



## **Working at Heights Assessment**

**3 Parramatta Square**

**153 Macquarie Street, Parramatta NSW 2150**

**Walker Corporation**

**October 2021**

Client No: W0045

Job No: 96454S

# Statement of Limitations

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## **Recommendation for Further Study**

The industry recognised methods used in undertaking the works may dictate a staged approach to specific investigations. The findings therefore of this report may represent preliminary findings in accordance with these industry recognised methodologies. In accordance with these methodologies, recommendations contained in this report may include a need for further investigation or analytical analysis. The decision to accept these recommendations and incur additional costs in doing so will be at the sole discretion of Walker Corporation and Prensa recognises that Walker Corporation will consider their specific needs and the business risks involved. Prensa does not accept any liability for losses incurred as a result of Walker Corporation not accepting the recommendations made within this report.

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## 1 Introduction

Prensa Pty Ltd (Prensa) was engaged by Walker Corporation to undertake a Working at Heights (WAH) Assessment of 3 Parramatta Square located at 153 Macquarie Street, Parramatta NSW 2150 (The Property). The assessment was undertaken to provide the building owner with an understanding of how fall risk issues are being managed at the building and where gaps may be present that require action to rectify.

The WAH assessment was undertaken by Prensa on Thursday 23<sup>rd</sup> September 2021 with the assistance of Tony Trajceski, Senior Facilities Manager for Walker Corporation.

## 2 Objective

The objective of this Assessment was to determine the most practicable method of controlling risks of fall at the Site.

To achieve the above objectives, the requirements of the following Legislation, Codes and Australian Standards was reviewed:

- State based Occupational/Work Health and Safety Acts
- State based Occupational/Work Health and Safety Regulations (Regulations);
- Building Code of Australia;
- Australian Standard (AS) 1657, Fixed Platforms, Walkways, Stairways and Ladders – Design Construction and Installation; and
- Code of Practice for Managing the Risk of Falls at Workplaces, Safe Work Australia.

## 3 Scope of Works

The scope of this Assessment included a review of WAH activities under the management of Walker Corporation and included identification of:

- The method of access to the nominated areas;
- The methods of access to plant and equipment present on the nominated areas;
- Hazards associated with working at height activities and tasks undertaken at the nominated areas; and
- Recommendations for elimination or control of these hazards.

Contractor management procedures implemented by Walker Corporation as well as review of contractor systems of work or work procedures were considered to be outside the scope of the assessment.

The Assessment also does not constitute an evaluation of the adequacy of load ratings and engineering assessment of fall protection measures installed.

## 4 Background

Walker Corporation engage contractors to service and maintain plant and equipment on the roof of the Site. Prensa was engaged to identify discrepancies between what risk controls for fall hazards exists on site and the legislative requirements. Prensa was also requested to identify whether any deficiency is considered to pose an unacceptable risk to health & safety when considering the following:

- Effectiveness of existing risk controls provided;
- The magnitude of the risk; and
- The availability of risk mitigation solutions which are considered acceptable industry practice.

### 4.1 Definition of a Fall Hazard

In this report, the meaning of a fall hazard includes:

- Fall from one level to another that is reasonably likely to cause an injury; and
- Falling objects that can cause serious injuries.

The Regulations stipulates that the Person Conducting Business or Undertaking (PCBU) or an employer must, so far as is reasonably practicable, **identify** any task that is undertaken by an employee/worker in a workplace that involves a fall hazard including:

- On any plant or structure being constructed, demolished, inspected, tested, maintained, repaired or cleaned;
- On a fragile, slippery or potentially unstable surface;
- Using equipment to gain access to an elevated level or to undertake the task at an elevated level;
- On a sloping surface on which it is difficult to maintain balance;
- In close proximity to an unprotected edge; and
- In close proximity to a hole, shaft or pit that is of sufficient dimensions to allow a person to fall into the hole, shaft or pit.

### 4.2 Legislative Requirements

An employer must ensure that each identified task which involves a risk of a fall is appropriately controlled, so far as is reasonably practicable, by one of the following:

- Level 1 – Eliminate the fall hazard by performing the work on ground or solid construction.
- Level 2 – Use a passive fall protection device e.g. edge protection.
- Level 3 – Use a work positioning systems e.g. which limits movements thereby minimising access to areas where a fall may occur.
- Level 4 – Use a fall arrest system e.g. a harness.
- Level 5 – Use a ladder or implement administrative controls e.g. waring signage.

The hierarchy begins with the level 1 control elimination- the most effective hazard control strategy. A lower order control can only be used when it is not reasonably practicable to use a higher level of control.

A PCBU or an employer must ensure that emergency procedures are established, in accordance with the Regulations, prior to a task being undertaken, following the implementation of control measures associated with reducing fall risks. Emergency procedures must enable the rescue of an employee in the event of a fall and the provision of first aid to an employee who has fallen. A PCBU or an employer must also ensure that emergency procedures can be undertaken immediately after a fall has taken place and that any risks associated with carrying out the emergency procedure are eliminated or reduced.

### 4.3 Key Definitions

The Regulations define a **fall** as an involuntary movement that results in a fall greater than 2.0 m. Additional terms and definitions, as outlined in the Regulations, are included below.

**Solid construction** means an area that has—

- A surface that is structurally capable of supporting people, material and any other loads intended to be applied to it;
- Barriers around its perimeter and any open penetrations to prevent a fall from the area;
- An even and readily negotiable surface and gradient; and
- A safe means of access and egress.

**Passive fall prevention device:** Material, equipment or a combination of material and equipment that is designed for the purpose of preventing a fall and that following initial installation, does not require any ongoing adjustment, alteration or operation by any person to ensure the integrity of the device in performing its intended function. Passive fall prevention devices include temporary work platforms, roof safety mesh and guard railing.

**Work positioning system:** An industrial rope access system, travel restraint system or any other equipment other than a temporary work platform that enables a person to be positioned and safely supported at a work location for the duration of the task being undertaken at height. An example includes a harness or belt system in which the person is attached to a static line or anchorage point to physically restrain them from reaching an edge or elevated surface fall hazard.

**Fall arrest system:** Equipment, material or a combination of equipment or material that is designed to arrest the fall of a person. Fall arrest systems include industrial safety nets, catch platforms and safety harness systems (other than a travel restraint system).

## 5 Methodology

The WAH Assessment comprised a review of available documentation, interviews with site personnel and a visual inspection of reasonably accessible areas at the Site and included the following steps:

### 5.1 Discussions on Site

Discussions were held between Walker Corporation and Prensa to establish roof access procedures implemented by Walker Corporation. Frequency of access for various working at height activities were also established.

## 5.2 Site Inspection

A walk-through of the nominated areas of the Property was undertaken to identify fall protection systems installed at the Site. During the site inspection, and through discussions with the site contract, Prensa reviewed routine maintenance tasks which have potential risks of falls such as cleaning of gutters, maintenance of plant on the roof etc. For each of the specific hazards identified on site, adequacy of existing control measures implemented was documented e.g. ladders, guard rails, anchor points, walking platforms etc.

### 5.2.1 Work at Height Activities

From observations made via the site inspection it is assumed that the following work at height activities may be undertaken at the Site:

- Cleaning of windows and exterior facades;
- Maintenance of external planter boxes;
- Maintenance of above ground storage tanks;
- Maintenance of lights and other fixtures; and
- Maintenance of plant and equipment.

### 5.2.2 Working at Heights Areas

The following areas were assessed during the Assessment:

- Exterior, Upper Rooftop;
- Level 17, Upper Level, Roof Access;
- Level 17, Upper Level, Plant Room;
- Exterior, Level 17, Roof Access;
- Level 17, Plant Room;
- Level 17, Cooling Tower Plant Room;
- Level 6, Balcony;
- Level 2, Plant Room;
- Exterior, Level 2, Balcony;
- Level 2, Atrium;
- Level B1, Pump Room;
- Level B1, Chiller Plant Room;
- Level B2, Plenum, 'Authorised Access Only' room; and
- Level B3, Plant Room.

