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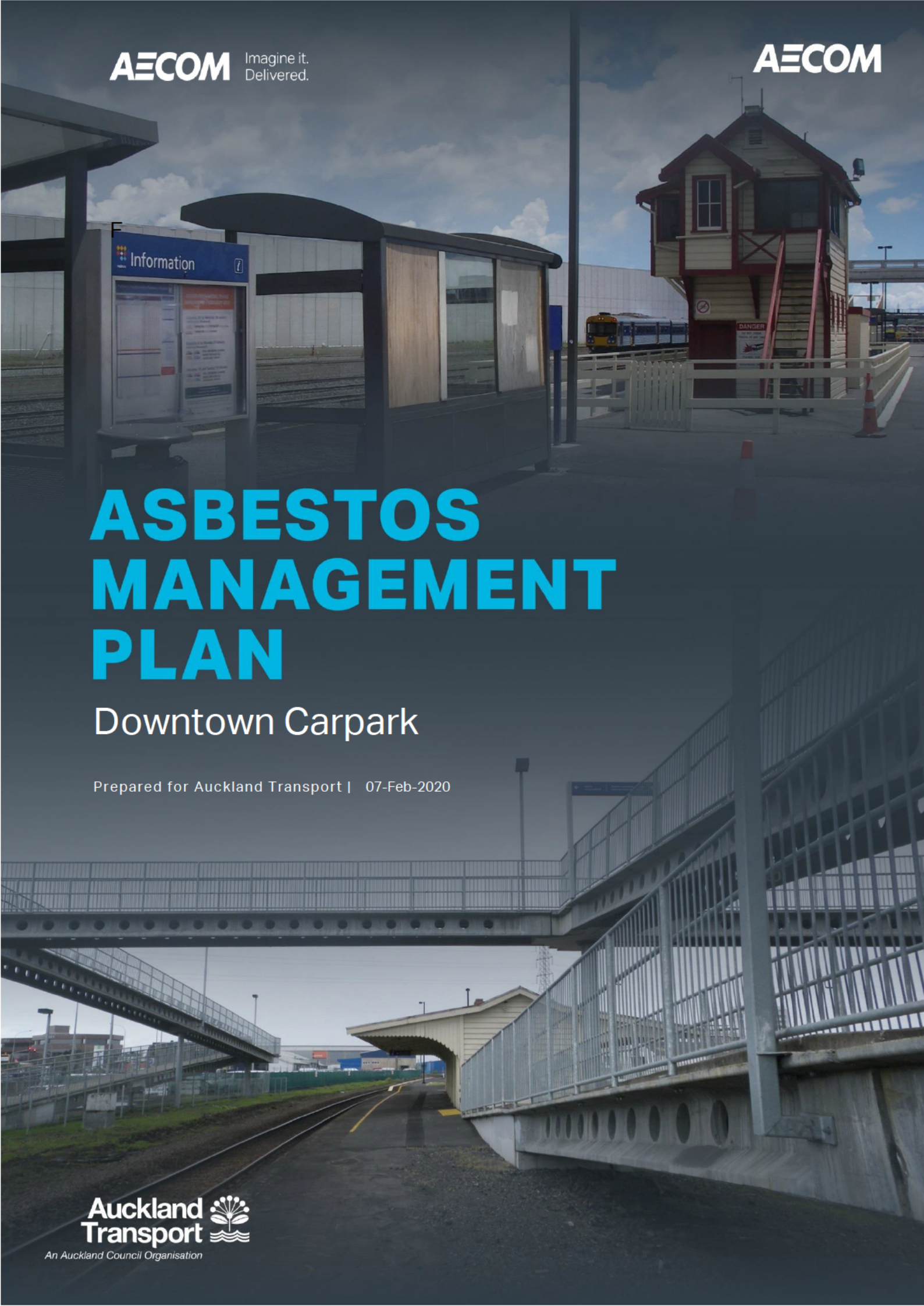

ASBESTOS MANAGEMENT PLAN

Downtown Carpark

Prepared for Auckland Transport | 07-Feb-2020

Auckland Transport
An Auckland Council Organisation

Asbestos Management Plan

Downtown Carpark

Client: Auckland Transport

Co No.: N/A

Prepared by:

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AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 AS/NZS4801 and OHSAS18001.

Quality Information

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Ref	60607392
Date	07-Feb-2020
Prepared by	Tara Hutchins
Reviewed by	Judah Lebow

Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
1	06-Sept-2019	Asbestos Management Plan	Lance Constable Senior Environmental Scientist	
2	07-Feb-2020	Updated following further sampling and access to inaccessible areas.	Lance Constable Senior Environmental Scientist	

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1.0 Introduction

1.1 Purpose

This Asbestos Management Plan (AMP) has been prepared by AECOM New Zealand Limited (AECOM) to assist Auckland Transport (AT) in meeting their legal obligations under the *Health and Safety at Work Act 2015*[1] (hereafter referred to as 'the HSWA') and the *Health and Safety at Work (Asbestos) Regulations 2016*[2] (hereafter referred to as 'the Asbestos Regulations') with regards to the Downtown Carpark, located off Custom Street West, Auckland CBD 1010, Auckland, New Zealand (the Site).

1.2 Applicability of this AMP

The intention is that this AMP primarily be relevant for day-to-day operations at the Site, i.e., it will set out Auckland Transport's approach to managing asbestos related hazards identified at the Site, by documenting procedures designed to address and help minimise the risk of asbestos exposure to employees, contractors, and visitors.

Prior to Site works that may disturb building materials (i.e. refurbishment or demolition and not day to day activities) further invasive surveying must be undertaken in these areas.

1.3 Legal Context

1.3.1 Auckland Transport's Role

In accordance with the HSWA, Auckland Transport is the 'person conducting a business or undertaking' (PCBU) in the context of the Site. The HSWA places a broad range of responsibilities on the PCBU and the purpose of this AMP is to set out how AT will meet their responsibilities with regards to asbestos at the Site.

1.3.2 Requirement for this AMP

Regulation 13(1)(a) of the Asbestos Regulations specifies that an AMP must be prepared if asbestos or an asbestos containing material (ACM) is identified or presumed at a workplace.

AT engaged AECOM to complete an asbestos management survey at the site in May 2019 (discussed further in **Section 3.1**). The asbestos management survey undertaken by AECOM presumed the presence of ACM in areas that could not be surveyed.

The information that is required to be included in an AMP and the section of this AMP in which that information can be found is summarised in **Table 1**.

Table 1 Regulation 13(4) Roadmap

Regulation	Section of this AMP
Regulation 13(4): An asbestos management plan must include information about the following:	
13(4)(a): The identification of asbestos or ACM	**Section 3.0**
13(4)(b): Decisions, and reasons for decisions, about the management of the risk arising from asbestos at the workplace	**Section 4.0**
13(4)(c): Procedures for detailing incidents or emergencies involving asbestos or ACM at the workplace	**Section 6.0**
13(4)(d): The workers who carry out work involving asbestos, including i. Information and training that has been and will be provided to the workers ii. Roles and responsibilities of the workers iii. Any health monitoring of the workers that has or will be undertaken	**Section 6.0** **Section 8.0**

[1] http://legislation.govt.nz/act/public/2015/0070/37.0/DLM5976660.html
[2] http://www.legislation.govt.nz/regulation/public/2016/0015/19.0/DLM6729706.html

2.0 Implementation of this AMP

The AT staff who will be involved with the implementation of this AMP and the specific roles they will hold is summarised in **Table 2**.

Table 2 Roles of Auckland Transport Staff

Role	Auckland Transport Staff
Overall oversight and review of AMP	
Site inductions	
Labelling known and presumed asbestos locations	
Review and approval of asbestos related work task risk analysis (TRA) / safe work method statements (SWMS)	
Incident reporting	
Oversight of tender process (for removal works)	

3.0 Asbestos Identified and Presumed to be Present at the Site

This section summarises asbestos that has been identified or presumed present onsite.

3.1 Asbestos Surveys

In May 2019, AT engaged AECOM to complete an asbestos management survey (the Survey) at the Site. The associated survey report *(Asbestos Management Survey, Auckland Transport, Downtown Carpark, Rev 2, February 2020)* is included in **Appendix A** and is hereafter referred to as 'the Survey Report'.

In general, the purpose of an asbestos survey is to identify and assess the location, type and condition of asbestos and ACM present at a site, in order to:

- Provide an understanding of the overall risk in regards to the asbestos and ACM identified; and
- Provide recommendations of measures that can be implemented to address statutory obligations under the HSWA and the Asbestos Regulations.

In general, an asbestos management survey is comprised of an initial building assessment and not a comprehensive intrusive investigation. On this basis, if specific areas of a building are to be disturbed, an additional, more intrusive survey (e.g. a refurbishment or demolition survey) may be required. This AMP must be updated to reflect the findings of any additional surveys.

In general, an asbestos refurbishment/demolition survey is comprised of an initial building assessment followed by a comprehensive intrusive investigation. This type of survey is targeted at specific areas to be affected by planned refurbishment or demolition work and provides further detailed information above what is involved in an asbestos management survey.

3.2 Asbestos Identified at the Site

The Survey identified areas of asbestos on Site by detecting, presuming and assuming:

Detected Sample collected and identified as asbestos-containing in an IANZ Accredited Laboratory.

Presumed Area or item could not be sampled and/or visually assessed. Asbestos must be presumed to be present until proven otherwise.

The specific features, locations and identifying photographs are presented in the Survey Report included in **Appendix A**.

Asbestos was detected in the following locations at the Site as summarised in **Table 3**..

Table 3 Locations in Which Asbestos was Detected

Location	Item	Asbestos Type
Ground Level Carpark (northern wall)	Conduit Wrap	Textile

3.3 Asbestos Presumed at the Site

The Asbestos Regulations require a PCBU to presume that asbestos is present in inaccessible materials and areas if it is considered likely that asbestos is present in the workplace.

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. In the case of this Site, these may include but not be limited to the following:

- Energised electrical features;
- Lift shafts and lift machine rooms;
- Ceiling voids;
- Floor voids; and/or
- Wall voids.

The completion of additional surveys may remove presumed materials and/or areas from the Survey Report. This AMP must be updated to reflect any additional surveys completed.

4.0 Management of Asbestos Risks at the Site

This section addresses how the asbestos identified or presumed present onsite will be communicated and managed.

4.1 Communications

It is unlikely that occupants of or visitors to the Site will disturb the identified or presumed asbestos-containing materials and/or areas during their day-to-day activities. Nevertheless, these hazards must be communicated to site users. In the case of Site, this will include but not necessarily be limited to, the following:

- Communication of this AMP to current site staff and any contractors who carry out regular maintenance at the Site;
- Communication of this AMP during the induction for new site staff and contractors; and
- Labelling as discussed in **Section 5.0** of this AMP.

4.2 Basis for Management Decisions

The Survey Report includes a material assessment which evaluates the potential for releasing asbestos fibres from each ACM occurrence. The methodology used for the material assessment is included in the Survey Report. This has been referred to when recommending the appropriate management options for each ACM.

For clarity, 'immediate management' refers to actions that should be taken as soon as possible to protect site users against potential exposure to airborne asbestos fibres. 'Ongoing management' refers to actions that should be taken over a longer-term period and considers future works.

