

Wei Siang Design Construction Pte Ltd v Euro Assets Holding (S) Pte Ltd
[2018] SGHC 182

Case Number : Suit No 993 of 2012
Decision Date : 23 August 2018
Tribunal/Court : High Court
Coram : Vinodh Coomaraswamy J
Counsel Name(s) : Michael Por and Cindy Er (Michael Por Law Corporation) for the plaintiff; Melvin Chan, Kishan Pillay and Geraldine Kuah (TSMP Law Corporation) for the first defendant; Nigel Bogaars and Savliwala Din (Bogaars & Din) for the second defendant; Timothy Ng and Marjorie Kong (Timothy Ng LLC) for the third defendant.
Parties : Wei Siang Design Construction Pte Ltd — Euro Assets Holding (S) Pte Ltd (formerly known as Euro Search International Pte Ltd)

Building and Construction Law – Architects, Engineers and Surveyors – Duties and Liabilities

Building and Construction Law – Architects, Engineers and Surveyors – Statutory Obligations

Building and Construction Law – Construction Torts – Negligence

Building and Construction Law – Construction Torts – Economic Loss

Building and Construction Law – Drawings

Building and Construction Law – Scope of Works – Variations

Planning Law – Conservation Areas

[LawNet Editorial Note: The first defendant's appeal in Civil Appeal No 171 of 2018 and the third defendant's appeal in Civil Appeal No 170 of 2018 were dismissed by the Court of Appeal on 12 July 2019, with no written grounds of decision rendered. The Court of Appeal agreed with the reasoning and decision of the High Court.]

23 August 2018

Judgment reserved.

Vinodh Coomaraswamy J:

Introduction

1 When a conservation building in a historic district in Singapore is renovated, all those involved in the renovation must comply with Conservation Guidelines issued by the Urban Redevelopment Authority ("URA"). The case before me arises from the renovation of a conserved shophouse in Chinatown which deviated substantially from these guidelines. Parts of the shophouse which were to be retained were demolished and rebuilt in a non-compliant way. Parts of the shophouse which were to be constructed in a certain way were constructed in a non-compliant way.

2 The URA refused to waive these deviations. The owner of the shophouse was obliged to rectify the deviations. As a result, it incurred substantial costs and suffered a delay of more than three years

in securing the Temporary Occupation Permit ("TOP") for the shophouse. The owner now seeks compensation from the three parties involved in the renovation: the contractor, the architect, and the engineer.

3 The owner's case is that: (a) the architect failed to ensure that the drawings used for the renovation were consistent with each other; (b) the engineer failed to ensure that his structural drawings were consistent with the other drawings; and (c) the contractor failed to clarify with the architect the obvious inconsistencies between the drawings presented to it and instead proceeded to demolish architectural features and to rebuild them, doing both in a manner inconsistent with the drawings. The plaintiff also alleges that the architect and the engineer failed to detect the contractor's deviations and failed to insist that the contractor rectify them in a timely manner.

4 The main question before me is which one or more of these three parties, if any, is liable for the owner's loss. A subsidiary question before me is whether the owner owes the contractor certain sums for work done.

5 Having heard and considered the parties' submissions, I now set out my decision. On the owner's claim, I hold that:

(a) The contractor, the architect, and the engineer are all liable to the owner in respect of the deviations to: (i) the second and third storey rear slabs; (ii) the rear roof slab; and (iii) the rear external staircase;

(b) The contractor and the architect, but not the engineer, are liable to the owner for the deviation at the rear boundary wall.

The quantum of damages payable to the owner by these three parties will be assessed separately. That assessment will also deal with the apportionment of liability as between each of these three parties. As against the owner, however, the three parties are jointly and severally liable for the whole of the owner's loss.

6 On the contractor's claim against the owner, I allow the claim in respect of variation works done to install an additional rainwater drop pipe. All of the contractor's remaining claims against the owner are dismissed.

The factual background

The shophouse

7 The conservation shophouse at the centre of this dispute is at 25 Boon Tat Street, Singapore 069622. It is located within the Historic District of Chinatown. The URA considers that district to be one in which the "strictest form of conservation is practised". [\[note: 1\]](#) Renovation of shophouses in Chinatown are therefore subject to the URA's Conservation Guidelines. [\[note: 2\]](#)

The parties

8 The owner of the shophouse is Euro Assets Holding (S) Pte Ltd. In 2011, the owner initiated a renovation project to make certain additions and to carry out certain alterations to the shophouse. The owner is, as a matter of form, the sole defendant to the contractor's claim for unpaid sums due for work done. As a matter of substance, however, the owner is the plaintiff in this action in all but name.

