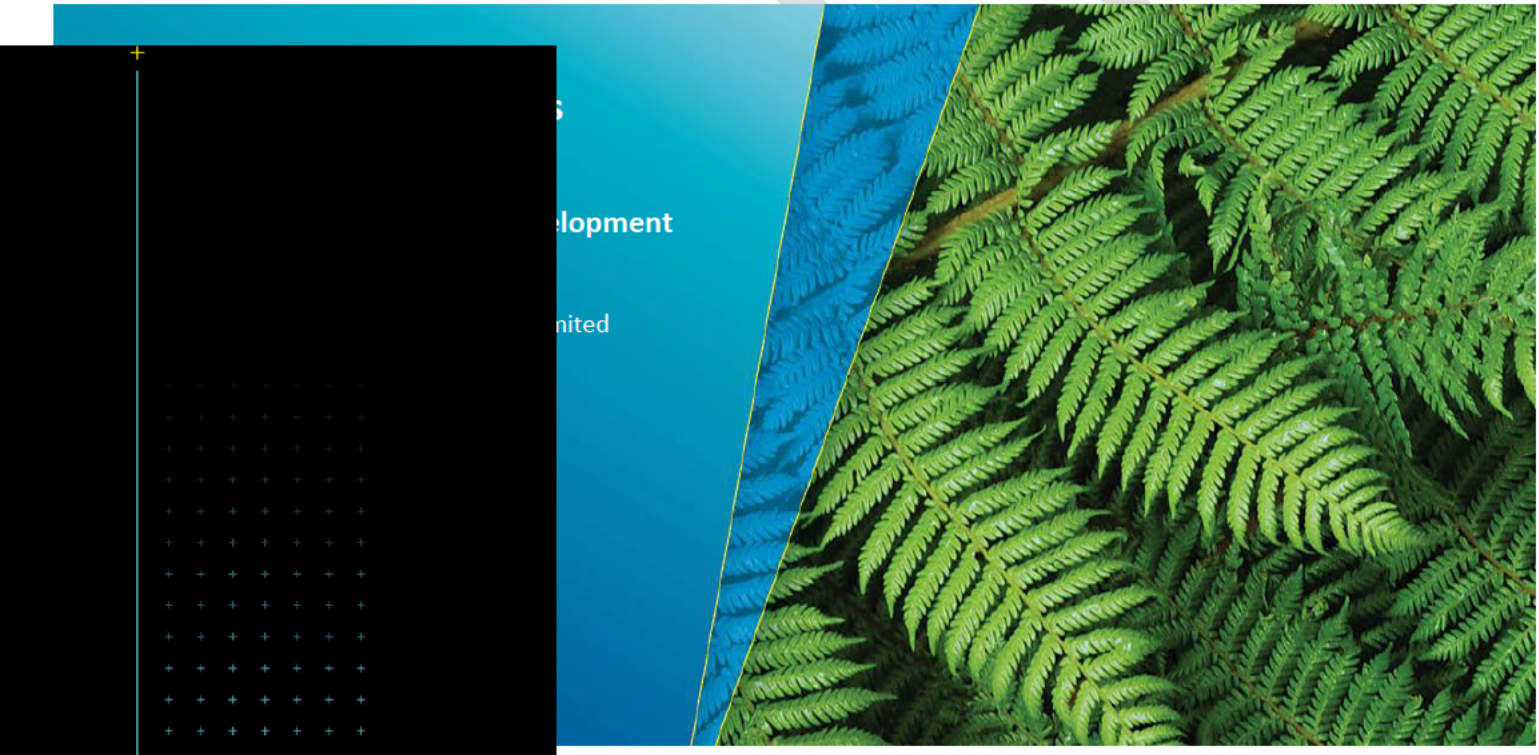
REPORT

Tonkin+Taylor



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Document control

Title: Hazardous Substances Management Plan – Downtown Carpark Site Development					
Date	**Version**	**Description**	**Prepared by:**	**Reviewed by:**	**Authorised by:**
November 25	1	Draft to support fast track application	R. Turnwald	R. Van de Munckhof	P. Millar

Distribution:

Precinct Properties New Zealand Limited	1 electronic copy
Tonkin & Taylor Ltd (FILE)	1 electronic copy

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1 Introduction

RCP on behalf of Precinct Properties NZ Limited ("**Precinct**") has engaged Tonkin and Taylor Ltd (T+T) to prepare this Hazardous Substances Management Plan (HSMP) as part of the proposed Downtown Carpark Site Development at 2 Lower Hobson Street ("**Project**").

The Project proposed at 2 Lower Hobson Street (hereafter referred to as the 'Site') is located at the current Downtown Carpark in a densely built-up section of Auckland City's CBD at the corner of Lower Hobson Street and Custom Street West. The location of the Project is depicted in **Figure 1.1** below.

Figure 1.1: Site location plan *Sourced from: LINZ aerial imagery*

The key hazardous substance stored and used at the Project is diesel to operate backup power generators. The site will include a total diesel storage capacity of up to 20,000 L, across three bulk storage tanks and five smaller day tanks.

Other smaller quantities of hazardous substances may be brought to site and used for facility maintenance such as disinfection of mechanical water systems in the building, including biocides, scale control, corrosion control, dispersants and antifoams. It is expected that volume of these other chemicals will be minimal (replenished as required during compulsory monthly maintenance) and that any required ongoing package storage will be kept in a bunded enclosure in a secure plant area.

1.1 Purpose and scope of HSMP

This HSMP has been prepared to detail the controls in place at the site to manage hazardous substances and minimise the risk of release of these substances into the surrounding environment.

The HSMP shall detail the roles and responsibilities, important contact details, a hazardous substance register, pollution risks and detailed controls, spill response, emergency management, and requirements for site inspections, monitoring, staff training, audit and regular review of the HSMP.

