site will be fully secured outside of working hours. Security measures will include fencing, locks, surveillance systems, security lighting and motion detectors. Site equipment and materials will be fully secured at night. Site materials and equipment will be located away from neighbouring properties to limit the potential use as climbing aids. All chemicals will be securely stored away from emergency exits and stormwater pits. 	Ongoing	Supervisor
Security signage	Signage <ul style="list-style-type: none"> Contact and procedural details will be provided, at entrances and exits, in case of an emergency or security breach. Safety, traffic control and restricted access signage will be located on fencing and at entrances to the site. 	Ongoing	Supervisor
Damage to public areas	Public Areas <ul style="list-style-type: none"> Any damage to public areas and assets will be rectified. The construction team will ensure there are no trip hazards from the hoarding or fencing on adjacent footpaths. 	Ongoing	Supervisor

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
	<ul style="list-style-type: none"> Any utilities or services that cross the path will be covered with ramps in accordance with the relevant standards. Public areas will be protected from construction activities including vehicle loading and unloading. All bins will be stored on site in secure areas away from public access. All materials and machinery will be stored onsite, away from public areas. 		
Use of street and pathway	Street Space Occupation <ul style="list-style-type: none"> Any necessary permits will be obtained from Blacktown City Council. 	Ongoing	Supervisor
Reduced visual amenity and outlook for neighbouring properties	Prevent Unsightly Premises <ul style="list-style-type: none"> Trucks will be washed down to prevent soil, dust or debris falling on the adjacent roadway and footpaths. 	Ongoing	Supervisor
General Site Management	General Management <ul style="list-style-type: none"> Contractors will provide written notice prior to commencement of works in accordance with the Conditions of Consent. Existing pedestrian and traffic signs will be retained. Additional safety signage will be in accordance with requirements. 	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring Monitoring of public safety, amenity and site security to ensure their effectiveness and compliance is to be carried out by the Supervisor on a regular basis.	Ongoing	Supervisor

7 Operating Hours, Noise and Vibration Controls

The follow table outlines operating hours and the noise and vibration controls and mitigation measures to be adopted by the builders, sub-contractors and construction workers to meet the compliance requirements of Blacktown City Council and the relevant Australian Standards.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Noise impacts on neighbouring residents and businesses	Hours of Operation <ul style="list-style-type: none"> Hours of onsite work operation will be limited to 7am-6pm Monday to Friday, and 7am-5pm on Saturdays. No onsite work operations will be undertaken on public holidays. Any proposed onsite work outside of these hours will be required to be approved by Council or the private certifier. 	Ongoing	Supervisor
Noise nuisance Noise pollution caused by loud noise from site disturbing workers	Noise - Plant and equipment <ul style="list-style-type: none"> All practical precautions are to be taken to minimise the impact of noise emissions from the site. Equipment and machinery will be selected to meet the noise emissions requirements outlined in the Noise and Vibration Assessment report. Where practical equipment will be fitted with silencers. Regular monitoring of equipment will be undertaken to ensure all equipment meets requirements. Vehicles and machinery will be turned off when not in use. 	Ongoing	Supervisor
Vibration damage to structures and potential impacts to nearby business, residents and public infrastructure	Vibration – Plant and equipment <ul style="list-style-type: none"> The major sources of vibration caused by the project during construction will include the use of excavators with rock breakers (or grinding heads attached), bulldozers and vibratory rollers. All site personnel must adhere to the site OH&S requirements in relation to use of appropriate personal protective equipment (PPE) when operating, or in the vicinity of noise/vibration generating plant/equipment. Noise and vibration awareness training for all site staff including subcontractors as part of general site induction and tool-box talk activities. Strict adherence to approved works times. In the event that out of hours delivery activities are required, the approval process will be completed via consultation with the Project Managers office. Works will be scheduled, where practical, to avoid simultaneous vibration causing activities occurring on site. Vehicles, plant and machines/equipment used intermittently during construction activities (i.e. cranes, excavators, bobcats, lifting equipment, etc) will be shut down, as practicably achievable, in the period between works activities rather than allowed to idle. 	Ongoing	Supervisor

