

QUEENSLAND CIVIL AND ADMINISTRATIVE TRIBUNAL

CITATION: *Hall & Anor v Queensland Building and Construction Commission* [2020] QCAT 379

PARTIES: **STEPHEN HALL**
SZILVIA AGOSTON
(applicants)
v
QUEENSLAND BUILDING AND CONSTRUCTION COMMISSION
(respondent)

APPLICATION NO/S: GAR309-18

MATTER TYPE: General administrative review matters

DELIVERED ON: 9 October 2020

HEARING DATE: 13 March 2020
Further written submissions filed on 3 April 2020 and 24 April 2020.

HEARD AT: Brisbane

DECISION OF: Member Traves

ORDERS: **The scope of works decision made by the Queensland Building and Construction Commission dated 13 August 2018 is amended as follows:**

- (a) amendments to items S2, S3, S4, S8, S10 and S17 in the terms provided in these Reasons;**
- (b) the addition of S23 in the terms provided in these Reasons; and**
- (c) the addition of S24 in the terms provided in these Reasons.**

CATCHWORDS: ADMINISTRATIVE LAW – ADMINISTRATIVE TRIBUNALS – QUEENSLAND CIVIL AND ADMINISTRATIVE TRIBUNAL – where review about scope of works decision – where scope of works depends upon the wording of the policy terms of the statutory insurance scheme – whether works “reasonable and necessary” or otherwise “necessary” to rectify defects – where Part 4 of the Policy indemnifies the reasonable cost of necessary works to remedy the residential construction work – whether defective pier installation a cause of an identified defect - whether correct and preferable decision

on review to include works which address the defective pier installation – where both experts agree works to address defective pier installation only required if stabilisation works unsuccessful in addressing differential movement.

Queensland Building and Construction Commission Act 1991 (Qld), s 71, s 71A, s 74, s 75, s 86, s 87
Queensland Civil and Administrative Tribunal Act 2009 (Qld), s 19, s 20, s 24
 Queensland Building and Construction Commission “Insurance Policy Conditions, Edition 8”

Col Jenkins & Associates v Queensland Building and Construction Commission [2019] QCAT 117
Shi v Migration Agents Registration Authority (2008) 235 CLR 286
Tadc Pty Ltd v Queensland Building Services Authority [2004] QCCTB 503-03

APPEARANCES & REPRESENTATION:

Applicant: L Watt, solicitor, Becker Watt Lawyers Pty Ltd

Respondent: G Phillips, solicitor, QBCC Legal Services

REASONS FOR DECISION

- [1] This is a review by Mr Stephen Hall and Ms Szilvia Agoston of a decision by the Queensland Building and Construction Commission (the Commission) of 13 August 2018, about the scope of works to be undertaken under the Queensland Home Warranty Scheme (statutory insurance scheme) to rectify ‘tribunal work’ at a lowset duplex property in Birkdale.
- [2] Mr Hall, the first applicant, owns Unit A of the duplex property and Ms Agoston, the second applicant, owns Unit B. Ms Agoston was joined as a party to the review proceedings on 22 March 2019.

Relevant statutory framework

- [3] Under s 87 of the *Queensland Building and Construction Commission Act 1991 (Qld)* (QBCC Act) a person affected by a reviewable decision may apply to the Tribunal for a review of the decision.
- [4] Section 86(1)(g) of the QBCC Act provides that the following decision of the Commission is a reviewable decision:

a decision about the scope of works to be undertaken under the statutory insurance scheme to rectify or complete tribunal work.

- [5] “Tribunal work” is defined to include, relevantly, the “erection or construction of a building”.¹ Mr Hall and Ms Agoston are “affected by the decision” because they own the property to which the scope of works decision relates.
- [6] There is no definition of the term “scope of works” in the QBCC Act. A scope of works decision is issued by the QBCC when it intends to have carried out rectification or completion of building work under the statutory insurance scheme it operates. The power to have carried out such rectification or completion of building work is in s 71A of the QBCC Act. Under s 71A(6) the QBCC may only have work carried out under s 71A to the extent that the cost of the work is covered by the assistance under the statutory insurance scheme that the person may be entitled to.
- [7] The final orders the Tribunal can make on review are:
- (a) the decision is confirmed; or
 - (b) the decision is set aside and substituted with the Tribunal’s own decision; or
 - (c) the decision is set aside and the matter returned to the Commission to reconsider the decision with directions the Tribunal considers appropriate.²
- [8] The Tribunal is required to hear and decide a review of a reviewable decision by way of a fresh hearing on the merits³ for the purposes of producing the correct and preferable decision.⁴ A fresh hearing on the merits means that the Tribunal can consider the factual merits of the matter and is not confined to the legal merits. The question for the Tribunal on review is not whether the decision made by the Commission was the correct and preferable one on the material before the Commission but to determine the correct and preferable decision at the time of the review, on the material before the Tribunal.
- [9] Although it has been acknowledged that regard may be had to the decision of a primary decision-maker as part of the “material before the Tribunal”, particularly where it involved special expertise or knowledge,⁵ ultimately it is for the Tribunal to reach its own decision upon the relevant material including any new, fresh, additional or different material that has been received by the Tribunal as relevant to its decision. This has been seen as no more than a consequence of the Tribunal’s obligation to conduct a true merits review.
- [10] The Tribunal in exercising its review jurisdiction, must decide the review in accordance with the QCAT Act and the enabling Act under which the reviewable decision being reviewed was made.⁶ While the Tribunal, in undertaking the review, is commonly said to “step into the shoes” of the Commission and in so doing to acquire the functions of the Commission, the Tribunal does not have *all* the Commission’s functions, only those necessary to review the decision made by it.⁷
- [11] In deciding the review, therefore, in accordance with the powers conferred on the Tribunal under both statutes, it is important first to clearly identify what is the

¹ QBCC Act, s 75(1).

² QCAT Act, s 24.

³ QCAT Act, s 20(2).

⁴ QCAT Act, s 20(1).

⁵ *Re Control Investment Pty Ltd and Australian Broadcasting Tribunal (No 2)* (1981) 3 ALD 88.

⁶ QCAT Act, s 19(a).

⁷ QCAT Act, s 19(c); *Shi v Migration Agents Registration Authority* (2008) 235 CLR 286, [147].

decision under review. As Kiefel J held in *Shi v Migration Agents Registration Authority*:⁸

...the decision, and the statutory question it answers, should be identified with some precision, for it marks the boundaries of the review.

- [12] It is also important, in considering what is the correct and preferable decision, that the Tribunal addresses the same question as the original decision-maker was required to address.⁹ Carefully defining the question raised by the statute for decision will also usually determine the facts which may be taken into account in connection with the decision.¹⁰
- [13] There is some doubt, evidenced by the terms of the Direction to Rectify, as to whether differential slab movement in fact formed part of the subject matter of the original scope of works decision. The issue of differential slab movement assumed increasing importance during the proceeding, including the obtaining of late expert evidence. The parties proceeded on the basis that the differential slab movement was within the scope of the original decision and I will proceed on that basis. Ultimately the issue does not affect the outcome of my decision.
- [14] I do not accept, in this context, the submissions of the Commission that the Direction to Rectify *necessarily* defines the scope of the review power. There is no call for that approach in the QBCC Act or relevant review provisions of the QCAT Act. It is also not, in my view, a requirement of cover under the terms of the Policy. The Direction to Rectify will, however, ordinarily provide evidence of the subject matter and scope of the decision. It would not however, in my opinion, be beyond the scope of review of a scope of works decision to include within the scope of works the remedying of a cause of a defect within the subject matter of the decision which, although previously unidentified had, by the time of the review, been discovered. On the other hand, a defect discovered subsequent to the scope of works decision under review which is unrelated to the subject matter of the decision would be beyond the scope of the review.
- [15] Here, the decision on review was about the scope of works under the statutory scheme necessary to rectify the defects which, at the time the Commission made its decision, were, as I have outlined above, the defects relating to slab edge dampness and differential movement. In my view, the review decision is therefore confined to determining what works are necessary to rectify these defects.
- [16] The relevant enabling Act is the QBCC Act. Part 5 of that Act, relating to the statutory insurance scheme, was amended by the *Queensland Building and Construction Commission and Other Legislation Amendment Act 2014* (the Amendment Act). Schedule 1, Part 11 of the QBCC Act includes s 66 and 67, transitional provisions relating to existing policies of insurance.
- [17] Section 66 provides:
- 66 Existing policies of insurance
- (1) A policy of insurance that came into force under former part 5 continues in force on the terms stated in the board's policies for that purpose.

⁸ *Shi v Migration Agents Registration Authority* (2008) 235 CLR 286, [133], (Kiefel J).

⁹ *Ibid*, [142] (Kiefel J).

¹⁰ *Ibid*.

(2) Despite the replacement of part 5 by the Amendment Act, former part 5 continues to apply to a contract for residential construction work if the contract was entered into before the replacement day.

(3) To remove any doubt, it is declared that subsection (2)—

(a) applies to a contract even if an insurance premium is paid in relation to the contract on or after the replacement day; and

(b) does not prevent the consumer for the contract from obtaining optional additional cover under section 67Z.

(4) The board's policies that are relevant for this section continue for that purpose despite the replacement of part 5 by the Amendment Act or the repeal of the policies under schedule 1, section 67.

