

AMENDED COMMERCIAL LIST SECOND CROSS-CLAIM STATEMENT

COURT DETAILS

Court	Supreme Court of New South Wales
Division	Equity
List	Commercial List
Registry	Sydney
Case number	2019/00232749

TITLE OF PROCEEDINGS

First plaintiff	Terry Walter Williamson
Second plaintiff	Helen Therese Williamson
Defendant	Sydney Olympic Park Authority ABN 68 010 941 405

Number of defendants 3

TITLE OF FIRST CROSS-CLAIM

Cross-claimant to the first cross-claim	Sydney Olympic Park Authority ABN 68 010 941 405
First cross-defendant to the first cross-claim	Australian Avenue Developments Pty Ltd ACN 104 573 391

Number of cross-defendants ~~3~~ 4

TITLE OF THIS CROSS-CLAIM

Cross-claimant	Icon Co (NSW) Pty Ltd ACN 604 790 409
Cross-defendant	WSP Structures Pty Ltd ABN 78 006 769 339

FILING DETAILS

Filed for	Cross-claimant
Legal representative	Peter Wood, MinterEllison
Legal representative reference	1238049
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A. NATURE OF DISPUTE

1. On 18 June 2015, the NSW Department of Planning and Environment approved the development of a high-rise mixed residential and commercial development, referred to as the '**Opal Tower Development**' at Sydney Olympic Park, NSW (**Development Consent**).
2. On or about 29 October 2015, Australia Avenue Developments Pty Limited (**AAD**) entered into a contract with Icon Co (NSW) Pty Ltd (**Icon**), whereby Icon agreed to design and construct the Opal Tower Development.
3. On 24 November 2015, Icon and WSP Structures Pty Ltd (**WSP**) entered into an agreement (**Consultancy Agreement**) by which WSP agreed to provide structural and civil engineering design services to Icon for the development of the Opal Tower Development.
4. Icon achieved practical completion as follows:
 - (a) Separable Portion 1 on 22 June 2018;
 - (b) Separable Portion 2 on 2 July 2018; and
 - (c) Separable Portion 3 on 8 August 2018.
5. In late December 2018, damage was observed on levels 4, 10 and 16 of the building. Residents of the building were evacuated following this discovery. Icon has, since this date, and without admission of liability, taken steps (to date, at its own cost) to rectify the damage, and, where necessary, pay owners and residents' costs, where temporary relocation has been necessary in order to complete these works. Theis main rectification work ~~will be~~ was completed in March early 2020.
6. On 26 July 2019, the plaintiffs commenced representative proceedings under Part 10 of the *Civil Procedure Act 2005* (NSW) against Sydney Olympic Park Authority (**SOPA**), alleging that they, and the Group Members, have suffered loss and damage by reason of SOPA's alleged breach of the statutory warranties in the *Home Building Act 1989* (NSW) (**HB Act**).

6A. On 5 May 2021, the plaintiffs filed an Amended Commercial List Statement, joining Icon and WSP as defendants. The plaintiffs have alleged in their Amended Commercial List Statement that they, and the Group Members, have suffered loss and damage by reason of Icon and WSP's alleged:

- (a) breach of the duty to exercise reasonable care to avoid economic loss caused by defects that is imposed upon each of Icon and WSP by s 37(1) of the *Design and Building Practitioners Act 2020 (NSW) (DBP Act)*; and
- (b) misleading or deceptive conduct in contravention of s 18 or s 29 of the Australian Consumer Law.

6B. In its List Response to the plaintiffs' Amended Commercial List Statement, Icon:

- (a) denies that it engaged in misleading or deceptive conduct or that it was negligent;
- (b) says further that WSP was negligent and engaged in misleading or deceptive conduct;
- (c) says further that the necessary condition for the occurrence of the alleged structural damage that occurred on and from 24 December 2018 on levels 4, 10 and 16 of the building was the failure of WSP to design the hobs to ensure that there was:
 - (i) sufficient transverse steel reinforcement across the thickness of the hob so as to resist bursting tension; and
 - (ii) sufficient steel reinforcement so as to control inclined cracking in the hob;
and
- (d) denies that the plaintiffs, or the Group Members, have suffered loss and damage as alleged.

7. SOPA, in turn, in its Amended Cross-Claim List Statement filed on 27 September 2019 (SOPA's **Amended Cross Claim List Statement**) has cross-claimed against Icon, alleging that:

- (a) if SOPA is found to be liable to the plaintiffs or the Group Members, Icon must indemnify SOPA for such liability; and

(b) if the building was, or is, affected by ~~certain~~ the alleged **FC System Defects or Strength Defects** (as defined in SOPA's Amended Cross-Claim Statement),
Icon:

(i) Icon breached the statutory warranties under the HB Act in relation to the lots in the building owned by SOPA (the '**Retained Units**');

(ii) breached the duty to exercise reasonable care to avoid economic loss caused by defects that is imposed upon each of Icon and WSP by s 37(1) of the DBP Act in relation to the Retained Units; and

(iii) engaged in misleading or deceptive conduct in contravention of s 18 or s 29 of the Australian Consumer Law, and

SOPA has suffered loss and damage as a result.

8. Icon repeats its response to SOPA's allegations that are set out in Icon's First Cross-Claim List Response (**Icon First Cross-Claim List Response**) and, in particular, repeats paragraph 58A(a) of such response where Icon pleads that it is not bound by any admission that SOPA has made in its Amended Commercial List Response. On 8 November 2019, Icon filed its Commercial List Response to SOPA's Cross-Claim List Statement (**Icon List Response**).
9. In this Amended Commercial List Second Cross-Claim Statement, Icon alleges that to the extent that SOPA has suffered a loss (which Icon denies), that is a consequence of WSP's breach of the Consultancy Agreement and because WSP contravened s 18 of the Australian Consumer Law set out in Schedule 2 to the *Competition and Consumer Act 2010* (Cth) (**Australian Consumer Law**). The damage referred to above was caused by shortcomings in the design that WSP either prepared or approved. Icon says that its construction works did not causally contribute to that damage, or the extent of it.
10. Icon also alleges that WSP has caused Icon to suffer further losses by reason of its breach of the Consultancy Agreement and its contravention of s 18 of the Australian Consumer Law.
11. In the Fifth Cross-Claim List Statement filed on 27 April 2020 (**AAD/ECOVE's Cross Claim List Statement**):

- (a) AAD alleges, amongst other things, that Icon is liable to AAD under the Head Contract in respect of any liability that AAD is found to have to SOPA; and
 - (b) Ecove Group Pty Ltd (**Ecove**) alleges that Icon is liable to it in negligence.
12. Icon repeats its response to AAD and Ecove's allegations that is set out in Icon's List Response to AAD/Ecove's Cross Claim List Statement.

B. ISSUES LIKELY TO ARISE

1. The extent, and cause, of any damage that has been observed in the building.
2. Did WSP breach the Consultancy Agreement, causing Icon loss and damage (such loss or damage including Icon's potential liability to the plaintiffs (and Group Members), SOPA, AAD and/or Ecove, as well as other losses)?
3. Did WSP engage in misleading or deceptive conduct in contravention of s 18 of the Australian Consumer Law, causing Icon loss and damage (such loss or damage including Icon's potential liability to the plaintiffs (and Group Members), SOPA, AAD and/or Ecove, as well as other losses)?
4. Is Icon entitled to contribution from WSP pursuant to s 5(1)(c) of the *Law Reform (Miscellaneous Provisions) Act 1946* (NSW)?

C. CROSS-CLAIMANT'S CONTENTIONS

[The use of italics (for instance, '*Services*') denotes the use of a term that is defined in the Consultancy Agreement]

A. BACKGROUND

Parties

1. Icon, the cross-claimant in the Amended Commercial List Second Cross-Claim Statement:
 - (a) is a corporation that can sue and be sued in its corporate name and style;
 - (b) is in the business of providing construction services; and

- (c) is the third cross-defendant to the cross-claim brought against it and others by SOPA;
 - (d) is the third defendant to the claim brought against it and others by the plaintiffs (and Group Members); and
 - (e) is the first cross-defendant to the cross-claim brought against it and others by AAD and Ecove.
2. WSP, the cross-defendant to the Amended Commercial List Second Cross-Claim Statement:
- (a) is a corporation that can sue and be sued in its corporate name and style; ~~and~~
 - (b) is in the business of providing expert structural engineering services and represents itself as a leading provider of such services;
 - (c) is the fourth defendant to the claim brought against it and others by the plaintiffs (and Group Members);
 - (d) is the fourth cross-defendant to the cross-claim brought against it and others by SOPA; and
 - (e) is the first cross-defendant to the cross-claim brought against it by Evolution Precast Systems Pty Ltd (**Evolution**).

Consultancy Agreement between Icon and WSP

3. On or about 29 October 2015, AAD entered into a contract with Icon (**Head Contract**), whereby Icon agreed to design and construct the Opal Tower Development, which included the residential building known as the Opal Tower (**Building**).
4. The Head Contract is comprised of:
- (a) the formal instrument of agreement;
 - (b) the general conditions of contract and annexures thereto;
 - (c) the Project Delivery Agreement (redacted);
 - (d) development consent;

- (e) schedule of rates; and
 - (f) AAD's project requirements (**PPR**).
5. On 24 November 2015, Icon and WSP entered into the Consultancy Agreement by which WSP agreed to provide structural and civil engineering design and associated services in relation to the design of the structural elements (excluding external and landscaping works) of the Opal Tower Development.
 6. The Consultancy Agreement is comprised of:
 - (a) the formal instrument of agreement (executed on 24 November 2015);
 - (b) the general conditions of contract being AS4904-2009 Consultant Agreement – Design and Construct as amended and annexed to the formal instrument of agreement (**General Conditions**); and
 - (c) any further documents annexed to or incorporated by reference into the Consultancy Agreement.
 7. By clause 2.1 of the General Conditions, WSP was required to carry out and complete the *Services* in accordance with the Consultancy Agreement and *directions* authorised by the Consultancy Agreement and otherwise comply with its obligations under the Consultancy Agreement.

Particulars

The '*Services*', as defined in clause 1 of the Consultancy Agreement, means 'the services in Annexure Part B which the *Consultant* is or may be required to carry out and complete as part of the project in accordance with the *Contract*, including *variations*, and any other services not so described if that other service ... (a) should reasonably have been anticipated by an experienced and competent consultant as being necessary for carrying out the *Services*'.

8. The *Services* that WSP was required to carry out were set out in the definition of *Services* in the General Conditions and Annexure Part B of the General Conditions and included structural and civil engineering services in relation to:
 - (a) schematic design;

- (b) design development;
- (c) the construction documentation phase of the works that Icon was required to carry out under the Head Contract; and
- (d) the construction phase of the works that Icon was required to carry out under the Head Contract.

Particulars

Annexure Part B of the General Conditions

9. The scope of structural engineering services provided by WSP prior to the commencement of construction of the Building included:
- (a) reviewing information (including in relation to geotechnical matters, easements, site survey, land title information and wind reports);
 - (b) reviewing preliminary architectural drawings to consider viability of structural options (including column grids and core layout);
 - (c) providing sketches of structural solutions for incorporation in architectural drawings;
 - (d) providing sketches of the proposed basement solution;
 - (e) completing sketch design of thickness and reo rates (including column layout);
 - (f) attending design meetings;
 - (g) providing a design certificate;
 - (h) undertaking a lateral analysis of the structure to confirm structural columns, wall sizes and locations/extents;
 - (i) providing CAD drawings of the agreed scheme;
 - (j) progressing the design in conjunction with the architect and services engineers to produce a set of coordinated structural documents; and
 - (k) preparing documents for trade pricing.

10. The scope of structural and civil engineering services provided by WSP during the construction of the Building included:
- (a) attending design meetings;
 - (b) providing general arrangement CAD documents of all post-tensioned and reinforced concrete or structural steel elements;
 - (c) providing detailed design and documentation for all structural elements including design of high level foundations and pile caps, pile loads, columns, core and shear walls, load bearing masonry, stairs, structural steelwork excluding metalwork and façade, slabs on grade, general arrangements of suspended slabs, concrete specification, steel specification and reinforcement specification;
 - (d) liaising with consultants for the coordination of built elements and services;
 - (e) developing a performance brief for shoring and piling;
 - (f) providing a typical design of precast elements;
 - (g) providing design certification;
 - (h) if required, generating a performance brief for ground anchor systems;
 - (i) providing an erosion and sediment control plan;
 - (j) undertaking periodic inspections to observe accordance with the design intent;
 - (k) checking the shop drawings including in relation to the use of precast and structural steel;
 - (l) answering builders' requests for information; and
 - (m) providing final certification.

