Attn. the Proper Officer
Icon Co (NSW) Pty Ltd
ACN 604 790 409
Pitcher Partners Advisors Proprietary
Limited Level 13, 664 Collins Street
DOCKLANDS VIC 3008

Service: By express post and by email

16 November 2023

Building Work Rectification Order

Section 33 of the Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020

Icon Co (NSW) Pty Ltd (ACN 604 790 409) is being given this Building Work Rectification Order ("Order") in relation to 'Avantra', 659-669 Gardeners Road, Mascot NSW 2020 SP97291 ("the Building").

Icon Co (NSW) Pty Ltd is required to cause building work to be carried out to remediate the potential serious defects as set out in paragraph 8 of this Order.

Failure to comply with this Order is a criminal offence.

Background

1. The Department of Customer Service (**the Department**) administers the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020* (**the Act**).

2. Under section 33 of the Act, if the Secretary of the Department or their authorised delegate has a reasonable belief that building work was carried out in a manner that could result in a serious defect in the Building or that the Building has a serious defect, they may order the developer to rectify building work to remediate the serious defect or potential defect.

3. Elizabeth Stewart is an authorised delegate of the Secretary of the Department.

4. **Icon Co (NSW) Pty Ltd (ACN 604 790 409)** is the Developer of the residential apartment building known as Avantra, 659-669 Gardeners Road, Mascot NSW 2020 (SP97291) (the Building) for the purposes of section 4(a) of the Act.

5. Under section 3 of the Act a serious Defect in relation to a building, means –

   a. a defect in a building element that is attributable to a failure to comply with the performance requirements of the *Building Code of Australia*, the relevant Australian Standards or the relevant approved plans, or

b. a defect in a building product or building element that

   i. is attributable to defective design, defective or faulty workmanship or defective materials, and

   ii. causes or is likely to cause—

      (A) the inability to inhabit or use the building (or part of the building) for its intended purpose, or
      (B) the destruction of the building or any part of the building, or
      (C) a threat of collapse of the building or any part of the building, or

c. a defect of a kind that is prescribed by the regulations as a serious defect, or
d. the use of a building product (within the meaning of the *Building Products (Safety) Act2017*) in contravention of that Act.

6. Under s 6(1) of the *Design and Building Practitioners Act* 2020 a building element means any of the following:

   a. the fire safety systems for a building within the meaning of the *Building Code of Australia*,
   b. waterproofing,
   c. an internal or external load-bearing component of a building that is essential to the stability of the building, or a part of it (including but not limited to in-ground and other foundations and footings, floors, walls, roofs, columns and beams),
   d. a component of a building that is part of the building enclosure,
   e. those aspects of the mechanical, plumbing and electrical services for a building that are required to achieve compliance with the *Building Code of Australia*,
   f. other things prescribed by the regulations for the purposes of this section.

Decision to issue a building work rectification order

7. I, Elizabeth Stewart, am the decision maker for this Building Work Rectification Order **(the Order**). I have decided to issue the Order to Icon Co (NSW) Pty Ltd because I have formed a reasonable belief under s 33(1) of the Act the Building has the serious defects set out in this Order.

Description of serious defect

8. **Defect 1 – Inadequate detail of the waterproofing and drainage system to basement walls.**

   On 31 March 2022, authorised officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Within the below ground basement carpark levels of the Building it was observed that there was uncontrolled water penetration laterally through the perimeter walls and downward through cracks and junctions of the structural concrete slabs to the lower levels of the basement carpark.

   The failure to control the flow of water is a serious defect because it is a slip hazard, causes corrosion in structural members and presents a nuisance to the occupants.

   The failure to prevent the deterioration of the structural reinforced concrete slab is a serious defect because it is a defect in a building element that is attributable to a failure to comply with the **BCA Volume One, Section B Structure, Part B1 Structural Provisions** and the following Performance Requirements:

   BP1.1 Structural reliability which states:

"Structural reliability

(a) A building or structure, during construction and use, with appropriate degrees of reliability, must-

(i) Perform adequately under all reasonably expected design actions; and

(ii) Withstand extreme or frequently repeated design actions; and

(iii) Be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage; …"

(b) The actions to be considered to satisfy (a) include but are not limited to:

(i) …

(vi) liquid pressure action; and

*(vii) **ground water action** (emphasis added); and*

(viii) rain water action (including posing action),

and

BP1.2 Structural resistance which states:

"The structural resistance of materials and forms of construction must be determined using five percentile characteristic material properties with appropriate allowance for-

(a) known construction activities; and

(b) type of material; and

*(c) **characteristics of the site**; and*

(d) the degree of accuracy inherent in the methods used to assess the structural behaviour; and

(e) action effects arising from the differential settlement of foundations, and from restrained dimensional changes due to temperature, moisture, shrinkage, creep and similar effects."

The failure to address the water ingress and drainage is a serious defect because it is a defect in a building element that is attributable to a failure to comply with the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement**:

FP1.1 Managing rainwater impact on adjoining properties, which states:

"Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by abuilding or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property. "and

FP1.3 Rainwater drainage system, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a)20 years must—

(i)convey surface water to an appropriate outfall; and

(ii)avoid surface water damaging the building; and

(b)100 years must avoid the entry of surface water into a building."

9. **Defect 2 – The deterioration of the roof structural reinforced concrete slab.**

On 31 March 2022, authorised officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. When inspecting the rooftop areas the following observations were made:

1. There is water ponding throughout the waterproofed flat concrete roof areas.

2. The membrane has been applied to services and fixings penetrating the roof, namely bolted posts.

3. There are redundant unfilled holes on the face of the posts, leading to water ingress to the inside of the slab.

The failure to prevent the waterproofing issues on the rooftop areas is a serious defect because it is a deficiency in a building element that is attributable to a failure to comply with **Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, Section 2 Design and Installation, 2.8 Termination of membranes:**

2.8.1 Upward termination, 2.8.1.1 Heights which states:

"Where the membrane termination is to prevent water entry, the finished height of the membrane above the finished surface level shall be sufficient to prevent water, including wind driven, flowing over the top of the membrane."

The ponding water on the liquid rooftop membrane demonstrates a failure to comply with **Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, Section 2 Design and Installation, 2.5 Substrate, 2.5.2 Falls**, which states:

"Falls in finishes shall ensure water drains to the drainage outlet. Water shall not be retained on the finished surface with the exception of residual water remaining due to surface tension.

The fall shall be in the structural substrate or formed by a screed over the structural substrate.

The detail provided to the overflow demonstrates a failure to comply with **Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, Section 2 Design and Installation, 2.11 Overflows**, which states in part:

"The membrane shall be turned into the overflow, to prevent moisture from tracking behind the membrane".

The detail provided to the fixings penetrating the membrane demonstrates a failure to comply with **Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, 2 Design and Installation, 2.8 Termination of membranes, 2.8.4 Penetrations**, which states:

"Any fixings that penetrate the membrane shall be sealed. The sealant shall be compatible with the surface material.

Where backing rods are used to support the sealant, they shall be a minimum of 12mm."

