

# Downtown Carpark Redevelopment Site Clearance and Demolition Management Plan



Prepared for:

**Precinct Properties** 

04 / 12 / 2024

# **Contents**

1	Version Control	1
1.1	Revision Notes	1
2	Background	
2.1	Purpose of this document	1
2.2	Scope	1
2.3	Application	2
	2.3.1 Purpose	2
3	Method Statement	
3.1	General	3
3.2	Enabling Works	4
3.3	Demolition	4
	3.3.1 Stage 1:	5
	3.3.2 Stage 2	5
	3.3.3 Stage 3:	6
	3.3.4 Stage 4:	6
	3.3.5 Stage 5:	6
4	Environmental Management	8
4.1	Project Deconstruction Environmental Effects and Mit	igation 8
	4.1.1 Noise and Vibration	8
	4.1.2 Traffic Management	8
	4.1.3 Dust Management	9
	4.1.4 Asbestos Removal	11
	4.1.5 Arboricultural	11
6	Implementation and Operation	13
6.1	Management Structure and Responsibility	13
	6.1.1 All Staff	14
	6.1.3 Project Manager	15
	6.1.4 Site Manager	15
	6.1.5 Environmental Manager	15
	6.1.6 Stakeholder Relationship Manager	16
6.2	Training	16
6.3	Emergency Contacts and Response	16
6.4	Engagement and Communication	17
7	Monitoring and Review	17
6.1	Consent Compliance Monitoring	18
6.2	General Site Monitoring	18
6.3	Reporting	18
6.4	SCDMP Management	19
APPE	ENDIX 1	

Demolition Methodology Schematics
APPENDIX 2
Asbestos Management Plan
APPENDIX 3
Draft Demolition Noise and Vibration Management Plan
APPENDIX 4
Preliminary Demolition Traffic Management Plan
APPENDIX 5
Dust Management Plan

### Preface

This plan has been prepared for the benefit of Precinct Properties. No liability is accepted by this company or any employee of subconsultant of this company with respect to its use by any other person. This disclaimer shall apply notwithstanding that the report may be made available to other persons for an application for permission or approval to fulfil a legal requirement.

This Site Clearance and Demolition Management Plan will be finalised upon the granting of the resource consents and following appointment of the Contractor. The Contractor will determine the construction methodology for the project on the

basis of best practise. The environmental performance standards and environmental controls specified within this draft plan, resource consent conditions, and other management plans specified under the resource consents are the minimum requirements that the Contractors must comply with when undertaking construction activities on site. Confirmation will be required that the Contractors' management of the construction process is in accordance with the standards and controls specified within this management plan.

### 1. Version Control

### 1.1 Revision Notes

Version	Version Notes	Date
Version 1.0	Draft For Resource Consent	10 July 2023
Version 2.0	Updated Draft for Resource Consent	03 March 2024
Version 3.0	Final for Resource Consent	12 July 2024
Version 4.0	Updated in response to Request for Further Information	22 October 2024
Version 5.0	Updated in response to further clarification from Auckland Transport	04 December 2024

## 2 Background

### 2.1 Purpose of this document

This draft Site Clearance and Demolition Management Plan (SCDMP) details the principles, practices, and procedures to be implemented on the Downtown Carpark Redevelopment (the "project") to manage, remedy, and mitigate potential adverse effects during demolition. These principles, practices and procedures are intended to meet resource consent conditions, relevant legislation, and the objectives of Precinct Properties.

This SCDMP has been prepared prior to the appointment of a Demolition Contractor, and as such provides the framework for how effects will be managed to inform the resource consent application. It is intended that a final Site Clearance and Demolition Management Plan, that builds upon and provides more detail to this SCDMP, will be prepared, and submitted to Auckland Council pursuant to a condition of consent once a preferred contractor is appointed who will provide the final management plans.

### 2.2 Scope

The project comprises the redevelopment of the existing Downtown Carpark located at 2 Lower Hobson Street, Auckland Central and will comprise the following stages:

- Site Clearance and Demolition involving (refer Figure 1):
  - the demolition of the carpark building.
  - demolition of the pedestrian bridge over Lower Hobson Street and associated stair and colonnade together with make good works to the building located at 204 Quay Street.
  - demolition of the vehicle ramp connecting to Fanshawe Street together with make good works to the Fanshawe Street retaining wall, landscaping, and pavements.
  - All demolished elements will be taken to ground level only.
- Enabling Works: subject to separate consent and not covered by this plan.
- Construction of the above ground works: subject to separate consent and not covered by this plan.

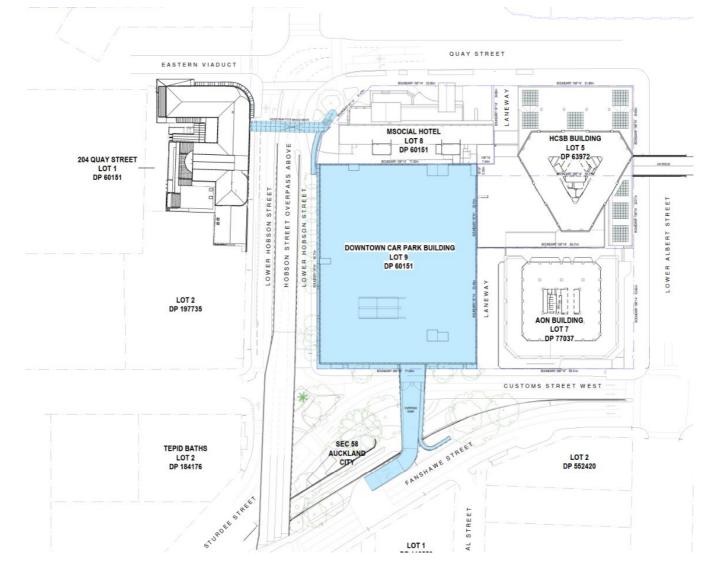


Figure 1: Scope of Demolition

### 2.3 Application

This SCDMP is the document for the management and monitoring procedures to be implemented during the Site Clearance and Demolition phase of the Project. The SCDMP defines details of who, what, where and how demolition management and mitigation measures should be implemented.