Particulars

The matters in sub-paragraphs (a)-(m) above are set out in Annexure Part B of the General Conditions

Warranties provided by WSP under the Consultancy Agreement

11. By clause 2.2 of the General Conditions, and having regard to the definition of *Consultant's Warranties* in clause 1 of the General Conditions, WSP warranted, amongst other things, that it:
- (a) at all times shall be suitably qualified and experienced, and shall exercise due skill, care and diligence in carrying out and completing the *Services*;
 - (b) has examined the *Client's* [i.e. Icon's] *project requirements* (which are described in the documents referred to in Item 9 of Annexure Part A of the General Conditions) and exercising the due skill, care and diligence referred to in paragraph 11(a) above, warrants that the *Services* are suitable, appropriate and adequate for the purposes stated in the *Client's* [i.e. Icon's] *project requirements*;
 - (c) will ensure that *design obligations*, when carried out, shall meet the *Client's* [i.e. Icon's] *project requirements*;
 - (d) shall perform the *Services* and the *Consultant's* [i.e. WSP's] *design obligations* (meaning all those tasks necessary to design and specify the part of the project the subject of the *Services*) to that standard of care and skill to be expected of a consultant who regularly acts in the capacity in which WSP is engaged and who possesses the knowledge, skill and expertise of a consultant qualified to act in that capacity and in that industry;
 - (e) will ensure that the *Services* to be provided by WSP will be fit for their intended purpose (including ensuring the *Services* are adequate and suitable for the purposes for which they are required); and
 - (f) has carefully examined the *Client's* [i.e. Icon's] *project requirements* for the purposes of performing the *Services* and there are no discrepancies in the *Client's* [i.e. Icon's] *project requirements*.
12. By clause 3A of the General Conditions, WSP was required to perform the *Services* with recognised methods and standards of professional practice.
13. By clause 5.9 of the General Conditions, WSP covenanted that as part of the *Consultant's* [i.e. WSP's] *design obligations*, it would:

- (a) ensure that the *design documents* (including any *design documents* which were not produced by WSP) satisfy the *Client's* [i.e. Icon's] *project requirements*, all *legislative requirements* and any requirements of an *Authority*;
 - (b) ensure that the *design documents* contain sufficient detail to construct to and, when completed, satisfy the *Consultant's* [i.e. WSP's] *warranties* in subclause 2.2 of the General Conditions;
 - (c) ensure that the details contained in any *design documents* prepared by WSP are co-ordinated with the details contained in all other *design documents*;
 - (d) complete the *Services* consistently with the Consultancy Agreement; and
 - (e) ensure that the *design documents* shall be structurally and aesthetically sound.
14. By clause 5.15 of the General Conditions, WSP agreed that it would, if required by Icon:
- (a) prepare plans and specifications based on the principles of design described in the *Project Delivery Agreement*, the *Development Consent* and *SOPA Guidelines* and otherwise in accordance with the Consultancy Agreement into plans and specifications suitable for inclusion in an *Application* for a *Construction Certificate* and to a level of detail required by the *Consent Authority*; and
 - (b) prepare a consolidated set of those plans and specifications and have them marked for identification by Icon and WSP as the 'Approved Plans and Specifications'.
15. By clause 5.22 of the General Conditions, WSP agreed, at its own cost, to:
- (a) comply with:
 - (i) all the conditions of the *Development Consent* (except those expressly specified to be satisfied by AAD) (which development consent required that all aspects of the building design comply with the applicable performance requirements of the Building Code of Australia (**BCA**) (now incorporated into the National Construction Code));

- (ii) all *Other Approvals* and all legislative requirements in connection with the carrying out of the *Project*; and
 - (b) promptly notify Icon if it:
 - (i) is in breach of any obligation under the Consultancy Agreement; or
 - (ii) becomes aware of any dispute in relation to the Consultancy Agreement or the performance of its obligations under the Consultancy Agreement.
16. By clause 5.22 of the General Conditions, WSP was required to provide all necessary documentation and assistance requested by Icon to enable Icon to satisfy any conditions of the *Development Consent* (which development consent required that all aspects of the building design comply with the applicable performance requirements of the BCA).
17. By clause 42 of the General Conditions, and without limiting its obligations under the Consultancy Agreement, WSP agreed to provide to Icon a 'design certificate' (in the form set out in Annexure Part I of the General Conditions) which certifies that (to the extent applicable) all design carried out complies with:
- (a) all legislative requirements (including work and health safety legislation);
 - (b) the requirements of the PPR; and
 - (c) the requirements of the *Client's* [i.e. Icon's] *project requirements*.
18. In addition to its certification obligations arising from clause 42 of the General Conditions, WSP was also required, as part of the *Services* to be provided during the construction phase, to provide final certification.

Particulars

Annexure Part B of the General Conditions

19. It is an implied term of the Consultancy Agreement, which term is necessary to give business efficacy to the Consultancy Agreement, that:

- (a) where WSP becomes aware that a design certificate that it provided in accordance with clause 42 was issued erroneously because the design it carried out did not comply with the matters referred to in paragraphs 17(a)-(c) above; or
 - (b) where WSP becomes aware that it erroneously issued a final certificate,
- and, as a consequence, WSP subsequently:
- (c) amends its design to ensure the design, as amended, complies with the matters in paragraphs 17(a)-(c) above; or
 - (d) undertakes additional design work, which design work will need to be constructed,

WSP is required to provide Icon with:

- (e) a further design certificate (in the form set out in Annexure Part I of the General Conditions) in respect of any further design work that it performs; and
- (f) an addendum to the final certificate following the completion of any additional construction work.

Indemnities provided by WSP under the Consultancy Agreement

- 20. By clause 9.1 of the General Conditions, WSP agreed that it would indemnify Icon against claims for loss of, or damage to, any property arising out of or as a consequence of a breach of any warranty given in subclause 2.2 of the General Conditions in carrying out of the *Services*, but such indemnity shall be reduced proportionally to the extent that the act or omission of Icon or its consultants, agents or contractors (not being employed by WSP) may have contributed to the loss or damage.
- 21. By clause 32 of the General Conditions, and subject to various limitations contained therein, WSP agreed that to the extent permitted by law, and without limiting any other indemnity provided under the Consultancy Agreement, WSP will indemnify Icon, and will keep Icon indemnified, against all:
 - (a) *Claims*, meaning any claim, action, demand, proceeding or suit for, amongst other things, *Compensation*, whether arising under the Consultancy Agreement

or otherwise at law or in equity including under statute, in tort (including negligence) and for restitution;

- (b) *Loss*, which includes any loss, cost, expense, damage or liability (including any fine or penalty) whether direct, indirect or consequential (including revenue loss and pure economic loss) present or future, fixed or unascertained, actual or contingent and whether arising under contract, in equity or under statute or otherwise (including restitution); and
 - (c) damage, cost or expense.
22. If, as pleaded in paragraph 26 below, it be found that on a proper construction of the HB Act, the design *Services* that WSP provided pursuant to the Consultancy Agreement constituted 'residential building work':
- (a) the statutory warranties in s 18B of the HB Act were, by reason of s 18B(2) of the HB Act, implied into the Consultancy Agreement; and
 - (b) any provision in the Consultancy Agreement, including any provision in clause 32 of the General Conditions, that sought to limit WSP's liability to Icon arising from WSP's design of dwellings will be void by reason of s 18G of the HB Act.

B. SERVICES PROVIDED BY WSP

23. Under the Consultancy Agreement, WSP was engaged to provide design *Services* in respect of the Opal Tower Development.
24. Under the Consultancy Agreement, WSP was required to provide design *Services* in four phases as set out in Annexure Part B of the General Conditions.
25. WSP provided design *Services* pursuant to, or governed by, the Consultancy Agreement during the period:
- (a) 24 November 2015 to 8 August 2018, during which time WSP issued multiple versions of the structural design drawings and a number of design certificates;
 - (b) 24 December 2018 to early January 2019, during which time WSP assisted in the inspection and investigation of the Building and provided advice in relation to structural propping and grouting works;

- (c) early January 2019 to 9 April 2019, during which time WSP prepared a design to rectify the damage on levels 4, 10 and 16 of the Building; and
 - (d) commencing on 6 May 2019, during which time WSP inspected the rectification works and provided site inspection reports.
26. If it be found, on a proper construction of the HB Act, that the design Services that WSP provided pursuant to the Consultancy Agreement constituted 'residential building work' (because it was 'work involved ... in the construction of a dwelling' within the meaning of cl 2(1) of Schedule 1 to the HB Act) (which is alleged against Icon, but which it denies) then in such circumstances only:
- (a) the statutory warranties in s 18B of the HB Act were, by reason of s 18B(2) of the HB Act, implied into the Consultancy Agreement to the extent that such agreement required WSP to design 'dwellings' as that expression is defined in cl 3(1) of Schedule 1 to the HB Act; and
 - (b) any provision in the Consultancy Agreement that sought to limit WSP's liability to Icon arising from WSP's design of dwellings would be void by reason of s 18G of the HB Act.

C. WSP'S DESIGN OF THE HOB-BEAM

27. Icon refers to and repeats paragraph 36(c) of SOPA's Amended Cross-Claim List Statement and paragraphs 36(b)(ii) to (iv) of the List Response in relation to the design of the Building.
28. WSP's design of the Building included a hob ~~beam~~ in the common property area of the Building at external areas at levels 4, 10 and 16 with either a precast panel (or panels) or in-situ wall installed on top of the hob ~~beam~~ to form a wall.
29. WSP's design at each of the relevant locations on levels 4, 10 and 16 of the Building was as follows:
- (a) on level 4, a hob ~~beam~~ and precast panel:
 - (i) outside Apartment 404 on elevation 1 at grid reference 4B-0.5 (above columns C2 and C22) (**Level 4, 4B-0.5**);

- (ii) outside Apartment 412 on elevation 9 at grid reference 4A-10.5 (above columns C16 and C34) (**Level 4, 4A-10.5**); and
 - (iii) outside Apartment 408 on elevation 6 at grid reference 4C-5.5 (above columns C9 to C40) (**Level 4, 4C-5.5**);
- (b) on level 10, a hob-beam and precast panel:
- (i) outside Apartment 1005 on elevation 12 at grid reference 10C-14.5 (above columns C21 and C38) (**Level 10, 10C-14.5**);
 - (ii) outside Apartment 1001 on elevation 8 at grid reference 10B-9.5 (above columns C14 and C32) (**Level 10, 10B-9.5**); and
 - (iii) outside Apartment 1009 on elevation 4 at grid reference 10A-4.5 (above columns C7 and C26) (**Level 10, 10A-4.5**); and
- (c) on level 16, a hob-beam and precast panel:
- (i) outside Apartment 1604 on elevation 1 at grid reference 16B-0.5 (above columns C2 and C22) (**Level 16, 16B-0.5**);
 - (ii) outside Apartment 1612 on elevation 9 at grid reference 16A-10.5 (above columns C16 and C34) (**Level 16, 16A-10.5**); and
 - (iii) outside Apartment 1608 on elevation 6 at grid reference 16C-5.5 (above columns C9 to C40) (**Level 16, 16C-5.5**).
30. On 29 November 2016, a design change at Level 4, 4C-5.5 to replace a precast panel with an in-situ wall was approved by WSP.

Particulars

Aconex from WSP to Icon dated 29 November 2016 timed 5:03pm (mail no. WSP(SA)-CADV-000734)

31. On 6 December 2016, a design change at Level 16, 16C-5.5 to replace the precast panel with an in-situ wall was approved by WSP.

Particulars

Aconex from WSP to Icon, Dalma Form and Evolution dated 6 December 2016 timed 1:18pm (mail no. WSP(SA)-CADV-000760)

32. WSP's approval of the design changes to incorporate an in-situ wall at Level 4, 4C-5.5 and Level 16, 16C-5.5 was not thereafter administratively incorporated by WSP into any amended for construction drawings (**FC Drawings**).
33. The Building, including levels 4, 10 and 16, was designed by WSP such that:
- (a) the precast panels (which form a precast wall) would be (and were) placed on a load bearing concrete hob ~~beam~~ and, in the case of the in-situ walls at Level 4, 4C-5.5 and Level 16, 16C-5.5, the walls were cast on a load bearing concrete hob ~~beam~~;
 - (b) the precast panels were connected to the hob ~~beam~~ by a grouted joint; and
 - (c) the loads from the wall are transmitted through the hob ~~beam~~ to the columns supporting the hob ~~beam~~.
34. The hob ~~beam~~ carries load induced by the precast panels above the hob ~~beam~~ through grout that is placed between the precast panel and the hob ~~beam~~. This load is concentrated over a bearing area above the supporting columns and is transmitted to the columns below the hob ~~beam~~ by compressive struts.
35. Where the width of the grout bed is less than the width of the hob ~~beam~~, as was the case with the hob ~~beam~~ designed by WSP:
- (a) the compressive stress trajectories in the hob ~~beam~~ become inclined; and
 - (b) a transverse tensile force develops in the hob ~~beam~~, otherwise known as a bursting or splitting tension.

