



# NZDF Nationwide Asbestos Survey Project – Surveyor Manual

- Prepared for  
New Zealand Defence Force

- January 2022

- FINAL Version 2.0

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## Quality Control Sheet

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Approved by

### SIGNATURE

Matt Wrigglesworth

**Important:** The information within this document does not in any way negate the surveyor from complying with the requirements of the Asbestos Regulations or any other applicable Legislation or Regulations current at the time of issue.

The requirements of this Manual do not override or replace the requirements of the DEI Construction Health, Environment and Safety Specifications (CHESS). It is the responsibility of the surveyor to ensure they have read, understood, and comply with all obligations and requirements specified by CHESS.

Table 1: Surveyor Manual Version		
Version Number	Reasons for Change	Date Updated
Version 0.1	DRAFT	27 October 2020
Version 0.2	DRAFT update to various to procedures following consultations with AQAA	20 April 2021
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Version 1.0	FINAL	17 May 2021
Version 2.0	FINAL V2 following various updates to NAS Programme and Survey123 apps	28 Jan 2022
<p>Notes:</p> <ol style="list-style-type: none"> <li>Record subsequent version numbers above.</li> <li>From 10/12/2021 updates made by NZDF in consultation with PDP and NZDF AQAA.</li> </ol>		

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## 1.0 NZDF Nationwide Asbestos Survey Project

### 1.1 Project Introduction

The New Zealand Defence Force (NZDF) operates nine camps and bases across New Zealand. These are as follows:

Royal New Zealand Navy: Devonport

New Zealand Army: Burnham, Linton, Papakura, Trentham, Waiouru

Royal New Zealand Air Force: Auckland (Whenuapai), Ohakea, Woodbourne

In addition, there are many satellite sites which are managed from each of the administering sites listed above (administering sites and associated satellite bases are listed in *Appendix A*).

These camps and bases have been in use since the early 20<sup>th</sup> century (Devonport since the 19<sup>th</sup> century), so there are many buildings which were built during the period during which asbestos was commonly used in construction and services, and many NZDF-owned properties are known to contain asbestos-containing materials (ACMs).

NZDF, as a PCBU (Person Conducting Business or Undertaking) is required by law to comply with the *Health and Safety at Work (Asbestos) Regulations 2016* (to be referred to as “the Regulations” throughout this document). *Section 10(1)* of the Regulations states that: “A PCBU with management or control of a workplace who knows or ought reasonably to know that there is a risk of exposure to respirable asbestos fibres in the workplace must ensure, so far as is reasonably practicable, that all asbestos or ACM giving rise to the risk at the workplace is identified.”

It must be assumed that all buildings structures and plant built before the year 2000 contain asbestos unless proven otherwise.

NZDF have commissioned the National Asbestos Survey (NAS) programme to assess ACM’s in buildings and structures across the Defence Estate. This will be achieved in two ways:

- 1) Existing information will be assessed for compliance with the Regulations, including descriptions of material location, condition, and other risk factors.
- 2) Management surveys will be conducted on all buildings that require them (including those that may have been surveyed recently, but the data is considered to be inadequate).

Due to the large number and geographic spread of buildings that will require surveys, multiple surveyor organisations are required to conduct the project.

Before Surveyors are engaged, NZDF will prepare a Request for Tender or Statement of Work. This document will include relevant building information so that Surveyors can adequately scope the works and plan for any potential limitations (e.g. heights, confined spaces, security requirements).

This manual has been prepared to assist Surveyors to maintain consistency and quality across all management surveys. Specific processes which should be adhered to before, during and after surveys are detailed, including details of communications required during the tasks.

This manual includes instructions for the NZDF Asbestos Survey123 app (Version 2), which will be used on NZDF supplied iPads to collect survey data on site. This includes guidance on associated browser-based applications to assist with off-site data management and production of the subsequent reports.

This manual is to be kept up to date in accordance with changes to the NAS Programme, requirements for data collection and reporting, as well as following any updates to applicable legislation or guidance documents.

## **1.2 Project Stakeholders**

Below is a list of key parties who are involved or fundamental to the project.

### **1.2.1 Defence Estate and Infrastructure (DEI)**

The NZDF organisation responsible for the development and maintenance of NZDF estate assets and infrastructure, including all buildings and sub-surface horizontal infrastructure.

### **1.2.2 NZDF Contamination Programme Manager (CPM)**

The person responsible for managing contamination risks throughout the NZDF Estate, including asbestos in buildings and soils.

### **1.2.3 NZDF Asbestos Manager (AM)**

Manager of the National Asbestos Survey Programme and Asbestos Information Management, and Custodian of the NZDF Asbestos Management Plan. Reports to the CPM.

### **1.2.4 Estate Delivery Director (EDD)**

The person responsible for management, maintenance, delivery and development of Estate and Infrastructure assets and services throughout each primary base and their associated satellite bases.

### **1.2.5 DEI Point of Contact (POC)**

Nominated by DEI and contact details included on each Statement of Work, the POC will assist with the on-site facilitation of the survey programme on each base. This includes:

- Liaising with the Surveyors, survey facilitators, EDD, Base Security and other affected parties (such as contractors, military personnel and civilian workers) throughout the project.
- Organising any required site inductions, base pass processes and obtaining Survey 123 app logins.
- Scheduling the works around base operations and facilitate access to all buildings throughout their bases.
- Tracking project completion and liaising with the CPM/AM on overall project status and completion.

For Particular Asbestos Risk notifications, multiple DEI POCs may require liaison in order to effectively identify and isolate the risk.

#### 1.2.6 Building Occupants

Encompasses all personnel who are working in, living in or otherwise occupying NZDF property. The POC will inform relevant parties about any upcoming surveys due to take place and will schedule any works around other military and civilian operations. The POC may also nominate a building representative (such as the contractor manager, officer or facilities manager) to communicate directly with the Surveyor, particularly where there are special induction, access or scheduling arrangements.

#### 1.2.7 Asset Information Team

NZDF's Asset Information Team manage the NZDF ArcGIS Online (AGOL) geodatabase and are the administrator of the App and the associated asbestos register. They provide logins to Surveyors for the App and manage credit allocation. They also provide technical support for the App.

#### 1.2.8 Asset Data Management Team

This team can provide data on buildings to assist with the survey process, including existing information such as building construction type and age, and floor plans (including "as-built" drawings).

- Providing technical support for the Survey123 app and web editing tool.

#### 1.2.9 Contamination Data Manager

Supports the CPM, AM and Asbestos Team and Regional POC's with the handling and storage of contamination data across the NZDF estate.

#### 1.2.10 Surveying Technical Advisor (STA)

The STA is responsible for development and maintenance of the Survey123 app and associated browser-based tools, designed to capture asbestos information

on site and upload it to the NZDF National Asbestos Database. They are also responsible for:

- Training asbestos Surveyors regarding site processes and use of the Survey123 App.
- Providing technical support for the Survey123 app and web editing tool.

#### 1.2.11 Asbestos Surveyors

Conduct survey works on each site to collect asbestos in buildings information using the tablet based Survey123 app, undertake post-survey data updates and production of the subsequent asbestos management survey reports for each building surveyed.

#### 1.2.12 Asbestos Quality Assurance Advisor (AQAA)

Responsible for assessing the quality of surveys provided by the Surveyors. The AQAA must review the reports and data for consistency across the Estate for all management survey reports and undertake spot-check audits on some reports to ensure standards are kept high. The first 5 reports submitted by each consultant new to the NAS Programme must be fully reviewed prior to being accepted as final. The AQAA's are managed by the NZDF Asbestos Manager.

Email: [asbestos@nzdf.mil.nz](mailto:asbestos@nzdf.mil.nz)

### 1.3 Surveyor Requirements

To achieve high quality standards throughout the Estate NZDF have set minimum requirements for Surveyors conducting works.

- Surveyors must meet all specified training and experience requirements for working on the NZDF Estate.
- Surveyors must have current MD390 clearance before they can be issued an App login or conduct surveys on the Defence Estate. Surveyors must keep an electronic copy of their clearance to be produced on site upon request.
- All NZDF contractors must attend one of the DEI Contractor induction sessions run at least weekly across all camps and bases, as well as any other required site health and safety inductions for each specific camp or base where works are to be undertaken.
- NZDF envisages that surveys will be completed by one site surveyor, however they recognise the requirement for two surveyors in some instances, where a resultant efficiency can be demonstrated and/or for health and safety reasons.
- Surveyors must have all required tools and equipment to perform an asbestos survey in accordance with the expectations outlined within the

Worksafe NZ Publication *Good Practice Guidelines: Conducting Asbestos Surveys, 2016*. This includes warning tape, signage and labels. Surveyors must also have sufficient competencies and suitable equipment to provide reactionary air monitoring and/or dust sampling assessments during survey works.

- Surveyors must provide information on skills, qualifications and experience as and where requested by the Asbestos Manager or regional POC's.
- Surveyors' inputting data must be trained in the use of the Survey123 app and be aware of any special considerations while conducting survey works on NZDF Bases (this training has been provided at sessions to various consultancies – further training of personnel can be arranged if required at the survey companies' cost).
- Surveyors must also be familiar with the requirements of the Particular Asbestos Risk Notification form and communication process within Appendix C.

## 2.0 Summary of Processes

This section presents an overview of the processes which will occur both on and off site during the course of the management survey works.

### 2.1 Pre-Survey Process

1. STA provides training for Asbestos Surveyors who may be involved in the NAS Programme.
2. POC's engage Asbestos Surveyors to conduct surveys as required.
3. At least two weeks prior to surveys, POC initiates access, inductions and scheduling of surveys.
4. POC issues Statement of Works (SOW) to surveyors detailing buildings to be surveyed and scope of survey, floor plans and information on any known ACM's in or on the building.
5. POC liaises with Asbestos Surveyor to arrange access, inductions, scheduling surveys and health & safety documentation. Base Facilities Management (FM) may also be contacted at this point to facilitate these actions.
6. POC obtains App Logons for all surveyors undertaking the work by emailing the GIS team [dei.gis@nzdf.mil.nz](mailto:dei.gis@nzdf.mil.nz), providing a completed AGOL access request form and providing the Clearance Granted form supplied by Indyvets for each surveyor.
7. A pre-start site visit of each building is usually required (requirement included on SOW), to enable better planning of works, including identifying areas which may be difficult to access.
8. Asbestos Surveyor is provided with building plans (where available) and logins for the tablet and browser Apps.
9. Asbestos Surveyor prepares their proposal and health and safety documentation to be issued to the POC and Asbestos Manager prior to start of works. This must include details regarding special access arrangements such as working with plant, vehicles, at height, etc. This must be emailed at least 5 days in advance of works to [matthew.wrigglesworth@nzdf.mil.nz](mailto:matthew.wrigglesworth@nzdf.mil.nz). A contract or variation to existing contract will be issued once the proposal and health and safety documentation has been reviewed and approved by the Asbestos Manager.
10. POC arranges for iPad to be available for surveys.
11. Asbestos Surveyor notifies POC of planned arrival and departure times for each day in advance.

### 2.2 Survey Process

1. Asbestos Surveyor to comply with all Health and Safety legislative and NZDF organisational requirements, which includes any NZDF site inductions and C.H.E.S.S. obligations.

2. Asbestos Surveyor checks in with POC upon arrival and departure from site each day and collects the camp/base iPad from the regional DEI office located on base.
3. Visual surveying of the building can be undertaken while the building is occupied. However, the collection of samples from the interior must be completed when rooms are un-occupied or, for larger buildings or open plan spaces, where there is an adequate safe separation distance in place.
4. Surveyors must utilise appropriate controls to minimise the risk of airborne fibre release during all types of sampling and treat all sampled materials as if they are asbestos containing until analysis can prove otherwise. This includes making good the sample location using paint or other compounds to adequately prevent the exposed ACM surface from further damage or influence to environmental conditions.
5. Surveyors must also ensure the condition of each area they visit is left the same once the survey is complete and report any accidental damage to the POC prior to leaving the area.
6. During surveys, any item found and assessed to be *Particular Asbestos Risk*, the process detailed within Appendix C must be followed, and a Particular Asbestos Risk Notification form must be filled in and sent to the Asbestos Team ([asbestos@nzdf.mil.nz](mailto:asbestos@nzdf.mil.nz)) within 24 hours.
7. All iPads have a cellular connection. Prior to completing works for the day, the Asbestos Surveyor must make sure that all iPad data is uploaded to the cloud (ideally this function should be performed multiple times daily while a connection is available).
8. Asbestos Surveyor returns the iPad to the DEI office, places it on charge at the end of each day and sends all samples to Hill Laboratories for analysis. POC responsible for making sure the device is charged for future surveys.

### 2.3 Post-Survey Process

1. Asbestos Surveyor amends item records via WebApp following receipt of analysis results.
2. Asbestos Surveyor produces draft asbestos register report.
3. Asbestos Surveyor emails final report (draft report if one of the first five reports for surveyor) to AQAA (cc POC) for review and inclusion on the Defence Document Management System (DDMS).
4. AQAA provides review comments to Asbestos Surveyor where applicable. If required Surveyor updates survey and/or report to address review comments and resubmits report to AQAA (cc POC). The Asbestos Surveyor must ensure all updates are made within the web-editor app to ensure consistency between report and AGOL data.
5. CDM uploads final asbestos management survey reports to DDMS.

### 3.0 Considerations for surveying on the NZDF Estate

All survey works shall be conducted at minimum in accordance with the *Good Practice Guidelines: Conducting Asbestos Surveys* (WorkSafe, 2016) (GPG). There are some additional considerations when surveying on NZDF property that must be followed.

#### 3.1 Non-Accessed Areas

In accordance with the expectations outlined within the GPG, asbestos management surveys are intended to identify risk associated with normal ('general') occupation of a building, structure, or area as well as reasonably foreseeable (minor) maintenance tasks. This will involve assessing the risks that are easily or generally accessible and consultants are expected to plan for and undertake surveys in such a way as to access as many areas as possible during the survey.

All reasonable efforts must be made by the Asbestos Surveyor to inspect all areas required, including requesting keys and / or further assistance from the Regional POC's where necessary. If any area is not accessed by the Asbestos Surveyor, the location must be recorded in the survey, and assumed to contain asbestos until further assessment can be undertaken.

This assumption will result in the area being flagged for further inspection and / or testing prior to the area being disturbed, which is not a desirable outcome so should be avoided.

This could have implications for the building users and operators, therefore every effort must be made during the course of the survey to enable access for inspection to take place. The requirements for accessing all areas, and the implications if this will not be possible, should be discussed between the Asbestos Surveyor and POC/FM prior to the start of survey works during the pre-start site visit and any failed attempts for accessing rooms or areas should be discussed prior to leaving site to ensure all reasonable attempts have been made.

Where access cannot be provided through further investigation and discussion, the surveyor must enter the highest reasonably foreseeable risk score which should be assessed according to their knowledge of the building and other similar buildings, the findings of the survey in all other accessible areas and the buildings age. The Asbestos Surveyor must also record the specific reasons why access was not possible at the time of the survey in the relevant item record on the App (via dropdown options and comments). Any photos taken must also provide information which may help with location of the area and assistance with access (e.g. contact information provided on a locked door). Note that any photography must comply with the security requirements of the base (see *Section 4.2.6*).

### 3.1.1 Security Sensitive Areas

NZDF manage varying levels of security throughout the Estate which can impact access and how surveys take place.

The default security requirement involves an Asbestos Surveyor obtaining a Defence Security Clearance (DSC) by completing the MD390 security application, obtaining a contractor card to be able to conduct works unescorted with full use of the tablet. However, in some instances increased security requirements for a building or specific area may result in some or all of the following requirements:

- The Asbestos Surveyor is required to be escorted by NZDF personnel.
- Surveys need to be conducted at particular times, or with sufficient advance warning to allow sensitive operations to be paused while the inspection takes place.
- Photography restrictions in some areas, including areas where photography is completely banned. See *Section 4.2.6* for more information relating to on-site photography.
- Tablet usage restrictions in some areas, for security and/or transmission reasons. The Asbestos Surveyor may be required to turn off all transmitting functions during a survey (using flight mode) and/or the Asbestos Surveyor may be barred from taking photographs from the device.
- Use of the tablet may be completely prohibited in some highly sensitive areas.

The POC must alert the Asbestos Surveyor to any security sensitive areas in advance of the survey.

If the Asbestos Surveyor is prevented from entering a building or room for security reasons, discussions should take place with the POC in an attempt to find a solution which enables the survey to occur without compromising security.

Suggested workarounds for security sensitive areas include:

- Review of any photographs taken by appropriate military personnel prior to submitting the data to the cloud database.
- Using a separate NZDF owned camera to take photos if tablet use is restricted (available from local DEI offices).
- Using pen and paper to gather information in areas where tablet use is not allowed. This information can then be transferred to the tablet elsewhere on site where such restrictions do not apply.
- Rearranging access during a stand-down or recess period whilst sensitive activities are temporarily halted.

The Asbestos Surveyor may also be asked to apply for additional security clearance to be able to access some areas. This should be discussed with the POC and arranged well in advance of any planned surveys in these areas.

### 3.1.2 Non-Accessed Areas for Health and Safety Reasons

There may be areas which cannot be accessed by the Asbestos Surveyor for health and safety reasons, but which are accessed by personnel for operations and maintenance tasks.

The reasons could include (but are not limited to):

- Areas at height (not accessible by ladder)
- Chemical, radioactive, explosive and biological hazards
- Unsecure/unstable access (i.e. flooring, walkways)
- Unstable structures (including those deemed to be non-seismically safe)
- Active plant, machinery or vehicular activity
- Confined spaces

In some instances, these issues may be anticipated prior to starting works via discussions with the POC/FM. Alternatively, they may be encountered whilst conducting the survey works, either by coming across warning signs or making visual observations that an area may be unsafe.

When such areas are encountered, the Asbestos Surveyor and POC/FM should discuss ways of enabling safe access to take place. This could involve:

- Temporarily making the area safe for the surveyor to enter, e.g. turning off plant/machinery/active vehicles, and installing temporary safe access systems such as scaffolding.
- Use of safe access methods, i.e. mobile elevated work platform (MEWP).
- Implementing control measures, e.g. fall arrest systems, use of respiratory protective equipment (RPE)/personal protective equipment (PPE).
- Utilising remote visual access, e.g. remotely operated cameras.

It could be assumed that, given personnel may be required to enter these areas, these safe access facilities may already be in place, however this may not be the case every time.

If signage is displayed warning of an asbestos risk, the Asbestos Surveyor is required to access the area in order to make a complete assessment and fulfil the criteria of a management survey, unless access is physically denied by a permanently fixed barrier and seal (in these cases, they should be treated as non-accessed, as described in this section). Depending on the location of the

access point, it may be prudent to only access such areas at a time when site personnel are not present in the adjacent areas. The Asbestos Surveyor is responsible for using the correct RPE/PPE when accessing these areas.

In all instances where an additional risk is encountered that has not been documented within a JSA, the Asbestos Surveyor / survey team should assess the risk prior to continuing. All works on the NZDF Estate are subject to the condition of CHES including requirements to receive a permit and continuously review its conditions.