The project team will be required to undertake all demolition activities on site in accordance with the provisions of the relevant management plans and conditions of consent.

### 2.3.1 Purpose

The following information should be treated as indicative only. It is intended to provide sufficient detail on the proposed deconstruction activities to assess their potential environmental effects and to identify any necessary measures to avoid, remedy or mitigate those effects where appropriate.

Detailed programming has been undertaken; however this will be dependent upon several factors, and it should be recognised that once the Contract for the site clearance and demolition has been awarded and a contractor in place, that the deconstruction methodology shall be further defined and developed. This will be undertaken within the scope of the resource consent conditions which will be in place to manage the environmental effects of deconstruction activities.

Specialised Environmental Management Plans (SEMPs) will be further finalised and informed by conditions of consent to ensure that all mitigation measures are implemented as required. Should a contractor wish to undertake construction activities in a manner not consistent with the consents held, appropriate authorisations shall be obtained at that time.

Overall, the purpose of this SCDMP is to:

- Specify practicable methods and measure to avoid and mitigate adverse effects arising from clearance and demolition works
- Provide the framework for the Contractor responsible for this SCDMP to achieve compliance with conditions of resource consents.
- Achieve compliance with legislation.
- Appropriately manage risks associated with the project; and
- Provide the Demolition Contractor with sufficient information to enable the development of a final SCDMP.

The final Site Clearance and Demolition Management Plan shall include processes for:

- Controls during deconstruction
- Deconstruction methodologies for different parts of the structure (i.e. roof)
- Protection of adjacent buildings
- Protections of the public
- Health and Safety
- Risk Management Strategy
- Waste removal

### 3 Method Statement

### 3.1 General

The following method statement is subject to finalisation by the contractor. The demolition is proposed to occur over five primary (5) stages as described in the schematics provided as *Appendix 1.* Overall, the demolition is to occur over a 12-month period anticipated to commence February 2026.

It is anticipated that the demolition will involve the isolation of all services and internal strip out whilst maintaining the integrity of the building. The hard demolition will be achieved by a top-down demolition / cut and crane methodology to around Level 2 followed by the use of a high reach demolition excavator for the demolition of the lower levels down to the ground floor slab on grade. The exact level of the changeover will be determined with the appointed contractor.

Removal of the ground floor slab and foundations is not part of the demolition phase and will be subject to a future consent application. All demolition shall be undertaken using water sprays prior to and during demolition activity. All concrete shall be wet cut.

It is of note that an asbestos survey (refer *Appendix 2*) was undertaken by Aecom New Zealand Limited for Auckland Transport, dated 7th February 2020. This will be used to inform the final demolition methodology. This was a non-intrusive survey to locate as far as reasonably practicable the presence of any asbestos containing materials within the premise and assess their condition. A pre demolition intrusive survey will be completed prior to internal strip out starting.

Demolition materials will be loaded onto trucks for offsite removal / recycling as appropriate. Any asbestos will be removed by licenced asbestos contractors, double bagged at point of building removal for safe disposal and disposed of as asbestos waste to an appropriate facility which can accept asbestos

It will be a requirement for the demolition contractor to:

- Analyse all materials on-site (including fitout, fixtures, fittings, structures), noting their condition and potential to be re-used, and document findings in a Site Specific Waste Plan.
- Salvage all valuable and re-usable items from buildings in accordance with the approved Site Specific Waste Plan, before commencing Deconstruction.

 Perform a Deconstruction of all structures on-site using a Deconstruction Specialist, in accordance with the Site-Specific Waste Plan.

### 3.2 Enabling Works

Initial activities will involve necessary enabling and site establishment works and will include:

- a. Isolation / disconnection and capping of services
- b. Establishment of a project site office and site amenities
- c. Establishment of laydown areas and implementation of traffic and pedestrian management systems including a restricted access arrangement to maintain vehicle access to and from the MSocial Hotel.
- d. Existing adjacent stormwater catchpits that will receive runoff from the site will be protected to GD05 Standards.
- e. The existing kerb and channels along Customs Street West and Lower Hobson Street will serve as a clean water cut off, diverting stormwater and road runoff around the site location. A bund will be installed at sections along the portions of the perimeter not confined by kerb and channel (locations to be confirmed). The bund will be constructed from hotmix or sandbags (subject to location). The purpose of this bund is to both isolate the site from clean runoff and to ensure runoff from within the site is retained within the site boundaries.
- f. Stabilised entrance ways will be established at all entry and exit points of the site.
- g. A non-intrusive asbestos survey has previously been undertaken by Aecom New Zealand Limited for Auckland Transport, dated 7<sup>th</sup> February 2020. The purpose of the asbestos survey was to identify and assess the location, type and condition of asbestos and asbestos containing materials (ACM) present at a site to:
  - Provide an understanding of the overall risk in regard to the Asbestos and ACM identified; and
  - Provide recommendation of measures that can be implemented to address statutory obligations under the Health and Safety at Work Act 2015 (HSWA) and the Health and Safety at Work (Asbestos) Regulations 2016 (Asbestos Regulations).