4.3 Presumed Asbestos-Containing Materials and/or Areas

4.3.1 Immediate Management

Generally, presumed asbestos-containing materials and/or locations cannot be accessed due to safety (e.g. energised electrical features) or physical limitations (e.g. building cavities such as ceiling, wall, or floor voids) and therefore labelling may not be possible. Where practicable, signs warning of the possible presence of asbestos should be installed. These warning signs should be in the form of stickers printed with Quick Response (QR) codes (see **Section 5.0**).

No other immediate action is required in areas where asbestos is presumed to be present. However, the recommendations provided in **Section 7.0** should be followed should disturbance to these areas (e.g. maintenance activities) be planned.

Reasons for Decision: Inaccessible materials and/or areas suspected of containing asbestos must be presumed to contain asbestos until proven otherwise by further surveys in accordance with Regulation 10(5) of the Asbestos Regulations.

4.3.2 Ongoing Management

Longer-term management of materials and/or areas where asbestos has been presumed present will largely depend on whether any planned future works disturb these materials and/or areas.

4.4 Areas where Asbestos was Determined to Not be Present

4.4.1 Immediate Management

No immediate action is required. However, should intrusive works in these areas uncover any suspected asbestos or ACM, the procedures in **Section 6.0** will be followed.

Reasons for Decision: Areas where asbestos or ACM has been demonstrated in the Survey Report as not being present require no management. However, should suspected asbestos or ACM be encountered in these areas, the procedures in **Section 6.0** will be followed.

4.4.2 Ongoing Management

No ongoing management is required. However, should intrusive works in these areas uncover any suspected asbestos or ACM, the procedures in **Section 6.0** will be followed.

5.0 Signage and Labels

Regulation 12 of the Asbestos Regulations states that: *'A PCBU with management or control of a workplace must ensure that the presence and location of asbestos or ACM identified at the workplace under regulation 10 are clearly indicated (and in a way that complies with the requirements of any applicable safe work instrument)'*.

Where practicable, QR codes are to be installed on any identified and/or presumed asbestos containing materials which will be linked back to the relevant asbestos register.

No 'safe work instrument' (SWI, which is an additional tool developed by WorkSafe New Zealand) exists yet for signage and labels (in the context of asbestos). In the absence of a SWI, the standard NZS/AS 1319 '*Safety Signs for the Occupational Environment'* should be considered when installing warning signs and labels.

6.0 Accidental Discoveries, Incidents and Emergencies

6.1 Emergency Procedures

The presence of asbestos or ACM onsite cannot be discounted. It has been reiterated throughout this plan that no intrusive works should take place in areas that have not been surveyed and / or where asbestos has been presumed to be present until further surveys have been completed by a competent person and the AMP updated to reflect the findings.

Nevertheless, emergency procedures have been included and will be followed in the event that previously unidentified asbestos is inadvertently disturbed. These procedures are included in **Appendix B**.

6.2 Recording of Incidents

Any incidents relating to asbestos will be recorded in the Incident Register included in **Appendix C**. Incidents will also be recorded as required by AT's incident reporting requirements, with AT's incident reference included in the Incident Register and all documentation added to this plan for completeness.

7.0 Works Involving Asbestos

7.1 Working in the Site Building(s)

It is unlikely (and not the intention) that people working on Site will 'carry out work involving asbestos' in the context of Regulation 13(d). Rather, any work involving asbestos will be carried out by specialist contractors only. Therefore, the remainder of this section is chiefly targeted towards maintenance contractors and asbestos removalist and the applicable regulations.

7.2 Asbestos Related Work

Any work required to be undertaken on identified/presumed asbestos or non-accessible areas presumed to contain asbestos is considered 'asbestos related work'.

All asbestos related work should follow the guidelines outlined in WorkSafe New Zealand's *Approved Code of Practice: Management and Removal of Asbestos* (November 2016, herafter referred to as "the ACOP").

Contractors undertaking asbestos related work must complete a Task Risk Assessment (TRA) / Safe Work Method Statement (SWMS). The TRA / SWMS must be reviewed by a competent reviewer as identified in **Table 2**. The TRA / SWMS must identify how the work will be completed in order to comply with the ACOP.

7.3 Asbestos Removal Works

Currently, the asbestos presumed at the Site by the Survey Report is not deemed to require removal. The actions required if the asbestos is deemed to require removal (and provided the condition of the asbestos remains unchanged) are summarised in **Table 4**.

Table 4 Asbestos Removal Class

Location	Item	Asbestos Type	Class of Asbestos Removal Work (A/B)
Ground Level Carpark (northern wall)	Conduit Wrap	Textile	B

It should be noted that this material is non-friable and intact removal may be performed under Class B controls. Accordingly, only the regulations and requirements for Class B asbestos removal works will be considered or referenced in this section. However, any other removal methodology is likely to render the material Class A and must therefore be conducted under Class A controls. An Asbestos Assessor must review and approve an asbestos removal control plan (ARCP) prior to removal.

As all asbestos removal works will be Class B, only the regulations and requirements for Class B asbestos removal works will be considered or referenced in this section. Additionally, if additional surveys deem asbestos removal works other than Class B necessary, this AMP will be updated to reflect this.

The Regulations that specifically set out the requirements for how asbestos removal works will be completed comprise 'Part 3' of the Asbestos Regulations.

7.3.1 Obligations of the PCBU

Specific parts of the Asbestos Regulations requiring how the asbestos removal works will be completed include:

- Regulation 27 *'Duty to ensure asbestos removalist is licenced'*, specifically:
  - Regulation 27(1)*: A PCBU* [in this case Auckland Transport] *who commissions the removal of asbestos must ensure that the asbestos removal work is carried out by a licenced asbestos removalist who is licenced to carry out the work.*

A register of licensed assessors and removalist contractors with the licence class they hold can be found on the WorkSafe New Zealand website.[3]

7.3.2 Obligations of the Asbestos Removalist

Regulations 27 to 42 in Part 3 of the Asbestos Regulations set out the requirements of the licenced asbestos removalist before and during Class A and Class B asbestos removal works.

These will not be replicated here in detail. However, it is important that the requirement to comply with these regulations is included in any tender documentation and subsequent contract with the asbestos removalist.

The asbestos removalist should be encouraged to refer to the ACOP, which provides good guidance around how these requirements can be met, including useful templates for plans and other records that will need to be created.

8.0 Health Monitoring

8.1 Asbestos Workers

Regulation 15 and 16 set out the PCBU requirements for health monitoring. The PCBU must ensure that health monitoring is conducted for workers carrying out work involving asbestos in accordance with the requirements as set out in regulations 15 and 16.

9.0 Additional Works Required

9.1 Review of this AMP

Regulation 14 of the Asbestos Regulations requires review of this AMP if:

- Any of the management items discussed in **Section 3.0** are reviewed;
- Asbestos is removed, disturbed, sealed or enclosed;
- The plan is no longer adequate for managing the asbestos risks, such as when new asbestos is identified, or if a previous inaccessible area has become accessible;
- A representative (which could be a health and safety representative, union representative or a person authorised by a worker to represent them) asks to have the plan reviewed if they have reasonable grounds to believe a control measure might not adequately affect worker health and safety and the workplace PCBU has not adequately reviewed the plan in response to this; or
- If five years have lapsed since the last review.

[3] https://worksafe.govt.nz/topic-and-industry/asbestos/licensing/licence-holder-register/

Reviews and updates to this AMP will be recorded in the 'Revision History' table located at the beginning of the plan.

10.0 Limitations

1. AECOM has prepared this Asbestos Management Plan (the "**AMP**") in accordance with the usual care and thoroughness of the consulting profession for the use of Auckland Transport and only those third parties who have been authorised in writing by AECOM to rely on this AMP.
2. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this AMP.
3. This AMP should be read in full and no excerpts are to be taken as representative of the findings. No amendments, reviews or updates should be made to this AMP without the written consent of AECOM. No responsibility is accepted by AECOM for use of any part of this AMP in any other context.
4. This AMP is based on the Survey Report, where a non-destructive survey was undertaken. Only those areas of investigation at the Site that were accessible to AECOM at the time of the inspection are covered in this the Survey Report. AECOM cannot guarantee that all asbestos containing materials within the facility were identified nor addressed in the Survey Report or that the results contained in the Survey Report, nor this AMP, are definitive. Asbestos containing materials are frequently concealed within the fabric of buildings or within sealed voids, and the ability to sample is restricted by the nature of the building(s) on site. Further, the samples taken are representative only of the specific locations from which they are taken. The results do not necessarily reflect conditions at any location removed from the specific points of sampling. It must always remain a possibility that asbestos containing materials (other than those identified within this AMP) may be found during any maintenance, refurbishment or demolition activity, and suitable precautions should always be taken when carrying out such activities.
5. In this AMP, we have identified from the Survey Report those materials suspected to contain asbestos. Until proven otherwise, it should be presumed that any similar materials will also contain asbestos. The same assumption should not be made in respect of those materials which are similar to those identified in this AMP as non-asbestos containing samples.
6. Except as specifically stated in this AMP, AECOM makes no statement or representation of any kind as to the suitability of the facility for any purpose and/or the potential risk to human health and safety posed by the presence (or otherwise) of asbestos containing materials.
7. The ongoing use of the facility may require the maintenance, management and/or removal of asbestos containing materials identified at the facility. Except as expressly stated in this AMP, AECOM makes no statement as to the requirements, or methods to be used, for such maintenance, management and/or removal.
8. This AMP (Rev 2) prepared in February 2020 is based on the information contained in the Survey Report (Rev 2) which was prepared in February 2020. The information in this AMP is considered to be accurate at the date of issue and is in accordance with information provided in the Survey Report. This AMP and the information contained herein should only be regarded as validly representing the site conditions at the time of the investigation unless otherwise explicitly stated in a preceding section of this AMP. AECOM disclaims responsibility for any changes that may have occurred after this time.
9. Except as required by law, no third party may use or rely on, this AMP unless otherwise agreed by AECOM in writing. Where such agreement is provided, AECOM will provide a letter of reliance to the agreed third party in the form required by AECOM.
10. To the extent permitted by law, AECOM expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this AMP. AECOM does not admit that any action, liability or claim may exist or be available to any third party.
11. AECOM does not represent that this AMP is suitable for use by any third party in deciding whether to enter a transaction in relation to the property which is the subject of the AMP or to put that property to a particular use.

12. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the relevant property.
13. This AMP does not, and does not purport to, give legal advice as to Auckland Transport's actual or potential asbestos or hazardous material liabilities, or draw conclusions as to whether any particular circumstances constitute a breach of relevant legislation. Such advice can only be given by qualified legal practitioners.