9 The contractor is Wei Siang Design Construction Pte Ltd. The owner engaged the contractor to carry out the addition and alteration works to the shophouse. The contractor is the plaintiff in the action and the first defendant to the owner's counterclaim.

10 The architect is Chia Soo Ong Hector. He is a registered architect and the Managing Director and a shareholder of Nota Design Architects + Engineers Pte Ltd ("NDAE"). The architect was at all material times the principal architect for the project and also the Qualified Person (Architectural) in the statutory regime under which the alterations and additions were carried out. The architect is not a party to the contractor's claim and is the second defendant to the owner's counterclaim.

11 The engineer is Lee Ong Fee, also known as Lee Tat Sang. He is a professional engineer and was the civil and structural engineer for the project. He was also the Qualified Person (Structural) in the statutory regime under which the alterations and additions were carried out. The engineer is not a party to the contractor's claim and is the third defendant to the owner's counterclaim.

The relationship between the parties

12 The only contract between any of the parties in this action is the contract between the owner and the contractor. That contract came about when, under a letter of award dated 19 July 2011, the owner engaged the contractor to be the main contractor for the project. [\[note: 3\]](#)

13 The owner has no contract with the architect or with NDAE. The owner's contract for architectural services is, instead, with a project consultancy firm related to NDAE and known as Nota Group Pte Ltd ("NGPL"). [\[note: 4\]](#) Both NDAE and NGPL are members of a group of companies known as the Nota group.

14 The owner entered into its contract with NGPL in September 2010. Under that contract, NGPL was to provide the following professional services for the project: "architectural, structural design, interior design, M&E design, design development, submission and supervision of the ... project". [\[note: 5\]](#) NGPL acted as project consultants and managed various aspects of the project. Three of its personnel in particular are important: Lee Boon Pin, Declan Reilly, and Danny Goh. I shall refer to these three individuals collectively as the "project management team".

15 Pursuant to NGPL's contract with the owner, NGPL engaged NDAE to provide architectural services for the project. NDAE then nominated the architect as the individual to provide the architectural services. The architect was the only registered architect in NDAE and also in the wider Nota group. The relationship between NGPL and NDAE, although contractual, is not recorded in any formal written agreement. [\[note: 6\]](#)

16 In December 2010, by a written contract, NDAE engaged the engineer to provide engineering services for the project. [\[note: 7\]](#)

17 For whatever reason, the owner makes no claim against NGPL or NDAE in this action.

The drawings and colour coding convention

18 It is essential to begin the summary of the facts by describing and distinguishing between five sets of drawings.

(a) First are the tender drawings. As the name suggests, these are drawings issued to

contractors who are invited to tender for the project. [\[note: 8\]](#)_NGPL prepared the tender drawings.

(b) Second are the written permission drawings. [\[note: 9\]](#)_These are the drawings submitted by the architect to the URA setting out the work which the owner intends to carry out. [\[note: 10\]](#) The URA considered and approved these drawings before it granted written permission dated 2 March 2011 for the owner's works to proceed. [\[note: 11\]](#)_The written permission drawings are architectural drawings which set out the plan (top) and elevation (side) views of the shophouse. The written permission drawings are substantially the same as the tender drawings.

(c) Third are the structural drawings. [\[note: 12\]](#)_These plans were prepared by the engineer and were approved by the Building & Construction Authority ("BCA") on 5 May 2011. [\[note: 13\]](#)

(d) Fourth are the construction drawings. [\[note: 14\]](#)_The contractor gave discovery of the construction drawings in this action. The contractor says that the construction drawings were part of the tender drawings and were turned into construction drawings. [\[note: 15\]](#)_The construction drawings are substantially the same as the tender drawings, except that the construction drawings are in black and white rather than in colour. [\[note: 16\]](#)

(e) Fifth and finally are the building plans. [\[note: 17\]](#)_The building plans are architectural drawings prepared by the architect and submitted to the BCA for approval.

19 Several of these drawings are prepared with the use of a software package known as Auto Computer Aided Design or 'AutoCAD'. Construction professionals and contractors who use AutoCAD adopt a specific colour-coding convention in depicting architectural features in these drawings. This convention is set out the Code of Practice for Construction Computer Aided Design ("Code of Practice"). [\[note: 18\]](#)_The colour-coding indicates whether a particular feature is: (a) an element of the existing structure to be retained, indicated in blue or cyan; (b) a proposed new element to be constructed, indicated in magenta or purple; or (c) an existing element to be demolished, indicated in yellow.