Observations made during the inspection of each of the above four areas are detailed in **Section 7: Findings**, and site plans have been provided within **Appendix C**.

## 6 Limitations

The scope of the WAH Assessment was limited to areas that have been provided with adequate means to safely access at height. Substation areas were excluded from the scope of the assessment.

Should any further fall protections systems or potential fall risks be identified onsite, a risk assessment should be conducted in accordance with the methodology outlined in this report and appropriate control measures implemented.

## 7 Findings

Detailed findings of the areas inspected are presented in the following sub-sections:

### 7.1 General Findings

In general, it was found that the infrastructure and controls observed were considered to be effective in reducing the risk of falls to so far as reasonably practicable, including:

- Access to roof areas was generally secured through locked doors and access hatches;
- Fall arrest systems, such as anchor points and needle systems, were provided in areas near to roof and balcony edges;
- 'Authorised Access Only' signage was observed to be provided to roof access doors and access hatches;
- Hand rails were observed to be provided to stairs and ladders and grab rails were provided for safe entry and exit from access hatches; and
- A review of the SHA Certificate of Compliance for Height Safety Systems confirmed the annual maintenance inspection for fall arrest equipment was completed on the 14<sup>th</sup> April 2021.

### 7.2 Exterior, Rooftop

The Rooftop is accessed via a vertical rung ladder located within a secured Plant Room on Level 17, Upper Level. It is understood that contractors access the Upper Rooftop to conduct works, including:

- Maintenance works to plant equipment and lightning protection;
- Cleaning works to the building facade and windows; and
- Cleaning gutters.

To facilitate these works the Upper Rooftop was provided with the following working at heights equipment:

#### 7.2.1 Lightweight Needle Systems

The Rooftop was provided with three (3) lightweight needle systems, two (2) needle systems were observed to be provided to the south-eastern corner of the building, and one (1) needle system was provided to the south-western corner. A review of the maintenance records confirmed the three (3) needle systems were inspected on the 14<sup>th</sup> April 2021. At the time of the inspection, Prensa noted the following observations relating to the needle systems:

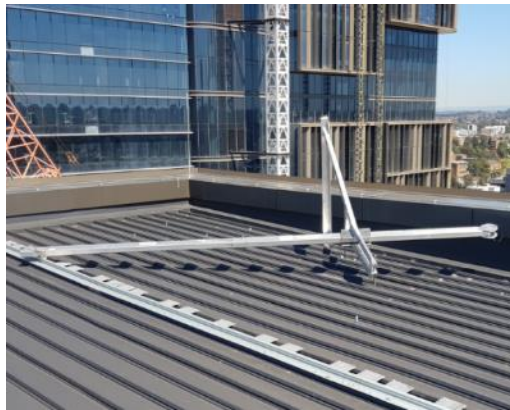
- Upper Rooftop, South-Eastern Corner:
  - A needle system was observed to be unsecured (**Figure 1**);
  - Loose pins, associated with needle system, were observed to be stored on a needle system, presenting a risk of being blown off the roof (**Figure 2**); and
  - Loose fall arrest equipment was observed to be stored adjacent to the needle systems.
- Upper Rooftop, South-Western Elevation:
  - A needle system was observed to be stored on its side (**Figure 3**).



**Figure 1:** Rooftop, South-Eastern Corner – A needle was observed to be unsecured (red) and minor components were observed to be stored on a needle system (yellow) (left).



**Figure 2:** Loose fall arrest equipment was observed to be stored adjacent the needle systems (right).



**Figure 3:** Upper Rooftop, South-Western Elevation – A needle system was observed to be stored on its side

### 7.2.2 Anchor Points

The Upper Rooftop was provided with a number of anchor points. Inspected anchor points were observed to be provided with certification tags. A review of the certification tags indicated testing was conducted on 30<sup>th</sup> March 2021. A failed anchor point was noted to be tagged out and physically secured against use.

### 7.2.3 Rung Ladders

The Rooftop was provided with three (3) fixed rung ladders. The ladders were provided with grab rails and were observed to be free from obstructions.

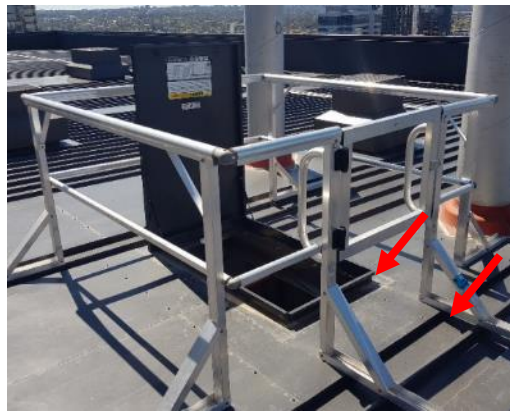
## 7.3 Level 17, Upper Level

### 7.3.1 Rooftop Access

The rooftop was accessed via a fixed rung ladder located within the Level 17, Upper Level, Plant Room, leading to a secured hatch. The rung ladder was observed to be provided with grab rails and was free from obstructions. However, the following was noted:

- The ladder landing was noted to not be level due to the raised lip of the access hatch and raised sections of the corrugated roofing presenting trip hazards. AS1657 specifies that a ladder landing must be provided with a flat level landing, extending 900 mm from the ladder (**Figure 4**); and

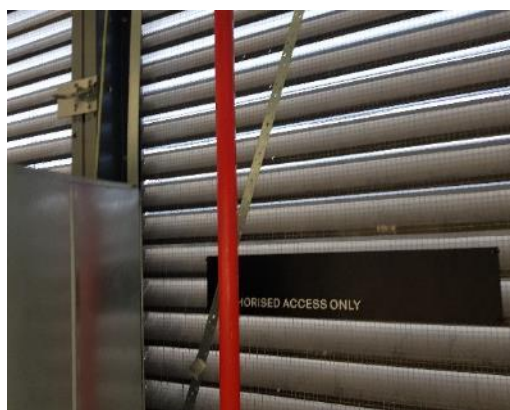
- The distance between the rung ladder and the handle of the access hatch was noted to result in difficulty in closing the hatch while descending the ladder, and required the user to lean into the open space, thereby increasing the risk of falls.



**Figure 4:** Level 17, Upper Level, Rooftop Access Hatch – Raised hatch lip and roofing sections presenting trip hazards.

### 7.3.2 Level 17, Upper Level, Plant Room

A door labelled ‘*Authorised Access Only*’ was provided adjacent to the supply air fan (SAF) 17-1. The door opens to an external live edge. Fall prevention and/or arrest systems such as anchor points or parapet walls were not observed to be provided to this location presenting an increased risk of falls. The door was noted to be provided with a door bolt, however this was not lockable. The Senior Facilities Manager explained that the door was provided for construction purposes and was no longer utilised (**Figure 5**).



**Figure 5:** Level 17, Upper Level, Plant Room, Adjacent SAF 17-1 – Doorway opening to roof area.

## 7.4 Level 17, Plant Room

### 7.4.1 Mobile Gantry

A mobile gantry was observed to be provided within the atrium. The Senior Facilities Manager explained that the gantry had not previously been utilised. A review of the Height Safety System

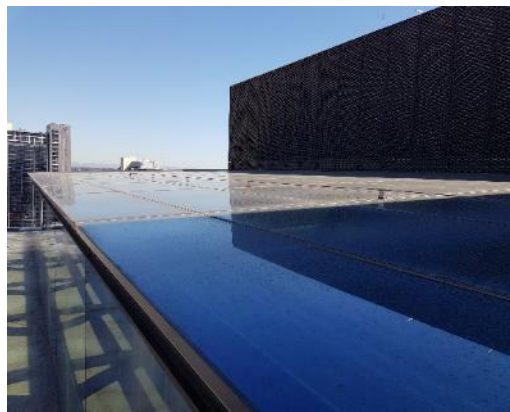
Certificate of Compliance confirmed the annual inspection of the gantry was completed on 14<sup>th</sup> April 2021.

