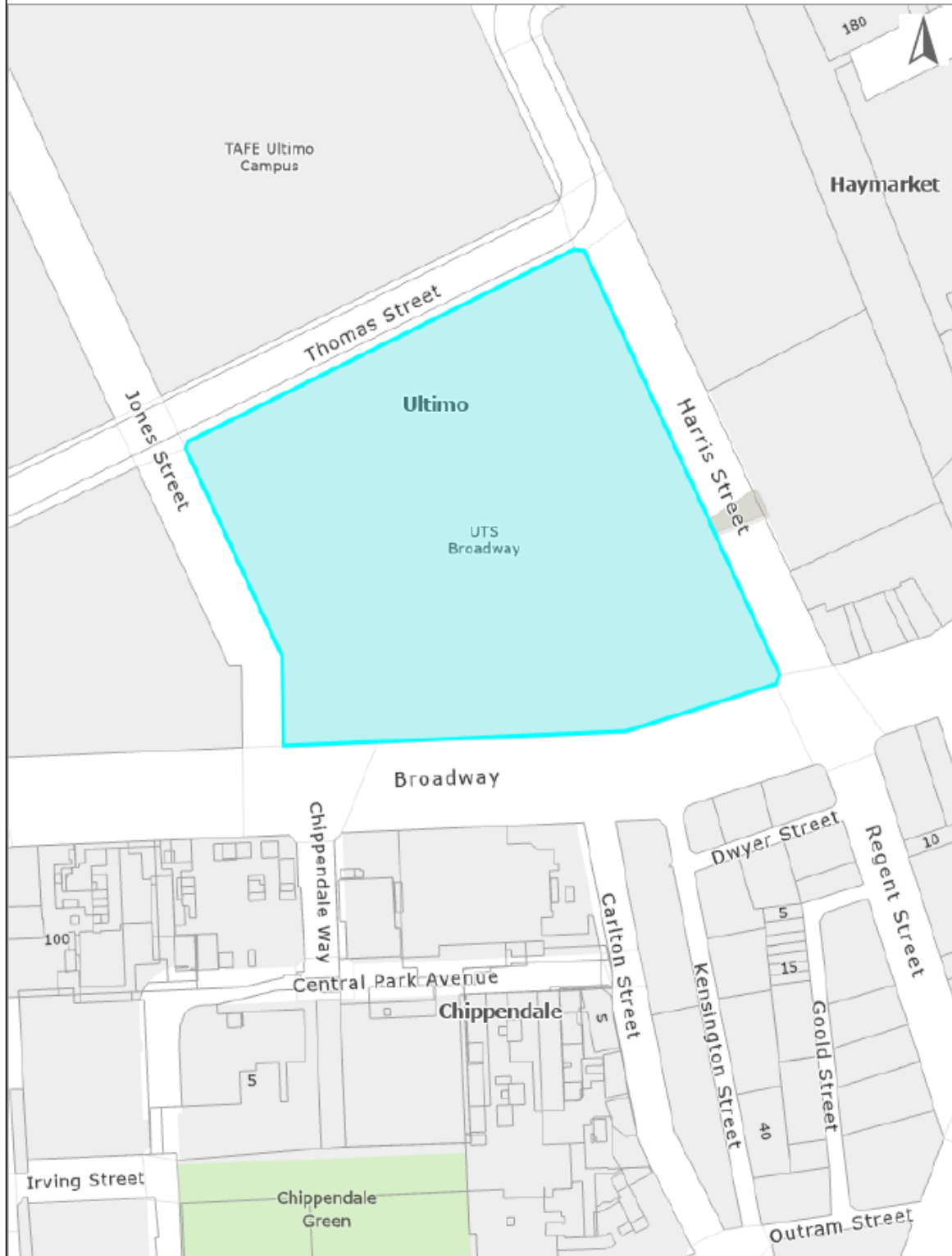


# **Attachment C**

**Inspection Report  
1-73 Broadway, Ultimo**

# Buildings 1 and 2 at 1 - 73 Broadway, Ultimo

CITY OF SYDNEY



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Notes

24/02/2025

**City Investigation Officer Inspection and Recommendation Report  
Clause 17(2), Part 8 of Schedule 5, of the Environmental Planning and Assessment  
Act 1979 (the Act)**

**File:** 3275577

**Officer:** Muhammad Hassan

**Date:** 26 February 2025

**Premises:** 1 – 73 Broadway, Ultimo “Buildings 1 and 2, University of Technology Sydney”

### **Executive Summary**

The City received correspondence from the Commissioner of Fire and Rescue NSW (FRNSW) in relation to the subject premises on 6 January 2025 with respect to matters of fire safety.