### 3.1.3 Returning to access areas at a later date

In some instances, an area may not be accessible during the time of the survey, but arrangements may be made to return and access at a later date. During the initial visit, the area must be treated as “not accessed” and entered as such into the database, including the assumption of ACM presence within.

After access has been facilitated and the inspection of the required area is complete, the relevant record can be updated to include the details of any ACMs that were identified, along with updated risk scores. If after gaining access no ACMs are identified, the entry and assumption for the area can be deleted.

## 3.2 Material Risk Assessment

As part of the management survey process, Asbestos Surveyors must record information relating to the spatial context, condition, and ability to release fibres for all identified ACMs, to contribute towards the risk categorization for each item found.

### 3.2.1 Risk Assessment Variables

NZDF have developed a material risk assessment system which is based around four variables.

**IMPORTANT: The Asbestos Surveyor is responsible for ensuring the risk identified and resultant recommendation for each item is representative of the risk posed.**

#### 3.2.1.1 Asbestos Product Type

Each product (material) type within the Survey123 app have been assigned a score of 1, 2 or 3. This score is based on assumptions relating to the general ability to release fibres for a product type in an undamaged state. The products deemed least likely to release fibres have been scored '1' and the products most likely to release fibres scored '3' (see full list in *Appendix B:* ).

Please note that some product type scores are not in alignment with that recommended by the MAS risk scoring model but it is ultimately the Surveyors responsibility to review the end score and recommendation to ensure it is the most effective outcome for the actual risk presented.

#### 3.2.1.2 Asbestos Condition

A score is assigned for the condition of each material as follows. A materials 'surface treatment' must also be taken into account when assessing the condition.

- **1 = Good condition:** Good condition, no visible damage, or deterioration. Or minor damage to non-friable ACM's with a few scratches or surface marks or broken edges. Any material which is fully sealed within a unit (e.g. a safe, fire doors) or which is otherwise fully encapsulated or enclosed.
- **2 = Fair condition:** Significant breakage of non-friable ACM's including associated debris. Or minor damage to friable ACM's, or unsealed materials with a few scratches or surface marks, or broken edges.

**3 = Poor condition:** Very fine or highly deteriorated debris from non-friable ACM's. Significant breakage of friable ACM's revealing exposed edges or debris prone to further disturbance. All thermal insulation product types (where not fully encapsulated or enclosed). If a particular item has two or more distinct areas with differing levels of damage seen, the surveyor is to enter separate line

items for each area of the material. This will allow separate risk assessments to be made and may result in differing recommendations which will only apply to the areas in question rather than for the whole material.

#### 3.2.1.3 Asbestos Disturbance Potential

Scored according to the potential for the material to be disturbed within its current position within a room or area:

- **1 = Low disturbance potential:** material is generally out of reach of building occupants or active machinery/vehicles. Includes materials which are fully (and adequately) enclosed.
- **2 = Medium/high disturbance potential:** material can be potentially accessed and/or disturbed during routine and/or maintenance activities. Also applies to products which cannot be accessed directly by the Surveyor for health and safety reasons but may be accessed during routine maintenance, such as textile flashguards hidden within live electrical fuse casings.

#### 3.2.1.4 Asbestos Sensitivity

Scored according to the occupation status of the room or area where the material is located.

- **1 = Low sensitivity:** area/room which is not usually occupied, is accessed infrequently (e.g. for maintenance) and is not connected to an air conditioning intake. Includes materials which are fully (and adequately) enclosed.
- **2 = Medium/high sensitivity:** area/room which is generally occupied or accessed for between 25 - 100% of working hours.

#### 3.2.2 Risk Categorisation

The four variables are added together to provide a total risk score between 4 and 10. This score is categorised into a risk level. Within the Survey123 app, each risk level generated will automatically identify standard recommendation for the surveyor to select / use where appropriate. A free text field is then available for additional observations and recommendations.

**IMPORTANT: The Asbestos Surveyor is responsible for ensuring the risk identified and resultant recommendation for each item is representative of the risk posed. The Surveyor should not 'default' to the standard recommendations all the time.**

Risk score	Risk category (risk of exposure to occupants)	Automatically Generated Recommendation Text
N/a*	<b>Presumed Asbestos</b>	Further inspection and / or sampling required prior to disturbance. Presume asbestos present unless proven otherwise.
4-6	<b>Low Risk</b>	Do not disturb item, monitor condition of material. Remove or implement controls prior to disturbance.
7-8	<b>Medium Risk</b>	Four standard options are available for the survey to select: <ol style="list-style-type: none"> <li><b>1. ACTION REQUIRED:</b> Restrict access to area and remove.</li> <li><b>2. ACTION REQUIRED:</b> Control access to vicinity of item, repair / enclose / encapsulate, and monitor condition of material.</li> <li><b>3. ACTION REQUIRED:</b> Control access to vicinity of item, and remove.</li> <li><b>4.</b> Do not disturb item, monitor condition of material. Remove or implement controls prior to disturbance.</li> </ol>
9-10	<b>High Risk</b>	<b>IMMEDIATE ACTION:</b> Restrict access to area, indicate with warning signage at all access points. Area accessible only to those working under approved work procedure / PTW's. Remove / remediate in accordance with asbestos regulations.

\*Risk score may be low, medium or high, dependant on option selected by Surveyor.

All sampled and assumed asbestos materials identified during the survey will be added to the asbestos register and the recommendations will be reviewed and acted upon by NZDF as part of the Defence Estate Asbestos Management Plan. All recommendations should be written within the Survey123 app at the time of inspection however, these can be changed or modified following the survey using the web editing tool.

### 3.2.3 Particular Asbestos Risk Notifications

During surveys, if a **high risk** item is encountered the Survey123 app will prompt the Surveyor to consider whether a particular asbestos risk notification form should be completed. To determine this, the Asbestos Surveyor should consider whether there is an immediate risk of exposure to anyone who may work in the area (even if the area is only occupied from time to time). If an access restriction is recommended, this triggers the requirement for a Particular Asbestos Risk Notification form. Not all high risk items will require a notification.

**Medium risk** items in some instances may also require an access restriction (and therefore a particular risk notification), which is left to the surveyor to determine based on risk of exposure to airborne asbestos fibres.

It is the Surveyors responsibility to determine the urgency of reporting the requirement to restrict access however, **if the Surveyor determines that there is a definite and ongoing exposure event underway, this must be notified by phone immediately to the POC or Delivery Team and in advance of completing the notification form.** The normal survey process should stop to ensure they have enough information to determine the extent of the recommended access restriction and to immediately assist NZDF with any supporting information to isolate the area quickly. The survey should then continue if determined safe to do so.

### 3.3 Assessment of Asbestos Containing Dust

With consideration to historic results across the NZDF Estate and updated industry guidance NZDF have decided to restrict the collection of dust samples during asbestos surveys to limited specific circumstances only. Dust sampling methodologies must be discussed with the Asbestos Manager or AQAA in advance of dust samples being taken or submitted for analysis. This is the case across all survey types.

Currently available analytical methods are not sufficient to reliably relate an instance of asbestos containing dust to a quantifiable exposure risk. Surveyors are expected to provide adequate information to fully assess quantifiable risk by continuing to undertake thorough surveys of all accessible areas of NZDF buildings, assessing all risk through visual observations and bulk sampling, and recording any necessary limitations.

All consultants undertaking asbestos surveys across the NZDF Estate whom include asbestos dust sampling are to adopt a new approach emphasizing the requirement for a thorough visual and bulk sampling (only) strategy with immediate effect.

#### 3.3.1 Background

Settled dust results cannot be used to accurately predict airborne fibre concentrations. Asbestos fibres are expected to be found in low levels within settled dust in any building where asbestos containing materials form part of the construction. In the absence of other information, the detection of a few individual asbestos fibres within an area of surface dust does not provide a reliable measure of risk.

When applying the material assessment score to dust samples collected for 'presence / absence' analysis, the detection of a low number of asbestos fibres can cause a 'positive' result and may lead to an unnecessarily high-risk classification that does not reflect the actual potential for exposure. Interpretation of results is further complicated due to the non-homogenous nature of dust deposits and high potential for surface deposit variability (i.e. representativeness) across locations within a building or area. In many instances a 'high risk' value is often prescribed to account for the 'unknown' factors which can result in further unnecessary testing, access restrictions and / or costly remediation work. Conversely, asbestos risk can be missed if the surveyor is overly reliant on dust sample results.

The limitations of current surface testing methods are reflected briefly within the *Management and Removal of Asbestos ACOP* ('The ACOP'), which strongly indicates that the presence of asbestos fibres in low quantities does not indicate an area is unsafe to occupy. This understanding has since been adopted widely in New Zealand when issuing clearance certificates.

The ACOP references guidance from the UK HSE which has recently been updated and republished as *HSG 248 Asbestos: The analysts' guide* (2<sup>nd</sup> edition) which now contains guidance information specifically for asbestos dust assessment, with selected text included below:

*Sampling and analysis of asbestos in settled surface dust is not recommended except in specific circumstances where the spread of asbestos from a substantial recent release incident is being investigated. Dust sampling should not be routine or part of a bulk sampling or survey programme. Sampling is not advised due to the technical difficulties (eg efficiency of collection methods) and surface deposit/settled dust variability (ie representativeness) as well as uncertainties in the statistical relevance and in the assessment and evaluation of risk that arises from the detection of low numbers of fibres.*

*Surfaces with low numbers of microscopic fibres in dusts often occur in buildings and the fibres may have been present for many years, particularly on high-level surfaces. The use of surface samples to trigger extensive 'environmental cleaning' or abatement works requires careful evaluation and 'clean-up' will not usually be necessary in the absence of any visible suspicious asbestos debris and fragments. The fibres may not even be asbestos. Assessment of such material requires the use of standardised methods both to identify the fibres and to collect representative quantitative samples for analysis.*

*Where dust sampling for asbestos is carried out, results should be interpreted with caution. It is important that valid and reasonable conclusions are reached. The implications of small numbers of asbestos fibres in dust are quite different from the presence of visible asbestos debris and fragments. Occasional random asbestos fibres in settled dust cannot be considered to represent 'widespread or significant' contamination and should not be reported as such. Overstated claims and imprecise reporting may lead to undue anxiety for the client and occupants.<sup>1</sup>*

### 3.3.2 Requirement for Collection of Dust Samples on the NZDF Estate.

With consideration to the above, there are exceptions for limited circumstances where dust sampling may provide benefit, the foreseeable scenarios are defined below:

- **Investigation of a recent and significant disturbance event.** In this scenario the 'source ACM' is already identified and the material type, condition and surface treatment are used to inform of the likelihood of it having released a significant quantity of asbestos fibres to the surrounding area(s). Dust samples may therefore provide (indicative) results on how far the asbestos has spread, and how extensive any

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<sup>1</sup>Health and Safety Executive (UK), HSG248 Asbestos The Analysts' Guide 2nd Edition, 2021

required access restrictions should be to mitigate risk. The consultant should design a sampling strategy based on exposure risk (not random sampling), and provide recommendations based on careful interpretation of sample results as well as visual observations made of the area (for example, how much dust is present in general).

- **For scoping of asbestos remediation works.** In the absence of physical barriers such as walls and partitions that can be used to clearly delineate the extent of a remediation activity, dust sampling can provide a limited insight into delineating the remediation areas. Again, results must be carefully interpreted and may require input from others with intimate knowledge of the building / area, and its history.

Where dust sampling takes place, where possible the surveyor should take bulk dust (minimum approx. 1tbs) samples for analysis by identifying surfaces where dust has been allowed to accumulate over a longer time period, allowing for a more representative result.

It is important to note that during surveys and inspections adequate precautions must be taken to prevent the surveyors from exposure to asbestos. This includes minimising the amount of time necessary – and number of samples needed - to investigate asbestos in dust which may present a risk of becoming airborne when disturbed.

In all cases, settled dust sampling may only occur with prior consultation with the NZDF Asbestos Team at [asbestos@nzdf.mil.nz](mailto:asbestos@nzdf.mil.nz), and should generally be approached as a separate exercise to the survey, allowing the survey to continue uninhibited.

NZDF recognise that there is a broad interpretation of dust sampling strategies within the industry currently, and has prescribed various approaches in the past to standardise our approach. In the absence of equivalent formally recognised guidance in New Zealand, settled dust sampling is no longer recognised by NZDF as part of an asbestos survey.

### 3.4 Sample Naming and Submission

NZDF use an ESdat database to store the results of all samples taken on their bases, including any that are to be analysed for asbestos. This is a semi-automated system meaning that all sample and analysis information can be communicated directly between the laboratory and NZDF.

#### 3.4.1 Sample Naming

To enable communication with the ESdat database, the following sample naming format must be followed for all samples collected:

**[Full Floc ID]\_[Sample ID]\_[Sample date]**

**Each component of the above is detailed as follows:**

- **Full Floc ID:** Each building and structure to be surveyed has a unique identifier known as a Floc ID (some buildings may have multiple Floc IDs, in this situation each sample must be recorded according to the correct Floc ID from where it was taken).

The full Floc ID contains the abbreviated base code, structure type and zone identifiers and the specific building code (which is sometimes displayed outside the building in question) in the following format example:



The full Floc ID will be provided to the Asbestos Surveyor when buildings are allocated for planned surveys. They will also be shown in the *Survey123 app* – when you enter the camp/base name and search for the building ID, the full Floc ID will appear.

- **Sample ID:** The sample ID denotes the type of sample that has been collected:
  - ASB – Bulk samples
  - ASD – Dust samples (both wipe and micro-vacuum)
  - AA – Air samples
  - SS – Soil samples

The prefix is followed by a three-digit number. The first sample of that particular type in that building will be 001, then others follow sequentially (e.g. ASB001).

- **Sample date:** This is the date the sample was taken in DDMMYY format, e.g. 10<sup>th</sup> December 2021 would be 101221.

An example sample name is shown below.

**WHP:BLD:Z6:N5188\_ASB008\_101221**

The Asbestos Surveyor will need to enter the full sample name on any chain of custody forms and sample bags. Any failures to follow the naming convention will need to be rectified by the Asbestos Surveyor at no extra cost to NZDF before samples are reported by the laboratory.

Printing pre-labelled stickers for sample bags and pre-filling the Chain of Custody (COC) with sample IDs before heading to site (the COCs are provided in editable PDF format to allow for this) will assist to speed up the sampling process.

In the *Survey123* app, you only need to fill out the Sample ID (e.g. ASB008). The software will automatically append the Floc ID and sample date from information provided in the app, which can then be communicated to ESdat. This short form Sample ID will also appear on the management survey report and in the browser-based WebApps (see *Section 4*), plus any associated figures (see *Section 5.4.3*).

#### 3.4.2 Chain of Custody Forms

All asbestos samples are to be submitted to Hill Laboratories using the supplied Chain of Custody forms. Samples collected for management surveys are charged directly to NZDF. The additional information required on the form is shown on the next page (Figure 1).

Note: The Base acronym entered into the *Client Reference* must be for the administering site (even if the samples were taken at an associated satellite base). A list of primary camps and associated satellite bases is provided in Appendix A:

A separate COC form is required for each Floc ID.





**Quote No** 105084

**Primary Contact** P Wedlake

**Submitted By**

**Client Name**

**Address**

**Postcode**

**Phone** **Mobile**

**Email**

**Charge To** NZDF

**Client Reference** "BASE" Asbestos\_Lead

**Order No** Consultant Job Ref.:"Floc ID"

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

Email Primary Contact  Email Submitter  Email Client

Email Other [petra.wedlake@pdp.co.nz](mailto:petra.wedlake@pdp.co.nz)

Other [nzdf@esdat.net](mailto:nzdf@esdat.net) (Contact ID 288260)

**ANALYSIS REQUEST**

R. J Hill Laboratories Limited  
28 Duke Street, Hamilton 3204  
Private Bag 3205  
Hamilton 3240, New Zealand

**Office use only  
(Job No)**

T 0508 HILL LAB (44 555 22)  
T +64 7 858 2000  
E [mail@hill-labs.co.nz](mailto:mail@hill-labs.co.nz)  
W [www.hill-laboratories.com](http://www.hill-laboratories.com)

**CHAIN OF CUSTODY RECORD**

**Sent to Hill Laboratories** **Date & Time:**

**Name:**

Tick if you require COC to be emailed back **Signature:**

**Received at Hill Laboratories** **Date & Time:**

**Name:**

**Signature:**

**Condition** **Temp:**

Room Temp  Chilled  Frozen

Sample and Analysis details checked

**Signature:**

**Priority**  Low  Normal  High

Urgent (ASAP, extra charge applies, please contact lab first)

**Requested Reporting Date:**

**ADDITIONAL INFORMATION**

SR: Add AsbBulks\_ET to bulks & wipes analysis

No	Sample Name	Sample Date	Sample Time	Sample Type	Tests Required (if not as per Quote)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

*Continued on next page*

Retain quote number for management survey samples

Retain Primary Contact:  
  
P Wedlake

Insert consultancy details here

Enter consultant email for receipt of analysis results

Change "Base" to parent base acronym e.g. WHP\_Asbestos\_Lead

Enter consultant job reference plus building ID, e.g. "N5188"

Retain Other Email:  
[petra.wedlake@pdp.co.nz](mailto:petra.wedlake@pdp.co.nz)

Enter full sample ID as detailed in Section 3.5.1

**Figure 1:** Hill Laboratories Chain of Custody form information

## 4.0 SURVEY123 App

### 4.1 Introduction

NZDF has developed a Survey 123 App for collecting asbestos survey information for asbestos management surveys. NZDF require all consultants engaged to carry out asbestos management surveys to use this App.

Each consultancy engaged to conduct asbestos management surveys will be provided one training session in the use of the App and will be provided this guidance document.

#### 4.1.1 What is Survey123 for ArcGIS?

Survey123 is a form centric data collection tool developed by ESRI. All the survey data is saved within a database (feature service) hosted on ArcGIS Online (a Cloud technology solution), including the photographs. Customised reports are then generated from the database.

The NZDF Asbestos Survey App is composed of three tools:

1. Survey123 Field App: A mobile tool used to complete surveys in the field using a mobile device (e.g. an iPad) and a desktop version of the same Field App. Surveys submitted using this App are saved in a database hosted on ArcGIS Online and managed by NZDF.
2. Survey123 Web App (for editing): Allows access to the collected field data to conduct post site work review and/or to update survey data e.g. with lab results.
3. Survey123 Website (for review and reporting): A portal that allows users to view survey data that they have submitted in the Field App and updated via the Web App. Includes a tool for users to generate individual survey register reports as word documents.

### 4.2 Prior to Commencing Surveying

#### 4.2.1 Login for Survey123

The Asbestos Surveyor will be provided with an ArcGIS Online username and password by the NZDF Asset Information Team prior to visiting the camp(s)/base(s), which will allow access to the relevant regional App (this will be arranged by the POC). Logins can only be gained once Defence Security Clearance has been GRANTED to the Asbestos Surveyor. Before starting a survey, the Asbestos Surveyor must ensure that they are logged into the device with the credentials supplied. The Field Apps are installed on mobile devices (i.e. iPads) supplied to each camp or base, with which the Asbestos Surveyor will login with their supplied username and password. For security reasons these devices must not be removed from the camp or base at any point (except when transporting between administering sites and satellite camps).