	<ul style="list-style-type: none"> The duration of noise/vibration intensive works will be minimised through a regular review of the program and construction methodologies during project team meetings. Piling/piering works will be undertaken using non-percussive piling methods where achievable given the subsurface conditions. Reference will be made to the existing geotechnical site assessment report for advice on suitable protection distances from heritage structures for the use of moderate to heavy impact machinery. Regular and effective plant/equipment maintenance will be completed and documented throughout the project period and documentation will be maintained on site demonstrating completion of maintenance logs and associated checklists in order to ensure all machinery is in good working order and use does not generate excess noise/vibration. Plant, equipment and vehicles will not be operated in the event that excessive noise/vibration is produced at start up as a result of maintenance being required. Care will be taken by site personnel to ensure materials will not be dropped from a height either onto or from vehicles or from the roof, overhead bridge or other raised location. Power drills, saws, planers, nail guns etc will be used inside where possible to achieve acoustic muffling or where possible, to the south of buildings to provide shielding between the user and sensitive receptors. The quietest and least vibration causing suitable plant reasonably available will be selected for each works activity. This will include review of documentation provided by manufacturers, suppliers, hire companies in relation to equipment prior to delivery to site. 		
Construction noise impacting the amenity of neighbouring properties	Neighbours <ul style="list-style-type: none"> Neighbouring properties will be notified about potentially noisy construction works. Activities which may impact on the amenity of neighbouring properties will only be conducted for short durations. 	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring Where monitoring of site conditions and activities indicates the potential or actual occurrence of noise/vibration exceedances at nearby sensitive receptors, the effectiveness of installation of temporary shielding options, including portable noise walls in the form of timber hoarding, compressed fibre board panels, steel sheeting etc (with no gaps between panels) will be evaluated prior to ongoing noise generation activities, etc.	Ongoing	Supervisor

8 Environmental Management

8.1 Air and dust management

The following table outlines the air and dust management items that are to be considered.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Generating dust pollution	Dust <ul style="list-style-type: none"> Fencing will be designed to minimise the impact of dust on neighbouring sites. Soil and other materials stored onsite will be covered to prevent dust. 	Ongoing	Supervisor
Dust pollution generated by machinery	Machinery <ul style="list-style-type: none"> Equipment used on site shall not emit visible exhaust fumes for no more than 10 seconds after power has been applied. 	Ongoing	Supervisor
Dust pollution generated by machinery	Excavation <ul style="list-style-type: none"> Excavation will be closely monitored during high wind conditions. Exposed or excavated soils will be regularly rehabilitated where possible to minimise dust. Exposed areas will be watered down to prevent dust, especially on windy days and in close proximity to dwellings and public areas. 	Ongoing	Supervisor
Dust pollution generated due to vehicular movements into and out of the site	Traffic/Vehicular Movement <ul style="list-style-type: none"> Loaded trucks leaving the site will have tray covers to prevent dust during transport. A shaker pad will be located to remove soil from vehicle tyres. Internal driveway near the boundaries will be watered down to minimise airborne particles. 	Ongoing	Supervisor
Impacts of Piling	Piling <ul style="list-style-type: none"> The Impacts of piling are to be mitigated in accordance with the requirements outlined in the Safe Work Method Statement prepared by the contractors that will undertake the demolition and building works. 	Ongoing	Supervisor
Impacts of Excavation	Excavation <ul style="list-style-type: none"> The impacts of excavation are to be mitigated in accordance with the requirements outlined in the Safe Work Method Statement prepared by the contractors that will undertake the building works. 	Ongoing	Supervisor
	Other <ul style="list-style-type: none"> No burning will be undertaken on site. Waste and scrap materials will be stored to prevent dust emissions. 	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring Continual visual monitoring by the Supervisor. Any evidence of dust shall be recorded.	Ongoing	Supervisor