The premises is known as “Buildings 1 and 2 at the University of Technology Sydney” and both buildings are used primarily for educational and administrative purposes.

Building 1 also known as UTS Tower is located south of the City’s central business district, near Central Station and opposite Central Park on Broadway. The building contains thirty-two (32) levels with twenty-seven (27) levels occupied. The extra floors comprise building services and storage. The building is constructed of concrete and masonry and contains mainly administrative offices of the university. The Great Hall on levels 5 and 6 caters for graduation ceremonies and there is a car park and loading dock on level 2.

Building 2 also known as UTS Central is located next to the UTS Tower and opposite Central Park on Broadway. UTS Central is a seventeen (17) storey, glass-encased building accommodating the UTS Library, faculty of Law, study spaces, and a publicly accessible food court.

The City’s inspection on 10 February 2025, in the presence of the building’s managers and fire safety consultants, revealed only minor works were required to ensure adequate fire safety.

A compliance letter of instruction was issued on 27 February 2025 requiring the owners to rectify the minor fire safety work by 29 March 2025.

Although there remains minor fire safety work to attend to, the overall fire safety systems were considered adequate. No additional fire safety concerns were identified, specifically no combustible external cladding was found.

## Chronology

| Date             | Event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 January 2025   | FRNSW correspondence received regarding premises at 1 – 73 Broadway, Ultimo, specifically Buildings 1 and 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 10 February 2025 | <p>An inspection of the subject premises was undertaken with the building services and operations manager and several fire safety consultants. The inspection revealed that the building contained the following maintenance issues:</p> <ol style="list-style-type: none"> <li>1. The fire indicator panel for building 2 contained a fault.</li> <li>2. The existing sprinkler block plan was not located in the vicinity of the sprinkler control valves, contrary to the requirements of Clauses 8.3 and 8.5 of AS 2118.1-2017.</li> <li>3. The fire hydrant block plans (including fire hydrant schematics associated with the block plans) for each building appeared to contain incorrect information.</li> <li>4. The fire brigade booster connection serving building 1 lacked signage required by the Australian Standard 2419.1</li> <li>5. Signage indicating the maximum allowable inlet pressure was not located at the sprinkler booster assembly serving building 2, contrary to the requirements of Clause 4.14.1 of AS 2118.1-2017.</li> <li>6. The entry doors to the sprinkler and fire hydrant pump rooms serving both buildings were not provided with adequate signage to identify that these services were located within the rooms.</li> </ol> |
| 27 February 2025 | The City issued a compliance letter of instruction detailing fire safety deficiencies to be rectified by 29 March 2025.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 27 February 2025 | The building was referred to the City's hydrant team that will investigate the building, and if needed, may consider a Notice of Intention to issue an Order to upgrade the hydrant system.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## FIRE AND RESCUE NSW REPORT

Fire and Rescue NSW conducted an inspection of the subject premises after receiving an enquiry about the adequacy of the provision for fire safety in connection with the premises.

The report from FRNSW detailed several issues, in particular noting the following:

| Ref | Issue                                                                                                                          | City response                                                                                                                                                |
|-----|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | Compartmentation and Separation                                                                                                |                                                                                                                                                              |
| 1.A | The automatic closing fire doors separating buildings 1 and 2 on level 6 did not self-close and latch when tested as required. | The City's inspection on 10 February 2025 confirmed this issue had been rectified and doors self-close as required, addressing this issue.                   |
| 2.  | Services and Equipment                                                                                                         |                                                                                                                                                              |
| 2.A | Emergency Warning and Intercommunication System (EWIS)                                                                         |                                                                                                                                                              |
| A.  | The EWIS panel indicated an audio fault.                                                                                       | The City's inspection on 10 February 2025 confirmed this issue had already been rectified and there were no faults on the EWIS panel, addressing this issue. |