Aecom New Zealand Limited have confirmed that Asbestos has been detected in the following location:

Ground Level Carpark (northern wall) – in the conduit wrap.

For the purpose of risk management, asbestos is presumed present until proven otherwise in materials and areas predating the year 2000 and inaccessible during the survey.

Aecom have provided specific recommendations relating to the management of any ACM identified or presumed in this survey are presented in the Asbestos Register within the existing Asbestos Management Report (Appendix 2).

An additional asbestos survey will be completed by an asbestos building surveyor, who meets the definition of a competent person under the Asbestos Regulations, in advance of demolition works.

### 3.3 Demolition

Demolition is proposed to occur in the following five (5) stages as illustrated in *Figure 2* with full detail of the proposal provided as *Appendix 1*.

Demolition hours will be:

- between 7am 6pm, Monday to Friday.
- between 8am 5pm Saturdays.

Demolition hours may be extended to:

- Monday to Friday 6.30am 10.30pm
- Saturdays 7am 11pm to enable works to occur outside sensitive hours of neighbouring buildings.

A building wrap solution will be installed to contain the immediate area of demolition works taking place at any one time, progressing around the building in a series of zones as the demolition progresses. The wrap will be braced off the building and will reduce in height as the height of the building decreases.

Demolition will be undertaken by way of a top down / cut and crane methodology to level 2 followed using a high reach excavator to the bottom slab on grade. All demolition shall be undertaken using water sprays prior to and during demolition activity with all concrete shall be wet cut.

### 3.3.1 Stage 1:

Stage 1 will occur over a 48-hour duration and comprises:

- the demolition of the existing pedestrian foot bridge over Lower Hobson Street utilising a cut and crane method:
  - Prior to road closure, the end of the concrete deck element adjacent to the 204 Quay St building would be propped securely to the footpath level, with appropriate pedestrian protection measures provided (hoarding / barricades). The roof spine elements will be propped, the cables will be removed, and the spine element and roof would be demolished and removed to the deck level.
  - Once the road is closed, the end of the deck unit would be cut though flush with the face of the existing building, leaving a small remnant piece attached to the building. Once the other end, adjacent the western intermediate pier, is also cut free this deck span can be removed.
  - The A-frame masts will then be cut free and removed. The methodology to remove the deck spans involves cutting them at the junction with the existing piers and the support at the existing building and then removing each span, one at a time. Propping would be in place to secure the spans until ready for removal. The piers would be demolished separately after the spans are removed.
  - The remnant piece of deck adjacent the building can be grouted in place to ensure it is safely secured to the existing building. The propping and pedestrian protective measures at footpath level can then be removed, hoardings at first floor level to secure the opening to the inside of the locked doors shall remain until façade remediation works are complete.

### 3.3.2 Stage 2

Stage 2 will occur over a 3-month duration and will comprise:

- the demolition of the existing stair and colonnade associated with the pedestrian footbridge over Lower Hobson Street.
- demolition to the car park building's northwestern corner through top-down cut and crane methodology to around level
   2 followed by high reach excavator down to the bottom slab on grade.
- the crane will initially be located in the road reserve, with a temporary base over the existing tree pit, and will move out of the road reserve when space is available within the site.
- Make good works to 204 Quay Street façade where the pedestrian foot bridge over Lower Hobson Street connects. The remedial methodology is summarised as follows and illustrated in Figure 3:
  - Demolish existing footbridge and any fixings relating to this from existing facade as noted above.
  - Demolish existing glass doors including any egress controls.
  - Demolish overlight infill above existing concrete ledge and make good to sill profile and opening to accept new window.
  - Infill opening to lower sill height, create new sill and opening to accept new window and finish to match existing wall (to be defined in future scope of work).
  - Reinstate decorative plasterwork freeze and concrete window head to match existing.

Install new steel window and overlight to match existing.



### 3.3.3 Stage 3:

Stage 3 will occur over a 3-month period and involve:

- Crane position and set down area moved into the carpark site from being located on Lower Hobson Street.
- Demolition of the remainder of the carpark's western extent.
- Installation of scaffolding with an acoustic barrier to the full extent of the eastern façade.

### 3.3.4 Stage 4:

Stage 4 will occur over a 6-month duration and comprise:

- Crane and set down area moved to a new position within the carpark site and demolition of the carpark's full eastern extent.
- Scaffolding and acoustic barrier to the full eastern façade will decrease as the building comes down. The height of the scaffold shall stay high enough to block the line of sight to the works from the Aon podium.
- Installation of a temporary steel support structure under the overpass ramp connecting to Fanshawe Street.

### 3.3.5 Stage 5:

The duration of Stage 5 is to be confirmed, including in consultation with Auckland Transport. However, is anticipated to occur over a circa 1-week period and will comprise:

- Crane and set down area moved to a new position within the carpark site.
- Demolition the vehicle ramp connecting to Fanshawe Street down to ground level utilising a cut and crane methodology.
- Undertake make good works to the Fanshawe Street retaining wall, landscaping and pavements to be agreed in further consultation with Auckland Transport.