WSP's Concrete Strength Design

36. In relation to the concrete strength of the hob ~~beam~~, WSP's FC Drawings:
- (a) depicted the hob ~~beam~~ as cast as part of the floor element in that it was monolithically connected to the slab;

Particulars

Drawings No. 4419 S09.220[C], S09.204[A] and S09.260[B]

- (b) specified a concrete strength of 40 MPa for the floor elements unless noted otherwise;

Particulars

Drawings No. 4419 S00.003[A] (see Note C9), S09.200[C], S09.210[A], S09.220[C], S09.230[A], S09.240[A], S09.250[B], S09.260[B], S09.270[A], S09.275[A], S09.276[A], S09.280[A], S09.290[A], S09.300[A], S09.310[B], S09.320[D] and S09.330[A]

- (c) did not expressly specify any different or specific concrete strength for the hob beam; and

Particulars

Drawings No. 4419 S00.003[A], S04.003[H], S04.005[H], S04.007[H], S06.002[A], S06.010[A], S06.011[C] (see Panel Type H) and S09.240[A]

- (d) specified a concrete strength of 65 MPa for specific areas shown on the drawings above the columns only (and not to the full hob-beam footprint and not at any height in the hob-beam) which were to be puddle poured (the hob beam not being puddled poured).

37. In the premises, as WSP's drawings did not specify a different concrete grade for the hobs-beams, and as WSP designed the hob beam as part of the slab (which is a floor element), WSP specified a concrete strength for the hobs-beams of 40 MPa.
38. Notwithstanding that the specified concrete strength for the hobs-beams was 40 MPa, the hobs-beams were constructed by Icon with concrete which achieved a concrete strength of at least 65 MPa.

WSP's Grouting Design Change

39. On 16 September 2016, WSP issued FC Drawing No. 4419 S06.010[A] 'Typical Precast Wall Details' which specified the use of a 20mm grout bed in the joint between the precast panel and the hob where the precast panels were less than 180mm thick ~~showed full grout coverage between the precast panel and the hob beam.~~

39A. As at 16 September 2016, neither Drawing S06.010[A], nor any other design drawing prepared by WSP, specified the use of grouting in the joint between the precast panel and the hob where the precast panels exceeded 180mm in thickness.

40. On or around 21 September 2016, Evolution ~~Precast Systems Pty Ltd~~ (**Evolution**) (which manufactured, supplied and installed the precast panels) issued a drawing to Icon, WSP and others entitled 'Precast Detail Page' DE01 Revision P2 (**Drawing DE01 P2**), which specified design details for:

- (a) ~~hob-beam~~ to precast panel connections;
- (b) precast panel to precast panel connections; and
- (c) precast panel to suspended slab connections,

that were to apply to areas of the Building where other drawings nominated or called up the use of such detail.

Particulars

Aconex from Evolution to Icon, Bates Smart and WSP dated 21 September 2016 timed 2:50am (mail no. EVOPS-SUBADV-000028) including attachments '20-09-2016 ICON - OPAL TOWER precast package level 1 for re-approval.zip', '20-09-2016 MA01 - ELEVATION.dwg' and '20-09-2016 MA01 - LAYOUT.dwg'

41. ~~Drawing DE01 P2 proposed in Detail 1 and Detail 1A, a change to the grouting of the joints between the hob beams and precast panels, such that grouting would be placed on the inner portion of the hob beam only~~ in Drawing DE01 P2 recorded that the joints between the precast panel and the hob were to be grouted on the inner portion of the hob only (**Partial Grouting**).

42. On 26 September 2016, WSP placed a stamp on Drawing DE01 P2 in the following terms (the **Reviewal Stamp**):

<input checked="" type="checkbox"/>	REVIEWED, NO COMMENTS
<input type="checkbox"/>	REVIEW, AMEND AS NOTED

<input type="checkbox"/>	REVISE AND RESUBMIT
<p>THIS DRAWING HAS BEEN CHECKED FOR STRUCTURAL ADEQUACY ONLY IN THE FINAL CONDITION, AND COMPLIANCE WITH THE DESIGN INTENT. OMISSIONS, DIMENSIONS, FIT AND TEMPORARY WORKS ARE SPECIFICALLY EXCLUDED FROM THIS REVIEW. THIS REVIEW DOES NOT RELIEVE THE BUILDER OF RESPONSIBILITY UNDER THE CONTRACT. COMPLIANCE WITH SPECIFIED REQUIREMENTS AND STATUTORY REGULATIONS REMAIN THE RESPONSIBILITY OF THE BUILDER</p>	

43. On 22 September 2016, WSP issued Drawing DE01 P2 with the Reviewal Stamp to Icon.
44. Between 21 September 2016 and 5 July 2017, Evolution issued revisions of Drawing DE01 P2, each revision including Detail 1 and Detail 1A, showing Partial Grouting.
45. On or around 31 October 2016, Evolution issued a further revision titled 'Precast Detail Page' DE01 Revision P5 (**Drawing DE01 P5**) to Icon, WSP and others which included Detail 1 and Detail 1A showing Partial Grouting.
46. On 3 November 2016, WSP placed a Reviewal Stamp on Drawing DE01 P5 with the terms set out in paragraph 42 above.
47. WSP's approval of the design change on this typical precast details sheet drawing for Partial Grouting between the hob-beam and precast panels (**Grouting Design Change**):
- (a) applied as the applicable detail where a hob-beam/precast panel connection was to be constructed throughout the Building; and
 - (b) was not thereafter administratively incorporated by WSP into any amended FC Drawings, including FC Drawing No. 4419 S06.010[A].

WSP's Panel Thickness Design Change

48. On 16 September 2016, WSP issued FC Drawings No. 4419 S06.001[A], S06.002[A], S06.003[A], S06.004[A] and S06.005[A] which specified the thickness of the precast panels, including:

- (a) 200mm for Elevation 1 on Level 4;
- (b) 180mm for Elevation 9 on Level 4;
- (c) 180mm for Elevation 8 on Level 10;
- (d) 180mm for Elevation 12 on Level 10;
- (e) 180mm for Elevation 1 on Level 16;
- (f) 180mm for Elevation 5 on Level 16; and
- (g) 180mm for Elevation 9 on Level 16.

49. WSP approved the following changes to the thickness of the precast panels:

- (a) on or about 14 December 2016, WSP approved a change to the structural design of the precast panels on levels 10, 11, 14, 15, 26 and 27 at elevations 8 and 12 of the Building, which includes the precast panel at Level 10, 10C-14.5 and Level 10, 10B-9.5, for the thickness of those precast panels to be increased to 200mm;

Particulars

Aconex from WSP to Icon dated 14 December 2016 timed 10:06am (mail no. WSP(SA)-CADV-000772) including attachment '16.12.14 - 4419 SK 403 (Change to pre-cast thickness).pdf'

- (b) on or about 10 January 2017, Bates Smart emailed AMA Windows and Icon (copied to WSP) suggesting that the precast panels on grid reference C be consistently 200mm thick all the way between levels 11 and 15, which meant the change to the precast panel thickness extended to the precast panels at grid reference C on levels 12 and 13;

Particulars

Aconex from Bates Smart dated 10 January 2017 timed 5:10pm (mail no. B Smart-CADV-001115)

- (c) on 12 January 2017, WSP placed the Reviewal Stamp, which was in the terms set out in paragraph 42 above, on Evolution Drawings C1212[B] and C1312[B]

for the change to the thickness of the precast panel on levels 12 and 13, as suggested by Bates Smart;

Particulars

Aconex from WSP dated 12 January 2017 timed 4:03pm (mail no. WSP(SA)-CADV-000800)

- (d) on 3 March 2017, Evolution issued correspondence to Icon, Bates Smart and WSP stating that *'Series 09 are now 200 thick all the way to level 26 as per instruction yesterday'*, which includes the precast panel at Level 16, 16A-10.5, and attached shop drawings which specified a precast panel thickness of 200mm for those precast panels;

Particulars

Aconex from Evolution dated 3 March 2017 timed 11:07am (mail no. EVOPS-TRANSMIT-000041) including attachments

- (e) on 15 March 2017, Icon issued to WSP and Bates Smart the shop drawings for elevation 9, showing a precast panel thickness of 200mm for those precast panels, including the precast panel at Level 16, 16A-10.5;

Particulars

Aconex from Icon dated 15 March 2017 timed 11:04am (mail no. NSWIcon-TRANSMIT-000866) including attachments

- (f) on or about 26 May 2017, Icon notified WSP and others of the change to the precast panels on elevation 12 on levels 26 to 34 for the thickness of those precast panels to be increased to 200mm; and

Particulars

Aconex from Icon dated 26 March 2017 timed 4:58pm (mail no. NSWIcon-HCADV-006716) including attachments

- (g) on or about 29 May 2017, WSP approved the change in thickness of the precast panels on elevation 12 on levels 26 to 34 for the thickness of those precast panels to be increased to 200mm,

Particulars

Aconex from Icon dated 29 May 2017 timed 10:19am (mail no. WSP(SA)-CADV-001039) including attachments

(together, the **Precast Panel Thickness Changes**).

50. WSP's approval of the Precast Panel Thickness Changes were not thereafter administratively incorporated by WSP into any amended FC Drawings.

WSP's Electrical Conduit Placement Approval

51. On 21 February 2017, Icon sent correspondence to WSP attaching photographs showing the placement of the electrical conduit within the zone of concrete in the hob ~~beam~~ immediately above column C38.

Particulars

Aconex from Icon to WSP dated 21 February 2017 timed 5:56pm (mail no. NSWIcon-HCADV-0005067) including attachments titled 'L10 P2 Columns.zip' and 'L10 P2 Hobs.zip'

52. On 23 February 2017, WSP replied to Icon's correspondence with site inspection report (**SIR**) number 43, stating that the photo appears to comply with the structural drawings.

Particulars

Aconex from WSP to Icon dated 23 February 2017 timed 11:26am (mail no. WSP(SA)-CADV-000850) including attachment titled '20170223 4419_SIR43_JYH closed out.pdf'

53. Given that WSP did not advise or indicate to Icon that such placement of the electrical conduit within the zone of concrete in the hob ~~beam~~ immediately above column C38 was not in accordance with the design it prepared, Icon continued to construct the Building on the basis that the placement of the electrical conduit was in accordance with WSP's design.

D. WSP'S INSPECTION AND CERTIFICATION

54. During the course of providing the *Services* pursuant to the Consultancy Agreement, WSP:
- (a) provided to Icon the design certificates listed in Attachment A to this Amended Commercial List Second Cross-Claim Statement on the dates set out in that attachment (**Design Certificates**); and
 - (b) carried out periodic site inspections of the construction work (or approved construction work shown in photographs which were issued by Icon to WSP, as in the case of the ~~hob-beam~~ at Level 10, 10C-14.5 as set out in paragraphs 51 and 52 above) on at least 143 occasions.
55. On 15 May 2018, WSP issued a certificate within which it certified, amongst other things, that:
- (a) it was responsible for the design of the structural elements of the building (excluding external and landscaping);
 - (b) its drawings had been checked and they complied with the BCA, the relevant Australian Standards listed in the BCA and specifically AS 3600-2009 Concrete Structures (**AS 3600**); and
 - (c) all reinforced concrete work had been completed in accordance with WSP's design, relevant Australian Standards and the BCA,
- (15 May 2018 Certification).**

Particulars

WSP letter to Nicholas Economos dated 15 May 2018

56. On 5 June 2018, WSP certified that the works had been completed in accordance with the BCA and the PPR.

Particulars

Statement of Compliance in respect of Site 68 Sydney Olympic Park
signed by WSP dated 5 June 2018

57. On 14 June 2018, McKenzie Group Consulting (NSW) Pty Ltd (**McKenzie Group**) issued 'Interim Occupation Certificate No. 18/123378-6' in respect of the Opal Tower Development, excluding public domain and landscaping works.

Particulars

Interim Occupation Certificate No. 18/123378-6 from McKenzie Group to AAD dated 14 June 2018

58. On 14 June 2018, McKenzie Group issued a final occupation certificate, 'Occupation Certificate No. 18/123378-7', in respect of the childcare centre at the Opal Tower Development.

Particulars

Occupation Certificate No. 18/123378-7 from McKenzie Group to AAD dated 14 June 2018

59. On 8 August 2018, McKenzie Group issued a final occupation certificate, 'Occupation Certificate No. 18/123378-8', in respect of the public domain and landscaping works at the Opal Tower Development.

