



# APPENDIX J - DEMOLITION WORK PLAN

Woolworths Customer Fulfilment Centre, Marrickville

## Contents

1. Introduction
  - 1.1 General
  - 1.2 Document Design
  - 1.3 Supporting Documents
  - 1.4 Client Requirements
2. Project Information
  - 2.1 Details
  - 2.2 Project Scope of Works
  - 2.3 Project Site Aerial Photograph
3. Investigation
  - 3.1 Investigation of Structures
    - 3.1.1 Description of Structures
    - 3.1.2 Structural System
    - 3.1.3 Hazardous Materials
    - 3.1.4 Height of Structures and Distance to Boundaries
  - 3.2 Investigation of Site
    - 3.2.1 Description of Site
    - 3.2.2 Site Constraints
    - 3.2.3 Retaining Structures
    - 3.2.4 Hazardous Chemicals / Dangerous Goods Storage or Dumps
    - 3.2.5 General Condition of Land and Structures on Adjoining Sites
  - 3.3 Investigation of Services
    - 3.3.1 Services to be disconnected
    - 3.3.2 Services to be maintained
  - 3.4 Hazard Investigation / Identification
  - 3.5 No-Go Areas for Machine's
4. Demolition Exclusion Zone
5. Details of Demolition
  - 5.1 Sequence
  - 5.2 Detailed Work Method
    - 5.2.1 Receive Handover of Site and Sign-off on Services
    - 5.2.2 Site Induction
    - 5.2.3 Demarcate Site and Define Exclusion Zones
    - 5.2.4 Install Environmental Controls
    - 5.2.5 Practical Removal of Hazardous Materials
    - 5.2.6 Soft Strip Structures
    - 5.2.7 Erect Scaffold and Protection
    - 5.2.8 Mechanical Demolition
    - 5.2.9 Remove Rubbish and Rubble from Site
    - 5.2.10 Handover Site to Client Representative
    - 5.2.11 Demobilise from Site
6. Permits by Authorities
7. Personnel Qualifications
8. Notes
9. Appendix

Appendix A – Hazardous Materials Report  
Appendix B – Service Disconnection Signoffs  
Appendix C – Engineer Certificates and Instructions  
Appendix D – Sediment Control Plan  
Appendix E – Scaffold Plan  
Appendix F – Permits by Authorities  
Appendix G – Ammonia Removal Certificate  
Appendix H – Tree Removal Plan

Details	Title	Name	Signature	Date
Prepared by	Site Engineer	Subhash Ahir		10/10/2022
Reviewed by	Project Manager	Ryan Bonakey		10/10/2022
Approved by	Demolition Manager	Sarkis Elias		10/10/2022

### DWP - Revision Control

DWP issue number	Date Issued	Amended Page(s)	Action / Amendment Description	Approved By

### DWP – Review

Date Reviewed	Reviewed By	Required Revision (Record Section Numbers where changes occurred)

### DWP Controlled Document Distribution

Issued to	Name and Organisation	Date	Issued By

CENTRAL CIVIL (NSW) PTY LTD  
 Unit 3B, Building 4, 256B New Line Road, Dural NSW 2158  
 ABN: 61 167 710 545 | W: www.centralcivilnsw.com.au | E: info@centralcivilnsw.com.au

# 01

## 1 - Introduction

# 1. Introduction

## 1.1 General

This Demolition Work Plan (DWP) has been developed by Central Civil (NSW) Pty Ltd and sets out the method of demolition to be adopted for 74 Edinburgh Road, Marrickville development, during the course of contractual works and meet Client/Contractual/legal and other requirements.

## 1.2 Document Design

This Project DWP has been developed to meet the requirements of:

- Work Health and Safety Regulation 2017 (NSW) Part 4.6, 6.3 and 8.6
- Code of Practice: Demolition Work 2019 (SafeWork, NSW)
- AS 2601:2001 Demolition of structures
- Central Civil (NSW) Integrated Management System (IMS) requirements

## 1.3 Supporting Documents

This DWP is to be read in conjunction with the Safety Management Plan (SMP) and Environmental Management Plan (EMP) and / or other plans developed for the project. These developed plans are considered to be the overarching documents to manage and control foreseeable work health and safety risks, environmental risks and meet legislative requirements for the project. Other supporting documents that may be used during the project include:

- Asbestos Removal SWMS
- Emergency Response Plan
- Asbestos Control Plan

## 1.4 Client Requirements

This DWP takes into consideration the Client's requirements for implementation through such documents/processes as:

- Health, Safety, Environment and Quality Management Plan (HSEQ)
- Noise and Vibration Management Plan
- Sediment Control Plan
- Waste Management Plan
- Emergency Management Plan
- Environmental Management Plan
- Traffic Management Plan
- Site Program
- AS2601 Demolition of Structures Engineers Compliance Notification
- Aboriginal Cultural Heritage Assessment (ACHA) Policy
- Unexpected Contamination Finds Procedure