1.2 Review schedule for HSMP

The HSMP is a living document that will be reviewed on a two-yearly basis or in the event of changes at the site and updated as necessary by Precinct.

2 Roles and responsibilities

Roles responsible for management of the Downtown West facilities are included in **Table 2.2** below.

2.1 Key contact details

Table 2.1: Key site contacts

Role	Name	Organisation	Phone (office)	Phone (mobile)	Email
Site owner/operator		Precinct Properties NZ Limited			
Facilities manager					
Maintenance team lead		Precinct Properties NZ Limited			
After hours contact		Precinct Properties NZ Limited			

External emergency contact details are provided in **Table 2.2** below.

Table 2.2: Emergency response contacts

Service	Role	Contact Details
Auckland Council Pollution Hotline	Diesel spills exceeding protection measures	09 377 3107
Police/Ambulance/Fire	Emergency response	111

3 Documentation

3.1 Register of hazardous substances

Table 3.1 summarises the register of hazardous substances stored on site.

These are principally the diesel tanks associated with back-up power generation systems, and packaged substances used in facilities maintenance.

The register will be updated once the packaged substances kept on site for the facility maintenance tasks are known.

Table 3.1: Hazardous substance register

Substance and volume	Hazard classification		Quantity	Location
Diesel 18,300 L	3.1D 6.1E 6.3B 6.7B 9.1B	Flammable liquid Category 4 Aspiration Hazard Category 1 See Note 1 Carcinogenicity Category 2 Hazardous to the aquatic environment chronic Category 2	13,000 L (3 x 4,333 L)	Basement level B4
			3,600 L (3 x 1,200 L)	Level 1 podium
			1 x 1,200 L	Basement level B1
			1 x 500 L	Basement level B1
Biocide				
Scale control agents				
Corrosion control agents				
Dispersants				
Antifoams				
Refrigerants				

Table note:
1. Class 6.3B corresponds to Skin irritation Category 3, which has not been adopted as part of New Zealand's transition to the GHS7 classification system.

3.2 Safety data sheets

All hazardous substances must have a safety data sheet (SDS). The SDS provides detailed information about a hazardous substance for people who handle, store, use, or could be exposed to them. The key information on the SDS relevant to Precinct's use of hazardous substances in facility maintenance include:

- How to respond to emergencies (e.g. first aid (Section 4), firefighting recommendations (Section 5) and measures to control spills (Section 6))
- Precautions for using, handling, storing, transporting and disposing of the product (Section 7 and 13)
- How to protect people and the environment (e.g. exposure limits and controls to prevent exposure (Section 8), recommended personal protective equipment (also Section 8), toxicological and ecological information (Sections 11 and 12))

Staff need to understand how to use an SDS to identify this information in the event of a spill.

Precinct must obtain a SDS for every hazardous substance from the manufacturer, supplier or importer:

- This includes if five years have passed since a substance was last supplied to PGW (SDS may not be older than five years)
- When there are any changes to the SDS (the supplier should notify PGW of any updated documentation)

Physical copies of the SDS must be kept near the storage location for access during an emergency.

3.3 Packaging and labelling requirements

Before containers of hazardous substances get to the workplace, importers and manufacturers must label them according to the rules made by the Environmental Protection Authority (EPA) in the Hazardous Substances (Labelling) Notice 2017.

Precinct must make sure, so far as reasonably practicable, that hazardous substances in their original containers retain the manufacturers or importer's label and that these labels are maintained in a legible condition. This could mean replacing the label if it can no longer be read or getting a replacement label for labels that fall off containers or that are damaged.

3.4 Site plans

A site plan is required that describes the physical position of all hazardous substances storage locations in relation to the legal boundary of the Site.

The site plan must also detail other safety measures such as spill kits, hydrants and firewalls.

[Plans to be updated with details prior to commissioning].

Site plans are attached as **Appendix A**.

4 Hazardous substances risk assessment

Table 4.1: Primary risk factors and mitigation measures

Event	Controls (Mitigation/ Management Measures)	Residual risk of off-site effects with controls in place		
		Likelihood	Consequence	Risk
Fire at the diesel tank	Tank selection for 240/240/240 fire-rating. The diesel tank storage locations are secured from unauthorised access. The storage areas segregate diesel storage from other hazardous substances and activities to limit the potential for and impact of a fire. Separation distances provided to public and protected places and between tanks to minimise the impact of fire at the storage locations and potential for fire to spread between locations. Emergency Response Plan in place, including provision of a pair of fire extinguishers for initial response to small fires in the vicinity of the tanks.	Unlikely	Minor	Low
Tank leak	Tanks provided with a minimum of 100% secondary containment by use of the double-skinned tanks. Interstitial space is monitored to alert operators in the event that the primary tank leaks into the second skin.	Unlikely	Minor	Low
Spill during refuelling	Refuelling is only conducted by trained individuals. Diesel tanks must possess a liquid level indicator to reduce the likelihood of accidental overfilling. Dry-break couplings used.	Unlikely	Minor	Low
Flooding in the area resulting in contamination of water	Building design includes freeboard to prevent floodwater ingress. Refuelling will not occur during flooding. The tanks are double skinned, the contents will be retained even if partially inundated.	Rare	Insignificant	Low
Spill of packaged maintenance substances	Packages used on site kept to practical minimum. If required, storage is in closed packages in bunded areas. Maintenance activities are undertaken in indoor areas isolated from the stormwater network. Maintenance activities to be undertaken by staff trained in spill response plan.	Unlikely	Minor	Low

5 Hazardous substances management controls

5.1 Signage

The requirement for signage is triggered by the volume of diesel stored on site, due to its Class 3.1D (flammable) and 9.1B (eco-toxic) hazard classifications. The trigger volumes are:

- Class 3.1D: 10,000 L
- Class 9.1B: 1,000 L.