| Ref  | Issue                                                                                                                     | City response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.B  | Exit Signs                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| A.   | The pictorial on the exit sign fitting was not fitted and displayed as required.                                          | The City's inspection on 10 February 2025 confirmed this issue had already been rectified. The exist signage was not obstructed and was properly secured, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2.C. | Fire Hose Reels                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| A.   | A number of fire hose reels located in building 1 were not located in accordance with current building code requirements. | The subject fire hose reels were installed under Ordinance 70, 1973 which had less stringent height requirements than Section 11 of AS 2441-2005. The building contains portable fire extinguishers which can be used by occupants of the building to extinguish a fire as an alternative to hose reels. The current Building Code of Australia does not require hose reels in class 2, 3 and 5 buildings and in classrooms and associated corridors in primary and secondary schools. Based on the above, it is considered unreasonable to require the owners of the building to rectify the height of the current hose reels. The existing hose reels are considered to still be useable by occupants to extinguish a fire in the building, addressing this issue. |
| 2.D  | Fire Hydrant System – Building 1                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| A.   | The fire hydrant booster assembly does not comply with the requirements of AS 2419.1-2021, In this regard:                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| i    | Insufficient clearance around the fire hydrant booster inlets is provided to enable easy connection to the inlets.        | The fire hydrant booster was installed under Ordinance 70, 1973 and there were no hydrant booster clearance requirements under this code. Although it will be a little more difficult to connect to the inlets, FRNSW can still connect their hoses to the inlets, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ii   | Insufficient clearance around the isolation valve at the fire hydrant booster is provided to enable operation.            | The fire hydrant booster was installed under Ordinance 70, 1973 and there were no isolation valve clearance requirements under this code. Although it will be a little more difficult to operate the isolation valve, FRNSW can still operate the isolation valve, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| iii. | An isolation valve is not provided downstream of the fire hydrant booster inlets.                                         | The City's inspection on 10 February 2025 identified an isolation valve was provided downstream of the fire hydrant booster inlets, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Ref | Issue                                                                                                                                                                                  | City response                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| iv. | The non-return valve at the booster in building 1 appears to be installed such that it is orientated in the incorrect direction.                                                       | The City's inspection on 10 February 2025 found that the non-return valve was orientated in the correct direction, addressing this issue.                                                                                                                                                                                                                                                        |
| V.  | Feed fire hydrants were not provided at the booster assembly.                                                                                                                          | The fire hydrant booster was installed under Ordinance 70 and there were no requirements to install feed fire hydrants under this code providing that a street hydrant was located within 20m of a fire brigade pump appliance that could be parked within 15m of the inlet boosters. A street hydrant was in such a location, which is considered to address this issue.                        |
| B.  | Signage indicating the boost pressure for the hydrant system serving building 1 was not provided at the fire hydrant booster assembly. Concerns are raised in this regard, as:         |                                                                                                                                                                                                                                                                                                                                                                                                  |
| i.  | FRNSW appliances are unable to pump to this pressure.                                                                                                                                  | During the City's inspection on 10 February 2025 the owner's Fire Safety Consultant advised the City that the pressure indicated on the fire hydrant block plan is incorrect and is required to be adjusted.<br><br>The compliance letter of instruction requires owners to address this issue by 29 March 2025, addressing this issue.                                                          |
| ii  | The stated boost pressure would be inadequate to provide the required pressures to the most hydraulically disadvantaged fire hydrant landing valves in accordance with AS 2419.1-2021. | The owners fire safety consultants advised that the pressure indicated on the fire hydrant block plan is incorrect and is required to be adjusted. This issue has been addressed under the compliance letter of instruction requiring issue to be rectified by 29 March 2025.                                                                                                                    |
|     | Accordingly, it is considered that the fire hydrant system as designed and installed fails to meet the operational needs of FRNSW.                                                     | Although the fire hydrant system complies with the standard of performance with which it was designed and constructed, FRNSW's operational requirements have changed and as such the system may need to be upgraded.<br>The building was referred on 27 February 2025 to the City's hydrant team that will investigate the building, and if needed, may Order the upgrade of the hydrant system. |
| C.  | Signage indicating the test pressure was not located at the fire hydrant booster as required by the current standard.                                                                  | The fire hydrant booster was installed under Ordinance 70 and there were no requirements to install test pressure signage under this Code. Although not required, the owners have advised the City that                                                                                                                                                                                          |