#### 7.4.2 Roof Access

A roof access door was provided adjacent to the Satellite Room. The door was secured and provided with “Roof Access Authorised Access Only” and “Warning Access Point” signage which included installation and inspection details.

#### 7.4.3 Exterior, Roof Area

The roof area was provided with a fixed rung ladder and three (3) static line systems. The fixed rung ladder was noted to be free of obstructions and was provided with grab rails. Two (2) of the static lines were located adjacent to the roof access door and perpendicular to the two (2) exposed edges, while the third was located on the upper level. A review of the certification tags indicated the static lines were inspected on 30<sup>th</sup> March 2021. The upper level was noted to be consist of trafficable glass panelling. However, signage displaying a Safe Weight Limit was not provided at the location (**Figure 6**).



**Figure 6:** Exterior, Level 17, Roof Area, Upper Level – Signage displaying a Safe Weight Limit for the trafficable glass panelling was not displayed.

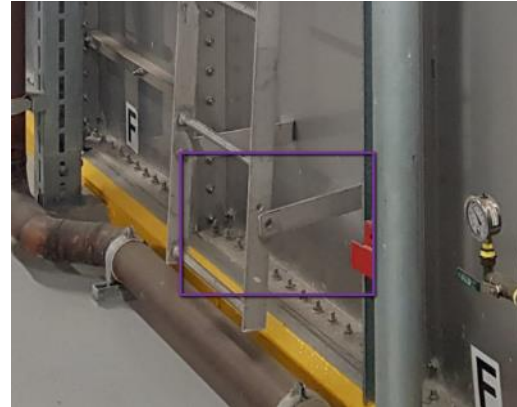
#### 7.4.4 Water Tank Area

Three (3) water tanks were located within the Level 17, Plant Room. It was understood that the water tanks were accessed for maintenance every ten (10) years with fixed vertical rung ladders provided. The rung ladders were generally observed to be provided with grab rails and free from obstructions. However, the following issues associated with the rung ladder attached to the potable water tank were noted:

- The clearance from the back edge of the rung was noted to be obstructed by a metal pipe, presenting a trip hazard (**Figure 7**);
- Head clearance was noted to be obstructed by HHW Flow and HHW return pipework (**Figure 7**); and
- A bolt was noted to be missing from the lower securement bracket (**Figure 8**).



**Figure 7:** Level 17, Plant Room, Water Tank Area – A metal pipe beneath the bottom rung was considered to pose a trip hazard when descending the rung ladder (yellow) and head clearance was noted to be obstructed by HHW Flow and HHW return pipework (red).



**Figure 8:** Level 17, Plant Room, Water Tank Area – A bolt was noted to be missing from the lower securement bracket (purple).

#### 7.4.5 Cooling Tower Plant Room

Seven (7) cooling towers were situated within the Level 17, Cooling Tower Plant Room. Each of the cooling towers was provided with a fixed rung ladder, which was understood to be used by contractors on a monthly basis to conduct cooling tower maintenance works. The ladder gates located at the top of the ladders were noted to be seized and difficult to open, presenting an increased risk of falls when opening (Figure 9). In addition, low headroom was observed on a platform walkway adjacent to the cooling towers due to the presence of pipework and a bracket (Figure 10).



**Figure 9:** Level 17, Cooling Tower Plant Room – The gates provided to access cooling towers were noted to be difficult to open which may increase the risk of falls.



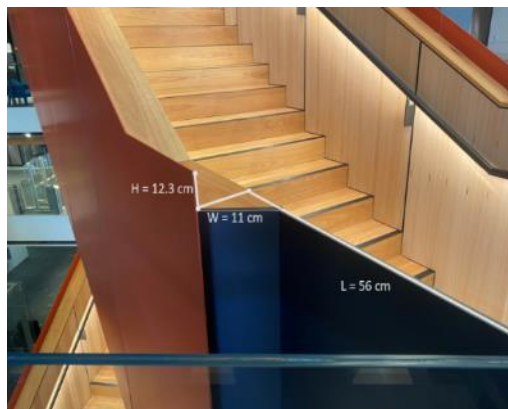
**Figure 10:** Level 17, Cooling Tower Plant Room – Low headroom was observed on a platform walkway adjacent to the cooling towers due to the presence of pipework and a bracket.

## 7.5 Atrium, Throughout Internal Levels

### 7.5.1 Barriers

The Property was provided with an internal atrium noted to be intersected by suspended stairs and walkways. An inspection of representative barriers identified the following:

- Stair barriers were noted to be provided with a flat top with a horizontal width of approximately 11cm wide, which may entice occupants to temporarily store items on the barrier (e.g. laptop, coffee, keys, phone, etc.); and
- Edge protection was generally provided to the flat top of the barrier, to reduce the risk of items being knocked off the edge. However, a gap in the panelling was observed at the base of the stairs presenting an increased risk of objects falling or sliding off the barrier (**Figure 11**).



**Figure 11:** Atrium, Throughout Internal Levels – Edge protection to barrier not observed at base of stairs.

### 7.5.2 Maintenance of Light Fittings

A number of light fittings were observed to be provided to ceiling areas throughout the atrium. The Senior Facilities Manager explained the following controls are implemented during maintenance works:

- An electric work platform must be utilised;
- Workers are required to wear a harness which is attached to the EWP; and
- Tools and equipment must be tethered with lanyards.

## 7.6 Exterior, Level 6 and Level 2, Balcony Areas

The balcony areas of Level 6 and Level 2 were provided with perimeter edge protection in the form of glass barriers. However, a number of planter boxes were noted to be provided outside the barriers, adjacent to the edge of the building. It was understood that contractors were engaged to maintain the planter boxes on a monthly basis. The planter boxes were accessed through the use of an anchorage rail which was provided to the ceiling of the balcony area and extends along the perimeter of the balcony. An inspection of the anchorage rail indicated that the working line may pass over the top of the glass barriers. The barriers were observed to be provided with steel capping to facilitate industrial rope access, as per the *3 Parramatta Square - Façade Performance Specification*, dated 28/07/2017, provided to Prensa for review (**Figure 12**).



**Figure 12:** Level 6 Balcony Area – Steel capping provided to glass barrier to facilitate industrial rope access for façade and planter box maintenance.

## 7.7 Level 2, Plant Room

### 7.7.1 On-site Stormwater Detention Tank

An on-site stormwater detention tank (OSD tank) was situated within the Level 2, Plant Room. The OSD tank was provided with a fixed rung ladder and was understood to be accessed by contractors on a quarterly basis for maintenance works. AS1657 prescribes a landing headroom clearance of 2000 mm or higher for fixed ladders and a front clearance (from front of nosing) of 750 mm or higher for rung ladders. However, the landing headroom provided at the top of the ladder was measured to be 820 mm high (**Figure 13**) and the front clearance was measured to be 510 mm due to protruding metal brackets located adjacent to the ladder (**Figure 14**). These reduced clearances may result in an increased risk of falls.



**Figure 13:** Level 2 Plant Room, OSD Tank – the landing headroom provided at the top of the rung ladder was measured to be 820 mm high.