Signs should be displayed next to the storage area and on each tank, contain the words HAZCHEM, the relevant pictograms and hazard statements, and state the precautions necessary to prevent unintended ignition of the diesel.

Depending on the final quantities and classifications of packaged substances stored for building maintenance, signage may be required at package storage areas to indicate their own hazardous substance properties.

5.2 Segregation of incompatible substances

Incompatible substances must be kept in segregated storage at all times to reduce the risk of adverse reactions in the event of a spill or fire.

For diesel, incompatible substances include all Class 1 (explosive), Class 2 (flammable gas), Class 3.2 (desensitised explosive), Class 4 (flammable solid) and Class 5 (oxidising) substances.

5.3 Secondary containment

Primary containment refers to the vessel that holds a hazardous liquid. Secondary containment is provided to capture any liquid that is lost from the primary container in the event that it is damaged or fails.

Secondary containment systems for liquid substances are required to:

- Prevent people from being directly exposed to any toxic or biological corrosive substances contained in the system
- Prevent pollution of natural resources, preserving biodiversity, safeguarding water sources, protecting aquatic life, maintaining soil fertility and mitigating long-term environmental damage.
- Prevent any of the substances contained in the system from being contaminated by incompatible substances and materials.
- Be constructed of material that is impervious to the substances stored.

Each diesel tank used at the Project site is designed with integral (double-skinned) secondary containment.

Locations where packages of hazardous substances (such as cleaning products, water system treatment chemicals) must be provided with secondary containment, such as storage within a bunded cabinet or on a pallet bund.

6 Emergency response

6.1 Spill response provisions

The spill response plan will be finalized as part of the site commissioning and will be ready for implementation prior to stocking of hazardous substances at the Site.

A draft spill response action plan is attached as **Appendix B.**

6.1.1 Spill kit locations

The locations of all spill kits on site will be included in finalized plans and will be brought to the attention of staff during training. Locations of spill kits will also be indicated by clearly legible signage.

At a minimum, a spill kit will be located at each room containing diesel tanks and at any package storage area for maintenance substances.

6.1.2 Spill kit contents

The minimum contents of spill kits will be determined in the final version of this document, but are expected to include:

- Absorbent pads
- Spill socks or booms
- Absorbent sand or fibre
- Safety Gloves
- Goggles
- Hazardous Waste Bags
- Tape
- A Laminated Instruction Card

Spades, shovels, and other general site equipment may also be used in case of an emergency.

6.1.3 Spill response training

Training on the use of spill kits in an emergency will be provided to maintenance contractors and facilities staff as part of site inductions.

6.1.4 Spill waste disposal

Waste produced in the use of spill kits will be bagged and stored in leak-proof containers. These containers will be labelled to indicate the type of hazardous material present and will subsequently be disposed of at a licensed hazardous materials disposal facility.

6.1.5 Incident reporting requirements

All spills related to the diesel stored on site or any packaged hazardous substances used in facility maintenance must be reported to the facility manager as soon as practical following the spill event.

If this spill is greater than 20 L in volume and there is a risk that this has entered the stormwater network, the incident must be reported to the Auckland Council Pollution Hotline. The contact details for the facility manager and the Auckland Council Pollution Hotline are included in **Table 2.1** and **Table 2.2** respectively.

6.2 Fire response

6.2.1 Fire response provisions

Diesel is a low flammability liquid. Each diesel tank is four-hour fire-rated to minimise the hazard to people at property at the development.

On discovery or accidental ignition of a fire in the vicinity of the tanks, the fire response action plan in **Appendix C** must be followed, and may include use of a fire extinguisher on small fires, if safe to do so.

6.2.2 Evacuation plan

The Project has an evacuation plan prepared in accordance with the requirements set in the *Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes) Regulations 2018*.

The Evacuation Plan (Jensen Hughes, November 2025) provides the evacuation strategy for each area of the building dependent on the location of the detected fire (the 'zone of activation'). Each strategy includes egress routes and assembly points. The draft Evacuation Plan is attached as **Appendix D**.

6.2.3 Fire extinguishers

A minimum of two fire extinguishers must be kept at each diesel tank storage area in case of small fires. The extinguishers must have a rating of at least 30B in accordance with *AS/NZS 1850:2009—Portable fire extinguishers—Classification, rating and performance testing*. Foam, dry chemical powder (ABE or BE) extinguishants are recommended for Class B flammable liquid fires in *NZS 4503:2005 Hand Operated Fire-fighting Equipment.*

The following are the relevant requirements from NZS 4503:2005 for the placement of fire extinguishers in commercial premises:

- Fire extinguishers should be located in conspicuous positions, available at all times for immediate use and fitted on brackets or stands where they will be readily seen by any person following an escape route.
- Fire extinguishers should be positioned no more than 10 meters away from potential fire hazards.
- Fire extinguishers should be mounted at a height of 1 to 1.5 meters above the floor.
- Fire extinguishers should be located near exit points and along escape routes.
- Fire extinguishers should be regularly inspected and maintained to ensure they are functional and within their service date.
- Place fire extinguishers in areas where they are not likely to be obstructed by furniture or equipment.
- Avoid placing fire extinguishers in areas where they are exposed to extreme temperatures or moisture.
- Do not place fire extinguishers immediately next to flammable materials.

6.3 Drills

Emergency scenario drills are an important measure to test the effectiveness of the planned responses, to ensure staff are aware of requirements and to identify areas for improvement in the execution of response procedures.

A schedule of drill scenarios is provided in **Table 6.1**.