| Ref  | Issue                                                                                                                                                                                                                                                        | City response                                                                                                                                                                                                                                                                                                                                             |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                                                                                                                                                                                                              | they are happy to install such signage. The lack of signage and the boost pressure concerns have been addressed under the written letter of instruction which requires signage to be installed by 29 March 2025.                                                                                                                                          |
| D.   | The block plan indicates that the pumps located on level 31 have less pressure than that required.                                                                                                                                                           | <p>The owners fire safety consultants advised that the pump pressure appears to be incorrect and will investigate this matter further.</p> <p>The compliance letter of instruction requires the owners to correct the block plan by 29 March 2025, addressing this issue.</p>                                                                             |
| E.   | It is unclear what purpose the fire hydrant pump located on level 16 of building 1 serves.                                                                                                                                                                   | <p>During the City's inspection on 10 February 2025, the owner's fire safety consultants advised that they would investigate this matter further and will inform Council on the purpose of the pump when their investigation is complete.</p> <p>The compliance letter of instruction requires hydrant details to be corrected by 29 March 2025.</p>      |
| 2.D. | Fire Hydrant System - Building 2                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                           |
| F.   | The boost pressures indicated for the low-rise pressure zone in building 2 would result in an inadequate amount of residual pressure being available at the most hydraulically disadvantaged attack hydrant, contrary to current building code requirements. | The fire hydrant system in building 2 was installed under AS 2419.1-2005 and the minimum boost pressure under table 2.2 and 2.3 is 700KPA. The boost pressure noted on the booster is 800KPA which is greater than the minimum. The minimum boost pressure under Clause 2.2.6 of AS 2419.1-2021 is also 700KPA. This is considered to address this issue. |
| G.   | Concerns are raised that either the Building 2 schematic is incorrect, or the signage and associated pressure gauge should not be installed.                                                                                                                 | <p>The City's inspection on 10 February 2025 noted the hydrant schematic needed to be amended.</p> <p>The compliance letter of instruction requires the schematic to be amended by 29 March 2025, addressing this issue.</p>                                                                                                                              |
| 2.E. | Smoke Detection System                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                           |
| A.   | The Fire Brigade Panel (FBP) indicated 3 faults.                                                                                                                                                                                                             | The City's inspection on 10 February 2025 found the faults had already been rectified, addressing this issue.                                                                                                                                                                                                                                             |
| 2.F. | Smoke Control System                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                           |
| A.   | The Fire Fan Control Panel (FFCP) indicated 2 faults relating to "AHU-CB02-01-01".                                                                                                                                                                           | The City's inspection on 10 February 2025 found the faults had already been rectified, addressing this issue.                                                                                                                                                                                                                                             |

| Ref  | Issue                                                                                                                                                                                                                                                                                                                   | City response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.G. | Sprinkler System – Building 1                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| A.   | Isolation valves for the sprinkler system are not monitored, contrary to the requirements of Clause 3.5.3 of AS 2118.1-2017.                                                                                                                                                                                            | The sprinkler system in the building was installed under Australian Standard CA 16 – 1962 and isolation valves were not required to be monitored under this standard. The isolation valves are in secure rooms and are unlikely to be tampered with, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| B.   | The sprinkler pump room is not provided with direct access to a road, open space or fire-isolated passageway, contrary to the requirements of Clause D4 of AS 2941-2013.                                                                                                                                                | <p>The sprinkler system was installed in the building prior to the introduction of Ordinance 70 and the BCA. It most likely would have been installed under the Height of Buildings Act and there is no requirement under this Act to install a sprinkler pump room in a location with direct access to a road, open space or fire isolated passageway. Furthermore, it would be very costly, difficult and unreasonable to move the sprinkler pump location.</p> <p>Taking the above into consideration and considering the building is already provided with suitable passive and active fire safety measures, the City has determined that no work is required to address this issue.</p> |
| C.   | Block plans and emergency instructions were not provided in the vicinity of the sprinkler control valves, contrary to the requirements of Clauses 8.3 and 8.5 of AS 2118.1-2017.                                                                                                                                        | <p>The City's inspection on 10 February 2025 identified that a block plan and emergency instructions were present in the sprinkler control valve room, though were not located beside the control valves. The building services/operations manager advised that he would move the plan and emergency instructions to a suitable location near the control valves.</p> <p>The compliance letter of instruction requires the plan and emergency instructions by 29 March 2025, addressing this issue.</p>                                                                                                                                                                                      |
| 2.G. | Sprinkler System – Building 2                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| D.   | The pilot operated pressure reducing valve located in the supply pipework upstream of the stop valves for installations 1 and 2 incorporated quarter turn isolating valves in the sensing pipework. FRNSW do not recommend the use of pilot operated pressure reducing valves that are able to be isolated in this way. | The City's inspection on 10 February 2025 identified the quarter turn isolating valves had been removed, addressing this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Ref  | Issue                                                                                                      | City response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| E.   | Signage indicating the maximum allowable inlet pressure was not located at the sprinkler booster assembly. | <p>The existing sprinkler system in building 2 was designed and installed to AS 2118.1-1999. Clause 4.4.3 of this standard requires the maximum allowable pressure to be displayed at the booster. During the City's inspection on 10 February 2025, it was observed that signs indicating the test and boost pressure were displayed but not the maximum allowable inlet pressure.</p> <p>The compliance letter of instruction requires signage to be corrected by 29 March 2025, addressing this issue.</p> |
| 3.   | Maintenance                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3.A. | A maintenance logbook was not available on site for the electric hydrant pumpset for building 2.           | The City's inspection on 10 February 2025 identified that a maintenance logbook was provided for the electric hydrant pumpset, addressing this issue.                                                                                                                                                                                                                                                                                                                                                         |