Appendix A

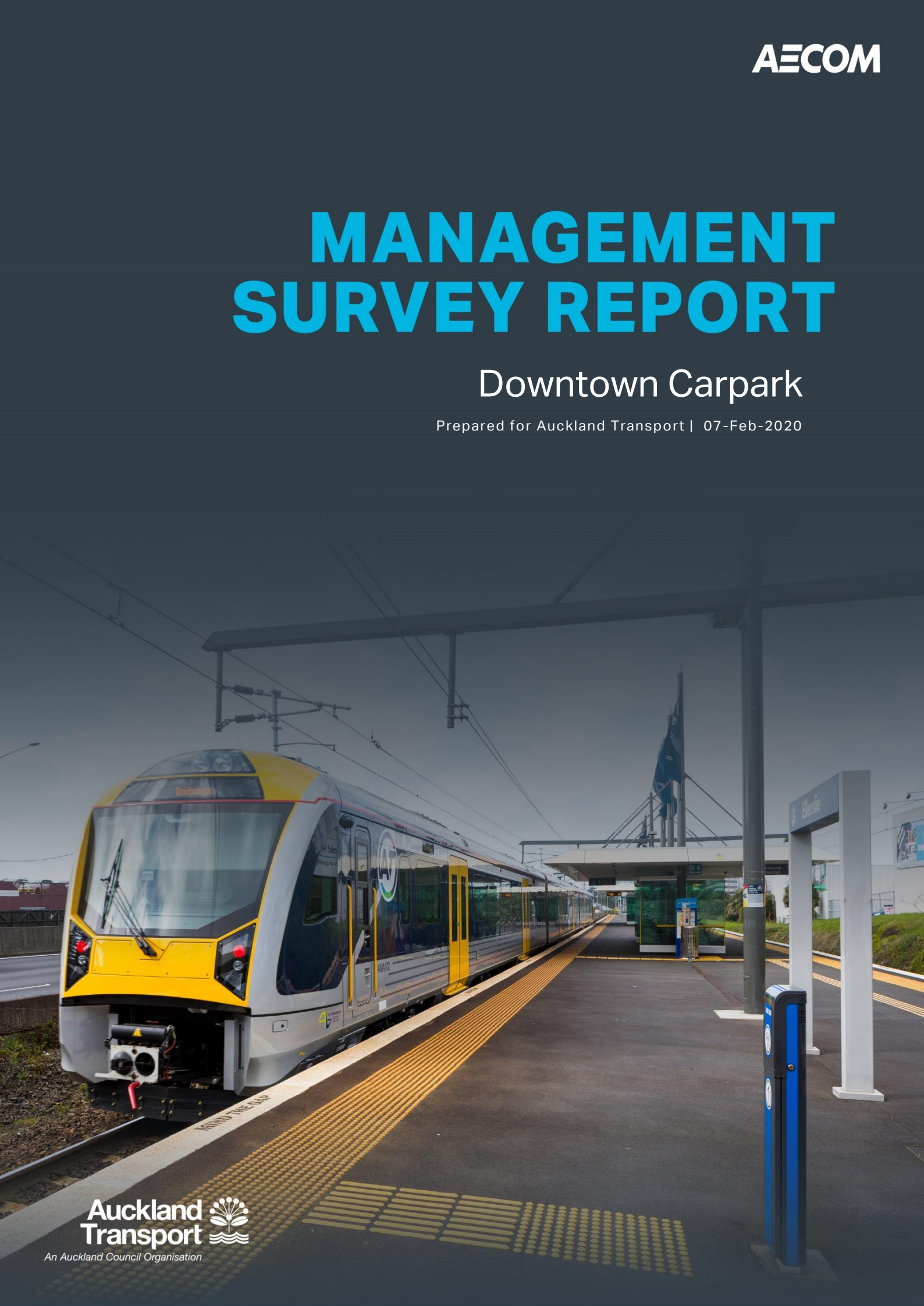
Asbestos Register and Survey Reports

AECOM

MANAGEMENT SURVEY REPORT

Downtown Carpark

Prepared for Auckland Transport | 07-Feb-2020



Asbestos Management Survey

Downtown Carpark

Client: Auckland Transport

Co No.: N/A

Prepared by

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07-Feb-2020

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Reviewed by	Judah Lebow

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Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
1	06-Sept-2019	Draft - Asbestos Management Survey	Lance Constable Senior Environmental Scientist	
2	07-Feb-2020	Draft - Updated following further sampling and access to inaccessible areas.	Lance Constable Senior Environmental Scientist	

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1.0 Key Findings

The Asbestos Management Survey resulted in the following key findings:

- Asbestos was identified at Downtown Carpark detailed in **Table 1** below.
- An Asbestos Management Plan (AMP) must be developed and implemented to fulfil the requirements of the *Health and Safety at Work (Asbestos) Regulations 2016*.
- Recommendations are presented in **Section 7.0**.

The AMP should be structured to assist Auckland Transport in managing the asbestos risk during regular day-to-day operational activities, and provide clear guidance as to the steps that will need to be taken during the future removal of asbestos, and how these steps will be completed in order to comply with the Asbestos Regulations.

Table 1 Summary of Asbestos Results

Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Asbestos type
Carpark	Ground Level	Carpark	Conduit	Conduit Wrap	Textile	Chrysotile

2.0 Introduction

AECOM New Zealand Limited (AECOM) was engaged by Auckland Transport (the Client) to complete an Asbestos Management Survey, hereinafter referred to as 'the Survey', at Downtown Carpark, located off Custom Street West, Auckland CBD 1010 (the Site).

The asbestos survey was conducted by AECOM on 13 August 2019, 05 December 2019, 17 January 2020, and 31 January 2020, and included the buildings/areas specified in **Table 2**.

The objectives of the asbestos survey were to identify the location and condition of visually accessible asbestos-containing materials (ACM) present throughout the buildings/areas specified in **Table 2**, and to provide asbestos risk management advice to assist the client in meeting their statutory obligations under the *New Zealand Health and Safety at Work Act 2015* (HSWA), and *Health and Safety at Work (Asbestos) Regulations 2016* (Asbestos Regulations).

2.1 Report Content

This report should be read in its entirety. It presents the findings of the Survey and includes the following:

- Appendix A – Asbestos Register;
- Appendix B – Site Plans;
- Appendix C – Photographic Log;
- Appendix D – Asbestos Material Assessment and Priority Rating Methodology; and
- Appendix E – Laboratory Results.

Auckland Transport (AT) is advised that being part of an Asbestos Management Survey, the Asbestos Register contained in **Appendix A** is not an exhaustive record of all asbestos containing materials present in the buildings/areas specified in **Table 2**. Assumptions are stated where made.

As per the *Management and Removal of Asbestos Approved Code of Practice* (ACOP, 2016), an Asbestos Management Survey should not be relied upon when undertaking refurbishment or demolition.

The Asbestos Regulations states that "refurbishment" does not include minor or routine maintenance work, or other minor work. Interior refits, where building materials are left in situ and not disturbed, should not require further asbestos surveying.

3.0 Site Description

The details of the buildings inspected for the asbestos survey are summarised in **Table 2.** Buildings not listed in **Table 2** were not inspected and are excluded from the report and Asbestos Register.

Table 2 Property Details

Item	Details	
Site Name	Downtown Carpark	
Site Address	31 Custom Street West, Auckland CBD 1010	
Date of Investigation	13 August 2019, 05 December 2019, 17 January 2020 and 31 January 2020	
Site Building	**Description**	**Construction Date**
Carpark	The carpark occupies 8 floors including a roof level. General building materials include concrete floors, walls and ceilings and metal lifts, fittings and handrails.	The carpark was originally developed between 1959 and 1996[1]. The current roof level was constructed between 2001 and 2006.

The survey was limited to assets owned by AT. Any on site assets owned by another entity were not inspected during the survey and are not covered in this asbestos management survey report.

[1] Auckland Council GeoMaps, 2019, https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html.

4.0 Legislative Framework

The HSWA places a broad range of responsibilities on the person conducting a business or undertaking (PCBU) and key stakeholders, to promote and secure the safety and health of persons in the workplace. The Asbestos Regulations also outline an array of requirements pertaining to the identification, assessment and control of asbestos in the workplace.

This Survey has been completed in order to assist Auckland Transport, as the PCBU, with the process of meeting the necessary requirements of the HSWA and the Asbestos Regulations, in particular the following:

- Regulation 10: Duty to ensure asbestos is identified at the workplace
- Regulation 11: Duty to analyse samples
- Regulation 12: Duty to ensure presence and location of asbestos is identified

According to Regulation 19 of the Asbestos Regulations, the duty to determine the presence of asbestos or ACM onsite (i.e. to conduct an asbestos survey) applies to structures or plant constructed or installed before 1 January 2000, in which asbestos was identified, or in which asbestos is likely to be present from time to time. Where otherwise suspect materials and/or areas were not sampled due to being installed on or after 1 January 2000, this is noted in the report and relevant appendices.

Additional regulations may be triggered depending on the outcome of the Survey, and therefore additional measures may be required to address these regulations. This will be discussed in this report.

In addition to the HSWA and the Asbestos Regulations, the Survey was completed with reference to the following documents:

- New Zealand Good Practice Guidelines, Conducting Asbestos Surveys, October 2016.
- New Zealand Approved Code of Practice, Management and Removal of Asbestos, November 2016.
- Resource Management Act 1991, and
- Land Transport Rule: Dangerous Goods 2005, and Land Transport Rule: Dangerous Goods Amendment 2010.

In the case of conflict between these procedures and any Act or Regulation, then the more stringent requirement shall apply.

4.1 Definitions

The Asbestos Regulations provide the following definitions for terms that are commonly used during asbestos survey work:

Asbestos containing material (ACM): any material or thing that, as part of its design, contains asbestos.

Friable asbestos: an asbestos-containing material in a powder form, or that is able to be crumbled, pulverised or reduced to powder by hand pressure when dry.

Non-friable (or bonded) asbestos: any material (other than friable asbestos material) that contains asbestos, including materials containing asbestos fibres reinforced with a bonding compound.

5.0 Nature and Extent of Survey

5.1 Asbestos Survey

The purpose of the asbestos survey was to locate, identify and document visually accessible ACM present in the nominated areas at the Site by way of a non-destructive means. This was carried out in accordance with WorkSafe New Zealand's Good Practice Guidelines "Conducting Asbestos Surveys" (October 2016).

The scope of work covered by the asbestos survey included the following:

- A review was undertaken of the existing building plans (where provided);
- A visual inspection was undertaken of the internal and external construction materials and components within the areas of investigation, to identify and locate visible above ground, accessible asbestos materials;
- The survey was undertaken by "non-destructive" means unless requested otherwise. Any areas which were not subject to or inaccessible during the surveys are documented in **Appendix A** and **Section 3.0**;
- Materials suspected of containing asbestos were sampled when safe to do so. Samples of suspected ACM were forwarded to a laboratory accredited by International Accreditation New Zealand (IANZ) for analysis;
- Comment regarding inaccessible materials is provided in **Appendix A** and in **Section 5.3**;
- Where possible, suspected ACM were photographed, and documented in the Photograph Log provided in **Appendix C**; and
- This report was prepared, detailing the location, extent, condition and type of ACM detected.

5.2 Asbestos-Containing Materials – Sampling Methodology

Sampled materials suspected of containing asbestos were sampled and set for analysis to an IANZ accredited laboratory (Eurofins and Hill Laboratories).

Sampling is not always possible due to a number of factors, which might include a lack of accessibility, the possibility of damaging finishes or the risk of causing asbestos contamination.

Where sampling was not possible, a determination was reasonably made as to the presence or absence of asbestos (i.e. asbestos presumed). This determination was based on factors such as the age, physical appearance or fixing method (nail and screw heads, cover strips or cover battens). Additionally, a determination might be made by inference from the analytical results of similar materials sampled during the survey. When a determination based on similar sampled material is made the Asbestos Register will refer to as 'AS' samples within the Asbestos Register in **Appendix A**.

5.3 Inaccessible Areas

Any areas of the Site not listed in **Table 2** were not inspected and are excluded from this Report and the Asbestos Register.