And;

Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, 2 Design and Installation, 2.8 Termination of membranes 2.8.1.2 Anchoring*, which states:*

"Sheet membranes shall be secured along the top edge or bottom edge."

The ponding water and roof slab demonstrates a failure to comply with **Australian Standard 4654.2-2012 Waterproofing Membranes for External Above Ground Use, Section 2 Design and Installation, 2.12 Changes in direction or upstands**, which states in part:

"…The membrane system shall be designed to accommodate differential horizontal movement (shear) between the vertical and horizontal substrate…"

Australian Standard 4654.2 appears as a standard referenced in the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to-Satisfy provision F1.4 External above ground membranes**, which states:

"Waterproofing membranes for external above ground use must comply with AS 4654 Parts 1 and 2."

Deemed-to-Satisfy provision F1.4 is a pathway that can satisfy the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

10. **Defect 3 – Inadequate installation of window system and associated waterproofing/weatherproofing.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Inspections of the windows/louvres to common hallways of the North building including the associated waterproofing of these components showed water ingress. This was seen through the wall gaps surrounding the perimeter window detail between the grout lines of the wall and window adjoining the wall.

The inadequate installation demonstrates a serious defect as it is a failure to comply with the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.4 Weatherproofing**, which states:

" A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

Performance Requirements FP1.1 Managing rainwater impact on adjoining properties, which states:

"Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by a building or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property."

Performance Requirements FP1.3 Rainwater drainage systems, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

And;

Performance Requirements FP1.7 Wet areas, which states:

"To protect the structure of the building and to maintain the amenity of the occupants, water must be prevented from penetrating –

(a) Behind fittings and linings; and

(b) Into concealed spaces, of sanitary compartments, bathrooms, laundries and the like."

11. **Defect 4 – Undue dampness and deterioration of the building (Ceiling).**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. In the Rooftop garbage disposal room, situated immediately below the rooftop terrace, had heavy black staining and blistering at the southern end of the western foyer of Level 3.

The failure to prevent the waterproofing issues on the rooftop areas is a serious defect because it is a deficiency in a building element that is attributable to a failure to comply with **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements."

12. **Defect 5 – Undue dampness and deterioration of the building (operational roof windows).**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. When observing the operational roof windows of the North building rooftop the following observations were made:

a) Waterproofing membrane and sealant has not been applied uniformly to the 'pressure seal' area of skylight flashing, these voids allow water entry into building.

b) Rooftop operable windows have not been adequately sealed with up to 15mm gaps, allowing wind riven rain to enter areas below.

The inadequate roof cover products systems demonstrate a serious defect as it is a failure to comply with the **BCA Volume One, Section F Health and Amenity, Part F1.5 Roof Covering,** which states:

"A roof must be covered with-

(a) Concrete roofing tiles … or,

(b) Terracotta roofing tiles … or,

(c) Cellulose cement corrugated sheeting … or,

(d) Metal sheet roofing … or,

(e) Plastic sheet roofing … or,

(f) Terracotta, fibre cement and timber slates and shingles … ."

And;

Performance Requirement FP1.2 Preventing rainwater from entering buildings, which states:

"Surface water, resulting from a storm having an average recurrence interval of 100 years must not enter the building."

And;

Deemed-to-Satisfy provision F1.4 External above ground membranes, which states:

"Waterproofing membranes for external above ground use must comply with AS 4654.1 and AS 4654.2."

And;

Deemed-to-Satisfy provision F1.4 appears as a standard referenced in **the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause -

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

13. **Defect 6– Balustrade support/Penetrations/Waterproofing.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Whilst observing the balustrades on external areas it was found that:

1. Voids were found in support and fixing holes points of the balustrades.
2. Inadequate upward termination of the external above ground waterproofing membrane at fixings for balustrade supports, harness hooks, aircon installations and the like.
3. The rooftop membrane has been penetrated with fixings securing posts and rope access points to the concrete roof.
4. PVS pipe is not protected with upward waterproofing membrane.
5. Flexible ducts from rooftop to fire stair are not sealed.

The holes are neither reported nor sealed and result in ingress of water and leaks that are often blamed on membrane failure.

The inadequate waterproofing system termination height and the evidence of water entry and damage internally demonstrates a defect as it is a failure to comply with the **Australian Standard 4654.2-2012, Waterproofing Membranes for External Above Ground Use, Section 2 Design and Installation, 2.8 Termination of Membranes, 2.8.4. Penetrations**, which states:

"Any fixing that penetrate the membrane shall be sealed. The sealant shall be compatible with the surface material.

Where backing rods are used to support the sealant, they shall be a minimum of 12mm."

Australian Standard 4654.2 appears as a standard referenced in the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and weatherproofing, Performance Requirement FP1.4 Weatherproofing,** which states:

"*A roof and external wall (including openings around windows and doors) must prevent the penetration of to prevent penetration of water that could cause-*

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants: and

(b) Undue dampness or deterioration of building elements."

14. **Defect 7–Waterproofing and drainage of planter box gardens.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Whilst observing the balustrades on external areas it was found that:

1. The construction of the planter boxes waterproofing and overflow (drainage to stormwater system) with insufficient membrane height (minimum of 100 mm above the soil level) and drainage.

2. Water ingress behind the waterproofing membrane and water accumulates on the base for incorrect drainage installation, causing structural damage but also “concrete cancer”, and mould.

The inadequate planter construction, membrane termination and the stormwater drainage systems demonstrate a defect as it is a failure to comply with **the Australian Standard 4654.2-2012: Waterproofing membranes for external above ground use: Section 2 – Design and Installation, 2.13 Planter Boxes**, which states:

“The membrane shall be sealed to the drainage outlet. It shall extend vertically to a height of 100 mm above the soil or fill level. Falls in the base of the planter shall be in accordance with Clause 2.5.2 with a minimum of 1 to 100 (10mm per 1 m);

A suitable overflow should be provided;

Protection boards should be installed to minimize root damage to the membrane;

Externally exposed walls of the planter boxes should be waterproofed to prevent failure of the internal membrane.”

And;

2.8 Termination of membranes, 2.8.2. Vertical downward termination, 2.8.2.2 Parapet, which states:

"The top edges of the membrane shall be protected by the downturn of the cavity flashing.

Australian Standard 4654.2 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and weatherproofing, Performance Requirement FP1.4 Weatherproofing, which states:

“A roof and external wall (including openings around windows and doors) must prevent the penetration of to prevent penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants: and

(b) Undue dampness or deterioration of building elements.”

15. **Defect 8–Waterproofing and drainage roof top below pool deck.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. The area located in the North Building below the pool deck was examined and Authorised Officers observed the following:

a) The rooftop membrane has been penetrated with fixings securing posts and rope access points to the concrete roof.

b) PVC pipe is not protected with upward waterproofing membrane.

c) Flexible ducts from rooftop to fire stair are not sealed.

This issue is considered a defect in the waterproofing that is a failure to comply with the following performance requirements of **the Building Code of Australia NCC2016 BCA Volume 1 Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing**, which states:

“A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements.”