The deviations

20 The project breached the URA's Conservation Guidelines in the manner in which four features of the shophouse were treated. These breaches also led to the URA refusing to give its approval to BCA issuing a TOP for the shophouse.

21 The first of the four features is the rear slab on the roof of the shophouse. The rear roof slab was to be demolished and reconstructed. The original rear slab accommodated a drop in elevation from the front slab. As required by the conservation guidelines, the reconstructed rear roof slab was to retain this drop in elevation. Instead, the contractor reconstructed the rear roof slab flush with the front roof slab, *ie* without any drop in elevation.

22 The second feature is the rear floor slabs on the second and third storey. The original rear floor slabs on the second and third storeys had a drop in elevation from the original front floor slab on the same storey. This drop in elevation was again to be retained. The contractor demolished these rear floor slabs and reconstructed them flush with the front floor slabs on each storey, *ie* without the drop in elevation.

23 The third feature is the rear external staircase. The contractor built this staircase using a structure comprising thick columns and beams. The parties refer to this as the “H” structure”. The “H” structure appeared in neither the written permission drawings nor the construction drawings. The URA rejected the “H” structure as being in breach of the Conservation Guidelines because it was “too heavy looking and [changed] the architectural character of the rear service block”. [\[note: 19\]](#)

24 The fourth and final feature is the rear boundary wall. According to the written permission drawings, the rear boundary wall was to be built with a height of 1.0 metre. The contractor built the wall with a height of 1.8 metres.

The legal background

25 Having summarised the factual background, I now turn to the legal background. At the root of the legal background is the statutory regime governing constructions work in Singapore and, in particular, governing structural work done to buildings covered by the URA’s Construction Guidelines.

26 Where an owner proposes to do any structural work to a building in Singapore, he must comply with the Building Control Act (Cap 29, 1999 Rev Ed). In addition, where an owner proposes to do any work to a conservation building in Singapore, he must also comply with the Planning Act (Cap 232, 1998 Rev Ed). I will briefly describe each statute in turn.

The Building Control Act

27 The Building Control Act regulates structural works to any building. The BCA is the competent authority to grant permission to carry out structural works under the Act and to grant a TOP when the works are completed.

28 Section 6 of the Building Control Act sets out the procedure for an application for a permit to carry out structural works in the course of any building works. This application takes the form of a joint application by three parties: (a) the developer of the building works; (b) the builder appointed by the developer; and (c) the qualified person whom the developer or builder has appointed to supervise the works.

29 Section 2 of the Building Control Act provides that the qualified person may either be an architect or an engineer who has a practising certificate in force. But rr 4 and 6 of the Building Control Regulations 2003 (S 666/2003) read with the Third Schedule to those regulations provide that there are certain categories of works for which *only* a professional engineer (and therefore not an architect) can be the qualified person.

30 In this case, the engineer took it upon himself to declare in the joint application to the BCA for permission to carry out structural works that he was the qualified person to supervise the structural works. [\[note: 20\]](#) He also confirmed in cross-examination that the submissions which he made to the BCA under the Building Control Act were made in his capacity as the qualified person for structural works. [\[note: 21\]](#) Hence, I shall refer to the engineer as “QP (Structural)”.

31 It is not disputed, however, that it was the architect – and the architect alone – who was responsible for submitting the building plans to the BCA under the Building Control Act. [\[note: 22\]](#)

The Planning Act and the Conservation Guidelines

32 Section 11 of the Planning Act read with the Planning Act (Appointment of Competent Authority) Notification (Cap 232, N 7, 2007 Rev Ed) empowers the URA to issue guidelines for the conservation of buildings or land within a conservation area and for the protection of their setting. It is not disputed that the owner's shophouse is subject to a set of Conservation Guidelines which the URA issued under this power in 2006.

33 Section 12(2) of the Planning Act prohibits any person from carrying out any works within a conservation area without conservation permission. Conservation permission is a type of "written permission" as defined in s 2 of the Planning Act.