Table 6.1: Drill scenarios

Scenario	Frequency
Fire	6-monthly evacuation test required by *Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes) Regulations 2018*
Small spill (<20 L) of liquid	One spill scenario per 24 months
Large spill (>20 L) of liquid	

7 Site inspections

It is the responsibility of the facilities manager or a delegated person to regularly inspect the activities taking place on site to ensure compliance with the conditions of this HSMP. The specifics of these inspections may require updating over the duration of the site's operation to include any changes in activities, mitigation measures, risks, management processes, and responsibilities.

A full inspection list will be appended to this document once inventories, plans, and staff responsibilities have been finalized.

Monthly inspections shall be undertaken and recorded to confirm the safe storage of hazardous substances. These inspections will include at minimum: all of the diesel storage tanks, any other hazardous substances storage location, and the refuelling connection bay to ensure no deterioration or functional impairment is apparent.

A draft inspection checklist is attached as Appendix E.

8 Staff training schedule

The Site Manager is responsible for ensuring that all relevant operational safety procedures are properly implemented within their designated area of responsibility. Suitable induction and ongoing training will be established and maintained to ensure employees and subcontractors at each function are aware of:

- The importance of conformance with the requirements of this HSMP.
- Their roles and responsibilities in achieving conformance with the site-specific plans and consent conditions.
- Actions required by the Spill Response Plan when an incident takes place.
- Accident and incident reporting.

Training will be renewed for all staff on a two-yearly basis, during spill response drills. Any training records will be maintained and must also identify staff and contractors with external training certifications such as those carrying specific licences for the handling of hazardous substances, such as diesel delivery contractors.

9 Applicability

This report has been prepared for the exclusive use of our client Precinct Properties New Zealand Limited , with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that our client will submit this report as part of an application for resource consent under the Fast-Track Approvals Act 2024.

This management plan has been prepared in accordance with our proposal[1] dated 14 February 2023 (T+T ref:1016043.0000) and variation orders dated 18 February 2025 and 8 August 2025 (T+T reference 1016043.2000).

Tonkin & Taylor Ltd
Environmental and Engineering Consultants

Report prepared by:

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Rose Turnwald
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Authorised for Tonkin & Taylor Ltd by:

[redacted]

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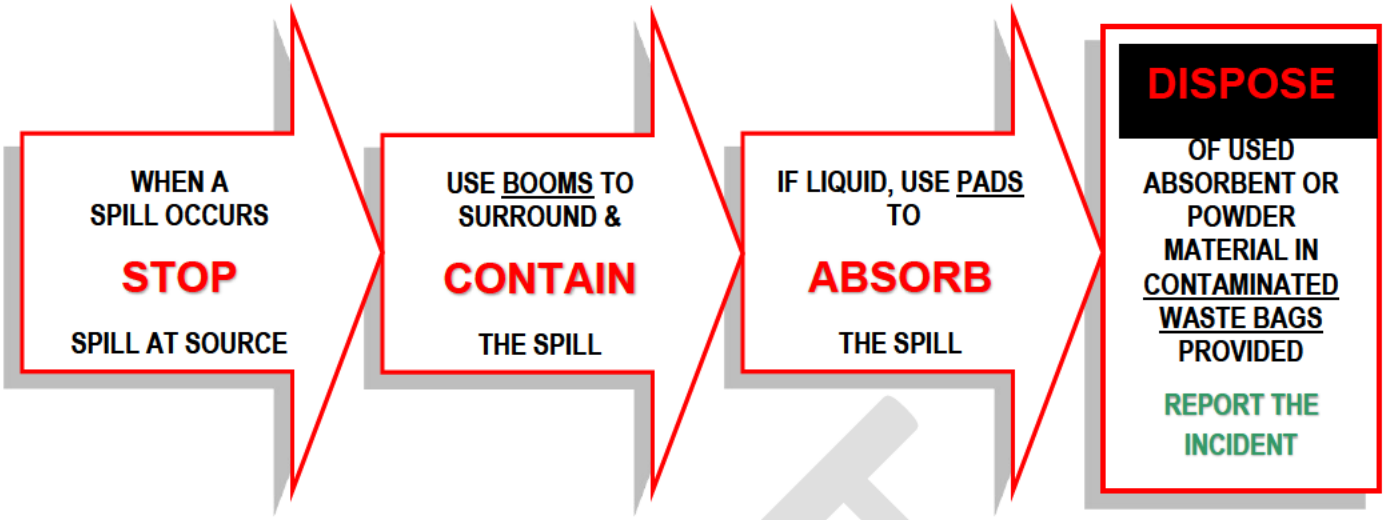
Peter Millar
Project Director

ROTU
P:\1016043\1016043.2000\IssuedDocuments\20251105 Diesel tank and HSMP\1016043.2_HSMP_Draft_clean.docx

[1] T+T LOE, 14 February 2023. *"Downtown Carpark Redevelopment – Geotechnical and Environmental Engineering/Civil and Infrastructure Services"*, Job number 1016043.

Appendix A Site plans

Appendix B Spill response action plan



DO NOT ALLOW ANY CHEMICALS, OILS OR SUBSTANCES TO ENTER THE STORMWATER DRAINS

1. When a spill is identified, if safe to do so, a barrier must be put in place to contain the spill and protect the stormwater system. Place drain covers over any proximate drains adjacent to the spill to prevent discharge of contaminants.
2. Notify your Site Manager of spill location and type and keep other personnel away.
3. Identify type of material involved in the spill (i.e., flammable/corrosive liquid, alkaline powder). Obtain and consult Safety Data Sheets (SDS).
4. All persons involved in containing and cleaning up of a spill must wear the appropriate Personal Protective Equipment – refer to the SDS. The following equipment is available at spill station:
   - Eye protection, (i.e., goggles)
   - Hand protection (i.e., impervious rubber gloves)
5. For minor spills that can be controlled and safely cleaned up, place contaminated material into contaminated waste bags, and follow instructions on SDS for disposal.