FRNSW believes that there are inadequate provisions for fire safety within the building.

FRNSW recommends that Council:

1. Review items 1 to 3 of this report and conduct an inspection.
2. Address any other deficiencies identified on "the premises".
3. Ensure that the existing fire hydrant system for building 1 is upgraded to meet the requirements of AS 2419.1-2021 for an equivalent new building or a hybrid system that suits the operational requirements of FRNSW.
4. Ensure that an audit of the installed fire hydrant system is undertaken with a view to ensuring all installed block plans and signage accurately depict the installed system.
5. Advise them in writing of its determination in relation to this matter in accordance with the provisions of clause 17(4) of Schedule 5 of the Environmental Planning and Assessment Act 1979.

## COUNCIL INVESTIGATION OFFICER RECOMMENDATIONS

| Issue Order (NOI) | Issue emergency Order | Issue a compliance letter of instruction | Cited Matters rectified | Continue to undertake compliance action in response to issued Council correspondence | Continue with compliance actions under the current Council Order | Other (to specify) |
|-------------------|-----------------------|------------------------------------------|-------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------|
|                   |                       |                                          |                         |                                                                                      |                                                                  |                    |

As a result of the above site inspection undertaken by Council's investigation officers it is recommended that the owners of the building continue to comply with the compliance letter of instruction as issued by Council officers to rectify the identified fire safety deficiencies noted by FRNSW.

It is recommended that the City not exercise its powers to give a fire safety order at this time.

The City's dedicated hydrant team has commenced separate investigations to determine if the existing fire hydrant system in Building 1 meets the operational requirements of FRNSW. Should the system be found defective, a Fire Safety Order may be issued to address this matter.

It is recommended that the Commissioner of FRNSW be advised of the City's actions and determination.

OFFICIAL



File Ref. No: FRN20/1689 - BFS24/6847 - 8000038797  
TRIM Ref. No: D24/148669  
Contact: Ryan Maestri

24 December 2024

General Manager  
City of Sydney  
GPO Box 1591  
SYDNEY NSW 2001

Email: [council@cityofsydney.nsw.gov.au](mailto:council@cityofsydney.nsw.gov.au)

Attention: Manager Compliance/Fire Safety

Dear Sir / Madam

**Re: INSPECTION REPORT  
UNIVERSITY OF TECHNOLOGY SYDNEY – BUILDINGS 1 AND 2  
15 BROADWAY, ULTIMO (“the premises”)**

Fire and Rescue NSW (FRNSW) received correspondence on 22 October 2024 concerning the adequacy of the provision for fire safety in connection with ‘the premises’.

The correspondence stated that:

- *EWIS system not operating at time of activation of the fire panel and also major faults on the system and system operations not correct.*
- *Large amount of defective fire doors, specially the doors on level 6 between building 1 and 2 when activated the do not close and catching on the tiles and unable to close on alarm. Meaning no fire separation between the 2 buildings if a fire broke out.*
- *Large amount of emergency lighting is out.*

Pursuant to Section 9.32(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), Authorised Fire Officers from the Fire Safety Compliance Unit of FRNSW inspected ‘the premises’ on 13 November 2024.