**Figure 14:** Level 2 Plant Room, OSD Tank – The front clearance was measured to be 510 mm due to protruding metal brackets located adjacent to the ladder.

## 7.8 Level B1, Pump Room

### 7.8.1 Potable Water Tank

A potable water tank was situated within the Level B1, Pump Room. The tank was understood to be accessed by contractors on a less than yearly basis. The tank was accessed via a fixed vertical rung ladder which was noted to be free of obstructions and with stiles extending approximately 1000 mm above the top rung.

## 7.9 Level B2, Plenum, Authorised Access Only Room

Scaffolding was observed to be provided within a room labelled 'Authorised Access Only', located within a plenum on Level B2. The Senior Facilities Manager explained that the scaffolding was erected to provide access to an area impacted by reoccurring issues of water ingress, and was intended to remain in place for the foreseeable future to provide access to the upper areas of the plenum. The scaffolding was noted to be greater than four (4) meters high. As such, the integrity and stability of the scaffolding must be inspected at least every 30 days. Copies of handover certificates and/or inspection reports were not made available to Prensa for review (Figure 15).



**Figure 15:** Level B2, Plenum, Authorised Access Only Room – Scaffolding erected to provide access to an area impacted by reoccurring issues of water ingress.

## 7.10 Level B3, Plant Room, Diesel Storage Tank

A fixed ladder was provided to access the diesel tank within the Level B3, Plant Room. It was understood that the ladder was used for accessing the dip point. The rung ladder was noted to be free from obstructions. The ladder was not provided with grab rails, however it was noted that the dip point could be accessed without exiting the ladder, as such a recommendation has not been raised (Figure 16).



**Figure 16:** Level B3, Plant Room, Diesel Storage Tank – Rung ladder provided to access the dip point of the diesel storage tank.

## 8 Work at Height Risk Assessment

Following the identification of potential areas where fall hazards were present, a risk assessment was conducted which considered the following:

- Tasks that maybe undertaken;
- The location and height of the area;
- Frequency at which the area is accessed;
- Qualification and skill level (competency) of the worker accessing the area; and
- The nature of hazards and risk control measures currently in place.

Each area where potential risk of fall was noted was assigned a likelihood and consequence value in accordance with the risk assessment guide provided in **Appendix A** of this report. An overall risk rating of **Low**, **Medium** or **High** was assigned to each area using the risk matrix also provided in **Appendix A** of this report. The risk assessments completed for each area where potential for falls was noted is provided in **Appendix B** of this report. Recommendations for the implementation of additional fall risk control measures are also detailed in **Appendix B**, where required and also summarised in **Section 9**. Site plans indicating location of additional risk controls have been provided within **Appendix C**.

## 9 Recommendations

A total of three (3) **Medium** and eight (8) **Low** risks were identified at the.

Recommendations for further controls to address the Medium and Low risks are presented below.

### 9.1 Recommendations to Address Medium Risks

The following recommendations have been raised to address the **Medium** risk identified:

#### 9.1.1 Upper Rooftop, South-Eastern Corner

- Store loose components associated with the needle systems securely, either internally or in a secured store, to reduce the risk of the components being blown off the roof; and
- Relocate loose fall arrest equipment to an internal location.

#### 9.1.2 Upper Rooftop, South-Western Elevation

- Engage a competent person to secure the unsecured needle system.

#### 9.1.3 Atrium, Throughout

Install edge protection to the flat top of the stair barriers, at the base of the stairs traversing the atrium, to reduce the risk of falling objects.

#### 9.1.4 Level B2, Plenum, 'Authorised Access Only' Room

Undertake one of the following:

- Obtain the handover certificate from the building contractor, or engage a competent person to conduct a handover inspection; and
- Engage a competent person to undertake the following inspection program:
  - Before the scaffold is used following repairs or an incident that might affect the stability of the scaffold; and
  - At least every 30 days.

Or

- Remove the scaffold.

## 9.2 Recommendation to Address Low Risks

The following recommendations have been raised to address the **Low** risk identified:

### 9.2.1 Level 17, Upper Level, Rooftop Access

Undertake the following:

- Install a level landing from the access hatch extending 900 mm from the ladder; and
- Install an extended handle or cord to the underside of the hatch handle to assist in closing the hatch whilst descending the ladder.

### 9.2.2 Level 17, Upper Plant Room, Lower Roof Area

Secure access to the door of the roof area with a lock.

### 9.2.3 Level 17, Exterior, Lower Roof

- Display signage in a prominent location at the entry point to the trafficable glass panelling stating the safe weight limit (SWL).

### 9.2.4 Level 17, Plant Room, Potable Water Tank:

- Provide highlighting to the metal pipe beneath the metal rung;
- Display '*Warning Low Headroom*' signage at a prominent location adjacent to the ladder; and
- Provide the missing bolt from the lower securement bracket of the rung ladder.

### 9.2.5 Level 17, Cooling Tower Plant Room, Cooling Towers:

Repair and maintain the ladder gates to enable them to open easily.

### 9.2.6 Level 17, Cooling Tower Plant Room, Platform Walkway

Undertake the following:

- Display signage stating '*Warning Low Headroom*' signage in a prominent location adjacent to the protruding pipework and a bracket; and
- Install highlighted padding to the protruding pipework and bracket.

### 9.2.7 Level 2, Plant Room, Storage Tank Maintenance:

- Display signage stating '*Warning, Low Headroom*' adjacent to the OSD tank ladder; and
- Install highlighted padding to the protruding metal bracket adjacent the OSD tank.

# Appendix A: Risk Assessment Criteria

## Risk Matrix

Risk is the combination of the probability (likelihood) of a specific unwanted event and the potential consequences if it should occur.

**Likelihood:** The likelihood of a hazardous event occurring is detailed in **Table 1** below.

Table 1: Risk Likelihood Rating	
Likelihood	Description
Rare	The event may occur but only in exceptional circumstances
Unlikely	The event could occur at some circumstances
Possible	The event should occur sometime
Likely	The event will probably occur
Almost Certain	The event is expected to occur in normal circumstances

**Consequence:** Consequence refers to the severity of an outcome of an event or situation

Table 2: Risk Consequence Rating	
Consequence	Potential Consequence
Insignificant	No injuries, low financial loss
Minor	First aid treatment, medium financial loss
Moderate	Individual injury and/or significant damage to asset, high financial loss
Major	Single death and/or extensive injuries, major financial loss
Catastrophic	Multiple deaths, huge financial loss

## Determination of Risk

The risk level is determined by combining the likelihood and consequences presented in the above two tables. The risk level is categorised in the following manner:

Table 3: Risk Level Matrix					
Consequence	Likelihood				
	1 - Rare	2 - Unlikely	3 - Possible	4 - Likely	5 - Almost Certain
5 - Catastrophic	Medium	Medium	High	High	High
4 - Major	Low	Medium	Medium	High	High
3 - Moderate	Low	Low	Medium	Medium	High
2 - Minor	Low	Low	Low	Medium	Medium
1 - Insignificant	Low	Low	Low	Low	Medium