(5) In this section—

"board's policies" means the policies of the board made for the purposes of section 19 and relating to the statutory insurance scheme.

"replacement day" means the day former part 5 was replaced under the Amendment Act.

[18] Section 67 provides:

67 Repeal of board's policies about statutory insurance scheme

On the commencement all policies of the board made, for the purposes of section 19, about the terms of cover under the statutory insurance scheme are repealed.

[19] Here, the relevant contract for residential construction work was entered into on 17 December 2012. As that date was before the replacement date, former Part 5 of the QBCC Act applies, as do the board's policies then in force.

[20] Accordingly, the relevant Part 5 which contains the provisions relevant to the statutory insurance scheme (sections 67X to 71AA) is Part 5 of the *Queensland Building Services Authority Act 1991* (QBSA Act), reprint current as at 1 January 2011. The relevant policy is the policy that existed at the time the contract was entered into, that is, the policy that existed as at 17 December 2012. The policy as at 17 December 2012 which established the terms of the statutory insurance scheme was "Insurance Policy Conditions, Edition 8".

The scope of the review

[21] The statutory scheme requires that the scope of works for the purposes of s 86(1)(g) of the QBCC Act must be a scope of works within the confines of the terms of the Policy which govern the entitlement to assistance under the statutory insurance scheme. This reasoning is consistent with s 71A(6) of the QBCC Act which provides that the Commission may only have rectification work carried out under s 71A to the extent that the cost of the work is covered by the statutory insurance scheme.¹¹

[22] The submissions of the parties have proceeded on the basis that for an order to be made including rectifying work in the scope of works, the work must be "reasonable

¹¹ *Samimi v Queensland Building and Construction Commission* [2015] QCA 106, [31] (Boddice J, Margaret McMurdo P and Morrison JA agreeing).

and necessary” to rectify the defects. That is, indeed, the test which has been consistently applied by the Tribunal in respect of matters of this nature.

- [23] The Tribunal has held that the scope of review of a decision about a scope of works to be undertaken under the statutory insurance scheme to rectify tribunal work is limited to asking what rectification work is reasonable and necessary given the nature and extent of the damage at the relevant property,¹² or, alternatively to be limited to asking what rectification work is reasonable and necessary to rectify the items identified in the direction to rectify.¹³
- [24] Part 4 of the Policy, which deals with Defective Construction provides, relevantly, as follows:

4.1 Payment for Defective Construction

Subject to the terms of this policy, the QBBC agrees to pay the cost of rectifying defects in the residential construction work that is primary building work, other than for defects from subsidence or settlement referred to in Part 5 of this policy.

4.2 Amount of Payment

(a) Subject to clause 4.2(c) and Parts 6, 7 and 8 of this policy, the amount of the payment under this Part will be limited to the reasonable cost, as determined by the QBBC, of undertaking those works necessary to rectify the defects, less, where the insured contracted with the contractor for the undertaking of the residential construction work which is defective, the owner’s remaining liability under the contract.

(b) Where the QBCC has admitted a claim for payment for loss relating to defects, it may if it thinks fit, having given prior written approval, pay the insured for the reasonable alternative accommodation of the insured and any removal and storage costs of the insured as determined by the QBCC as having been necessarily incurred by the insured as a result of the need to rectify the defects and because the residential construction work is, in the opinion of the QBCC, uninhabitable.

(c) Where, in the opinion of the QBCC, the undertaking of remedial works is unnecessary or unreasonable, the payment under this clause 4.2 will be limited to the loss in value, if any, as determined by the QBCC in the residential construction work, produced by the departure from the plans or specifications or by the defective workmanship or materials.

- [25] Clause 4.2 of the Policy refers to “the amount of the payment under this Part will be limited to the reasonable cost, as determined by the QBCC, of undertaking those works necessary to rectify the defects”. It is arguable that the test of “reasonable and necessary”, at least on one view of its meaning, does not faithfully reflect the provisions of clause 4.2, that is, that the correct test is “the reasonable cost of the necessary works”.

¹² *Col Jenkins & Associates v Queensland Building and Construction Commission* [2019] QCAT 117, [21], citing *Middling v QBSA* [2005] CCT Q600-03; *J & K Homes Pty Ltd v Queensland Building and Construction Commission* [2017] QCAT 269, [21]; *Tadc Pty Ltd v QBSA* [2004] QCCTB 503-03, [117]-[120]; *Turcinovic v Queensland Building Services Authority* [2012] QCAT 14, [6].

¹³ *Col Jenkins & Associates v Queensland Building and Construction Commission* [2019] QCAT 117, [21].

- [26] A review of the authorities suggests that the test “reasonable and necessary” stems from a decision of the Commercial and Consumer Tribunal in *Tadc Pty Ltd v Queensland Building Services Authority*.¹⁴ An examination of the reasons of the learned Member reveals that the regulatory authority there submitted that the test was limited to the question as to whether the works specified in the said scope of works was “necessary” to rectify the defects noted in the Direction to Rectify, or whether that scope went beyond what is necessary.¹⁵
- [27] The Member made the following observations about a scope of works decision:
- I consider that the words “scope of works” in sub-paragraph (g) are not meant as a reference to a specific document by that title...I consider that what is intended in sub-paragraph (g) is simply that the word “scope” is to bear its ordinary meaning, namely “extent or range”, and that the proper interpretation of sub-paragraph (g) is that the review is to be about the extent or range of the proposed rectification works, and limited to such matters.
- I consider that I am assisted in that interpretation by the following –
- There is no reference in any associated sections of the relevant Acts (those sections dealing with the statutory insurance scheme and the calling of tenders) to any document entitled a “scope of works”. Having said that, I accept in a practical sense, a document might come into existence which might bear such a title, however, that is neither required nor envisaged by the relevant legislation.
- ...
- ...I consider that any such review should be confined to considerations as to whether the proposed rectification works are reasonable and necessary to rectify the defects noted in the Direction to Rectify, or whether they go beyond what is reasonable and necessary.
- It is to be remembered, in the above regard, particularly when considering what is reasonable, that there is often more than one method of rectifying defective work. Accordingly, the relative costs of such differing modes of rectification may become pertinent to the above considerations, in my view.¹⁶
- [28] It can be seen from the above that, in respect of “Defective Construction”, clause 4.2(a) provides that the amount of payment be limited to “the reasonable cost” of “those works necessary”. The conflation of the test to “reasonable and necessary work” is arguably a short-hand but slightly inaccurate expression of the obligation.
- [29] It is doubtful whether *Tadc v QBSA* is authority for the proposition that the test is “reasonable and necessary”. On the proper view, in my opinion, the test should reflect accurately the terms of the Policy.¹⁷
- [30] In deference to the decisions of the Tribunal which precede this case, I will approach the matter applying the test of “reasonable and necessary” and, also, the “reasonable cost of necessary works”. The outcome of my decision would not vary whether one or the other of the tests were applied.

¹⁴ [2004] QCCTB 503-03.

¹⁵ *Ibid*, [82].

¹⁶ *Ibid*, [120]-[123].

¹⁷ I note clause 4.2(c) which refers to remedial works which are “unnecessary or unreasonable”. In my opinion, those words in that context are insufficient to rebut the plain meaning of clause 4.2(a).

Background to the formulation of the scope of works

- [31] On 18 December 2012 Mr Suleyman Soner and Homesone Qld Pty Ltd entered into a contract for the construction of a freestanding rendered masonry duplex dwelling at Birkdale.
- [32] On 12 March 2012 Geotech Drilling Services prepared a site classification report 3574. The house was constructed with a ‘waffle raft slab on ground’ design. The slab was to be built in accordance with AS 2870 Residential slabs and footings and AS 3600 Concrete Structures.
- [33] Morgan Consulting Engineers prepared drawings and a design report in relation to the slab dated 9 May 2013. The waffle raft slab was certified on 19 August 2013.
- [34] The work commenced on 16 May 2013 and was suspended approximately one year later, on 6 May 2014.
- [35] On 16 June 2014 the contract was terminated by the homeowner on the basis the builder had gone into liquidation and was unable to complete the contract.
- [36] Mr Soner lodged a complaint dated 17 June 2014 with the Commission alleging non-completion of works.
- [37] On 10 August 2014 Mr William Pullar of the QBCC completed a building inspection report. Mr Pullar reported no defective work but that external works to the house, courtyards and internal plumbing fit out were incomplete. At the inspection for the purposes of preparing the report, Mr Pullar advised those in attendance at the inspection that he would refer the report and a scope of works to a QBCC file manager for assessment of a possible insurance claim under the statutory insurance scheme.
- [38] On 8 September 2014 an assessment report by Sergon Consultants was prepared which included a proposed scope of work. The tender process then commenced. The builders went to site and gave a quote to the claims officer, Insurance Services at QBCC. On 5 January 2015 GW Homes Pty Ltd forwarded a quote for the non-completion works as identified by Sergon for \$191,721.27.
- [39] On 14 January 2015 the QBCC approved a claim of \$133,221.27 (retention amount of \$58,500) based on the lowest quote supplied by the tenderer, GW Homes Pty Ltd. A copy of the approval letter was forwarded to Mr Soner. The completion works were completed by GW Enterprises Pty Ltd on 18 June 2015.
- [40] On 20 August 2015 Mr Hall and Ms Agoston entered into a contract to purchase the property for \$1,000,000.
- [41] On 6 November 2017 the Commission received a complaint from Mr Hall in relation to residential construction work at the property identifying seven items:
1. “Courtyard: vertical control joint of 11A has moved.”
 2. “Rear privacy wall between 11A & 11B moved more than normal.”
 3. “All gutters have no fall. Also gutter between 11A & 11B is also falling in the wrong direction.”
 4. “The flashing of windows not finished to standard. Finish flush not 75mm post.”