34 Under Schedule 1 of the Planning Act, a qualified person for the purposes of the Act includes a registered architect, a registered professional engineer and a registered land surveyor. Where a conserved building is involved, however, the URA's guidelines impose more stringent conditions on who can be a qualified person, depending on the degree of the impact of the works on the conserved building. [\[note: 23\]](#) The URA defines Category 1 Works as works which "affect the key elements of conserved buildings" and have a "significant impact on the architectural character and spatial integrity of conserved buildings". Where an owner proposes to do Category 1 Works to a conserved building, the qualified person in the submission for written permission can only be a registered architect (and therefore not an engineer). [\[note: 24\]](#)

35 In the case before me, both the architect and the engineer knew that this project involved Category 1 Works. [\[note: 25\]](#) It is not disputed that the architect was the qualified person for all submissions of plans to the URA. I therefore refer to him as "QP (Architectural)".

36 Rule 3 of the Planning (Declaration by Qualified Person) Rules (Cap 232, R 11, 2007 Rev Ed) provides that every application to the URA for written permission must be accompanied by a declaration by a qualified person that the information contained in the "form, document, plan or drawing" submitted for the purposes of the application is true and correct in all material particulars, and that every such form, document, plan or drawing has been completed and prepared in accordance with the Act, with rule 3 of the Planning (Development) Rules 2008 (S 113/2008), and such other requirements as may be specified by the URA in respect of the application.

Interaction between the Building Control Act and the Planning Act

37 Where construction work to be carried out to a building is subject to both the Building Control Act and the Planning Act, the BCA will not issue a TOP unless the URA approves. The URA will not give its approval if the terms of the URA's written permission have been breached. [\[note: 26\]](#)

38 In this case, as I have set out at [20]–[24] above, four features of the work carried out on the shophouse deviated in significant respects from the terms of the URA's written permission. When the architect applied for TOP for the shophouse, the URA declined to waive the deviations. [\[note: 27\]](#) The BCA therefore declined to issue the TOP until rectification works were carried out to bring the work done to the shophouse into compliance with the terms of the URA's written permissions. [\[note: 28\]](#)

The delays in obtaining URA's approval and in obtaining TOP

39 The contractual completion date for the project was 22 November 2011. [\[note: 29\]](#) There was some suggestion that the contractor secured an extension of time to 11 December 2011. [\[note: 30\]](#) That is not, however, material for present purposes.

40 On 28 November 2011, the architect applied to the URA for written permission to amend the original drawings submitted to the URA in order to align those drawings with the deviations which had taken place in carrying out the works. [\[note: 31\]](#) The URA rejected his application. Instead, on 27 December 2011, the URA issued a written direction objecting to the deviations at the rear roof slab and at the rear external staircase. [\[note: 32\]](#) The URA made no mention of the deviations at the second and third storey slabs. This is because the architect did not disclose these deviations in his amendment application.

41 The architect submitted a series of similar amendment application in April 2012 and May 2012. [\[note: 33\]](#) The URA rejected them both. [\[note: 34\]](#)

42 In October 2012, the owner changed architects. [\[note: 35\]](#) The new architect, Philip Yong, submitted another amendment application to the URA in November 2012, in effect seeking again a waiver of the deviations. [\[note: 36\]](#) That too was rejected. [\[note: 37\]](#)

43 Philip Yong then changed tack. In July 2013, he submitted a fresh application to the URA, [\[note: 38\]](#) now seeking written permission to rectify the deviations. He proposed to do this by:

- (a) Demolishing the existing rear block, comprising the rear roof slab and the second and third storey rear floor slabs, and reconstructing them at the original heights as indicated in the written permission drawings;
- (b) Demolishing the non-compliant rear external staircase and constructing a new cantilevered staircase; and
- (c) Demolishing the rear boundary wall and reconstructing it at a height of 1.0 metre as indicated in the written permission drawings.

44 In September 2013, the URA approved Philip Yong's application and granted written permission for the rectification works to be carried out. [\[note: 39\]](#) The owner appointed a new contractor and a new engineer to do so.

45 The rectification works were duly carried out and completed in September 2014. [\[note: 40\]](#) The delay of almost three years meant that the necessary approvals for the certificate of statutory completion ("CSC") had already been obtained by September 2014. [\[note: 41\]](#) It was no longer necessary, therefore, for the owner to go through the intermediate step of securing TOP before occupying the shophouse. The project received its CSC on 4 December 2014 and the owner went into occupation. [\[note: 42\]](#)

This action

Procedural history

46 The contractor began this action in 2012 as a claim against the owner for unpaid sums due for work done on the project. The owner in turn counterclaimed damages from the contractor for loss cause by the deviations. The architect and the engineer were then joined as defendants to the owner's counterclaim.