# Appendix B: WAH Risk Assessment

Item #	Location	Activity	Factors Affecting Likelihood of Fall										Factors Affecting Consequence of Fall		Likelihood	Consequence	Risk	Recommended Additional Risk Controls	Photo Reference			
			Hazard Description	Carry Equipment	Three points of contact	Work within 2 m of edge	Operator facing the edge	Pitch	Trip Hazard Present	Occupancy below	Condition / maintenance of equipment	Frequency of Access	Access By	Height of fall						Nature of landing	Current Risk Controls	Deficiencies
1	Rooftop	Window and facade cleaning using needle systems	Person falling off roof	Single hand carried tools	Yes	Yes	Yes	Flat	No	Thoroughfare	Good	Monthly	Maintenance personnel	> 6m	Flat hard stand	<ul style="list-style-type: none"> <li>Secured access;</li> <li>Maintenance of fall arrest equipment, including needle systems and anchor points;</li> <li>Competent contractors only accessing this area;</li> <li>Parapet wall surrounds the majority of the balcony; and</li> <li>Anchor points available throughout rooftop.</li> </ul>	<p><u>Upper Rooftop, South-Eastern Corner:</u></p> <ul style="list-style-type: none"> <li>A needle system was observed to be unsecured;</li> <li>Loose pins were observed to be stored on the needle system, presenting a risk of being blown off the roof; and</li> <li>Loose fall arrest equipment was observed to be stored adjacent to the needle systems.</li> </ul> <p><u>Upper Rooftop, South-Western Elevation:</u></p> <ul style="list-style-type: none"> <li>A needle system was observed to be on its side.</li> </ul>	Possible	Major	Medium	<p><u>Upper Rooftop, South-Eastern Corner:</u></p> <ul style="list-style-type: none"> <li>Store loose components associated with the needle systems securely, either internally or in a secured store, to reduce the risk of the components being blown off the roof; and</li> <li>Relocate loose fall arrest equipment to an internal location.</li> </ul> <p><u>Upper Rooftop, South-Western Elevation:</u></p> <ul style="list-style-type: none"> <li>Engage a competent person to secure the unsecured needle system.</li> </ul>	Figures 1, 2 and 3
2	Rooftop	Rooftop Access	Person falling off ladder	Single hand carried tools	Yes	Yes	No	Flat	Yes	Unlikely	Good	Monthly	Maintenance personnel	2m to 6 m	Flat hard stand	<ul style="list-style-type: none"> <li>Secured behind locked plant room doors;</li> <li>Ladder gate provided; and</li> <li>Grab rails provided on the roof.</li> </ul>	<ul style="list-style-type: none"> <li>The ladder landing was noted to not be level due to the raised lip of the access hatch and raised sections of the corrugated roofing presenting trip hazards. AS1657 specifies that a ladder landing must be provided with a flat level landing, extending 900 mm from the ladder; and</li> <li>The distance between the rung ladder and the handle of the access hatch was noted to result in difficulty in closing the hatch while descending the ladder.</li> </ul>	Unlikely	Moderate	Low	<ul style="list-style-type: none"> <li>Install a level landing from the access hatch extending 900 mm from the ladder; and</li> <li>Install an extended handle or cord to the underside of the hatch handle to assist in closing the hatch whilst descending the ladder.</li> </ul>	Figure 4
3	Level 17, Upper Plant Room, Lower Roof Area (1)	Plant maintenance	Person falling off roof	Single hand carried tools	Yes	Yes	Yes	Flat	No	Unlikely	Good	Monthly	Maintenance personnel	> 6m	Flat hard stand	<ul style="list-style-type: none"> <li>Located within a locked plant room; and</li> <li>'Authorised Access Only' signage provided to the door.</li> </ul>	The door was noted to be provided with a door bolt, however this was not lockable.	Rare	Major	Low	Secure the roof access door with a lock.	Figure 5
4	Level 17, Exterior, Lower Roof Area (2)	Cleaning windows and plant maintenance using static line	Person falling off roof	Single hand carried tools	Yes	Yes	Yes	Flat	No	Thoroughfare	Good	Yearly	Maintenance personnel	> 6m	Flat hard stand	<ul style="list-style-type: none"> <li>Static lines provided and maintained annually;</li> <li>Locked door; and</li> <li>'Authorised Access Only, Abog Access' signage was provided to the door.</li> </ul>	The upper level was noted to be consist of trafficable glass panelling. However, signage displaying a Safe Weight Limit was not provided.	Rare	Major	Low	Display signage in a prominent location at the entry point to the trafficable glass panelling stating the safe weight limit (SWL).	Figure 6

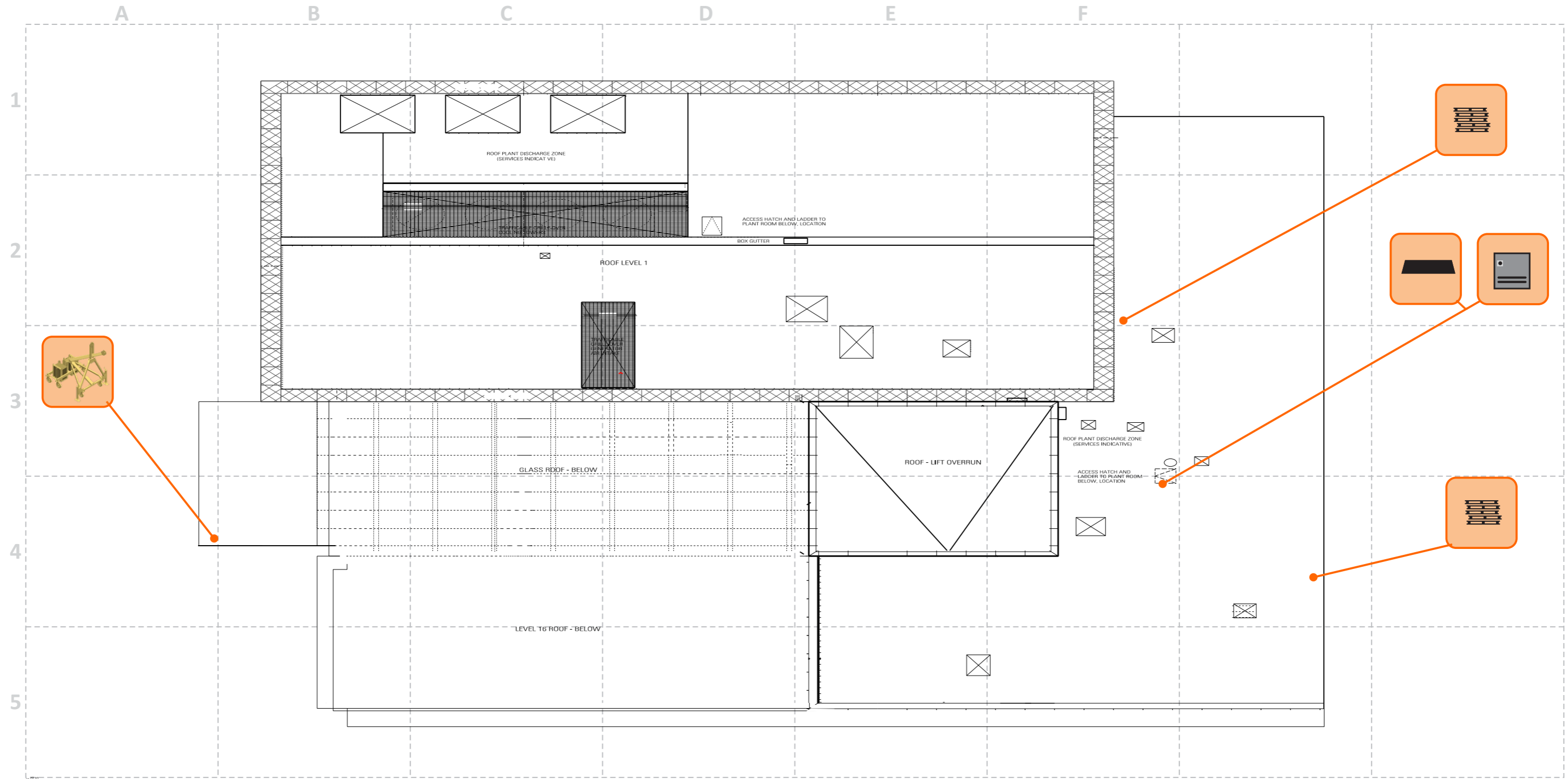
Item #	Location	Activity	Factors Affecting Likelihood of Fall											Factors Affecting Consequence of Fall		Current Risk Controls	Deficiencies	Likelihood	Consequence	Risk	Recommended Additional Risk Controls	Photo Reference
			Hazard Description	Carry Equipment	Three points of contact	Work within 2 m of edge	Operator facing the edge	Pitch	Trip Hazard Present	Occupancy below	Condition / maintenance of equipment	Frequency of Access	Access By	Height of fall	Nature of landing							
5	Level 17 Plant Room	Potable water tank maintenance	Person falling off ladder	Single hand carried tools	Yes	Yes	No	Flat	No	Unlikely	Good	Quarterly	Maintenance personnel	2m to 6 m	Flat hard stand	<ul style="list-style-type: none"> <li>Secured behind locked plant room doors; and</li> <li>Grab rails provided for rung ladders.</li> </ul>	<p><u>Level 17, Plant Room, Potable Water Tank.</u></p> <ul style="list-style-type: none"> <li>The clearance from the back edge of the rung was noted to be obstructed by a metal pipe, presenting a trip hazard;</li> <li>Head clearance was noted to be obstructed by HHW Flow and HHW return pipework; and</li> <li>A bolt was noted to be missing from the lower securement bracket of the rung ladder.</li> </ul>	Unlikely	Moderate	Low	<p><u>Level 17, Plant Room, Potable Water Tank.</u></p> <ul style="list-style-type: none"> <li>Provide highlighting to the metal pipe beneath the metal rung ladder;</li> <li>Display 'Warning Low Headroom' signage at a prominent location adjacent the ladder;</li> <li>Provide the missing bolt from the lower securement bracket of the rung ladder.</li> </ul>	Figures 7 and 8
6	Level 17, Cooling Tower Plant Room	Cooling tower maintenance	Person falling off ladder	Single hand carried tools	No	Yes	No	Flat	No	Unlikely	Good	Quarterly	Maintenance personnel	2m to 6 m	Flat hard stand	<ul style="list-style-type: none"> <li>Secured behind locked plant room doors;</li> <li>Ladder gates provided, to cooling tower ladders; and</li> <li>Grab rails provided for rung ladders.</li> </ul>	<ul style="list-style-type: none"> <li>The ladder gates located at the top of the cooling tower ladders were noted to be seized and difficult to open.</li> </ul>	Unlikely	Moderate	Low	Repair and maintain the cooling tower ladder gates to enable them to open easily.	Figure 9
7	Level 17, Cooling Tower Plant Room, Platform Walkway	Plant maintenance	Person falling from walkway	Single hand carried tools	Yes	Yes	No	Flat	No	Unlikely	Good	Fortnightly	Maintenance personnel	Less than 2 m	Flat hard stand	<ul style="list-style-type: none"> <li>Located within a locked plant room;</li> <li>Handrails provided to platform walkway.</li> </ul>	<p>Low headroom was observed due to the presence of pipework and a bracket.</p>	Unlikely	Moderate	Low	<ul style="list-style-type: none"> <li>Display 'Warning Low Headroom' signage in a prominent location adjacent to protruding pipework and bracket; and</li> <li>Install highlighted padding to the protruding pipework and bracket.</li> </ul>	Figure 10