#### 4.2.2 Security and Sensitive Information

Since the information is hosted on ArcGIS Online (a Cloud technology solution), sensitive information such as building names, sensitive room names and photographs of high security buildings must not be entered into the Online database. The survey confidentiality is controlled via ArcGIS Online and administrated by the NZDF Asset Information Team. NZDF will advise if any of the buildings to be surveyed are high security buildings.

It is the responsibility of the Asbestos Surveyor to keep their password secret and secure. These must not be shared even within the same organisation. Failure to follow this instruction will result in the Asbestos Surveyor's ArcGIS access being revoked, and in serious cases, their security clearance being revoked. If the password is compromised (e.g. if the device is stolen or lost), then the Asbestos Surveyor needs to inform the POC immediately who will inform the NZDF Asset Information Team. A new password will be generated and provided.

#### 4.2.3 Building Plans and Floc IDs

Prior to asbestos surveys being carried out, NZDF will provide building floor plans where they are available. Where these are unavailable, the Asbestos Surveyor will be expected to prepare basic plans to support the register. The floor plan(s) must be used to record locations of samples taken and items recorded in the App.

The POC should liaise with the Asset Information Team prior to survey works to check that the Floc ID (Functional Location) of the building or other asset that is planned to be surveyed is available in the Building ID (Floc ID) dropdown list on the App prior to starting the surveys. If a Floc ID is missing, then the NZDF Asset Information Team must update the App prior to the surveying commencing (see *Section 5.5.1*).

#### 4.2.4 Data Connection

An internet connection is required to submit surveys from the App to the database on the Online Cloud. The iPads provided by NZDF have a mobile data connection incorporated, however data may not be available in some locations across the NZDF Estate. Data can be collected offline and submitted later to the online database when an internet connection or mobile data is available.

**However, if a data connection is available, it is highly recommended to regularly submit the data while the survey takes place to reduce the potential for loss of data.**

If the Asbestos Surveyor encounters any technical issues, they should contact the POC in the first instance.

#### 4.2.5 NZDF Risk Assessment Method

NZDF have developed a risk assessment method for asbestos management surveys. It is important that Asbestos Surveyors familiarise themselves with the NZDF Asbestos Risk Assessment method - which differs from the more commonly used Material Assessment and Priority Assessment algorithms - prior to conducting the surveys.

The variables and processes involved with Risk Assessment are detailed in *Section 3.2.1*.

#### 4.2.6 Photographs

Within the Survey123 App, Asbestos Surveyors are able to take two photos of each item recorded. These must both be taken in landscape mode fit within the management survey template. Combined, they must clearly show the location of the ACM, be able to demonstrate the Surveyors interpretation of the items condition, as well as demonstrate the risk of the item being disturbed.

- **Photo 1** must show the item within its wider environment.
- **Photo 2** must be a close-up image of the item.

If referring to an area which is not accessed, the photos should be used to identify the area in question and any visible items which may assist access in the future (e.g. padlock on a locked door, phone number of key holder).

The Asbestos Surveyor will at times be required to take additional photos of materials and areas during the survey. These cannot be feasibly taken on the App as there is currently no way to retrieve these photos from the device (only data and photos from the App itself are uploaded to the cloud database), therefore these photos must be taken on the surveyor's own device. It is important that the Asbestos Surveyor receives approval from the POC prior to taking any extra photos if using their own device on the NZDF Estate.

Any restrictions on photography must be discussed between the POC and Asbestos Surveyor during the survey planning process.

For all NZDF sites, the Asbestos Surveyor must not include identifiers (such as faces, ID numbers, vehicle registration plates, military logos, technical military documentation) in any photograph.

Photographs, and other survey related documentation, must not be used in any way other than via the procedures detailed in this document, without prior explicit consent from the CPM. (This includes sharing via any public or private avenue).

### 4.3 Carrying Out Surveys – Survey123 App

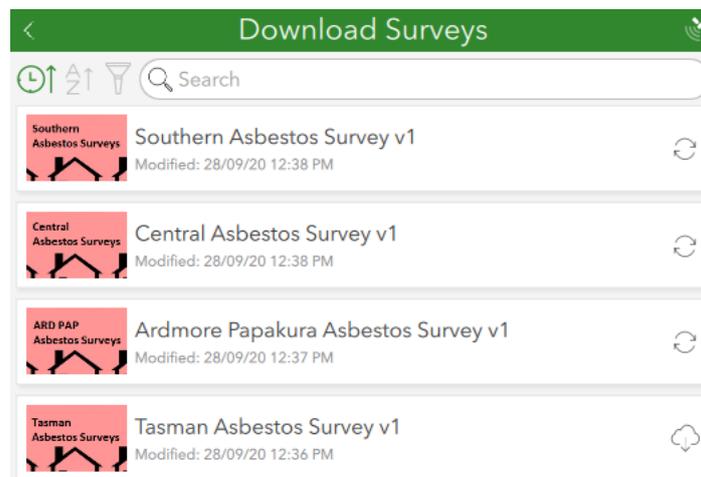
#### 4.3.1 Choosing the Relevant Survey App

For security reasons, the Survey123 apps are separated into 5 distinct regional groups and access into these groups is restricted to only those undertaking surveys within that region. They are grouped as follows:

- **Northern:** Arch Hill, Devonport, Great Barrier Island, Hobsonville, Kaipara, Kauri Point, Ngataranga Bay, Narrow Neck, North Shore, Torpedo Bay, Tauranga, Whangarei, Whangaparaoa, Whenuapai.
- **Ardmore and Papakura:** Ardmore, Papakura.
- **Central:** Bulls, Gisborne, Iirirangi, Landguard Bluff, Linton, Makomako, Napier, Ohakea, Raumai, Roys Hill, Waiouru, Wanganui.
- **Tasman/Wellington:** Dip Flat, Mangaroa, Olphert, Trentham, Woodbourne, Wellington.
- **Southern:** Burnham, Greymouth, Glentunnel, Invercargill, Kensington Army Hall, Pegasus, Tekapo, Toroa, Waitati, Weedons, Wigram, West Melton.

Note: Satellite bases may not necessarily be grouped together with their administering site.

On the App front page (*My Surveys*), the Asbestos Surveyor must check that the relevant App for the site to be surveyed appears. Otherwise, the Asbestos Surveyor must click on their initials in the top-right corner and select *Download Surveys* and the groups available to their account should be listed. Click the download icon  for the survey required.



(Note: v1 survey apps are no longer in use as of October 2021, refer to latest NZDF communications for advice on latest app versions.)

If the Asbestos Surveyor already has the relevant survey on the device, there will be an icon in place of the download icon . Refresh the survey to ensure the latest version is being used.

Once the survey is downloaded/refreshed, press on the icon to open the survey front screen.

There may be App updates which require deletion of the surveys on the unit, followed by reinstallation (users will be notified if this is required). To do this, select the relevant app from the front screen, then clicking the three-line icon  in the top right corner will present the option “Delete survey”. Following this, reinstall the survey as described above.

#### 4.4 Using the Field App

Dropdown lists are set up in the App to aid consistency of data collection within the database and for reporting. List of options available in each drop down are found in *Appendix E: List of Dropdown Options in Survey123 App*. Options can be selected either by scrolling through the list or searching by typing into the field to select the most relevant option.

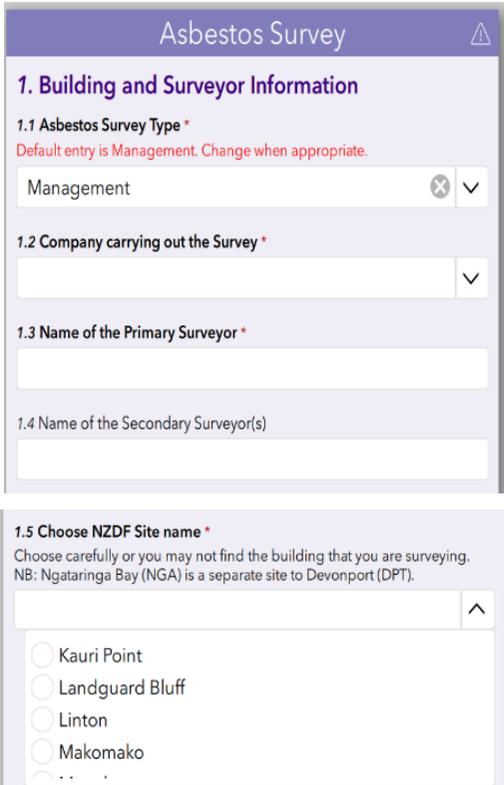
Locational/building data is pulled down from pre-populated fields when the building ID (Floc ID) is selected. (Further details are provided below on what to do should the building ID be missing from the dropdown list).

**IMPORTANT UPDATE: Asbestos Surveys should only be using the ‘V2’ versions of the Survey123 apps. The below instructions are based on V2 only and supersede the previous versions entirely.**

Previous app versions will be removed once fully field tested in all regions.

	<p><b>Sign in / out</b></p> <p>Before starting a survey, the Asbestos Surveyor <u>must</u> ensure that they are logged into the app with the credentials supplied to them. If the app is still logged in with someone else’s details, the Asbestos Surveyor may not be able to access the data collected on the Web App or Survey123 websites.</p> <p>If another user is still logged in, click on the initials in the top right corner, then select <i>Sign out</i>. Then click on the three parallel lines  and <i>Sign In</i> with the supplied credentials.</p> <p>When the Asbestos Surveyor has completed survey works for the day, they must ensure that they have signed out of the app before handing it back at the DEI office.</p> <p><b>Open the Regional Survey form / group</b></p> <p>Open <i>Survey123 for ArcGIS</i> on the device provided at the NZDF site where the surveys will be taking place.</p> <p>Click on the relevant survey icon  to begin site data collection. Three options will then be displayed at the bottom of the screen.</p>
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	<p>Click <b>Collect</b> to begin a survey of a new building.</p> <p><b>Drafts</b> contains any saved surveys which have not been uploaded to the online Cloud. Surveys in this draft folder are only saved on the device. If the device is damaged or lost, this information will be lost. Submit surveys regularly throughout the day and edit the sent surveys. <b>Once surveys are sent, the Asbestos Surveyor can still edit the data collected, but not the photos.</b></p> <p><b>Sent</b> contains surveys which have been uploaded. These can be edited and resent as many times as necessary during field data collection.</p> <p>Sent surveys are only accessible on the same device and with the same user login that originally sent the survey. Asbestos Surveyors cannot see or edit surveys submitted by others in the Field App. To view the data from all the surveys submitted, the Asbestos Surveyor must log in to the editable Web App (see <i>Section 5.3</i>).</p> <p>Required fields are shown with * next to the field.</p> <p>Dropdown lists are available to choose from on those fields with a down arrow. See Appendix E for a complete list of dropdowns available in the App.</p>
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 <p>The screenshot shows the 'Asbestos Survey' app interface. The title bar is purple with the text 'Asbestos Survey' and a warning icon. Below the title bar is a section header '1. Building and Surveyor Information'. Under this header are five numbered sections:</p> <ul style="list-style-type: none"> <li><b>1.1 Asbestos Survey Type *</b>: A dropdown menu with 'Management' selected. A red note below it says 'Default entry is Management. Change when appropriate.'</li> <li><b>1.2 Company carrying out the Survey *</b>: An empty dropdown menu.</li> <li><b>1.3 Name of the Primary Surveyor *</b>: An empty text input field.</li> <li><b>1.4 Name of the Secondary Surveyor(s)</b>: An empty text input field.</li> <li><b>1.5 Choose NZDF Site name *</b>: A dropdown menu with a search bar and a list of radio buttons for site names: Kauri Point, Landguard Bluff, Linton, Makomako, and an ellipsis.</li> </ul>	<p><u>1. Building and Surveyor Information</u></p> <p><b>1.1 Asbestos Survey Type:</b> Select the type of survey relevant to the particular task, e.g. Management.</p> <p><i>Note that the options listed below are relevant for conducting Management surveys. At the time of writing this version of the manual, Refurbishment and Demolition surveys must not be conducted using the App due to ongoing development which could impede functionality. The Audit function is only for use by those parties authorised to conduct audits.</i></p> <p><b>1.2 Company carrying out the Survey:</b> Select the surveying company from the dropdown list provided. If the company is not listed here, select “Other:” which will enable the Asbestos Surveyor to enter the company details manually.</p> <p><b>1.3 Name of the Primary Surveyor:</b> Enter only the lead Asbestos Surveyor’s name.</p> <p><b>1.4 Name of the Secondary Surveyor:</b> More than one assistant name can be entered here.</p> <p><b>1.5 Choose NZDF Site Name:</b> The Asbestos Surveyor can make a selection by using the dropdown arrow or by typing in any part of the site name. If the Base is not listed, the Asbestos Surveyor may be using the wrong regional survey form / group (see <i>Section 4.2.2</i>).</p>
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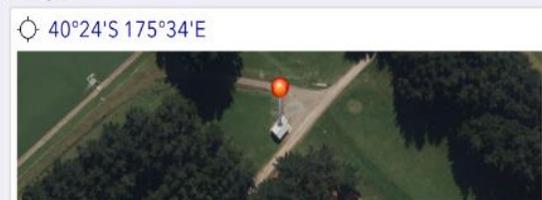
**1.6 Choose Building being Surveyed - Building ID (Floc ID) \***

If the building ID (Floc ID) is not found in the list, first check that the site name has been entered correctly as the buildings are filtered by this field entered above. If the building ID is not listed, please follow the procedure outlined in the guidance document. For clarification or questions please contact Charlotte Scott (charlotte.scott@pdp.co.nz or Tel: 09 5236918)

- LIN:BLD:ZL:CL13
- LIN:BLD:ZI:CI2
- LIN:BLD:ZF:CF5
- LIN:BLD:ZB:CA2
- LIN:BLD:ZL:CI11A

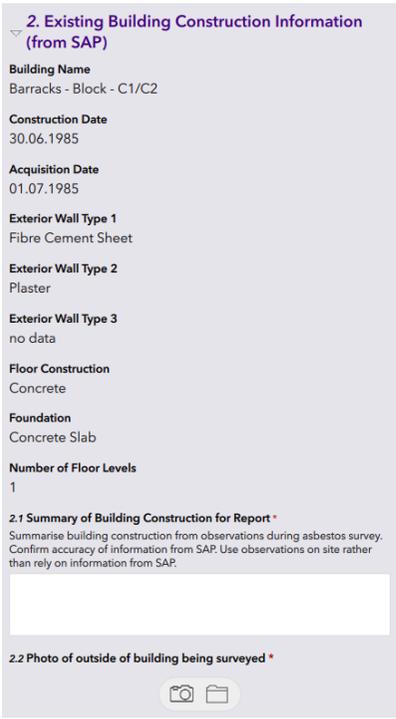
**Building Location**

Check that the building being surveyed matches the location on the map. If it does not, check the building ID entry above and/or follow up with onsite facilities staff to locate and ensure that the correct building is being surveyed.



**1.6 Choose Building being Surveyed:** Options only appear when the Asbestos Surveyor has selected a Base above. Type the building Floc ID and select (see *Section 5.5.1* for guidance regarding missing Floc IDs).

**Building Location:** An overhead view automatically appears once the building is selected. Use this, if necessary, to confirm that the correct building is being surveyed.

	<p><u>2. Existing Building Construction Information (from SAP)</u></p> <p>Building information from the existing NZDF SAP database appears automatically following selection of the building in Field 1.6. Asbestos Surveyors must check that the building name relates to the building. Also check the construction date and whether the building looks the same age as this (the date information must be checked as it is known to be inaccurate in some circumstances) and that other building information is correct (i.e. no. of levels, materials etc).</p> <p><b>2.1 Summary of Building Construction for Report:</b> The Asbestos Surveyor will need to fill this section out before completing the survey. Provide notes relating to the building construction and materials including ceilings, walls, floor and floor coverings, and roof structures; plus foundation construction and presence of sub-floors and/or roof voids. <b>It is best practise for Asbestos Surveyors to be extensive with their description to ensure that report users can confirm a visual inspection of all accessible areas has taken place.</b> Also compare with SAP data above for any major differences, including whether the building looks older than the information given. If the age information appears to be incorrect, the Asbestos Surveyor should state this and provide an estimated initial construction date. Any specific or indicative ages for building extensions/additions must also be commented on here if known. This text can be amended as required in the WebApp.</p> <p><b>2.2 Photo of outside of building being surveyed:</b> Take a photo of the front elevation on the iPad, this photo will be the main photo on the report. Press the camera button and take the photo in landscape mode. The folder button is also available in case the Asbestos Surveyor has taken a photo using the device photo app.</p>
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### 2.3 Building Survey Asbestos Status

- Assumed asbestos found  
 All rooms and exterior of the building were surveyed but no assumed asbestos was found

1 of 2

### 3. Asbestos Survey Details

#### 3.1 Date of Survey \*

Default entry is today's date. Change if appropriate.

Friday, 1 May 2020

#### 3.2 Which part of the building are you surveying? \*

- Internal       External

**2.3 Building Survey Asbestos Status:** Currently the default setting is “Assumed asbestos found”. However, if the Asbestos Surveyor looks throughout the building (internally and externally) and finds no suspicious materials, click the “All rooms....” option.

Click on the blue right arrow , or the [Next] button to move to the item details page.

*The Asbestos Surveyor will now begin recording individual items for inclusion in the Asbestos Register.*

### 3. Asbestos Item Details

Note that this page will be blank if the Asbestos Surveyor has selected “no assumed asbestos found.” If no suspected materials are to be recorded in the survey for the building, then click on the [Submit] button and upload the survey (process described in Field 4).

If the “*assumed asbestos found*” option was selected, Fields 3.1 and 3.2 will appear on the next page.

**3.1 Date of Survey:** Today’s date is the default setting. This can be changed if needed.

**3.2 Which part of the building are you assessing?** Select Internal or External depending on where the assessed item/material is located.