Figure 2: Site Clearance and Demolition Proposed Staging (please also refer to Appendix 1)

## 4 Environmental Management

Based on the understanding of the deconstruction programme and existing environment, the potential environmental effects and associated management / mitigation measures are outlined below.

The following sections identify project related potential impacts, the guidance for the management of the impacts and the project issues that need to be considered in the management of those impacts.

Specialised Environmental Management Plans will be further finalised and informed by conditions of consent to ensure that all mitigation measures are implemented as required.

### 4.1 Project Deconstruction Environmental Effects and Mitigation

### 4.1.1 Noise and Vibration

### Potential Effects

Surrounding receivers are a mixture of commercial and hotel/apartment buildings and have been identified as:

MSocial: 196 – 200 Quay St

HSBC Building: 188 Quay St

Aon Building: 29 Customs St West

■ The Sebel: 85 Customs St West

204 Quay St

1-3 Albert St

22 Fanshawe St

The demolition noise and vibration report prepared by Marshall Day Acoustics notes that demolition noise effects will be reasonable with the implementation of good practice mitigation and management measures. Demolition vibration is predicted to comply with the limits contained in the Auckland Unitary Plan.

### Mitigation Measures

It is considered that that the noise and vibration levels will be generally reasonable with the adoption and implementation of a Demolition Noise and Vibration Management Plan (DNVMP). A draft DNVMP is provide as *Appendix 3*. A finalised DNVMP will be provided to Council for approval prior to demolition works commencing.

Specific note is made of the proposed scaffold lined with an acoustic barrier to be constructed to the full eastern façade of the Downtown Carpark building. The scaffold will be the full height of the Downtown Carpark building and will be decreased as the building is demolished. The height of the scaffold will stay high enough to block line of sight to the works from the Aon podium.

### 4.1.2 Traffic Management

### Potential Effects

Partial and full road and footpath closures around the site will be required to protect the public from construction work zones, construction vehicles and overhead works, with the need for traffic, bus, and pedestrian diversions. Detailed preliminary traffic management plans are provided in the drawings attached as *Appendix 4*.

The following truck volumes are anticipated:

- On average, up to 7 trucks per day (14 truck movements) will be generated during the demolition for the removal of material, based on the smallest truck size (large rigid truck)
- This equates to an average of less than 1 truck per hour, or less than 2 truck movements per hour (assuming daily construction periods of 10.5 hours during weekdays and 9 hours on Saturdays)
- The truck movements will be spread throughout the demolition process. There will be some days that are higher and lower than the average volumes. We note that the contractor will be able to schedule truck movements, to minimise the effects of too many trucks arriving at the same time
- Nevertheless, we note that these truck volumes are very low when considered on a daily and hourly basis.

### Mitigation Measures

Demolition of the Downtown Carpark can be safely undertaken, subject to implementing a CTMP once a contractor has been appointed. It is considered that the traffic effects because of the various road closures can be appropriately managed and accommodated by the wider road network.

A Preliminary Demolition Traffic Management Plan has been prepared and is attached as *Appendix 4* outlining how the site can be managed. This confirms how the site, and the surrounding road network are to be managed across the various demolition stages.

A final, more detailed Management Plan shall be provided to Council for approval prior to the commencement of works on site.

The guidance and expectations as set out by the Preliminary Traffic Management Plan should be followed and will be reviewed and updated once a detailed construction methodology has been finalised along with appointment of the Main Contractor. The Main Contractor shall provide information regarding anticipated site compound and lay down points, traffic management points or method statements for effective traffic management.

The following is specifically noted:

- Controlled / managed access arrangements shall be put in place, and which will be enacted in collaboration with
  adjacent properties once a demolition contractor is engaged to put in place necessary measures to manage scheduling
  and coordination of access in a way that prevents conflicts, provides for health and safety and efficiency between
  parties.
- Temporary changes to existing kerbs, signal posts and signs will be required to enable site access underneath the
  existing flyover.
- Precinct Properties and the demolition Contractor will work collaboratively with Auckland Council and Auckland
   Transport throughout the demolition duration to explore options that enable the re-opening of bus lanes and / or
   footpaths earlier than anticipated where appropriate and where it is safe, cost efficient and practicable to do so.
- A temporary pedestrian crossing on Customs Street West is to be considered as part of the final more detailed CTMP in collaboration with Auckland Transport.

### 4.1.3 Dust Management

### **Potential Effects**

The main discharge to air from the demolition activities will be dust. Dust has the potential to cause nuisance or soil property if deposited in sufficient quantities in the environment. Fine particles present in dust emissions have the potential to affect respiratory heath while suspended in air.

The main sources of nuisance dust emission along the project are:

- Demolition activities, such as
  - Knocking down and breaking up of building material including plasterboard and blockwork, and
  - Cutting, breaking and crushing of concrete;
- Handling of spoil, aggregate and other solid materials;
- Wind erosion of spoil and other stockpiled material

### Mitigation Measures

A Dust Management Plan has been prepared and is provided in *Appendix 5*. Measures to manage and mitigate the effects of discharges of dust from demolition activities are outlined below and are to be used as required depending on the type of demolition activity being undertaken, weather conditions, and proximity to sensitive receptors.

- Internal fittings are to be stripped out prior to demolition of structural and exterior elements.
- Use of water sprays to dampen material prior to and during demolition.
- Only wet cutting of concrete is to be undertaken.
- Any breaking of concrete should be done under wet conditions (such as a water spray or fog cannons directed at where the breaking is occurring).