DO NOT WASH DOWN THE AREA – USE ABSORBENT MATERIALS OR HYDROVAC SERVICE IF NEEDED

6. For large scale or hazardous spills contact Fire Brigade on 111 and follow emergency procedures.
7. Any spills larger than 20 L or are likely to get into the stormwater system shall be notified to the Auckland Regional Council immediately on (09) 366 2000.

Appendix C Fire response action plan

Standard fire response: alarm and evacuation

8 **Raise the alarm** by activating the nearest fire alarm.

9 **Evacuate** any people from the area. Advise that they follow the evacuation procedure.

10 **Call emergency services** (dial 111) and ask for Fire.

11 **Tell the operator hazardous substances (diesel) are present** at the site and if they are involved in the fire.

12 **Call site management** to report the incident.

Using a fire extinguisher

1 **Sound the fire alarm and call emergency services**, if you haven't already.

2 **Assess the fire** – use an extinguisher *only* if:

- The fire is small and contained (wastebasket size or smaller).
- You have a clear escape route.
- The correct extinguisher for the fire type is available (see types in table overleaf).
- You feel confident in using it.

3 **Position yourself** with your back to an exit, so you can retreat if necessary.Stand approximately 2 -3 m from the fire.

4 **Operate the extinguisher** as follows:

- Pull the pin

  This unlocks the operating lever and allows you to discharge the extinguisher.
- Aim low

  Aim the nozzle or hose at the base of the fire, not the flames.
- Squeeze the handle

  Squeeze the handle slowly and evenly to release the extinguishing agent.
- Sweep side to side

  Move the nozzle from side to side across the base of the fire until it appears out.

  Watch the area; if it reignites, repeat as necessary.

5 **Leave immediately if you're unable to extinguish the fire**.

6 After the incident, have the extinguisher recharged or replaced immediately, even if only partially discharged.

Do NOT use water on electrical or oil fires.

Evacuate immediately if the fire spreads or becomes uncontrollable.

Fire extinguishant selection chart (Table J2 of NZS 4503:2005 Hand Operated Fire-fighting Equipment)

Appendix C Table 1: Fire extinguishant selection chart (Table J2 of NZS 4503:2005)

Extinguishant	TYPE OF FIRE						
	Class A	Class B	Class C	Class E	Class F	Class D	Comments
	Wood paper plastics	Flammable liquids	Flammable gases	Electrically energized equipment	Cooking oils and fats	For fire involving combustible metals use special purpose fire extinguisher	
Water	**YES**	NO	NO	NO	NO	NO	Dangerous if used on flammable liquid, energized electrical equipment and cooking oil/fat fires
Wet chemical	YES	NO	NO	NO	**YES**	NO	Dangerous if used on energized electrical equipment
Foam	YES	**YES**	NO	NO	LIMITED	NO	Dangerous if used on energized electrical equipment
ABE powder	**YES**	**YES**	**YES**	YES	NO	NO	Look carefully at the extinguisher to determine if it is a BE or ABE unit as the capability is different
BE powder	NO	**YES**	YES	YES	LIMITED	NO	Look carefully at the fire extinguisher to determine if it is a BE or ABE unit as the capability is different
Carbon dioxide	LIMITED	LIMITED	LIMITED	**YES**	LIMITED	NO	Not suitable for outdoor use

NOTE –

1) LIMITED indicates that the extinguishant is not the agent of choice, but may have a limited extinguishing capability.
2) Solvents such as alcohol and acetone mix with water and therefore require alcohol-resistant foam.
3) Bold text indicates the class or classes in which the agent is most effective.

Reference: New Zealand Standard. (2005). Hand operated fire-fighting equipment (NZS 4503:2005), Appendix J Table J2.

Appendix D Evacuation Plan

Consultant's advice

Project:	Downtown Carpark Site Development	Project number:	4661
Subject:	Draft Evacuation Plan	Date:	November 7, 2025
Prepared by:	Raymond Qiu	Rev:	1.1

1.0 Introduction

1.1 Project overview

Downtown Carpark Site Development is the development of the Downtown Carpark site into an integrated mixed-use precinct ("**Project**"), located at 2 Lower Hobson Street in the Auckland City Centre.

This includes the construction of two high-rise towers above an eight-level podium complex and an interconnected basement. The Project will also communicate with the existing neighbouring Aon Centre and HSBC Tower.

Tower 1 ("**T1**") sits atop Podium 1 ("**P1**") and contains commercial office and plant spaces, and is approximately 220 m tall. Tower 2 ("**T2**") sits atop Podium 2 ("**P2**"), is approximately 158 m tall and contains residential apartments, a hotel and supporting spaces. In addition to the towers, a shorter two-level podium building ("**P3**") will be constructed as part of the podium space. The podium buildings surround a semi-enclosed public "Urban Room" which connects Customs and Lower Hobson Streets, and contains retail and public circulation spaces.

A 3D render of the proposed building is shown in Figure 1, sourced from the architectural drawings by Warren and Mahoney. Figure 2 shows the key components of the Project.

The Project is currently in the preliminary design phase and Jensen Hughes has prepared a fire engineering brief ("**FEB**") outlining the proposed assessment methodologies and acceptance criteria. The FEB is currently under review by regulatory stakeholders – Auckland Council and Fire and Emergency New Zealand ("**FENZ**").

Figure 1: 3D renders of the Project – from Warren and Mahoney architects.