5. "There is an overhang on bottom of aluminium door on 11B (support needed)."
 6. "Painting of external has been an issue since settlement."
 7. "Roofing – corrugation under capping 11B where roof butts to firewall."
- [42] An inspection was undertaken by Mr Arnold Fisher of the Commission on 19 February 2018 and 5 March 2018. Following the second inspection in March an additional item was identified which became item 8 in the Inspection Report dated 20 July 2018:
- (viii) "Slab edge dampness – moisture wicking through slab to internal areas adjacent walls".
- [43] Items (i) to (viii) are referred to in these Reasons as complaint items 1 to 8.
- [44] On 18 May 2018 an inspection was carried out by Mr Rebibou, an engineer and director of Booth Engineers and Associates Pty Ltd, on behalf of the QBCC. Further inspections were carried out on 1 April 2019 and 24 February 2020. Mr Rebibou completed two reports: first report of 25 June 2018 and second report of 17 April 2019.
- [45] On 22 June 2018 Mr Jesberg of Leakless Plumbing Pty Ltd, at the Commission's request, carried out inspections of the property which identified numerous plumbing and draining issues with the property.
- [46] On 12 July 2018 an inspection report was completed by New Life Restorations Pty Ltd, mould specialists, on behalf of the owners, which identified serious mould growth issues in the property.
- [47] On 18 July 2018 Mr Somerville of Mackenzie Consulting carried out an inspection of the property, having been engaged by the QBCC. The report identified that the slab level timber in the property had a high moisture content which presented a mould and potential decay issue.
- [48] On 23 July 2018 a Direction to Rectify was issued to the original contractor, Homesone Qld Pty Ltd which listed the following items:
1. "The installation of the SGD external of the Laundry in Units 11A & 11B does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's license for the relevant class in that the door sill is not adequately supported. The issue is a health and safety concern for the occupants of the dwellings." (item 5 of the complaint)
 2. "The construction of the dwelling does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's license for the relevant class in that dwelling has not been adequately protected from moisture in accordance with standards to stop slab edge dampness from occurring and entering into the dwelling. The issue has caused a health and safety concern for the occupants and deterioration of building elements." (item 6 of the complaint)
 3. "The construction of the skillion roof over the garage area of unit 11B does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's license for the relevant class in that

the roof sheeting has not been weathered in accordance with standards allowing water to enter the dwelling.” (item 7 of the complaint)

4. “The construction of the dwelling does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor’s license for the relevant class in that dwelling has not been adequately protected from moisture entry into the footings of the dwelling resulting in slab edge dampness occurring and moisture entry into the dwelling. The issue is a health and safety issue for the occupants of the dwellings and is causing deterioration of building elements.” (item 8 of the complaint).

- [49] Homesone failed to comply with the Direction to Rectify.
- [50] On 8 August 2018 Juvenaire, engaged by the applicants’ insurer, completed an inspection report which identified serious mould growth issues in the property.
- [51] On 8 August 2018 Sergon Building Consultants prepared a Scope of Works (Sergon SOW). On 13 August 2018 the Commission adopted the Sergon SOW (original SOW) and notified the applicants that their claim had progressed under the statutory insurance scheme and that an associated scope of works to rectify the defects at the property had been approved.
- [52] On 13 August 2018, Mr Helisma, a building defects and quality expert and director of Building Investigations and Consultants Qld Pty Ltd, carried out an inspection and produced the following reports: first report of 10 September 2018; second report of 4 February 2019; and third report of 20 February 2019.
- [53] On 13 August 2018 the Commission notified the applicants that their claim had progressed under the Queensland Home Warranty Scheme and an associated scope of works to rectify the defects at the property had been approved by the Commission.
- [54] On 10 September 2018, Mr Hall filed an application for review of the scope of works in the Tribunal on the basis it was inadequate to rectify the defects listed on the Direction to Rectify.
- [55] On 16 October 2018 Mr Arnold Fisher, Senior Building Inspector of the Commission inspected the property. He completed his investigations of alleged subsidence issues on 2 February 2019. Mr Fisher’s subsidence report was written on 30 April 2019.
- [56] On 23 January 2019, Mr Peter Wright, an engineer and director of Hughes, Beal & Wright Pty Ltd (HBW) carried out an inspection of the property, having been engaged by the applicants. Mr Wright produced the following reports: first report of 10 January 2019 (which addressed defects in the property) and second report of 4 February 2019 (which addressed the rectification works proposed by Booth Engineers).
- [57] On 1 April 2019 and 25 February 2020 Mr Rebibou of Booth Engineers carried out further inspections of the property. Mr Rebibou wrote a report following the inspection of 1 April 2019 and a supplementary statement (which was tendered at the hearing) following the inspection on 25 February 2020.
- [58] On 4 September 2019 Mr Helisma (on behalf of the applicants) and Mr Rebibou (on behalf of the Commission) participated in an Expert Conclave. As a result of the conclave, a Joint Expert Report dated 22 October 2019 was produced.

The scope of works dispute

- [59] Both parties were directed at the conclusion of the Hearing to file and serve their written closing submissions including a draft proposed scope of works from the applicants and the Commission's response to that draft proposed scope of works.¹⁸
- [60] The applicants' position is that the original SOW should be amended to include Items 23, 24 and 25 and a new item 7 in addition to the current item 7, on the basis they are reasonable and necessary to rectify the defective items. They also propose some other amendments to existing items in the original SOW. Those amendments relate to Items 2, 3, 4, 8, 10, 12 and 17.
- [61] The Commission's position is that the evidence filed in the Tribunal and the oral evidence at the hearing, indicates the original SOW is reasonable and necessary to rectify the defective items. They submit there is no evidence that the original SOW was deficient or not reasonable and necessary to rectify the Slab Edge Dampness. Further, that the Tribunal does not have jurisdiction to set aside the scope of works decision on the basis of intangible and undefined items which may, at some stage, become reasonable and necessary. However, the Commission conceded that Items 23 and 24 (although with some amendments) ought to be included in the original SOW to enable the work to commence as soon as possible.
- [62] Given the common ground between the parties, and being satisfied that the works are 'reasonable and necessary' to rectify defects at the property, it is proposed to adopt the original SOW with the addition of Items 23 and 24 (but adopting the amendments to item 24 as proposed by the Commission) and to focus on the identified areas of disagreement: namely, proposed amendments to original SOW items 2, 3, 4, 8, 10, 12, 17 and proposed new Items 7 and 25. (SOW item numbers will be referred to as S2, S3 etc).

Items 2 and 4: Slab Edge Dampness defects

- [63] In order to understand the scope of works required to address the issue of slab edge dampness it is important to understand the cause. This is different to embarking on an exercise to determine who is liable for the defect, although it may, of course, inform that question.
- [64] The engineering evidence with respect to the causes of the slab edge dampness defects, in my view, can be summarised to be a combination of soil moisture conditions, poor site drainage, plumbing leaks and fill settlement, particularly at the rear left of the building.
- [65] Items 2 and 4 in the Direction to Rectify are dealt with in S2 to S4 and S7 to S17 of the original SOW. The applicants propose amendments to the following SOW items: S2, S3, S4, S9, S11 and S13 and S18.
- [66] The applicants submitted that the inclusion of items 1 to 22 were not disputed by either party, that items 1 to 22 ought be included with the addition of the experts' comments and recommendations and that, as Mr Helisma's evidence regarding those items in the joint expert report was not contested by the Commission at the hearing, it should be deemed accepted.

¹⁸ Tribunal Directions dated 16 March 2020.

[67] The Commission does not accept each amendment proposed by the applicants to items 1 to 22 so I will consider whether the correct and preferable decision includes those amendments and the addition of new item 7, before turning to the main item in dispute, new item 25.

S2

[68] S2 deals with plumbing defects identified in the Leakless Plumbing Report resulting from their inspection of 22 June 2018. The applicants submit that S2 should include:

Allow for external pavements and driveway to be removed back to the first sawn joint to undertake the plumbing and drainage issues in conjunction with the slab edge remedial works.¹⁹

[69] The Commission's position is that the applicants have not discharged their onus of establishing that the addition to S2 is "reasonable and necessary" to be added to the scope of works. The Commission considers that S2 and S3 already adequately addresses rectification of the defective items.

[70] In any event, the Commission notes that "external pavements" and "driveway" are excluded from coverage under the statutory insurance scheme. Part 4.1 of the Insurance Policy Edition 8 (the Policy) provides that the Commission "agrees to pay the cost of rectifying defects in the residential construction work that is primary building work..." Part 4.6 provides that the Commission "is not liable under this Part for that part of residential construction work that is associated building work." "Primary building work" is defined in Part 9 of the Insurance Policy by reference to section 11 of the Regulation. The relevant Regulation was the *Queensland Building Services and Authority Regulation 2003* (Qld), current as at 28 September 2012. Section 11(2) of the regulation defines "primary building work", and s 11(3) defines what "is not primary building work, but may be associated building work". This includes, inter alia, "driveways, paths or roads".²⁰ As such, driveways and paths are excluded from coverage.