- Containment of the immediate area of demolition works though placement of construction wrap in a series of zones as the demolition progresses.
- Containment or screening is to be installed along the entire eastern façade of the carpark building during demolition of the adjacent carpark building (demolition stages 3 and 4), This is to be achieved through either:
  - o Installation of scaffold lined with an acoustic barrier is proposed to the full eastern façade, provided that this wall of barriers is impermeable to wind flow.
  - o If wind flow is able to pass through the acoustic barrier wall, construction wrap should be placed along entire eastern façade. This could be progressively reduced in elevation as demolition progresses.
- Store stockpiled material containing a high content of fine material indoors or undercover where practicable.
- Locate and orientate outdoor stockpiles to maximise wind sheltering and separation from sensitive off-site activities as far as practicable.
- Dampen, cover or stabilise inactive stockpiles if they are producing visible dust emissions.
- Limit the height of stockpiles to reduce wind entrainment as far as practicable.
- Minimise handling of stockpiled material and drop heights to stockpiles during unloading to decrease potential for dust generation.
- Avoid handling (including loading or unloading) of material during windy conditions in locations where dust may be emitted beyond the site boundary, where practicable.
- Cover loads of dry fine materials.
- Minimise drop heights when loading and unloading dry material.
- Use enclosed chutes and conveyors for material to be dropped to lower levels as well as covered skips.
- Limit vehicle speeds on site to no more than 20 km/h.
- All vehicle engines are to be switched off when stationary (no idling on-site).
- Limit load sizes to avoid spillages.
- Cover loads of fine materials leaving or entering the site.
- Minimise on-site travel distances through appropriate site layout and design.
- Minimise mud and dust track out the site to sealed areas by using wheel cleaning facilities at site exits to sealed roads.
- Wheels of all trucks exiting the site to public roads are to be inspected and washed as required to prevent tracking of material off-site.
- Any material identified to be tracked onto public roadways during regular inspections (or via notification from the public) is to be cleaned with a vacuum sweeper truck.
- Sealed access routes are to be cleaned with a vacuum sweeper truck whenever inspections (regular or in response to complaints) identify surface accumulation of dust material.
- In dry conditions (e.g. less than 1 mm of rain in the preceding 48 hours), maintain vehicle accessways in regular use in damp condition through surface watering (e.g. with water carts or fixed irrigation).
- If water suppression is ineffective, synthetic dust suppressants (excluding used oil-based suppressants) may be used as
  an alternative.
- Planning of site layout so that dust generating activities are located away from sensitive receptors where practicable.
- Site personnel trained in dust management controls.
- Monitoring of site conditions (weather/soil conditions) to anticipate and prevent dust effects.
- Limiting operations which have the potential to cause high dust during high wind events.
- Use of water cart and sprays to keep surfaces damp as required near sensitive receptors. A critical part of this control
  measure is identification of a sufficient water supply at the site for this purpose with adequate volume.
- Use of wind break fences.

Cleaning paved surfaces if affected by tracking of transported dust.

In addition, visual monitoring of dust across all demolition areas should be undertaken on a daily basis, or more frequently if conditions change. Weather forecasts should also be checked daily (wind speed, wind direction and rainfall) to assist in managing site activities and implementing the appropriate dust controls.

Procedures to ensure that any complaints are recorded and promptly investigated to identify and resolve the cause of the complaint should also be implemented.

### 4.1.4 Asbestos Removal

A pre-demolition asbestos survey will be required prior to demolition activities and will be used to inform an ARCP. The ARCP will be provide the appropriate controls and procedures for the management of asbestos removal and will be provide to the appropriate authorities e.g. WorkSafe. The final and/or updated SDCMP will be prepared to provide synergy with the ARCP.

### 4.1.5 Arboricultural

### **Potential Effects**

Six (6) protected street trees or groupings of trees are growing adjacent to structures proposed for demolition, with pruning anticipated for one (1) of the five individual trees and the removal of an existing garden area proposed as part of the demolition works.

### Mitigation Measures

The arboricultural assessment provides for the following tree protection measures which are to be adopted to ensure that adverse effects on the protected trees being retained within the project area are minimised and/or avoided.

- Pre-commencement meeting to be held on site and prior to works commencing to discuss all issues pertaining to the protection of the trees and to gain a common understanding of the relevant conditions of consent in that regard.
- No excavations are to be undertaken within the protected root zones of the protected vegetation.
- Protective fencing shall be installed at an appropriate alignment on the edge of the root zone, under the guidance of the appointed works arborist. This fencing shall be installed at the edge of the root zone where practicable. The fencing shall remain in place for the duration of the project in order to best protect the subject trees. The fencing is to be rento-style 1.8 metre steel mesh sections. The location of this fencing is to be confirmed and approved at the precommencement meeting.
- All pruning works are to be undertaken by a Council Approved Arborist under the supervision of the works arborist. The
  pruning is to be recorded and added to the completion log.
- Compliance with all conditions of consent relating to tree protection would be monitored by the appointed works arborist - with the detail of each visit and communication being logged. The completed log would be provided to the consent holder at the completion of the project to serve as a compliance report.