<p>3.2 Which part of the building are you surveying? *</p> <p><input checked="" type="radio"/> Internal      <input type="radio"/> External</p> <p>3.2a Floor Level *</p> <p><input type="text"/></p> <p>3.2b.i Specific Room Name and/or Description</p> <p>Type in the room type if not in dropdown list or expand upon if required i.e. include the common name for the room</p> <p><input type="text"/></p>	<p><i>Internal:</i></p> <p><b>3.2a Floor Level:</b> Select the relevant floor level, including options for “All floors” and “Multiple floors”. If the option required is not there, enter “Other Floor Level:” and the Asbestos Surveyor can enter relevant information manually.</p> <p><b>3.2b Room Type:</b> Select relevant room type. Please try and match one of the options listed as closely as possible (further details can be added later in Field 3.2b.i). If the option required is not there, enter “Other Room Type:”</p> <p>If the same material is found in multiple rooms, then a separate entry must be added for the presence of the material in each room. However, in some buildings, such as Barracks, where there are many rooms of the same appearance and similar layout, a single record can be entered detailing each material found throughout the rooms in question, so long as the risk score variables (i.e. condition, accessibility) are consistent throughout. Comments must be added detailing which rooms have been inspected and which have been assumed to include the same products. A separate line item is required if the material’s risk scores are different in a particular room.</p> <p><i>Note: If any of the following floor levels are chosen in Field 3.2a, the Room Type option will not be available: Roof Void, Sub-floor.</i> Specifics relating to these levels can be entered in Location Description below in Field 4.2.</p>
<p>3.2 Which part of the building are you surveying? *</p> <p><input checked="" type="radio"/> Internal      <input type="radio"/> External</p> <p>3.2a Floor Level *</p> <p>Ground Floor</p> <p>3.2b Room Type *</p> <p><input type="text"/></p> <ul style="list-style-type: none"> <li><input type="radio"/> Ablutions</li> <li><input type="radio"/> Accommodation</li> <li><input type="radio"/> A/C Enclosure</li> <li><input type="radio"/> Armoury</li> <li><input type="radio"/> ...</li> </ul>	

<p><b>3.2 Which part of the building are you surveying? *</b></p> <p><input type="radio"/> Internal      <input checked="" type="radio"/> External</p> <p><b>3.2a External Survey Location *</b></p> <p><input type="text" value=""/> <input type="button" value="v"/></p> <hr/> <p><b>3.3 Was the Floor/Room/Exterior location or Item (e.g. potential internal ACM) accessed? *</b></p> <p><small>e.g. If a room was locked, choose 'Not Accessed'. If a gutter was too high, choose 'Visually assessed - but not accessed'. For a potential internal ACM choose 'Visually assessed - but not accessed'.</small></p> <p><input type="radio"/> Accessed      <input type="radio"/> Visually assessed - but not accessed      <input type="radio"/> Not Accessed</p>	<p><b>3.2b.i Specific Room Name and/or Description:</b> Enter any room specifics here which may differentiate the room type listed above with others on the same floor e.g. bedroom number in barracks, “west laundry room” or any ancillary rooms which incorporate the same material as the main room recorded above.</p> <p><i>External:</i></p> <p><b>3.2a External Survey Location:</b> Select the most relevant external location from the dropdown list. If there is not a relevant option listed, enter “Other External Location:” and manually type the location.</p> <p><b>3.3 Was the Floor/Room/Exterior location or item (e.g. potential internal ACM) accessed?</b> Select the relevant option, detailed below:</p> <ul style="list-style-type: none"> <li>• <i>Accessed:</i> The material or item in question can be closely inspected by the Asbestos Surveyor and could potentially be sampled.</li> <li>• <i>Visually assessed – but not accessed:</i> This can also be described as “limited access”. The material or item can be seen and assessed but full access cannot be achieved for close inspection and sampling e.g. due to hazards such as height, electrics, etc. This should also be applied if a particular section of a room or area cannot be fully accessed and there is a requirement to assume the presence of asbestos in this area.</li> <li>• <i>Not accessed:</i> The room or area cannot be accessed, and no assessment can take place.</li> </ul>
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<p><b>3.3 Was the Floor/Room/Exterior location or Item (e.g. potential internal ACM) accessed? *</b> e.g. If a room was locked, choose 'Not Accessed'. If a gutter was too high, choose 'Visually assessed - but not accessed'.</p> <p> <input type="radio"/> Accessed              <input type="radio"/> Visually assessed - but not accessed              <input checked="" type="radio"/> Not Accessed       </p> <p><b>3.3a Reason for No Access to Floor/Room/Exterior location or Item (e.g. potential internal ACM) *</b> Select the reason for no access, if not in the dropdown list - choose other.</p> <p><input type="text"/></p> <p><small>Arrange access/visit. If access is possible at a later time, edit the sent survey record for the building in the Survey 123 App and update this item then resubmit the survey. Do not create a new survey for the building.</small></p> <hr/> <p><b>4. Survey Item Information</b></p> <p><b>4.1 Building Component *</b></p> <p><input type="text"/></p> <p><b>4.2 Location Description (Position)</b> Describe the position of the item within the room or exterior. e.g. North wall, Floor, Eastern half, Throughout, All walls etc.</p> <p><input type="text"/></p>	<p><b>3.3a Reason for No Access</b> field will appear if any of the two “not accessed” options were chosen in Field 3.3. The Asbestos Surveyor has to select the relevant reason from the dropdown. If none of these are relevant, select “Other reason for no access:” and add the reason in Field <b>3.3a.i Other Reason for No Access – Not in List</b>.</p> <p>If it is not possible to enter any part of the building, please let the POC know as soon as possible so that they can arrange access. <a href="#">The Asbestos Surveyor must access all accessible areas where it is safe to do so within the scope of a management survey (see Section 3.1 for further guidance relating to access issues on site).</a></p> <p><u>4. Survey Item Information</u></p> <p>If “<b>Accessed</b>” or “<b>Visually assessed – but not accessed</b>” was selected, go to Field 4.1 Building Component. If the option “<b>Not Accessed</b>” was chosen, the app will skip to <i>Field 4.5b Item No</i>.</p> <p><b>4.1 Building Component:</b> Select from the dropdown list of components. If the exact component is not listed, look for an item which most closely matches what is to be recorded. Debris is not listed here so enter the component where debris is seen and/or presumed. If the relevant option cannot be found, the Asbestos Surveyor should enter “Other Building Component:” and add their own entry.</p> <p><b>4.2 Location Description (Position):</b> If relevant, enter the location or position of the material or item in the room or area, or relative to the building. For example, the Asbestos Surveyor may wish to record that the linings are to the north and east walls, or that debris is found in the cable trench.</p>
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<p><b>4.3 Material *</b> What is the material type/product type? Consider dust as a separate item and the surroundings (location/activities/occupants etc.)</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <input style="width: 100%; height: 20px;" type="text"/> </div> <p><b>4.4a Quantity Units *</b> Choose the unit e.g. 100m length or 50m<sup>2</sup>, or 5 items</p> <p> <input type="radio"/> Length (m)             <input type="radio"/> Area (sq m)             <input type="radio"/> Number of items       </p> <p><b>4.4b Estimated quantity *</b> Enter the quantity here:</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> <input style="width: 100%; height: 20px;" type="text"/> </div>	<p>This field is not mandatory, so for example if there is only one hot water cylinder in the room and its location is obvious, then the Asbestos Surveyor does not need to add any further details.</p> <p><b>4.3 Material:</b> Enter the material being assessed from the dropdown list. Asbestos Surveyors must familiarise themselves with this list before selecting an entry. “Dust - settled” is an option but the Surveyor must contact the Asbestos Team to discuss requirements for dust sampling prior to taking samples, or before submitting samples to the laboratory. Three options are available for debris based on low, medium and high product type scores of the source material.</p> <p>The Asbestos Surveyor should make every effort to qualify the material as one of the dropdown options presented. The Asbestos Surveyor should be familiar with the material list prior to conducting the survey so that an appropriate choice can be made. However, if this is not possible, the Asbestos Surveyor should enter “Other material:” and add their own entry.</p> <p>If there is assumed ACM contained within a unit which cannot be accessed internally, the surveyor must make an informed decision of the most likely products contained, or select “Unknown – not accessed”.</p> <p><b>4.4a Quantity Units:</b> The Surveyor must select the most appropriate unit to accurately depict the full extent of the item / material (full extent within the location selected / described). One of the three options / units must be selected. Debris should usually be expressed as the area over which the debris visually extends rather than the assumed collected amount of material present. Sealed items can be expressed as a number of items if the amount of material is not apparent e.g. 2 no.</p>
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<div data-bbox="376 558 853 790"> <p><b>Floc ID</b> DPT:BLD:Z11:SY32</p> <p><b>4.5a Sample No.</b> Enter the sample number taken at this location. Format must be entered here as ASB001 and then use the next consecutive number e.g. ASB001, ASB002, ASB003 etc. The CoC and sample bag must use the full sample number format Floc_ID+ASB001+Sample date e.g. DPT:BLD:Z11:SY14_ASB001_070520</p> <input data-bbox="385 742 840 778" type="text"/> </div> <div data-bbox="376 912 853 1018"> <p><b>4.5a.i Reference Sample No.</b> Enter the reference sample number that is being used to record the item result. This must be sampled from the same material type.</p> <input data-bbox="385 973 840 1010" type="text"/> </div> <div data-bbox="376 1061 853 1193"> <p><b>4.5b Item No. *</b> Item number being assessed and recorded on the floor layout/building plan. Numbered consecutively 1, 2, 3 etc.</p> <input data-bbox="385 1133 840 1169" type="text"/> </div>	<p><b>4.4b Estimated Quantity:</b> The Surveyor must then type the number of units observed according to which unit was selected.</p> <p><b>4.5a Sample No.:</b> If this item / material is sampled, enter the sample number here. Abbreviated sample number format must be used here i.e. ASB001 must be used for the first bulk sample taken, with use of consecutive numbers thereafter.</p> <p><i>NB: The full sample number includes the building Floc ID, followed by the sample reference and the sample date. For example, WHP:BLD:Z8:A5310_ASB001_110520. The full sample number must be used on sample bags and associated Chain of Custody. (see Section 3.4.1 for more information regarding sample naming).</i></p> <p><b>4.5a.i Reference Sample No.:</b> If the material is visually consistent with another previously sampled item <u>collected from the same building</u>, write the original sample number here (in the same abbreviated sample number format). The original sample reference can also be entered here if the assumption is based off a sampling exercise prior to the survey.</p> <p><b>4.5b Item No.:</b> Label each item with a unique identifier. The items must be labelled sequentially starting with 1. <b>All items must be unique.</b></p> <p>Note: number formats such as '01' and '001' are incorrectly formatted for ArcGIS.</p>
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<p><b>4.6a Photo 1*</b> TAKE PHOTOS IN LANDSCAPE. The photo should help others recognise where the item being surveyed is located. Two photos may be required. Take the first photo to show position(s) within a room/exterior area and a second photo close up. If access is not possible, take a photo of the location for the record (e.g. the locked door).</p>  <p><b>4.6b Photo 2*</b> Take a second photo to show close up of the item.</p> 	<p>At this stage, the Asbestos Surveyor needs to make sure that the item number and sample number (including referenced samples) are recorded on a site plan (example of a completed site plan is found in <i>Section 5.4.3</i>), along with any further information that may be required to assist in completing the report (such as documenting the extent). Note that currently there is no facility to create site plans within the Survey123 App. Asbestos Surveyors will be required to do this using pen and paper, including using printed site figures.</p> <p><b>4.6 Photos:</b> Two photos are required for each item. These photos can be taken from within the App using the camera icon. <b>The photos must be taken in <u>landscape</u> mode</b> rather than portrait (this is for report formatting reasons). The photos cannot be annotated within the app e.g. with text or arrows. Only two photos per item can be taken using the App. Any additional photos should be taken using the Asbestos Surveyor’s own camera/mobile phone – please check prior to conducting the survey with the POC that the device is approved for use in that building. (The base iPad cannot be used to take additional photos as there is currently no facility for these to be retrieved from the device).</p>
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	 <p style="text-align: center;">Example of <b>Photo 1</b></p>	 <p style="text-align: center;">Example of <b>Photo 2</b></p>
<p>The format of the photos must be as follows:</p> <ul style="list-style-type: none"> <li>• <b>4.6a Photo 1</b> must show the position of the item/material within the local room/area and must clearly indicate the accessibility of the item.</li> <li>• <b>4.6b Photo 2</b> must show a close-up of the material and must be of suitable quality to identify the product type, and surface condition of material.</li> </ul> <p>See Section 4.2.6 for more information on photography and requirements.</p>		

<p><b>5.1 Sample Results *</b></p> <p>The default entry is Sampled (Assumed Pending Results). Once the lab results are received, then the record must be updated back in the office using the Web App. For potential internal ACM, choose Assumed ACM - No access.</p> <p>Sampled (Assumed Pending Results) ^</p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Sampled (Assumed Pending Results)</li> <li><input type="radio"/> Positive</li> <li><input type="radio"/> Assumed Positive</li> <li><input type="radio"/> ACM - No Access (Assumed Asbestos)</li> </ul>	<p>Note that when taking photos in dark areas, the main camera on the tablets provided may not include a flash function. A workaround is to select the forward-facing camera icon  and make sure the flash is on , allowing the Asbestos Surveyor to take a photo with the front camera with the assistance of a “screen flash”. Another way is to use a wide angled torch to illuminate the room in question.</p> <p><b>Once a survey is submitted, the photographs cannot be changed</b> or replaced later using the editable Web App (see <i>Section 5.3</i>) or using the edit and resend survey option in the App. Please check site photographs are suitable whilst on site.</p> <p><u>5. Asbestos Results</u></p> <p><b>5.1 Sample Results:</b> Surveyors should keep the default entry of “Sampled (Assumed Pending Results)” for any samples items. These can be updated to “Negative” later following receipt of the laboratory results.</p> <p>OR select “Positive” for any strongly presumed items that do not require laboratory confirmation.</p> <p>OR select “Assumed Positive” for presumed items.</p> <p>OR select “Negative” for items already known not to contain asbestos.</p> <p>OR select “Non-Suspect Material” for items that the Surveyor wants to highlight as being inspected but have not been sampled e.g. modern vinyl or exposed concrete.</p>
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<div data-bbox="342 555 862 735"> <p>5.2 Type of Fibre Detected in Laboratory Result</p> <input type="text"/> </div> <div data-bbox="342 651 862 735"> <p>5.3 Asbestos Friability</p> <input type="text"/> </div> <div data-bbox="331 954 878 1066"> <p>6. NZDF Risk Assessment</p> <p><b>ASB Product Type:</b> This refers to the Material type entered in the previous section if the site was assessed or visually assessed (removed the need to select again), if Not Accessed, N/A. Bituminous product</p> </div>	<p><b>5.2 Fibre Type:</b> Only applies to items which are sampled and found to be positive or strongly presumed items where the Surveyor must use their best judgement to estimate the most likely fibre types OR select the “Chrysotile, Amosite, Crocidolite” option. Select the fibre types recorded on the analysis certificate from the dropdown list. In unusual cases if any other asbestos fibre type is found or strongly presumed, select “Other Asbestos Fibre Type:” and field <b>5.2a Other type of Fibre not listed</b> will appear to allow details to be added.</p> <p><b>5.3 Asbestos Friability:</b> Enter the friability of the material concerned. For assumed materials where the material type is uncertain, enter the presumed friability of product type selected, adopting a “worst case” approach if unsure.</p> <p><u>6. NZDF Risk Assessment</u></p> <p>The NZDF Risk Assessment Method is described in <i>Section 3.2</i>.</p> <p><b>6.1 Asbestos Product Type:</b> Previous versions of the app have forced the Surveyor to select the Product Type in 4.3 as well as this section. This is no longer necessary but the selection from 4.3 is displayed in order to allow the Surveyor to easily double check the selection.</p>
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<p><b>6.2 Asbestos Condition *</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> N/A</li> <li><input type="radio"/> Good - No deterioration/damage or sealed/encapsulated</li> <li><input type="radio"/> Fair - Minor deterioration/damage, some exposed surfaces</li> <li><input type="radio"/> Poor - Extensive damage resulting in material fibre release</li> </ul> <p style="text-align: right;">*</p> <p><b>6.3 Asbestos Disturbance Potential *</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> N/A</li> <li><input type="radio"/> Low - not accessible (too high or locked/restricted) or access activities will not have potential to generate airborne fibre</li> <li><input type="radio"/> Medium/High - moderate level of activity with potential for minor disturbance/fibre generation. e.g. Active mobile plant, high airflow, high level of foot traffic or regular disturbance of ceiling tiles which may disturb/generate fibres</li> </ul> <p style="text-align: right;">*</p> <p><b>6.4 Asbestos Sensitivity *</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> N/A</li> <li><input type="radio"/> Low (area is outdoors or only accessed infrequently and is not connected to air conditioning intake etc - i.e. no pathway). Infrequent occupation (e.g. plant room, 1-5 people)</li> <li><input type="radio"/> Medium/High (e.g. likely indoors and area is accessed regularly i.e. more than 25-100% of the time/multiple people, high level of human occupation). Permanent occupation (office)</li> </ul> <p style="text-align: right;">*</p> <p><b>*Refer to updated descriptions on Page 16-17, wording scheduled to be replaced on combined survey app as of February 2022.</b></p>	<p><b>6.2 Asbestos Condition:</b> Refer to Section 3.2.1 for more detailed descriptions of how to assess the items condition.</p> <p>Select “N/A” for Negative or Non-Suspect Material items.</p> <p><b>6.3 Asbestos Disturbance Potential:</b> This mostly relates to the accessibility of the material. If people are likely to encounter the material on a regular basis or it is likely to be disturbed routinely, then mark as “Medium / High”, otherwise if it is an item/material that is out of reach of people or machinery then mark as “Low”. For example: fibre cement ceilings could be classed as “Low” but wall linings in the same room could be classed as “Medium / High”. Also mark materials in areas that are generally not accessed as “Low” – this includes materials that are well encased and protected such as safes and HWCs.</p> <p><b>6.4 Asbestos Sensitivity:</b> This relates to the room or area where the material/item is located. As explained in the App, if the room is populated for more than 25% of the day (including as a circulation space such as a corridor or staircase) then it should be classed as “Medium / High”.</p> <p><i>NB: In cases where friable asbestos has been enclosed, the surveyor must assess the adequacy of the enclosure (i.e. is it sufficiently robust and durable) to determine the sensitivity. Adequately enclosed friable asbestos is likely to have a Low Asbestos Sensitivity.</i></p>
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**7.1 Risk Based Recommendations based on Low Asbestos Risk Score:** Do not disturb item, monitor condition of material. Remove or implement controls prior to disturbance.

Add your own comments to the free text field in the section below:

### Example of low risk material

**7.1 Risk Based Recommendations based on Medium Asbestos Risk Score:**

Select one of the options from the drop down list below and add your own comments to the free text field in the section below:

- ACTION REQUIRED:** Restrict access to area and remove
- ACTION REQUIRED:** Control access to vicinity of item, repair / enclose / encapsulate, and monitor condition of material.
- ACTION REQUIRED:** Control access to vicinity of item, and remove.
- Do not disturb item, monitor condition of material. Remove or implement controls prior to disturbance.

### Example of medium risk material

**7.1 Risk Based Recommendations based on High Asbestos Risk Score:**  
**IMMEDIATE ACTION:** Restrict access to area, indicate with warning signage at all access points. Area accessible only to those working under approved work procedures / PTW's. Remove / remediate in accordance with asbestos regulations.

Add your own comments to the free text field in the section below:

### Example of high risk material



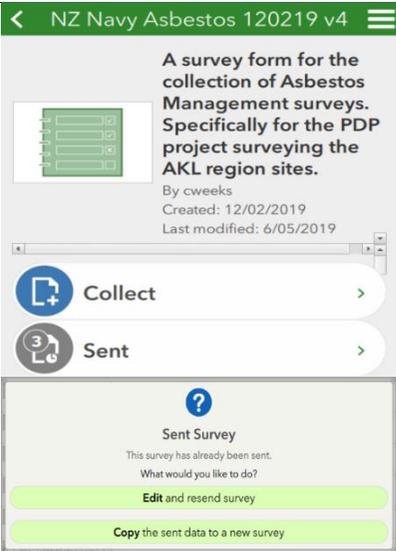
**7 NZDF Recommendations:** Following completion of the Risk Assessment the Surveyor will see the calculated risk score and level. At this point it is recommended that each item is reviewed on site to ensure the outcome is appropriate for the situation observed. **High risk** items will trigger a prompt to consider whether a Particular Asbestos Risk notification is required. (see *Section 3.2.3* for more details on Particular Asbestos Risk Notifications).