[71] The Commission submits that, given the purpose of a scope of works provided for in the QBCC Act, namely to identify the work to be undertaken under the statutory insurance scheme (s 86(1)(g) of the QBCC Act), it would be incorrect for a scope of works to be approved which specifies work which cannot be covered by the Policy. To do so would be beyond the purpose of a scope of works. Further, s 71A(6) of the QBCC Act makes it clear that a scope of works should only reference work which is covered under the statutory insurance scheme.

[72] In my view, as the rectification works to repair all of the plumbing defects noted in the Leakless Plumbing Report dated 22 June 2018 are required to remedy the slab edge dampness issues, then if those works require the external pavements and driveway to be removed back to the first sawn joint to enable it to be completed, then that associated work should be included in the SOW. It would be different if the applicants were claiming that there was a defect in the external pavements and driveway which needed to be rectified. In that case, I would agree with the Commission, that the work would be outside the scope of the Policy, on the basis the

¹⁹ Applicants' Proposed Amendments to the Sergon SOW.

²⁰ *Queensland Building Services Authority Regulation 2003* (Qld), s 11(3)(d)(ii).

applicants would be claiming the cost of rectifying defects in “associated building work” for which the Commission is not liable.²¹

- [73] The original SOW includes in the last bullet point for item 2 (and item 3): “Allow to install articulation joints (horizontal & vertical) to all downpipes. *Locally cut concrete where necessary, to nearest existing joint within 1000 of downpipe....Reinstate concrete upon completion to best match adjacent.*” (emphasis added)
- [74] The aspects in the existing item 2 relating to cutting concrete and replacing it to match existing to my mind, serve a similar purpose to the addition proposed by the applicants. I am satisfied that it is reasonable and necessary to include the addition to enable the works outlined in the Leakless Plumbing Report to be satisfactorily completed.
- [75] I therefore allow an amendment to S2 in the following terms:
- (b) Allow for removal and replacement of concrete where necessary.
 - (c) Allow for external pavements and driveway to be removed back to the first sawn joint *where necessary* to undertake the plumbing and drainage issues in conjunction with the slab edge remedial works.

S3

- [76] For similar reasons, I allow the amendment to S3 in the following terms:
- (a) Allow for removal and replacement of concrete where necessary.
 - (b) Allow for external pavements and driveway to be removed back to the first sawn joint *where necessary* to undertake the plumbing and drainage issues in conjunction with the slab edge remedial works.

S4

- [77] There was no dispute that S4 was intended to apply to both units. The amendment to include both units is therefore allowed. I therefore allow the amendment to S4 by including the heading as follows:

UNITS A and B

S8

- [78] The applicants seek an amendment to this item as follows:
- Allow to lower the finished ground levels in preparation for a concrete pavement and 900mm deep cut-off wall to extend around the remainder of the building.
- [79] The Commission’s position is that item 8 in the original SOW adequately addresses rectification of the defective items.
- [80] Item 8 in the original SOW provides:
- Allow to install a moisture barrier (minimum 2.5m deep) as close to the front of the building as practically possible, and extend to the boundaries on either side of the site as per Booth Engineers Drawing No BE2018/180530 (sheet 5)

²¹ Policy, cl 4.6; *Queensland Building Services and Authority Regulation 2003* (Qld), s 11(2), s 11(3).

and associated detail (sheet 6)...On completion allow to extend concrete paving from the front of the building as required to extend over the moisture barrier to ensure no areas remain where stormwater can enter (without resistance) the ground inside of the cut off wall.

[81] Although the lowering of ground levels in readiness for the installation of concrete pavement and a cut-off wall was probably assumed by S8 I allow an amendment to S8 in the following terms so it is clear:

- (a) Allow to lower the finished ground levels in preparation for a concrete pavement and 900mm deep cut-off wall as described in item 8.

S10

[82] The applicants' proposed amendments make clear that the exposure of the slab edge is to be for the full perimeter of the building. I am satisfied that the rectification work described in item 10 should be applied to the full perimeter of the slab edge. The other proposed amendments are by way of clarification rather than addition to the item as originally expressed.

[83] Accordingly, I allow the amendments to S10 in the following terms:

- (a) Allow to expose the slab edge to the full perimeter of the building and entry piers to the base level. Allow to clean slab edge with suitable method (to minimise water use) to remove soil etc/clean in preparation for moisture seal application. Allow to install 'Xypex', 'Sureseal', or 'Sika' etc strictly in accordance with manufacturer's recommendations to the exterior of the exposed slab edges and piers.
- (b) Do not install moisture seal to internal areas at this time. This is to allow any moisture in the concrete to dry out naturally.

S12

[84] The applicants propose the following amendment:

Allow to install field gullies to the engineer details and provide the required fall incorporating a spoon drain (refer to Annexure A to this scope of works).

[85] Annexure A appears to be Annexure A to AS2870-2011 and is a series of diagrams showing the use of damp roof membrane for slab protection. There is no written mention of a spoon drain, although it is possibly depicted by way of an unmarked circle on figure 5.7. In any event, as the Commission submits, the applicants have not demonstrated how the amendment is "reasonable and necessary" or otherwise "necessary".

[86] Further, I note that field gullies are referred to in the Booth Engineers Report, sheet 5 drawing and that four field gullies with appropriate falls away from the building as per Booth Engineers Drawing No BE2018/180530 (sheet 5) have been incorporated in the original SOW, item 12.

[87] In the circumstances, I am not satisfied it is "reasonable and necessary" or otherwise "necessary" to add the amendment proposed by the applicants.

[88] Accordingly, I refuse this amendment.

S17

- [89] The applicants' proposed amendments to this item relate to the nature of the moisture testing to be conducted at the property, including specifying that the testing is to be undertaken at three monthly intervals.
- [90] Although the specifics of the required testing was not the subject of the Joint Expert Report, nor raised in evidence by the applicants at the hearing, Mr Rebibou conceded at the hearing that he was unable to contribute at the conclave to a discussion of areas beyond his expertise. The Commission has also had an opportunity to respond to the item in its response draft scope of works filed after the hearing. I note that the Commission's position is that the applicants have not discharged their onus of establishing that the addition of this item is reasonable and necessary to be added, and that the item as originally formulated was adequate.
- [91] The item as written provides that the moisture readings be undertaken "in a sufficient number of locations to as accurately as possible recorded (sic) the moisture levels in the concrete floors." As the moisture issue is one of most significant issues at the property it is, in my view, "reasonable and necessary" and otherwise "necessary" for the readings to be undertaken with care and precision at specified intervals. I do not, however, consider it appropriate for the SOW to provide for testing to occur for an open ended period. I have therefore omitted the proposed amendment which allowed for testing until the desired results were achieved and have replaced it with a 12 month testing period.
- [92] I therefore allow the amendments to S17 in the following terms:
- Allow for Booth Engineers to carry out an inspection on the completion of the works to provide the following information:
 - Undertake and provide moisture readings in accordance with ASTM F2170 ASTM F 2170 RH (Relative Humidity).
 - The testing is to include both external and internal areas in a sufficient number of locations to as accurately as possible record the moisture levels in the concrete floors.
 - The moisture reading locations shall be accurately recorded on a scale plan of the dwellings and include the moisture readings on the plan. The testing record to include:
 - (i) depth from top of slab, mm;
 - (ii) relative humidity in concrete, %;
 - (iii) temperature in concrete, C;
 - (iv) air relative humidity, %.
 - Allow to undertake additional testing at three monthly intervals for 12 months.
 - Results of testing shall be forwarded to Sergon/QBCC and attached to the file at each stage of monitoring.

S23 and S24

[93] The Commission conceded in its closing submissions filed after oral evidence that new items 23 and 24 are “reasonable and necessary” and ought to be included in “some form” in the SOW.

[94] It became apparent at the hearing that there had been some misunderstanding as to what item 23 referred to. Once the Commission understood that external cladding and flashings referred to the vertical joints, such as joints between brick work and cladding panels and not to the concrete pavements adjoining the wall or slab, the Commission conceded that the item should be included in the SOW.

[95] I am also satisfied that the item is “reasonable and necessary” or otherwise “necessary” and should be included in the SOW.

[96] I therefore include item 23 in the SOW in the following terms:

- External cladding and flashings:

Allow to remove sealants from vertical control joints/articulation Joints, prepare masonry substrate and install joint sealant in accordance with the manufacturer’s specifications.

[97] The new item 24 as proposed by the applicants relates to the mould remediation work that will be required at the property once the rectification work is complete. The applicants’ position is that item 24 should be included to ensure that the “necessary mould remediation” is undertaken at a later stage. The Commission does not contest that mould is a significant issue at the property and that it ought to be remedied. Accordingly, the Commission, after having had an opportunity to review the detail of the applicants’ proposed method of rectification, conceded that it is reasonable and necessary for item 24, in some form, to be included in the SOW.

[98] I accept that the rectification works are staged and that part of the process is the rectification of internal consequential damage and remedial work required as a result of mould. I am satisfied that item 24, as proposed by the applicants is “reasonable and necessary” and otherwise “necessary” to address the damage caused by mould. However, I also accept that the item needs to be confined so as not to exceed the terms of the cover available under the statutory insurance scheme. Therefore I accept the Commission’s proposed amendments to new item 24.