Australian Standard 4654.2-2012 Waterproofing membranes for external above-ground use – Design and installation, Section 2 - Design and installation, 2.8 Termination of membranes, 2.8.4 penetrations, which states:

"Any fixings that penetrate the membrane shall be sealed. The sealant shall be compatible with the surface material.

Where backing rods are used to support the sealant, they shall be a minimum 12mm."

16. **Defect 9–Fire services of fire stairs of the north building.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the fire stairs of the north building and found the following:

(a) Water penetration in the form of staining emanating to the floor to wall junction of the wall adjacent to the fire safety door and fire staircase.

(b) Slip hazards and nuisance to the occupants whilst accessing the fire staircase due to water pooling.

(c) Water penetrating through walls.

(d) Water penetrates through wall from car visitor into fire stair.

(e) Water ingress into fire stair from rooftop as a result of the slope of the floor being directed towards the inside of the building, no water stop.

This is considered a defect in the fire system that results in a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.1 Managing rainwater impact on adjoining properties,** which states:

"Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by a building or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property."

And;

FP1.3 Rainwater drainage system, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

17. **Defect 10–Fire services/Fire penetrations throughout whole of development.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. The following issues with the fire penetrations to whole of buildings were found:

a. the service penetrations in the fire-resisting wall/floor elements have not been fire stopped with a protection method at the penetration that is identical with a prototype assembly of the protection method throughout the building.

This is considered a defect in the fire system which will result in a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section C Fire Resistance, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations**, which states:

"Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning, or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that installation must comply with any one of the following:

(a) Tested systems

(i) The service, building element and any protection method at the penetration are identical with a prototype assembly of the service, building element and protection method which has been tested in accordance with AS 4072.1 and AS 1530.4 and has achieved the required FRL or resistance to the incipient spread of fire.

(ii) …

(b) …

(c) Compliance with Specification C3.15…"

Deemed-to-Satisfy provisions C3.15 and specification C3.15 are pathways that can satisfy the **BCA Volume One, Section C Fire Resistance, Part C3 Protection of openings, Performance Requirement CP8 Fire protection of openings and penetrations,** which states:

"Any building element provided to resist the spread of fire must be protected, to the degree necessary, so that an adequate level of performance is maintained—

(a) where openings, construction joints and the like occur; and

(b) where penetrations occur for building services."

18. **Defect 11– Fire services/ Combined Hydrant & Sprinkler Pump Room.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Whilst inspecting Basement 1/ Combined Hydrant & Sprinkler Pump Room the following was witnessed:

(a) Minimum 1m clearance has not been provided in front of the fire pump panel.

(b) A horizontal duct has been installed on the floor in front of the control panel, preventing the passage.

(c) Pipework is within the clearance zone, as well as the step-up in the concrete is restricting the clearance.

This is considered a defect in the fire system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section D Access and Egress, Part D1 Provision for Escape, D1.6 Dimensions of exits and paths of travel to exits**, which states:

"In a required exit or path of travel to an exit—

(a) …

(b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than—

(i) 1m;"

And;

Australian Standard 2941:2013 Fixed fire protection installations - Pumpset systems, Section 11 Sitting and installation, 11.3 Location, which states:

"For ongoing inspection and testing, a clearance of not less than 1.0m shall be provided around the perimeter of a complete pump assembly; for multiple pumpset installations, a clearance of not less than 600mm between each of the installed pumps shall be provided."

19. **Defect 12– Fire services/ Fire penetrations to whole of building.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. The following issues with the fire penetrations to whole of buildings were found:

(a) The penetrations in the fire-resisting wall/floor elements have not been fire stopped with a protection method at the penetration that is identical with a prototype assembly of the protection method throughout the building.

This is considered a defect in the fire system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section C Fire Resistance, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations**, which states:

'Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning, or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that installation must comply with any one of the following:

(a) Tested systems

(i) The service, building element and any protection method at the penetration are identical with a prototype assembly of the service, building element and protection method which has been tested in accordance with AS 4072.1 and AS 1530.4 and has achieved the required FRL or resistance to the incipient spread of fire.

(ii) …

(b) …

(c) Compliance with Specification C3.15…'

And;

Building Code of Australia NCC2016 BCA Volume 1, Section C Fire Resistance, Part C3 Protection of openings, Deemed-to-Satisfy provisions: Clause C3.16 Construction joints, which states:

"Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL."

Deemed-to-Satisfy provisions C3.15 and C3.16 are pathways that can satisfy the BCA Volume One, Section C Fire Resistance, Part C3 Protection of openings, Performance Requirement CP8 Fire protection of openings and penetrations, which states:

Any building element provided to resist the spread of fire must be protected, to the degree necessary, so that an adequate level of performance is maintained—

(a) where openings, construction joints and the like occur; and

(b) where penetrations occur for building services. "

20. **Defect 13– Fire services/ Fire stopping to pump room/Lift.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Whist inspecting the Ground Level/perimeter of the lift, the following was observed:

(a) Absence of adequate fire stopping to the control joint / interface of the block wall and the fire door jamb in the pump room.

This is considered a defect in the fire system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section C Fire Resistance, Part C3 Protection of openings, Deemed-to-Satisfy provisions, Clause C3.16 Construction joints**, which states:

"Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL."

Deemed-to-Satisfy provisions C3.16 are pathways that can satisfy the **BCA Volume One, Section C Fire Resistance, Part C3 Protection of openings, Performance Requirement CP8 Fire protection of openings and penetrations**, which states:

"Any building element provided to resist the spread of fire must be protected, to the degree necessary, so that an adequate level of performance is maintained—

(a) where openings, construction joints and the like occur; and

(b) where penetrations occur for building services. "

21. **Defect 14– Fire services/ Fire rated doors to all of development.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Whist inspecting the fire rated doors to all of the development, the following was observed:

(a) The fire door frame is not core backfilled/fire rated side of door hinges (at all basement fire doors), it omits contrasting sounds when tapped, indicating inconsistent and inadequate filling of the fire door jambs.

(b) Unmarked doorsets fail to confirm if they have the required fire resistance level (FRL), therefore pose a risk to their fire-resisting performance.

(c) The doorset labels failed to readily identify the periods relating to integrity and insulation of the installation.

The defect in the fire system is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section C Fire resistance, Part C3 Protection of openings, Specification C3.4 Fire doors, smoke doors, fire windows and shutters, Deemed-to-Satisfy Provision 2. Fire doors**, which states:

"A required fire door must—

(a) comply with AS 1905.1; and

(b) …"

And;

Deemed-to-Satisfy provision Specification C3.4 is a pathway that can satisfy the **BCA Volume One Section C Fire resistance, Performance requirement CP8 Fire protection of openings and penetrations,** which states:

"Any building element provided to resist the spread of fire must be protected, to the degree necessary, so that an adequate level of performance is maintained—

(a) where openings, construction joints and the like occur; and

(b) where penetrations occur for building services."