No access was available to the following areas at the time of inspection:

- Building cavities (walls, ceiling);
- High level areas such as ceilings, ceiling spaces and building exterior surfaces above the reach of a 1.8 metre step ladder (visual assessments are undertaken where possible of materials situated in high level areas);
- Areas beyond the limits of access hatches;
- Heater units, hot water cylinders, zip hot water heaters;

- All live electrical areas or from within air plenums such as air conditioning fan rooms, vent shafts, plant equipment, motors and stored equipment; and
- Confined spaces.

General examples of inaccessible areas that may contain asbestos include:

- A cavity in a building that is completely (or almost completely) enclosed and suspected of containing asbestos (based on where asbestos is located elsewhere in the building) and access is only possible through destruction of part of the walls of the cavity;
- Ceiling spaces, where synthetic mineral fibre insulation restricts access to identify materials below;
- Hidden gaskets within pipework flanges;
- Vinyl floor tiles that may contain asbestos, which have had a number of layers of non-ACM placed over them and secured (e.g. carpet) – where the layers above it have been well secured and require some form of destruction in order to access the floor tiles that may contain asbestos;
- Enclosed riser shafts containing cables that may be insulated with ACM; and
- Air-conditioning ducts, and heater banks that may contain asbestos gaskets and linings.

The *Health and Safety at Work (Asbestos) Regulations 2016* requires a Person Conducting Business or Undertaking (PCBU) to presume that asbestos is present in inaccessible areas if it is considered likely that asbestos is present in that part of the workplace. For the purposes of risk management, it is recommended that areas where access was not possible should also be presumed to contain ACM until proven otherwise.

Assumptions that asbestos is not present can only be made on **reasonable grounds that it is not present**.

Specific areas not able to be accessed at the time of inspection areas are also detailed in the Asbestos Register in **Appendix A**.

6.0 Results

Results can be found in the Asbestos Register (**Appendix A**).

7.0 Recommendations

Specific recommendations relating to the management of any ACM identified or presumed in this survey are presented in the Asbestos Register in **Appendix A.** The sections below provide general guidance only on appropriate risk management measures and is not intended to provide definitive advice or recommendations as to any obligations that arise, or measures that should be taken, as a result of any identified or presumed ACM.

7.1 Actions

Non-accessible areas and presumed items should be accessed and sampled in order to definitively identify any asbestos prior to any intrusive works such as demolition or refurbishment.

All identified and presumed asbestos-containing materials should be clearly indicated, and onsite personnel should not disturb identified or presumed asbestos-containing materials.

7.2 Asbestos Management Plan

As asbestos has been discovered and or presumed an Asbestos Management Plan (AMP) must be developed and implemented to fulfil the requirements of the *Health and Safety at Work (Asbestos) Regulations 2016*.

The AMP will assist Auckland Transport in managing the asbestos risk during regular day-to-day operational activities, and will also provide clear guidance as to the steps that will need to be taken during the future removal of asbestos or decommissioning of plant, and how these steps will be completed in order to comply with the Asbestos Regulations.

The AMP may include (but may not necessarily be limited to) the following as required in the *New Zealand Approved Code of Practice, Management and Removal of Asbestos, November 2016*:

- Labelling and communications;
- Regular re-inspection of known ACM;
- Additional survey(s) (as the scope of future renovation/demolition work is defined);
- Removal and disposal of known ACM;
- Accidental discovery / emergency procedures;
- Health monitoring;
- Asbestos Encapsulation;
- Asbestos Removal; and
- Clearance and re-occupation procedures.

8.0 Limitations

This Report has been produced by AECOM for the sole use of Auckland Transport and for the specific purpose set out above in **Section 2.0**. Its content is confidential and cannot be used for any other purpose(s) without prior permission from AECOM. This Report is qualified in its entirety by and should be considered in the light of AECOM's Terms of Engagement with the Client and the following:

a. The asbestos survey was undertaken by visual inspection and non-destructive means. Only those areas of investigation at the Site that were accessible to AECOM at the time of our inspection are covered in this report. Therefore, AECOM does not guarantee that this visual inspection has confirmed, warranted or certified the location, identification and/or the removal of all asbestos material either identified by AECOM or others in any report previously provided and/or which is or may be present on the Site inspected.

b. AECOM has relied on information provided by Auckland Transport and by third parties to produce this Report and arrive at its conclusions. AECOM has not verified the accuracy or completeness of such information and therefore presumes no responsibility for its accuracy and makes no representations with respect to its accuracy or completeness.

c. In no event, regardless of whether AECOM's consent has been provided, does AECOM accept any liability, whether directly or indirectly, for any liability or loss suffered or incurred by any third party to whom this Report is disclosed placing any reliance on this Report, in part or in full.

This Report does not, and does not purport to, give legal advice to Auckland Transport actual or potential asbestos or hazardous material liabilities, or draw conclusions as to whether any particular circumstances constitute a breach of relevant legislation. Such advice can only be given by qualified legal practitioner.

9.0 References

- New Zealand Health and Safety at Work Act 2015.
- Health and Safety at Work (Asbestos) Regulations 2016.
- New Zealand Good Practice Guidelines, Conducting Asbestos Surveys, October 2016.
- New Zealand Approved Code of Practice, Management and Removal of Asbestos, November 2016.
- Resource Management Act 1991, and
- Land Transport Rule: Dangerous Goods 2005, and Land Transport Rule: Dangerous Goods Amendment 2010.

Appendix A

Asbestos Register

Asbestos Survey Site Data Collection Sheets

Type of Survey	Management Survey			**Job No.**	60607392 Task 03
Client	Auckland Transport	**Date**	13/09/2019, 05/12/2019, 17/01/2020, 31/01/2020	**Surveyor(s)**	Matthew Brown and Tara Hutchins
Site Address	31 Customs Street West, Auckland CBD, Auckland 1010			**Site Code**	Downtown Carpark

Key

- No asbestos detected / suspected
- Asbestos presumed
- Asbestos detected

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product Type	Estimated if exact / Quantity	Unit	Sample ID	Asbestos type	Extent of damage (deterioration	Surface Treatments	Material Assessment Rating	Potential to Release Fibres - (High, Medium, Low, Very Low	Comments	Recommendations
	AT Office	Ground	Disabled Toilet							No Suspected Asbestos					Office area was built in 2018	No further action required
	AT Office	Ground	Female Toilet							No Suspected Asbestos					Office area was built in 2018	No further action required
	AT Office	Ground	Male Toilet							No Suspected Asbestos					Office area was built in 2018	No further action required
	AT Office	Ground	Store Room	Hot water cylinder	Insulation	Insulation material				No Suspected Asbestos					Office area was built in 2018	No further action required
	AT Office	Level 1	Ops Room 2							No Suspected Asbestos					Office area was built in 2018	No further action required
	AT Office	Level 1	Ops room and Kitchen	Western wall	Electrical mounting board	Plastic				No Suspected Asbestos					Plastic electrical board	No further action required
	AT Office	Level 1	Stairwell							No Suspected Asbestos					Office area was built in 2018	No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential for Release (Poor - High, Medium, Low, Very Low	Comments	Recommendations
	Carpark	All Levels	Lifts	Elevator car and landing doors						No Suspected Asbestos					Metal, plastic and glass	No further action required
	Carpark	Ground	Staff room	Floor around kitchenette	Floor covering	Vinyl sheet				No Suspected Asbestos					Renovated 2018	No further action required
S-001	Carpark	Ground	Carpark	Gasket	Gasket	Gasket			DOW04	No Asbestos Detected						No further action required
S-002	Carpark	Ground	Carpark	Around base of drain pipe	Sealant	Putty			DOW03	No Asbestos Detected						No further action required
S-003	Carpark	Ground	Carpark	Conduit	Conduit Wrap	Textile	50	m	DOW12	Chrysotile	Fair	Sealed	8	Medium	This material is non-friable and intact removal may be performed under Class B controls. However, any other removal methodology is likely to render the material Class A and must therefore be conducted under Class A controls. An Asbestos Assessor must review and approve an asbestos removal control plan (ARCP) prior to removal.	The PCBU must clearly indicate the presence and location of this material in accordance with WorkSafe New Zealand's Approved Code of Practice "Management and Removal of Asbestos" Section 5.12. The material should be re-inspected at regular intervals in line with legislative requirements and the site asbestos management plan (AMP).
S-004	Carpark	Ground	Carpark	Between concrete floor slabs	Sealant	Putty			DOW05	No Asbestos Detected						No further action required
S-005	Carpark	Ground	Carpark	Cement sheet door	Wall lining	Fibre cement sheeting			DOW06	No Asbestos Detected						No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in to use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants
Low disturbance activities (eg office type activity)	Low disturbance activities (eg office type activity)	Large rooms or well-ventilated areas	Occasionally likely to be disturbed	>50 m2 or >50 m pipe run	>10	Daily	>5 hours	Low disturbance (eg changing light bulbs in asbestos insulating board ceiling)	<1 per year	7	Medium

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential to Release Fibres : High, Medium, Low, Very Low	Comments	Recommendations
S-006	Carpark	Ground	Cleaners Room	Between wooden walls and concrete structure	Building paper	Paper			DOW01	No Asbestos Detected						No further action required
	Carpark	Ground	Cleaners Room	Edge of room	Floor covering	Vinyl sheet			DOW02	No Asbestos Detected						No further action required
	Carpark	Ground	Document Storage Room							No Suspected Asbestos					Concrete walls, floor and ceiling. Timber Framing	No further action required
	Carpark	Ground	Ladies toilet	Around all fittings	Sealant	Silicone				No Suspected Asbestos						No further action required
	Carpark	Ground	Men's toilet							No Suspected Asbestos					Tile floor and walls	No further action required
	Carpark	Ground	Server room							No Suspected Asbestos					Plastic Electrical boards, concrete wall and ceiling	No further action required
	Carpark	Ground	Staff only room							No Suspected Asbestos					Concrete walls, floor and ceiling. Timber Framing and plastic electrical board.	No further action required
	Carpark	Ground	Staff only room	At join of floor and wall	Concrete Bond Breaker	Packing				No Suspected Asbestos					Fibrous Organic Material	No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential for Release Fibres : High, Medium, Low, Very Low	Comments	Recommendations
	Carpark	Ground	Store Room (east)							No Suspected Asbestos					Concrete walls, floor and ceiling.	No further action required
	Carpark	Ground	Store Room (west)							No Suspected Asbestos					Concrete walls, floor and ceiling. Timber Framing	No further action required
	Carpark	Ground	Ticket Office							No Suspected Asbestos					Tile floor, plasterboard walls	No further action required
	Carpark	Level 1	Unnamed room adjacent to male toilet							No Suspected Asbestos					Concrete floor and G B walls.	No further action required
S-010	Carpark	Level 1	Carpark	Cement sheet on eastern wall	Wall lining	Fibre cement sheeting			As DOW08	No Asbestos Detected						No further action required
S-011	Carpark	Level 1	Store Room	Floor	Floor covering	Vinyl sheet			DOW08	No Asbestos Detected						No further action required
	Carpark	Level 1	Ticket Booth (east)							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
S-012	Carpark	Level 1	Ticket Booth (west)	Floor	Floor covering	Vinyl sheet			DOW07	No Asbestos Detected						No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential for Release (Poor - High, Medium, Low, Very Low	Comments	Recommendations
	Carpark	Level 2	Carpark							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 2	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 3	Carpark							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 3	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 4	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 4	Carpark							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 5	Carpark							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 5	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential for Release Fibre : High, Medium, Low, Very Low	Comments	Recommendations
S-013	Carpark	Level 6	Carpark	Eastern wall	Wall lining	Fibre cement sheeting			DOW09	No Asbestos Detected						No further action required
S-014	Carpark	Level 6	Carpark	Western wall	Wall lining	Fibre cement sheeting			As DOW09	No Asbestos Detected						No further action required
	Carpark	Level 6	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	Level 6	Unknown Room							No Suspected Asbestos					Concrete floor and walls, metal stairs and debris.	No further action required
S-015	Carpark	Level 7	Carpark	Upper walls	Wall lining	Fibre cement sheeting			As DOW09	No Asbestos Detected						No further action required
	Carpark	Level 7	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
S-017	Carpark	Level 8	Carpark	Floor	Floor covering	Waterproofing			DOW10	No Asbestos Detected						No further action required
	Carpark	Level 8	Carpark	Base of posts	Sealant	Rubber				No Suspected Asbestos						No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Photo Number	Building	Floor Level	Room/Area Name	Specific Location	Material Application	Product type	Estimated Extent / Quantity	Unit	Sample ID	Asbestos type	Extent of damage/ deterioration	Surface Treatments	Material Assessment Rating	Potential for Release (Poor - High, Medium, Low, Very Low	Comments	Recommendations
	Carpark	Level 8	Store Room							No Suspected Asbestos					Concrete walls, ceiling and floor	No further action required
	Carpark	All Levels	Stairwell (north east)	Walls, fittings and floor	Sealant	Silicone				No Suspected Asbestos						No further action required
	Carpark	All Levels	Stairwell (north west)	Walls, fittings and floor	Sealant	Silicone				No Suspected Asbestos						No further action required
S-018	Carpark	All Levels	Stairwell (north)	Around door	Sealant	Putty			DOW11	No Asbestos Detected						No further action required
	Carpark	All Levels	Stairwell (north)	Walls, fittings and floor	Sealant	Silicone				No Suspected Asbestos						No further action required
	Carpark	All Levels	Stairwell (south east)	Walls, fittings and floor	Sealant	Silicone				No Suspected Asbestos						No further action required
	Carpark	All Levels	Stairwell (west)	Walls, fittings and floor	Sealant	Silicone				No Suspected Asbestos						No further action required