8.2 Contamination Management

The following table outlines the contamination management items that are to be considered.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Pollution of soils on the site and pollution of ground waters by chemical, organic or physical contamination	General <ul style="list-style-type: none"> All staff will be aware of proper handling procedures and appropriate measures will be taken to minimise the potential for contamination. Chemical spillage kits will be kept on site, staff will be made aware of the appropriate use of kits. 	Ongoing	Supervisor
Contamination from machinery	Machinery <ul style="list-style-type: none"> High risk activities, including refuelling and servicing, will be undertaken allocated areas, controlled to reduce environmental impact. Fuel and oil storage areas will be bunded with a 120% capacity. Machinery will be inspected on a regular basis for leaks. Repairs will be undertaken immediately. 	Ongoing	Supervisor
Contamination from chemicals/materials	Chemicals/materials <ul style="list-style-type: none"> All contaminants shall be handled in a manner so as to confine the material completely and prevent any fugitive emission. Material will be kept on segregated, covered, bunded areas and then disposed of by removal to a registered waste depot. Paint and slurry will not be discharged into the stormwater. A designated paint brush and roller washing area will be located near each building to prevent contaminating the stormwater. Construction materials and chemical will be stored appropriately to prevent leakages into surrounding water ways. 	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring <ul style="list-style-type: none"> Waste product will be assessed and categorised as contaminated or non-contaminated and disposed of accordingly If contaminated material is encountered, then it will be monitored for each type of material and the method of disposal recorded in the Contaminated Material Register. All hazardous materials will be removed from site and correctly disposed on completion of the works. 	Ongoing	Supervisor

9 Stormwater Management and Sediment Control

The site has the potential to result in a negative environmental impact on water quality if not appropriately addressed. Impacts could include increased runoff, run off erosion with sediment removal from site.

The following table outlines potential impacts as well as appropriate erosion and sediment control and stormwater measures to control sediment and reduce runoff generally.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
Erosion and sediment control	Erosion Sediment Control Measures <ul style="list-style-type: none"> All control measures will be installed prior to commencing works in accordance with the Soil and Water Management Plan. Works will be appropriately staged where possible to minimise potential for erosion and sedimentation during the project. Silt fencing will be erected along batter slopes, stockpiles, and any disturbed surfaces that may drain into any adjacent water bodies and stormwater systems. Sandbags and other sediment controls shall be installed around stormwater inlets and outlets to prevent dirty discharge from works area entering stormwater systems. Soil and waste stores will be located in designated areas to prevent run off into drains. On project completion, the site will be left protected by temporary measures as required. Once permanent measures (i.e. revegetation) have been established the temporary measures may be removed. 	Ongoing	Supervisor
Stockpile locations	Stockpiles <ul style="list-style-type: none"> Stockpiles for loose materials such as soil, sand and gravel are to be located in areas clear of overland flow paths. Sediment barriers are required around the stockpiles. 	Ongoing	Supervisor
Reduced water quality	Water Quality <ul style="list-style-type: none"> The site is not identified as having Acid Sulfate Soil issues. Temporary diversion drains will be installed to divert clean run-off around the works area. Drainage system outlets will be directed to temporary or permanent retention basins. 	Ongoing	Supervisor
Sediment runoff due to excavation	Excavation <ul style="list-style-type: none"> Disturbance onsite will be minimised by clearly marking boundaries and designating areas for construction activities and traffic movements. Exposed surfaces will be stabilised as soon as possible by hydro mulching or other means. 	Ongoing	Supervisor
Sediment washed into the stormwater network	Stormwater <ul style="list-style-type: none"> Stormwater measures will be put in place during construction. Shaker pad will be installed to collect mud from exiting vehicles. 	Ongoing	Supervisor