### 4.1.6 Heritage

### Potential Effects

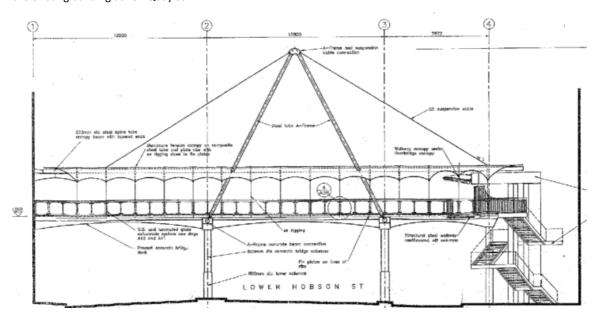
The footbridge connecting to the Downtown Car Park building is proposed to be removed. As such the following modifications are proposed to be undertaken to the façade of the heritage building:

- Demolish the existing footbridge and any fixings relating to this structure from the existing façade.
- Demolish existing glass doors including any egress controls.
- Demolish overlight infill above the existing concrete ledge and make good to sill profile and opening to accept new window.
- Infill opening to lower sill height, create new sill and opening to accept new window and finish to match existing wall (to be defined in future scope of work).
- Reinstate decorative plasterwork freeze and concrete window head to match existing along façade.

Install new steel window and overlight to match existing façade.

### Mitigation Measures

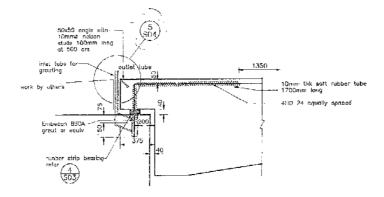
The main concrete pedestrian bridge has three spans. These spans are formed between three concrete piers and a support at the existing building at 204 Quay St.



Prior to road closure, the end of the concrete deck element adjacent to the building would be propped securely to the footpath level, with appropriate pedestrian protection measures provided (hoarding / barricades) the roof would be demolished and removed to the deck level. The roof spine elements will also be propped.

Once road is closed, the cables will be removed and the spine element are ready to remove the end of the deck unit would be cut though flush with the face of the existing building, leaving a small remnant piece attached to the building. Once the other end adjacent the western intermediate pier is also cut free this deck span can be removed.

The A-frame masts will then be cut free and removed. The methodology to remove the deck spans involves cutting them at the junction with the existing piers and the support at the existing building and then removing each span, one at a time. Propping would be in place to secure the spans until ready for removal. The piers would be demolished separately after the spans are removed.



The remnant piece of deck adjacent the building can be grouted in place to ensure it is safely secured to the existing building. The propping and pedestrian protective measures at footpath level can then be removed, hoardings at first floor level to secure the opening to the inside of the locked doors shall remain until façade remediation works are complete.

# 6 Implementation and Operation

This section of the Draft SCDMP addresses the implementation and operation of the SCDMP

### 6.1 Management Structure and Responsibility

Each person involved in the Project has equal responsibility to avoid, remedy or mitigate potential adverse environmental effects.

The expected management roles on site are provided below. The management structure and role descriptions for the Demolition Contractor shall be provided upon contract award.

Position	Name	Company	Responsibility	
Precinct Properties Development Manager	Tim Woods	Precinct Properties or Delegate	<ul> <li>Overall Responsibility for the Project</li> </ul>	
Engineer to the Contract	ТВС	ТВС	<ul> <li>Administration of the Contract</li> </ul>	
Engineer's Representative	TBC	RCP	<ul> <li>Overall responsibility for construction activities on site.</li> <li>Responsibility to ensure the implementation of the SCDMP.</li> <li>Administration of the Contract</li> </ul>	
Project Manager	Andre Koolen or Delegate	RCP	<ul> <li>Project delivery and ultimate responsibility</li> </ul>	
Demolition Contractor				
Demolition Contractor	ТВС	ТВС	<ul> <li>Contractor representative with overall responsibility for the</li> </ul>	
Project Manager	TBC	TBC	<ul><li>Project</li><li>Compliance and updating of SCDMP</li></ul>	
Site Manager	TBC	TBC	<ul> <li>Responsibility for site environmental management</li> <li>Review and reporting on performance and compliance</li> <li>Onsite compliance with conditions attached to consents / approvals</li> </ul>	

			<ul> <li>Update and maintain environmental risk register</li> <li>Facilitate and oversee monitoring</li> <li>Maintain complaints, incidents register</li> </ul>
Environmental Manager	TBC	TBC	<ul> <li>Environmental induction and training</li> <li>Responding to incidents, including seeking specialist contamination advice where necessary, and providing feedback</li> <li>Environmental reporting</li> <li>Maintaining the SCDMP</li> <li>Compliance with SCDMP</li> <li>Liaison with Council</li> </ul>
Licenced Asbestos Removalist	TBC	TBC	<ul> <li>Responsible for notifying WorkSafe of asbestos removal work,</li> <li>preparing and providing an Asbestos Removal Control Plan (ARCP)</li> <li>and supervision of asbestos removal work in compliance with the Health and Safety at Work (Asbestos) Regulations 2016.</li> </ul>

Generally, the key roles of personnel as they relate to environmental management during the construction of the Project are detailed below and will be confirmed following appointment of the Main Contractor. Roles and responsibilities of personnel which implement specific environmental controls and monitoring programmes (such as the arborist, asbestos removalist) are to be detailed in the relevant SEMP's.