# 02

## 2 – Project Information

## 2. Project Information

### 2.1 Details

<b>Client Details</b>	Is the client the Principal Contractor	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Company Name	RP Infrastructure	
ABN	62 065 072 193	
Address	Level 19, 9 Hunter Street Sydney NSW 2000	
Phone	02 8272 9300	
Email	James.Webb@rpinfrastructure.com.au	
Client Contact Name	James Webb	
Client Contact Phone Number	0406 882 188	
<b>Demolition Contractor Details</b>	Is the contractor the Principal Contractor	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Company Name	Central Civil (NSW) Pty Ltd	
ABN	61 167 710 545	
Address	Unit 3B, Building 4, 256B New Line Road, Dural NSW 2158	
Phone	0476 910 130	
Email	greg@centralcivilnsw.com.au	
<b>Project Specifics</b>		
Project Name	Woolworths Customer Fulfilment Centre, Marrickville	
Project Address	74 Edinburgh Road, Marrickville	
Start Date	01/11/2022	
Peak number of personnel on site	16	
<b>Project Contacts</b>		
<b>Project Manager</b>		
Name	Greg Banks/Ryan Bonakey	
Phone	0476 910 130	
Email	greg@centralcivil.com.au	
Competent Person on Site	Sarkis Elias	
<b>Supervisor</b>		
Name	Charlie Elias	
Phone	0450 170 630	
<b>Project Engineer/WHS Person</b>		
Name	Subhash Ahir	
Phone	0405 823 241	
Email	estimator@centralcivilnsw.com.au	

## 2.2 Project Scope of Works

All works will be completed in accordance with Code of Practice: Demolition Work (SafeWork, NSW) and AS2601: The demolition of structures shall meet legislative requirements contained in the Work Health and Safety Act 2011 (NSW) and Work Health and Safety Regulation 2017 (NSW).

The Site is located within the Inner West Local Government Area (LGA). The Site is situated approximately 5.5km south-west of Sydney CBD and approximately 2.9km north-east of Sydney International Airport within the suburb of Marrickville.

The Site has an area of approximately 28,090sqm and has frontages to both Edinburgh Road (north) and Sydney Steel Road (east). The boundaries of the Site are illustrated below in Figure 1.

The key elements within and surrounding the Site include:

- The Site is located within the industrial area of Marrickville and currently accommodates several large freestanding industrial buildings and associated car parking and loading areas.
- Vehicular access to the Site is via an existing entry and exit driveway at the Edinburgh Road frontage. Access is also available from Sydney Steel Road.
- The Site contains minimal vegetation which is fragmented by buildings and areas of hardstand surfaces. Vegetation is limited to scattered trees and shrubs within the Site and planted within the nature strip.
- The Site is located within 1km of Sydenham Railway Station, which is currently being upgraded as part of the Sydney Metro Chatswood to Bankstown metro line; and
- The Site is well positioned in terms of access to arterial and main roads, public transport modes of bus and rail, Sydney Airport, and the retail centre of Marrickville.

The Works will comprise of, authority approvals, demolition, and site clearance to achieve Practical Completion under the Contract, including rectification of defects during the Defect Liability Period (DLP).

The proposed development includes the demolition and the removal of:

- Industrial Buildings.
- Raised Footpaths and Slabs.
- Signage.
- Retaining walls and garden beds.
- Eastern Staff Site Facilities Block; and
- Brick office Building.

Works consist of demolishing single, double storey buildings and Industrial Buildings down to existing ground slab level. Plinths and slab above ground will be removed to eliminate any trip hazards. All pits and voids generated through the demolition process will be filled with clean fill won from site to make the building footprint safe.

Buildings to be demolished:

- Northeast Warehouse and all associated furniture, plant and equipment.
- Gatehouse.
- Plant Building.
- Southern Warehouse.
- Office Building.
- All pipes, tanks, cables, cable trays support, instruments, valves, switchboards and all other items that are located in the areas designated to be demolished.
- Nominated Trees.

The site is to be demolished in stages. The initial stage is to remove all the nominated trees on the site. This is to allow unimpeded movement of earthmoving equipment on the site and to allow for the delivery and construction of a heavy-duty scaffold and hoarding structure to Edinburgh Road building frontage (Northeastern Warehouse) and along Sydney Steel Road building frontage (Southern Warehouse).



The phased demolition will be gradual following the tree removal process with hazmat material removal taking place consistent with the Prensa Destructive Hazardous Materials Assessment report ref number 99323S dated November 2021. Once a clearance certificate is issued, demolition of buildings will take place in the following order:

1. Office Building - soft strip out of internal walls, ceilings and loose furniture.
2. Single Level Covered Gantries
3. Plant Building
4. Northeastern Warehouse
5. Substation
6. Gate House
7. Southern Warehouse
8. Eastern Staff Rooms

### 2.3 Project Site Aerial Photograph



Figure 1 – Site Boundaries

# 03

## 2 – Investigation

## 3. Investigation

An investigation of the structures to be demolished and surrounding environment has been undertaken in accordance with the Code of Practice: Demolition Work (SafeWork, NSW) and AS2601: The demolition of structures. The observation from this investigation is broken up into three (3) sections 'Investigation of Structures', 'Investigation of Site', and 'Investigation of Services' and is recorded below.