	<ul style="list-style-type: none"> Shaker pad will be cleaned on a regular basis and link to the designated stormwater outlets. 		
Dispersal of sediments during the transportation of material	Traffic <ul style="list-style-type: none"> Trucks transporting materials will be inspected before leaving or entering the site to prevent spillage of soil and other materials on roads and footpaths. A wash down area will be established on site. 	Ongoing	Supervisor
Excessive use of water during construction	Water Saving Measures <ul style="list-style-type: none"> All hoses will be in good condition. Any wash down areas will utilise high pressure water nozzles. 	Ongoing	Supervisor
Ongoing Supervision	Measurement and Monitoring <ul style="list-style-type: none"> Ensure the soil erosion and sediment control devices are installed and maintained accordance with the Soil and Water Management Plan. Weekly site inspections by the Supervisor with appropriate corrective actions taken immediately. Additional inspections after each rain event by the Supervisor Maintenance of control measures: <ul style="list-style-type: none"> Repair damaged or blocked sections Remove silt from fencing where built up Records shall be kept of all ESC device installations, inspections and maintenance activities The quality and quantity of water released from site must be recorded 	Ongoing	Supervisor

10 Waste & Material Reuse Management

On an excavation and building site there are numerous opportunities to reduce, reuse and recycle waste through the implementation of a Waste Management Plan (WMP). Potential impacts resulting from construction include excessive waste, missed opportunities for reusing and recycling materials and contamination of recycled waste with non-recyclable waste materials.

The following table outlines potential impacts as well as appropriate waste management measures reduce, reuse and recycle waste, as well as education and training for staff.

POTENTIAL ISSUE	CONTROL MEASURES	TIMING	OFFICER
General Site Management	Site Management <ul style="list-style-type: none"> The construction site will be kept free of rubbish, waste material and debris. 	Ongoing	Supervisor
Waste storage and removal	Waste Management Plan <ul style="list-style-type: none"> Chemical waste will be removed from site and disposed of at licenced facilities. Procedures for removal of other hazardous or dangerous materials from the site in accordance with State and Federal legislation including WorkSafe requirements. Waste collection shall only occur during permitted hours. For outside bins, self-closing lids must be installed to ensure waste does not become airborne. Litter and debris 'trapped' against site fencing must be regularly cleaned Procedures for removal of waste (materials that cannot be reused or recycled) from the site Demolished concrete will be reused on site for construction driveways where possible or sent to a concrete recycling plant. General waste will be stored in the designate bin/skip and removed by the waste contractor on a regular basis. Recyclable waste will be stored in a designated bin/skip and removed by the waste contractor on a regular basis. 	Ongoing	Supervisor
Excess waste	Reduce <ul style="list-style-type: none"> Efforts to minimise waste on site by avoiding over-estimation of purchasing requirements, minimizing packaging materials, and buying environmentally approved and recycled content products Minimise use of packaging materials and recycle packaging products where possible Utilise quantity surveyor estimates to order materials, to prevent wasted materials. 	Ongoing	Supervisor
Not re-using material on-site	Reuse <ul style="list-style-type: none"> Native vegetation will be mulched and reused onsite. Weeds and contaminated mulch will be disposed of separately. The site office will utilise recycle waste paper bins. The re-use of timber, glass and other materials 	Ongoing	Supervisor

Not separating recycle material from general waste	Recycle <ul style="list-style-type: none">• Procedures are to be put in place for the collection and sorting of recyclable construction materials• Training will be provided to all staff outlining the appropriate recycling procedures.• Recycled waste bins will be appropriately sign posted.	Ongoing	Supervisor
Construction staff and contractors waste	Staff waste <ul style="list-style-type: none">• Provision of containers for recyclable materials including cardboard, glass, metal, and plastic and green waste• Provisions for collection of daily rubbish from workers.	Ongoing	Supervisor
Ongoing supervision	Measurement and Monitoring Waste monitoring will be recorded on a regular basis.	Ongoing	Supervisor

11 Management Responsibility

11.1 Accountabilities

11.1.1 Project Manager

The Project Manager is responsible for construction management and shall establish and maintain the Company's policies for this project and shall be responsible for their effectiveness.