47 The trial of the contractor's claim has not been bifurcated whereas the trial of the owner's counterclaim is bifurcated. [\[note: 43\]](#) As far as the claim is concerned, therefore, this judgment deals with both liability and quantum. As far as the counterclaim is concerned, this judgment deals only with liability.

48 By a series of agreements, the contractor's claim against the owner has been considerably narrowed. As a result, the substance of this action is now really about the counterclaim rather than the claim. I therefore begin with the counterclaim before turning to the claim.

The parties' cases on the counterclaim

49 I shall set out in detail each party's case on each deviation when I analyse that deviation. At this juncture I set out only the general thrust of each party's case in order to crystallise the issues to be addressed.

50 The owner's case is that all three defendants to its counterclaim are – to varying extents – responsible for its loss. The contractor is liable because it failed to clarify inconsistencies in the drawings with the architect. Instead, the contractor blindly demolished what was not meant to be demolished; and, in rebuilding the features, it failed to rebuild them according to the drawings. The architect is liable because he was the professional overseeing the project but failed to ensure that his drawings and the engineer's drawings were consistent with the drawings approved by the URA. Finally, the engineer is also liable because he failed to ensure that his structural drawings were consistent with the drawings approved by the URA. Moreover, both the architect and the engineer failed to detect the contractor's deviations during their respective site inspections and failed to have the deviations rectified in a timely manner.

51 The contractor, the architect and the engineer respond with mutual finger pointing.

52 The contractor's response is that it has no obligation to clarify divergences between the drawings, and that as long as it follows one of the various sets of drawings, it is not in breach of contract. In any event, the architect approved the demolition and rebuilding of the various features.

53 The architect's response is that he owed no duties to the owner because he is not in a contractual relationship with the owner. But even if he did owe a duty of care in tort to the owner, he says that he discharged that duty because detecting deviations such as those which occurred here is not within the scope of that duty. The cause of the owner's loss and damage is the contractor's failure to follow the approved drawings.

54 The engineer's response is that he owed no duty to the owner to ensure consistency between drawings or to detect deviations from the drawings such as those which occurred. Instead, it is the architect's duty to ensure that the various sets of drawings are consistent with each other and that no deviations occur when the contractor carries out the works. That is because the architect is required by statute to be the professional overseeing a project such as this. Alternatively, the contractor should be held liable because he failed to comply with the drawings.

Issues to be determined on the counterclaim

55 The most significant legal feature of this case is that the owner has no contract with either the architect or with the engineer. The fundamental issue which is in controversy, therefore, is whether either the architect or the engineer owed a duty of care to the owner.

56 I therefore summarise the issues which I have to decide on the counterclaim as follows:

- (a) Did the architect owe a duty of care to the owner?
- (b) Did the engineer owe a duty of care to the owner?
- (c) Were any of the four deviations identified above at [21]–[24] above caused by one or more of the following:
 - (i) a breach of contract by the contractor;
 - (ii) a breach of any duty of care which the architect owed the owner; or
 - (iii) a breach of any duty of care which the engineer owed the owner?

Preliminary issue: what were the exact duties owed?

57 Before I turn to analyse these issues, it is necessary to set out clearly the specific duties which the owner claims the architect and the engineer owed it. The owner argues two specific duties.

58 The first of these duties is a duty to: [\[note: 44\]](#)

...[prepare] plans for submission to the relevant authorities to obtain their approval for the works, and ensure that the said plans are in compliance with the requirements of the authorities; and also to check and ensure that all the drawings used in the course of construction of the [project] are consistent with the plans approved by the relevant authorities...

I shall refer to this duty as the “drawings duty” and to the set of factual allegations underlying this aspect of the owner’s claim as “drawings failure”.

59 The second duty is a duty to: [\[note: 45\]](#)

...[supervise] the carrying out of the building works to ensure that the building works comply with the requirements of the authorities, including, inter alia, that the works are in accordance with the approved plans...

I shall refer to this duty as the “supervision duty” and to the set of factual allegations underlying this aspect of the owner’s claim as “supervision failure”.

Issue 1: did the architect owe the owner a duty of care in tort?

60 The first issue is whether the architect owes the owner a duty of care in the tort of negligence. The Court of Appeal set out the universal test for determining this question in the seminal case of *Spandeck Engineering (S) Pte Ltd v Defence Science & Technology Agency* [2007] 4 SLR(R) 100 (“*Spandeck*”). The test is so well-established that I need not set out the elements in detail. I will, however, give an outline of the test to serve as the skeleton for the analysis which follows.