Particulars

Occupation Certificate No. 18/123378-8 from McKenzie Group to AAD dated 8 August 2018

E. DAMAGE OBSERVED IN THE BUILDING

60. On 24 December 2018, damage occurred and was visually identified in the Building in a precast panel and hob-beam at Level 10, 10C-14.5.
61. On 24 December 2018, all residents were evacuated from the Building under the instruction of emergency services.
62. On 25 December 2018, all residents except for residents in 51 apartments were permitted to reoccupy the Building.
63. On 27 December 2018, further damage was identified in a precast panel and hob-beam at Level 4, 4A-10.5.

64. On 27 December 2018, WSP directed all residents to evacuate the Building which process was completed on or about 28 December 2018.

65. The damage identified in the Building on and from 24 December 2018 included the following:

(a) damage on level 4 in the form of:

- (i) spalling and cracking of a hob-beam and a precast panel at Level 4, 4B-0.5; and
- (ii) spalling and cracking of a hob-beam and a precast panel at Level 4, 4A-10.5, noting that this includes the damage referred to in paragraph 63 above,

(Level 4 Damage);

(b) damage on level 10 in the form of:

- (i) spalling and cracking of a hob-beam and a precast panel at Level 10, 10C-14.5, noting that this includes the damage referred to in paragraph 60 above; and
- (ii) vertical displacement and cracking of the slab on level 10 (in the vicinity of the hob-beam and precast panel at Level 10, 10C-14.5),

(Level 10 Damage); and

(c) damage on level 16 in the form of:

- (i) cracking of a precast panel at Level 16, 16B-0.5, above columns C2 and C22;
- (ii) cracking of an in-situ wall at Level 16, 16C-5.5, above columns C9 and C40; and
- (iii) cracking of a precast panel at Level 16, 16A-10.5, above columns C16 and C34,

(Level 16 Damage).

66. The Level 4 Damage, Level 10 Damage and Level 16 Damage is together referred to as the '**Observed Damage**'.
67. On 19 February 2019, a report titled '*Opal Tower Investigation Final Report*' authored by Professors John Carter, Stephen Foster and Mark Hoffman was published which concluded, amongst other things, that:
- (a) in respect of the hob-beam at Level 4, 4A-10.5, '*the site observations of the damaged [hob] beam are consistent with a bursting failure*'; and
 - (b) in respect of the hob-beam at Level 10, 10C-14.5, '*bursting appears to be the dominant mode of failure*' and '*bearing stresses appear to have also been influential in forming the failure surfaces*'.

Particulars

'Opal Tower Investigation Final Report' authored by Professors John Carter, Stephen Foster and Mark Hoffman dated 19 February 2019

68. The damage observed in the precast panel at Level 16, 16A-10.5, precast panel at Level 16, 16B-0.5, in-situ wall at Level 16, 16C-5.5 and in the hob-beam and precast panel at Level 4, 4B-0.5, is consistent with bursting failure.

F. RECTIFICATION DESIGN AND RECTIFICATION WORKS

Rectification Design

69. Following the identification of the damage on 24 December 2018, WSP commenced preparing a design:
- (a) for the installation of propping, as a precautionary measure:
 - (i) under Level 10, 10C-14.5 from level 4 to level 9 to stabilise those areas; and
 - (ii) under Level 4, 4A-10.5 from basement level B3 to level 3 to stabilise those areas,

(Propping Design);
 - (b) for grout injection of additional structural grout:

- (i) in the joints between the ~~hob-beams~~ and precast panels on all locations on levels 4, 10 and 16;
- (ii) into all visible cracks in the precast panel and ~~hob-beam~~ on levels 4, 10 and 16; and

Particulars

WSP Drawing S02.01[7] titled 'Stage A: Stabilisation Typical Details'

- (iii) in the joint between precast panels at the following locations:
 - (A) elevation 1 from levels 5 to 9 and 17 to 25 (inclusive) at grid reference B-0.5;
 - (B) elevation 5 from levels 5 to 9 and 17 to 25 (inclusive) at grid reference C-5.5;
 - (C) elevation 8 from levels 1 to 3 and 11 to 15 (inclusive) at grid reference B-9.5;
 - (D) elevation 9 from levels 16 to 17 at grid reference A-10.5; and
 - (E) elevation 12 from levels 1 to 3 and 11 to 15 (inclusive) at grid reference C-14.5,

(together, **Grouting Works**); and

Particulars

WSP Structural Drawing No S03.01[3] dated 30 August 2019

- (c) to remediate the damage in the Building (**Rectification Design**), which Rectification Design specified the following:
 - (i) ~~hob-beam~~ reinforcement to the internal and/or external face of the ~~hob-beams~~ on levels 4, 10 and 16; and

Particulars

WSP Drawing S02.01[7] titled 'Stage A: Stabilisation Typical Details'

- (ii) wall strengthening works to the precast panels on levels 4, 10 and 16.

Particulars

WSP Drawing S02.01[7] titled 'Stage A: Stabilisation Typical Details'

- 70. By reason of the matters pleaded in paragraphs 16 - 19 above, WSP is obliged to provide a further certificate to Icon certifying that the Rectification Design complies with:
 - (a) all legislative requirements (including work and health safety legislation);
 - (b) the requirements of the PPR; and
 - (c) the requirements of the *Client's* [i.e. Icon's] *project requirements*.
- 71. On 31 December 2018, WSP issued a statement for residents supporting the progressive reoccupation of the majority of units in the Building.

Particulars

WSP's Statement For Residents dated 31 December 2018.

- 72. On 24 January 2019, WSP issued a further statement for residents supporting the progressive reoccupation of units in the Building.

Particulars

WSP's Statement For Residents dated 24 January 2019.

- 73. The progressive reoccupation of the units was also approved by an independent structural engineer engaged by the Owners Corporation, Cardno Limited.
- 74. On 1 February 2019, APS issued remedial design drawings for the slab near Level 10, 10C-14.5.

Particulars

APS Drawing titled J1371-01-01[6] titled 'L10 Slab Strengthening CFRP Layout and Detail Plan'

75. On 5 April 2019, Bates Smart issued remedial design drawings for the façade of the Building.

Particulars

Aconex from Bates Smart to Icon dated 5 April 2019 timed 3:39am (mail no. B Smart-TRANSMIT-000245)

Rectification Works

76. Between 27 December 2018 and 12 January 2019, and in accordance with WSP's Propping Design, Icon installed propping to the locations specified by WSP in the Propping Design and WSP inspected the installation of the propping (**Propping Works**).
77. On and from 12 January 2019, and in accordance with WSP's Grouting Works' design, Icon ~~has~~ carried out the Grouting Works and WSP ~~has~~ progressively inspected the Grouting Works, with such Grouting Works ~~scheduled for completion~~ by March 2020.
78. On 13 March 2019, the NSW Department of Planning and Environment confirmed that the rectification works specified in the Rectification Design could be carried out without further development consent or a modification to the Development Consent.

Particulars

Letter from the NSW Department of Planning and Environment to Ecove Group Pty Ltd dated 13 March 2019.

79. On and from 6 May 2019, Icon ~~has~~ carried out the rectification work specified by WSP in its Rectification Design, Bates Smart and APS in paragraphs 69(c), 74 and 75 above respectively, ~~which, as at the date of the preparation of this Commercial List Second Cross-Claim Statement, is scheduled to be completed by March 2020.~~
80. During the period of the rectification works, WSP carried out progressive site inspections and issued site inspection reports documenting the completion of rectification work as set out in Attachment B.
81. On ~~25 October 2019~~, Icon wrote to WSP to request that WSP 16 December 2019, WSP issued to Icon a certificate certifying that the final structural design drawings it

prepared, which includes the at Rectification Design and Grouting Works specification, compl~~y~~ies with the BCA and the relevant Australian Standards, specifically AS 3600 (Rectification Design Certification);~~;~~ and

Particulars

Email from Norton Rose Fulbright to MinterEllison dated 16 December 2019 at 4:56pm attaching the Rectification Design Certification

- 81A. On 18 March 2020, WSP issued to Icon a certificate dated 13 March 2020 certifying that the rectification work complies with the Rectification Design and Grouting Works specification (Rectification Work Certification).

Particulars

~~Letter from Icon to WSP dated 25 October 2019~~

Email from Norton Rose Fulbright to MinterEllison dated 18 March 2020 at 6:17pm attaching the Rectification Work Certification

82. ~~Not used. On 15 November 2019, WSP responded to Icon's letter dated 25 October 2019 and stated that 'the only reason there has been an impasse on the certificates is because WSP's position to date has been that it would not be issuing any certificates for rectification works unless WSP were specifically engaged to do so by Icon under the PSA' and further requested that Icon clarify, amongst other things, the 'statutory necessity for the provision of the certificates'.~~

Particulars

~~Letter from WSP to Icon dated 15 November 2019~~

83. ~~Not used. On 27 November 2019, Icon's solicitors, MinterEllison, wrote to WSP's solicitors, Norton Rose Fulbright, and stated that:~~
- ~~(a) — WSP's Rectification Design has been prepared and the rectification works have been performed pursuant to the Development Consent; and~~
- ~~(b) — the Rectification Design Certification and Rectification Work Certification is required to comply with:~~
- ~~(i) — the requirements contained in the Development Consent; and~~

~~(ii) — Annexure Part B of the Consultancy Agreement.~~

Particulars

~~Letter from MinterEllison to Norton Rose Fulbright dated 27 November 2019~~

84. Not used. ~~On 29 November 2019, WSP's solicitors, Norton Rose Fulbright, wrote to Icon's solicitors, MinterEllison, and stated that WSP is prepared to provide a form of Rectification Design Certification and Rectification Work Certification.~~

Particulars

~~Letter from Norton Rose Fulbright to MinterEllison dated 29 November 2019 and attachment~~

85. Not used. ~~In taking the steps pleaded in paragraphs 81 and 83 above, Icon has demanded that WSP provide:~~
- ~~(a) — a design certificate certifying the Rectification Design and Grouting Works specification; and~~
 - ~~(b) — an addendum to the final certification,~~
- ~~as required under the Consultancy Agreement by reason of the matters pleaded in paragraph 19 above.~~
86. Not used. ~~As at the date of this Commercial List Second Cross-Claim Statement, WSP has, in breach of its obligations under the Consultancy Agreement pleaded in paragraph 19 above, not provided the Rectification Design Certification.~~
87. Not used. ~~In the circumstances pleaded in paragraph 85 above, Icon is entitled to an order for specific performance requiring WSP to provide the Rectification Design Certification and the Rectification Work Certification, if not provided once the rectification work has been completed.~~

G. THE CAUSE OF THE OBSERVED DAMAGE

AS 3600

88. Various provisions of AS 3600 are relevant to the design, and construction, of the hobs ~~beams~~ and wall panels, as pleaded in paragraphs 89 to 91 below.
89. AS 3600 sets out the minimum requirements for the design and construction of concrete building structures and members containing steel reinforcement or tendons, or both. The hobs ~~beams~~ and precast panels (it being a concrete structure) were required to be reinforced using sufficient steel reinforcement to satisfy the strength and serviceability requirements set out in Section 2 of AS 3600.
90. The steel reinforcement that is required by clauses 2.2 and 2.3 of AS 3600 is required in the hobs ~~beams~~ and precast panels:
- (a) to carry compressive forces;
 - (b) to carry the tensile forces after the concrete cracks;
 - (c) to prevent the propagation of, and to stabilise, any cracking that develops; and
 - (d) to ensure that there is adequate strength following any cracking; and
 - (e) to confine the compressive concrete.
91. By clause 7.2.4 of AS 3600, steel reinforcement was required in relation to the inclined compressive struts in the hobs ~~beams~~ and in the wall panels given that the design transverse concrete tensile stresses were greater than 50% of the characteristic direct tensile strength of the concrete that was used.
92. Clause 7.3 of AS 3600 specifies the arrangement, strength and anchorage of reinforcement in ties (or tension members) in a concrete structure.
93. Clause 12.6 of AS 3600 specifies the measure of design bearing strength of concrete at a bearing surface.

WSP failed to design for bursting stresses

94. In preparing its design of the hob ~~beam~~, WSP failed to consider, contrary to what is required by AS 3600, that the hob ~~beam~~ would experience bursting tension.

95. WSP's design of the hob-beam was not compliant with AS 3600 as that design did not provide:
- (a) sufficient transverse steel reinforcement across the thickness of the hob-beam so as to resist bursting tension; and
 - (b) sufficient steel reinforcement so as to control inclined cracking in the hob beam.
96. WSP's design of the hob-beam failed to comply with AS 3600, as regards the need for sufficient transverse steel reinforcement, whether or not the joint between the hob beam and precast panel was partially grouted or fully grouted.

~~WSP failed to design for bearing stresses~~

97. WSP's design of the hob-beam was not compliant with AS 3600 as the design bearing stresses at the hob-grout-wall interface at levels 4, 10 and 16 exceeded the design bearing strength of:
- (a) the 40MPa concrete specified by WSP for the floor elements (which included the hob-beam); and
 - (b) the 65MPa concrete specified by WSP for the puddle pour areas of the hob beam for the full length of the hob beams on levels 4, 10 and 16.
98. WSP's design of the hob-beam failed to comply with AS 3600, as regards bearing stresses, whether or not the joint between the hob-beam and precast panel was partially grouted or fully grouted.