**7.1 Risk Based Recommendation:** The recommendations displayed here are automatically provided in line with the total risk score / level. For **Medium risk** items there are several recommendations to select from.

**7.1 Surveyors Additional Comments and Recommendations:** Each risk level allows the surveyor to input additional text as recommendations or to add further context that is not covered by the standard options available for this item. All Surveyors are encouraged to add further detailed recommendations, advice and context to enable to report users to understand your findings. Supporting information is strongly encouraged where areas have not been accessed or otherwise presumed.

### Enter another item

This is the end of the item entry. To enter details for another item, press the **+** button at the bottom to begin another record. If there is any missing required information in the current record, the Asbestos Surveyor will be alerted to this and must complete all required fields before moving to the

	<p>next record. If the Asbestos Surveyor wants to delete a record, press the bin icon. When multiple records have been collected, move between them using the grey left and right arrows at the bottom of the page. The blue left arrow will take users back to the building information front page.</p> <p><b>Send survey</b></p> <p>Once the survey is completed and all the information has been entered, click on the blue tick icon <input checked="" type="checkbox"/> in the bottom right corner and, assuming that the device is online, click send survey (or the [Submit] button). <u>It is recommended to also complete this action regularly while the survey is taking place</u> to ensure that information is saved on the Cloud in case of device failure.</p> <p>Once the record is saved, the Asbestos Surveyor will be sent back to the front page of the App and the survey previously sent can be found by clicking the “Sent” button. Then click on the survey and select “<b>edit</b> and resend survey” to return to the data screens.</p> <p>If data connection is not available at the time of the survey, save the survey to the device and then upload it later (it will be accessible in <i>Drafts</i> on the front page).</p>
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## 5.0 Sample Naming, Floor Plans, Item/Sample Location Plans

### 5.1 Sample and Item Referencing

The sample numbering system within the App is:

**ASB001** (Asbestos bulk sample with or without detected asbestos fibres)

The full sample name (including Floc ID and sample date) is required on all sample bags and associated chain of custodies – this is explained in *Section 3.4*.

The sample number should also be included for other materials which reference that sample, with the prefix “XR”.

The Item Number system assigns each survey entry with a unique item number, including all sampled and assumed materials and non-accessed rooms. They should be added sequentially into the database, starting with “1” then “2”, “3”, etc. All item numbers as well as associated sample numbers should be marked on any relevant figures. This means items extending through multiple figures (i.e. multiple floors) should be referenced on each one.

### 5.2 File Storage / File Naming

#### 5.2.1 Field Notes

NZDF encourages Asbestos Surveyors to take field notes (including sketched/annotated building plans). These are to be scanned and saved in the Asbestos Surveyor’s own project folder at the end of each day along with photographs. Field notes and photographs should be filed and named by the Floc ID.

Each file should be named as follows: yyyyymmdd-flocID (i.e. 20190218-NY218).

**Survey related documentation must not be shared with any other party, other than for use by NZDF via the procedures detailed in this document, without prior explicit consent from the CPM.**

#### 5.2.2 Laboratory Results

The Asbestos Surveyor is to ensure laboratory results are saved in the project folder under the building name when received from the laboratory, including a copy of the chain of custody documentation.

**The data must be provided back to NZDF as a deliverable in ESdat format. This must be requested from Hill Laboratories.**

**NOTE: There are two browser-based applications which are to be used during the post-survey process. Each one is intended to serve a different task. Please use each application as shown below only. Usage details for each are shown in *Sections 5.3* and *5.4*.**

<b>Browser Application</b>	<b>URL</b>	<b>Purpose</b>
<i>WebApp</i>	Different URLs supplied for each Survey Region (see <i>Section 4.3.1</i> ), relevant URL supplied by STA/POC to surveyor upon request.	To edit survey data collected off site including updates following receipt of sample results.
<i>Survey123*</i>	<a href="https://survey123.arcgis.com/surveys">https://survey123.arcgis.com/surveys</a>	To produce the management survey report.

\* *Not to be confused with Survey123 iPad app, used to collect survey data on site.*

### **5.3 Editable WebApp**

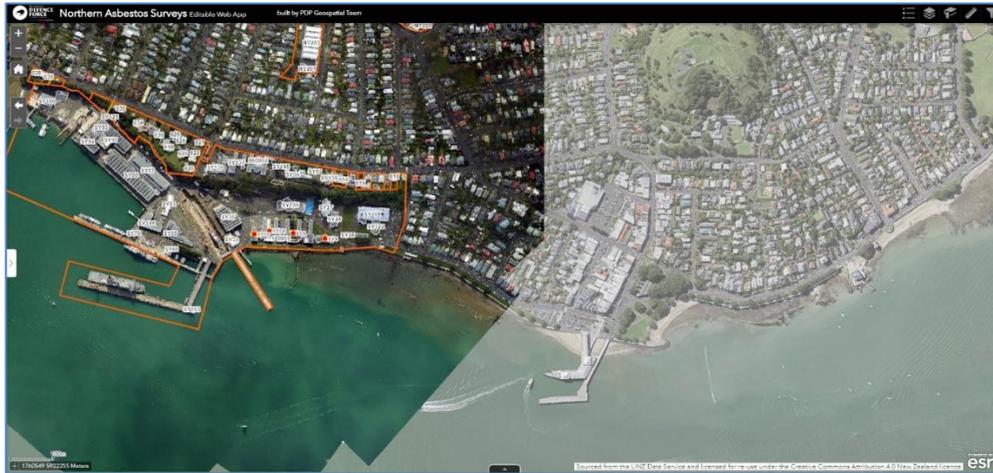
A link to the relevant editable regional Web App will be provided to the Surveying Company by the Asset Information Team.

An editable WebApp for each regional group has been created to enable Asbestos Surveyors to update certain information back in the office post fieldwork, such as laboratory results, actions and recommendations. The WebApp is easier for typing in longer text strings such as comments and contains other layers of information as well as providing a more user-friendly interface for Quality Assurance / Quality Control (QA/QC) of the database (using the attribute table and pop ups). These contain multiple records for each building location.

#### **5.3.1 WebApp Survey Process / Notes**

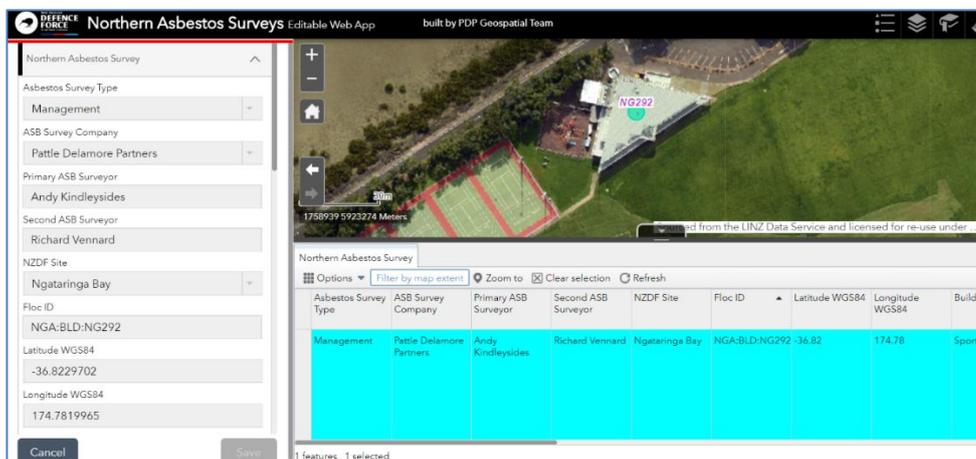
Asbestos Surveyors are to access the WebApp once the survey has been submitted on the Field App. This will enable the Asbestos Surveyor to make any edits to the survey which could not be done on site. The Asbestos Surveyor should login using the credentials provided. Note that the WebApp works best on Chrome browser.

NEW ZEALAND DEFENCE FORCE – NZDF NATIONAL ASBESTOS SURVEY PROGRAMME – SURVEYOR USER MANUAL



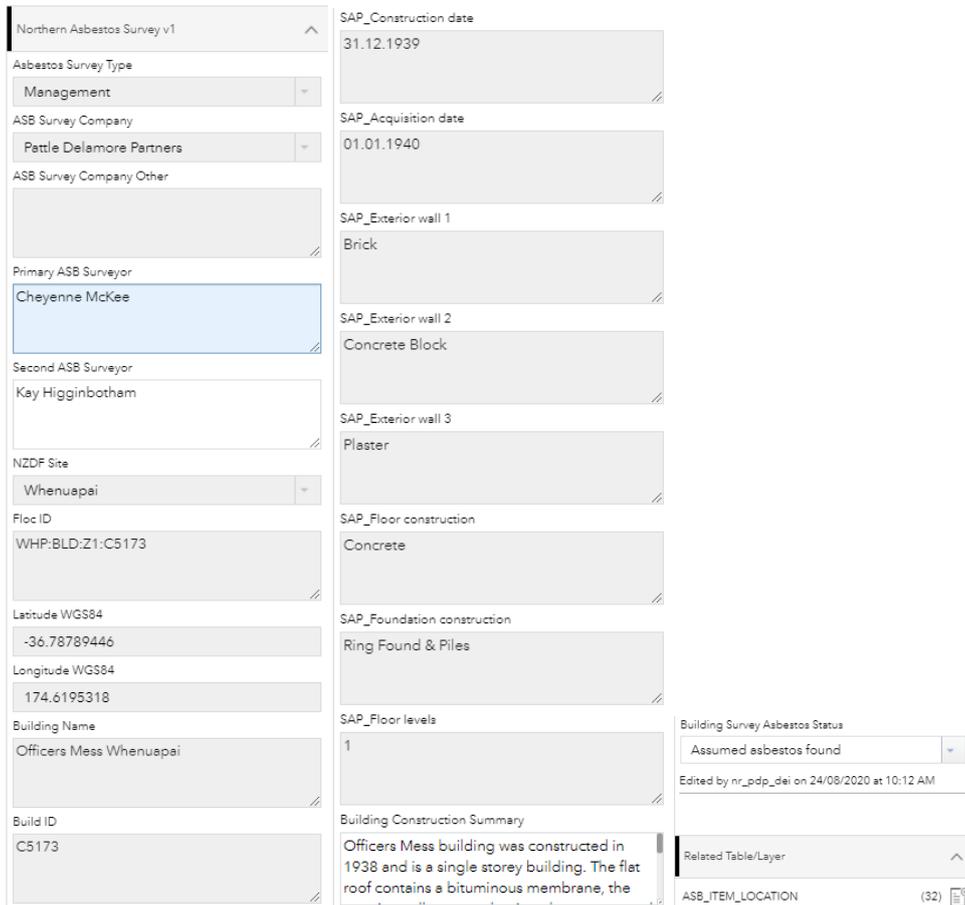
Once logged in, the Asbestos Surveyor will be presented with a satellite image. The Asbestos Surveyor will need to then zoom in to the Base that has been surveyed. Small pink and green circles representing each survey undertaken by the Surveyor. Alternatively, the Floc ID can be searched, although only buildings with current uploaded survey data are searchable.

To view the data attributes, click on the building unit and a window will appear on the left-hand side. If this does not happen, then there may be a small grey tab with an arrow which will need to be clicked to reveal it.



Once the building/unit has been selected, the details taken from the tablet will be visible. Note that there may be more than one survey on each building, in this case the Asbestos Surveyor can select the appropriate survey using the arrow keys at the top of the building details window.

Some of the details listed are greyed out and are not editable. The first page relates to the front page of the App, and amendments can be made here to the building construction summary, for example the Asbestos Surveyor can elaborate on any brief notes made on the tablet, amongst other things.



Northern Asbestos Survey v1

Asbestos Survey Type: Management

ASB Survey Company: Pettle Delamore Partners

ASB Survey Company Other:

Primary ASB Surveyor: **Chyenne McKee**

Second ASB Surveyor: Kay Higginbotham

NZDF Site: Whenuapai

Floc ID: WHP:BLD:Z1:C5173

Latitude WGS84: -36.78789446

Longitude WGS84: 174.6195318

Building Name: Officers Mess Whenuapai

Build ID: C5173

SAP\_Construction date: 31.12.1939

SAP\_Acquisition date: 01.01.1940

SAP\_Exterior wall 1: Brick

SAP\_Exterior wall 2: Concrete Block

SAP\_Exterior wall 3: Plaster

SAP\_Floor construction: Concrete

SAP\_Foundation construction: Ring Found & Piles

SAP\_Floor levels: 1

Building Construction Summary: Officers Mess building was constructed in 1938 and is a single storey building. The flat roof contains a bituminous membrane, the

Building Survey Asbestos Status: Assumed asbestos found

Edited by nr\_pdp\_dlei on 24/08/2020 at 10:12 AM

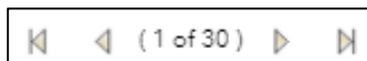
Related Table/Layer: ASB\_ITEM\_LOCATION (32)

**Figure 2: WebApp Building Front Page**

At the bottom is a tab that reads “Related Table/Layer” click here and scroll down to see another piece of text labelled “ASB\_ITEM\_LOCATION” – click on this to access the editable item records. Asbestos Surveyors should be able to make any necessary amendments on most of the fields entered in this section.

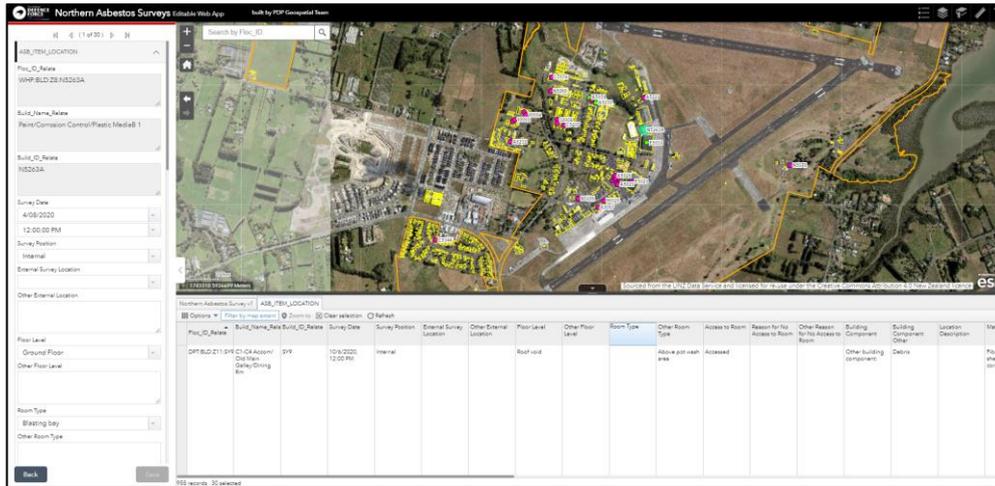
### 5.3.2 Updating Sample Results

Each item recorded can be viewed by clicking on the left and right buttons at the top of each record. This will display the record number you are viewing (which should correlate with the Item Number) and the total number of records in the entry (see below). There is currently no option to search the records.



In addition to the editable record viewer, records can also be viewed for each Floc ID in tabular form. The Asbestos Surveyor should click on the translucent up-arrow tab  to bring up the table, then select the “ASB\_ITEM\_LOCATION” tab to bring up a table of all records belonging to the building currently selected.

The table can be sorted in order of any of the field columns shown by clicking on the column header and selecting “Sort ascending” or “Sort descending”. This can be useful for comparing record entries in the editable item record. Note that data cannot be edited within this table, only in the record display on the left (see *Figure 3*).

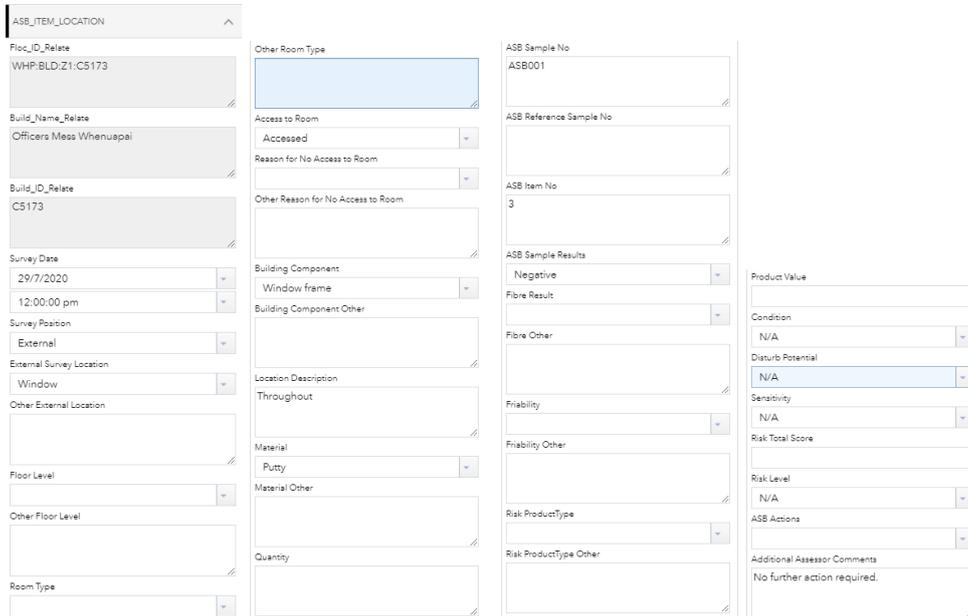


**Figure 3: Comparing selected item record with other items at same location**

The main use for the editable item records is to make amendments following the receipt of bulk sample analysis. The Asbestos Surveyor can change the “ASB Sample Results” to Positive and Negative as required. All fields which are not applicable for a negative-asbestos material (quantity, friability and risk scores (incl. product type)) must be replaced by “N/A” if not originally selected. If the high-risk alert note is filled out, this must be deleted if the item is not asbestos. “ASB in air” and “ASB in soil” should be changed to “No”, and any comments associated with remediating the material (when assumed to be positive) should also be amended accordingly. (See *Figure 4* for image of complete sampled negative item record).

For all negative and Non-Suspect Material items, “No further action required” should be selected in the ASB Actions field.

