Department of Customer Service

Attn: Proper Officer
KRED Pty Ltd
PO Box 292
Wickham NSW 2293

Service: By registered post and email

11 January 2024

Building Work Rectification Order

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

KRED Pty Ltd (ACN 145 344 403) (KRED) is being given this Building Work Rectification Order (Order) in relation to 75-77 Shortland Esplanade, Newcastle NSW 2300 (SP 95192).

KRED is required to cause building work to be carried out to remediate the serious defects as set out below in this Order.

Failure to comply with the requirements in 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 relation to the Building, they may order the developer to rectify building work to remediate the serious defect or potential defect.

3. Section 3 of the Act defines a serious defect. Section 3 of the Act also defines to term "building element" by reference to the *Design and Building Practitioners Act 2020* (**DBP Act**). Section 4 of the Act defines the term "developer". Section 6 of the Act provides the building work to which the Act applies. Relevant excerpts from sections 3, 4 and 6 of the Act and section 6 of the DBP Act are set out in **Attachment A** to this order.

4. Elizabeth Stewart, Acting Executive Director Building Operations and Assistant Building Commissioner, Department of Customer Service is an authorised delegate of the Secretary of the Department.

5. KRED Pty Ltd (ACN 145 344 403) is the developer of the residential apartment building known as 75-77 Shortland Esplanade, Newcastle NSW 2300 (SP 95192) (**the Development**) for the purposes of section 4(a) of the Act.

6. The Development comprises a lower ground level and basement level for carparking and/or commercial use, and 14 floors of residential units. The Act applies to building work at the Development because it is a class 2 Development, is currently occupied and less than 10 years old.

7. On 14 December 2022, with the consent of the owners corporation, a third party consultant engaged by the Department attended the Building (**Investigator**). The Investigator prepared a report on serious defects in the Building (**Inspection Report**).

Requirements in relation to Serious Defects

8. I, Elizabeth Stewart, under section 33 of the Act, require you KRED Pty Ltd (ACN 145 344 403), to do the things specified in column 4 in Table 1 to eliminate, minimise or remediate each respective serious defect described in columns 1, 2 and 3 of Table 1. Each requirement must be complied with by the time set out in column 5 of Table 1:

Table 1: Requirements in respect of Serious Defects

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
1	Rooftop	The absence of a waterproofing membrane on the rooftop concrete slab was observed.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 4654.2-2012*, Waterproofing Membranes for External Above Ground Use - Design and Installation, Section 2 - Design and installation which appears as a standard referenced in *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to-Satisfy provision F1.4 which is a pathway that can satisfy the *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
2	Rooftop - Enclosed Plant Room	The absence of a waterproofing membrane on the floor of the Enclosed Plant Room was observed. Additionally, the floor drainage was higher than the surrounding finished floor level. No other drainage was observed in the surrounding area.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 4654.2*-2012, Waterproofing Membranes for External Above Ground Use - Design and Installation, Section 2 - Design and installation which 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 which is a pathway that can satisfy the *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
3	External Areas - South-East Section (adjacent to 'Reform Pilates Workouts')	Falls of 3/1000mm away from the drainage were observed. The required minimal fall is 10/1000mm towards the drainage.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS/NZS 3500.3* –2015 Plumbing and Drainage–Stormwater Drainage, Section 5 Surface water drainage system – Design, 5.3 Layout – General criteria; and • *Australian Standard 4654.2* - Waterproofing Membranes for External Above Ground Use, Section 2 Design and installation, 2.5 Substrate, 2.5.2 Falls which appears as a standard referenced in the *BCA Volume One*, Part F Damp and Weatherproofing, Performance Requirements FP1.3. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
4	This item was removed			
5	This item was removed			
6	This item was removed			
7	This item was removed			
8	Building A - Level 14 Stairwell	It was observed that a pipe penetrating the wall from the stairwell into the adjacent room has not been sealed to maintain fire separation.	Within the time period specified in column 5 submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction,	Stage 1 60 days Stage 2 150 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Clause 3.1 Fire-Resistance of Building Elements. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
9	Building A - Hallway - Electrical Riser Cupboard and Service Cupboard Systemic throughout the service cupboards in Building A	It was observed that services within cupboards penetrate concrete slabs between levels and between adjacent rooms. The penetrations have not been sealed to maintain fire separation. This was observed to be systemic throughout the service cupboards in Building A.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction, Clause 3.1 Fire-Resistance of Building Elements.	Stage 1 60 days Stage 2 150 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
10	External - Ground Level Systemic throughout external fire doors of the building	Corrosion in the fire door hardware, including door handles, hinges, bottom seal, was observed. This indicates that the materials used for the fire exit doors are not fit for the aggressive coastal environment that the building is exposed to. This was observed to be systemic throughout the external fire doors of the building.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 150 days
11	Building B - Electrical Riser Cupboard and Service Cupboard Systemic throughout service cupboards in Building B	It was observed that services within cupboards penetrate concrete slabs between levels and between adjacent rooms. The penetrations have not been sealed to maintain fire separation.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps	Stage 1 60 days Stage 2 150 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		This was observed to be systemic throughout the service cupboards in Building B.	to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction, Clause 3.1 Fire-Resistance of Building Elements. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
12	This item was removed			
13	Carpark - Exit Gate	Corrosion in the sprinkler system fixings, connections and non-painted pipe section was observed. This indicates that the materials used for the sprinkler system are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5 submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with:	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
14	This item was removed			
15	This item was removed			
16	Rooftop Systemic throughout the rooftop	It was observed that areas of the concrete slab plinths, concrete supports and parapet walls have not been properly vibrated or compacted, resulting in areas of segregation and honeycombing. This was observed to be systemic throughout the rooftop of the building.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 -	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.	
17	Rooftop	Corroded embedded metal was observed within the parapet wall as well as embedded plastic cables within the concrete slab.	Within the time period specified in column 5 submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			accordance with the report and drawings required to comply with Stage 1 of this requirement.	
18	Rooftop Systemic throughout the rooftop	Severe corrosion was observed to have occurred to the structural base plates of the Rooftop structure. The fixings were also observed to have corroded. The base plates will degrade further due to the aggressive coastal environment, reducing the service life of the structure. This was observed to be systemic throughout the rooftop.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 120 days
19	Rooftop - Air-conditioning ducting	It was observed that corrosion has occurred to the rooftop structure supporting the air-conditioning ducting	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			to eliminate the serious defect in accordance with: • *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
20	Building A - Fire Stairwell Systemic throughout the Building A Fire Stairwell	It was observed that concrete slabs in the stairwell have not been properly vibrated or compacted which has created areas of segregation and honeycombing. This was observed to be systemic throughout the stairwell in Building A.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 -	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
21	Building B - Fire Stairwell Systemic throughout the Building B Fire Stairwell	It was observed that concrete slabs in the stairwell have not been properly vibrated or compacted which has created areas of segregation and honeycombing. This was observed to be systemic throughout the stairwell in Building B.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
22	Carpark - Level P4	Uncontrolled cracking was observed in the concrete column.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
23	Carpark - Level P4 - Visitors Parking	It was observed that the concrete column has not been properly vibrated or compacted which has created areas of segregation and honeycombing	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days
24	Carpark - Level P5 - Storage Cages	Uncontrolled cracking and damaged and chipped concrete	Within the time period specified in column 5:	Stage 1 60 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		were observed in the concrete beam.	Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 2 180 days
25	Carpark - Level P6	Exposed reinforcement bar was observed in the concrete pile.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
26	Carpark - Level P6	Uncontrolled cracking was observed in the concrete pile.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with:	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
27	Carpark - Level P7	Uncontrolled cracking was observed in the concrete slab.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which	180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
28	Carpark - Level P7	Uncontrolled cracking was observed in the underside/soffit of the concrete slab.	Within the time period specified in column 5: Stage 1 - submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
29	Carpark - Level P7	Honeycombing was observed in the concrete slab adjacent to the pile.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			required to comply with Stage 1 of this requirement.	
30	Carpark - Level P9	Uncontrolled cracking was observed in the concrete pile.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days
31	Carpark - Level P10	Uncontrolled cracking was observed in the concrete slab.	Within the time period specified in column 5:	Stage 1 60 days