WSP's design caused the Observed Damage

99. The necessary condition of the occurrence of the Observed Damage, and therefore the cause of the Observed Damage, which led to the evacuation of the residents as set out in paragraphs 61 and 64 above and necessitated the preparation of the Rectification Design and carrying out of the rectification work, was WSP's failure to:
- (a) design the hob-beam to include sufficient steel reinforcement to comply with clauses 2.2, 2.3, 7.2.4, 7.3 and 12.6 of AS 3600; and
 - (b) design the hob-beam to prevent bursting and control cracking in the hob-beam in the area where the tensile forces in the hob-beam created a risk of bursting.

100. Had WSP designed the ~~hobs-beams~~ to contain sufficient steel reinforcement as required by AS 3600 to account for the tensile forces inherent in the design specified and/or approved by WSP and to prevent bursting, the Observed Damage would not have occurred.
101. Although the design bearing stresses exceeded the design bearing strength of the concrete as pleaded in paragraph 97 above, this design defect was not the cause, or a primary cause, of the Observed Damage which led to the evacuation of the residents as set out in paragraphs 61 and 64 above and necessitated the preparation of the Rectification Design and carrying out of the rectification work.

H. DEFECTS ALLEGED BY THE PLAINTIFFS AND SOPA

102. In paragraphs 57 and 58 of the plaintiffs' Amended Commercial List Statement (which are repeated by SOPA in paragraphs 37 and 38 of SOPA's Amended Cross-Claim Statement), it is alleged ~~SOPA alleges~~ that the Building contained certain 'FC System Defects' and certain 'Strength Defects' that are attributable to defects in design.
103. In answer to the allegations in paragraph 57 of the plaintiffs' Amended Commercial List Statement (which is repeated by SOPA in paragraphs 37 of SOPA's Amended Cross-Claim Statement), Icon:
- (a) as to paragraph (a) thereof, repeats the matters pleaded in paragraphs 57(a) and 57(d) of Icon's List Response to the plaintiffs' Amended List Statement;
- (b) as to paragraph (b)(i) thereof, repeats the matters pleaded in paragraph 57(b) of Icon's List Response to the plaintiffs' Amended List Statement;
- (c) as to paragraph subparagraphs (b)(ii)-(iv) thereof, repeats the matters pleaded in paragraph 57(c) of Icon's List Response to the plaintiffs' Amended List Statement.

~~Icon has denied the 'System Defects' alleged in paragraphs 37(a), 37(b)(ii) and 37(b)(iii) of SOPA's Cross-Claim Statement for the reasons set out in paragraphs 37(b), 37(b)(iii), 37(b)(iv) of the List Response respectively and reserves the right to further plead against WSP upon the plaintiffs or SOPA, amending or further or properly particularising the allegations.~~

104. ~~Not used.~~ In relation to the 'System Defect' alleged in:

- (a) ~~paragraph 37(b)(i) of SOPA's Cross-Claim Statement, that the joints between the hob beams and precast walls on elevations 1, 4, 5, 8, 9 and 12 of the Building were not grouted to full width (**Alleged Grouting Defect**), Icon repeats paragraph 37(b)(v) of the List Response and paragraphs 39 to 47 above;~~
- (b) ~~paragraph 37(b)(iv) of SOPA's Cross-Claim Statement, that each of the precast panels in elevations 1, 4, 5, 8, 9 and 12 were manufactured to be at least 20mm thicker than the width specified in the FC Drawings (**Alleged Precast Panel Defect**), Icon repeats paragraph 37(b)(v) of the List Response and paragraphs 48 to 49(b) above; and~~
- (c) ~~paragraph 37(c)(i) of SOPA's Cross-Claim Statement, that the Building was constructed such that an electrical conduit was placed in the zone of concrete immediately above column C38 (**Alleged Electrical Conduit Defect**), Icon repeats paragraph 37(b)(vi) of the List Response and paragraphs 51 to 53 above.~~

105. In relation to the 'Strength Defects' alleged in paragraph 58 of the plaintiffs' Amended Commercial List Statement (which is repeated by paragraph 38 of SOPA's Amended Cross-Claim Statement), Icon refers to and repeats paragraph 38(b) of the List Response and paragraphs 36 to 38 and 97 to 98 above.

I. THE CLAIMS MADE IN THE PROCEEDINGS

106. The plaintiffs have alleged in their Amended Commercial List Statement that they, and the Group Members, have suffered loss and damage by reason of SOPA's breach of the statutory warranties in the HB Act.

107. In its Amended Commercial List Response, SOPA denies:

- (a) that it breached the statutory warranties in the HB Act; and
- (b) that the plaintiff, and the Group Members, have suffered loss and damage as a result of any breach of the statutory warranties in the HB Act.

107A. The plaintiffs have also alleged in their Amended Commercial List Statement that they, and the Group Members, have suffered loss and damage by reason of WSP's and Icon's alleged:

- (a) breach of the duty to exercise reasonable care to avoid economic loss caused by defects that is imposed upon each of WSP and Icon by s 37(1) of the Design and Building Practitioners Act 2020 (NSW); and
- (b) misleading or deceptive conduct in contravention of s 18 or s 29 of the Australian Consumer Law.

107B. In its Commercial List Response, Icon:

- (a) denies that it engaged in misleading or deceptive conduct or that it was negligent;
- (b) says further that WSP was negligent and engaged in misleading or deceptive conduct; and
- (c) denies that the plaintiffs, or the Group Members, have suffered loss and damage as alleged.

108. In SOPA's Amended Cross-Claim Statement, SOPA alleges, insofar as Icon is concerned, that:

- (a) if SOPA is found to be liable to the plaintiffs or the Group Members, Icon must indemnify SOPA for such liability; and
- (b) if the Building was, or is, affected by the alleged FC System Defects or Strength Defects, Icon breached the statutory warranties under the HB Act in relation to the lots in the Building owned by SOPA (the '**Retained Units**') and has suffered loss and damage as a result.

109. Icon repeats its response to SOPA's allegations that are set out in the Icon's First Cross-Claim List Response and, in particular, repeats paragraph 58A(a) of such response where Icon pleads that it is not bound by any admission that SOPA has made in its Amended Commercial List Response.

J. WSP BREACHED THE CONSULTANCY AGREEMENT, CAUSING ICON LOSS AND DAMAGE

110. Not used.

If the Court finds that:

(a) ~~the Level 4 Damage;~~

(b) ~~the Level 10 Damage; and/or~~

(c) ~~the Level 16 Damage;~~

has the consequence that:

(d) ~~SOPA:~~

(i) ~~breached the statutory warranties in the HB Act and is liable in damages to the plaintiffs and the Group Members as a result; and~~

(ii) ~~is entitled to be indemnified by Icon in respect of its liability to the plaintiffs and the Group Members; and~~

(e) ~~Icon breached the statutory warranties in the HB Act in relation to SOPA's Retained Units and is liable to SOPA as a result,~~

~~Icon pleads as follows.~~

111. Not used. ~~Icon repeats the matters pleaded in paragraphs 99 to 101 above.~~

112. ~~In the premises of paragraph 110 above, As pleaded in paragraphs 99 to 101 above each of the:~~

(a) the Level 4 Damage;

(b) the Level 10 Damage; and

(c) the Level 16 Damage,

occurred because of WSP's failure to design the hob ~~beam~~ to include sufficient steel reinforcement to comply with paragraphs 2.2, 2.3, 7.2.4, 7.3 and 12.6 of AS 3600 in its design of the hob ~~beam~~ so as to prevent bursting and control cracking in the concrete

hob-beam component in the area where the tensile forces in the concrete hob component created a risk of bursting.

113. Further, if (contrary to Icon's denials) the Court finds that the Observed Damage was caused or contributed to by any, or any combination, of:

- (a) insufficient concrete strength in the hobs-beams (as pleaded in paragraph 58 of the plaintiffs' Amended Commercial List Statement and paragraph 38 of SOPA's Amended Cross-Claim Statement);
- (b) the joints between the hobs and precast walls on elevations 1, 4, 5, 8, 9 and 12 of the Building not being grouted to full width (as pleaded in paragraph 57(b) of the plaintiffs' Amended List Statement and paragraph 37(b)(i) of SOPA's Amended Cross-Claim Statement) (**Alleged Grouting Defect**); or
- (c) a precast panel at level 10 not being constructed using bottom horizontal reinforcement (as pleaded in paragraph 57(b) of the plaintiffs' Amended List Statement and paragraph 37 of SOPA's Amended Cross-Claim Statement) the Alleged Precast Panel Defect; or
- (d) not used the Alleged Electrical Conduit Defect,

Icon says that:

- (e) insofar as the Observed Damage was caused by insufficient concrete strength, that occurred by reason of WSP's failure to specify in its design an AS 3600 compliant concrete strength;
- (f) insofar as the Observed Damage was caused by the Alleged Grouting Defect, that occurred by reason of Icon constructing the Building in accordance with WSP's Grouting Design Change as set out in paragraphs 39 to 47 above;
- (g) Not used. insofar as the Observed Damage was caused by the Alleged Precast Panel Defect, that occurred by reason of Icon constructing the Building in accordance with WSP's Precast Panel Thickness Changes as set out in paragraphs 48 to 49 above; and
- (h) Not used. insofar as the Observed Damage was caused by the Alleged Electrical Conduit Defect, that occurred by reason of WSP's approval of the

~~placement of the electrical conduit during construction as set out in paragraphs 51 to 53 above.~~

114. In the premises of paragraphs 440, 112 to 113 above, in preparing its design of the Building:
- (a) WSP breached clause 2.2 of the General Conditions by:
 - (i) failing to exercise due skill, care and diligence in carrying out and completing the *Services*;
 - (ii) not ensuring that the *Services* are suitable, appropriate and adequate for the purposes stated in the *Client's* [i.e. Icon's] *project requirements*;
 - (iii) not ensuring that its design obligations, when carried out, meet the *Client's* [i.e. Icon's] *project requirements*;
 - (iv) not performing the *Services* and its design obligations to the standard of care and skill to be expected of a consultant who regularly acts in the capacity in which WSP is engaged and who possesses the knowledge, skill and expertise of a consultant qualified to act in that capacity and in that industry;
 - (v) not ensuring that the *Services* provided by WSP were fit for their intended purpose; and
 - (vi) not ensuring that the design prepared by WSP would be adequate in relation to the design of structural elements such as columns, core and shear walls, load bearing masonry, beams and slabs;
 - (b) WSP breached clause 5.22 of the General Conditions by failing to ensure that its design complied with all the conditions of the *Development Consent*, which development consent required that all aspects of the design of the Building comply with the applicable performance requirements of the BCA;
 - (c) WSP breached clause 5.9 of the General Conditions:
 - (i) by failing to ensure that the *design documents* satisfy the *Client's* [i.e. Icon's] *project requirements*, all *legislative requirements* and any requirements of an *Authority*;

- (ii) by failing to complete the *Services* consistently with the Consultancy Agreement; and
- (iii) by failing to ensure that the work the subject of the *design documents* would be structurally and aesthetically sound; and
- (d) WSP breached the warranties in s 18B(1)(a), (c) and (e) of the HB Act, but only if it be found that WSP's design *Services* constituted 'residential building work' in the circumstances pleaded in paragraph 22 above,

(WSP's Warranty Breaches).

115. ~~Not used. In addition to the WSP's Warranty Breaches, by failing to provide the Rectification Design Certification as pleaded in paragraph 85 above, WSP breached its obligations under the Consultancy Agreement pleaded in paragraph 19 above~~
(WSP's Certification Breach).

Icon is entitled to an indemnity and/or damages in relation to any liability that Icon is found to have to SOPA and, AAD/Ecove and the plaintiffs (and the Group Members)

116. If, which is denied, in the circumstances the Court finds that:

(a) SOPA:

- (i) because of the occurrence of the Observed Damage, breached the statutory warranties in the HB Act viz the plaintiffs (or the Group Members); and
 - (ii) is liable to the plaintiffs (or the Group Members) as a result; and
 - (iii) is entitled to be indemnified by Icon for such liability and that Icon is liable to indemnify SOPA in respect of such liability; and/or
- ~~(a) Icon is liable to indemnify SOPA in respect of any liability that SOPA is found to have to the plaintiffs, or the Group Members; and~~
- (b) Icon is liable to SOPA by reason of Icon's breach of the statutory warranties in the HB Act in relation to SOPA's Retained Units,

the amount of any liability that Icon has to SOPA (**SOPA Liability Damages**) represents, or will represent, part of the loss or damage that Icon has suffered, which has been caused by WSP's Warranty Breaches and ~~WSP's Certification Breach~~.