[99] Accordingly, I allow S24 in these terms:

Rectification of Internal consequential damage and required remedial work:

Preamble: The scope of work to generally include removal of floor coverings to affected areas only, all external wall joinery and plasterboard linings to 1200 above the floor to all areas systematically opened and identified as containing mould spores, sanitising the wall cavity and reinstating all including painting to match existing. The work to be completed after the slab moisture content has reached the required Relative Humidity – Refer Item 18.

Allow to complete the following work:

1. Restrict access to all affected areas. Susceptible individuals who are immunocompromised or genetically predisposed should not enter these areas until remediation works are complete and post remediation verification (PRV) results indicate normal fungal ecology.

2. Contain the area so that airborne biological contaminants do not cross contaminate during remediation. Install air management equipment ie HEPA filtration units, to achieve at least four air changes per hour and run under negative pressure air flow.
3. Remove and dispose of all moisture damaged materials including gypsum wallboard (gyprock walls); wall insulation; sound attenuation board; and carpet and carpet cushion (underlay) to affected areas. This is considered an accepted “standard of care” to be followed.
4. Mould remediation to structural building components employing methods as described in the *IICRC S520 Standard* and *R520 Reference Guide for Professional Mold Remediation*. The following list represents the generally accepted remediation procedures for building materials affected by mould contamination (actual growth):
 - (i) Mould remediation clean to remaining building interior surface components using HEPA vacuuming and damp wiping.
 - (ii) Antimicrobial treatment to all wall cavities and affected areas/building components.
 - (iii) Structural drying of any at risk building components (if required).
 - (iv) Mould remediation clean to wall mounted AC units.
 - (v) Post remediation verification (PRV) testing to confirm successful remediation by independent Environmental Professional.
5. Reinstatement of building materials damaged or removed during the investigation and remediation process including affected wall linings and ceilings if damaged requiring repair to match or equivalent to existing including two full body coats of paint on completion in accordance with AS 2311:2017 Guide to painting buildings; and AS/NZS 2455.1:2007 Textile Floor coverings – Installation practice General.

S7

[100] The applicants propose a new item after item 6 (new item 7). It provides:

- Allow to remove isolated bricks directly below the DPC/Termite barrier at approximately 900cm centres and replace with 1 course high brick vents. Builder to ensure finished level of path is sufficiently below bottom of brick vents and complaint (sic) with item 16 of this scope. Works to be undertaken to the left and right hand side of the building only.
- Finished surface levels are to be completed at the same height as the external slab edge height – so that the cavity does not fall below ground level.
- Allow to install a concrete apron to satisfy the NCC and AS2870 performance requirements as per Annexure A to this scope of works.

[101] Mr Helisma attached a drawing, Annexure A to the applicants’ proposed scope of works, which pertained to the third bullet point above of the new item 7. The Commission’s position is that the applicants have not discharged their onus of establishing that the addition of this item is reasonable and necessary to be added to

the scope of works. In particular, the Commission submits there is no evidence that the new Annexure A, relating to the concrete apron, is at all necessary and/or reasonable.

[102] I am not satisfied on the evidence, that the inclusion of new item 7 is “reasonable and necessary” or otherwise “necessary”. Accordingly, I do not allow new item 7.

S25

[103] Item 25 is a new item proposed by the applicants.

[104] The item, as proposed by the applicants, is as follows:

Rectification work if required associated with the movement in the footing system:

- Allow to arrange for engineer investigation to determine the full extent of non-conforming footing pier installation.
- Subject to the investigation allow to install underpinning and/or other works necessary to stabilise the building from ongoing movements in accordance with AS2870.
- If required allow to monitor the building by undertaking a level survey at 3 monthly intervals for a minimum of 6 months after completion of the above.
- On completion of the stabilising work including level survey monitoring, carry internal cosmetic repairs to any damage to internal plasterboard finishes including repainting walls and ceilings to the first architectural corner to match existing finishes in conjunction with Item 24.

[105] It will be noted that item 25 requires rectification work “if required”. Notwithstanding that, the applicants submit that the item is reasonable and necessary to rectify the defects identified in the direction to rectify.²²

[106] The Commission disputes that the item is reasonable and necessary. They argue that the evidence before the Tribunal indicates the defect currently evident at the property is slab edge dampness, as defined in the defective items listed in the Direction to Rectify issued on 23 July 2018 which, relevantly, provides:

...dwelling has not been adequately protected from moisture entry into the footings of the dwelling resulting in slab edge dampness occurring and moisture entry into the dwelling.

[107] The Commission submits that there is no evidence that there is subsidence, nor evidence that it is likely to develop.²³

Background and relevant evidence relating to item 25

[108] The owners in their complaint form of 28 October 2017 raised, amongst other things, issues with the vertical control joint in the courtyard of unit 11A which had moved; at the rear of the property, the privacy wall between 11A and 11B had sunk/moved more than normal and that the gutters had no fall and, in the case of the gutter between 11A and 11B was falling in the wrong direction.

²² Applicants’ submissions, [46].

²³ QBCC’s closing submissions (after oral evidence), [62].

[109] Mr Arnold Fisher, a Senior Building Inspector employed by the Commission undertook an inspection of the property on two occasions in early 2018. Mr Fisher identified that the property had “slab edge dampness” issues and added it as a complaint item to be further investigated by the Commission.

[110] The Commission asked Booth Engineers to carry out an inspection of the property only for the purpose of enabling the engineers to provide a report on the slab edge dampness issues affecting the property. On 25 June 2018 Mr Rebibou of Booth Engineers provided that report, titled Report on Slab Edge Dampness. Mr Rebibou is a civil engineer with over twenty years’ experience in the structural engineering sector.

[111] The report stated:

- The property falls from the front right to the rear left.
- The footing and slab inspection reports by Morgan Consulting Engineers describe that the footing system was constructed as a ‘waffle raft’ footing system.
- Evidence of ongoing moisture ingress was noted with ingress most obvious in the form of salting to slabs, moisture ingress and efflorescence around the building - most notably around perimeter sections of the building (although were advised that items within some cupboards located more centrally also are subjected to moisture related issues).
- Compared to other properties affected by SED, we would consider moisture ingress symptoms ...to be ‘moderate’.
- Excavation reveal[ed] that a moisture membrane has been installed. This reflects BCA/NCC and AS2870 requirements...with barrier terminated under external footing edge.
- Generally the moisture readings recorded indicated a high moisture is present.
- Recommend additional moisture tests be carried out following rectifications - this would thus allow for a ‘relative’ moisture content to be established which could be used to establish if moisture conditions were improving or worsening.

Conclusion

We recommend the following rectifications be considered as measures aimed at addressing the complex problems affecting this property:

Stage 1: Ensure no plumbing leaks are present and upgrade site drainage conditions around building and property. During removal of gravel walkways to the sides of building, consideration could also be given to the application of waterproofing to exposed footing edge noting however that this will not address moisture issues noted elsewhere around building. Consider the use of a moisture barrier/cut off wall around the front of the property. Such a moisture barrier would be used to attempt to divert subsurface water from the underside of the building pad and footing system. Monitor moisture content levels and possible improvements.

Stage 2: Consider the use of proprietary sealing products such as ‘Xypex’, ‘Sureseal’, ‘Sika’ etc to be applied externally and internally – apply to the

concrete footing/slab edge to manufacturers recommendations (this could also be applied internally around perimeter areas for best results). ...Monitor moisture content levels and possible improvements.

[112] On 18 July 2018 Mr Colin MacKenzie provided a report to the Commission primarily as to whether the timber in the wall cavities at the slab level had been affected by mould, decay or high moisture levels due to ingress of slab edge moisture. The moisture content of the wood was below 20% which is when wood will start to deteriorate due to moisture. However the results were much higher than normal for dry internal situations where moisture content results would be expected to be 12% to 13%. Results ranging from 17% to 21% were found in seven out of 12 locations following an extended dry and low humidity season. The report stated that 'higher readings may be found to occur during the wet season.'

[113] The Commission then provided their Initial inspection report on 20 July 2018. In that report, Mr Fisher referred to the reports by Booth Engineers and Mr MacKenzie and concluded that in respect of the gaps in the vertical control joint, movement at the expansion joint of the privacy wall and the fall of the gutters that there was no evidence of defective work and that they were maintenance issues commonly associated with dwellings on clay soil. In relation to the slab edge dampness issue, that the owners were advised that if a claim under the scheme is approved, that the following information was relevant which included:

The Booth Engineers Report and design to address the slab edge dampness issues on the site includes a deep cut-off wall across the front of the dwellings to stop water traversing down the slope through the ground to the slab. The installation of the cut-off wall will require a section of concrete approximately 600mm wide cut and removed across the full width of the concrete apron areas in front of both dwellings. The removed concrete section will be replaced with a match as possible (sic) to the existing scheme.

QBCC advised the concrete must be cut to rectify the defect, however, the whole area will not be replaced as it is not necessary to do that in order to rectify the defect. The HWS allows for the reasonable cost of rectification as determined by the QBCC. The replacement of significant areas of concrete not considered defective would be considered unreasonable.