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			Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 2 180 days
32	Carpark - Level P10	An exposed reinforcement bar was observed in the concrete pile.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			to eliminate the serious defect in accordance with: • *Australian Standard 3600* Concrete structures, Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete, Section 17 - Materials and construction requirements,17.1.3 Handling, placing and compacting of concrete. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
33	Carpark Entry	Corrosion in the supporting structure of the garage door was observed.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with:	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			• *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
34	External – Southeast Portion of the site - Planter Box	Uncontrolled cracking was observed in the concrete planter wall.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			accordance with the report and drawings required to comply with Stage 1 of this requirement.	
35	External – Southeast Portion of the site - Planter Box	Uncontrolled cracking was observed in the concrete planter wall.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking which appears as a standard referenced in the *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 180 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
36	This item was removed			
37	External Common Areas – Southeast	Significant lateral deflection was observed in the balustrade when pushed by hand.	Within the time period specified in column 5: Stage 1 - submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • Australian Standard 1170.1 Structural design actions. AS1170, Section 3 Imposed actions, 3.6, Barriers as appear as a standard referenced in the *BCA Volume One,* Part B Structural Provisions, Deemed-to-Satisfy provision B1.1 – Resistance to actions, B1.2 Determination of individual actions. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 150 days
38	Rooftop	Corrosion in the roof hardware was observed. This indicates that the materials used are not fit for the aggressive coastal	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to	Stage 1 60 days Stage 2

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		environment the building is exposed to.	projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	120 days
39	Rooftop	Corrosion (i.e. primarily pitting) in the roof sheeting was observed. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
40	External Area	Corrosion in the wall cladding fixings was observed. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 120 days
41	External Area	Corrosion in the base of the corner wall was observed. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
42	This item was removed			
43	Rooftop – Enclosed Plant Room	Corrosion in the pump components was observed. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.	Stage 1 60 days Stage 2 150 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
44	Rooftop	Corrosion was observed in the rooftop metal fixings, brackets and other components. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	Stage 1 60 days Stage 2 120 days
45	Rooftop	Corrosion was observed in the external vent duct components. This indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			to complete that work that can be carried out to eliminate the serious defect in accordance with: • *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
46	Lift landings	Lift landing buttons have been installed within 500mm of an internal corner.	Within the time period specified in column 5: Stage 1 - Submit a written report to the Department via email to projectintervene@customerservice.nsw.gov.au from a suitably qualified person or specialist detailing the specific building work and steps to complete that work that can be carried out to eliminate the serious defect in accordance with: • *Australian Standard 1735.12* Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities, Section 7 Control Buttons, 7.1 Provision at Landings and 7.3.3 At lift landings which is a standard referenced in the *BCA Volume One,* Section D Access and Egress,	Stage 1 60 days Stage 2 120 days

Serious Defect Reference Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Section D3.3 Parts of a Building to be accessible, Part E3 Lift Installations. Stage 2 - Carry out the work to rectify the defect and consequential repairs in accordance with the report and drawings required to comply with Stage 1 of this requirement.	
47	This item was removed			

Conditions of this Order

9. Making good any consequential damage caused in carrying out the works specified in this Order.

10. For any building work to address a serious defect in this Order you must comply with the requirements of the *Design and Building Practitioners Act 2020* (NSW).

Duration of this Order

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

[redacted]

Elizabeth Stewart
Acting Executive Director
Building Operations and Assistant Building Commissioner
Building Commission NSW
Department of Customer Service

Reasons for the Building Work Rectification Order

1. I, Elizabeth Stewart, have formed a reasonable belief that the Development has a serious defect based on the following.

2. I have formed this belief after reviewing an Inspection Report (dated 24 February 2023) prepared by a third party consultant engaged by the Department, who conducted an inspection of the Development by consent of the owners corporation on 14 December 2022.