116A. If, which is denied, in the circumstances the Court finds that:

- (a) Icon is liable to indemnify AAD in respect of any liability AAD is found to have to SOPA; and/or
- (b) Icon is liable to Ecove for damages in negligence.

the amount of any liability that Icon has to AAD and Ecove (**AAD/Ecove Liability Damages**) represents, or will represent, part of the loss or damage that Icon has suffered, which has been caused by WSP's Warranty Breaches.

116B. If, which is denied, in the circumstances the Court finds that:

- (a) Icon failed to exercise reasonable care to avoid economic loss caused by defects that is imposed upon each Icon by s 37(1) of the *Design and Building Practitioners Act 2020* (NSW) and that such failure causally contributed to the occurrence of the Observed Damage; and
- (b) Icon is liable to the plaintiffs (and Group Members) as a result,

the amount of any liability that Icon has to the plaintiffs (and the Group Members) (**Plaintiffs/Group Members' Damages**) represents, or will represent, part of the loss or damage that Icon has suffered, which has been caused by WSP's Warranty Breaches.

117. In the premises of paragraphs 116 to 116B and ~~116A~~ above, and by reason of clause 32 of the General Conditions of the Consultancy Agreement and ~~WSP's Certification Breach~~, WSP must indemnify and continue to indemnify Icon in respect of the whole of the SOPA Liability Damages, the AAD/Ecove Liability Damages and the Plaintiffs/Group Members' Damages.

118. In the alternative to the matters pleaded in paragraph 117 above, Icon is entitled to damages for WSP's Warranty Breaches and ~~WSP's Certification Breach~~ in an amount equivalent to the whole of the SOPA Liability Damages, the AAD/Ecove Liability Damages and the Plaintiffs/Group Members' Damages.

Icon is entitled to an indemnity and damages for Icon's costs

119. In addition to the SOPA Liability Damages, the AAD/ECOVE Liability Damages and the Plaintiffs/Group Members' Damages, the damages to which Icon will be entitled as a result of WSP's Warranty Breaches ~~and WSP's Certification Breach~~ and Icon's performance of the works referred to in paragraphs 76, 77 and 79 above in accordance with the Propping Design, WSP's Grouting Works design and the Rectification Design, will include damages for the amount expended, and which will be expended, by Icon, which at 11 June 2021 ~~the date of the List Response~~ was as follows:

- (a) \$24,967,764.55 ~~\$13,731,407.32~~ in rectifying the common property and associated costs (**Icon's Incurred Rectification Costs**);
- (b) further costs in rectifying the common property (**Icon's Future Rectification Costs**);
- (c) \$280,804.39 ~~\$144,913.39~~ in payments to certain Group Members in circumstances where those Group Members were unable to lease their lots following the evacuation of the Opal Tower and during the period in which rectification work was being carried out (**Group Members' Loss of Rent Costs**);
- (d) \$6,679,999.08 ~~\$6,786,322.95~~ in payments to, or directly to accommodation providers and storage providers (including related insurance costs and associated costs) for the benefit of, certain Group Members who were unable to live in their units and were therefore required to seek alternative accommodation arrangements following the evacuation of the Opal Tower and during the period in which rectification work was being carried out (**Group Members' Alternative Accommodation Costs**);
- (e) \$4,103,560.74 ~~\$3,984,026.84~~ in payments to certain lessees of units or lots in the Opal Tower (and associated costs) who were, and have been, unable to live in or had restricted use of the lots they leased and therefore were required to seek alternative accommodation arrangements or compensation following the evacuation of the Opal Tower and during the period in which rectification work was being carried out (**Lessees' Alternative Accommodation Costs**);

- (f) \$128,531 in payments made, or payments which will be made, to certain Group Members on account of Icon being granted a licence to occupy the lots owned by those Group Members so as to enable Icon to conduct rectification work on the common property (**Licence Occupation Fees**);
- (g) \$1,705,613.12 in payments to the Owners Corporation so that the Owners Corporation had sufficient funds to insure that part of the Opal Tower comprised in strata plan 97315 for the period 31 May 2019 to 30 May 2020, thus obviating the need for the Owners Corporation to levy the lot owners further (**Owners Corporation's Insurance Costs**); and
- (h) loss and damage suffered because it:
- (i) was terminated from at least one contract that it had been awarded;
 - (ii) was not awarded contracts for other projects:
 - (A) having tendered for such projects; and/or
 - (B) having been issued a letter of intent for such projects; and
 - (iii) was not permitted to tender for other projects,
- as a result of the matters in paragraphs 60 to 65 above becoming publicly known (**Icon's Loss of Opportunity / Loss of Contract Damages**),
- (hi) \$3,867,677.78, which payment was made to AAD in lieu of AAD having recourse to a bank guarantee in the same amount, in circumstances where this Court held in *Icon Co (NSW) Pty Ltd v Australia Avenue Developments Pty Ltd* [2020] NSWSC 178 that AAD was entitled to have recourse to the bank guarantee (**Bank Guarantee Sum**); and
- (hii) legal costs in addition to the legal costs incurred in defending the proceedings (**Legal Costs**).

given that:

- (i) had WSP not committed the WSP's Warranty Breaches and WSP's ~~Certification Breach~~, Icon would not have needed to incur those costs or would not have suffered those damages; and

- (j) Icon's incurring of such costs or Icon's suffering of those damages flowed ordinarily or naturally from WSP's Warranty Breaches ~~and WSP's Certification Breach~~.

120. Further, or in the alternative, WSP must by reason of clause 32 of the General Conditions indemnify and continue to indemnify Icon in respect of:

- (a) Icon's Incurred Rectification Costs;
- (b) Icon's Future Rectification Costs;
- (c) Group Members' Loss of Rent Costs;
- (d) Group Members' Alternative Accommodation Costs;
- (e) Lessees' Alternative Accommodation Costs;
- (f) Licence Occupation Fees;
- (g) Owners Corporation's Insurance Costs; ~~and~~
- (h) Icon's Loss of Opportunity / Loss of Contract Damages;
- (i) the Bank Guarantee Sum; and
- (j) Legal Costs.

K. IF WSP DID NOT APPROVE THE GROUTING DESIGN CHANGE (WHICH IS DENIED BY ICON), WSP NEVERTHELESS ENGAGED IN MISLEADING OR DECEPTIVE CONDUCT

121. Icon repeats the matters pleaded in paragraphs 39 to 47 above.

122. If the Court finds, contrary to Icon's contentions, that WSP's act of placing the Reviewal Stamp on Drawing DE01 P2 and Drawing DE01 P5 did not constitute an approval of the detail prescribed on Drawing DE01 P2 and Drawing DE01 P5 for all relevant levels in the Building, Icon pleads as follows.

123. Evolution issued the following versions of Precast Detail Page Drawing DE01 to Icon and WSP:

- (a) version P1 on 8 September 2016;

- (b) version P2 on 21 September 2016;
- (c) version P3 on 22 September 2016;
- (d) version P4 on 12 October 2016;
- (e) version P5 on 31 October 2016;
- (f) version P6 on 16 May 2017; and
- (g) version A on 5 July 2017.

124. On or around 22 September 2016, WSP placed the Reviewal Stamp, which was in the terms set out in paragraph 42 above, on Drawing DE01 P2.

Particulars

Aconex from WSP to Icon and Evolution dated 22 September 2016 timed 2:42pm (mail no. transmittal WSP(SA)-CADV-000581)

125. On or around 3 November 2016, WSP placed the Reviewal Stamp, which was in the terms set out in paragraph 42 above, on Drawing DE01 P5.

Particulars

Aconex from WSP to Icon and Bates Smart dated 3 November 2016 timed 5:21pm (mail no. transmittal WSP(SA)-CADV-000684)

126. Drawing DE01 P2 and Drawing DE01 P5 prescribed the use of Partial Grouting in Detail 1 and Detail 1A for the joint between the hob-beam and the precast panel.

127. The Reviewal Stamp on Drawing DE01 P2 conveyed representations, made by WSP, that:

- (a) WSP had checked each of the specific details in Drawing DE01 P2 for structural adequacy and had approved those details; and
- (b) the approved detail in Drawing DE01 P2, including Detail 1 and Detail 1A, was to be constructed on each elevation of the Building where that construction detail was nominated on other Evolution drawings,

(26 September 2016 Representations).

128. The Reviewal Stamp on Drawing DE01 P5 conveyed representations, made by WSP, that:
- (a) WSP had checked each of the specific details in Drawing DE01 P5 for structural adequacy and had approved those details; and
 - (b) the approved detail in Drawing DE01 P5, including Detail 1 and Detail 1A, was to be constructed on each elevation of the Building where that construction detail was nominated on other Evolution drawings,

(3 November 2016 Representations).

129. The 26 September 2016 Representations and 3 November 2016 Representations were made prior to the commencement of the construction of the hob-beam on levels 4, 10 and 16.
130. Further to paragraph 54(b) above, during the construction of the Building over the period January 2016 to August 2018, WSP conducted periodic inspections of the construction work.
131. As a result of the inspections referred to in the paragraph 130 above, WSP became aware, or should have become aware, that Icon was constructing the Building in accordance with:
- (a) Drawing DE01 P5 generally; and
 - (b) Detail 1 and Detail 1A in particular, which showed Partial Grouting for the joint between the hob-beam and the precast panel.
132. At no stage did WSP inform Icon that, contrary to the 26 September 2016 Representations and 3 November 2016 Representations, the detail in Drawing DE01 P2 and Drawing DE01 P5, was not to apply to all levels in the Building where those details was nominated or called up on other Evolution drawings.
133. In making the 26 September 2016 Representations and the 3 November 2016 Representations, and by failing to correct them in circumstances where WSP was aware that Icon was relying upon them, WSP thereby engaged in misleading or deceptive conduct in trade or commerce in contravention of s 18 of the Australian Consumer Law.

134. As a result of the 26 September 2016 Representations and 3 November 2016 Representations, and by reason of WSP's failure to correct them, Icon was led into error in believing that WSP considered that the detail in Drawing DE01 P2 and Drawing DE01 P5 was to be constructed on each elevation of the Building where that construction detail was nominated or called up on other Evolution drawings.
135. In reliance on the 26 September 2016 Representations and 3 November 2016 Representations, and unaware of their falsity, Icon constructed the hob-beam on all relevant levels of the Building in accordance with Detail 1 and Detail 1A of Drawing DE01 P2 and Drawing DE01 P5 such that Partial Grouting was used for the joints between the hob-beams and the precast panels on levels 4, 10 and 16.
136. Had WSP not made the 26 September 2016 Representations and 3 November 2016 Representations, or had WSP alerted Icon to the falsity of the representations before Icon commenced construction of the Building:
- (a) Evolution would not have constructed the Building on the basis that the detail in Drawing DE01 P2 and Drawing DE01 P5 was to apply to all relevant levels of the Building;
 - (b) Icon would not have constructed, or allowed the construction, of the Building on the basis that the detail in Drawing DE01 P2 and Drawing DE01 P5 was to apply to all relevant levels of the Building;
 - (c) Icon would have requested that WSP advise as to whether the detail in Drawing DE01 P2 and Drawing DE01 P5 applies to all relevant elevations of the Building;
 - (d) Icon would have requested that WSP withdraw its approval of Drawing DE01 P2 and Drawing DE01 P5 and advise its subcontractor, Evolution, accordingly;
 - (e) Icon would have requested that WSP prescribe with specificity in its FC Drawings the grouting detail for the joint between the hob-beam and precast panel on the relevant levels and issue the FC Drawing to Icon and its subcontractor, Evolution; and
 - (f) Icon would have constructed, or arranged for the construction, of the joint between the hob-beam and precast panel in accordance with the FC Drawings that WSP had previously issued.

137. Had WSP alerted Icon to the falsity of the 26 September 2016 Representations and 3 November 2016 Representations after Icon had commenced construction of the Building:
- (a) Evolution would not have continued to construct the Building on the basis that the detail in Drawing DE01 P2 and Drawing DE01 P5 was to apply to all relevant elevations of the Building;
 - (b) Icon would not have continued to construct, or allowed the continued construction of, the Building on the basis that the detail in Drawing DE01 P2 and Drawing DE01 P5 was to apply to all relevant elevations of the Building;
 - (c) Icon would have requested that WSP advise as to whether the detail in Drawing DE01 P2 and Drawing DE01 P5 applied to all relevant elevations in the Building; and
 - (d) if WSP's advice had been that full grouting of the hob-beam was required on all relevant elevations in the Building, Icon would have:
 - (i) in respect of the hobs-beams that had already been constructed, inserted further grout in such areas so that the joint between the hob-beam and the precast panel was fully grouted; and
 - (ii) constructed all remaining hobs-beams in the Building such that the joint between the hob-beam and the precast panel was fully grouted.
138. If, in the circumstances pleaded in paragraph 113(b) above, the Court finds that the Partial Grouting caused, or materially contributed to, the Level 4 Damage, the Level 10 Damage and the Level 16 Damage, such damage was caused by Evolution's and/or Icon's reliance on the 26 September 2016 Representations and 3 November 2016 Representations (as pleaded in paragraphs 135 to 137 above), which was false and misleading and which was never corrected (as pleaded in paragraphs 132 and 133 above).
139. In the premises, but for WSP's misleading or deceptive conduct:
- (a) the Level 4 Damage, the Level 10 Damage and the Level 16 Damage would not have occurred;
 - (b) the Building's residents would not have been needed to have been evacuated;

- (c) Icon would not have needed to undertake the rectification works; and
- (d) Icon would not have suffered the loss or damage pleaded in paragraph 119 above.