And;

Australian Standard 1905.1:2005 Components for the protection of openings in fire-resistant walls, Fire-resistant door sets, Section 6 Marking and Other Documentation, 6.1 Marking of fire-resistant doorsets, **6.1.2 Completed installation**, which states:

"The completed installation shall be as follows:

(a) When the installation is complete, the manufacturer or the certifier shall inspect each installed lire-resistant doorset and shall affix the prescribed metal lag to the edge of the door leaf and to the doorframe, only if ii can be confirmed that-t…"

And;

Australian Standard 1905.1:2005 Components for the protection of openings in fire-resistant walls, Fire-resistant door sets, Section 6 Marking and Other Documentation, 6.1 Marking of fire-resistant doorsets, **6.1.3 Metal Tags**, which states:

"The following provisions shall apply to metal tags:

(c) Location - The location of the tags shall be as follows:

(i) Horizontally sliding doorsets - For horizontally sliding doorsets, the tags shall be fixed to the trailing edge of the door leaf' at approximately 1.5 m above floor level and to the doorframe, if any, at approximately the same height.

(ii) Side-hung doorsets - For side-hung doorsets, the tags shall be fixed to the edge or the hinge stile of the door leaf and to the doorframe at approximately 1.5 m above floor level…"

And;

Australian Standard 1905.1:2005 Components for the protection of openings in fire-resistant walls, Fire-resistant door sets, Section 6 Marking and Other Documentation, 6.1 Marking of fire-resistant doorsets, **6.1.4 Information requirements, 6.1.4.1 Door frame,** which states:

"The following information shall be shown on the tag fixed to the doorframe:

(a) Name of the certifier.

(b) Name of the manufacturer.

(c) Fire resistance level of the doorset, in minutes."

22. **Defect 15– Fire services/ Fire rated doors main switchboard room ground floor.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the exit door from the Main switchboard on the Ground Level and observed:

(a) Fire exit passageway included a raised floor level at the door threshold in the path of travel.

(b) Door egress pathways discharging to a stair with 250mm from the door to the first step. The legislation mentions an open space of 1 meter width free space in front of the door.

This is considered a defect in the fire system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section D Access and egress, Part D2 Construction of exits, Deemed-to-Satisfy provision D2.15 Thresholds,** which states:

"The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section D Access and egress, Part D1 Provision for escape, D1.6 Dimensions of exits and paths of travel to exits, which states:

"… the required width of a stairway or ramp must—

be measured clear of all obstructions such as handrails, projecting parts of balustrades or other barriers and the like, and…"

And;

Building Code of Australia NCC2016 BCA Volume 1, Section D Access and egress, Part D1 Provision for escape, D1.10Discharge from exits, which states:

'An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.

If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—

the minimum width of the required exit; or

1 m, whichever is the greater.

If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—

a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D3;..."

And;

Deemed-to-Satisfy provision D.15 Thresholds and D1.10 Discharge are pathway that can satisfy the **BCA Volume One, Section D Access and egress, Performance Requirement DP2 Safe movement to and within a building,** which states in part:

"So that people can move safely to and within a building, it must have—

walking surfaces with safe gradients; and

any doors installed to avoid the risk of occupants—

having their egress impeded;"

And;

Australian Standard 2067:2008 Substations and high voltage installations exceeding 1kV a.c., Section 6 Safety measurements, 6.7 Protection against fire and explosions, 6.7.2 Fire and explosion risk zones, which states:

"The following should be considered:

(a) Every high voltage installation has a potential fire risk zone that extends in every direction, from its perimeter. A risk assessment should be undertaken to AS/NZS 3931: 1998 (refer Clause 6.7.3 and 6.7.4 for additional information). If any part of the fire risk zone extends to include other buildings, parts of the same building that house the high voltage installation, fire escape routes, or other fire sensitive locations and facilities, then a potentially high fire hazard exists…"

23. **Defect 16– Fire services/ structure, fire rating and associated compartmentation of the Combined Hydrant & Sprinkler Pump Room.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the Combined Hydrant & Sprinkler Pump Room and observed:

(a) Masonry wall structure, fire rating and associated compartmentation has been comprised.

(b) Water ingress within the void behind the masonry wall and entry into sprinkler pump room.

This is considered a defect in the fire system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Part B1 Structural provisions, BP1.1 Structural reliability**, which states:

"Structural reliability

(a) A building or structure, during construction and use, with appropriate degrees of reliability, must-

(i) Perform adequately under all reasonably expected design actions; and

(ii) Withstand extreme or frequently repeated design actions; and

(iii) Be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage; …

(b) The actions to be considered to satisfy (a) include but are not limited to:

(i) liquid pressure action; and

(ii) ground water action; and

(iii) rain water action (including posing action), and ..."

And;

Australian Standard 1170.0:2002 Structural design actions, Part 0: General principles, section 6 Structural Robustness, 6.1 General, which states:

"General detailing of components of the structural force-resisting system and of other components shall be in accordance with this Section.

Structures shall be detailed such that all parts of the structure shall be tied together both in the horizontal and the vertical planes so that the structure can withstand an event without being damaged to an extent disproportionate to that event."

24. **Defect 17– Structural System / Uncontrolled cracking to slabs.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the Basement carpark areas and observed:

(a) Uncontrolled cracking of 2mm to 4mm in the basement slabs and soffits.

(b) Longitudinal cracking to soffit in Ground Floor Basement which extends from 1mm to 5m.

This is considered a defect in the structural system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section B Structure, Deemed-to-Satisfy provision B1.4 Determination of structural resistance of materials and forms of construction**, which states:

"The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate:

...

(b) Concrete:

(i) Concrete construction (including reinforced and prestressed concrete): AS 3600."

And;

Australian Standard 3600-2009 Concrete structures, Section 2 Design procedures, actions and loads, Clause 2.3, Design for serviceability, 2.3.3 Cracking, 2.3.3.1 General, which states:

"Cracking in concrete structures shall be controlled so that structural performance, durability and appearance of the structure are not compromised."

25. **Defect 18– Structural System / Unknown permanent plastic formwork.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the ground floor basement area and observed:

(a) unknown permanent plastic formwork product with a 290mm measurement of the module width dimension this is a serious defect because it is a defect in a building element (the load bearing walls which are required to be considered as part of the fire safety systems to achieve compliance with the Building Code of Australia) attributable to a failure to comply with the relevant approved plans.

This is considered a defect in the structural system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section C Fire resistance, Performance requirement CP2 Spread of fire**, which states:

"(a) A building must have elements which will, to the degree necessary, avoid the spread of fire—

(i) to exits; an

(ii) to sole-occupancy units and public corridors; an

(iii) between buildings; and

(iv) in a building."

And;

Section B Structure, Part BP1 Structural Provisions, Performance Requirements BV1 Structural reliability, which states:

"Compliance with BP1.1 and BP1.2 is verified for the design of structural components and connections when—

(a) the calculated annual structural reliability index (β), for each action, is not less than that listed in Table BV1.1; and

…

(d) the resistance model for the structural component or connection is established after taking into account variability due to material properties, fabrication and construction processes, and structural modelling."