3. My reasonable belief is also based upon the following matters, set out in Table 2 below in respect of each serious defect identified in column 1 of Table 2 (where that reference corresponds to the reference set out in Table 1 above)

Reason why defect is a serious defect

Table 2 – basis of reasonable belief as to serious defects

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
1	Waterproofing	There is an absence of waterproofing membrane on the Rooftop concrete slab. The only waterproofing membrane observed was on several concrete plinths.	The absence of waterproofing membrane on the Rooftop concrete slab is attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require compliant waterproof membranes for external above ground use and that roofs and external walls prevent the penetration of water that could cause unhealthy or dangerous conditions, loss of amenity and 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; • *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to-Satisfy provision F1.4; and • *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4.
2	Waterproofing	An absence of waterproofing membrane was observed on	The absence of waterproofing membrane and inadequate drainage	• *Australian Standard 4654.2*-2012, Waterproofing Membranes

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
		the floor in the Rooftop Enclosed Plant Room. Additionally, the floor drainage was higher than the surrounding finished floor level. No other drainage was observed in the surrounding area.	provisions in the Rooftop Enclosed Plant Room are attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require falls in finishes to ensure that water drains to the drainage outlet, compliant waterproofing membrane and the roofs and external walls prevent the penetration of water.	for External Above Ground Use - Design and Installation, Section 2 - Design and installation; • *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to-Satisfy provision F1.4; and • *BCA Volume One*, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4.
3	Waterproofing	Inadequate falls in the floor were observed in External Areas - South-East Section, adjacent to 'Reformer Pilates Workouts'. Falls were observed to be 3/1000mm away from the drainage, they are required to be 10/1000mm towards the drainage.	The inadequate falls on the floor are attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require falls to be no flatter than a ratio of 1:100 to ensure that water drains to the drainage outlet.	• *Australian Standard AS/NZS 3500.3* –2015 Plumbing and Drainage–Stormwater Drainage, Section 5 Surface water drainage system – Design, 5.3 Layout – General criteria; • *Australian Standard 4654.2* - Waterproofing Membranes for External Above Ground Use, Section 2 Design and installation, 2.5 Substrate, 2.5.2 Falls; and • *BCA Volume One*, Part F Damp and Weatherproofing, Performance Requirements FP1.3.
4	This item was removed			
5	This item was removed			