Main type of activity in area	Secondary activities for area	Location	Accessibility	Extent/ amount	Number of occupants	Frequency of use of area	Average time area is in use	Type of maintenance activity	Frequency of maintenance activity	Priority Risk Rating	Potential Risk to Occupants

Appendix B

Site Plans

Satellite imagery sourced from Google Earth, topographic map sourced from NZTOPOMAPS.com and licensed for re-use under the Creative Commons Attribution 3.0 New Zealand license.

AECOM

PROJECT

AT METRO ASBESTOS MANAGEMENT SURVEY

CLIENT

Auckland Transport

CONSULTANT

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

Downtown Carpark – Site Diagram

FIGURE NUMBER

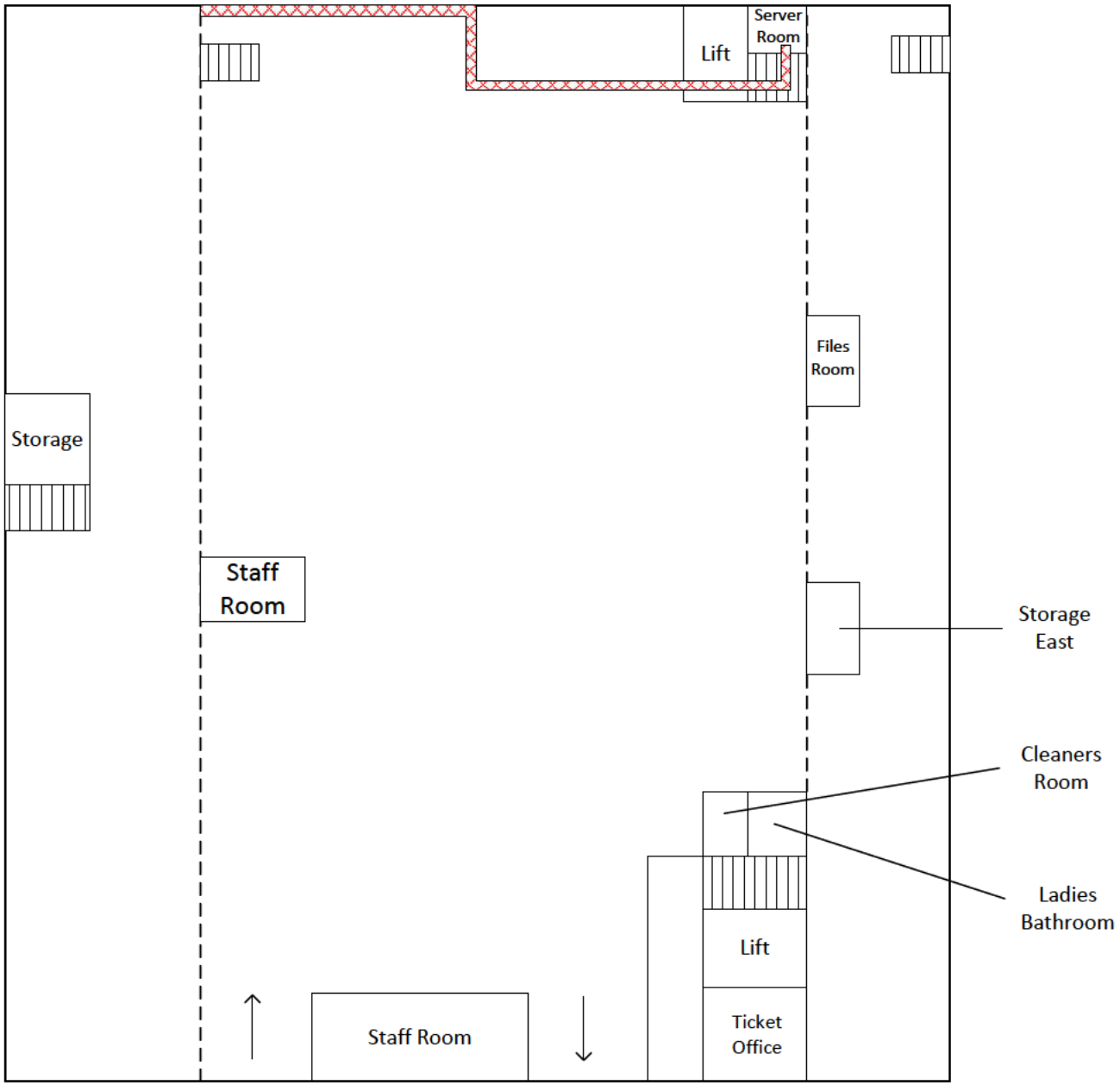
FIGURE 1

ISSUE/REVISION

I/R	Date	Description
1	19/08/2019	Draft
2	03/02/2020	

Key:

Site Outline



Note:

Visible extent of asbestos-containing conduit wrap

Not to scale. Areas are approximate only.

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

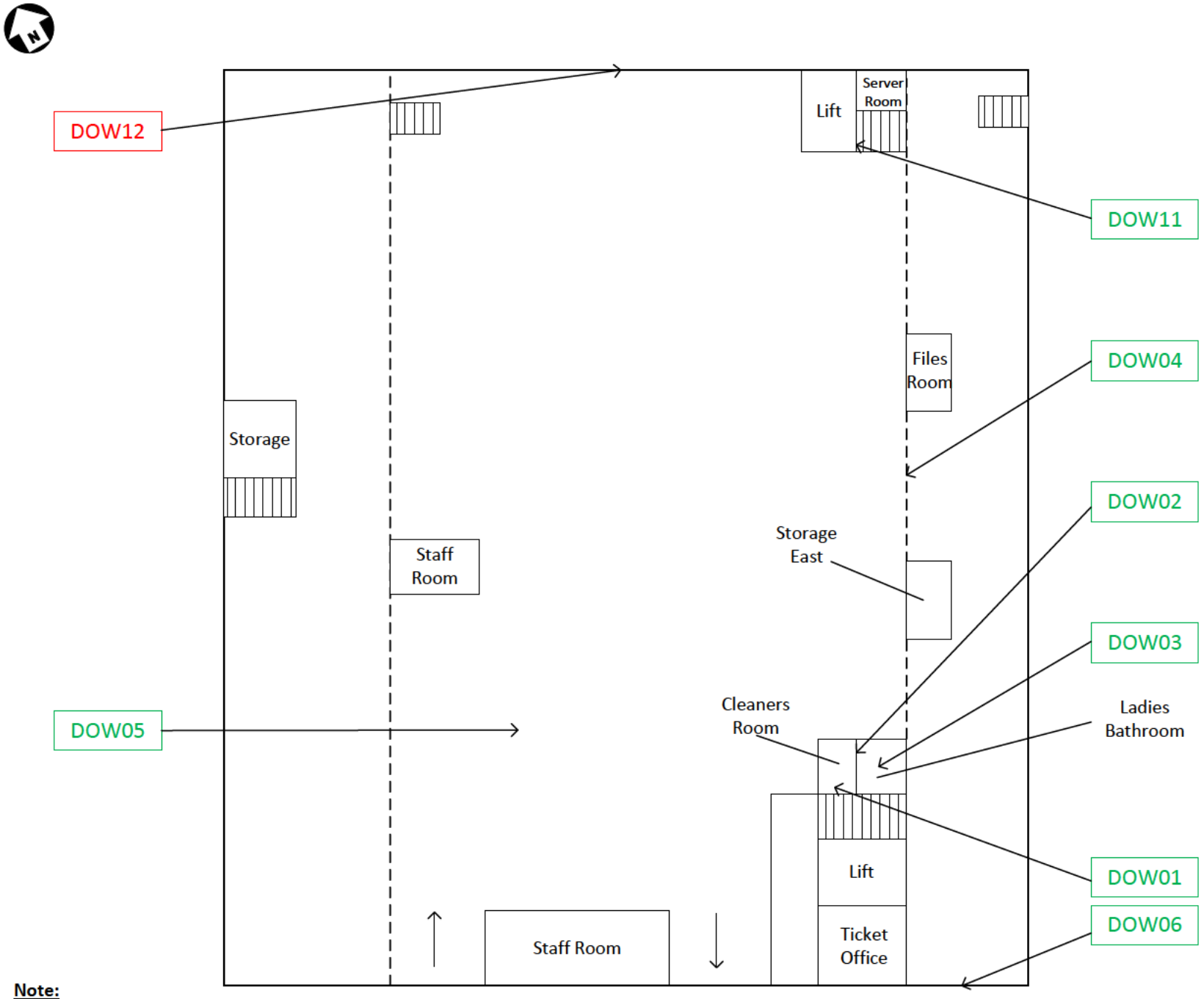
Downtown Carpark - Ground Floor Asbestos Extent

FIGURE NUMBER

FIGURE 02

ISSUE/REVISION

I/R	Date	Description
1	21/08/2019	Draft
2	03/02/2020	



Note:

1 Sample Location – No Asbestos Detected

1 Sample Location – Asbestos Detected

Not to scale. Areas are approximate only.