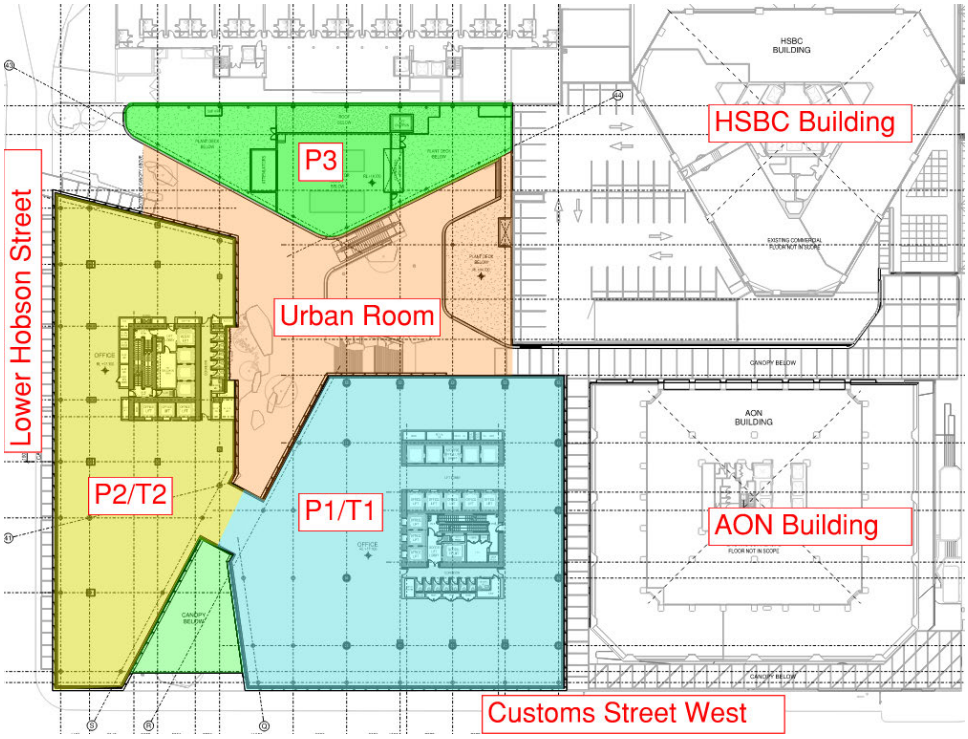


Figure 2 Plan view of Downtown West development, showing primary components.

2.0 Development-wide evacuation philosophy

The Project will adopt a staged evacuation philosophy. Fire alarms and notifications are managed through the fire alarm panel and the Emergency Warning and Intercommunication System ("**EWIS**") with Warden Intercom Phones, located in the Fire Control Centre on Level B01. The fire alarm and EWIS panels are directly accessible from the primary FENZ attendance point on Customs Street West.

The Project will be divided into evacuation zones so that a fire incident can be managed locally with prioritised evacuation of the affected zone first (and those immediately adjacent), followed by the phased evacuation of the same building. The staged approach is intended to prioritise the zone most at risk while reducing unnecessary disruption to unaffected areas and to minimise stair congestion within the towers. This strategy is illustrated in Figure 3.

The general evacuation strategy for tower floors is as follows – refer to the FEB prepared by Jensen Hughes dated 29th September 2025 for further information on the proposed strategy.

a. Following activation of a fire alarm device or sprinkler on a given floor, the initial stage evacuates the fire floor together with the floor above and the floor below. Subsequently, the evacuation proceeds in a 'top down' manner in stages following a set time which will be determined by egress modelling.

b. Where a fire occurs on linked floors that form part of the same firecell, all linked levels evacuate together, followed by a phased evacuation in a top-down manner.

c. The EWIS allows FENZ to trigger the evacuation of additional floors or zones, or halt the sequence as conditions dictate.

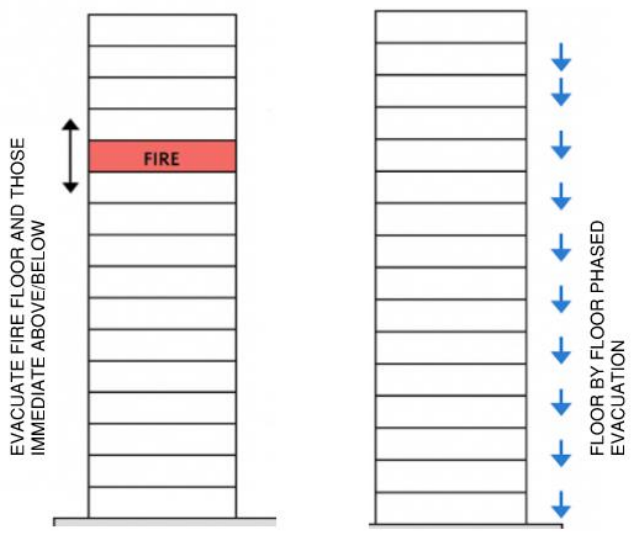


Figure 3 Left: Initial stage of fire - Fire floor + Floor Above + Floor Below evacuates.
Right: Evacuation proceeds in a top-down matter following initial evacuation

Evacuation will typically be limited to the building where the fire alarm has activated, with response in adjoining buildings limited to an alert signals unless directed by the FENZ incident controller at the EWIS panel, or in the unlikely scenario where smoke or fire spreads between buildings. The evacuation zoning between different components of the development is shown in Table 1.

Table 1: Proposed evacuation zones and preliminary evacuation matrix.

Zone of Activation	Basement	P1	P2	P3 / Urban Room	T1	T2
Basement	Simultaneous evacuation to outside	Alert	Alert	Alert		
P1	Alert	Sequenced evacuation to outside	Alert	Alert	Sequenced evacuation to outside	
P2	Alert	Alert	Sequenced evacuation to outside	Alert		Sequenced evacuation to outside
P3 / Urban Room	Alert	Alert	Alert	Simultaneous evacuation to outside		
T1		Sequenced evacuation to outside			Sequenced evacuation to outside	
T2			Sequenced evacuation to outside			Sequenced evacuation to outside

Potential assembly points for occupants who have evacuated from the building are located at the viaduct area, Quay Street and/or along Lower Albert Street as shown in Figure 4. Confirmation of the assembly points will be subject to input from the client and their nominated evacuation consultant who will be required to prepare an evacuation scheme for approval under the Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes) Regulations 2018.