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
6	This item was removed			
7	This item was removed			
8	Fire Safety Systems	At the Building A Level 14 a pipe was observed to be penetrating the wall from the stairwell in the adjacent room that has not been sealed to maintain fire separation.	The inadequate fire-resisting sealing is attributable to a failure to comply with the Building Code sections referenced in column 5. These require that building elements provided to resist the spread of fire must be protected so that an adequate level of performance is maintained where penetrations occur for building services.	• *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction, Clause 3.1 Fire-Resistance of Building Elements.
9	Fire Safety Systems	At the Building A Hallway Electrical Riser Cupboard and Service Cupboard it was observed that services within the cupboard penetrate concrete slabs between levels and between adjacent rooms. These penetrations have not been sealed to maintain fire separation. This defect is systemic throughout the service cupboards in Building A.	The inadequate fire-resisting sealing is attributable to a failure to comply with the Building Code sections referenced in column 5. These require that building elements provided to resist the spread of fire must be protected so that an adequate level of performance is maintained where penetrations occur for building services.	• *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction, Clause 3.1 Fire-Resistance of Building Elements.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
10	Fire Safety Systems	Corrosion in the fire door hardware was observed at the External Ground Level area, including corrosion to door handles, hinges and the bottom seal. This defect is systemic throughout external fire doors of the building.	The corrosion in the metal hardware components indicates that the materials used for the fire exit doors are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires building parts to be constructed using materials fit for the purpose for which they are intended.	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.
11	Fire Safety Systems	At the Building B Electrical Riser Cupboard and Service Cupboard it was observed that services within the cupboard penetrate concrete slabs between levels and between adjacent rooms. These penetrations have not been sealed to maintain fire separation. This defect is systemic throughout the service cupboards in Building B.	The inadequate fire-resisting sealing is attributable to a failure to comply with the Building Code sections referenced in column 5. These require that building elements provided to resist the spread of fire must be protected so that an adequate level of performance is maintained where penetrations occur for building services.	• *BCA Volume One*, Section C Fire Resistance, CP2 Spread of fire, CP8 Fire protection of openings and penetrations, Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.15 Openings for service installations and Part C1 Fire Resistance and Stability, Specification C1.1 Fire-Resisting Construction, Part 3 Type A Fire-Resisting Construction, Clause 3.1 Fire-Resistance of Building Elements.
12	This item was removed			•
13	Fire Safety System	At the Carpark Exit Gate it was observed that there was corrosion in the sprinkler system fixings, connections and non-painted pipe section.	The corrosion in metal hardware components indicates that the materials used for the sprinkler system are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			Code section referenced in column 5. This requires building parts to be constructed using materials fit for the purpose for which they are intended.	
14	This item was removed			
15	This item was removed			
16	Structural Systems	It was observed on the Rooftop that areas of the concrete slab, concrete supports and parapet walls have not been properly vibrated or compacted, resulting in areas of segregation and honeycombing. This defect is systemic throughout the rooftop of the building.	The honeycombing and segregation observed on the Rooftop is attributable to a failure to comply with the Australian Standard requirements referenced in column 5. These require concrete to be handled, placed and compacted so as to limit segregation or loss of materials. Hardened concrete must also not be segregated or honeycombed.	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
17	Structural Systems	Corroded embedded metal was observed within the parapet wall and embedded plastic cables within the concrete slab on the Rooftop.	The embedded items observed in the concrete installation on the Rooftop are attributable to a failure to comply with the Australian Standards referenced in column 5. These require that embedded items shall be protected from corrosion or deterioration.	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
18	Structural Systems	Severe corrosion was observed to the structural base plates of the rooftop structure, as well as corrosion of fixings. The corrosion of the base plates will further degrade due to the aggressive coastal environment. This was systemic throughout the rooftop.	The corrosion identified on the Rooftop is attributable to a failure to comply with the Building Code section referenced in column 5. This requires structures to perform adequately under reasonably expected design actions, withstand repeated design actions and be designed to sustain local damage.	• *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1.
19	Structural Systems	Corrosion has occurred to the Rooftop structure supporting the air-conditioning ducking.	The corrosion identified on the Rooftop air-conditioning ducking is attributable to a failure to comply with the Building Code section referenced in column 5. This requires structures to perform adequately under reasonably expected design actions, withstand repeated design actions and be designed to sustain local damage.	• *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1.
20	Structural Systems	Segregation and honeycombing was observed in concrete slabs in the Building A Fire Stairwell, resulting from improper vibration and compacting.	The segregation and honeycombing observed in the Building A Fire Stairwell is attributable to a failure to comply with the Australian Standard sections referenced in column 5. These require concrete to be handled, placed and compacted so	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
		This was a systemic defect throughout the stairwell in Building A.	as to limit segregation or loss of materials. Hardened concrete must also not be segregated or honeycombed.	items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
21	Structural Systems	Segregation and honeycombing was observed in concrete slabs in the Building B Fire Stairwell, resulting from improper vibration and compacting. This was a systemic defect throughout the stairwell in Building B.	The segregation and honeycombing observed in the Building B Fire Stairwell is attributable to a failure to comply with the Australian Standard sections referenced in column 5. These require concrete to be handled, placed and compacted so as to limit segregation or loss of materials. Hardened concrete must also not be segregated or honeycombed.	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
22	Structural Systems	Uncontrolled cracking was observed in the concrete column in Carpark Level 4.	The uncontrolled cracking observed in the concrete column is attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance, durability and performance are not	• *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			compromised and that concrete is reinforced and prestressed.	provision B1.4 - Determination of structural resistance of materials and forms of construction.
23	Structural Systems	Areas of segregation and honeycombing were observed at the concrete column at Carpark Level P4, Visitors Parking. This is a result of improper vibration and compaction.	The honeycombing and segregation observed in the concrete column are attributable to a failure to comply with the Australian Standard sections referenced in column 5. These require concrete to be handled, placed and compacted so as to limit segregation or loss of materials. Hardened concrete must also not be segregated or honeycombed.	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
24	Structural Systems	Uncontrolled cracking and damaged and chipped concrete were observed in the concrete beam on Carpark Level P5 at the Storage Cages.	The uncontrolled cracking and damaged concrete are attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance, durability and performance are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
25	Structural Systems	Exposed reinforcement bar was observed in the concrete pile on Level P6 of the Carpark.	The exposed reinforcement bar is attributable to a failure to comply with the Australian Standard	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			sections referenced in column 5. These require embedded items in concrete to be protected from corrosion and deterioration and handled, placed and compacted to produce a monolithic mass.	Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
26	Structural Systems	Uncontrolled cracking was observed in the concrete pile on Level P6 of the Carpark.	The uncontrollable cracking is attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance, durability and performance are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
27	Structural Systems	Uncontrolled cracking was observed in the concrete slab on Level P7 of the Carpark.	The uncontrollable cracking is attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance, durability and performance are not compromised	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			and that concrete is reinforced and prestressed.	structural resistance of materials and forms of construction.
28	Structural Systems	Uncontrolled cracking was observed in the underside/soffit of the concrete slab on Level P7 of the Carpark.	The uncontrolled cracking is attributable to a failure to comply with the Australian Standard and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance, durability and performance are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
29	Structural Systems	Honeycombing was observed in the concrete slab adjacent to the pile on Level P7 of the Carpark.	The honeycombing observed in the concrete installation is attributable to a failure to comply with the Australian Standard sections referenced in column 5. These require concrete to be handled, placed and compacted so as to limit segregation or loss of materials. Hardened concrete must also not be segregated or honeycombed.	• *Australian Standard AS3600* Concrete Structures Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover, Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete and Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete.
30	Structural Systems	Uncontrolled cracking was observed in the concrete pile on Level P9 of the Carpark.	The uncontrolled cracking is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			column 5. These require general cracking on concrete structures to be controlled so that structural durability and performance are not compromised and that concrete is reinforced and prestressed.	serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
31	Structural Systems	Uncontrolled cracking was observed in the concrete slab on Level P10 of the Carpark.	The uncontrolled cracking is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural durability and performance are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600*-2009 Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3, Cracking; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
32	Structural Systems	An exposed reinforcement bar was observed in the concrete pile on Level P10 of the Carpark.	The exposed reinforcement bar is attributable to a failure to comply with the Australian Standards referenced in column 5. These require covers for reinforcing steel and tendons, and to protect against corrosion, and concrete handling requirements that include the rejection of hardened concrete.	• *Australian Standard 3600* Concrete structures**,** Section 4 – Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover**,** Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete, Section 17 - Materials and construction requirements,17.1.3 Handling,