[114] The report also stated, in relation to complaint item 6 (blistering and peeling paint on external walls) and complaint item 8 (slab edge dampness problem in garages and internal rooms of both dwellings) were found to be defective items. In relation to the paint issue (complaint item 6) it was said:

The blistering and peeling paint was found to relate to rising damp caused by moisture entering the concrete footings and wicking into the lower masonry walls under the dampcourse (sic) as a result of defective site and piped drainage work undertaken by the licensee.

...

QBCC conclusion

The construction of the dwelling does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's licence for the relevant class in that dwelling has not been adequately protected from moisture in accordance with standards to stop slab edge dampness from occurring and entering into the dwelling. The issue has

caused a health and safety concern for the occupants and deterioration of building elements.

[115] In relation to the slab edge dampness issue (complaint item 8) it was said:

The exterior and interior of the dwelling was inspected and it was identified there are signs of moisture permeating up from the under slab in areas around the perimeter of the dwelling particularly to masonry walls. An inspection of the internal areas of the dwelling identified salt build up, carpet smooth edged rot/decay and mould as a result of water wicking up through the slab.

The moisture is the result of defective construction in that plastic has not wrapped around the lower areas of the footing and up the external face to stop water entering the bare concrete.

A complete plumbing inspection and test was undertaken of all services attached to the dwelling. The plumbing test revealed damage to the drainage pipes surround the dwelling. Drainage pipes attached to the central courtyard areas were found to be blocked and possibly not connected to council discharge outlets. All the drainage issues noted were adding to the moisture in the ground, significantly increasing the moisture to very wet conditions not allowing the soil to dry naturally.

The result of the plumbing and site drainage issues has caused a condition called slab edge dampness and requires extensive external rectification to site and piped stormwater systems to correct the defect.

QBCC has obtained advice from Booth Engineers and Associates and Leakless Plumbing Pty Ltd as to how to rectify the slab edge dampness.

[116] On 23 July 2018 a direction to rectify was issued which included the following items relating to the paint and slab edge dampness issues respectively:

....

2.The construction of the dwelling does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's license for the relevant class in that dwelling has not been adequately protected from moisture in accordance with standards to stop slab edge dampness from occurring and entering into the dwelling. The issue has caused a health and safety concern for the occupants and deterioration of building elements.

- Pertains to Item 6 of the QBCC Complaint form.

...

4.The construction of the dwelling does not meet a reasonable standard of construction or finish that would be expected from a competent holder of a contractor's license for the relevant class in that dwelling has not been adequately protected from moisture entry into the dwelling. The issue is a health and safety issue for the occupants of the dwellings and is causing deterioration of building elements.

- Pertains to Item 8 of the Complaint form.

[117] On 27 July 2018 a second report by New Life Restorations identified "very high" levels of mould in the wall cavity of bedroom 1, lounge/media room and "extremely high" levels of mould from a surface sample.

[118] The Sergon SOW was prepared on 8 August 2018 and notified to the applicants on 13 August 2018. That scope of works did not include any ongoing monitoring or underpinning work.

[119] On 10 September 2018 Mr Helisma, on behalf of the owners, prepared a report with attached schedule that indicated he did not believe adequate investigations had been undertaken into the cause of the moisture problems and that the moisture problems should be considered at the same time as any differential movement problems. Mr Helisma states that he has worked in the construction industry as an apprentice carpenter, site supervisor, estimator, and has experience in contract administration and project supervision.

[120] In relation to the differential movement Mr Helisma states:

Differential movement exceeding 50mm has occurred in the waffle raft slab system which is 20mm greater than recorded by Booths on 18/5/2018.

The following further engineer investigation is required:

1. Soil testing for MC profile
2. Establish if subsidence is due to piers not founded to the required depth and/or adequate bearing capacity. Test the depth of piers.
3. Establish the effects of trees and leaking drainage and site drainage.
4. Undertake further plumbing drainage testing immediately including removal of front pavements to properly test pipe work.

Due to limited height of adjacent ground levels, poorly graded subgrades and highly reactive clays sealed concrete pavements including cut off walls are recommended.

Consequent damage cause by movement includes –

1. Crack in ceiling and
2. Separation/opening of articulation joints in 4 locations.
3. Back fall in roof gutters
4. Potential damage may occur in the recovery in the footing and slab system when drainage is rectified. Stabilisation may take 18 to 24 months.

[121] On 23 January 2019 Hughes, Beal & Wright Pty Ltd (HBW), as instructed by the owners, arranged a soil profile investigation to be undertaken by Civil Tech Soil Testing Services Pty Ltd. Three boreholes were drilled and the soil tested. Civil Tech established Shrink Swell index results which indicated a ground surface movement of between 48 and 77mm which is generally commensurate with a H1 classification at the rear of the building and an E classification at the front. Given the vegetation and fill on the site, the correct classification at the time the slab was cast and as at the date of the testing was P.

[122] On 4 February 2019, HBW wrote a preliminary report on slab edge dampness. It identified that:

The slab construction does not appear to comply with any of the details shown in Figure 3.2.2.3 of the National Construction Code 2012, the aim of which is to prevent moisture from being stored against the slab edge below slab level.

Booth in their report 'admit' that attempts to address "site drainage" may not be successful and that their recommendations are, in that event, not rectification.

Focus should be sealing (waterproofing) the exposed slab edge, from the vapour barrier beneath the slab up to the underside of the slab rebate or the threshold in the case of the garage doors.

Lowering the ground surface level and paving to a level below the slab rebate.

Opening the cavity between the slab rebate and the DPC to allow the cavity to breathe and dissipate any saturated atmosphere that may develop within that cavity from time to time. (This could be achieved by creating voids in the first course of bricks on top of the slab rebate).

Our investigations have *revealed other issues*, principally that some piers beneath the perimeter footing are founded in fill material or in one case on a tree root. This issue *may well be relevant to the long term performance of the footing and slab system* particularly given the proximity of the building to significant vegetation in neighbouring properties.(emphasis added)

[123] On 4 February 2019 Mr Helisma wrote a second report based on the preliminary findings by HBW and providing further instructions to HBW in relation to their geotechnical and structural investigation. In particular Mr Helisma raised the following as relevant issues:

1. CT testing shows shrink/swell value for the site ranges between 4.5 and 7.2 which may have the potential for differential movements under normal conditions exceeding 70mm placing the site classification in the E range depending on crack depth for Birkdale.
2. The engineer design may only be competent up to H2 classification.
3. The moisture profiles identify that the clay foundation have reached saturation down to 3m ie up to 46.3% at the rear of the house.
4. The footing piers have not been installed into 600mm through the fill into natural ground as specified by the design engineer. The footing piers fall short of the foundation requirements by up to 800mm to 1000mm.
5. This may have implication (sic) on the long-term performance and potential settlement.
6. Additionally, the engineer Morgan Consulting Engineers fail to address this issue prior to issuing the Form 16 where clearly the footing piers have not been installed to the correct depth.

[124] On 10 February 2019 HBW wrote a further, more detailed report²⁴ which summarised the evidence of damage at the property, the outcome of their investigations and made some findings. The report referred to cracking in internal and external walls, the opening of articulation joints mostly along the dividing wall between unit 11A and 11B and areas of efflorescence on the concrete floor slab.

[125] The HBW report identified that the slab was up to 69mm out of level; the back left hand corner, most probably the area with the greatest thickness of fill material, is the lowest point on the slab; the front of the garage to unit 11B is the highest area of the

²⁴ But incorrectly dated 10 January 2019.

slab; there is a ridge running from the garage door to unit 11B back towards the rear of the unit near the common wall; the steepest floor slopes do not exceed 1 in 100 and the opening articulation joints are consistent with the distortion in the floor slab assuming the slab was cast near level.

[126] In respect of the footing design, HBW concluded:

8.7.1 Morgan Consulting Engineers designed a 460mm deep waffle raft for the site. The raft was designed to be fully supported on 450mm bored piers founded not less than 600mm into natural firm material.

8.7.2 A 460mm deep waffle raft is consistent with a deemed to comply footing design for articulated masonry veneer construction on a class H2-D site.

[127] In respect of the footing construction, HBW excavated two exploratory pits down beside bored piers beneath the waffle slab. One pier was founded about 1.2m below the underside of the waffle slab. It was founded in fill material and in fact, there was a 50mm ag pipe running beneath the base of the footing. The second pier was founded about 1.2m below the underside of the waffle slab. It was founded on top of a large tree root. The pier was not founded 600mm into natural firm material.

[128] HBW concluded that the cracking and opening joints in the building were “almost certainly due” to differential ground movement beneath the footing and slab system. The subsoil was highly reactive beneath the rear of the building and extremely reactive at the front of the dwelling. The slab was 69mm out of level five years and nine months after construction.

[129] HBW concluded, relevantly:

I am of the opinion that the majority of the distortion in the building is due to fluctuations in moisture in the highly to extremely reactive subsoils. There may well be a component of the movement due to settlement of fill material particularly at the back left corner of the building where piers, designed to support the slab over fill material, were not founded into natural firm material.

[130] On 20 February 2019 Mr Helisma wrote a third report. In it he states he has perused the reports by HBW of 4 February 2019 and 19 February 2019 and concurs with the findings in relation to rising damp and the performance of the footing and slab system, in particular that the movements are associated with the highly to extremely highly reactive soils *as well as* improper founding of piers into natural ground (emphasis added).