### 3.1 Investigation of Structures

#### 3.1.1 Description of Structures

The Office and Northeastern Warehouse buildings consist of single and double level structures constructed of concrete and brick.

The Industrial Portal Frame structures previously used as cool rooms, consist of a structural matrix of steel columns and beams with either concrete precast panels or brickwork to the external skin of the buildings. Insulated wall panels were used to line the internal of the industrial sheds with dividing walls being of a similar material.

#### 3.1.2 Structural System

The structure of the Office Building consists of a brick façade with internal concrete columns with timber framed walls. The ground and first-floor levels consist of concrete columns and concrete slabs. Internally, the office space floors are covered with either vinyl or carpet overlaying concrete. The roof is of a timber truss construction with metal sheeting.

The structure of the and Northeastern warehouse consists of a brick façade with internal steel columns and beams. The perimeter internal walls consist of insulated wall panels.

The Southern Warehouse consists of concrete precast panels with internal steel columns and beams. The perimeter internal walls consist of insulated wall panels.

#### 3.1.3 Hazardous Materials

Hazardous materials have been identified in a previous report provided by the Client. The report was destructive in nature and should be viewed as complete – Refer Appendix A.

No strip out, demolition or other work that has the possibility of disturbing any asbestos / lead containing materials are to commence until a sign off/clearance certificate in the affected area is received prior to commencing.

The hazardous materials removal will be undertaken by Aztech Services. The licensed asbestos removal contractor will take possession of various areas throughout the site setting up containment walls, sheeting, decontamination units and other controls (where required).

Areas will be demarcated, for personnel requiring access, contact the Central Civil (NSW) Site Supervisor who will liaise with the Asbestos Removal Site Supervisor to organise appropriate measures. Under no circumstance entry will be permitted into an asbestos / lead work zone which will be demarcated as an exclusion zone. Tampering with warning signage or tampering with asbestos / lead equipment is strictly prohibited.

Initially, air monitoring will be undertaken daily in asbestos work areas, in site sheds and on the boundary of the site to establish background readings. Upon receipt, the results of monitoring will be posted in the site sheds. The location of temporary and localised asbestos removal zones will be discussed during the daily prestart talk.

A clearance certificate will be obtained by a qualified Occupational Hygienist prior to demolition.

In the case of encountering unexpected asbestos or lead, work will stop in that area and Aztech Services will seal the area and make safe. A hygienist will be notified and their advice sought, sampling and identification of the suspect material may be undertaken. Aztech Services will otherwise remove the asbestos / lead in accordance with the Aztech Services Asbestos and Lead Removal Control Plan which will be amended if necessary to cover the unexpected find. This unexpected find will then be included in the clearance certificate document issued by the hygienist and provide a clearance certificate for the same.

### 3.1.4 Height of Structures and Distance to Boundaries

Industrial buildings with internal cool room areas. It is a closed site and generally away from pedestrian and general traffic. It has residents near the site on the northern border and noise issues will be controlled with specialised excavator attachments. In addition, the neighbouring properties will be protected with the erection of a heavy-duty scaffold, enclosed in chainwire and shade cloth along the face of buildings in close proximity to the site's boundaries.

## 3.2 Investigation of Site

### 3.2.1 Description of Site

The Site is well positioned in terms of access to arterial and main roads, public transport modes of bus and rail, Sydney Airport and the retail centre of Marrickville. The Site is located on the northern periphery of the Sydenham Precinct which is part of the Sydenham to Bankstown Urban Renewal Corridor, earmarked for significant employment growth.

The Site also forms part of a large industrial precinct bounded by Edinburgh Road to the north, Railway Parade and the railway line to the east, Marrickville Road/the railway line to the south and Meeks Road/Farr Street/Shepherd Street to the west. The Industrial precinct includes:

- Large free standing industrial buildings.
- Industrial estates including smaller individual warehouse buildings to the south and east.
- Manufacturing, freight and logistics uses and includes storage facilities, car smash repairs, warehousing and factories.

The Marrickville Metro Shopping Centre also lies to north of the Site. Residential uses are well separated from the Site to the south and east. The Site is also physically separated from residential dwellings to the north and northwest by Edinburgh Road.

### 3.2.2 Site Constraints

The Site possesses a number of constraints which may influence not only the development outcome but also the demolition strategy and methodology. These include:

- Proximity to residential zones to north-west and associated acoustic considerations both during Demolition (e.g., concrete crushing works).
- Potential flood risk and flood liability
- A potable water reticulation line beneath Sydney Steel Road
- Wastewater reticulation mains within the property, including a critical 600 × 990mm wastewater trunk main located in easement which bisects the site.
- Several major stormwater lines, including a covered pipe beneath Sydney Steel Road, a major open stormwater channel which passes through the north-eastern part of the site, and a covered box culvert beneath Edinburgh Road.
- Proximity to flight path of Sydney Airport and implications to future tower cranes during demolition
- Other nearby construction sites

### 3.2.3 Retaining Structures

Retaining wall systems and raised garden beds will be demolished as part of the demolition process.