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				placing and compacting of concrete.
33	Structural Systems	Corrosion was observed in the supporting structure of the garage door at the Carpark Entry.	The corrosion is attributable to a failure to comply with the Building Code section referenced in column 5. This requires structural reliability for buildings and structures.	• *BCA Volume One*, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1.
34	Structural Systems	Uncontrolled cracking was observed in the concrete planter wall in the Planter Box at the Southeast Portion of the site.	The uncontrolled cracking is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance and durability are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
35	Structural Systems	Uncontrolled cracking was observed in the concrete planter wall in the Planter Box at the Southeast Portion of the site.	The uncontrolled cracking is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in column 5. These require general cracking on concrete structures to be controlled so that structural performance and durability are not compromised and that concrete is reinforced and prestressed.	• *Australian Standard 3600-2009* Concrete structures, Section 2 Design procedures, actions and loads, 2.3, Design for serviceability, 2.3.3; and • *BCA Volume One*, Section B Structure, Deemed-to-Satisfy provision B1.4 - Determination of structural resistance of materials and forms of construction.
36	This item was removed			
37	Structural Systems	Significant lateral deflection was observed in the balustrade in the Southeast External Common Area when pushed by hand.	The significant lateral deflection is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in column 5. These require balustrades	• Australian Standard 1170.1 Structural design actions. AS1170, Section 3 Imposed actions, 3.6; and