140. In the circumstances pleaded in paragraph 139 above, Icon has suffered loss and damage because of WSP's misleading or deceptive conduct done in contravention of s 18 of the Australian Consumer Law and is entitled to damages pursuant to s 236 of the Australian Consumer Law, comprising:

- (a) the SOPA Liability Damages, the AAD/Ecove Liability Damages and the Plaintiffs/Group Members' Damages;
- (b) Icon's Incurred Rectification Costs;
- (c) Icon's Future Rectification Costs;
- (d) Group Members' Loss of Rent Costs;
- (e) Group Members' Alternative Accommodation Costs;
- (f) Lessees' Alternative Accommodation Costs;
- (g) Licence Occupation Fees;
- (h) Owners Corporation's Insurance Costs; ~~and~~
- (i) Icon's Loss of Opportunity / Loss of Contract Damages;
- (j) the Bank Guarantee Sum; and
- (k) Legal Costs.

141. Further, and in the alternative, Icon is entitled to an indemnity under s 237 and s 243 of the Australian Consumer Law to the effect that Icon be, and is entitled to be, indemnified by WSP in respect of the loss or damage pleaded at paragraphs 119 and 140 above.

KK. CONTRIBUTION PURSUANT TO THE LAW REFORM (MISCELLANEOUS PROVISIONS) ACT 1946 (NSW)

WSP engaged in 'construction work' and therefore owed a duty of care by reason of the Design and Building Practitioners Act 2020 (NSW).

141A. As pleaded in paragraph 25, WSP was engaged to provide design services in respect of the Opal Tower Development and provided such services during the period 24 November 2015 to 8 August 2018.

141B. The design services that WSP provided during the period identified in paragraph 141A above, being the preparation of regulated designs or other design for building work, constituted 'construction work' (WSP's Construction Work) as that term is defined in s 36(1) of the Design and Building Practitioners Act 2020 (NSW) (DBP Act).

141C. By reason of s 37(1) of the DBP Act, WSP was under a duty when carrying out WSP's Construction Work to exercise reasonable care to avoid economic loss caused by defects:

(a) _____ in or related to the Building (it being the building for which WSP's Construction Work was done); and

(b) _____ arising from WSP's Construction Work.

141D. By reason of s 37(3) of the DBP Act, any person to whom WSP owed the statutory duty is entitled to damages for the breach of the duty as if the duty was a duty established by the common law.

141E. The duty owed by WSP referred to in paragraph 141C above was, by reason of s 37(2) of the DBP Act, owed to each of:

(a) _____ the plaintiffs and the Group Members;

(b) _____ the lot owners in strata plan 97315 (ie each of the lot owners in the Building)

(c) _____ the owners corporation - strata plan 97315; and

(d) _____ SOPA,

each being either:

(e) an 'owner' (as that term is defined in s 36(1) of the DBP Act) of the land in relation to which WSP's Construction Work was carried out; or

(f) a subsequent owner of such land.

Icon also engaged in 'construction work' and therefore owed a duty of care by reason of the DBP Act

141F. As pleaded in paragraph 3 above, Icon was engaged to design and construct the Building.

141G. During the period 2015 to 2018, Icon constructed the Building and during this period engaged in 'construction work' within the meaning of that term as defined in s 36(1) of the DBP Act.

141H. By reason of s 37(1) of the DBP Act, Icon, as the builder of the Building, had a duty, when constructing the Building, to exercise reasonable care to avoid economic loss caused by defects:

(a) in or related to the Building (it being the building for which Icon's construction work was done); and

(b) arising from the construction work carried out by Icon.

141I. The duty owed by Icon referred to in paragraph 141H above was, by reason of s 37(2) of the DBP Act, owed to each of the persons referred to in paragraph 141E above.

If Icon is found liable to SOPA or the plaintiffs (or Group Members), Icon is entitled to contribution from WSP:

141J. As pleaded in:

(a) paragraph 107A above, the plaintiffs (and Group Members) have filed an Amended Commercial List Statement against Icon; and

(b) paragraph 108 above, SOPA has filed an Amended Cross-Claim List Statement against Icon,

seeking damages and/or indemnity from Icon.

141K. If, which is denied, the Court finds that:

(a) Icon failed to exercise reasonable care to avoid economic loss caused by defects when it carried out the relevant 'construction work' such that it breached the duty it owed to SOPA and the plaintiffs (and Group Members); and

(b) Icon's breach of duty owed to SOPA and the plaintiffs (and Group Members) caused, or materially contributed to, the loss and damage allegedly suffered by SOPA and/or the plaintiffs (and Group Members),

it follows that Icon is a 'tortfeasor liable' to SOPA and/or the plaintiffs (and Group Members) within the meaning of 5(1)(c) of the *Law Reform (Miscellaneous Provisions) Act 1946 (NSW) (LRMP Act)*.

141L. Icon repeats the allegations in paragraphs 112 to 116 above and says further that if the Court finds that the Observed Damage occurred because of the manner in which WSP designed the building as set out in paragraphs 114 to 116 above, it follows that:

(a) the Observed Damage was caused by WSP's failure to take reasonable care when undertaking WSP's Construction Work in relation to the Building;

(b) any loss and damage suffered by SOPA (being loss or damage that is consequential upon the Observed Damage and which SOPA seeks to pass through to Icon in these proceedings) was therefore caused by WSP's breach of the duty (imposed by s 37(1) of the DBP Act) that it owed to SOPA when carrying out WSP's Construction Work in relation to the Building; and

(c) any loss and damage suffered by the plaintiffs (and Group Members) was therefore caused by WSP's breach of the duty (imposed by s 37(1) of the DBP Act) that it owed to the plaintiffs (and Group Members) when carrying out WSP's Construction Work in relation to the Building; and

(d) for the purposes of s 5(1)(c) of the LRMP Act, WSP is:

(i) a tortfeasor that, if sued by SOPA, would be liable to SOPA for the damage it has suffered;

(ii) a tortfeasor liable to the plaintiffs (and Group Members).

141M. In the circumstances pleaded in paragraphs 141K and 141L above, and by reason of s 5(2) of the LRMP Act, Icon is entitled to contribution from WSP in respect of any liability that Icon has to SOPA and the plaintiffs (and Group Members) in an amount as may be found by the Court to be just and equitable having regard to the extent of WSP's responsibility for the damage suffered by SOPA and the plaintiffs (and Group Members).

141N. The contribution to which Icon is entitled from WSP pursuant to s 5(2) of the LRMP Act should amount to a complete indemnity given that the Observed Damage (and therefore any loss suffered by SOPA and the plaintiffs (and Group Members) that is consequential thereon) only occurred because WSP:

(a) failed to design the hob in accordance with AS 3600; and

(b) failed to ensure that its design provided for:

(i) sufficient transverse steel reinforcement across the thickness of the hob so as to resist bursting tension; and

(ii) sufficient steel reinforcement so as to control inclined cracking in the hob.

L. WSP ENGAGED IN MISLEADING OR DECEPTIVE CONDUCT IN THE PROVISION OF DESIGN CERTIFICATES

Provision of design certificates

142. WSP was required by clause 42 of the General Conditions to provide a 'design certificate' to Icon each month, certifying that (to the extent applicable) all design activities carried out by WSP were compliant with:

(a) all legislative requirements (including work and health safety legislation);

(b) the requirements of the PPR; and

(c) the requirements of the *Client's* [i.e. Icon's] *project requirements*.

143. As pleaded in paragraph 54(a) above, during the course of providing the Services pursuant to the Consultancy Agreement, WSP provided to Icon Design Certificates, as listed in Attachment A to this Amended Commercial List Second Cross-Claim Statement.

144. The Design Certificates issued by WSP:

- (a) from 25 December 2015 to 25 February 2016 (inclusive) included the statement, which was in the following terms:

'The Consultant [i.e. WSP] certifies to the Principal [i.e. AAD] and the Contractor [i.e. Icon] that:

1. *The design documents prepared by it comply with all those elements of the works under the Consultancy Agreement and documents referenced within;*
2. *The works carried out thus far under the Consultancy Agreement comply with all legislative requirements and the Design Documents, so that the works, when completed comply with all requirements of the Consultancy Agreement; and*
3. *It is aware that the Principal and the Contractor will be relying on this certificate, as at the date of this certificate, except to the extent set out below:...*

- (b) from 23 March 2016 to ~~19 July~~ 21 December 2017 (inclusive) included the statement, which was in the following terms:

'The Consultant [i.e. WSP] certifies to the Principal [i.e. AAD] and the Contractor [i.e. Icon] that:

1. *The design documents listed within table T1 (Design Documents) prepared by it comply with all those elements of the works under the Consultancy Agreement and documents referenced within;*
2. *The works carried out thus far under the Consultancy Agreement (Structural Design) comply with all legislative requirements and the Design Documents, so that the works, when completed comply with all requirements of the Consultancy Agreement (Structural Design); and*
3. *It is aware that the Principal and the Contractor will be relying on this certificate, as at the date of this certificate, except to the extent set out below:...*

(together, the **Statements**).

145. The Statements which were made in each of the Design Certificates as set out in paragraph 144 above, conveyed a representation that:

- (a) WSP's design complied with all the requirements of the Consultancy Agreement, including the requirement that the design fulfil the *Principal's Project Requirements*, which included the following objectives:
 - (i) the creation of a high quality development in terms of design and construction; and
 - (ii) the construction of a building that was fit for purpose, and free from defects, such that it can operate on an uninterrupted basis as at the date of practical completion; and
- (b) WSP's design of the Building would, if such design was followed, result in the constructed Building possessing the following characteristics:
 - (i) the Building would be structurally sound in its entirety; and
 - (ii) the Building would, in its entirety, be fit for purpose as a high-rise mixed residential and commercial development; and
- (c) WSP's design work complied with all legislative requirements.

(Design Certificate Representations).

146. The Design Certificate Representations were false because WSP's design of the Building:

- (a) when followed, would not result in the constructed Building:
 - (i) meeting the *Principal's* [i.e. AAD's] *Project Requirements*;
 - (ii) being structurally sound in its entirety; and
 - (iii) being fit for purpose in its entirety as a high-rise mixed residential and commercial development; and
- (b) did not comply with all legislative requirements.

Particulars

1. WSP's design did not comply with AS 3600:2009, which falls within the definition of legislative requirement as that term is defined in the Consultancy Agreement.
2. WSP's design also did not comply with the relevant development consent (the development consent also being a legislative requirement as that term is defined in the Consultancy Agreement.).

The relevant development consent required that all aspects of the design of the Opal Tower building comply with the applicable performance requirements of the Building Code of Australia (BCA). WSP followed the "Deemed to Satisfy" approach in the BCA, which meant that WSP's design was required to comply with AS 3600.

147. Icon was unaware of the falsity of the Design Certificate Representations, and was led into error by believing the Design Certificate Representations to be true.

148. The Design Certificate Representations:

- (a) were made by WSP in trade or commerce within the meaning of s 18 of the Australian Consumer Law; and
- (b) were false, such that in making them, WSP engaged in misleading or deceptive conduct in contravention of s 18 of the Australian Consumer Law.

149. In reliance on the Design Certificate Representations, which were repeated each time a Design Certificate was provided by WSP to Icon, Icon followed, and continued to follow, WSP's design when it constructed the Building.

149A. Had Icon questioned WSP at any time during the course of constructing the Building about:

- (a) the general accuracy of the Statements in the Design Certificates; or
- (b) specifically, the accuracy of the statement in the Design Certificates that:

"The works carried out thus far under the Consultancy Agreement (Structural Design) comply with all legislative requirements" (which legislative requirements would include the matters set out in AS 3600),

WSP would have confirmed to Icon that the Statements in the Design Certificates were accurate and that, in particular, the design of the Opal Tower was compliant with the requirements of AS 3600.

149B. That WSP would have acted in the manner pleaded in paragraph 149A above is to be inferred from the fact that, following the Observed Damage occurring on and from 24 December 2018, WSP provided drawings and calculations to Icon that WSP said established that the design was compliant with AS 3600.