### 3.2.4 Hazardous Chemicals / Dangerous Goods Storage or Dumps

Ammonia was discovered within the refrigeration plant and field equipment. The ammonia has since been recovered by Tri-tech Refrigeration and the equipment broken in various locations to allow the refrigeration pipework and equipment to vent the remaining residual ammonia into the atmosphere.

No other major hazardous chemicals or dangerous goods (e.g. munitions, chemical storage systems, underground storage tanks, compressed gas cylinders, medical gases, dumps of noxious or toxic or hazardous substances) have been identified on site or have been communicated by the Client.

Work involving removal of hazardous chemicals / dangerous goods is not in Central Civil (NSW) scope of works and is the responsibility of the Principal Contractor to remove unexpected findings of hazardous chemicals / dangerous goods on site.

In the event of encountering any unexpected findings of hazardous chemicals / dangerous goods, the following is to apply before work commences in the immediate area:

1. Work in the immediate area will stop
2. The Site Supervisor will be notified of the find
3. The Site Supervisor will notify the Project Manager
4. The Project Manager will notify the client

The client will organise the safe removal of the substance (which may necessitate the engagement of specialist contractors). Work will not recommence in the area until the client has given approval to recommence demolition activities.

### 3.2.5 General Condition of Land and Structures on Adjoining Sites

The buildings, paths, roadways and other items surrounding the site are in sound structural condition. Central Civil (NSW) do not anticipate any physical impacts on the surrounding structures.

Care will be taken to minimise impacts on adjoining sites and structures. Various methods will be employed to minimise the disruption to the surrounding buildings or adjoining sites and structures.

SDS Engineering are providing a Dilapidation Report detailing conditions of external assets servicing the site surrounds.

## 3.3 Investigation of Services

### 3.3.1 Services to be disconnected

All services shall be disconnected / made safe prior to commencement of demolition work. A signoff on services will be received by Central Civil (NSW) prior to the commencement of any demolition works.

### 3.3.2 Services to be maintained

Water and temporary power will be used during the course of demolition works. Power will also be used by the Asbestos Removal Contractor to run vacuums and decontamination units (where required).

It has been identified that there are several existing utilities which run through and around the site and must be taken into consideration. The following is a non-exhaustive list:

- Existing right of way to the northwest of site leading to the existing sub-station for unknown services.
- Sydney Water Sewer Mains.
- Fire Services along Edinburgh Road boundary.
- Underground electrical power throughout the site.
- Belowground Stormwater Culvert cutting the site east to west.
- Storm water pipes along the south and west boundary.

- Telstra services along Edinburgh Road.
- Gas services (HP) along Edinburgh Road with gas mains noted on site.
- Water along Edinburgh Road and Sydney Steel Street.

### 3.4 Hazard Investigation / Identification

The following key hazards associated with demolition work have been identified:

- Unplanned structural collapse
- Falls from one level to another
- Falling objects
- The location above and underground essential services, including the supply of gas, water, sewerage, telecommunications and electricity
- Exposure to hazardous chemicals – these may be present in demolished material or in the ground where demolition work is to be carried out (contaminated sites)
- Hazardous noise from plant
- The proximity of the building or structure being demolished to other buildings or structures

Each of the above risks have been investigated and control measures outlined in the Safe Work Method Statement (SWMS) developed for demolition and associated works.

### 3.5 No-Go Areas for Machine's

The following areas are no-go areas for machinery unless an engineer's approval is sought first:

1. All suspended slabs
2. The high side of any retaining walls from the edge of the wall, back a distance equal to the height of the wall
3. On top of any underground structures including fuel tanks and the like. Note: Where the walls of underground structures are retaining walls, they should be treated in accordance with the above point
4. Demolition Exclusion Zone
5. Douglas Partner survey wells

The demolition Exclusion Zone will encompass the entire site with the exception of the site amenity areas (and access ways to and from), which will be deemed construction zones.

All personnel attending site, will need to be inducted into Central Civil (NSW) system. In addition, all personnel not inducted by Central Civil (NSW) will be required to visit the site office and not enter the demolition site until they have been inducted and signed on the Site Sign-In Register or brought on site with the permission of the Central Civil (NSW) Site Supervisor under the supervision of an inducted person and have signed in the Site Visitors Register.

As well as the whole demolition site being a demolition zone, various areas inside the site will be demarcated with visual barriers and signs 'Warning Drop Zone, Do Not Enter' and other engineering barricades will also be used in the Drop Zones. The locations of these Drop Zones will also be marked up on an Exclusion Zone Plan.