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			to be designed so that they can sustain imposed actions and provide resistance.	• *BCA Volume One,* Part B Structural Provisions, Deemed-to-Satisfy provision B1.1 – Resistance to actions, B1.2 Determination of individual actions.
38	Building Enclosure	Corrosion in the roof hardware on the rooftop was observed.	The corrosion in the roof hardware on the rooftop indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires every part of buildings to be constructed in an appropriate manner and be fit for purpose.	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.
39	Building Enclosure	Corrosion (i.e. primarily pitting) in the roof sheeting on the rooftop was observed.	The corrosion in the roof hardware indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires every part of buildings to be constructed in an appropriate manner and be fit for purpose.	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials**.**
40	Building Enclosure	Corrosion in the wall cladding fixings in the External Area was observed.	The corrosion in the wall cladding fixings indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials**.**

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			5. This requires every part of buildings to be constructed in an appropriate manner and be fit for purpose	
41	Building Enclosure	Corrosion in the base of the corner wall in the External Area was observed.	The corrosion in the base of the corner wall indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires every part of buildings to be constructed in an appropriate manner and be fit for purpose	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials**.**
42	This item was removed			
43	Building Essential Services	Corrosion in the pump components in the enclosed Plant Room on the Rooftop was observed.	The corrosion in the pump components indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires every part of buildings to be constructed in an appropriate manner and be fit for purpose.	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.
44	Building Essential Services	Corrosion was observed in the Rooftop metal fixings, brackets and other components.	The corrosion observed indicates that the materials used are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
			requires that every part of a building to be constructed in an appropriate manner and be fit for purpose.	
45	Building Essential Services	Corrosion in the external vent duct components was observed on the Rooftop.	The corrosion observed in the external vent duct components indicates that the materials are not fit for the aggressive coastal environment the building is exposed to. This is attributable to a failure to comply with the Building Code section referenced in column 5. This requires that every part of a building to be constructed in an appropriate manner and be fit for purpose.	• *BCA Volume One*, Part A2 Acceptance of Design and Construction A2.1 Suitability of Materials.
46	Building Essential Services	The landing buttons in the Lift landings are located within 500mm of an internal corner.	The inadequate installation of the lift landing buttons less than 500mm from an internal corner is attributable to a failure to comply with the Australian Standards and Building Code sections referenced in column 5. These require that lift landing control bottoms shall not be closer than 500mm from any internal corner of fixed obstruction.	• *Australian Standard 1735.12* Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities, Section 7 Control Buttons, 7.1 Provision at Landings and 7.3.3 At lift landings; and • *BCA Volume One,* Section D Access and Egress, Section D3.3 Parts of a Building to be accessible, Part E3 Lift Installations.
47	This item was removed			•

4. I am of the view the periods above for Defect 1 through to Defect 47 are reasonable periods for compliance in all the circumstances for the specified actions required by the Order to be carried out. I have formed this belief balancing the risks that the serious defects pose against the period of time it will take to carry out the specified actions.

5. Considering the potential consequences as outlined in my reasons and the order, I give greater weight to the seriousness of the defect and failure to adhere to the Building Code of Australia, Australian Standards & the approved plans and the benefits arising from remediating the defects and I find that it is appropriate, in the exercise of my discretion, to make the building work rectification order to carry out the building work described above within the specified period.

6. I have considered all of the circumstances. I accept that the Order requires considerable further building 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 in having the development constructed to the Building Code of Australia and Australian Standards.

Other matters considered relevant

7. I am aware that obtaining reports from third parties will pose time constraints and costs on the developer and the impact on the period of time it will take to give effect to the rectification work. However, I balance this risk against the serious defects outlined in this Order and the serious consequences these serious defects pose.

8. I am aware that there are residents occupying this location as the Building is completed which will delay rectification work.

Consideration of written representations

9. I have, as decision maker, considered written representations pursuant to section 47 of the Act. On 25 May 2023, a notice of intention to issue a building work rectification order, including a draft copy of the Order, was served on the Developer, Local Council, Office of the Registrar General, and Certifier. The served parties were invited to provide written representations relating to the Order to the Department by 15 June 2023.