Fire and Rescue NSW

ABN 12 593 473 110

[www.fire.nsw.gov.au](http://www.fire.nsw.gov.au)

Community Safety Directorate  
Fire Safety Compliance Unit

1 Amarina Ave  
Greenacre NSW 2190

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**OFFICIAL**

On behalf of the Commissioner of FRNSW, the comments in this report are provided under Section 9.32(4) and Schedule 5, Part 8, Section 17(1) of the EP&A Act.

The items listed in the comments of this report are based on the following limitations:

- A general overview of the building was obtained without using the development consent conditions or approved floor plans as a reference.
- Details of the Provisions for Fire Safety and Fire Fighting Equipment are limited to a visual inspection of the parts in the building accessed and the fire safety measures observed at the time.

**COMMENTS**

The following items were identified during the inspection:

1. Compartmentation and Separation
  - 1A. The automatic closing fire doors separating buildings 1 and 2 on level 6 did not self-close and latch when tested, contrary to the requirements of Clause C4D6 of the National Construction Code 2022 Volume 1 (NCC) and AS 1905.1-2015.
2. Services and Equipment
  - 2A. Emergency Warning and Intercommunication System (EWIS)
    - A. The EWIS panel indicated an audio fault relating to the Occupant Warning System on levels 1 and 29 of building 1.
  - 2B. Exit Signs
    - A. The pictorial on the exit sign fitting located on level 6 in the vicinity of the medical centre was obscured and not properly secured, contrary to the intent of AS 2293.1-2018.
  - 2C. Fire Hose Reels
    - A. A number of fire hose reels located in building 1 were located less than 1,400 mm from the floor level to the centre of the barrel, contrary to the requirements of Section 11 of AS 2441-2005.
  - 2D. Fire Hydrant System

Building 1

The fire hydrant system serving building 1 appears to have originally been installed in accordance with the requirements of Ordinance 70. Some features of the system indicate, however, that the system may have been partially upgraded at some point. Given this, it is difficult to determine the exact performance characteristics of the system.

**OFFICIAL**

Notwithstanding this, the following deviations from AS2419.1-2021 have been identified, which are of concern to FRNSW:

- A. The fire hydrant booster assembly does not comply with the requirements of AS 2419.1-2021. In this regard:
  - i. Insufficient clearance around the fire hydrant booster inlets is provided to enable easy connection to the inlets.
  - ii. Insufficient clearance around the isolation valve at the fire hydrant booster is provided to enable operation.
  - iii. An isolation valve is not provided downstream of the fire hydrant booster inlets.
  - iv. The non-return valve appears to be installed such that it is orientated in the incorrect direction.
  - v. Feed fire hydrants were not provided at the booster assembly.
- B. Signage indicating the boost pressure for the hydrant system was not provided at the fire hydrant booster assembly, contrary to the requirements of Clause 11.3.4.2 of AS 2419.1-2021. A boost pressure of 1,500 kPa was noted on the block plan provided at the booster. Concerns are raised in this regard, as:
  - i. FRNSW appliances are unable to pump to this pressure.
  - ii. The stated boost pressure would be inadequate to provide the required pressures to the most hydraulically disadvantaged fire hydrant landing valves in accordance with AS 2419.1-2021.

Accordingly, it is considered that the fire hydrant system as designed and installed fails to meet the operational needs of FRNSW.

- C. Signage indicating the test pressure was not located at the fire hydrant booster, contrary to the requirements of Clause 11.3.4.1 of AS 2419.1-2021. Further, it is noted on the block plan that the hydrant system has not been tested to the stated boost pressure of 1,500 kPa. Concerns are raised that the system may not be able to withstand the firefighting pressures required under AS 2419.1-2021.
- D. The block plan indicates that the pumps located on level 31 have a duty of 150 kPa. This is inadequate to provide the required pressures in accordance with AS 2419.1-2021, to the fire hydrants in the upper levels.

- E. It is unclear what purpose the fire hydrant pump located on level 16 serves. A review of the fire hydrant schematic appears to indicate that the pump is not connected in series with the fire hydrant boost inlets and may only serve to circulate water around the ring main supplying hydrants on levels 8 and above.