The location of smaller temporary localised Drop Zones will be discussed during the daily prestart meeting and detailed in the demolition SWMS. All Exclusion Zones, Asbestos Removal Zones and Drop Zones will be properly demarcated. No unauthorised persons shall be permitted into the demolition work area. All personnel and visitors will follow Site Personnel and Visitor Registration Procedure.

# 04

## 4 – Demolition Exclusion Zone



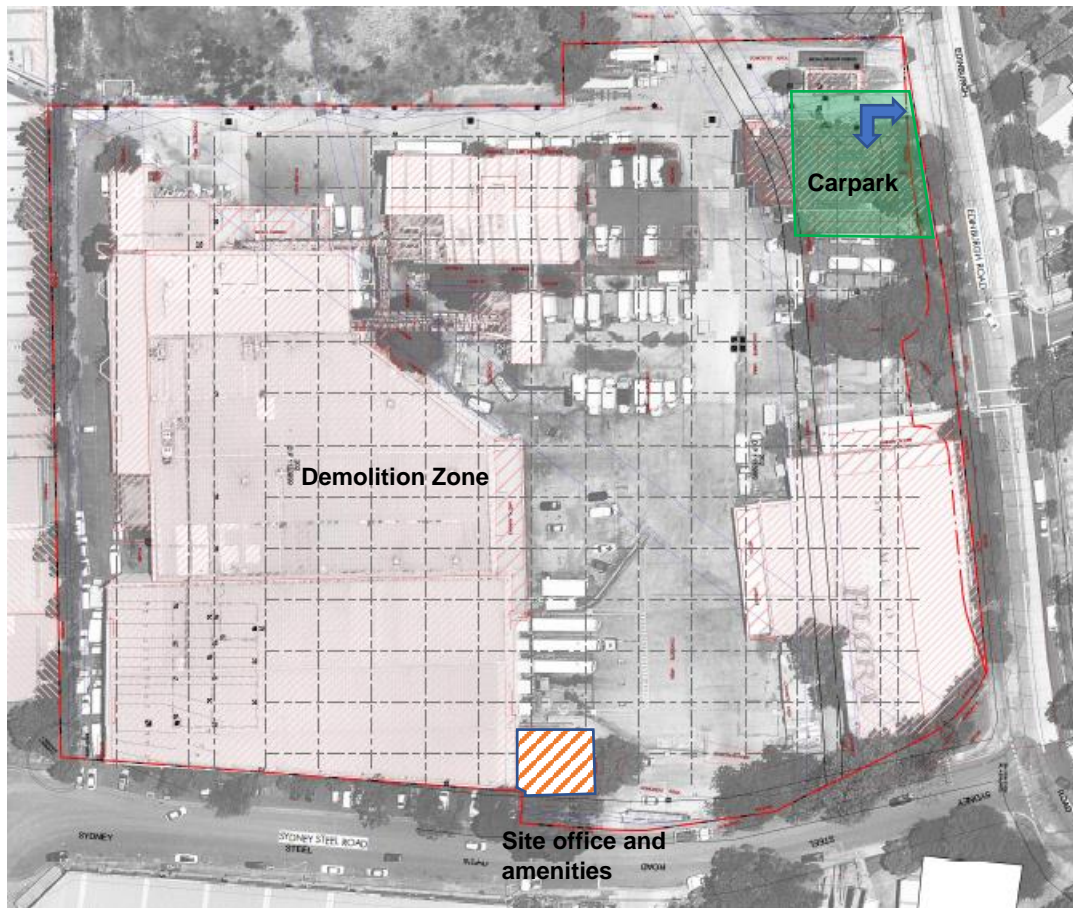
## 4. Demolition Exclusion Zone

The demolition Exclusion Zone will encompass the entire site with the exception of the site amenity areas (and access ways to and from), which will be deemed construction zones.

All personnel on the Principal Contractor site have to be inducted into their system. In addition, all personnel not inducted by Central Civil (NSW) will be required to visit the site office and not enter the demolition site until they have been inducted and signed on the Site Sign-In Register or brought on site with the permission of the Central Civil (NSW) Site Supervisor under the supervision of an inducted person and have signed in the Site Visitors Register.

As well as the whole demolition site being a demolition zone, various areas inside the site will be demarcated with visual barriers and signs - 'Warning Drop Zone, Do Not Enter' and other engineering barricades will also be used in the Drop Zones. The locations of these Drop Zones will be marked up on an Exclusion Zone Plan. The location of smaller temporary localised Drop Zones will be included in the daily toolbox talk and detailed in the demolition site sign on location.

All Exclusion Zones, Asbestos Removal Zones and Drop Zones will be properly demarcated. No unauthorised persons shall be permitted into the demolition work area. All personnel and visitors will follow Site Personnel and Visitor Registration Procedure.



# 05

## 5 – Details of Demolition

## 5. Details of Demolition

### 5.1 Sequence

Work will follow the sequence below. Amended to this sequence may occur to suit.