26. **Defect 19– Structural System / Chemical storage area.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the chemical storage area and observed:

(a) Reasonable belief that there is insufficient weatherproofing coating to external masonry block walls.

(b) Leachate permeating through masonry block wall.

(c) Inadequate prevention of rainwater action and associated water ingress through an external opening within the masonry.

This is considered a defect in the structural system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Part B1 Structural provisions, BP1.1 Structural reliability**, which states:

"Structural reliability

(a) A building or structure, during construction and use, with appropriate degrees of reliability, must-

(i) Perform adequately under all reasonably expected design actions; and

(ii) Withstand extreme or frequently repeated design actions; and

(iii) Be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage; …

(b) The actions to be considered to satisfy (a) include but are not limited to:

(i) liquid pressure action; and

(ii) ground water action; and

(ii) rain water action (including ponding action), and ..."

And;

Australian Standard 3700-2011 Masonry Structures, Section 2, Requirements for Design, 2.3 General requirements, 2.3.1 Durability, which states:

"A masonry member or structure shall withstand the expected wear and deterioration throughout its design life, taking into account the exposure environment and importance of the structure, without need for undue maintenance."

And;

Australian Standard 1170.0:2002 Structural design actions, Part 0: General principles, section 6 Structural Robustness, 6.1 General, which states:

"General detailing of components of the structural force-resisting system and of other components shall be in accordance with this Section.

Structures shall be detailed such that all parts of the structure shall be tied together both in the horizontal and the vertical planes so that the structure can withstand an event without being damaged to an extent disproportionate to that event."

27. **Defect 20– Structural System / Uncontrolled water ingress to basement levels.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the underground basement areas and observed:

(a) Porous concrete perimeter walls to basement areas with uncontrolled water ingress throughout.

(b) Uncontrolled ground water ingress through perimeter wall anchors.

(c) Absence of spoon drains to divert uncontrolled water ingress.

(d) Uncontrolled cracking of 2mm to 4mm in the basement soffits.

(e) Cracks have migrated through the full depth of the suspended post tension slab allowing leachate to formulate and permeate through.

(f) Unidentifiable plastic formwork system used to enclose and retain OSD (onsite detention) tank.

(g) Uncontrolled water continuously permeating through OSD tank walls.

(h) Absence of a water stop between OSD plastic formed concrete wall and OSD suspended slab OSD base.

This is considered a defect in the structural system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements."

And;

Australian Standard 3600-2009, Concrete Structure, Section 17, Material and construction requirements, 17.1 Material and Construction Requirements for Concrete and Grout, 17.1.7 Rejection of Concrete, 17.1.7.2 Hardened Concrete, which states:

'Hardened concrete shall be liable to rejection if:

…

1. It does not satisfy the requirements of Clause 17.1.6;

2. it is porous, segregated, or honeycombed, or contains surface defects outside the specified limits; or

3. it fails to comply with the other requirements of this Standard."

28. **Defect 21– Waterproofing / Uncontrolled water ingress to expansion and construction joints.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the ground floor basement area and observed:

(a) Separation and deterioration of waterproofing sealant between suspended slab expansion joints.

(b) Water permeating through construction joint.

This is considered a defect in the Waterproofing that is attributable to a failure to comply with the following performance requirements of **the Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements."

29. **Defect 22– Waterproofing / Exposed steel reinforcement.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the roof top of the north building area and observed:

(a) Exposed steel reinforcement due to inadequate concrete cover.

This is considered a defect in the structural system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, B1.4 Determination of structural resistance of materials and forms of construction,** which states:

"The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate:

...

(b) Concrete:

(i) Concrete construction (including reinforced and prestressed concrete): AS 3600."

And;

Australian Standard 3600-2009 Concrete Structures, Section 4 Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.1 General, which states:

"The cover to reinforcing steel and tendons shall be the greatest of the values determined from Clauses 4.10.2 and 4.10.3, as appropriate, unless exceeded by the covers required by Section 5 for fire resistance."

30. **Defect 23– Building Envelope / Louvred windows.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the louvred facade areas of the North and South Building and observed:

(a) The sets of louvered windows permanently fixed in an open position in the common foyers in both buildings allow rain to enter the building. Systematic occurrence on all floors.

(b) Most of the plasterboard wall and suspended ceiling linings adjacent to the louvre windows have been damaged by wind driven rain. In some cases, the fire alarm and sprinkler heads in the ceiling have prematurely corroded. This was typically more prominent in areas around the east facing louvre windows.

This is considered a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing,** which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements.

On 28 October 2021 Compliance officers inspected the waterproofing and observed the following:

(a) Heavy staining and some blistering at the ceiling levels of all levels in the North building and some levels in the South building.

(b) The water has not been prevented from causing undue dampness and deterioration of the internal linings.

(c) The water escapes an area considered to be a perimeter drain.

(d) The uncontrolled water extends and ponds in the path of egress leading the required exit."

And;

The following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing,** which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements."

31. **Defect 24– Waterproofing / Leaking OSD Tank.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the Ground level parking areas and observed:

(a) Water penetrating the Ground level car parking from OSD Tank.

(b) The water escapes an area considered to be a perimeter drain.

(c) The water is then uncontrolled, extending and ponding across the car spaces and internal street.

(d) Water penetrating the corridor services at the junction of the concrete walls forming the bathrooms and room services.

This is considered a defect in the waterproofing system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing,** which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause-

(a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) Undue dampness or deterioration of building elements."

And;

Part F1 Damp and Weatherproofing, Performance Requirement FP1.3 Rainwater drainage systems, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

32. **Defect 25– Waterproofing / Façade and balcony.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected the Façade and balcony areas and observed:

(a) there are no overflow provisions installed to the area to prevent water entering the building in the event of overflow of the stormwater drainage system.

This is a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to-Satisfy provision F1.1 Stormwater drainage**, which states:

"Stormwater drainage must comply with AS/NZS 3500.".

And;

Deemed-to-Satisfy provision F1.1 is a pathway that can satisfy the **BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.3**, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

And;

Australian/ New Zealand Standard 3500.3:2003 Plumbing and drainage - Stormwater drainage, Section 5 Surface drainage systems, 5.4 General method, 5.4.1 Basis, which states:

"Surface drainage systems shall be designed to provide protection against potential losses caused by any overflows, including damage to buildings and their contents, and injury and nuisance to persons."

33. **Defect 26– Building Envelope / Foyer floor and flashings.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected Foyer floor - in all levels of the North and South buildings and observed:

(a) The flashing and seal are damaged and the water is getting between the window sill. Allowing rainwater that enters through the windows assemblies to run down the facade and enter the floor below.

(b) The lack of a drain is also another factor that increases the problem mentioned above. The absence of the vapour barrier in relation to the external cladding could allow water to penetrate such that it could:

(a) cause unhealthy or dangerous conditions, or loss of amenity for occupants;

(b) undue dampness or deterioration of building elements; and

(c) the inability to inhabit or use the building (or part of the building) for its intended purpose due to the integrity of the waterproofing system being compromised by water penetrating the cladding system.