Item #	Location	Activity	Factors Affecting Likelihood of Fall											Factors Affecting Consequence of Fall		Current Risk Controls	Deficiencies	Likelihood	Consequence	Risk	Recommended Additional Risk Controls	Photo Reference
			Hazard Description	Carry Equipment	Three points of contact	Work within 2 m of edge	Operator facing the edge	Pitch	Trip Hazard Present	Occupancy below	Condition / maintenance of equipment	Frequency of Access	Access By	Height of fall	Nature of landing							
8	Atrium, Throughout	Items stored on the flat top of the stair barriers.	Falling object	Single hand carried tools	Yes	No	Not Applicable	Flat	No	Thoroughfare	Good	Daily	Any site occupant	> 6m	Flat hard stand	Edge protection was generally provided to the flat top of the stair barrier to reduce the risk of items being knocked off the edge.	A gap was noted, at the base of the stairs, in the edge protection provided to the flat top of the stair barriers presenting a risk of objects falling or sliding off the barrier to lower levels.	Possible	Major	Medium	Install edge protection to the flat top of the stair barriers, at the base of the stairs traversing the atrium, to reduce the risk of falling objects.	Figure 11
9	Level 6 and Level 2, Balconies	Maintaining planter boxes using anchorage rail systems.	Person falling off roof	Single hand carried tools	Yes	Yes	Yes	Flat	No	Transient	Good	Monthly	Maintenance personnel	> 6m	Flat hard stand	<ul style="list-style-type: none"> <li>Access is secured by locked gates;</li> <li>Anchorage rail systems provided and maintained annually;</li> <li>Glass balustrades observed to be provided with steel capping to facilitate industrial rope access.</li> </ul>	None.	Rare	Major	Low	None	Figure 12
10	Level 2 Plant Room	Storage tank maintenance	Person falling off ladder	Single hand carried tools	Yes	Yes	No	Flat	No	Unlikely	Good	Quarterly	Maintenance personnel	2m to 6 m	Flat hard stand	Located within a locked plant room.	<ul style="list-style-type: none"> <li>A low headroom height of a 820 mm was provided at the OSD tank landing platform; and</li> <li>A low front clearance distance of 510 mm was provided to the OSD tank access ladder due to protruding metal brackets.</li> </ul>	Unlikely	Moderate	Low	<ul style="list-style-type: none"> <li>Display signage stating 'Warning, Low Headroom' adjacent to the OSD tank ladder; and</li> <li>Install highlighted padding to the protruding metal bracket adjacent the OSD tank.</li> </ul>	Figures 13 and 14
11	Atrium, Throughout	Cleaning and maintaining light fittings	Person falling off EWP / Falling object	Single hand carried tools	Yes	No	Yes	Flat	No	Thoroughfare	Good	Quarterly	Maintenance personnel	> 6m	Flat hard stand	<ul style="list-style-type: none"> <li>EWP provided with edge protection;</li> <li>Contractors are required to utilise a harness; and</li> <li>Tools must be tethered with a lanyard.</li> </ul>	None.	Rare	Major	Low	None	
12	Level B2, Plenum, 'Authorised Access Only' Room	Rectifying Water Ingress	Person falling from scaffolding	Single hand carried tools	Yes	Yes	Yes	Flat	No	Unlikely	Uninspected	Ad hoc	Maintenance personnel	2m to 6 m	Flat hard stand	Scaffolding provided	<ul style="list-style-type: none"> <li>Handover certificate was not made available; and</li> <li>Scaffolding noted to exceed 4 m, however, Prensa was advised that scaffold inspections every 30 days were not being undertaken.</li> </ul>	Unlikely	Major	Medium	<ul style="list-style-type: none"> <li>Obtain the scaffold handover certificate from the building contractor, or engage a competent person to conduct a handover inspection; and</li> <li>Engage a competent person to undertake the following inspection program:                             <ul style="list-style-type: none"> <li>Before the scaffold is used following repairs or an incident that might affect the stability of the scaffold; and</li> <li>At least every 30 days.</li> </ul>                             Or;                             <ul style="list-style-type: none"> <li>Remove the scaffold.</li> </ul> </li> </ul>	Figure 15
13	Level B3, Plant Room, Diesel Storage Tank	Diesel tank maintenance	Person falling off ladder	Single hand carried tools	Yes	Yes	No	Not Applicable	No	Unlikely	Good	Monthly	Maintenance personnel	Less than 2 m	Flat hard stand	Fixed rung ladder provided	None.	Rare	Moderate	Low	None	Figure 16