[131] Mr Rebibou of Booth Engineers also wrote a Structural and Geotechnical Report dated 17 April 2019. In that report he concluded:

The floor levels of the dwelling are within compliant parameters of AS2870-2011 Appendix C.

There is cracking and damage to walls AS2870-2011 Category 1-3.

The issues on the site relate to moisture entering the ground from defective plumbing installations and poor site drainage and damage to installed plumbing pipes.

The cause of damage and movement is considered to be the result of a combination of heave relating to leaking services and poor site drainage, as well as trees and settlement to the rear.

Recommendations/Remedial work

Re-profile the ground levels around the building to ensure surface water does not pond near the footing system and to comply with design and BCA requirements as indicated on drawings BE2019/180530a.

Carry out slab edge dampness rectifications as per Booth Engineers report and consider HBW comments pertaining to increased ventilation at this time.

Remove trees within their mature height of the building where possible.

Inspection and monitoring during rectification to be undertaken by Booth.

After site rectifications, Booth to take level survey data and prepare a level survey plan and contour plan.

A monitoring inspection with a complete level survey and moisture ingress monitoring should also be undertaken at six (6) months and twelve (12) months after the works have been completed. This level survey data and monitoring inspection would then be used to confirm any ongoing movement prior to cosmetic rectifications being undertaken. Undertake cosmetic repairs utilising flexible fillers wherever possible following monitoring period and provide suitable articulation to wall fabrics. Should additional movement or ongoing moisture ingress be identified following the monitoring period, additional works may at this stage be considered which may include underpins to rear and rear left in particular and/or additional measures aimed at addressing slab edge dampness...

- [132] Based on Booth Engineers' Slab Edge Dampness Report and Structural and Geotechnical Report, the Commission wrote their Subsidence Summary Report dated 30 April 2019. That report extracts parts of the Booth Report above and states:

Cause of movement and damage including issues of site maintenance and drainage and construction works

7.01 The soil moisture conditions relating to a combination of poor site drainage and plumbing leaks/pipe breaks around the dwelling in all likelihood have had a significant influence on observed movement and damage particularly since these have been existing for some time (years in some cases) and are contributing to both SED and footing movement.

In this case we believe that damage and movement around the dwelling are related to a combination of heave conditions as reflected in the level survey data with some fill settlement which could also be occurring around the rear left of the building in particular (up to 0.7 metres of fill noted and piers founded in fill as per HBW report).

7.02 The following conditions and issues have hastened the inevitable long term building movements:

- i. Leaking services around the building as highlighted in plumbing test report.
- ii. Poor site and surface drainage around the building.
- iii. Trees/shrubs (rear left in particular).
- iv. Settlement (rear left of building).

8.02 The building damage and movement have occurred as a result of soil moisture related movements.

8.03 In summary, the footing and slab system and movements that have occurred adversely affect the structural adequacy and serviceability of the building and the expected performance and functional use of the building

when compared to the performance criteria for footings and slabs pursuant to AS2870 in regards to the category 2 to 3 cracks and gaps observed.

8.04 We also note that leaks and poor drainage are also contributing to observed SED as previously identified in Booth Engineers investigation....

[133] The report estimates the cost to rectify including cosmetics to be \$70,000.

[134] The final page of the report indicates that the file is to go to insurance for assessment, that the method of rectification is considered 'satisfactory' and the rectification is therefore recommended. Under 'method of rectification' it is stated: 'All rectification in accordance with the Booth engineering advice'.

[135] On 23 October 2019 a Joint Expert Report was filed in the Tribunal, following an experts' conclave conducted at the Tribunal on 29 August 2019 between Mr Helisma (the expert engaged by the applicants) and Mr Rebibou (the expert engaged by the Commission). The Member convening the conclave made the following direction at the conclusion of the conclave:

The experts, Martin Helisma and Stephane Rebibou are to prepare a joint report on the defects in the construction of the works of the relevant property, the cause of defects and the scope of works to rectify the defects.

[136] In the joint report, Mr Helisma concludes in relation to the issue of waterproofing of the slab:

The abnormal moisture and rising damp conditions are due to GW Homes (sic) failure to provide the following:

1. Field gullies...
 2. Falls away from the building in accordance with dwg 3 and dwg 2 of 9
 3. Falls away from the building to comply with AS2870
 4. Installation of gravel resulting in retention of moisture around the building
 5. Completion of the vapour barrier extending under the edge beams to the finished ground level in accordance with NCC2012 Volume 23.2.2.6 and Figure 3.2.2.3.
 6. Adequate site drainage across the front of the building.
 7. Rectification and installation of stormwater in accordance with dwg 2 of 9.
-The issues detailed above, collectively have caused the rising damp.

[137] In relation to the issue of differential movement with the footing system causing consequential damage to walls, ceilings and abnormal movement at control/articulation joints, Mr Helisma concludes:

The differential movement and consequential damage is primarily the result of site conditions which were either not rectified or completed by GW in a competent manner....this work was the responsibility of GW and was included in both the Sergon SOW and in the GW Contract Specification ...

The relevant defects include:

1. Site drainage
2. Stormwater pipes not being connected and/or leaking ...
3. Sanitary drainage...
4. Non-removal of tree...

[138] In relation to the issue of "footing piers not installed 600mm through the fill into natural ground specified by the design engineer. Footing pier depth falls short of the

foundation requirements by approximately 800mm to 1000mm”, Mr Helisma concludes in that part of the report dealing with who is responsible:

The full extent of non-conforming footing pier installation has not been identified by the QBCC. Therefore the effects or movement in the area of fill cannot be quantified. The issues relating to necessary further investigation of defects in the footing system have been ignored by the QBCC.

- [139] Mr Rebibou states “see above” which is a reference to a statement by him, in effect, that he is not in a position to address the issue of liability.
- [140] In relation to the issue of “Amount of movement has doubled since levels were taken by Booth Engineers on 18 May 2018, 36mm compared to 69mm on 23 January 2019”, neither expert provides comment.
- [141] In relation to proposed item 25, the Joint Report in relation to the proposed scope of work states:

New item – rectification work if required associated with the movement in the footing system.

Mr Helisma: I confirm that an assessment of such should be made as identified within my report and Stage 1 recommendations. Underpinning or other rectifications may then be considered as deemed appropriate.

Mr Rebibou: QBCC fail to provide this defect in the scope of work. Further investigation required to address the defective piers and assess what rectification work is necessary if required. Engineer assessment required.

- [142] Booth Engineers was engaged by the Commission to carry out an additional assessment of the slab edge dampness and subsequent building movement at the property. On 24 February 2020 Mr Rebibou of Booth Engineers carried out the additional assessment and undertook a floor level survey. It was found that the overall footing system movement and level differences across the property had reduced.²⁵ The level differences were 37mm as at 18 May 2018; 49mm as at 1 April 2019; and on 24 February 2020 were 40mm. Defects in the form of cracks and gaps had also decreased, significantly in some instances.
- [143] Mr Rebibou of Booth Engineers stated that the most likely cause of the observed recovery of movement/damage likely related to recent changes in soil moisture contents/rain. In his opinion rain had allowed founding soils to increase in moisture content around the property (and thus become more uniform throughout) and not just “wetter” around leaking services/poor drainage affected area.
- [144] Mr Rebibou stated that he expected conditions to worsen again as weather conditions became dryer, thus again leaving more pronounced differential moisture conditions around areas affected by leaking services/poor drainage.
- [145] Mr Rebibou considered that the building movement was within reasonable parameters and that “a lot of the movement” could be explained by site conditions, for example, plumbing leaks and bad drainage which did not require underpinning to be repaired. Mr Rebibou gave evidence that, based on the recorded levels, what was being seen was heave upwards movement relating to excessive moisture conditions

²⁵ Supplementary statement of Stephane Rebibou of 9 March 2020.

in the clays as opposed to sinking, the heave being directly related to the excess moisture conditions towards the front and right-hand side of the building.

- [146] In Mr Rebibou's view, if the soil moisture conditions were stabilised (by rectification of plumbing leaks and drainage issues), the next time the site dried out, it would not be just the rear part of the house, that is, the part of the home not as subject to plumbing leaks and drainage issues, which would drop down. Rather the whole building would move together in harmony, as it was supposed to do.
- [147] Mr Rebibou was asked in cross examination whether he was aware of the defective piers and whether, in his opinion, that issue could also have contributed to movement. Mr Rebibou gave evidence that he was aware of the defective pier installation at the rear left but, while he did not deny it was a possibility, he did not think, considering all the evidence, that it was significant.
- [148] Mr Rebibou did however agree that a review after six and 12 months was necessary and that, if, on review, the levels showed movement outside the accepted range, then underpinning work could be considered.

The applicants' position in relation to item 25

- [149] The applicants submit that rectification of the slab edge dampness issues is a staged process and the works in item 25 do not need to be done prior to, or concurrently with, the other rectification works. The applicants submit that item 25 is to be undertaken "if required". Mr Helisma when questioned as to what he meant by "engineering assessment required" in the joint report clarified that he meant:

Adequately investigate the issues properly so you are not reworking issues already refixed...