In light of this, FRNSW brings to your attention a position statement published by FRNSW on 8 January 2019. The statement is shown below:

***Fire hydrant system in existing premises***

*When the consent authority (e.g. Council) is assessing the adequacy of an existing fire hydrant system installed in accordance with the provisions of Ordinance 70 and Ministerial Specification 10 (or earlier), FRNSW recommend that the system be upgraded to meet the requirements of the current Australian Standard AS 2419.1 to facilitate the operational needs of FRNSW.*

*It may be appropriate for a partial upgrade of the existing fire hydrant system be undertaken. A partial upgrade may be proposed to address deficiencies in the design and/or performance of the existing fire hydrant system, when assessed against the requirements of Australian Standard AS 2419.1, so that the upgraded fire hydrant system will meet the operational needs of FRNSW.*

*Where a hybrid fire hydrant system is proposed, which incorporates the design and performance requirements from two different standards, the proponent should consult with FRNSW on the requirements for the fire hydrant system.*

**Building 2**

- F. The boost pressures indicated for the low-rise pressure zone would result in an inadequate amount of residual pressure being available at the most hydraulically disadvantaged attack hydrant, contrary to the requirements of Clause 2.2.6 (f) of AS 2419.1-2021.
  - G. The fire hydrant schematic indicates that the low-rise booster is connected in parallel with the primary and secondary pumps, however, signage located at the fire hydrant booster assembly indicates that these boost inlets are connected in series. Concerns are raised that either the schematic is incorrect or the signage and associated pressure gauge should not be installed.
- 2E. Smoke Detection System
- A. The Fire Brigade Panel (FBP) indicated a total of 3 faults relating to the smoke detection system for building 1.
- 2F. Smoke Control System

- A. The Fire Fan Control Panel (FFCP) indicated 2 faults relating to "AHU-CB02-01-01".

2G. Sprinkler System

Building 1

- A. Isolation valves for the sprinkler system are not monitored, contrary to the requirements of Clause 3.5.3 of AS 2118.1-2017.
- B. The sprinkler pump room is not provided with direct access to a road, open space or fire-isolated passageway, contrary to the requirements of Clause D4 of AS 2941-2013.
- C. Block plans and emergency instructions were not provided in the vicinity of the sprinkler control valves, contrary to the requirements of Clauses 8.3 and 8.5 of AS 2118.1-2017.

Building 2

- D. The pilot operated pressure reducing valve located in the supply pipework upstream of the stop valves for installations 1 and 2 incorporated quarter turn isolating valves in the sensing pipework. Closure of one or both of these valves will result in no flow of water to the installations. These valves were not monitored, contrary to the requirements of Clause 3.5.4 of AS 2118.1-2017. They are also considered to increase the risk of inadvertent isolation of water to the system.

FRNSW do not recommend the use of pilot operated pressure reducing valves that are able to be isolated in this way.

- E. Signage indicating the maximum allowable inlet pressure was not located at the sprinkler booster assembly, contrary to the requirements of Clause 4.14.1 of AS 2118.1-2017.

3. Maintenance

- 3A. A maintenance logbook was not available on site for the electric hydrant pumpset for building 2, contrary to the requirements of Clause 1.16.6 of AS 1851-2012.

FRNSW believes that there are inadequate provisions for fire safety within the building.

**WORKS UNDERTAKEN**

In consultation with the building management, works were undertaken in relation to items 2A and 2E above. In this regard, Council is not presently required to act on items 2A and 2E of this report.

## RECOMMENDATIONS

FRNSW recommends that Council:

- a. Review items 1 to 3 of this report and conduct an inspection.
- b. Address any other deficiencies identified on "the premises".
- c. Ensure that the existing fire hydrant system for building 1 is upgraded to meet the requirements of AS 2419.1-2021 for an equivalent new building or a hybrid system that suits the operational requirements of FRNSW.
- d. Ensure that an audit of the installed fire hydrant system is undertaken with a view to ensuring all installed block plans and signage accurately depict the installed system.

Please be advised that Schedule 5, Part 8, Section 17(2) requires any report or recommendation from the Commissioner of FRNSW to be tabled at a Council meeting. This matter is referred to Council as the appropriate regulatory authority. FRNSW awaits the Council's advice regarding its determination under Schedule 5, Part 8, Section 17 (4) of the EP&A Act.

Please do not hesitate to contact Ryan Maestri of FRNSW's Fire Safety Compliance Unit at or call (02) 9742 7434 if there are any questions or concerns about the above matters. Please refer to file reference FRN20/1689 - BFS24/6847 - 8000038797 regarding any correspondence concerning this matter.

Yours faithfully



Ryan Maestri  
Senior Building Surveyor  
Fire Safety Compliance Unit