## Appendix C: Site Plans

# 3 Parramatta Square

## Rooftop, WAH Findings



Not to scale - All locations are approximate




Client No: W0045    Job No: 96454S


Client: Walker Corporation


Project: 3 Parramatta Square WAH Assessment


Address:  
3 Parramatta Square,  
153 Macquarie Street, Parramatta NSW 2150

Legend:

 Unsecured needle system

 Roof access hatch

 Trip/fall hazard

 Stored items



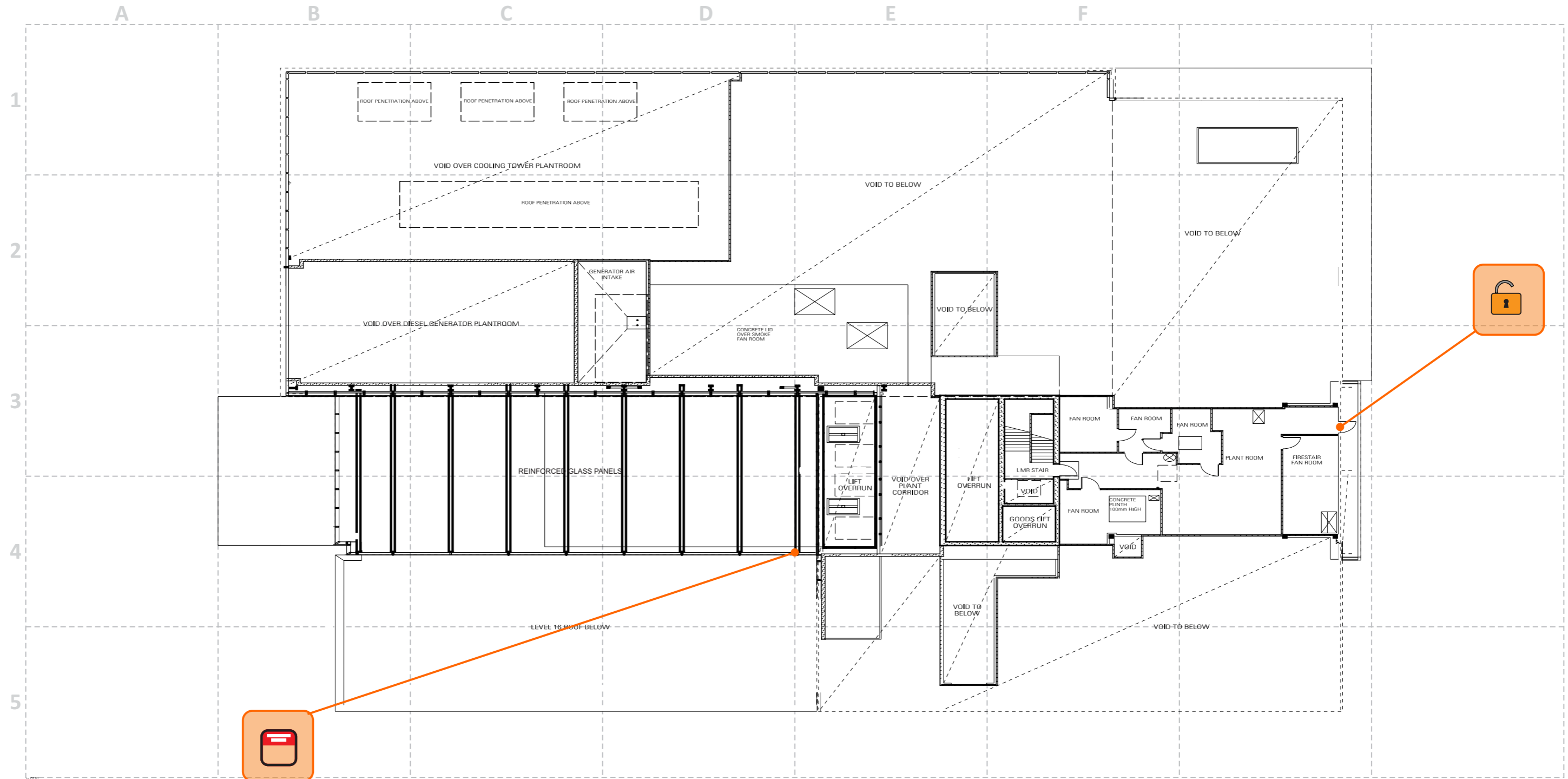
Level 1,  
71 Longueville Rd,  
Lane Cove NSW 2066

prensa.com.au  
P: (02) 8968 2500  
F: (02) 8968 2599

File Name: 3 Parramatta Square WAH Assessment		Version: 1	
Drawn By: CAH	Checked By: YVM	Date: 20/10/2021	Figure number: 1

# 3 Parramatta Square

## Level 17 Upper Level, WAH Findings



Not to scale - All locations are approximate




Client No: W0045    Job No: 96454S


Client: Walker Corporation

Project: 3 Parramatta Square WAH Assessment

Address:  
3 Parramatta Square,  
153 Macquarie Street, Parramatta NSW 2150

Legend:

 Unsecured access to a live edge

 Safe weight limit sign not provided



Level 1,  
71 Longueville Rd,  
Lane Cove NSW 2066

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F: (02) 8968 2599

File Name:  
3 Parramatta Square WAH Assessment

Version:  
1

Drawn By:  
CAH

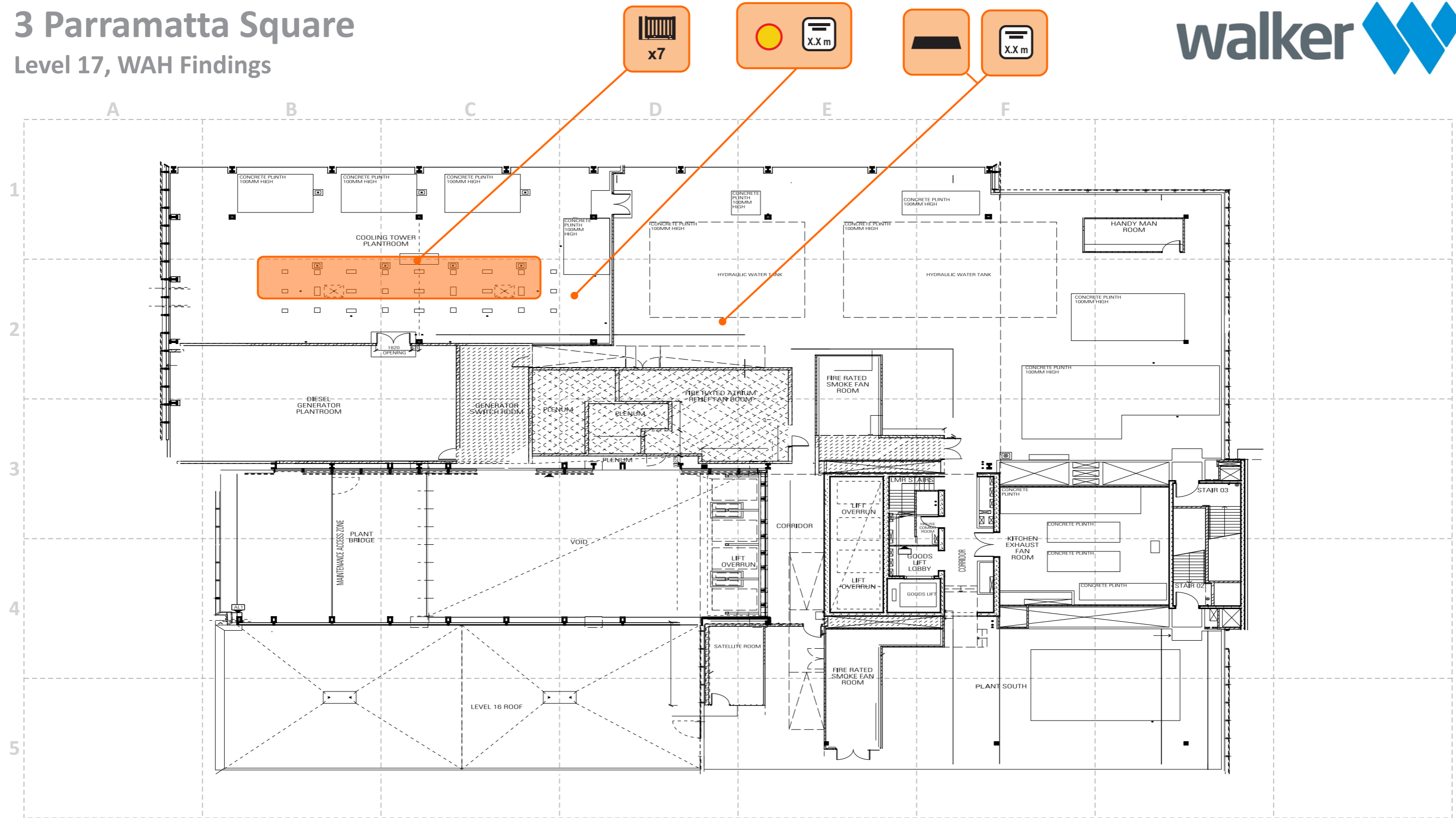
Checked By:  
YVM

Date:  
20/10/2021

Figure number:  
1

# 3 Parramatta Square

## Level 17, WAH Findings



Not to scale - All locations are approximate



Level 1,  
71 Longueville Rd,  
Lane Cove NSW 2066

prensa.com.au  
P: (02) 8968 2500  
F: (02) 8968 2599

Client No: W0045      Job No: 96454S

Client: Walker Corporation

Project: 3 Parramatta Square WAH Assessment

Address:  
3 Parramatta Square,  
153 Macquarie Street, Parramatta NSW 2150

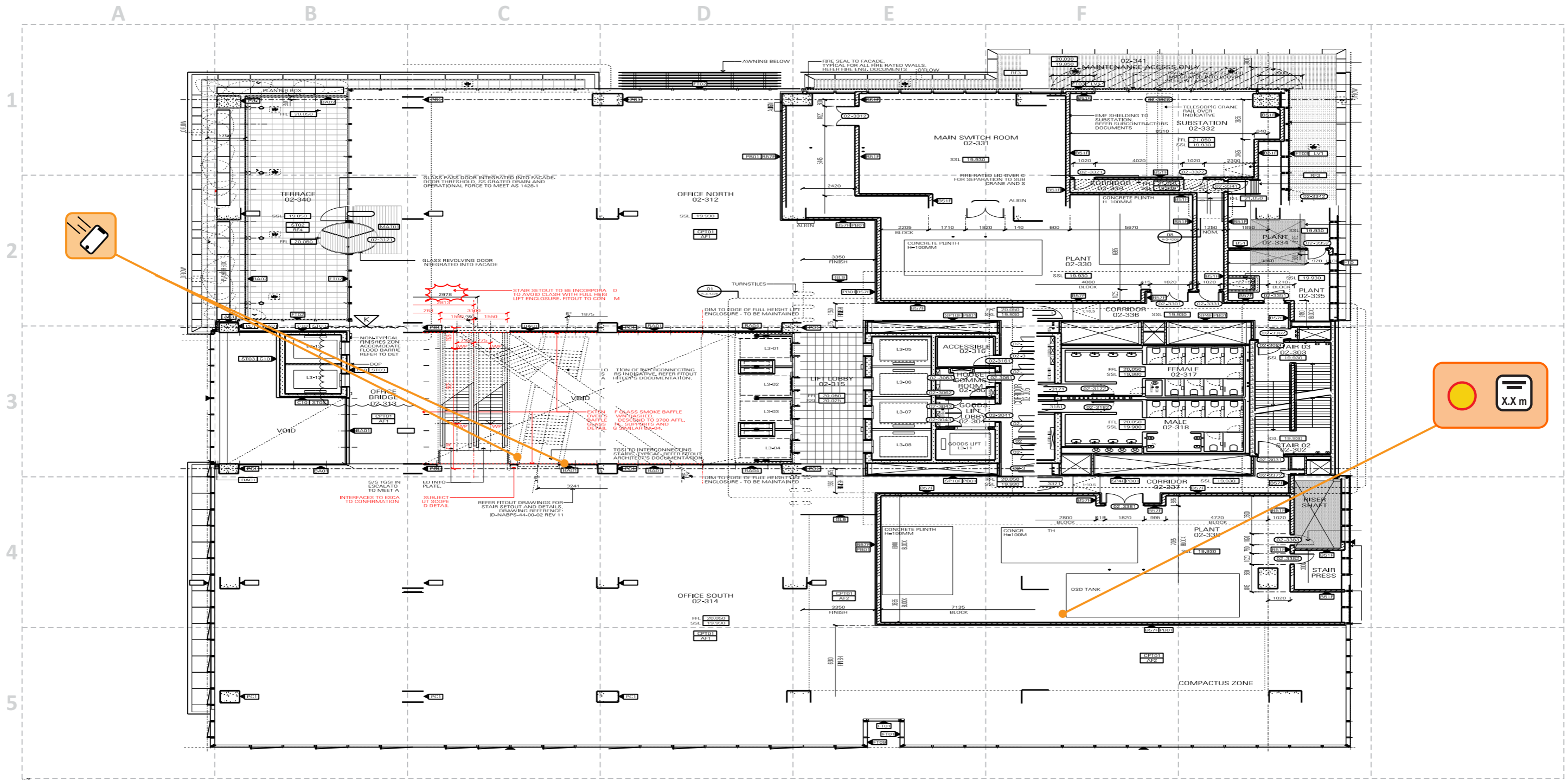
- Legend:
- Seized fall protection Gates
  - Trip/fall hazard
  - Low headroom
  - Protruding objects requiring highlighting



File Name: 3 Parramatta Square WAH Assessment		Version: 1	
Drawn By: CAH	Checked By: YVM	Date: 20/10/2021	Figure number: 1

# 3 Parramatta Square

## Level 2, WAH Findings



Not to scale - All locations are approximate



Level 1,  
71 Longueville Rd,  
Lane Cove NSW 2066

prensa.com.au  
P: (02) 8968 2500  
F: (02) 8968 2599

Client No: W0045      Job No: 96454S

Client: Walker Corporation

Project: 3 Parramatta Square WAH Assessment

Address:  
3 Parramatta Square,  
153 Macquarie Street, Parramatta NSW 2150

Legend:

Low headroom

Risk of falling objects / gap in stair barriers

Protruding objects requiring highlighting



File Name: 3 Parramatta Square WAH Assessment		Version: 1	
Drawn By: CAH	Checked By: YVM	Date: 20/10/2021	Figure number: 1

# 3 Parramatta Square

## Level B2, WAH Findings



Not to scale - All locations are approximate



Client No: W0045      Job No: 96454S

Client: Walker Corporation

Project: 3 Parramatta Square WAH Assessment

Address:  
3 Parramatta Square,  
153 Macquarie Street, Parramatta NSW 2150

Legend:  
 Scaffolding



Level 1,  
71 Longueville Rd,  
Lane Cove NSW 2066

prensa.com.au  
P: (02) 8968 2500  
F: (02) 8968 2599

File Name: 3 Parramatta Square WAH Assessment		Version: 1	
Drawn By: CAH	Checked By: YVM	Date: 20/10/2021	Figure number: 1