1. Receive Handover of Site and sign off services
2. Site induction
3. Demarcate site and define Exclusion Zones
4. Install Environmental Controls
5. Removal of Trees
6. Practical Removal of Hazardous Materials
7. Soft strip of structure internals
8. Erect scaffold and protection
9. Mechanical Demolition
10. Remove rubble and rubbish from site
11. Handover
12. Demobilisation

More details on the sequence and flow of the work including durations will be discussed during client/Central Civil (NSW) progress site meetings.

Note: Where temporary works are necessary (propping, scaffolding needles and the like) the following sequence MUST be adhered to, prior to the use of the temporary works item:

1. Design
2. Specialist Engineer Sign Off on Design
3. Installation
4. Inspection and Certification (engaged specialist Engineer)
5. Use

### 5.2 Detailed Work Method

#### 5.2.1 Receive Handover of Site and Sign-off on Services

Demolition process will begin only when the site has been officially handed over and a sign off on services has been received by the appropriate service providers for appropriate areas.

#### 5.2.2 Site Induction

A site induction is to be held before any work commences on site. The site induction includes the following:

- Induction into this DWP, other plans and SWMS
- Induction into the Work Health and Safety Management Plan/system
- Induction into the Environmental Management Plan/system (where required)

#### 5.2.3 Demarcate Site and Define Exclusion Zones

The existing site fencing to the perimeter of the site along with 1.8m chainwire fencing (when required) will be established to prevent unauthorised entry. Other areas of site may be demarcated as hazard removal areas, exclusion or Drop Zones. The access gate will be closed during demolition works and manned during load out.

The following site notices will be displayed in a prominent position:

- Unauthorised entry prohibited
- Warning Demolition in Progress
- Warning Asbestos Removal
- Mandatory PPE information signage
- Site Supervisor in charge of works
- 24 hour site emergency contact number

## 5.2.4 Install Environmental Controls

Central Civil (NSW) is a responsible demolition contractor and will endeavour to ensure the unimpeded operation of the surrounding areas throughout the works. Particular importance will be placed on sensitive receivers in close proximity to adjacent buildings. Central Civil (NSW) will endeavour to do everything reasonably practicable to make what is by nature a noisy and disruptive process as quiet and dust free as possible. A summary of the key environmental methods that will be used on site include:

### Sediment Control

- Leaving all hardstands in place. All truck movements will be on hardstand.
- Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns to limit the catchment area of any one section.
- A mechanical type sweeper is to be employed wherever sediment or dust becomes an issue on the external roadways and on the internal hardstand on site. It is expected that initially there will be little need for the sweeper however towards the peak load out period of the project the sweeper may need to return to site daily. The need for the sweeper will be assessed on a daily basis.
- All drains will be covered in a Geotech material, with gravel filled wire mesh or geotextile sausage placed up-stream of the flow to these drains. Refer to Appendix D for Sediment Control Plan.

### Noise Management

By nature, demolition is a noisy process, however many measures can be taken to minimise this noise. Central Civil (NSW) believe that with the following noise reduction measures when implemented will minimise noise disruption to the surrounding buildings:

- Demolition will be undertaken by as large as possible machines as they are far less obtrusive than the rapid crescendo of smaller machines.
- External walls of each building will be left in place until the very last stage of each building demolition. The walls act as a sound barrier shielding the neighbourhood buildings from much of the noise generated by machines on that floor.
- At least two decks of scaffolding will be lined with chainwire and shade cloth to the full height of the scaffold providing a noise dampening measure.
- Drop Zones will be located to ensure minimum noise from their operation. Material that generates a lot of noise when removed via Drop Zone (large steel members, etc.) will be reduced in size prior to drops off the structure.
- Where possible, the base of drop zones will be covered with 500mm of rubble prior to their use.

### Dust Control

Demolition of brick and concrete can generate excessive amounts of dust however through the following dust suppression measures Central Civil (NSW) anticipate the dust leaving the confines of the building being demolished will be kept below a level that adversely affects the surrounding buildings and site:

- Installing a water line with water point connections as needed to achieve sufficient water pressure for dust suppression.
- Each machine used in the demolition process will be accompanied by a labourer with a water hose to ensure water is available on each separate demolition face and provide adequate dust suppression. Water runoff will be minimised. All scaffolding will be lined with chainwire and shade cloth which reduces the wind over the active demolition faces and the possibility of dust permeating through the scaffolding screen.
- Material will be saturated prior to being removed via the Drop Zone.
- During load out of material, material will be wet down to minimise dust being generated.

### Vibration Management

Vibration on this site will emanate from the excavator mounted hydraulic hammers used in

the process of breaking down the concrete and brick structure into rubble and also from items reaching the base of the Drop Zone. The following measures will ensure that disruptive vibration will be kept to a minimum beyond the site:

- Physical links from structure being demolished to adjoining buildings and structures will be demolished (e.g. overhead service pipework, etc.)
- Physical separation will be done by excavators using appropriate attachments.
- Breakup of slabs, beams and columns into smaller pieces of rubble to reduce vibrations being felt from Drop Zone operation.
- Structural steel and large heavy objects will be reduced in size.
- Covering of the base of Drop Zone with 500mm of rubble prior to use.