61 The *Spandeck* test comprises a preliminary or threshold question coupled with a two-stage test. The preliminary question asks whether it was factually foreseeable that the plaintiff would suffer loss from the defendant’s actions. The two-stage test considers at the first stage whether there exists sufficient proximity between the parties. At the second stage, it considers whether policy

considerations point against a duty of care arising: *Spandeck* at [75]–[83]. The *Spandeck* test is to be applied incrementally at each stage, by reference to existing case law on analogous situations.

The threshold question: factual foreseeability

62 The owner argues that it was factually foreseeable that drawings failure and supervision failure by the architect would result in the owner suffering loss. [\[note: 46\]](#) A foreseeable consequence of drawings failure is that the contractor carries out works otherwise than in accordance with the written permission and the Conservation Guidelines resulting in the owner having to bear rectification costs. A foreseeable consequence of supervision failure is a delay in obtaining TOP.

63 The architect rightly does not contest factual foreseeability. [\[note: 47\]](#) This is no doubt because the Court of Appeal in *Spandeck* at [75] adopted the views of Andrew Phang J (as he then was) in *Sunny Metal & Engineering Pte Ltd v Ng Khim Ming Eric* [2007] 1 SLR(R) 853 at [55] that the requirement of factual foreseeability will almost always be satisfied.

64 In my view, this is the typical case in which the threshold requirement of factual foreseeability is easily satisfied. The real battle between the parties is on the two-stage test.

Stage 1: Proximity between the parties

The law

65 The first stage of the *Spandeck* test asks whether there was sufficient proximity between the plaintiff and the defendant to give rise to a duty of care. Proximity may be established using various indicia, as identified by the High Court of Australia in *Sutherland Shire Council v Heyman* (1985) 60 ALR 1 (“*Sutherland Shire*”) at 55-56, and adopted in *Spandeck* at [78]:

The requirement of proximity is directed to the relationship between the parties in so far as it is relevant to the allegedly negligent act or omission of the defendant and the loss or injury sustained by the plaintiff. It involves the notion of nearness or closeness and embraces physical proximity (in the sense of space and time) between the person or property of the plaintiff and the person or property of the defendant, circumstantial proximity such as an overriding relationship of employer and employee or of a professional man and his client and what may (perhaps loosely) be referred to as causal proximity in the sense of the closeness or directness of the causal connection or relationship between the particular act or course of conduct and the loss or injury sustained. It may reflect an assumption by one party of a responsibility to take care to avoid or prevent injury, loss or damage to the person or property of another or reliance by one party upon such care being taken by the other in circumstances where the other party knew or ought to have known of that reliance. Both the identity and the relative importance of the factors which are determinative of an issue of proximity are likely to vary in different categories of case... [emphases omitted]

66 Although the test for a duty of care in *Spandeck* is universal, the indicia of proximity to be considered in the first stage are not universal. As the passage from *Sutherland Shire* quoted in *Spandeck* recognises, the indicia of proximity will vary, depending on the alleged tortfeasor’s negligent act or omission and depending on the type of loss or injury sustained by the plaintiff. The owner’s claim against the architect in this action involves an allegation of professional negligence causing pure economic loss. The key indicia for that class of case or that type of loss are the twin elements of an assumption of responsibility by the tortfeasor and reliance by the plaintiff of which the tortfeasor knew or ought to have known. Indeed, all of the parties have been content to argue proximity based

on precisely these twin elements.

The owner's arguments

67 The owner argues that the architect owes it a duty of care because there was both an assumption of responsibility and reliance. [\[note: 48\]](#)

68 The architect assumed responsibility in respect of a drawings failure because he was the QP (Architectural) for the project and was thus responsible for obtaining the necessary approvals from the URA and the BCA. In particular, the owner refers to several applications which the architect made to the URA in each of which the architect declared that his proposal complied "with all ... [conservation] guidelines and all conditions imposed by URA" [emphasis omitted]. [\[note: 49\]](#) The owner also notes that the architect conceded in cross-examination that even if he did not personally prepare the drawings which he submitted, he was responsible for ensuring that the drawings complied with the URA's requirements before submission. [\[note: 50\]](#) Similarly, the architect assumed responsibility in respect of a supervision failure, because he essentially performed the role of project architect.