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The screenshot displays a web-based form for recording asbestos survey data. The form is organized into several columns and sections:

- ASB\_ITEM\_LOCATION** (Header)
- Left Column:**
  - Floc\_ID\_Relate: WHP:BLD:Z1:CS173
  - Build\_Name\_Relate: Officers Mess Whenuapai
  - Build\_ID\_Relate: CS173
  - Survey Date: 29/7/2020
  - Survey Time: 12:00:00 pm
  - Survey Position: External
  - External Survey Location: Window
  - Other External Location: (Empty)
  - Floor Level: (Empty)
  - Other Floor Level: (Empty)
  - Room Type: (Empty)
- Middle Column:**
  - Other Room Type: (Empty)
  - Access to Room: Accessed
  - Reason for No Access to Room: (Empty)
  - Other Reason for No Access to Room: (Empty)
  - Building Component: Window frame
  - Building Component Other: (Empty)
  - Location Description: Throughout
  - Material: Putty
  - Material Other: (Empty)
  - Quantity: (Empty)
- Right Column (Top):**
  - ASB Sample No: ASB001
  - ASB Reference Sample No: (Empty)
  - ASB Item No: 3
  - ASB Sample Results: Negative
  - Fibre Result: (Empty)
  - Fibre Other: (Empty)
  - Friability: (Empty)
  - Friability Other: (Empty)
  - Risk ProductType: (Empty)
  - Risk ProductType Other: (Empty)
- Right Column (Bottom):**
  - Product Value: (Empty)
  - Condition: N/A
  - Disturb Potential: N/A
  - Sensitivity: N/A
  - Risk Total Score: (Empty)
  - Risk Level: N/A
  - ASB Actions: (Empty)
  - Additional Assessor Comments: No further action required.

**Figure 4: Item record for sampled negative material**

Once all changes have been made, press “Save”.

Currently, Asbestos Surveyors do not have the ability to delete records using the WebApp. If it is deemed necessary for a record to be deleted from the database, the Surveyor should get in touch with STA to arrange this. **Please consider if such action is required before making this request.** Note that deletion of a record removes all trace of it from the database and the information cannot be retrieved.

Additional records can be added using the WebApp if required, using the  icon at the bottom of the survey data front page (next to “ASB\_ITEM\_LOCATION”). However, entering new data in this way means many of the features which are automatically generated in the field app, such as risk score calculation and associated recommendations, will need to be entered manually using this method. In addition, photos cannot be added to any register items entered in this manner. Therefore, **this option must be avoided unless there is no other way to enter this information.** It may be more practical to return to site and enter the new data on the tablet App.

## 5.4 Survey123 Web Page

Once a building is surveyed and the information is submitted in the Survey 123 App and WebApp, then the information can be viewed on the Survey 123 web page <https://survey123.arcgis.com/surveys>. This web page must be opened in the Google Chrome Browser.

This web page is where the register reports are generated. Note that it is not recommended to make edits to the register using the Survey123 page and the WebApp should be used for this purpose (*Section 5.3*).

### 5.4.1 Asbestos Register Reports

*Note: guidance relating to producing audit reports is not included in this version of the App Manual –specific training will be given to relevant parties when the need arises. Audits of the data submitted to AGOL will be conducted by the AQAA to confirm adherence to the guidance outlined in this manual.*

#### 5.4.1.1 Overview

Asbestos management survey reports must be generated for each building that has been surveyed using the templates within the Survey123 Web Page. The reports are generated from a word document template to ensure consistency. Data is pulled from the database which auto-populates the report template. An example of a generated management survey report is shown in *Figure 9*. The reports include the sample/material details, risk rating, comments, recommendations, actions, and photographs. The survey date (which may comprise of a range of dates over a few days) and the report date needs to be entered into the report manually. The report date is the date that the register report has been submitted to NZDF but should be amended if updates are requested.

This word document must then be converted to a pdf, combined with the marked-up site plan(s) showing sample locations (including assumed items) and the laboratory certificate(s), and the resultant document is sent to the NZDF AQAA via email (*Section 2.0* outlines this process). These documents (along with the Online GIS database) form the asbestos management register report.

Note that the site plans should be generated separately from the App by the surveyor. Guidelines and conventions to follow with figure production are shown in *Section 5.4.3*.

#### 5.4.1.2 Report Naming Convention

Reports must have the following naming convention:

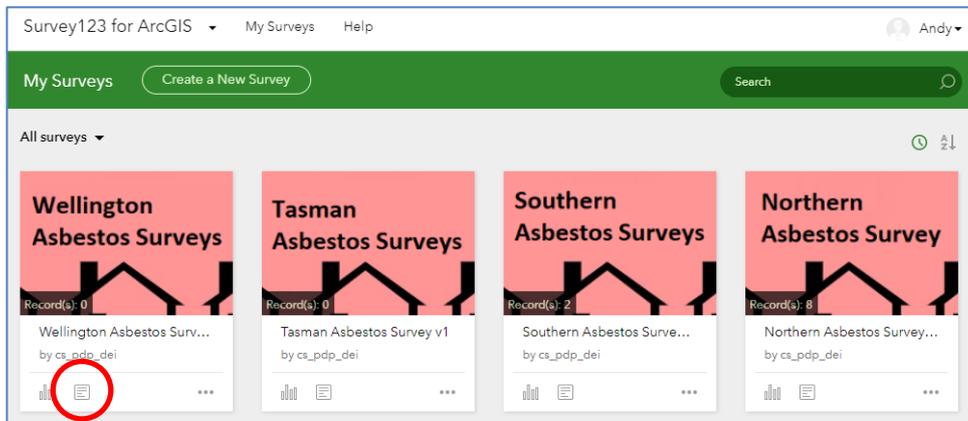
NZDF Site\_buildingID\_AMS Report\_DRAFT\_Rev0.n\_DDMMYY.pdf – for draft management survey register reports

NZDF Site\_buildingID\_AMS Report\_FINAL\_Rev1.n\_DDMMYY.pdf – for final management survey register reports

e.g. TOP\_NA711\_AMS Report\_DRAFT\_Rev0.1\_160221.pdf (which is the first revision of draft management register report for building NA711 at Torpedo Bay issued on 16.02.2021).

#### 5.4.1.3 Preparing Asbestos Management Survey Reports

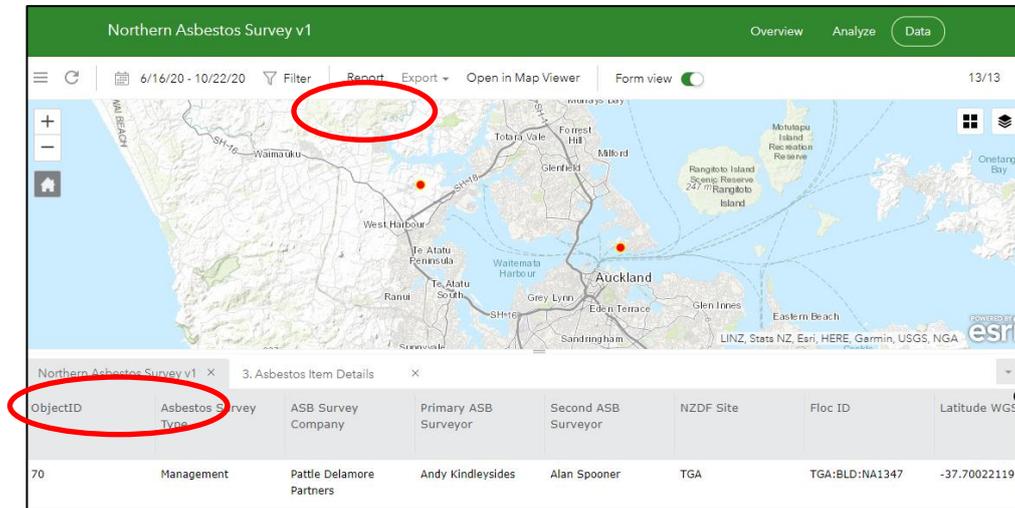
**It is the responsibility of the consultancy to undertake an internal quality review prior to submission of any draft or final reports.** The internal quality review must include checking for consistency of AGOL data with the report. To generate the report, the Asbestos Surveyor will go to the Survey 123 data homepage (<https://survey123.arcgis.com/surveys>). The Asbestos Surveyor will be asked to login to their account (using the same details as those supplied for using the on site app).



**Figure 5: Different surveys on Survey123 Web Page front page**

The Asbestos Surveyor should click on the data icon  beneath the App they have been using (see *Figure 5*) to see a summary of data collected using this survey. (Clicking on the pink box section may show a page without any data displayed.)

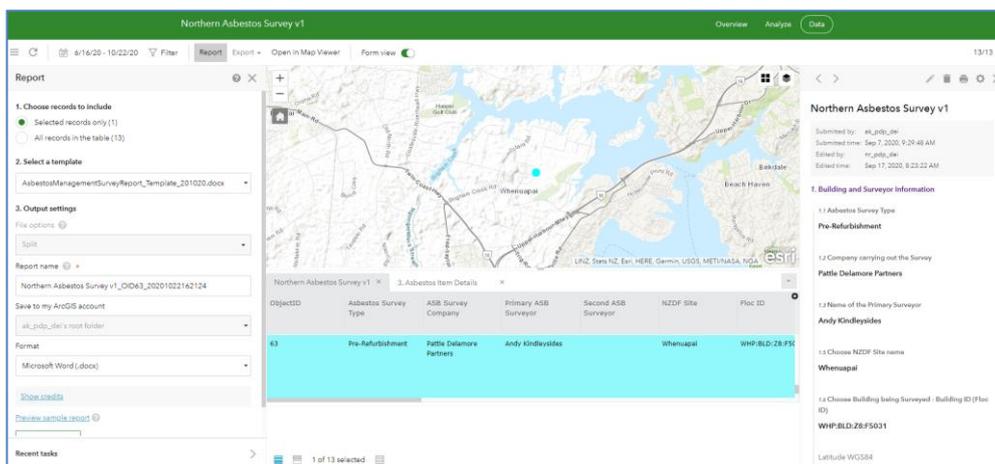
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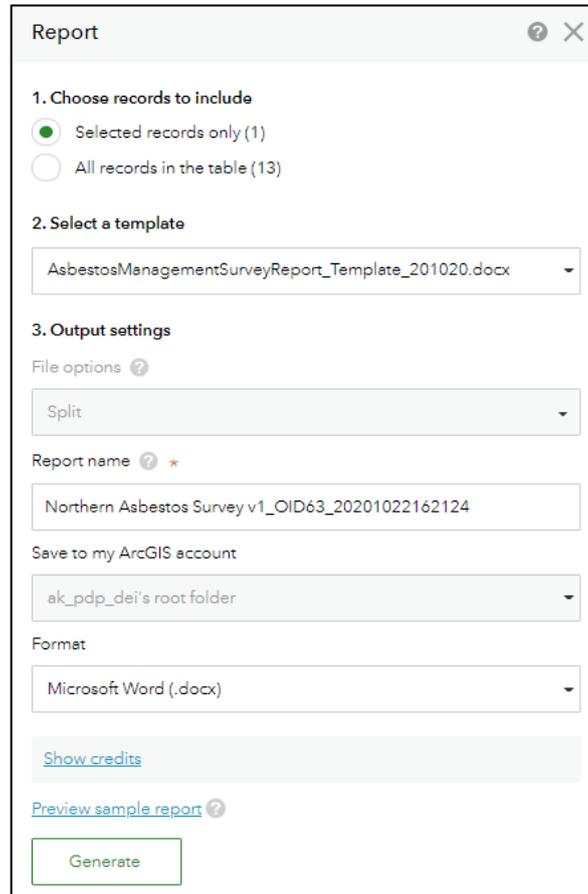
**Figure 6: Geographic display of surveyed properties**

Red icons will show which buildings have been surveyed (only buildings surveyed under the login used to access the Web Page are visible to the user). The *Asbestos Survey* tab should be selected (shaded grey), resulting in building information being listed at the bottom of the screen in a spreadsheet table (if 3. *Asbestos Item Details* is selected, this will show all the individual materials found instead and the report will not be generated correctly). This table can be sorted by clicking on the relevant header to assist with searching for a particular building. (see *Figure 6*)

Click on a red dot or a spreadsheet line entry, which will bring up survey data on the right-hand site. Click on *Report* at the top of the page to show the report generator dialogue box on the left. (See *Figures 7 and 8*)



**Figure 7: Report generator shown for selected property**



**Figure 8: Report generator options window**

*1. Choose records to include:* Default selection is for “Selected records only”, which will produce item records for the selected building only.

The file option “Split” should also be selected to keep each line item separate on the produced report.

*2. Select a template:* The field shows drop down options for the template which will be used to produce the AMS report. There are several options which should be used for different types of registers (i.e. management, refurbishment, demolition, audit). For management survey registers, the most recent version should be used which is “AsbestosManagementSurveyReport\_Template\_DDMMYY.docx”. (DDMMYY is the date that the Template was uploaded, use the most recent version available if more than one option is shown).

Note that clicking “Preview sample report” will create a partial .pdf file version of the report which is limited to the first three entries. Therefore, it is not recommended to preview the PDF this way prior to generating a Word document.

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3. *Output settings:* An automatically generated file name is displayed; however, the Asbestos Surveyor can edit this if required.

The Asbestos Surveyor’s account’s root folder is automatically selected as the file save location. This cannot be changed, however the Surveyor can save the generated report at a different location once it has been generated.

The default file format is Microsoft Word (.docx). This format is recommended to allow some minor editing of the document.

Click “Generate” at the bottom of the dialogue and the main AMS report will appear as a downloaded file. This may take some time for large file sizes.

Once the file has been downloaded, click to open using the relevant document editor software.

Examples of a generated management register report is shown in *Figure 9* below.

ASBESTOS MANAGEMENT SURVEY - ASBESTOS REGISTER													
<p><b>Introduction</b> The register below shows details of Asbestos Containing Materials (ACM) identified at the site including location, quantity and asbestos type. Also included are items assumed to contain asbestos and items that have been sampled and no asbestos has been detected. See further notes at bottom of table explaining the Risk Assessment Method developed by NZDF.</p>													
<p><b>NZDF Site</b> Tauranga</p>		<p><b>Building Information Observations (e.g. age and construction)</b></p> <p>Construction date provided by NZDF: 30.06.1950</p> <p>Warehouse style building with open plan training area / gym plus other rooms at ground, mezzanine and first floor levels, used as classrooms, administration, and welfare facilities. Concrete walls throughout, multiple pitched-roof structures. Tiled false ceilings throughout, except main training room which is open to roof structure. Concrete foundation/flooring throughout, with sub-floor extending beneath raised western section only. A previous asbestos management survey conducted by Thomas Consultants Ltd was reported in December 2019. The client requested PDP to conduct a new survey. Some items, including sample results, have been carried over to this document where this information is deemed acceptable (associated lab results included in this report).</p> <p><b>[Reference previous known asbestos surveys/inspections]</b></p>								<p><b>Building Photo</b></p> 			
<p><b>Building Name and ID</b> Bligg Ctr Devonport Rd/11th Ave Tauranga TGA-BLD-NA1344 (NA1344)</p>													
<p><b>Survey Date(s)</b> <b>[INSERT SURVEY DATE(S)]</b></p>													
<p><b>Report Date</b> <b>[INSERT REPORT PUBLISH DATE]</b></p>													
<p><b>Surveyor Company Name</b> Pattie Delamore Partners</p>		<p><b>Asbestos Summary</b></p>											
<p><b>Lead Surveyor</b> Andy Kindley/ides</p>		<p>Assumed asbestos found</p> <p><b>[LIST ROOMS/LOCATIONS WHERE ASBESTOS FOUND/ASSUMED, including potential contamination, as recorded in register]</b></p>											
<p><b>Assistant Surveyor</b> Alan Spooner</p>													
<p><b>Reviewer</b> <b>[INSERT REVIEWER NAME]</b></p>													
<p><b>NZDF QA auditor</b> <b>[INSERT QA AUDITOR NAME]</b></p>		<p>Given the age of this building, it is strongly presumed that ACMs (e.g. super-six roof, pipe insulation) could have been present historically. Information relating to the removal of historical ACM is unknown; however, it is recognised that removal of these items may not have been to current standards. As a result, asbestos-containing dust (ACD<sub>10</sub>) could potentially be present in some areas. <b>[Remove this sentence if built after 1988]</b></p>											
<p><b>[INSERT SUMMARY OF LIMITED/NO ACCESSED AREAS]</b></p>		<p><b>[Insert any actions relating to contamination which are planned or have been conducted, along with results summary]</b></p> <p>It is strongly presumed that soils or other areas with bare ground surrounding the building could potentially contain asbestos contamination arising from asbestos containing building materials presently or formerly in this area. A soil assessment must take place prior to any disturbance works occurring around the halo of the building.</p>											
Survey Item Details													
No	Location / Floor Level	Room / Position / Access	Building Component / Material	Sample No. / Results / Probability	Estimated Quantity / Extent	Condition of ACM	Disturbance Potential	Asbestos Sensitivity	Asbestos Risk Level	Actions / Comments	Photo 1	Photo 2	
1	External	Exterior wall	West, north and east sides (incl. gable). Accessed	Textured coating (paint impregnated)	asbestos Negative	70 m2	N/A	N/A	N/A	No further action required. Multiple sample points composited.			
2	External	canopy	To east canopy. Visually assessed - but not accessed.	Fibre cement sheet - fib	Assumed Positive Non-Friable	80 m2	Good - no deterioration/damage or sealed/encapsulated	Low - not accessible (too high or locked / restricted) or access activities will not have potential to generate airborne fibre	Low (area is outdoors or only accessed infrequently and is not connected to air conditioning intake etc. i.e. no pathway), infrequent occupation	4 Low	Leave, indicate and maintain as part of AMP. Remove or implement controls prior to disturbance. 5 metres above ground.		

**Figure 9: Example of generated management survey register report**

(The **yellow highlighted text** requires manual editing by the Asbestos Surveyor following generation of the report, as detailed below - this yellow highlighting effect should be removed following these edits.)

#### 5.4.2 Editing Asbestos Management Survey Reports

Due to limitations of the software used to convert the database information into a presentable register, some manual edits will be required using a document editor (such as Microsoft Word) prior to issuing the report to NZDF. Note that these specific changes are mainly in place to make the register document more presentable and easier for the end user to read. Any additional changes required to the database as a result are detailed below where relevant. It is the Asbestos Surveyor's responsibility for the data presented in the AMS report and the database to be fully consistent.

These changes are listed in Table 2 below:

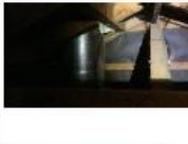
Table 2: Register Management	
Field	Recommended Manual Changes Required
Survey Date(s)	Enter all dates.
Report Date	Update the date the report is published.
Reviewer	Enter the name of the Asbestos Surveyor’s internal QA reviewer.
NZDF QA Auditor	Enter the name of the NZDF AQAA reviewer after you have received feedback to action. Otherwise, enter ‘N/A’ for all submissions of final reports (QA process updated as of 15.11.2021).
Building Information Observations	<p>If the listed Construction Date provided by NZDF appears to be incorrect, delete this line from the register document.</p> <p>After the Construction Summary text, record references to any previous survey or other asbestos documentation reviewed by the surveyor (e.g historic AMS or other reports) where available.</p>
Asbestos Summary	<p>If any material has been sampled in the survey and is found to contain asbestos, change the first line from “Assumed asbestos found” to “Identified and assumed asbestos found”, followed by a list of any room or area where asbestos has been found or assumed. This includes any areas which has been found of assumed to contain ACD.</p> <p>For any particular asbestos risks (see notification process in Appendix C) or for complex or unusual items or concerns, this is the Surveyors opportunity to clearly detail related actions and recommendations.</p> <p>The next paragraph which starts “Given the age of this building...” based on NZDF’s records, is far less likely to apply to any units known to be built after 1988, and should be removed in these instances.</p> <p>The final paragraph regarding potential for soil contamination to be present should remain for all units. Reference to any known soil assessments can be included here to prompt the reader to seek further (more relevant) information.</p>
Item(s) not accessed during the survey	List any rooms/areas which have not been accessed including a brief description of the reason. Each area on this list should have an associated line item within the report including all relevant details and an assumption for asbestos presence with an appropriate risk score (see <i>Section 3.1</i> ).
Survey Item Details	<ul style="list-style-type: none"> <li>For all negative, non-suspect materials and no access line items, fill “N/A” into all blank fields, <u>including</u> <i>Asbestos Risk Level</i>.</li> <li>For all line items with an asbestos risk score, the Asbestos Surveyor will need to manually colour the corresponding risk level word as follows: <b>green</b> for <i>Low</i>, <b>orange</b> for <i>Medium</i>, <b>red</b> for <i>High</i>.</li> </ul>

**Table 2: Register Management**

- Tidy up all fields to improve the general appearance, including leaving a gap between each piece of data in each field and removing unnecessary gaps such as spaces.