10. Written representations were received from KRED Pty Ltd on 15 June 2023. Submissions provided allowed the closure of certain defects included in the draft order so that they have not been included in the finalisation of this order.

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

11. I have considered all of the circumstances. I accept that the order requires considerable further 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 in having the development constructed to the Building Code of Australia and Australian Standards with respect to building elements.

12. Considering these potential consequences as outlined in this order, I give greater weight to the seriousness of the defects and failure to adhere to the Australian Standards and Building Code of Australia, and the benefits arising from remediating them and I find that it is appropriate, in the

exercise of my discretion, to require KRED Pty Ltd (ACN 145 344 403) to carry out the building work described, within the period specified in the above Order.

13. I have considered and 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 at the development in having the building constructed to the Building Code of Australia and Australian Standards. Considering the potential consequences as outlined in my reasons and the order, I give greater weight to the seriousness of the defect and failure to adhere to the Building Code of Australia, Australian Standards and the benefits arising from remediating the defects and I find that it is appropriate, in the exercise of my discretion, to make the building work rectification order to carry out the building work described above within the specified period

Notes about this Order

- **A person is not required to obtain consent or approval under the *Environmental Planning and Assessment Act 1979* to carry out work in compliance with a requirement of a Building Work Rectification Order.**

- **It is an offence to fail to comply with this Order. The maximum penalty for a company is 3,000 penalty units and in addition, for every day the offence continues, 300 penalty units. For and individual the maximum penalty is 1,000 penalty units and in addition, for every day the offence continues, 100 penalty units.**

- **You may appeal to the Land and Environment Court against this Order within 30 days after this Order is given, unless the Land and Environment Court grants leave for it to be made after that time. Lodging an appeal does not operate to stop the effect of this Order unless ordered by the Court.**

- **You are entitled to be given reasons for this Order, unless it has been given in an emergency. The reasons have been included within this Order and are not provided separately.**

- **The Secretary has given the following persons notice of the making of this building work rectification order:**

    - **the relevant local council,**

    - **if the local council is not the certifier in relation to the building work—the principal certifier,**

    - **if you are not the owner of the land concerned—the owner of the land concerned,**

    - **if the order relates to a strata building—the relevant owners corporation,**

    - **any other person prescribed by the regulations.**

- **This Order specifies a time by which, or period within which, the order must be complied with. This Order continues to have effect until it is complied with even though the time has passed, or the period has expired, unless any requirement under this Order is revoked.**

- **Annexure 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) Act 2017) in contravention of that Act.

building element, as defined in the *Design and Building Practitioners Act 2020* (NSW), 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.

(2) The regulations may exclude things from being building elements for the purposes of this Act.

(3) In this section—

above grade wall means a wall above the level of the ground surrounding a building.

below grade wall means a wall below the level of the ground surrounding a building.

building enclosure means the part of the building that physically separates the interior environment of the building from the exterior environment, including roof systems, above grade and below grade walls (including windows and doors).

a **developer**, in relation to building work, means any of the following persons, but does not include any person excluded from this definition by the regulations—

(a) the person who contracted or arranged for, or facilitated or otherwise caused, (whether directly or indirectly) the building work to be carried out,

(b) if the building work is the erection or construction of a building or part of a building—the owner of the land on which the building work is carried out at the time the building work is carried out,

(c) the principal contractor for the building work within the meaning of the Environmental Planning and Assessment Act 1979,

(d) in relation to building work for a strata scheme—the developer of the strata scheme within the meaning of the Strata Schemes Management Act 2015,

(e) any other person prescribed by the regulations for the purposes of this definition.

Section 6 - Act applies only to residential apartment building work

(1) The exercise of any function under this Act applies only to building work in respect of a residential apartment building that—

(a) is or was authorised to commence in accordance with a construction certificate or complying development certificate issued under the Environmental Planning and Assessment Act 1979, or is required to be authorised by a construction certificate or complying development certificate, and

(b) has not been completed or has been completed within the period of 10 years before the exercise of that function.

(2) The regulations may provide that a specified provision, or specified provisions, of this Act extend to other classes of buildings (within the meaning of the Building Code of Australia).