Figure 4: Site plan showing location of proposed development and assembly points

3.0 Component-based evacuation philosophy

The following sections outline the evacuation design of the different components of the building. The egress routes have been designed and sized in accordance with the fire engineering strategy, which have been determined in accordance with the proposed alternative solution methodology following the Verification Method C/VM2 design framework.

Note that the Project is currently progressing through the Preliminary Design stage, and the layouts are therefore subject to change as the design develops. For further information on the fire engineering design, refer to the FEB.

3.1 Basement levels – B01 to B04

3.1.1 Available egress routes

The basement levels are served by three egress stairs, one beneath each podium building. The basement stairs are fire separated below the level of the final exit to provide protection to the P1 and P2 stair shafts above.

- P1 stair – discharges south of the development on Customs Street West
- P2 stair – discharges west of the development on Lower Hobson Street
- P3 stair – discharges into the service lane east of the development

These routes are illustrated indicatively in Figure 5.

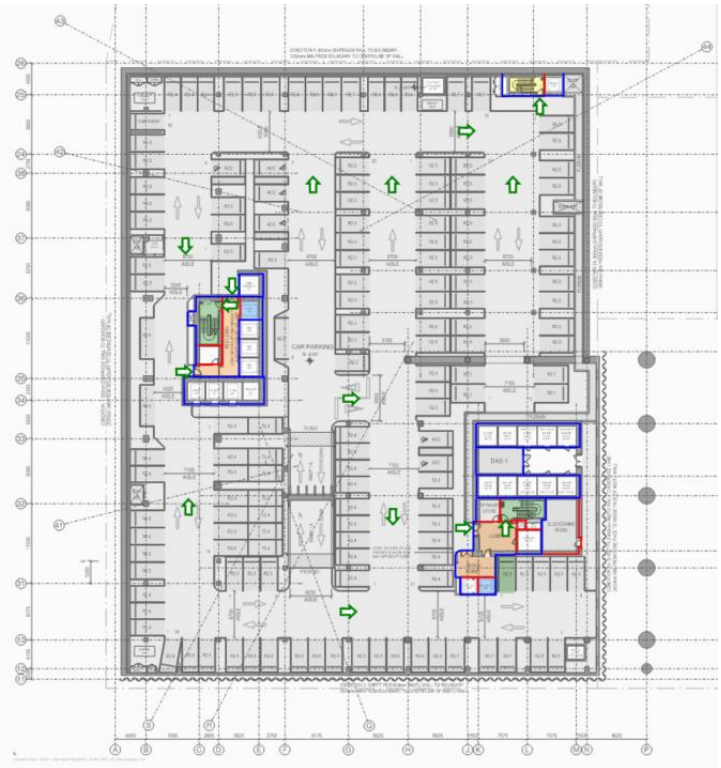


Figure 5: Level B02 Escape Routes

3.1.2 Fire alarm response

On fire alarm activation:

- The basement zones evacuate to Level 00 using the available egress routes described above.
- The podium spaces (P1, P2, P3 and the Urban Room) are alerted but are not instructed to evacuate. The FENZ incident controller can extend the evacuation sequence using the EWIS if required.
- The towers are not alerted by default. The FENZ incident controller can extend the alert or evacuation sequence using the EWIS if required.

3.2 Podium buildings P1 and P2

P1 is served by two egress stairs in a scissor stair configuration, which are a continuation of the stairs serving all levels of T1 above. These stairs discharge via fire separated corridors leading to Customs Street West. Additional escape routes provided at grade on Levels 00 and 01.

P2 is served by two egress stairs in a scissor stair configuration, which are a continuation of the stairs serving all levels of T2 above. Additional escape routes are also provided at grade on Level 00.

The two podium buildings (P1 and P2) are designed to evacuate independently and are therefore fire separated as illustrated in Figure 6 – i.e., a fire in P1 does not trigger the evacuation of P2, and vice versa. This strategy has been implemented to minimise disruption to building occupants, as agreed with the client.

Figure 6: P1 and P2 Escape Routes, Level 04.

3.2.1 Fire alarm response

On fire alarm activation:

- The relevant podium building (either P1 or P2) evacuates to Level 00 using the available egress routes described above. Following the equation sequence outlined in Table 1, the connecting tower above (either T1 or T2 depending on whether the fire is occurring in P1 or P2 respectively) will also be evacuated from the top down as part of the automatic sequence.
- The remainder of the podium (including the Urban Room) and the basement are alerted but are not instructed to evacuate. The FENZ incident controller can extend the evacuation sequence using the EWIS if required.
- The non-impacted building (i.e., P2/T2 if a fire occurs in P1 - and vice versa) is not alerted by default. The FENZ incident controller can extend the alert or evacuation sequence using the EWIS if required.

3.3 Podium building P3 and Urban Room

P3 is served by two stairs, one of which egresses directly to Lower Hobson Street via a corridor at Level 00, with the other discharging to the service lane east of the development.

The Urban Room is provided with two egress primary egress routes which provide access directly to Lower Hobson Street and Custom Street West as illustrated in Figure 7. Alternatively, egress on Level 1 of the Urban Room is provided via the external linkway towards the Aon building, or down the circulation stairs to Level 00, and via the above routes to the street.