This is considered a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements, FP1.1 Managing rainwater impact on adjoining properties, which states:

"Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by a building or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements, FP1.3 Rainwater drainage systems, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements, FP1.7 Wet areas, which states:

"To protect the structure of the building and to maintain the amenity of the occupants, water must be prevented from penetrating-

(a) behind fittings and linings; and

(b) into concealed spaces,

Of sanitary compartments, bathrooms, laundries and the like."

34. **Defect 27– Building Envelope / Planter boxes in all areas.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected planter boxes in all areas and observed:

(a) capping showed multiple gaps surrounding the perimeter capping detail between the grout lines of the wall and capping adjoining the parapet wall.

This is considered a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.1 Managing rainwater impact on adjoining properties, which states:

'Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by a building or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property.'

And:

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.3 Rainwater drainage systems, which states:

"A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—

(a) 20 years must—

(i) convey surface water to an appropriate outfall; and

(ii) avoid surface water damaging the building; and

(b) 100 years must avoid the entry of surface water into a building."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.7 Wet areas, which states:

"To protect the structure of the building and to maintain the amenity of the occupants, water must be prevented from penetrating-

(a) behind fittings and linings; and

(b) into concealed spaces,

Of sanitary compartments, bathrooms, laundries and the like."

35. **Defect 28– Building Envelope / Water penetrating and ponding across the level 1 car parking.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected Car Parking areas on level 1, Ground and Basement 1 and observed:

(a) Water penetrates the ceiling of the Level 1 car parking.

(b) The water is then uncontrolled, extending and ponding across the level 1 car parking exit egress.

(c) Water penetrating the wall and leaking across the floor on the escape egress on the Ground Level.

(d) The water and grease have created corrosion to the wall in consequence of the leakage from external area into the escape egress on the Ground level.

This is considered a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.4 Weatherproofing**, which states:

"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements."

And;

Building Code of Australia NCC2016 BCA Volume 1, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements FP1.5 Rising damp, which states:

"Moisture from the ground must be prevented from causing—

(a) Undue dampness or deterioration of building elements; and

(b) Unhealthy or dangerous conditions, or loss of amenity for occupants."

36. **Defect 29– Building Envelope / Toeholds/steps between 150 mm and 760 mm from the balcony.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected balconies on the South Building and observed:

(a) There are horizontal components on the air-conditioner condenser units that create toeholds/steps between 150 mm and 760 mm from the balcony surface. The balcony is situated more than 4 m above adjoining ground level.

This is considered a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section D Access and Egress Table D 2. 16 a part 3(c)**, which states:

"For floors more than 4 m above the surface below in all other locations. Any horizontal or near horizontal elements between 150 mm and 760 mm above the floor must not facilitate climbing."

37. **Defect 30– Building Envelope / Glass balustrades were not stamped with safety mark.**

On 31 March 2022 Authorised Officers of the Department conducted an inspection pursuant to s 20 of the Act in the Building. Authorised Officers inspected glass to balustrades and observed:

(a) The glass balustrades were not stamped with safety mark in the pool and rooftop area.

(b) Glass balustrade deflects easily when a small lateral force is applied.

This is a defect in the building enclosure system that is attributable to a failure to comply with the following performance requirements of the **Building Code of Australia NCC2016 BCA Volume 1, Section B Structural Provisions sub section BP 1.3 Glass installations** which states:

"Glass installations that are at risk of being subjected to human impact must have glazing that—

(a) if broken on impact, will break in a way that is not likely to cause injury to people; and

(b) resists a reasonably foreseeable human impact without breaking; and

(c) is protected or marked in a way that will reduce the likelihood of human impact."

Building Work to be Carried Out

38. **Icon Co (NSW) Pty Ltd** must carry out building work, or cause building work to be carried out as follows:

a. **Remediate Defect 1 by**: Developer to carry out rectification of the drainage grates in accordance with the BCA Volume One.

Particular attention to be given, but not limited to:

1. Provide suitable protection and access measures.
2. Carry out repairs to consequential damages as required.
3. Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

b. **Remediate Defect 2 by**: Developer to carry out rectification of the waterproofing defects in accordance with the BCA Volume One and Australian Standard 4654.2 Waterproofing membranes for external above ground use.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

c. **Remediate Defect 3 by**: Developer to carry out rectification of the defects in accordance with the BCA Volume One, Australian Standard 1562.1 Design and installation of sheet roof and wall cladding – Metal.

Particular attention to be given, but not limited to the following areas:

I. Conduct remedial rectification work to the coloured profiled metal cladding and associated components to prevent water entry through porous masonry and bypass of flashing systems;

II. Provide façade engineering design and details demonstrating compliance of the AAC product use and installation for fire safety, structural capacity and weatherproofing provisions;

III. Remove existing flashing system and safely depose off site; Install vertical and horizontal Z-flashing allowing the flashing to be chased into the existing blockwork wall and rectify any consequential damages as a result of the removal of capping;

IV. Make good any consequential damage.

d. **Remediate Defect 4 by**: Developer to carry out rectification of the uncontrolled water penetration in accordance with the BCA Volume One.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

e. **Remediate Defect 5 by**: Developer to carry out rectification of the waterproofing defects in accordance with the BCA Volume One.

Particular attention to be given, but not limited to:

- to AS 4654.1, and AS 4654.2 where any external waterproofing membranes are intended to be applied;
- The seal treatment of all insertions for operable windows, holding down bolts, anchors and the like;

Developer to demonstrate compliance of remediation works by providing evidence, including but not limited to, comprehensive photographs of work in progress, installer compliance certificate and any third party inspection reports.

f. **Remediate Defect 6 by**: Developer to carry out rectification of the waterproofing defects in accordance with the BCA Volume One, Australian Standard 4654.2 Waterproofing membranes for external above ground use.

Particular attention to be given, but not limited to the following:

- Sealing of any fixings that penetrate the membrane with a sealant produce compatible with the surface material. All penetrations into concrete should be treated with epoxy. All fixings into concrete should be of a chemically injected type in order to maintain the integrity of the waterproofing and substrate.

- The use of minimum 12mm backing rods to support the sealant.
- The membrane should be turned up around the post or support prior to membrane installation.
- All post bases should be placed into position prior to placement of membrane. If posts are placed onto a completed membrane, any damaged membrane should be replaced or repaired to ensure its original integrity.
- For posts penetrating through the deck, see Clause 2.8.4.
- The membrane should be turned up around the penetration and over-flashed with a minimum overlap of 75mm.
- All penetrations into concrete should be treated with epoxy. All fixings into concrete should be of a chemically injected type in order to maintain the integrity of the waterproofing and substrate.
- Consideration should be given to post designs that are fixed below the level of the deck without penetrating through the surface of the deck.
- Waterproofing of the system will be compromised by the use of timber or metal posts that are not suitable for external use.
- Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

g. **Remediate Defect 7 by**: Developer to carry out rectification of the planter box construction method and the waterproofing defects in accordance with the BCA Volume One, Australian Standard 4654.2 Waterproofing membranes for external above ground use.