Re-order all line items in the register starting with external items (from bottom to top, i.e. walls before roofing) then internal items starting from the lowest level (which could be a sub-floor or basement) up to the highest. This is to make the items easier to find when using the register. Make sure the item number for each item does not change to keep consistency with the database (which can not be reordered in this manner).

Below is an example of how the line items should appear after making the suggested edits:

010	Internal Ceiling Space	Ceiling void Surrounding fireplace flue Accessed	Debris Fibre cement	ASB007 Positive Chrysotile Non-Friable	0.5 Area (sqm)	Poor - Extensive damage resulting in material fibre release	Low - not typically accessible	Low (area is outdoors or only accessed infrequently and is not connected to air conditioning intake etc. i.e. no pathway). Infrequent occupation (e.g. plant room, 1-5 people)	6 Low	Do not disturb item, monitor condition of material. Remove or implement controls prior to disturbance.		
011	Internal Ceiling Space	Ceiling void Surrounding area of chippy heater flue Accessed	Debris Insulating board (AIB / millboard)	ASB008 Positive Chrysotile and Amosite Friable	0.5 Area (sqm)	Poor - Extensive damage resulting in material fibre release	Low - not typically accessible	Low (area is outdoors or only accessed infrequently and is not connected to air conditioning intake etc. i.e. no pathway). Infrequent occupation (e.g. plant room, 1-5 people)	8 Medium	Control access to vicinity of item, encapsulate and monitor condition of material. Label ceiling access panel and material with asbestos warning labels.  Recommend encapsulating material for management until it can be removed.		
012	Internal Ground Level	Entrance Accessed	Electrical cabinet / switchboard Other material: NSM	Non-Suspect Material	1 Number of items	N/A	N/A	N/A	N/A	No further action required.		

**(Note: above items should be re-ordered as per order above, and efforts made to realign photos)**

**Photos**

Arrows can be added to the photos to assist the end user with locating the item if required. Use red arrows for ACMs and green arrows for non-ACMs to assist the end user to discriminate between the two (sometimes they may both appear on the same photograph and/or in close proximity). It is important to remember that these annotations will only appear in this document, not in the Register Database.

The current version of the app has some problems with alignment of photos in the register so where necessary, realign photos within table cells to improve overall appearance.

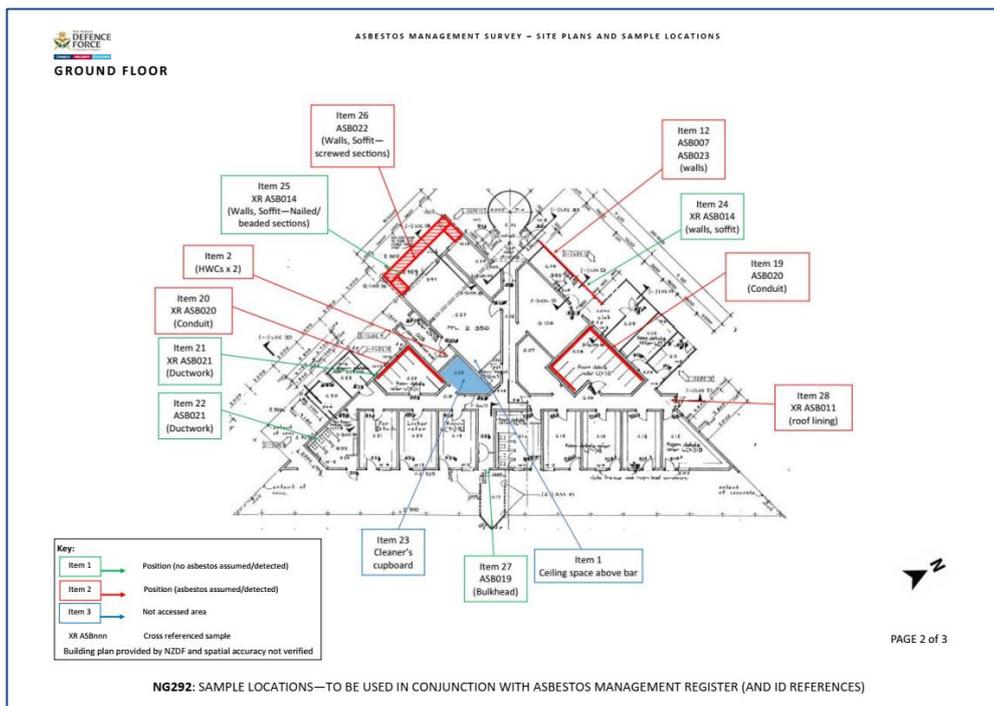
**Notes / Limitations**

The limitations at the bottom of the register should not be edited without prior consent from NZDF.

<b>Table 2: Register Management</b>	
<b>Register Revision History</b>	<p>Enter the date and details of any amendments made to the register document. This could be as a result of the following (note this list is not exhaustive):</p> <ul style="list-style-type: none"> <li>• Recommended changes made following an AQAA review.</li> <li>• Conversion of a draft format register to a final version following AQAA approval.</li> <li>• Changes to data within the document following additional access to areas/rooms previously not accessed.</li> <li>• Updates to line items following remediation works.</li> </ul> <p><b>Note that any updates to information in the register must be consistent with that held on the NZDF Asbestos Database hosted by AGOL. It is the Asbestos Surveyor’s responsibility to maintain this consistency.</b></p>
<b>Floor Plans</b>	Enter figures to supplement information in the Register. Process is detailed in <i>Section 5.4.3</i> .

### 5.4.3 Floor Plans

Below (Figure 10) is an example of the minimum requirement for an annotated floor plan figure. A figure (showing every level of a building/structure) must be included with all reports.



**Figure 10: Example of annotated floor plan figure**

Each floor plan can be created using the surveyor's preferred document editor. Once complete, they can be incorporated into NZDF approved figure templates which are generated separate to the main AMS register. These templates include standardised details including a key and caveats.

**The following are a list of agreed standards which must be incorporated into any sample location plan figure:**

- Individual site plans must be produced for each distinct level of the building, this includes separation for subfloor, mezzanines, roof voids, roof tops, etc. this is in order to clearly indicate the extent of ACM's in areas of varying occupancy.
- All line items in the register should be referenced in at least one of the figures. It can be referenced in multiple figures if relevant, e.g. external wall texture which extends across multiple floors.

- Each item referenced should detail the relevant building component to assist in the user’s ability to locate the material/item. Information does not need to be entered relating to the material type.
- If a sample has been taken, the sample number should also be included to indicate a sample point. Any items which utilise reference samples should also show this, prefixed with “XR”.
- The item text box and arrow should be coloured as follows:
  - **Green:** no asbestos assumed/detected
  - **Red:** asbestos assumed/detected
  - **Blue:** not accessed area.
- The extent of any asbestos material found must be expressed using red lines or shading (any shading should be set to an appropriate transparency (i.e., 50%) so associated room details can still be seen).
- Similarly, any non-accessed rooms should also be expressed using blue shading (set to an appropriate transparency).

Once each figure is created, it should be converted into a suitable format which can be pasted into the figure template. The following actions may be required following this:

- The text box within the key reading “*Building plan provided by NZDF and spatial accuracy not verified.*” should be deleted if the figure is not directly based off one supplied by NZDF (e.g. if floor plan has been manually drawn by the Asbestos Surveyor).
- The floor level should be entered into the yellow highlighted text section in the top-left of the figure template. The north point in the bottom-right corner should be rotated appropriately, and the page numbers inserted in the yellow highlighted text in this section.
- The building/structure Floc ID should be inserted into the yellow highlighted section of template footer text. This only needs to be the shortened building identifier (e.g. NG292).
- Elevation plans or photographs can also be added over the figure if deemed useful to provide further context.
- There are 10 figure templates generated within each management register Word template. Any which are not used should be deleted.

#### 5.4.4 Register Submission to NZDF

Once the final edits to the asbestos survey document have been made (and the documents compiled in a pdf file), it should be submitted as a draft or final to NZDF’s AQAA (cc POC), who will review the document as necessary and upload

onto the NZDF Sharepoint. **For a Surveyors initial 5 reports the Draft documents should include the filename suffix “\_DRAFT\_” followed by the revision number and date of issue, e.g. TOP\_NA711\_AMS Report\_DRAFT\_Rev0.1\_160221.pdf. This is to alert the AQAA of the presence of a report that requires a full review prior to being submitted as final.**

This email should be sent in the following format to the recipients listed:

<i>To: <a href="mailto:asbestos@nzdf.mil.nz">asbestos@nzdf.mil.nz</a></i>
<i>CC: [POC email]</i>
<i>Email Subject: NAS [insert camp / base] DRAFT/FINAL management/refurbishment/demolition survey report for [insert Floc ID]</i>
<i>Hi</i>  <i>Attached is the draft management survey report for building [insert Floc ID] at [insert camp/base name] submitted for review by the NZDF Asbestos Quality Assurance Advisor.</i>  <i>Thanks</i>  <i>X Surveyors</i>

The AQAA will provide feedback where required and may advise on any amendments to the documents that will be required before the document can be accepted for loading on the NZDF Sharepoint.

Where amendments are required; once these amendments have been implemented and approved by the AQAA, the final complete survey document will be forwarded to the POC and AQAA. The final version should include the filename suffix “\_FINAL\_” plus revision number and submission date (for the final report, if sent out on a different date to the most recent draft), e.g. TOP\_NA711\_AMS Report\_FINAL\_Rev1.1\_040321.pdf.

When emailing draft and final reports, limit 1 report per email. Each email should be no larger than 10MB – anything larger than this may not be received by all recipients.

Do not share links to external Sharepoint sites or document storage systems.

## 5.5 Troubleshooting

### 5.5.1 Missing Floc ID

If the Floc ID for the building or structure being surveyed does not appear on the dropdown list in the app field 1.6, firstly check that the correct NZDF Site Name is entered in field 1.5. If it is correct, the Floc ID may not be in the system.

The Surveyor must contact the DEI POC who will arrange for the Floc to be inserted into the App, or for an alternative method of data collection for that property.

### 5.5.2 Photographs not on reports

**Once a survey is submitted, the photographs cannot be changed** or replaced later using the editable WebApp (see *Section 5.3*) or using the edit and resend survey option in the Survey 123 App. To change a photograph, in Survey 123 go to the sent folder and choose 'copy the sent data to a new survey'. This makes a copy of the whole survey. The photographs can be edited in this copy and the survey submitted again. This makes a duplicate of the survey in the database. The incorrect survey record will need to be deleted by the NZDF Asset Information Team.

### 5.5.3 Cannot submit a survey

The inability to submit a survey could be the result of one of the following reasons:

1. The size of the upload may be too large – move into better internet connection.
2. The Survey App has been updated during surveying (this should not happen, and the Asbestos Surveyors should be warned prior to any upgrades in order to submit all surveys prior to upgrade). If an upgrade has taken place prior to submitting a survey, the user may not be able to submit the survey as the Online database schema will not match the data collected in the old survey schema. In this instance, it is possible to retrieve the data saved on the device. Contact the STA for further instructions.
3. The device has run out of storage space and cannot save any more data to it. Maintenance on the devices by NZDF on base staff will be required to ensure space is made available during a new survey programme. Contact the NZDF Asset Information Team.

#### 5.5.4 No photo flash available in dark areas

The iPads do not come equipped with a flash function to light up dark spaces to allow clear photographs to be taken to show materials in these spaces. A workaround is to select the forward-facing camera icon  and make sure the flash is on , allowing the Asbestos Surveyor to take a photo with the front camera with the assistance of a “screen flash”. Another way is to use a wide angled torch to illuminate the room in question while taking the photograph.

#### 5.5.5 Error when selecting photos from device

At the time of issue of this survey manual, there is a known error which occurs when choosing to select photos already saved on the iPad, rather than taking them in the App camera. Clicking on the file search icon  causes the screen to turn white and freeze. Only shutting down and restarting the App resolves this issue, meaning there is potential for data loss in the process. To avoid this, please only take photos with the camera within the App.

## Appendix A: List of Administering Sites and Associated Satellite Bases

Table 3: NZDF Base Codes		
Administering Site	Base Name	Abbreviation
Burnham	<b>Burnham</b>	BHM
	Christchurch	CHC
	Glentunnel	GTN
	Greymouth	GRM
	Invercargill	INV
	Kensington Army Hall	KAH
	Oamaru	OAM
	Pegasus	PEG
	Tekapo	TEK
	Timaru	TIM
	Toroa	TOR
	Waitati	WAT
	Weedons	WDN
	West Melton	WMN
Wigram	WIG	
Devonport	<b>Devonport</b>	DPT
	Great Barrier Island	GBI
	Kauri Point	KPT
	Narrow Neck	NNK
	Ngapona	NGP
	Ngataringa Bay	NGA
	North Shore	NSH
	Torpedo Bay	TOP
	Whangaparaoa	WHA
	Whangarei	WEI

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<b>Table 3: NZDF Base Codes</b>		
<b>Administering Site</b>	<b>Base Name</b>	<b>Abbreviation</b>
Linton	Gisborne	GIS
	Hastings	HAS
	<b>Linton</b>	LIN
	Makomako	MAK
	Napier	NPN
	Palmerston North	PNH
	Roys Hill	ROY
Ohakea	Bulls	BUL
	Landguard Bluff	LAN
	New Plymouth	NPH
	<b>Ohakea</b>	OHA
	Raumai	RAU
	Wanganui	WAN
Papakura	Arch Hill	ARH
	Ardmore	ARD
	Hamilton	HAM
	Hobsonville	HOB
	Manukau	MAN
	Mount Maunganui	MTM
	<b>Papakura</b>	PAP
	Rotorua	ROT
	Tauranga	TGA
	Whakatane	WKE
	Whangarei	WEI
Trentham	Cook Islands	COK
	Mangaroa	MGA
	Olphert	OLP

<b>Table 3: NZDF Base Codes</b>		
<b>Administering Site</b>	<b>Base Name</b>	<b>Abbreviation</b>
	Shelly Bay	SBY
	<b>Trentham</b>	TRN
	Wellington	WLG
Waiouru	Irirangi	IRI
	<b>Waiouru</b>	WAI
Whenuapai	Hobsonville	HOB
	Kaipara	KAI
	<b>Whenuapai</b>	WHP
Woodbourne	Dip Flat	DIP
	Nelson	NSN
	<b>Woodbourne</b>	WBN

## Appendix B: List of Material Scores for Asbestos Risk Assessment

Table 4: Product Value	
Product Type	Product Value
Adhesive	1
Asbestos reinforced composites	1
Bituminous product	1
Decorative coating / cementitious render or screed	1
Debris – High risk source	3
Debris – Medium risk source	2
Debris – Low risk source	1
Dust - settled	3
Electrical components	3*
Fibre cement	1
Friction material	2
Galbestos	1
Gasket material	3*
Insulating board (AIB / Millboard)	3*
Lath and plaster	2
Paint coating (paint impregnated)	1
Paper / cardboard	3*
Plaster stopping compound / coating	2
Potential internal ACM	3
Rope / Woven material	3*
Sealants, caulking and putty	1
Sprayed Insulation	3
Textured coating (popcorn)	2
Thermal insulation or lagging	3

<b>Table 4: Product Value</b>	
<b>Product Type</b>	<b>Product Value</b>
Unknown – not accessed	3
Vinyl products	1
Vinyl with paper backing	3*
Other material:	N/A**

\* Please note that some product type scores are not in alignment with that recommended by the MAS risk scoring model but it is ultimately the Surveys responsibility to review the end score and recommendation to ensure it is the most effective outcome for the actual risk presented.

\*\*No risk score provided, Surveyor must manually enter a product type score.

## Appendix C: Particular Asbestos Risk Notification Form

### Notes for surveyors when completing form:

This form must be completed when an asbestos surveyor identifies an asbestos item within the NZDF Estate that poses an immediate risk of exposure to airborne asbestos fibres. Only items where an immediate access restriction is required should be notified using this form. Only confirmed asbestos items or **STRONGLY** presumed items can trigger this process. All fields in the form must be completed by the asbestos surveyor as well as site plans. Additional information including lab reports can be appended where appropriate. If additional sampling is not required please insert "N/A". Notifications must be sent to [asbestos@nzdf.mil.nz](mailto:asbestos@nzdf.mil.nz) and your local DEI POC for NASP.

**Surveyors are not to discuss survey findings with building occupants without prior consultations with the DE&I Team.**

### Notes for Project Managers and DE&I Teams:

The notification is not to be used as a substitution to any asbestos survey document or plan. Additional asbestos hazards other than what has been identified in this notification may also exist at the property. Actions contained within this notification are preliminary only, based on known information that may become redundant.

**Once a notification is received, the communications process flowchart on Page 4 must be followed.**

Notification Date	Site Inspection Date
<b>FLOC and Address</b>	
<p>[Consultant Name] and [Consultant Name] from [Company name] has [identified / strongly presumed] a particular asbestos risk that required immediate action to prevent imminent exposure to airborne asbestos fibres. The item was found during a recent asbestos survey on the above date and this document is being issued prior to the completion of the survey report – full details are to be enclosed within said report.</p> <p>The primary purpose of this notification is to immediately advise NZDF of the immediate risk of exposure in order to enable informed appropriate actions to immediately minimise the risk.</p>	
<b>Material Type and Location Description</b>	
<b>Sample References</b>	[Must be the same as the final survey report and analysis certificate if attached]
<b>NZDF Site</b>	[Camp / Base name]
<b>NZDF Contact (POC)</b>	[Name, email and phone]
<b>Consultant Contact</b>	[Name, email and phone]

**Particular Risk Item 1 - Observations and Recommendations**

[Add a detailed description of material and its location including material condition, extent, position and proximity to occupied areas, level / floor, room numbers / names where known.]

**Observation**

[Add details of the specific risk for occupants of building / area to airborne asbestos fibres.]

[Delete either option below]

The material has been confirmed via laboratory analysis to be positive for asbestos (please see attached Laboratory Report) OR Based on visual inspection of the material, and the age and construction type of the building the material is strongly presumed to be asbestos containing and awaiting lab analysis for confirmation.