150. Had WSP not made the Design Certificate Representations, or had WSP alerted Icon to the falsity of them (which did not occur and would not have occurred for the reasons pleaded in paragraphs 149A and 149B above), Icon:

- (a) would not have commenced constructing the Building, or would not have continued constructing the Building, without first taking steps to satisfy itself (which steps would have included the obtaining of independent engineering advice) that:
 - (i) WSP's design of the Building met the *Principal's* [i.e. AAD's] *Project Requirements*; and
 - (ii) WSP's design of the Building when followed, would result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development; and
- (b) would have ascertained that WSP's design of the Building did not meet the *Principal's* [i.e. AAD's] *Project Requirements* and would not result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development.

151. Having ascertained the matters in paragraph 150(b) above, Icon would have:

- (a) required WSP to revise its design to ensure that its design of the Building met the *Principal's* [i.e. AAD's] *Project Requirements*;
- (b) required WSP to revise its design to ensure that its design of the Building would result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development; and
- (c) devised a plan to undertake any remedial work necessary as a result of WSP's proposed design revisions so as to ensure that the entirety of the *Works* were complete before the date for *practical completion*.

152. In reliance on WSP's misleading or deceptive conduct pleaded at paragraphs 145 to 148 above, Icon followed, and continued to follow, WSP's design when constructing the Building without taking the steps identified in paragraphs 150(a)(i)-(ii) above, being steps which would have alerted Icon to the falsity of the Design Certificate Representations.
153. But for WSP's misleading or deceptive conduct:
- (a) the Observed Damage would not have occurred;
 - (b) the Building's residents would not have been evacuated;
 - (c) Icon would not have needed to undertake the rectification works; and
 - (d) Icon would not have suffered the loss or damage pleaded in paragraph 107 above.
154. In the circumstances pleaded in paragraph 151 above, Icon has suffered loss and damage because of WSP's misleading or deceptive conduct done in contravention of s 18 of the Australian Consumer Law and is entitled to damages pursuant to s 236 of the Australian Consumer Law, comprising:
- (a) the SOPA Liability Damages, the AAD/ECOVE Liability Damages and the Plaintiffs/Group Members' Damages;
 - (b) Icon's Incurred Rectification Costs;
 - (c) Icon's Future Rectification Costs;
 - (d) Group Members' Loss of Rent Costs;
 - (e) Group Members' Alternative Accommodation Costs;
 - (f) Lessees' Alternative Accommodation Costs;
 - (g) Licence Occupation Fees;
 - (h) Owners Corporation's Insurance Costs;
 - (i) Icon's Loss of Opportunity / Loss of Contract Damages;
 - (j) the Bank Guarantee Sum; and

(k) Legal Costs.

155. Further, and in the alternative, Icon is entitled to an indemnity under s 237 and s 243 of the Australian Consumer Law to the effect that Icon be, and is entitled to be, indemnified by WSP in respect of the loss or damage pleaded at paragraph 154 above.

15 May 2018 Certification

156. On 15 May 2018, WSP provided the 15 May 2018 Certification (as that term is defined in paragraph 55 above) to Icon.

157. In providing the 15 May 2018 Certification, WSP represented that its drawings had been checked and complied with the BCA, the relevant Australian Standards listed in the BCA and AS 3600 (**15 May 2018 Certification Representation**).

158. The 15 May 2018 Certification Representation, which was made in trade or commerce, was false as WSP's drawings, including the FC Drawings that had been issued on 9 January 2017, did not comply with:

- (a) the BCA;
- (b) the relevant Australian Standards listed in the BCA; and
- (c) AS 3600.

159. By making the false 15 May 2018 Certification Representation, WSP engaged in misleading or deceptive conduct in contravention of s 18 of the Australian Consumer Law.

159A. Had Icon, after receipt of the 15 May 2018 Certification, asked WSP whether, as stated in the 15 May 2018 Certification, WSP's structural drawings complied with:

- (a) the BCA;
- (b) the relevant Australian Standards listed in the BCA; and/or
- (c) AS 3600.

WSP would have confirmed to Icon that its structural drawings complied with each of the BCA, the relevant Australian Standards listed in the BCA and AS 3600.

159B. That WSP would have acted in the manner pleaded in paragraph 145A above is to be inferred from the fact that, following the Observed Damage occurring on 24 December 2018, WSP provided drawings and calculations to Icon that WSP said established that the design was compliant with AS 3600.

160. In reliance on the 15 May 2018 Certification Representation, and unaware of its falsity:

- (a) on 13 June 2018, Icon issued to AAD a document entitled 'Statement of Compliance' (**SOC**);
- (b) on 18 June 2018, Icon issued a document to AAD in which Icon stated that it was of the opinion that practical completion of Separable Portion 1 has been achieved;
- (c) on 27 June 2018, Icon issued a document to AAD in which Icon stated that it was of the opinion that practical completion of Separable Portion 2 has been achieved;
- (d) on 27 July 2018, Icon issued a document to AAD in which Icon stated that it was of the opinion that practical completion of Separable Portion 3 has been achieved; and
- (e) Icon did not at that stage take any further steps to ensure itself that:
 - (i) WSP's design of the Building met the *Principal's* [i.e. AAD's] *Project Requirements*; and
 - (ii) WSP's design of the Building when followed, would result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development.

161. Had WSP not made the 15 May 2018 Certification Representation, or had WSP informed Icon of the falsity of the 15 May 2018 Certification Representation (which did not occur and would not have occurred for the reasons pleaded in paragraphs 159A and 159B above):

- (a) Icon would have not issued the SOC or the documents referred to in paragraphs 160(b) to 160(d) above; and

- (b) before proceeding any further, Icon:
- (i) would have undertaken investigations, and then ascertained, that WSP's design of the Building did not meet the *Principal's* [i.e. AAD's] *Project Requirements*;
 - (ii) would have undertaken investigations, and then ascertained, that WSP's design of the Building would not result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development;
 - (iii) having ascertained the matters in paragraphs (i) and (ii) above, Icon would have required WSP to revise its design to ensure that:
 - (A) WSP's design of the Building did meet the *Principal's* [i.e. AAD's] *Project Requirements*; and
 - (B) WSP's design of the Building would result in the Building being structurally sound in its entirety and fit for purpose as a high-rise mixed residential and commercial development; and
 - (iv) would have undertaken any remedial work that was necessary as a result of WSP's proposed design changes in a manner that ensured that the entirety of the *Works* were complete before the date for *practical completion*.

162. By reason of the matters pleaded in paragraph 160 above, had WSP not engaged in the misleading or deceptive conduct pleaded in paragraphs 156 and 157 above:

- (a) the Observed Damage would not have occurred, or would not have occurred whilst the Building was occupied;
- (b) the evacuation of residents of the Building above would not have needed to have taken place;
- (c) Icon would not have needed to undertake the rectification work, or if it did, such work would have been carried out prior to the Building being occupied;
- (d) Icon would not have incurred Icon's Incurred Rectification Costs, Icon's Future Rectification Costs, Group Members' Loss of Rent Costs, Group Members'

Alternative Accommodation Costs, Lessees' Alternative Accommodation Costs, Licence Occupation Fees, Owners Corporation's Insurance Costs, and Legal Costs;

- (e) Icon would not have suffered Icon's Loss of Opportunity / Loss of Contract Damages; ~~and~~
- (f) Icon would not be liable for the SOPA Liability Damages, the AAD/Ecove Liability Damages and the Plaintiffs/Group Members' Damages; and
- (g) Icon would not have been liable for, and would have been required to pay, the Bank Guarantee Sum.

163. In the circumstances of the matters pleaded in paragraph 160 above, Icon has suffered loss and damage because of WSP's misleading or deceptive conduct done in contravention of s 18 of the Australian Consumer Law and is entitled to damages pursuant to s 236 of the Australian Consumer Law.

164. Further, and in the alternative, Icon is entitled to an indemnity under s 237 and s 243 of the Australian Consumer Law to the effect that Icon be, and is entitled to be, indemnified by WSP in respect of:

- (a) the SOPA Liability Damages (if SOPA establishes that it is entitled to such damages);

(aa) the AAD/Ecove Liability Damages (if AAD or Ecove establishes an entitlement to such damages);

(ab) the Plaintiffs/Group Members' Damages;

- (b) Icon's Incurred Rectification Costs;
- (c) Icon's Future Rectification Costs;
- (d) Group Members' Loss of Rent Costs;
- (e) Group Members' Alternative Accommodation Costs;
- (f) Lessees' Alternative Accommodation Costs;
- (g) Licence Occupation Fees;

- (h) Owners Corporation's Insurance Costs; ~~and~~
- (i) Icon's Loss of Opportunity / Loss of Contract Damages;
- (j) the Bank Guarantee Sum; and
- (k) Legal Costs.

Relief

165. In the premises, Icon is entitled to the relief claimed in its Amended Cross-Summons.

D. QUESTIONS APPROPRIATE FOR REFERRAL TO A REFEREE

Icon does not consider that it is appropriate at this stage for any issues or questions arising out of this Amended Commercial List Second Cross-Claim Statement to be the subject of a referral.

E. A STATEMENT AS TO WHETHER THE PARTIES HAVE ATTEMPTED MEDIATION; WHETHER THE PARTY IS WILLING TO PROCEED TO MEDIATION AT AN APPROPRIATE TIME

Icon is willing to proceed to mediation at an appropriate time.

SIGNATURE

Signature of legal representative



Capacity

As employed solicitor of legal representative

Date of signature

~~3 December 2019~~ 9 July 2021

ATTACHMENT A Design Certificates Issued by WSP to Icon

Item	Certification of design for:	Date of certificate
1.	December 2015	25 December 2015
2.	<u>December 2015 (Amended)</u>	<u>4 March 2016</u>
3.	January 2016	25 January 2016
4.	<u>January 2016 (Amended)</u>	<u>4 March 2016</u>
5.	February 2016	25 February 2016
6.	<u>February 2016 (Amended)</u>	<u>4 March 2016</u>
7.	March 2016	23 March 2016
8.	<u>April 2016</u>	<u>26 April 2016</u>
9.	May 2016	24 May 2016
10.	June 2016	27 June 2016
11.	<u>August 2016</u>	<u>30 August 2016</u>
12.	<u>September 2016</u>	<u>22 September 2016</u>
13.	<u>October 2016</u>	<u>26 October 2016</u>
14.	November 2016	22 November 2016
15.	<u>December 2016</u>	<u>20 December 2016</u>
16.	<u>January 2017</u>	<u>31 January 2017</u>
17.	February 2017	23 February 2017
18.	March 2017	22 March 2017
19.	<u>April 2017</u>	<u>1 May 2017</u>
20.	July 2017	19 July 2017
21.	<u>August 2017</u>	<u>30 August 2017</u>

Item	Certification of design for:	Date of certificate
22.	<u>September 2017</u>	<u>4 October 2017</u>
23.	<u>November 2017</u>	<u>undated</u>
24.	<u>December 2017</u>	<u>21 December 2017</u>

ATTACHMENT B WSP Remediation Site Inspection Reports

SIR	Date of SIR	Date of Inspection
SIR #004	11/02/2019 to 13/02/2019	11/02/2019 to 13/02/2019
SIR #005	06/03/2019	06/03/2019
SIR #006	13/03/2019	13/03/2019
SIR #007	10/04/2019	10/04/2019
SIR #008	13/05/2019	13/05/2019
SIR #009	17/05/2019	16/05/2019
SIR #010	21/05/2019	21/05/2019
SIR #011	21/05/2019	21/05/2019
SIR #012	28/05/2019	28/05/2019
SIR #013	28/05/2019	28/05/2019
SIR #014	12/06/2019	12/06/2019
SIR #015	12/06/2019	12/06/2019
SIR #016	25/06/2019	25/06/2019
SIR #017	1/07/2019	1/07/2019
SIR #018	1/07/2019	1/07/2019
SIR #019	4/07/2019	1/07/2019
SIR #020	8/07/2019	5/07/2019
SIR #021	12/07/2019	12/07/2019
SIR #022	16/08/2019	15/08/2019
SIR #023	22/08/2019	20/08/2019
SIR #024	22/08/2019	None specified
SIR #025	26/08/2019	26/08/2019
SIR #026	05/09/2019	05/09/2019
SIR #027	01/10/2019	01/10/2019
SIR #028	16/10/2019	16/10/2019
SIR #029	29/10/2019	29/10/2019
SIR #030	20/11/2019	20/11/2019
SIR #031	26/11/2019	26/11/2019
<u>SIR #032</u>	<u>13/12/2019</u>	<u>13/12/2019</u>
<u>SIR #033</u>	<u>29/01/2020</u>	<u>29/01/2020</u>
<u>SIR #034</u>	<u>19/02/2020</u>	<u>19/02/2020</u>