The Project Manager ensures that the Project Team understands and implements the requirements of the Construction Management Plan for the course of the project.

11.1.2 Supervisor

The Project Supervisor is responsible to the Project Manager for the day to day co-ordination and site control of direct labour, plant, subcontractors and suppliers for construction works.

The Project Supervisor is responsible for the correct implementation of the controls and their on-going monitoring and maintenance and correction of non-conformances.

11.1.3 QA Manager

The QA Manager reports to the Project Manager and is responsible for the preparation and implementation of the management system for a project. The QA Manager shall ensure that all work be carried out in accordance with the Management System procedures.

The QA Manager shall establish audit schedules in consultation with the Project Manager and assign personnel to carry out planned audits. Any deviation from the Management System will be reported to the Project Manager for rectification. Trends and cumulative effects from all projects shall be assessed and corrective actions determined.

11.2 Subcontractors

The Project Manager shall clearly define the scope of subcontracted work including the subcontractor's duties for:

- Planning, installation and monitoring of the controls outlined in the Construction Management Plan
- Record keeping

The subcontractor may only enter the site from the designated access points shown on the relevant Construction Traffic Management Plan.

11.3 Communication Protocols

Both formal and informal communication systems are in place on this project to ensure that information regarding the Construction Management Plan is circulated effectively to relevant personnel both internal and external to the project.

Subcontractors shall be included in communications to ensure the compatibility and effectiveness of their systems.

Communication with the community shall be done through the Project Manager. The Project Manager is responsible for the timing and effectiveness of all communications.

11.4 Work Site Monitoring and Inspection

The principal contact person with regard to implementation of the Construction Management Plan on this project is the Project Manager.

The Supervisor shall carry out regular inspections of all work areas to ensure that the following standards and processes are being maintained. All controls of the site shall be monitored at least weekly by the Project Supervisor and the results recorded.

After each rain event site soil erosion and sediment controls shall be inspected by the Supervisor and any necessary maintenance done as soon as practicable. A record of the inspection and maintenance shall be kept on site.

The Project Supervisor has authority to initiate emergency response procedures. If a potentially environmentally hazardous situation is identified and cannot be rectified immediately, a Non-Conformance Report shall be made and, if needed, work in the area shall cease until the situation is rectified.

The Project Manager shall determine appropriate corrective action to address the immediate consequences of the non-conformance including containment, clean up and restoration work.

The Project Manager shall regularly review reports to confirm that clean up, restoration and corrective actions have been completed and are effective. The Project Manager shall review all non-conformances and report significant findings to monthly management review meetings.

Any damage to areas outside the work site shall be immediately reported to the Supervisor who may advise on the nature of appropriate corrective action.

11.5 Training

A Project Management Plan should be prepared to outline the expected qualifications and training requirements for project personnel. It shall be kept current with any additional training that may become necessary during the course of the work. Records of training done on site shall be kept in the project file system including dates, personnel attending and trainer details.

All site staff and workers undergo a site-specific site induction or other training which includes:

- Environmental aspects relevant to their working on site
- Description of control measures used, their construction & maintenance
- The potential impacts from ineffective controls
- Monitoring and reporting procedures
- Emergency and incident response

Any alteration to the CMP relevant to site personnel shall be immediately communicated via updated inductions and tool box talks.

Subcontractors shall be inducted and if their works require such, they shall be required to submit relevant work method statements with associated environmental protection measures.

11.6 Specific Emergency Responses, Contact Details, Emergency Preparedness

Any specific Emergency Response procedures required to be implemented are to be outlined by the Project Manager/Site supervisor.

The Contact details of the emergency services are to be located on site at a location that is easily accessible to all.