69 As for reliance, the owner relied on the architect as regards both the drawings duty and the supervision duty. This was because the owner had no prior experience of owning or renovating a conservation property and therefore relied on the experience of the professionals – such as the architect – which it engaged for the project. [\[note: 51\]](#)

70 The owner also notes that, although it is true that it did not have a contractual relationship with the architect, the architect was the only registered architect in the entire Nota group. He was thus the only person in either NGPL or NDAE who could have given the owner the professional assistance which NGPL had contracted to supply the owner. This, the owner says, is a relationship which is "equivalent to contract" and which gives rise to a duty of care. [\[note: 52\]](#) The plaintiff cites on this point the observations of Lord Devlin in *Hedley Byrne & Co Ltd v Heller & Partners Ltd* [1964] AC 465 at 529, which were adopted by the Court of Appeal in *Animal Concerns Research & Education Society v Tan Boon Kwee* [2011] 2 SLR 146 ("ACRES") at [63].

The architect's arguments

71 The architect's response is that the contractual arrangements which the owner agreed exclude any assumption of responsibility by the architect to the owner, and thus any duty of care. The architect notes that the owner chose to contract with NGPL and only with NGPL. It was NGPL who in turn contracted with NDAE. The architect is an employee of NDAE. He has no relationship whatsoever with NGPL or the owner. The contractual arrangements which the parties freely bargained for therefore placed at least two degrees of separation between the architect and the owner. [\[note: 53\]](#)

72 Further, the architect points out that the owner entered into a contract with the contractor and therefore had the opportunity to secure protection for himself in that contract. [\[note: 54\]](#) If the owner thought his contract with the contractor was inadequate protection, he had the opportunity to insist on an additional tripartite contract with the architect. Indeed, the architect argues that *Pacific Associates Inc v Baxter* [1990] 1 QB 993 ("*Pacific Associates*") and *Spandeck* indicate that where the owner has his rights protected under a bargained-for contractual framework, the courts should not superimpose a duty of care in tort which cuts across that framework. [\[note: 55\]](#)

73 The architect also argues that it was not his responsibility – and was instead the responsibility of either NGPL, as the project manager, or of the contractor – to check and ensure that the drawings which the contractor used to carry out the works were consistent with the approved plans. [\[note: 56\]](#) In particular, the architect argues that Lee Boon Pin and Declan Reilly of NGPL were trained in architecture and were in charge of the plans and were responsible for reviewing the plans for consistency. [\[note: 57\]](#)

There is sufficient proximity between owner and architect

74 I hold that there is sufficient proximity between the owner and the architect to satisfy the first stage of the *Spandeck* test. I agree with the owner that the architect assumed responsibility to the owner for design failure and supervision failure, notwithstanding the overarching contractual framework for the project. I also find that it was reasonable for the owner to rely on the architect, and that the owner did so rely.

(1) The law

75 There are a number of authorities which have considered the issue of an architect's duty of care and which are binding on me. In *RSP Architects Planners & Engineers (formerly known as Raglan Squire & Partners FE) v Management Corporation Strata Title Plan No 1075 and another* [1999] 2 SLR(R) 134 ("*RSP Architects*"), the question before the Court of Appeal was whether an architect who designed a condominium was liable in the tort of negligence to the condominium's management corporation for the cost of rectifying the consequences of the architect's design failure. As is typical in these cases, the architect had a contract only with the developer of the condominium but not with its management corporation.

76 The Court of Appeal held (at [38]) that there was sufficient proximity between the architects and the management corporation for a duty of care to arise. The architects were aware that, in the normal course of events, the developers would apply to register a strata title plan for the condominium and that a management corporation would then come into existence. The architect assumed responsibility to the developer to be professionally competent, and the architect knew that the developer relied on the architect exercising reasonable care and skill. The management corporation was merely the successor in title of the developer with respect to the common property. The architect knew that the management corporation would depend on the architect's care and skill in designing and supervising the construction of the common property. Further, the management corporation relied on the architect to get the design of the building right. There was therefore a sufficient degree of proximity in the relationship between the management corporation and the architect for the architect to owe a duty of care to the management corporation to avoid causing the loss sustained by the management corporation.

77 I acknowledge that *RSP Architects* was decided well before *Spandeck*. But the adoption of the universal test in *Spandeck* does not mean the rejection of all case law before *Spandeck*, particularly case law which deals with the concept of proximity in the tort of negligence. Further, the Court of Appeal in *Spandeck* held that the universal test is to be applied incrementally: at [73]. This means that it is desirable at each stage of the test to refer to decided cases in analogous situations to see how the courts have reached their conclusions in terms of proximity or policy: at [73]. I am therefore entitled and indeed obliged to have regard to the decision of *RSP Architects* at the proximity stage of the *Spandeck* test.