## Truck Movements

- Providing traffic controllers to control pedestrian and vehicular traffic.
- Ensure trucks are covered, where possible, prior to leaving site.
- Providing drivers information on access, routes and site conditions and sensitive receivers.
- Space allocated for trucks within the site.

### 5.2.5 Practical Removal of Hazardous Materials

The management of asbestos on site will be conducted in accordance with the Asbestos Removal Control Plan (ARCP) developed for the project.

Where hazardous materials removal is to be undertaken, an Asbestos SWMS is to be developed by Aztech Services. Hazardous materials removal work will be conducted in accordance with the Work Health and Safety Regulations 2017 (NSW) and the Code of Practice: How to safely remove asbestos. The hazardous materials removal will be undertaken by Aztech Services in all areas of the site prior to demolition in those particular areas. A clearance certificate will be obtained by a qualified Occupational Hygienist prior to demolition.

Refer to Asbestos Removal Control Plan (ARCP) and SWMS for further details on the asbestos removal and associated risks analysis.

### 5.2.6 Soft Strip Structures

The structures will be stripped-out by hand and appropriate hand tools where required, prior to mechanical stripping in appropriate areas. No heavy machines will be placed on suspended slabs that have not been approved by the structural engineer.

Bonded material such as non-loading bearing walls, partitions, and doors that may not be removed by machines will be removed by a combination of hand, picks, crow bars, and other associated tools, and stockpiled in the building or a secure area of site for load out by machines.

### 5.2.7 Erect Scaffold and Protection

The structure will be scaffolded in specific areas with heavy duty 5 board demolition scaffolding covered with chainwire and shade cloth. Refer to Appendix E for scaffold locations.

Refer to SWMS provided by scaffolders for further details on the scaffolding erection and associated risk analysis.

When undergoing demolition of a slab, 2 levels of the scaffold below will have erected a five-board heavy duty catch deck to stop rubble falling through. Alternatively, an exclusion zone will be set up for all the below floors and scaffolds preventing personnel from gaining access to beneath the scaffolds.

During demolition the scaffolding will always remain at least 2m higher than the top floor being demolished.

## 5.2.8 Mechanical Demolition

Mechanical demolition will be by hydraulic excavators being 1.5, 24, 27 and 35 tonne in capacity with shear, pulveriser, hammer and bucket attachments. The 1.5 tonne machine will be on suspended slabs and transported from one level to the next via ramps and vertical lifts. An engineer's approval will be sought confirming the size of the machine that can be put on any particular slab. The engineer's directions in regard to loads on each slab, back propping if required, to the slabs and sequence of demolition will be followed and will be included in this document as Appendix C.

Hydraulic excavators with shear attachments will cut down steel elements of structure in sections. Hydraulic excavators with hammer / pulveriser attachments will break up brick walls and concrete slabs of the structures in sections.

A watcher will work with plant and equipment operators at all times. Water will be maintained at the face of demolition for dust suppression where required. During demolition, the floor area under the excavators and the bay area's being demolished will be closed off with warnings signs, barrier mesh and existing wall structures. No plant or personnel will be allowed in these areas.

Shear wall that is on the perimeter of the building will be demolished in the following sequence:

1. Excavator will punch a vertical line in the wall, leaving steel reinforcement intact.
2. The excavator will then make a horizontal line at the base of the wall keeping the steel reinforcement intact, leaving 300mm of concrete between the vertical cut and the start of the horizontal cut.
3. The machine will then fold the wall inside the building.

The pulling in of perimeter beams will be done in the following sequence:

1. An excavator will pulverise both ends of the beam leaving steel reinforcing intact.
2. All steel reinforcement will be either oxy cut or mechanically sheared at one end with only the top reinforcement cut on the other end.
3. The cut end will be towed in and placed on the slab.
4. The remaining bottom steel will be either oxy cut or mechanically sheared.
5. The remaining end will fall onto some rubble or steel to cushion the impact on the slab.
6. The beam can then be safely dragged in by the excavator.
7. If the beam can be systemically demolished using a pulveriser attachment, this will be the preferred method.

Removal of double story walls will be carried out in the following sequence:

1. Excavator will punch a vertical line in the top of the wall, leaving steel reinforcement intact.
2. The excavator will then make horizontal line mid height of the wall keeping the steel reinforcement intact. Leaving 300mm concrete between the vertical cut and the start of the horizontal cut.
3. The machine will then hammer/pulverise and fold in the wall.
4. The procedure for removing perimeter shear walls will then be followed for the lower segment of the wall.

Mechanical demolition of lower structures from ground level will be by hydraulic excavators being 24, 27 and 35 tonne in capacity with shear, pulveriser hammer and bucket attachments. None of the machines will be placed on suspended slabs. All buildings and structures will be reached from the ground.