### 6.1.1 All Staff

- Familiarisation with the requirements of the Site Clearance and Demolition Management Plan () and Specialised Environmental Management Plans (SEMP's).
- Responsible for reporting environmental incidents, complaints, defects, and other problem areas to senior staff as they
  arise on site.
- Ensuring that required processes and procedures for environmental management are followed.
- Ensuring that environmental mitigation and protection measures are maintained and working correctly.

 Within day-to-day work responsibilities, ensure the environment both on site and adjacent to the site is protected and respected.

### 6.1.2 Precinct Properties Representative

- Review SCDMP, Complaints Register, Incidents and Emergency Register, Non-Compliance
- Environmental Performance Report.
- Meet monthly with Environmental Manager and Site Manager to discuss non-compliance, complaints, incidents and emergencies, monitoring, auditing and review of the SCDMP and sub-plans

### 6.1.3 Project Manager

- Takes ultimate responsibility for delivery of the project.
- Establishes a Resource Consent conditions tracker to provide to the contractor to track compliance against conditions.
- Tracking the compliance of the conditions of resource consents.
- Approves environmental plans prior to issue.
- Ensures adequate resources are provided to ensure environmental issues and obligations are appropriately managed.
- Ensure that environmental requirements are incorporated into the works as required by the consent.

### 6.1.4 Site Manager

- Reviews work packages against the SCDMP to ensure a high level of performance is achieved.
- Develops, implements, and monitors demolition works ensuring compliance with consents, designations, SCDMP and SEMP's.
- Implement environmental protection measures in accordance with the contract and the SCDMP and sub-plans.
- Trains all workers in relation to environmental measures.
- Report all incidents, system defects and complaints.
- Ensure all workers and others (e.g. subcontractors and suppliers) comply with environmental operating procedures and community relations protocols.
- Provides updates against Resource Consent Conditions Tracker to confirm compliance.
- Non-compliance reporting to Consent Authorities in a timely manner.
- Provides leadership to the site construction team to achieve Project environmental objectives and requirements.
- Ensures that the SCDMP is implemented appropriately.
- Ensures environmental controls are protected and maintained on a day-to-day basis.
- Leads the emergency response crew.
- Reviews and authorises the closures of site access points to reduce the risk of dirt on roads; and
- Reviews the need to use dust control measures such as water sprayers.

### 6.1.5 Environmental Manager

- Provides leadership to ensure staff are motivated to achieve environmental standards and comply with all resource consent conditions and approvals.
- Develops, implements and reviews environmental management systems including the SCDMP for the Project.
- Co-ordinates the interfaces and communications with external agencies and stakeholders in relation to environmental management of the Project.
- Manages and co-ordinates compliance with all consents and designation conditions and any new approvals required.
- Demolition monitoring and maintaining/submitting relevant reports and records to the consenting authorities as required.

- Notifies Project Manager and Consent Authority of any significant environmental non-compliances for which they have jurisdiction.
- Responsible for resolving issues of environmental non-compliances.
- Undertakes regular site inspections and audits to ensure compliance with the SCDMP and consent conditions.
- Coordinates all site monitoring including but not limited to groundwater, water quality, dust, noise, and vibration
  monitoring and provides necessary related training and advice to staff in relation to this monitoring.
- Trains staff in site specific environmental procedures.
- Coordinates environmental emergency responses.
- Manages maintenance and monitoring of the effectiveness of erosion and sediment controls, Stormwater devices and other control devices; and
- Ensures spill kits are available and stocked and provides training on equipment use.

### 6.1.6 Stakeholder Relationship Manager

- Coordinates interfaces with external agencies and stakeholders ensuring all requirements of resource consents and approvals are met.
- Responsible for notifying surrounding landowners of works occurring within the near vicinity and managing mitigation as required.
- Disseminates information to the public as approved by the Precinct Properties Limited Representative
- Primary contact for Project related complaints and enquiries.

### 6.2 Training

All those holding project roles that relate to compliance with consent conditions and implementation of the Contractors final SCDMP will have appropriate briefing and training in relation to the SCDMP and environmental responsibilities.

In addition to project team having relevant backgrounds and qualifications, systems to be implemented shall include:

- Site inductions communicating the specific site risks and potential impacts of work activities
- Health and Safety
- Project briefing including on the SCDMP requirements, consent conditions and consequences of non-compliance
- Ensuring specific training has been undertaken for those responsible for activities such as:
  - Environmental monitoring / sampling methods and techniques
  - Emergency responses
  - Environmental Auditing
  - Sediment and Erosion control installation
  - Spill training.

The Demolition Contractor shall develop, implement, and maintain necessary training systems to meet the requirements of this SCDMP for its staff and any subcontractors to ensure full compliance with the Resource Management Act, conditions attached to consents and approval and all applicable regulations and Management Plans.

### 6.3 Emergency Contacts and Response

This section outlines how environmental incidents / emergencies are to be managed by the Demolition Contractor if there is a requirement for an emergency response to unforeseen environmental impacts.

Incidents may include:

- Spills
- Release of hazardous substances to air or water

- Consent non-compliances
- Significant deviation from the requirements of the SCDMP or SEMP's failure to follow established processes or procedures.

An environmental emergency is an event that has a detrimental effect on the surrounding environment – causing significant harm and which is not legally permitted and as such requires an immediate response.