Particular attention to be given, but not limited to the following areas:

- Sufficient drainage provisions to be installed to facilitate maintenance and overflow provision.
- On the completion of the installation of a membrane system, inspection and acceptance testing must be conducted. In addition to the visual inspection, either the dry film thickness test (DFT) by non-destructive means or a controlled water test for a minimum of 24 hours duration is required.
- Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

h. **Remediate Defect 8 by**: Developer to carry out rectification of the pipe vent's installation in accordance with the BCA Volume One and the Australian Standard 4654.2-2012.

Particular attention to be given, but not limited to:

- Membrane upward termination around the PVC pipe.
- Membrane upward termination around posts.

- Seal flexible duct penetrations.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

i. **Remediate Defect 9 by**: Developer to carry out rectification of the drainage grates in accordance with the BCA Volume One. Particular attention to be given, but not limited to:

- Provide suitable protection and access measures;
- Install a perimeter capping to the neighbouring property;
- Apply a new suitable waterproofing membrane to at the top of the AFS wall in strict accordance with manufacturer's specification, ensuring all termination details are carried out in accordance with AS 4654.2;
- Carry out repairs to consequential damages as required;
- Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

j. **Remediate Defect 10 by**: Developer to rectify the fire-resisting sealing defects in accordance with the BCA Volume One. Particular attention to be given, but not limited to the installation of wall, floor, and service penetration systems in compliance with fire resistance tests that are representative of the intended application.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

k. **Remediate Defect 11 by**: Developer to carry out rectification work to ensure 1m clearance around the sprinkler pump will be maintained in accordance with the BCA Volume One and Australian Standard 2941 Fixed fire protection installations-Pumpset systems.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

l. **Remediate Defect 12 by**: Developer to rectify the fire-resisting sealing defects in accordance with the BCA Volume One. Particular attention to be given, but not limited to the installation of wall, floor control joints, and service penetration systems in compliance with fire resistance tests that are representative of the intended application.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

m. **Remediate Defect 13 by**: Developer to rectify the fire-resisting sealing defects in accordance with the BCA Volume One.

Particular attention to be given, but not limited to the following:

- Proper fire resistance levels at the perimeter of lift, fire isolated stairs and where required. Installation of wall sealed in compliance with fire resistance tests that are representative of the intended application.
- Make good any consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

n. **Remediate Defect 14 by**: Developer to rectify the inconsistent and inadequately filled fire doorsets in accordance with the BCA Volume One and Australian Standard 1905.1 Components for the protection of openings in fire-resistant walls – Fire-resistant doorsets.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

o. **Remediate Defect 15 by**: Developer to rectify the step in the threshold of the Ground level fire stair in accordance with the BCA Volume One. Particular attention to be given, but not limited to the following:

- Provide safety exit.
- Make good any consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

p. **Remediate Defect 16 by**: Developer to carry out rectification of the drainage grates in accordance with the BCA Volume One. Particular attention to be given, but not limited to:

- Provide suitable protection and access measures;
- Install a perimeter capping to the neighbouring property;
- Apply a new suitable waterproofing membrane to at the top of the AFS wall in strict accordance with manufacturer's specification, ensuring all termination details are carried out in accordance with AS 4654.2;
- Carry out repairs to consequential damages as required;
- Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

q. **Remediate Defect 17 by**: Developer to rectify the cracking defects in accordance with BCA Volume One and Australian Standard 3600 Concrete Structures.

Particular attention to be given, but not limited to the following areas:

- Conduct remedial rectification work to the structural concrete slab in co-ordination with the project structural design engineer; and
- Attention to the monitoring of the cracking to ensure long term stability.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

r. **Remediate Defect 18 by**: Developer to carry out rectification of the permanent plastic formwork defects in accordance with the BCA Volume One.

Particular attention to be given, but not limited to the Developer to demonstrating the brand system with the licenced document for the material.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

Developer to identify how this is regularised in the Fire Safety Schedule.

s. **Remediate Defect 19 by**: Developer to carry out rectification of the masonry defects in accordance with the BCA Volume One, Australian Standard 3700 Masonry Structures and Australian Standard 1170.0 Structural design actions to provide adequate structural robustness, reliability and a compliant weather-resistant coating.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

t. **Remediate Defect 20 by**: Developer to rectify the porous concrete walls, OSD tank and soffits in accordance with BCA Volume One, Australian Standard 3600 Concrete structures. Particular attention to be given, but not limited to the following areas:

Investigate and rectify the water and leachate permeating through cracks in the perimeter walls, OSD tank and soffits in co-ordination with the project structural design engineer and geotechnical engineer.

Conduct remedial rectification work to the structural concrete walls, OSD tank and soffits and in co-ordination with the project structural design engineer and geotechnical engineer; and

Attention to the monitoring uncontrolled water ingress and cracking to ensure long term stability.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

u. **Remediate Defect 21 by**: Adequate expansion joint filler and waterproofing solution is to be installed in accordance with BCA Volume One and Australian Standard 3600 Concrete structures.

Developer to demonstrate compliance by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

v. **Remediate Defect 22 by**: Developer to carry out rectification of the reinforcement defects in accordance with the BCA Volume One.

Particular attention to be given, but not limited to the following areas:

- Conduct remedial rectification work to the corroded reinforcement ensuring effective treatment in co-ordination with the project structural design engineer;
- Ensure adequate concrete coverage to reinforcement in accordance with Australian Standard 3600, Concrete Structures.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

w. **Remediate Defect 23 by**: Developer to carry out rectification of the uncontrolled water penetration in accordance with the BCA Volume One.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

x. **Remediate Defect 24 by**: Developer to carry out rectification of the uncontrolled basement water penetration in accordance with the BCA Volume One.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

y. **Remediate Defect 25 by**: Developer to carry out rectification of the overflow provisions in accordance with the BCA Volume One and Australian/ New Zealand Standard 3500.3:2003 Plumbing and drainage - Stormwater drainage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

z. **Remediate Defect 26 by**: Developer to carry out rectification of the moisture management of cavity walls to satisfy Performance Requirement of BCA Volume One.

Particular attention to be given, but not limited to the following areas:

- Threat the foyer as external areas, providing external fibre cement system and drainage.
- The builder is to install flashing along the base of the window sill and replace damaged materials.
- Builder to provide a drainage system.
- Make good any resultant consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

aa. **Remediate Defect 27 by**: Developer to carry out rectification of the defects in accordance with the BCA Volume One, Australian Standard 1562.1 Design and installation of sheet roof and wall cladding – Metal.