## 5.2.9 Remove Rubbish and Rubble from Site

Both strip out material and load out from floors being demolished, will be removed using either a Skid steer loader and/or a 1.5 tonne excavator.

Demolition rubble will be removed progressively from the floor areas prior to being demolished. The Skid steer and/or excavator will transport the rubble to the Drop Zones and drop it over the edge. The Skid steer operator will stay in constant communication with external work load out crews working in close proximity to the drop zones.

The Skid steer operator will also need to stay in constant communication with the machine loading out from the Drop Zone at ground level to ensure when material is being dropped into the Drop Zone, the base of the Drop Zone is evacuated.

The brick up-stand or manufactured guard rail (where the concrete upstand does not exist) to the edge of the Drop Zone is to be left in place to ensure there is no possibility of the Skid steer travelling over the edge of the building. The Skid steer will lift the material over this up-stand and tip through the opening.

An excavator operating at ground level (Drop Zone) will remove the rubble from the Drop Zone and load the waste into trucks. The area this machine is working in will be clearly demarcated and posted as a Drop Zone and is also out of bounds for all personnel unless under the express permission of the operator of the load out machine who will be in constant contact with the operators on the slab level and other demolition crews using the Drop Zone via 2 way radio.

ATF fencing or similar barriers will be installed at the base of the Drop Zone to ensure material does not escape the confines of the demarcated area. As an extra precaution, barriers will be placed sufficiently far enough from the drop zone area to prevent material build-up.

Demolished material will be separated and stockpiled ready for load out. A combination of hydraulic excavator with grapple attachments or bucket and/or Skid steer with grapple attachments will load out demolished material into appropriate bins for transportation to an EPA approved tipping or recycling facility.

Water will be maintained on stockpiles at all times for dust suppression. Care shall be taken to watch for pedestrians when entering and leaving site. The approved Traffic Control Plan will be adhered to at all times. All trucks will follow the truck route and guidelines on entering and exiting the site.

A Central Civil (NSW) RTA tickets traffic controller will assist trucks for site access and egress when required.

## 5.2.10 Handover Site to Client Representative

Where areas are to be progressively handed back to the Client the Project Area Handover Form is to be used and a copy provided to the Client.

On practical completion of works, a site meeting with the Clients representative and Central Civil (NSW) will occur. Central Civil (NSW) will hand over the site following the completion of all activities on the scope of works.

## 5.2.11 Demobilise from Site

The site demobilisation will take place following the site handover to the Clients representative. Truck floats will take plant off site, the office complex will be transported off site and the site fencing repaired. Where areas of fencing did not exist, a new fence line will be erected to delineate the site from the general public.

# 06

## 6 – Permits by Authorities



## 6. Permits by Authorities

All relevant permits required by authorities will be sought and displayed on-site at all times. These permits include but are not limited to (refer Appendix F):

- SafeWork NSW Permit for demolition
- SafeWork NSW Permit for asbestos removal
- Council approval for temporary hoardings and scaffold

# 07

## 7 – Personnel Qualifications

## 7. Personnel Qualifications

- All personnel onsite shall hold a General Construction Induction Card (White Card).
- The Site Supervisor shall be a SafeWork NSW recognised Demolition Supervisor.
- Competent Person with considerable expertise in the demolition of similar structures.
- All plant will be operated by SafeWork NSW ticketed and experienced personnel.
- Central Civil (NSW) is committed to ensuring ongoing Work Health and Safety compliance. All personnel will be site inducted prior to commencement of work on-site.

08

8 – Notes

## 8. Notes:

- During mechanical demolition, a competent observer will work with the operator at all times.
- An RTA ticketed traffic controller will assist trucks accessing and egressing the site.
- The structure is to be demolished in a controlled manner.
- Central Civil (NSW) will maintain a competent SafeWork NSW recognised person on site at all times.
- Each day a daily prestart and checklist will be conducted by the site foreman and is to be read in conjunction with this DWP and the task specific SWMS's.
- Personnel will sign off weekly toolbox talks prior to proceeding to the work face.
- All Central Civil (NSW) personnel will hold a General Construction Induction Card (White Card) and will wear appropriate PPE.
- Site specific SWMS and DWP can be altered in the Toolbox Talk, by altering the actual documents and by creating new SWMS on the blank forms provided. These changes will be outlined in a toolbox talk and orally if the competent person on site identifies additional risks. Further revisions of the documents will be issued as soon as practicable.

# Appendix

Appendix	Document
A	Hazardous Materials Report <ul style="list-style-type: none"> <li>• Prensa Targeted Destructive Hazardous Building Materials Assessment</li> <li>• Noel Arnold Hazardous Materials Survey Report</li> <li>• Prensa Asbestos Materials Management Plan</li> </ul>
B	Service Disconnection Signoffs
C	Engineer Certificates and Instructions (if required)
D	Sediment Control Plan
E	Scaffold Plan
F	Permits by Authorities
G	Ammonia Removal Certificate
H	Tree Removal Plan