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

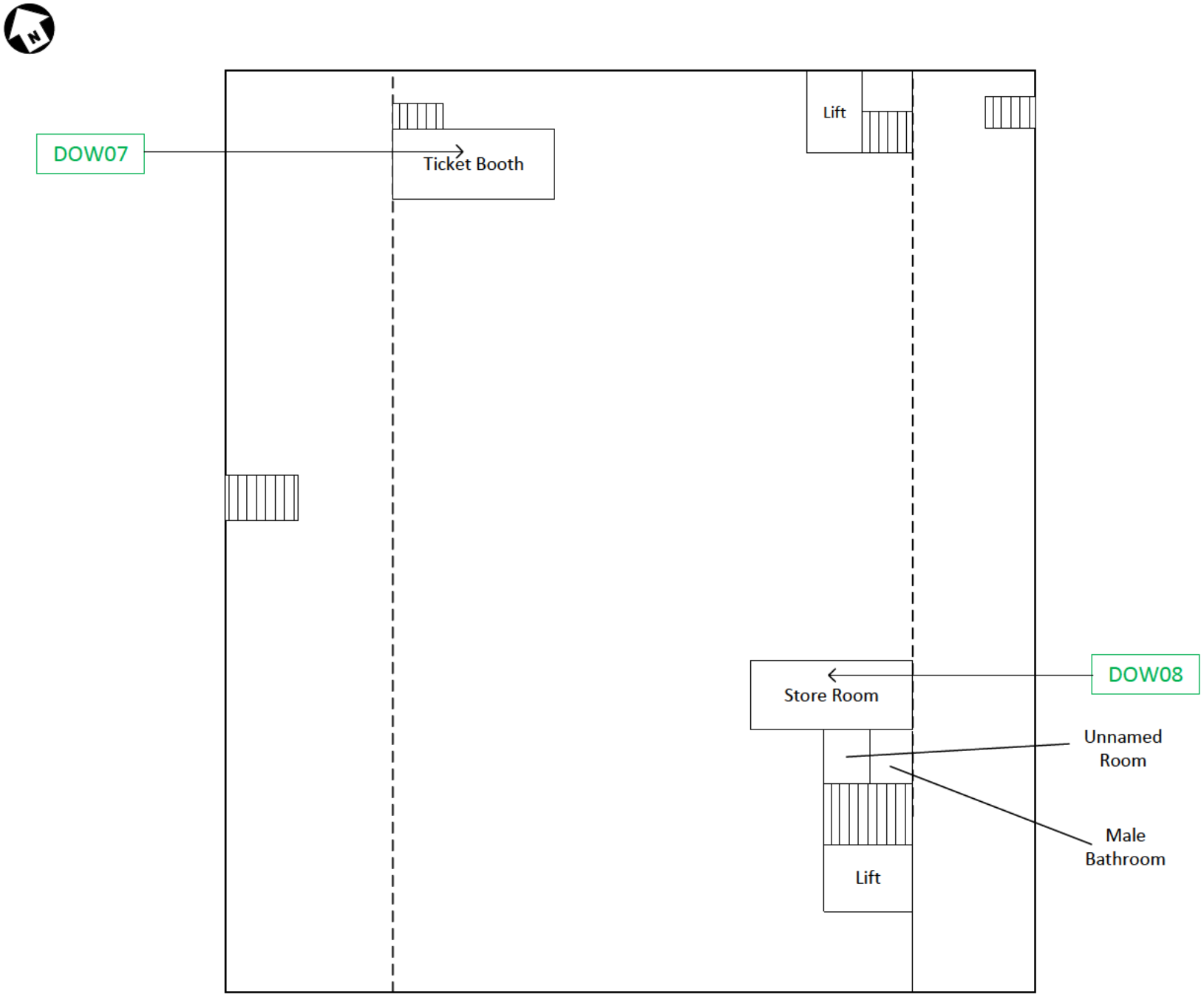
Downtown Carpark - Ground Floor Sample Locations

FIGURE NUMBER

FIGURE 3

ISSUE/REVISION

I/R	Date	Description
1	19/08/2019	Draft
2	03/02/2020	



Note:

1 Sample Location – No Asbestos Detected

Not to scale. Areas are approximate only.

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

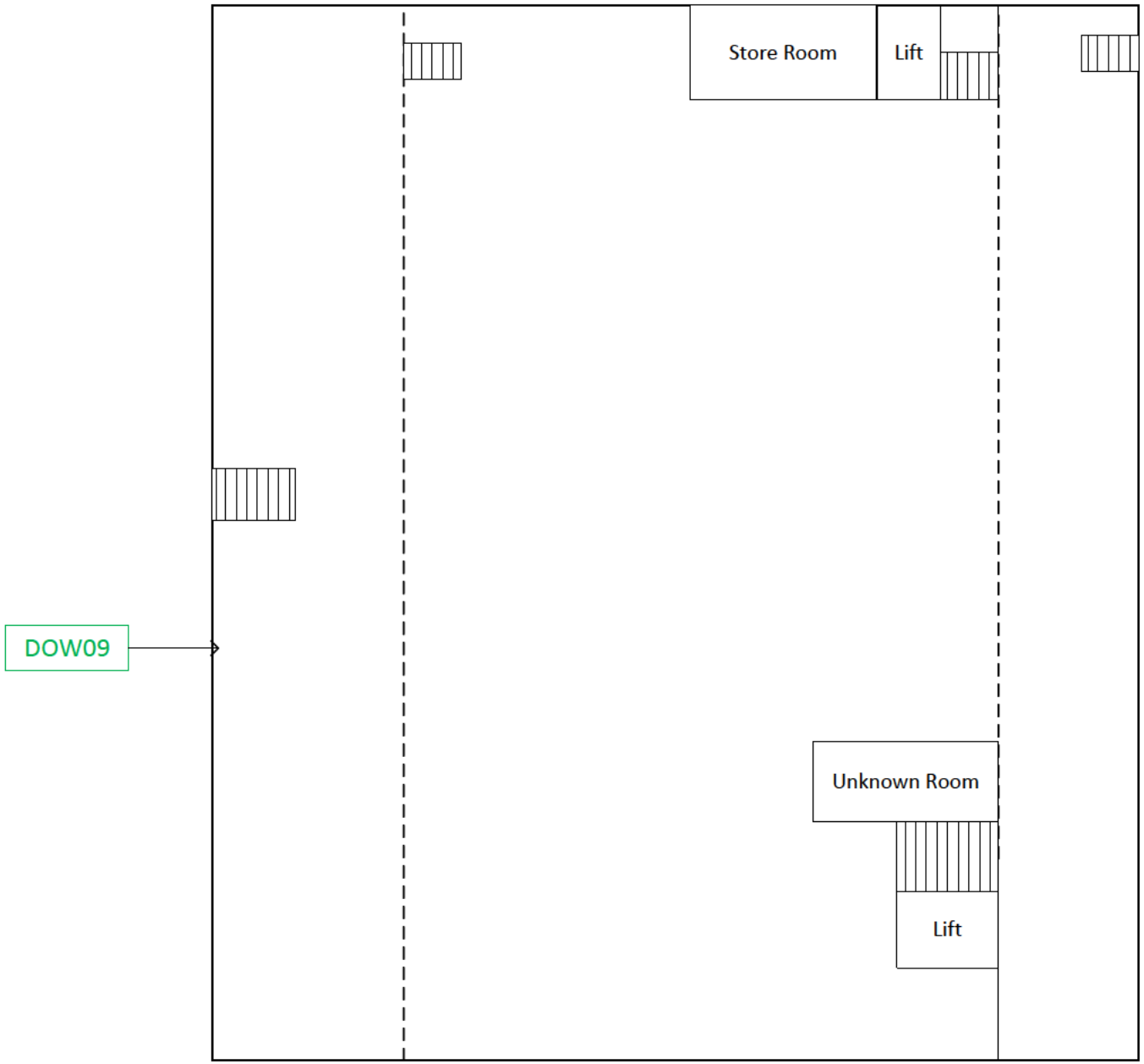
Downtown Carpark – 1st Floor Sample Locations

FIGURE NUMBER

FIGURE 4

ISSUE/REVISION

I/R	Date	Description
1	19/08/2019	Draft
2	03/02/2020	



Note:

1 Sample Location – No Asbestos Detected

Not to scale. Areas are approximate only.

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

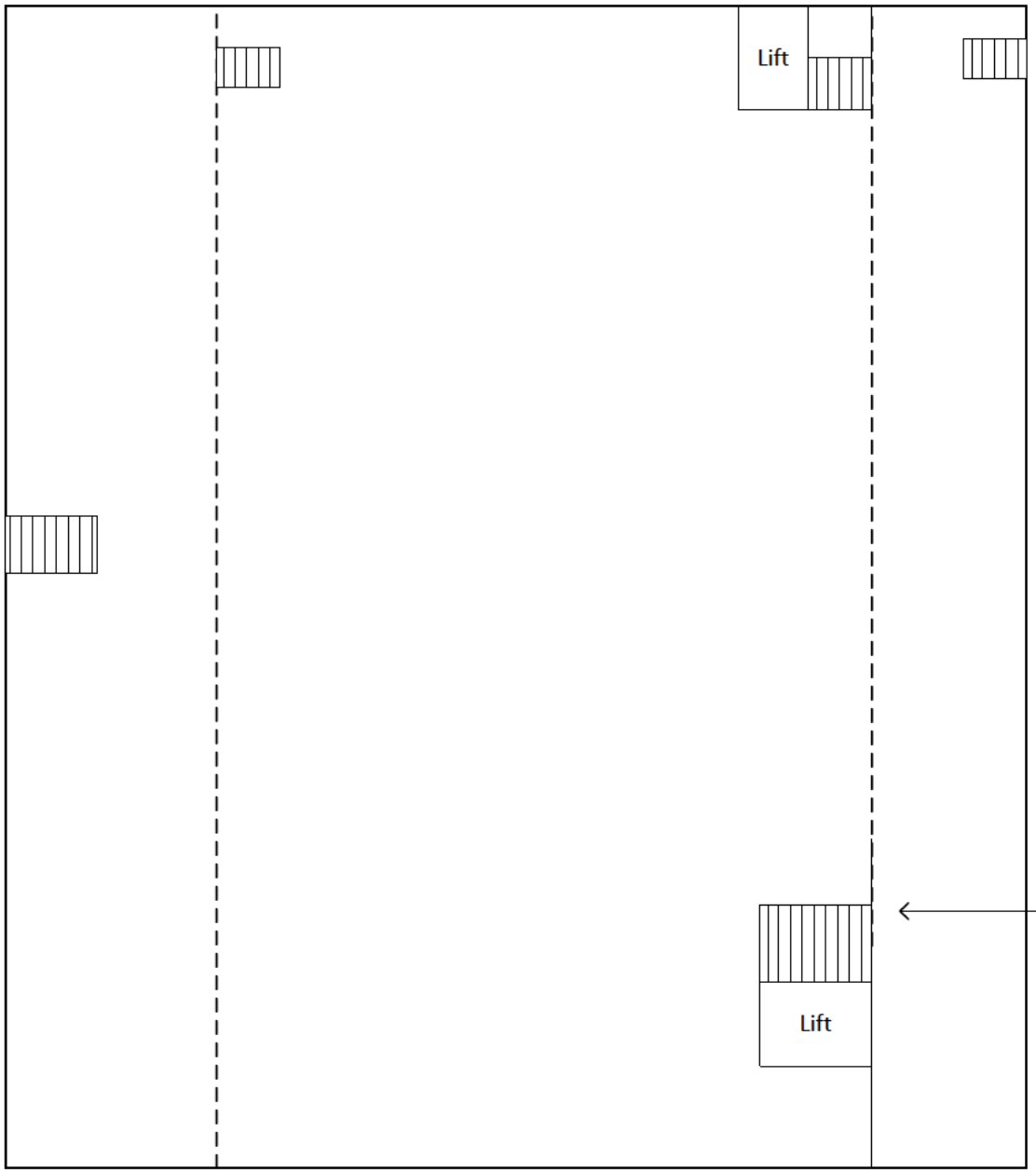
Downtown Carpark – 6th Floor
Sample Locations

FIGURE NUMBER

FIGURE 5

ISSUE/REVISION

I/R	Date	Description
1	19/08/2019	Draft
2	03/02/2020	



Note:

1 Sample Location – No Asbestos Detected

Not to scale. Areas are approximate only.