Particular attention to be given, but not limited to the following areas:

- Conduct remedial rectification work to the metal cladding and associated components to prevent water entry through thew flashing systems;
- Provide façade engineering design and details demonstrating compliance of the product use and installation for fire safety, structural capacity and weatherproofing provisions;
- Remove existing flashing system and safely depose off site;
- Install vertical and horizontal Z-flashing allowing the flashing to be chased into the existing blockwork wall and rectify any consequential damages as a result of the removal of capping;
- Make good any consequential damage.

bb. **Remediate Defect 28 by**: Developer to carry out rectification of the uncontrolled basement water penetration in accordance with the BCA Volume One.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

cc. **Remediate Defect 29 by**: Developer to carry out rectification of the balustrades defects in accordance with Table D 2 of BCA Volume One and ensure that stand-off bolts between 150 mm and 760 mm above the finished floor surface do not protrude more than 10 mm from the surface of the glass or otherwise do not facilitate climbing.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third-party inspection reports.

dd. **Remediate Defect 30 by**: Developer to rectify the glazing in accordance with the BCA Volume One.

Particular attention to be given to the replacement of the glass and making good any consequential damage.

Developer to demonstrate compliance of remediation works by providing evidence including but not limited to comprehensive photographs of work in progress, installer compliance certificates and any third party inspection reports.

Period for Compliance with Order

39. The work specified in paragraph 38 of this Order must be completed within 180 days of the date of this Order.

Conditions of this Order

40. **Icon Co (NSW) Pty Ltd** must notify OC Audit team, in writing, by email sent to **ocaudits@customerservice.nsw.gov.au** within 2 business days of the work required by this Order being completed.

Duration of this Order

41. This Order remains in force until it is revoked by the Secretary.

Elizabeth Stewart
Delegate of the Secretary
Office of the NSW Building Commissioner
Department of Customer Service

REASONS FOR THE ORDER

Reasonable belief and serious defects

1. I, Elizabeth Stewart, an authorised delegate of the Secretary of the Department, have formed a reasonable belief for the purposes of s 33(1) of the Act in relation to Defect 1 in the Order, that in the Building has a serious defect.

2. Defect 1 The construction of load bearing walls without capping beams or concrete walls on top of the shoring piles to support the ground floor slab as described above in paragraph 8 of the Order, is a serious defect in a building element (internal load bearing element) that are required to achieve compliance with the approved plan structural design drawings titled “Shoring Plan and Details” No. S0100 revision “K” dated 15.12.2014 and “Ground Floor Slab Plan and Sections” No. S0600 revision “M” dated 24.03.2015 and “Ground Sections sheet2/4” No. S0602 revision “D” dated 28.02.2015 by Australian Consulting Engineers

3. I have formed this belief after conducting the inspection with authorised officers at the Building and reviewing a copy of the approved plan structural design drawings titled “Shoring Plan and Details” No. S0100 revision “K” dated 15.12.2014 and “Ground Floor Slab Plan and Sections” No. S0600 revision “M” dated 24.03.2015 and “Ground Sections sheet2/4” No. S0602 revision “D” dated 28.02.2015 by Australian Consulting Engineers

Period for compliance

4. I am of the view that a period of 180 days is a reasonable period for compliance in all the circumstances for the rectification work required by the Order to be carried out. I have formed this belief balancing the risks that the serious defect poses against the period of time it will take to give effect to the rectification work. I am aware that there are residents occupying this location as the Building is completed which will delay rectification work. I am of the view that 180 days is sufficient to conduct the following works:

    a. Defect 1 -

        Retrofitting /strengthening the elements below so that they achieve a strength and serviceability level sufficient to support the Building:

        - the shoring piles.
        - the capping beam.

Consideration of written representations

1. On 15 June 2023 a further notice of intention to issue the Order and a draft copy of the Order was served on the Developer, Bayside Council ("**Local Council**"), the Owners of Strata Plan No 97291 ("**Owners Corporation**") and Environet Consultancy Pty Limited ("**Private Certifier**"). The parties were invited to provide submissions relating to the draft copy of the Order by 22 June 2023.

2. The Developer provided the Department with written submissions on 22 June 2023 ("**Developer Representations**") which included, among other things, the following:

    a. That to 22 June 2023, the Developer has engaged experts to review and develop scopes for the applicable items, including waterproofing, structural and passive fire, provided copies of the reports to the Department, and completed a number of items as per the nominated scope of works.

    b. That the Building is subject to Supreme Court Proceedings ("**the Proceedings**") with the Owners Corporation. The Developer has proactively engaged with the Owners Corporation representatives to ensure that corresponding items raised by the

Department via the Audit Report and those by the Owners Corporation within the Proceedings are satisfactorily addressed.

c. The Developer is seeking a collaborative approach with the Owners Corporation as the Developer is concerned that works carried out without the Owners Corporation's input may result in the:

i. Defect not being accepted as "completed" by the Owners Corporation;

ii. The Developer having rectified a defect pursuant to an enforceable undertaking or this Order but found liable by the Court to pay damages to the Owners Corporation for the same defect/breach of statutory warranties; and

iii. A gap between the rectification methodologies agreed to by the Developer and the Department and those pressed by the Owners Corporation's experts.

d. The Developer remains exposed to ongoing and additional liability to the Owners Corporation for the same alleged defects or breaches if the Owners Corporation is not satisfied with the rectification methodology.

e. The Developer has been working with the Owners Corporation's expert in conjunction with Mr Paul Ratcliff to carry out site inspections and develop joint methodologies of repair. The Developer submitted that this process takes time and whilst engagement with the Owners Corporation to this collaborative approach commenced last year, it was only in May 2023 that the scopes were approved.

f. That taking into consideration the collaborative approach the Developer has taken with the Owners Corporation to avoid any future issues, the Developer requested the Department not to issue this final Order as they endeavour to complete the works as a priority.

3. No representations were received from the Owners Corporation, the Council, or the Private Certifier.

4. I have reviewed and considered the Developer Representations.

5. I make the following observations in relation to the Developer Representations:

a. I acknowledge that the Developer says it has engaged experts to review and develop scopes for the applicable items, prepared reports and completed a number of items as per the nominated scope of works.

b. Whilst the Developer is in the process of working with the Owners Corporation's expert in conjunction with Mr Paul Ratcliff to develop joint methodologies of repair or agree to those proposed by either party, the Developer has not provided any supporting evidence showing definitive timeframes for rectification.

c. The Developer has not taken steps in a timely way to rectify the serious defects at the Building.

d. I do not consider that the making of this Order would unnecessarily cause prejudice to the Developer.

Why is it appropriate to give the Building Work Rectification Order?

6. I have considered all of the circumstances. I accept that the order requires considerable further construction work that is likely to be costly, and I give this consideration moderate weight. However, the cost to the developer must be balanced against the benefit to the

occupiers of the unit in having the building constructed to the approved plans so as to ensure in respect of Defect 1, the structural integrity of the Building.

7. Considering these potential consequences as outlined in this order, I give greater weight to the seriousness of the defect and failure to adhere to the approved plans and the benefits arising from remediating the defect and I find that it is appropriate, in the exercise of my discretion, to require **Icon Co (NSW) Pty Ltd** to carry out the building work described in paragraph 9 of the Order within the period specified in paragraph 10 of the Order.