- [150] The applicants submit that the inclusion of item 25 does not mandate that works be unnecessarily undertake to the footing system but rather, that by mapping out the scope of works, the appropriate investigation and monitoring of the works is undertaken so as to make sure the defective works are rectified.
- [151] The applicants point out that the QBCC's own expert, Mr Rebibou, also maintains that item 25 is a good idea and that in his second report he includes:

Should additional movement or ongoing moisture ingress be identified following the monitoring period, additional works may at this stage be considered which may include underpins to rear and rear left in particular and/or additional measures aimed at addressing slab edge dampness...

The Commission's position in relation to item 25

- [152] The Commission submits the Tribunal could not, on the basis of the evidence, adequately determine whether or not item 25 is reasonable or necessary to be included in the scope of works. Therefore, it is submitted that the correct and preferable decision is not to include item 25, due to its speculative and undetermined nature.
- [153] The Commission submits that it is undesirable for the Tribunal, standing in the shoes of the Commission, to venture into speculation about defects that might arise at some time in the future, as to do so would set an impossible exercise for the Commission, as a government regulatory authority, to maintain in the future.

[154] The Commission submits that the scope of the review proceeding ought to be narrow and limited to the evidence before the Tribunal at present. Further, that the Tribunal's jurisdiction in a scope of works review, when properly construed in light of the QBCC and QCAT Acts, does not extend to a supervisory jurisdiction under which the Tribunal may direct the Commission on future progress and expenditure under the statutory insurance scheme in relation to the applicants' accepted claims. On the contrary, that the scope of the Tribunal's jurisdiction is limited as prescribed by s 24 of the QCAT Act.

Consideration of whether to include Item 25 in the Scope of works

[155] The initial inspection report of the QBCC on 20 July 2018 identified the existence of gaps in the vertical control joint, movement at the expansion joint of the privacy wall and the fall of the gutters, but classified these as maintenance works and said there was no evidence of defective work.

[156] The existence of movement in the slab was identified on 10 September 2018, in the report of that date by Mr Helisma. In particular, Mr Helisma said that "Differential movement exceeded (sic) 50mm has occurred in the waffle raft slab which is 20mm greater than that recorded by Booths on 18/5/2018". Further engineering investigation was "required" including investigation of the piers. Mr Helisma also identified damage caused by the movement, including "crack in ceiling", "separation/opening of articulation joints in the 4 locations" and "Backfall in roof gutters". He also identified the fact that potential damage may occur in the recovery in the footing and slab system when drainage is rectified", and that "Stabilisation may take 18 to 24 months".

[157] On 23 January 2019 HBW identified ground surface movement of between 48 and 77mm.

[158] On 4 February 2019, HBW in a report noted that "piers beneath the perimeter footing are founded in fill material or in one case on a tree root". The issue "may well be relevant to the long term performance of the footing and slab system".

[159] Mr Helisma's report of 4 February 2019 outlined the need for further geotechnical and structural investigation. His report raises relevant issues including the following:

CT Testing shows shrink/swell value for the site ranges between 4.5 and 7.2 which may have the potential for differential movements under normal conditions exceeding 70mm; the footing piers have not been installed into 600mm through the fill into natural ground as specified by the design engineer, that is, the footing piers fall short of the foundation requirements by up to 800mm to 1000mm.

[160] On 10 February 2019 HBW identified that the slab was up to 69mm out of level in respect of the footing design. HBW concluded that the raft slab was designed to be supported on 450mm bored piers founded not less than 600mm into natural firm material. HBW concluded that one pier was not 600mm into natural firm material. It concluded that the cracking and opening of joints was almost certainly due to differential ground movement beneath the footing and slab system. It concluded that the majority of the distortion in the building was due to fluctuations of moisture in extremely reactive sub-soils; but that a component of the movement "may well" be due to the fact that at the back left corner the piers were not formed in natural firm material.

[161] Mr Helisma concurred with the last-mentioned finding in his report of 20 February 2019.

[162] The Booth Engineers Report of 17 April 2019 recommended monitoring of levels and moisture ingress six and 12 months after completion of the works to “confirm any ongoing movement”. It concluded:

- (a) Should additional movement or ongoing moisture ingress be identified following the monitoring period, additional works may at this stage be considered which may include underpins to rear and rear left in particular and/or additional measures aimed at addressing slab edge dampness...

[163] The QBCC “Subsidence Report” dated 30 April 2019 concluded:

Cause of movement and damage including issues of site maintenance and drainage and construction works

The soil moisture conditions relating to a combination of poor site drainage and plumbing leaks/pipe breaks around the dwelling in all likelihood have had a significant influence on observed movement and damage particularly since these have been existing for some time (years in some cases) and are contributing to both SED and footing movement.

In this case we believe that damage and movement around the dwelling are related to a combination of heave conditions as reflected in the level survey data with some fill settlement which could also be occurring around the rear left of the building in particular (up to 0.7 metres of fill noted and piers founded in fill as per HBW report).

[164] The QBCC Report recommended, in respect of “method of rectification”, that “All rectification in accordance with the Booth Engineering advice”.

[165] The “Booth Engineering advice” included the monitoring and consideration of additional work.

[166] In the Joint Report Mr Helisma said:

The full extent of non-conforming footing pier installation has not been identified by the QBCC. Therefore the effects or movement in the area of fill cannot be quantified. The issues relating to necessary further investigation of defects in the footing system have been ignored by the QBCC.

[167] Further, in the Joint Report, Mr Helisma and Mr Rebibou said, respectively:

New item – rectification work if required associated with the movement in the footing system.

Mr Helisma: I confirm that an assessment of such should be made as identified within my report and Stage 1 recommendations. Underpinning or other rectifications may then be considered as deemed appropriate.

Mr Rebibou: QBCC fail to provide this defect in the scope of work. Further investigation required to address the defective piers and assess what rectification work is necessary if required. Engineer assessment required.

[168] In the Booth Engineers Report of 24 February 2020, it was found that the movement difference across the property had reduced but that Mr Rebibou “expected conditions to worsen again as weather conditions became dryer, thus again leaving more pronounced differential moisture conditions around areas affected by leaking services/poor drainage”.

- [169] Mr Helisma treats the issues of slab edge dampness and the defective piers as entirely separate. In his oral evidence Mr Helisma concedes that further engineer assessment is required in order to determine whether and to what extent underpinning may be required. Mr Helisma gave evidence that underpinning was not dramatic and could be done in one day, particularly if the work was confined to the two piers on the outside rear left of the building.
- [170] Mr Rebibou considered in his oral evidence that the cause of the movement was related to site conditions and that once the soil moisture conditions had become uniform across the property the differential movement causing cracks and gaps in the building would also be addressed. Mr Rebibou gave evidence that underpinning is quite dramatic, involving drilling and excavation; that it affects the actual physical capacity of the main founding structure and would typically be reserved for structures where there had been significant obvious movement. However, Mr Rebibou also agreed in cross examination that because he could not categorically rule out issues with the footing system until the other stabilisation works had been completed and there had been an opportunity for monitoring, that it was necessary to include in the SOW a six or 12 month review of the works, and, that if there were any obvious cracks or gaps, to address them then.
- [171] The question is whether, on the basis of that evidence, item 25 is “reasonable and necessary” or “necessary” in the more refined sense I have discussed above. The applicants do not contend that a scope of works requiring rectification of the piers is “reasonable and necessary” at this time. That position is consistent with the engineering and other expert evidence which is uniform in its effect that further investigation and monitoring after completed stabilisation works is required.
- [172] I am satisfied, based on the evidence of HBW, that piers at the rear left of the property have been sourced in fill and that this amounts to defective installation, the piers having not been installed at least 600mm into firm ground in accordance with the engineer’s footing system design. However, I am not satisfied on the present evidence that the defective piers are contributing to the slab edge dampness or to issues relating to differential movement. The highest the position for the applicants could be put is that the defective piers “may well” be contributing to the slab movement. That was the evidence of Mr Wright from HBW. In itself, the words “may well” in my opinion fall short of “did, on the balance of probabilities”. Mr Wright was not called as a witness in the proceedings by the applicants and was not cross examined. Mr Rebibou’s evidence did not go as far as Mr Wright’s evidence and in his oral evidence before me Mr Rebibou gave evidence that his most recent floor levels proved that the movement was caused by heave upwards rather than being associated with settlement around the piers. On the weight of the evidence, and consistent with the position adopted by the applicants, I am not satisfied, on balance, that the defective piers are contributing to the slab movement.
- [173] It is, in my opinion, impermissible on that basis to order that the scope of works include the rectification of the defective pier work. Absent a demonstrated causal link between the defective piers and the defects the subject matter of the decision, so to order would fall outside the scope of this review decision.
- [174] In circumstances where the applicants have not proved that the rectification of the defective piers is necessary, only that the rectification work may be necessary depending upon further investigation, I am not satisfied that the applicants have discharged their onus in relation to those works. Even if, contrary to the view I have

formed, the defective piers are contributing to the slab movement, I am not satisfied that it is “reasonable and necessary” or “necessary” that the defective piers be rectified in the process of resolving the defect associated with the slab movement.

Conclusion

The scope of works decision made by the QBCC dated 13 August 2018 is amended as follows:

- (a) amendments to items S2, S3, S4, S8, S10 and S17 in the terms provided in these Reasons;
- (b) the addition of S23 in the terms provided in these Reasons; and
- (c) the addition of S24 in the terms provided in these Reasons.