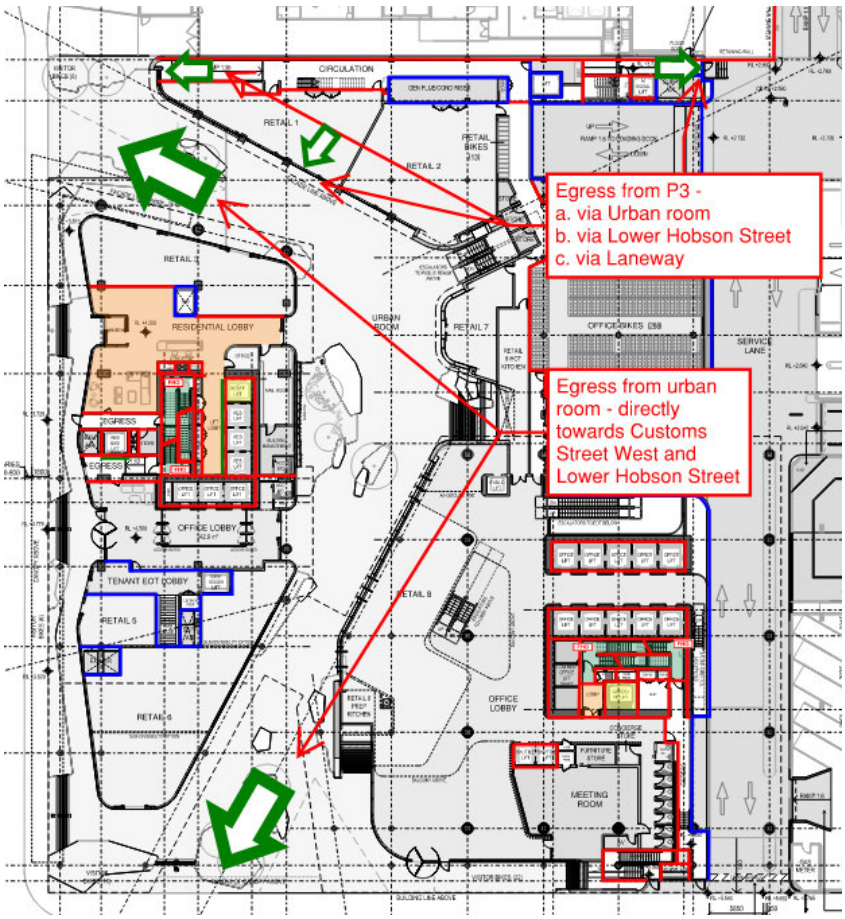


Figure 7 Urban Room and P3 key egress routes

3.3.1 Fire alarm response

On fire alarm activation:

- P3 and the Urban Room evacuate using the available egress routes described above. Following the equation sequence outlined in Table 1, the connecting tower (either T1 or T2 depending on whether the fire is occurring in P1 or P2 respectively) will also be evacuated as part of the automatic sequence.
- The remainder of the podium (P1 and P2) and the basement are also alerted but do not evacuate. The incident controller can extend the evacuation sequence using the EWIS if required.

- The remaining buildings in the development (i.e., P1/T1 and P2/T2) are not alerted by default. The FENZ incident controller can extend the alert or evacuation sequence using the EWIS if required.

3.4 Tower levels – T1 and T2

Each tower is served by two pressurised egress stairs in a scissor stair configuration. These continue down through the podium levels, and discharge to either Customs Street West or Lower Hobson Street via fire separated corridors as noted above.

Figure 8 shows a typical floor layout and the escape routes for T1 and T2.

Figure 8: Typical layouts and escape routes for T1 (left) and T2 (right).

3.4.1 Fire alarm response

On fire alarm activation:

- The fire-impacted tower evacuates to Level 00 using the available egress routes described above. Following the equation sequence outlined in Table 1, the connecting podium (either P1 or P2 depending on whether the fire is occurring in T1 or T2 respectively) will also be evacuated as part of the automatic sequence.
- The remainder of the development (including the podium and basement) is not alerted by default. The FENZ incident controller can extend the alert or evacuation sequence using the EWIS if required.

4.0 Conclusion

This document provides a draft summary of the intended evacuation plan and strategy for the Project. It is issued for coordination and review purposes only and should not be relied upon as a final design. Input from the client and their nominated evacuation consultant will be required to further develop the evacuation requirements across the Project.

All details, assumptions, and evacuation sequencing remain subject to confirmation through the FEB process, and the subsequent Fire Engineering Reports. It is noted that the Project is in the preliminary design phase, and so changes may occur as the design continues to progress.

For further information on design parameters, performance objectives, and verification assessments, refer to the FEB by Jensen Hughes dated 29th September 2025.

Quality management

Revision	Date	Revision Description		
1.1	7/11/2025	For information		
		Prepared	**Reviewed**	**Authorised**
		Raymond Qiu	Jeremy Gall	Raymond Qiu

Appendix E Inspection list

Record of inspections

Name: _____

Date: _____

Diesel storage		**Comments**
Diesel bulk tanks are free of leaks and visible damage.	**Basement 04** ☐ **Basement 01** ☐ **Podium level 1** ☐	
All diesel day tanks are free of leaks and visible damage.	**Basement 04** ☐ **Basement 01** ☐ **Podium level 1** ☐	
Areas around diesel tanks does not have accumulated liquids or cracks.	**Basement 04** ☐ **Basement 01** ☐ **Podium level 1** ☐	
Check that HAZCHEM signage is displayed at each fuel tank	**Basement 04** ☐ **Basement 01** ☐ **Podium level 1** ☐	
General chemical storage facilities		
Packaged liquids are stored upright in bunded areas and are not damaged or leaking.	☐	
Check that HAZCHEM signage is displayed at the storage area [if required]	☐	
Spill kits		
Check that the spill kits are in the correct location and are easily accessible to respond to spills of environmentally hazardous materials	☐	
Check that the spill kits are fully stocked.	☐	
Check that the spill kits are easily identified by clear signage.	☐	

Inspection notes:

_____

_____

_____

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