AECOM

PROJECT

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PROJECT NUMBER

60607392 Task 03

SHEET TITLE

Downtown Carpark – 8th Floor
Sample Locations

FIGURE NUMBER

FIGURE 6

ISSUE/REVISION

I/R	Date	Description
1	19/08/2019	Draft
2	03/02/2020	

Appendix C

Photographic Log

Photo No: S-001

Sample ID: DOW04

Date: 13/08/2019

Building: Carpark

Floor Level: Ground

Room/Area Name: Carpark

Specific Location: Gasket

Material: Gasket

Product Type: Gasket

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-002

Sample ID: DOW03

Date: 13/08/2019

Building: Carpark

Floor Level: Ground

Room/Area Name: Carpark

Specific Location: Around base of drain pipe

Material: Sealant

Product Type: Putty

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-003

Sample ID: DOW12

Date: 17/01/2020

Building: Carpark

Floor Level: Ground

Room/Area Name: Carpark

Specific Location: Conduit

Material: Conduit Wrap

Product Type: Textile

Asbestos Type: Chrysotile

Assessor: Tara Hutchins and Lance Constable

Photo No: S-004

Sample ID: DOW05

Date: 13/08/2019

Building: Carpark

Floor Level: Ground

Room/Area Name: Carpark

Specific Location: Between concrete floor slabs

Material: Sealant

Product Type: Putty

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-005

Sample ID: DOW06

Date: 13/08/2019

Building: Carpark

Floor Level: Ground

Room/Area Name: Carpark

Specific Location: Cement sheet door

Material: Wall lining

Product Type: Fibre cement sheeting

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-006

Sample ID: DOW01

Date: 13/08/2019

Building: Carpark

Floor Level: Ground

Room/Area Name: Cleaners Room

Specific Location: Between wooden walls and concrete structure

Material: Building paper

Product Type: Paper

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-010

Sample ID: As DOW06

Date: 13/08/2019

Building: Carpark

Floor Level: Level 1

Room/Area Name: Carpark

Specific Location: Cement sheet on eastern wall

Material: Wall lining

Product Type: Fibre cement sheeting

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-011

Sample ID: DOW08

Date: 13/08/2019

Building: Carpark

Floor Level: Level 1

Room/Area Name: Store Room

Specific Location: Floor

Material: Floor covering

Product Type: Vinyl sheet

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-012

Sample ID: DOW07

Date: 13/08/2019

Building: Carpark

Floor Level: Level 1

Room/Area Name: Ticket Booth (west)

Specific Location: Floor

Material: Floor covering

Product Type: Vinyl sheet

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-013

Sample ID: DOW09

Date: 13/08/2019

Building: Carpark

Floor Level: Level 6

Room/Area Name: Carpark

Specific Location: Eastern wall

Material: Wall lining

Product Type: Fibre cement sheeting

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-014

Sample ID: As DOW09

Date: 13/08/2019

Building: Carpark

Floor Level: Level 6

Room/Area Name: Carpark

Specific Location: Western wall

Material: Wall lining

Product Type: Fibre cement sheeting

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-016

Sample ID: As DOW09

Date: 13/08/2019

Building: Carpark

Floor Level: Level 7

Room/Area Name: Carpark

Specific Location: Upper walls

Material: Wall lining

Product Type: Fibre cement sheeting

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-017

Sample ID: DOW10

Date: 13/08/2019

Building: Carpark

Floor Level: Level 8

Room/Area Name: Carpark

Specific Location: Floor

Material: Floor covering

Product Type: Waterproofing

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Photo No: S-018

Sample ID: DOW11

Date: 13/08/2019

Building: Carpark

Floor Level: All levels

Room/Area Name: Stairwell (north)

Specific Location: Around door

Material: Sealant

Product Type: Putty

Asbestos Type: No Asbestos Detected

Assessor: Matthew Brown and Tara Hutchins

Appendix D

Asbestos Risk Assessment Methodology

Appendix D Asbestos Risk Assessment Methodology

The potential risks posed by asbestos-containing materials (ACM) in premises are due to a number of risk factors including the:

- ACM classification/friability of the material;
- condition of the material;
- activities which may affect the material;
- risk of fibre release from the material; and
- location of the material.

Assessing Materials

Any material presumed or confirmed as a hazardous, either visually or through sampling and laboratory analysis, must be assessed using the following criteria at the time of the survey.

ACM – Material Assessment

The risk assessment methodology used by AECOM for ACM surveys is described in the UK Health and Safety Executive, 2012, *Asbestos: The Survey Guide* (Second edition). Asbestos assessors must rate all ACM against this guide in order to complete the survey. ACM will be rated using the algorithm in **Table 3**

Table 3 Material Assessment Rating

Sample variable	Score	Examples of scores
Product type (or debris from product)	1	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc).
	2	Asbestos insulating board (AIB), millboards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.
	3	Thermal insulation (eg pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing.
Extent of damage/ deterioration	0	Good condition: no visible damage.
	1	Low damage: a few scratches or surface marks, broken edges on boards, tiles etc.
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos.
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles.
	1	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated) asbestos cement sheets etc.
	2	Unsealed asbestos insulating board (AIB), or encapsulated lagging and sprays.
	3	Unsealed lagging and sprays.

Asbestos type	1	Chrysotile
	2	Amphibole asbestos excluding crocidolite
	3	Crocidolite
TOTAL		

The scores are added for each sample variable to determine the total score for the material assessment rating.

The resulting potential to release asbestos fibres is provided in **Table 4** below.

Table 4 Material Assessment Rating Score

Total Score	Potential to release asbestos fibres
10 or more	High
7-9	Medium
5-6	Low
4 or less	Very low

Non-asbestos materials have no potential to release asbestos fibres.

The material with the highest score will not necessarily be the priority material for remedial action. The priority material for remedial action must be determined by carrying out a risk assessment which considers the following factors:

- The location of the material;
- The extent of the material;
- The use to which the location is put;
- The occupancy of the area;
- The activities carried out in the area; and
- The likelihood/ frequency with which maintenance activities are likely to take place.

This risk assessment is conducted according to the criteria set out in the UK Health and Safety Executive, 2002. *Comprehensive guide to Managing Asbestos in Premises* and the *New Zealand Good Practice Guidelines for Conducting Asbestos Surveys, October 2016.*

Table 5 Priority Risk Rating Continued

Assessment factor	Score	Examples of score variables
Normal occupant activity		
Main type of activity in area	0	Rare disturbance activity (e.g. little used store room)
	1	Low disturbance activities (e.g. office type activity)
	2	Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs)
	3	High levels of disturbance (e.g. fire door with asbestos insulating board sheet in constant use)
Secondary activities for area	As above	As above
Likelihood of disturbance		
Location	0	Outdoors
	1	Large rooms or well-ventilated areas
	2	Rooms up to 100 m^2
	3	Confined spaces
Accessibility	0	Usually inaccessible or unlikely to be disturbed
	1	Occasionally likely to be disturbed
	2	Easily disturbed
	3	Routinely disturbed
Extent/ amount	0	Small amounts or items (eg strings, gaskets)
	1	≤10 m^2 or ≤ 10 m pipe run
	2	>10 m^2 to ≤50 m^2 or >10 m to ≤50 m pipe run
	3	>50 m^2 or >50 m pipe run
Human exposure potential		
Number of occupants	0	None
	1	1 to 3
	2	4 to 10
	3	>10
Frequency of use of area	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Average times area is in use	0	<1 hour
	1	1 to 3 hours
	2	3 to 6 hours
	3	>6 hours
Maintenance activity		

Assessment factor	Score	Examples of score variables
Type of maintenance activity	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling)
	2	Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve)
	3	High levels of disturbance (e.g. removing a number of asbestos insulating board ceiling tiles to replace a valve or re-cabling)
Frequency of maintenance activity	0	ACM unlikely to be disturbed for maintenance
	1	<1 per year
	2	> 1 per year
	3	>1 per month

The average scores for each assessment factor are. added to determine the total score for the priority assessment rating.

The total score for the risk rating is the sum of the material assessment rating and the priority assessment rating.

Table 6 Priority Risk Rating Score

Total Score	Potential Risk to Occupants
10 or more	High
7-9	Medium
5-6	Low
4 or less	Very low

It should be noted that any risk assessment presented in this document was made on the basis of the nature of activities observed at the time the survey was undertaken. Changes in circumstances which affect the current Risk Assessment should be notified to your AECOM Consultant.

Appendix E

Laboratory Reports

Certificate of Analysis

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation, unless otherwise specified.
Accreditation No. :1290

AECOM New Zealand Ltd
8 Mahuhu Crescent
Auckland
New Zealand 1010

Attention:	Tara Ann Hutchins
Report	671361-AID
Project Name	DOWNTOWN CARPARK
Project ID	60607392_03
Received Date	Aug 15, 2019
Date Reported	Aug 22, 2019

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence IANZ Accreditation does not cover the performance of this service (non-IANZ results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name DOWNTOWN CARPARK
Project ID 60607392_03
Date Sampled Aug 13, 2019
Report 671361-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
D0W01	19-Au21094	Aug 13, 2019	Approximate Sample 2g / 75 x 28 x 2mm Sample consisted of: Bitumen paper	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W02	19-Au21095	Aug 13, 2019	Approximate Sample 2g / 75 x 20 x 2mm Sample consisted of: Bitumen paper	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W03	19-Au21096	Aug 13, 2019	Approximate Sample 3g / 72 x 20 x 2mm Sample consisted of: Glue	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W04	19-Au21097	Aug 13, 2019	Approximate Sample 2g / 22 x 6 x 3mm Sample consisted of: Gasket	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W05	19-Au21098	Aug 13, 2019	Approximate Sample 2g / 45 x 8 x 4mm Sample consisted of: Sealant	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W06	19-Au21099	Aug 13, 2019	Approximate Sample 2g / 30 x 6 x 3mm Sample consisted of: Fibre cement	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W07	19-Au21100	Aug 13, 2019	Approximate Sample 2g / 30 x 26 x 3mm Sample consisted of: Vinyl tile	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W08	19-Au21101	Aug 13, 2019	Approximate Sample 1g / 30 x 16 x 3mm Sample consisted of: Vinyl tile	No asbestos detected. Organic fibre detected. No respirable fibres detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
D0W09	19-Au21102	Aug 13, 2019	Approximate Sample 1g / 21 x 16 x 2mm Sample consisted of: Fibre cement	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W10	19-Au21103	Aug 13, 2019	Approximate Sample 2g / 24 x 16 x 3mm Sample consisted of: Sealant	No asbestos detected. Organic fibre detected. No respirable fibres detected.
D0W11	19-Au21104	Aug 13, 2019	Approximate Sample 1g / 45 x 4 x 3mm Sample consisted of: Sealant	No asbestos detected. Organic fibre detected. No respirable fibres detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Christchurch	Aug 20, 2019	Indefinite