**Photographs**

*Note: The consultant must provide appropriate photographs showing the specific material identified, and show spatial context (accessibility, position). (Add more lines if appropriate)*

Photo	Photo
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**Floor Plans**

*Note: Floor plans should be added below (and / or appended to this notification) to clearly show the extent of the required access restriction.*

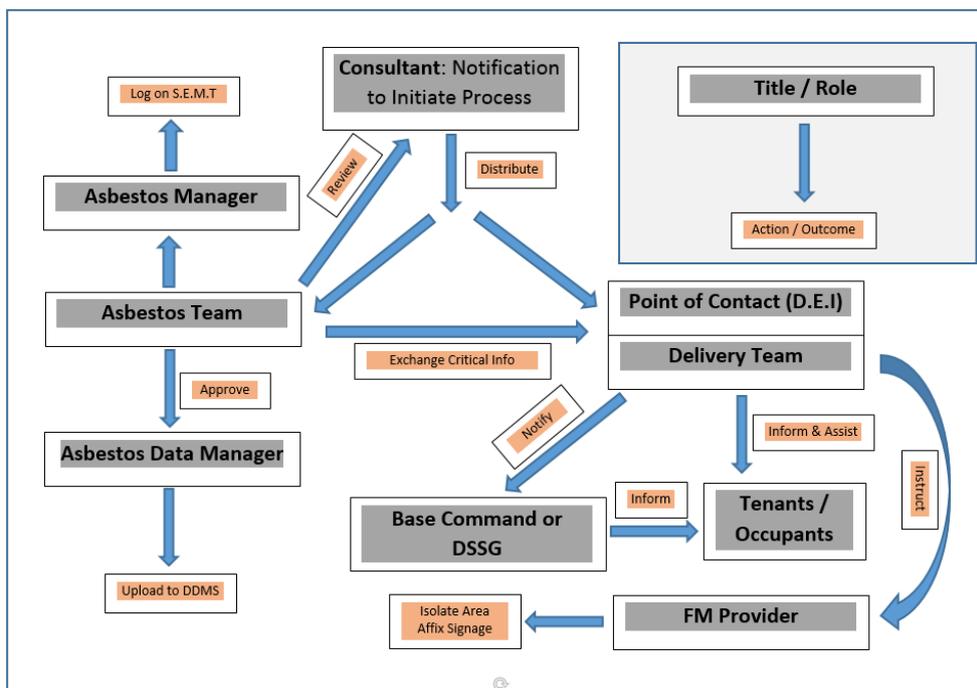
*Floor Plan*

### **Recommendations**

Immediate recommendations are required that can be actioned based upon the surveyor's observations, covering the bullet points below:

- Confirm an access restriction is recommended to areas described.
- Provide any applicable recommendations on how the access restriction should be implemented e.g. locations of access points, especially those that may not be obvious to normal occupants of the area(s).
- Any considerations for live ventilation that may require isolation.
- Other considerations for possible exposure pathways where applicable, and actions recommended to isolate pathway.
- Preliminary advice on what controls are appropriate for ongoing access into area.
- Confirm if air monitoring or some other type of further sampling is recommended to better ascertain the risk in adjacent areas (outside the area to be access restricted), if it remains uncertain.

**[Consultant to copy and paste Table above for any additional items requiring a notification as part of the same survey]**



**Communication process for Particular Asbestos Risk Notifications requiring access restrictions to materials / isolation of areas or buildings.**

1. The consultant undertaking the survey must fill in the Asbestos Particular Risk Notification form and send to the Asbestos Team at [asbestos@nzdf.mil.nz](mailto:asbestos@nzdf.mil.nz) and their National Asbestos Survey Programme (NASP) POC within 24 hours of the risk becoming evident (this may be prior to or once sample analysis results received). Where exposure is ongoing a verbal notification must be immediate.
2. The Asbestos Team will coordinate exchange of critical information between the Consultant and DE&I Team by seeking any clarifications from the Consultant and providing advice direct to the POC. The EDD must be included.
3. Once all required information is fully documented; Asbestos Manager to log the incident on S.E.M.T and Asbestos Data Manager to upload the notification to DDMS.
4. DE&I Team to notify Base Command for operational buildings and DSSG for residential buildings, and work with respective parties to communicate the requirements of the access restriction to all actual and potential occupants of the affected area(s).
5. DE&I Team must then isolate the risk by restricting access to the area(s), this can be done directly by locking access routes and affixing warning signage, or by instructing the FM Provider to undertake this on their behalf.
6. Where severe impacts are anticipated, DE&I Team to work with affected building POC's to assist with identifying alternative workspaces and resources.
7. DE&I Team to notify Asbestos Team once the area has been isolated – action to be logged on registers.

**Notes:**

- 1/ The above flowchart represents management of a critical and imminent health and safety risk; information can be exchanged verbally but must be followed up in writing.
- 2/ For the purpose of communication the POC's are considered fully integrated within the DE&I Teams and are therefore to act under the instruction of the Estate Delivery Directors.
- 3/ Other actions are highly likely to be recommended within the notification but are not included in this flowchart – for actions related to surveys, dust sampling, air monitoring and / or remediation refer to the DE-AMP for more information.

## Appendix D: WorkSafe Document WKS17 – A-Z of Products That May Contain Asbestos



### A-Z of products that may contain asbestos

#### A

- Air conditioning ducts – exterior or interior acoustic and thermal insulation
- Arc shields in lift motor rooms or large electrical cabinets
- Asbestos-based plastic products – as electrical insulates and acid-resistant compositions or aircraft seats
- Asbestos ceiling tiles
- Asbestos cement conduits
- Asbestos cement electrical fuse boards
- Asbestos cement external roofs and walls
- Asbestos cement in the sue of form work when pouring concrete
- Asbestos cement internal flues and downpipes
- Asbestos cement moulded products, such as gutters, ridge cappings, gas meter covers, cable troughs and covers
- Asbestos cement pieces for packing spaces between floor joists and piers
- Asbestos cement underground pits, as used for traffic control wiring and telecommunications cabling
- Asbestos cement render, plaster, mortar and coursework
- Asbestos cement sheet
- Asbestos cement sheet behind ceramic tiles
- Asbestos cement sheet internal over exhaust canopies, such as ovens and fume cupboards
- Asbestos cement sheet internal walls and ceilings
- Asbestos cement sheet underlays for vinyl
- Asbestos cement storm drain pipes
- Asbestos cement water pipes (usually underground)
- Asbestos-containing laminates (ie Formica) used where heat resistance is required
- Asbestos-containing pegboard
- Asbestos felts
- Asbestos marine board (marinate)
- Asbestos mattresses used for covering hot equipment in power stations
- Asbestos paper used variously for insulation, filtering and production of fire resistant laminates
- Asbestos roof tiles
- Asbestos textiles
- Asbestos textile gussets in airconditioning ducting systems
- Asbestos yarn
- Autoclave/steriliser insulation

---

## B

Bitumen-based water proofing such as malthoid (typically on roofs and floors but also in brickwork)  
Bituminous adhesives and sealants  
Boiler gaskets  
Boiler insulation, slabs and wet mix  
Brake disc pads  
Brake linings  
Builders Paper

---

## C

Cable penetration insulation bags  
Calorifier insulation  
Car body filters (not common)  
Carpet Underlay  
Caulking compounds, sealant and adhesives  
Ceilings – textured (ie whisper/stipple)  
Cement render  
Ceramic fuses in switchboards  
Chrysotile wicks in kerosene heaters  
Clutch faces  
Compressed asbestos cement panels for flooring, verandas, bathrooms and steps for demountable buildings  
Compressed asbestos fibres (CAF) used in brakes and gaskets for plant and vehicles

---

## D

Door seals on ovens  
Decramastic Roof Tiles

---

## E

Electric heat banks – block insulation  
Electric hot water services (normally not asbestos but some millboard could be present)  
Electric light fitting, high wattage, insulation around fitting (and bituminised)  
Electrical switchboards (see pitch-based)  
Exhausts on vehicles

---

## F

Filler in acetylene gas cylinders  
Filters – beverage, wine filtration  
Fire blankets  
Fire curtains  
Fire door insulation  
Fire-rated wall rendering (containing asbestos with mortar)  
Fire-resistant plaster board (typically on ships)  
Fire retardant material on steelwork supporting reactors on columns in refineries (chemical industry)  
Flexible hoses  
Floor vinyl sheets  
Floor vinyl tiles  
Fuse blankets and ceramic fuses in switchboards

---

## G

Galbestos roofing materials (decorative coating on metal roofs for sound proofing)  
Gaskets - chemicals, refineries  
Gaskets - general  
Gauze mats in laboratories or chemical refineries  
Gib board  
Gloves (for insulation against heat)

---

## H

Hairdryers (around heating elements)  
Header (manifold) insulation

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## I

Insulation blocks  
Insulation in electric reheat units for air-conditioner systems

---

## L

Laboratory bench tops  
Laboratory fume cupboard panels  
Laboratory ovens (wall insulation)  
Lagged exhaust pipes on emergency power generators  
Lagging in penetrations in fireproof walls  
Lift shafts - asbestos cement panels lining the shaft at the opening of each floor and asbestos packing around penetrations  
Limpet asbestos spray insulation  
Locomotives lagging on boilers, steam lines, steam dome and gaskets

---

## M

Mastics  
Millboard between heating units and walls  
Millboard lining of switchboxes  
Mortar  
Metal Pressed Roofing Tiles

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## P

Packing materials for gauges, valves etc (can be square packing, rope or loose fibre)  
Packing material on window anchorage points in high-rise buildings  
Paint (typically industrial epoxy paints)  
Penetrations through concrete slabs in high-rise buildings  
Pipe insulation including moulded sections, water-mix type, rope braid and sheet  
Pitch-based (Zelemite, asbestos, lebah) electrical switchboards  
Plaster and plaster cornice adhesives  
Pump insulation

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## R

Refractory linings  
Refractory tiles  
Rubber (extent of usage unknown)  
Roofs

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## S

Sealant between floor slab and wall, (usually in boiler rooms, risers or lift shafts)  
Sealant or mastic on windows  
Sealants and mastics in airconditioning ducting joints  
Spackle or plasterboard wall-jointing compounds  
Sprayed insulation – acoustic wall and ceiling  
Sprayed insulation – beams and ceiling slabs  
Sprayed insulation – fire retardant sprayed on nut internally for bolts holding external building wall panels  
Stoves (old domestic type) and stove wall insulation  
Swimming pools (if a marblesheen/marblelite finish)  
Spa pools (if a marblesheen/marblelite finish)

---

## T

Tape and rope – lagging and jointing  
Tapered ends of pipe lagging (where the lagging is not necessarily asbestos)  
Tilux sheeting in place of ceramic tiles in bathrooms  
Trailing cable under lift cabins  
Trains, Guard vans, millboard between heater and wall  
Trains – sprayed asbestos between steel shell and laminex

---

## U

Underlay of carpet

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## V

Valve insulation  
Vinyl flooring (note can be both vinyl and mastic underneath)

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## W

Window putty  
Welding rods  
Woven asbestos cable sheath

## Appendix E: List of Dropdown Options in Survey123 App

Table 5: Drop down Options
<b>Survey123 Field - 1.1 Asbestos Survey Type</b>
Management
Pre-Demolition
Pre-Refurbishment
Audit
<b>Survey123 Field 1.2 Company carrying out the Survey</b>
<List of NZDF approved survey companies>
Other
<b>Survey123 Field 1.5 Choose NZDF Site name (displayed in Northern App)</b>
Arch Hill
Devonport
Great Barrier Island
Hobsonville
Kaipara
Kauri Point
Ngataringa Bay
Narrow Neck
North Shore
Torpedo Bay
Whangarei
Whangaparaoa
Whenuapai
<b>Survey123 Field 1.5 Choose NZDF Site name (displayed in Ardmore and Papakura app)</b>
Ardmore

<b>Table 5: Drop down Options</b>
Papakura
<b>Survey123 Field 1.5 Choose NZDF Site name (displayed in Central app)</b>
Bulls
Gisborne
Irirangi
Landguard Bluff
Linton
Makomako
Napier
Ohakea
Raumai
Roys Hill
Waiouru
Wanganui
<b>Survey123 Field 1.5 Choose NZDF Site name (displayed in Tasman/Wellington app)</b>
Dip Flat
Mangaroa
Olphert
Trentham
Woodbourne
Wellington
<b>Survey123 Field 1.5 Choose NZDF Site name (displayed in Southern app)</b>
Burnham
Greymouth
Invercargill

<b>Table 5: Drop down Options</b>
Kensington Army Hall
Pegasus
Tekapo
Toroa
Waitati
Weedons
Wigram
West Melton
<b>Survey123 Field 1.6 Choose Building being Surveyed – Building ID (Floc ID)</b>
List of buildings available for survey from the base selected in 1.5.
<b>Survey123 Field 3.2a Floor Level (displayed when Internal selected in 3.2)</b>
All floors
Multiple floors
Sub-floor
Basement Level 1
Basement Level 2
Ground Level
Level 1 (NB: Floor above Ground Level)
Level 2
Level 3
Level 4
Level 5
Level 6
Level 7
Level 8

<b>Table 5: Drop down Options</b>
Level 9
Level 10
Level 11
Level 12
Level 13
Level 14
Mezzanine
Ceiling Space
Roof void
Other Floor Type:
<b>Survey123 Field 3.2b Room Type (displayed when Internal selected in 3.2)</b>
N/A
A/C Enclosure
Ablutions
Accommodation
Armoury
Auditorium
Bar
Bathroom
Battery Observation Post
Battery room
Bedroom
Biohazard room
Blasting bay
Boardroom
Boiler room
Bunker

<b>Table 5: Drop down Options</b>
Chain room
Changing room
Cinema
Classroom
Clean room AV
Cleaners cupboard
Cleaners room
Command centre
Common room
Composite bay
Compressor room
Conference room
Corridor
Crew room
Cupboard
Dark room
Dining room
Diving storage
Engine bay
Ensuite
Entrance
Electrical room
Electrical substation
Explosive store
Fabrication bay
Female toilet
First aid room

<b>Table 5: Drop down Options</b>
Flight office
Flight store
Foyer
Garage
Gas cylinder room
Generator room
Gun room
Gym
Hallway
Hanger
Hot water cupboard
Joe room
Kitchen
Laboratory
Laundry
Liferaft bay
Lift / Elevator
Lift motor room
Lift shaft
Lobby
Locker room
Lounge room
Lunchroom
Mail room
Main bedroom
Male toilet
Meeting room

<b>Table 5: Drop down Options</b>
Mess
Multiple rooms
NDT bay
Office
Oil store
Orderly room
Paint shop
Pantry
Parachute bay
Photographic bay
Plant room
Power house
Preparation room (prep)
Print room
Propeller bay
Pump room
Role store
Safe
Seminar room
Server room
Sheet metal bay
Shower
Skin bay
Stairwell and landings
Staff room
Store room
Studio

<b>Table 5: Drop down Options</b>
Toilets
Void other
Welding bay
Workshop
Other Room Type:
<b>Survey123 Field 3.2a External Survey Location (displayed when External selected in 3.2)</b>
Balcony / Deck
Canopy
Car port / parking bay
Covered area / walkway
External stairs
External store room
External wall
Garage
Ground surrounding building
Patio
Porch
Rainwater goods
Ramp
Roof
Shed
Other External Location:
<b>Survey123 Field 3.3a Reason for No Access to Floor/Room/Exterior location or Item accessed? (displayed when Visually assessed – but not accessed or Not Accessed selected in 3.3)</b>
Access restriction
Confined space – REST access

<b>Table 5: Drop down Options</b>
Height restriction
Live electrical hazard
Security restriction
Access restriction
Other reason for no access:
<b>Survey123 Field 4.1 Building Component</b>
Access hatch
Air handling unit
Air plenum
Autoclave
Awning
Barge
Bath tub surround
Beam
Bench
Boiler
Bowser
Boxing
Brake lining
Bracket
Bulkhead
Cable
Cable conduit
Cable tray
Calorifier
Ceiling above suspended ceiling
Ceiling lining

<b>Table 5: Drop down Options</b>
Ceiling tiles
Ceramic tile backing
Chalkboard
Chiller unit
Chimney
Cladding Baseboard
Column
Compressor
Concrete
Conduit
Cooling tower
Cubicle wall
Cupboard
Curtains
Damp proof course
Debris
Decorative coating
Desk
Door
Downpipe
Drain
Duct
Ductwork flange joint
Eaves
Electrical cabinet / switchboard
Electrical conduit
Enclosure

<b>Table 5: Drop down Options</b>
Engine exhaust
Expansion joint
Extractor hood
Fascia
Fence panels
Fire blanket
Fire break
Fire brick
Fire cabinet
Fireplace
Floor
Floor covering
Floor / ceiling
Floor / walls
Floor / walls / ceiling
Flue
Framework
Fume cupboard
Furnace
Fuse
Gable end
Generator
Gutter
Gutter and downpipes
Heat exchanger
Heater unit
Hot water cylinder

<b>Table 5: Drop down Options</b>
Hydraulic ram
Incinerator
Infill panels
Lift – Goods
Lift – Passenger
Lift doors
Lift plant and motor
Lift shaft
Light fitting
Oven
Oven door seal
Panel
Partition
Pipe
Pit
Plant and Machinery
Riser
Roof flashing
Roof sheeting
Roof tiles
Roof underlay
Safe
Sarking
Service shaft
Shelf
Shower surround
Sign frame

<b>Table 5: Drop down Options</b>
Sink
Skirting
Soffit
Soil
Steriliser
Stored item
Switch
Switchboard
Telecoms Unit
Underground Storage Tank
Urinal
Wall
Walls / ceiling
Waterproof membrane
Window
Other building component:
<b>Survey123 Field 4.3 Material</b>
Adhesive
Asbestos reinforced composites
Bituminous product
Decorative coating / cementitious render or screed
Debris – High risk source
Debris – medium risk source
Debris – Low risk source
Dust - settled
Electrical components
Fibre cement

<b>Table 5: Drop down Options</b>
Friction material
Galbestos
Gasket
Insulating board (AIB / Millboard)
Lath and plaster
Paint coating (paint impregnated)
Paper / cardboard
Plaster stopping compound / coating
Rope / Woven material
Sealants, caulking and putty
Sprayed Insulation
Textured coating (popcorn)
Thermal insulation or lagging
Unknown – not accessed
Vinyl products
Vinyl with paper backing
Other material:
<b>Survey123 Field 5.1 Sample Results</b>
Sampled (Assumed Pending Results)
Positive
Assumed Positive
ACM – No Access (Assumed Asbestos)
Negative
Non-Suspect Material
<b>Survey123 Field 5.2 Type of Fibre Detected in Laboratory Result (displayed when Positive selected in 5.1)</b>
Chrysotile
Amosite

<b>Table 5: Drop down Options</b>
Crocidolite
Chrysotile and Amosite
Chrysotile and Crocidolite
Amosite and Crocidolite
Chrysotile, Amosite and Crocidolite
Other Asbestos Fibre Type:
<b>Survey123 Field 5.3 Asbestos Friability (displayed when Positive or Assumed Positive selected in 5.3)</b>
Non-Friable
Friable