In the event of an environmental incident / emergency the following shall be undertaken:

- Immediate action is to be taken to stabilise the situation (i.e. cessation of works, deploy spill equipment), with specialist advice sought where necessary.
- Contractor is to contact Council within 24 hours or sooner where appropriate (i.e. hazardous substance spill)
- Any affected parties shall be contacted as soon as possible where an incident occurs that may affect land outside of the project area.
- An incident report is to be prepared, and all incidents recorded on a site incident register- which is to be elevated to project control group meetings as an agenda item. The report is to include a description of the incident; likely cause; potential or actual effects; remedial action taken; and the preventative actions taken to prevent reoccurrence.
- Emergency response and management equipment is to be made available at all times on site with all site staff made aware of the location of this equipment as part of the induction process. All staff are to be made aware of their responsibilities on site in an emergency situation.
- It is intended that following the appointment of the Demolition Contractor that a site-specific Emergency Response Plan shall be developed prior to the start of construction.

### 6.4 Engagement and Communication

The framework for engaging and communicating with stakeholders is to be outlined in a separate communication and engagement plan.

This plan shall identify the key stakeholders and a range of proposed methods for engagement acknowledging the need for a responsive approach to communications as the Project progresses.

The impacts of the Projects construction will be noticeable and as such open and two way communications will be provided to ensure people are informed as to construction impacts. This may include the following:

- Project specific website to provide project information and to be updated frequently to provide details on timing and durations, and construction processes and project progress.
- Targeted mail drops to forewarn of construction activity.
- Billboards positioned on site
- Contact details for the Project Communications Manager and as well as for the site and project manager should be provided as appropriate.
- A communications register will be kept for the project to record all enquiries and complaints with responses to be tracked and closed out within agreed timeframes.

## 7 Monitoring and Review

In order to ensure that compliance with consent conditions, legal requirements and relevant policies, standards and guidelines are achieved, on-going evaluation and monitoring shall be undertaken during construction. Environmental monitoring will be undertaken on both a scheduled (regular) and unscheduled (triggered) basis to check that specific activity controls have been implemented and that there are no adverse environmental effects being generated from the construction works.

Monitoring shall be primarily based on:

- Dust Control
- Noise and Vibration

Compliance with the Resource Consent Conditions.

### 6.1 Consent Compliance Monitoring

Scheduled monitoring of environmental performance and compliance with conditions of consent will be required throughout the deconstruction phase. This will enable the effectiveness of environmental controls to be determined and corrective action to be taken where there is an identified non-compliance.

Environmental monitoring shall take place

- Prior to demolition to establish necessary baselines
- During deconstruction to assess the impact of construction on the environment
- After construction to assess the impact of completed works.

Monitoring requirements at various stages of demolition as prescribed by conditions of consent of the consent and shall be undertaken and provided to the relevant authorities as required.

### 6.2 General Site Monitoring

General Site Monitoring shall be undertaken by the contractor on site, in line with the timeframes noted below.

In addition to the formal environmental monitoring, the following general site monitoring shall also be undertaken:

- Daily inspections to be conducted on the basis of informal visual inspections to check SCDMP compliance and focusing
  on specific activities including for example refuelling procedures
- Daily checking of weather and any necessary pre and post weather event inspections
- Inspections as required for environmental control procedures e.g. dust control and tree protection.
- Weekly formal site inspections to be completed by Site Manager to check compliance with consent conditions and content of the final SCDMP. Issues are to be noted where they present a significant risk – i.e. noisy works
- Monthly –Project Manager will conduct monthly inspection on site to confirm the environmental monitoring programme and work procedures are being implemented in accordance with consents, approvals and guidelines of the final SCDMP.
- Triggered inspections will be undertaken in response to the following:
  - Feedback upon receiving feedback on any issue an inspection of that issue / area shall be undertaken
  - Extreme Weather Site control measures shall be inspected prior to and during (if possible) as well as after an
    extreme weather event.
  - Non-compliance inspections will be undertaken immediately following an incident, emergency or near miss.
- Reporting on the basis of the above shall be presented at monthly PCG and / or Board meetings and include a summary of any issues and actions. Regular meetings shall also be held on site between the Project Manager and Contractor to discuss outcomes of daily and weekly monitoring.

### 6.3 Reporting

Reporting requirements for this SCDMP are provided below and are subject to the appointment of the Demolition Contractor:

- Statutory reporting requirements / Resource Consent compliance report as per resource consent conditions
- Non-compliance reporting where corrective actions are required in response to failure to comply with consents, approvals and / or operational procedures
- Risk reports
- Site Monitoring / Inspection report and any corrective actions
- Incident reporting and responses

- Complaints and resolutions
- Site auditing
- Internal monitoring on site of compliance with SCDMP and SEMP requirements and identification of any necessary amendments

On the basis of the above, a monthly report shall be prepared that provides a summary of all information pertaining to results of monitoring, sampling, environmental effects, incidents, complaints and the like.

### 6.4 SCDMP Management

This draft SCDMP will be reviewed following confirmation of the resource consent and conditions and will be finalised in accordance with those conditions. The SCDMP will be updated to reflect consenting requirements, and demolition contractor engagement.

# **APPENDIX 1 Demolition Methodology Schematics**

# **APPENDIX 2** Asbestos Management Plan Downtown Carpark Redevelopment

Site Clearance and Demolition Management Plan

# **APPENDIX 3** Draft Demolition Noise and Vibration Management Plan Downtown Carpark Redevelopment

# **APPENDIX 4** Preliminary Demolition Traffic Management Plan Downtown Carpark Redevelopment

APPENDIX 5	
Dust Management Plan	
Downtown Carpark Redevelopment	