Company Name:	AECOM New Zealand Ltd	**Order No.:**	60607392_03	**Received:**	Aug 15, 2019 10:00 AM
Address:	8 Mahuhu Crescent Auckland New Zealand 1010	**Report #:**	671361	**Due:**	Aug 22, 2019
		Phone:	0011 64 9 967 9200	**Priority:**	5 Day
		Fax:		**Contact Name:**	Tara Ann Hutchins
Project Name:	DOWNTOWN CARPARK				
Project ID:	60607392_03				

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos Absence /Presence
Auckland Laboratory - IANZ# 1327						
Christchurch Laboratory - IANZ# 1290						x
Eurofins Australia Laboratory						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	D0W01	Aug 13, 2019		Building Materials	Z19-Au21094	x
2	D0W02	Aug 13, 2019		Building Materials	Z19-Au21095	x
3	D0W03	Aug 13, 2019		Building Materials	Z19-Au21096	x
4	D0W04	Aug 13, 2019		Building Materials	Z19-Au21097	x
5	D0W05	Aug 13, 2019		Building Materials	Z19-Au21098	x
6	D0W06	Aug 13, 2019		Building Materials	Z19-Au21099	x

Company Name:	AECOM New Zealand Ltd	**Order No.:**	60607392_03	**Received:**	Aug 15, 2019 10:00 AM
Address:	8 Mahuhu Crescent Auckland New Zealand 1010	**Report #:**	671361	**Due:**	Aug 22, 2019
		Phone:	0011 64 9 967 9200	**Priority:**	5 Day
		Fax:		**Contact Name:**	Tara Ann Hutchins
Project Name:	DOWNTOWN CARPARK				
Project ID:	60607392_03				

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos Absence /Presence
Auckland Laboratory - IANZ# 1327						
Christchurch Laboratory - IANZ# 1290						x
Eurofins Australia Laboratory						
External Laboratory						
7	D0W07	Aug 13, 2019		Building Materials	Z19-Au21100	x
8	D0W08	Aug 13, 2019		Building Materials	Z19-Au21101	x
9	D0W09	Aug 13, 2019		Building Materials	Z19-Au21102	x
10	D0W10	Aug 13, 2019		Building Materials	Z19-Au21103	x
11	D0W11	Aug 13, 2019		Building Materials	Z19-Au21104	x
Test Counts						11

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Sophie Bush	Senior Analyst-Asbestos (NZS) (Key Technical Personnel)

Authorised by:

Irene Suresh	Senior Analyst-Asbestos

Sophie Bush
Senior Analyst-Asbestos (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates ISO/IEC 17025:2005 accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Hill Laboratories
TRIED, TESTED AND TRUSTED

R J Hill Laboratories Limited
Ground Fl, 28 Heather Street
Parnell
Auckland 1052 New Zealand

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T +64 7 858 2000
E mail@hill-labs.co.nz
W www.hill-laboratories.com

Certificate of Analysis

Client:	AECOM New Zealand Limited	**Lab No:**	2312450	A2Pv1
Contact:	Tara Ann Hutchins C/- AECOM New Zealand Limited PO Box 4241 Shortland Street Auckland 1140	**Date Received:**	28-Jan-2020	
		Date Reported:	29-Jan-2020	
		Quote No:	81048	
		Order No:	60607392; Task: 03	
		Client Reference:	Downtown Carpark	
		Add. Client Ref:	Sampled: 17/01/2020	
		Submitted By:	Tara Ann Hutchins	

Sample Type: Building Material

Sample Name	Lab Number	Sample Category	Sample Weight on receipt	Asbestos Presence / Absence	Description of Asbestos in Non Homogeneous Samples
DOW12 - Ground Floor - Conduit Wrap	2312450.1	Bituminous Product	13.52	Chrysotile (White Asbestos) detected. Organic fibres detected.	-

Glossary of Terms

- Loose fibres (Minor) - One or two fibres/fibre bundles identified during analysis by stereo microscope/PLM.
- Loose fibres (Major) - Three or more fibres/fibre bundles identified during analysis by stereo microscope/PLM.
- ACM Debris (Minor) - One or two small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
- ACM Debris (Major) - Large (>2mm) piece, or more than three small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
- Unknown Mineral Fibres - Mineral fibres of unknown type detected by polarised light microscopy including dispersion staining. The fibres detected may or may not be asbestos fibres. To confirm the identities, another independent analytical technique may be required.
- Trace - Trace levels of asbestos, as defined by AS4964-2004.

For further details, please contact the Asbestos Team.

Analyst's Comments

Appendix No.1 - Chain of Custody

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Laboratories, 28 Duke Street, Frankton, Hamilton 3204.

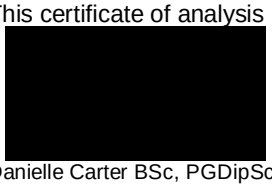
Sample Type: Building Material

Test	Method Description	Default Detection Limit	Sample No
Asbestos in Bulk Material			
Sample Category	Assessment of sample type. Analysed at Hill Laboratories - Asbestos; 28 Heather Street, Auckland.	-	1
Sample Weight on receipt	Sample weight. Analysed at Hill Laboratories - Asbestos; 28 Heather Street, Auckland.	0.01 g	1
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; 28 Heather Street, Auckland. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	0.01%	1
Description of Asbestos in Non Homogenous Samples	Form, dimensions and/or weight of asbestos fibres present. Analysed at Hill Laboratories - Asbestos; 28 Heather Street, Auckland. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	-	1

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Dates of testing are available on request. Please contact the laboratory for more information.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.



Danielle Carter BSc, PGDipSci, MSc
Laboratory Technician - Asbestos

Hill Laboratories
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ANALYSIS REQUEST

R J Hill Laboratories Limited
Level 1, 72 Grafton Road
Grafton
Auckland 1010, New Zealand
T 0508 HILL LAB (44 555 22)
T +64 7 858 2000
E mail@hill-labs.co.nz
W www.hill-laboratories.com

Job No: **231 2450**

Date Recv: 28-Jan-20 15:29

Received by: Katie Porter

3123124501

CHAIN OF CUSTODY RECORD

Sent to	Date & Time:
Hill Labratories	Name:
X *Tick if you require COC to be emailed back*	Signature:
Received at	Date & Time:
Hill Laboratories	Name:
	Signature:
Condition	Temp:

Room Temp *Chilled* *Frozen*

Sample and Analysis details checked
Signature:

Quote No	
Primary Contact	
Submitted By	Tara Hutchins
Client Name	AECOM NZ Ltd.
Address	8 Mahuhu Crescent
	Auckland *Postcode* 1010
Phone	*Mobile* 021-950-960
Email	
Charge To	
Client Reference	Downtown Carpark
Order No	*Project: 60607392; Task: 03*

Send Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

lance.constable@aecom.com
judah.lebow@aecom.com
tara.ann.hutchins@aecom.com

ADDITIONAL INFORMATION

No.	Sample Name	Sample Date	Sample Location	Material Description	Tests Required
1	DOW12	17 JAN 20	Ground Floor - Conduit Wrap	Conduit Wrap	Asbestos in Bulk Sample

About AECOM

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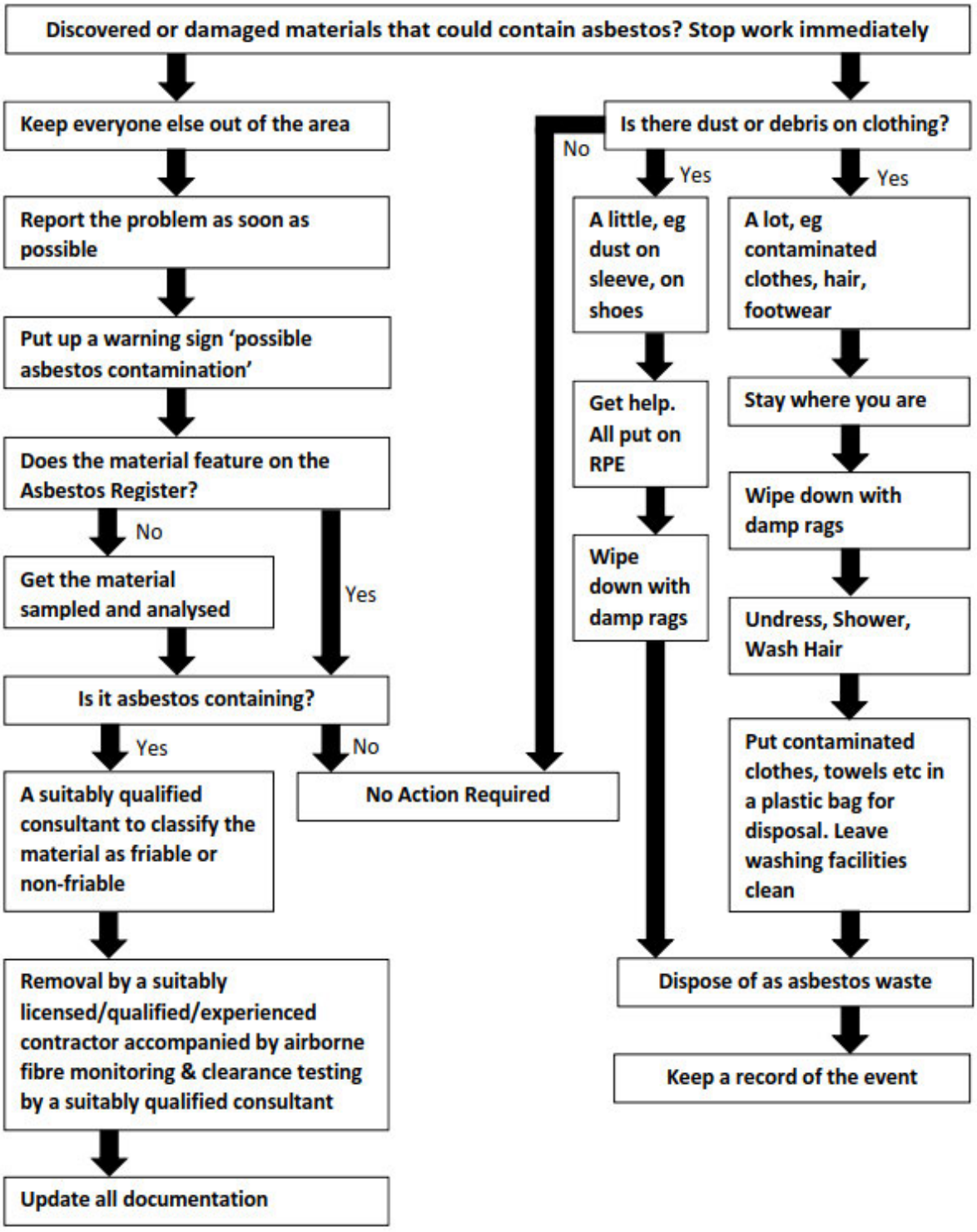
Appendix B

Emergency Procedures

Appendix B Emergency Procedures



Appendix C

Incident Register and Documentation

Appendix C Incident Register

Table 5 Incident Register

Date	Staff Involved	Incident Details (including actions taken)	Auckland Transport Incident Reference

About AECOM
AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organisations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately $20.2 billion during fiscal year 2018. See how we deliver what others can only imagine at aecom.com and @AECOM.

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