78 The case of *RSP Architects* is instructive for several reasons. First, *RSP Architects* shows that

the focus of the court is not on the degrees of separation between architect and owner, but on the fact that the owner is known by the architect to be the entity who is ultimately to benefit from the architect's professional skill. Thus, the fact that there are several degrees of separation between the architect and the owner in the present case is of no great consequence to the duty of care analysis because the architect here – like the architect in *RSP Architects* – must have known that his skills were being exercised for the ultimate benefit of the specific entity who is now suing him. Indeed, the relationship between the architect and the management corporation in *RSP Architects* can be said to be even more remote than the relationship between the architect and the owner in the present case. The owner in the present case existed from the outset. The management corporation in *RSP Architects* did not even exist as a legal person at the time the architects carried out the acts or omissions said to be negligent.

79 The second reason *RSP Architects* is instructive is because it shows that the presence of a contract between the architect and one entity – in that case the developer and in the present case with NDAE – does not in itself prevent a duty of care from arising or otherwise exhaust the scope of the architect's potential liability. This observation has been echoed in more recent case law. In *ACRES*, the Court of Appeal observed at [66] that the contractual arrangements of the parties, although an important consideration to be taken into account when deciding whether there is proximity, does not automatically exclude a duty of care. Instead, the true principle is “whether or not the parties structured their contracts intending thereby to exclude the imposition of a tortious duty of care”: *ACRES* at [71].

(2) Assumption of responsibility

80 In this case, there is nothing in the contract between the owner and NGPL to suggest that those two parties intended, by entering into that contract, to exclude the architect's potential personal liability to the owner in tort. [\[note: 58\]](#) Nor has the architect pointed to any evidence which suggests that, as between the architect and the owner, it contracted in that way so as to exclude the architect's liability in tort. As for the contract between NGPL and NDAE, that was not even an express contract. There is virtually no scope for extending its legal consequences beyond those two parties.

81 Conversely, the evidence that is before me does suggest that the architect stands in a sufficiently proximate relationship to the owner to give rise to a duty of care. As the owner points out, the architect is the only registered architect in the Nota group. Thus, whether one speaks of NGPL or NDAE as the entity which bore the immediate obligation to provide architectural services to the owner, the ultimate obligation fell upon the architect. He was the only person in either entity with the qualifications and skills necessary to supply the required architectural services.

82 Similarly, the behaviour of the architect suggests that he assumed the responsibility of providing the architectural services. In the first place, the architect assumed the role of QP (Architectural) for the project. Although it is true that the Court of Appeal in *ACRES* recognised (at [21]–[23]) that the presence of a statutory duty does not automatically give rise to a common law duty of care, it acknowledged that the former can “form the backdrop to and inform the existence” of the latter.

83 In the present case, the statutory duty does inform the existence of a common law duty of care. By taking on the role of QP (Architectural), the architect became the person with the primary responsibility for ensuring that the project complied with the Conservation Guidelines. He became the individual whom the URA would hold responsible for any deviations. And, because successful completion of the project depended on obtaining the URA's approval for TOP, he became the person

to whom the owner was looking to secure that successful completion.

84 It is true that there are several degrees of separation between the owner and the architect. NGPL served as a contractual intermediary between the owner and NDAE. NDAE in turn served as an intermediary between NGPL and the architect. But I do not make too much of this. The architect in his evidence acknowledged that whenever NGPL takes on a project that requires architectural services, it is NDAE who would provide those services. [\[note: 59\]](#) In particular, when NGPL requires the services of a registered architect, the architect acknowledged that he is the only person who can provide those services. [\[note: 60\]](#) Indeed, there is also evidence that the staff of NGPL with an architectural background – but who were not themselves at that time registered architects – were accustomed to act under the direction of the architect. This occurred so much so that the URA believed that the staff of NGPL acted for the architect. [\[note: 61\]](#)

85 In these circumstances, it is possible to find – and I do find – that the architect assumed responsibility to the owner to provide his architectural services with reasonable care and skill.

86 In any event, I would add that there is another distinguishing feature between *Spandeck* and *Pacific Associates* and the present case. In both of those cases, a plaintiff who stood in a direct contractual relationship with an owner was arguing that other parties who were also in a contractual relationship with the owner owed – in addition to their contractual duties to the owner – a parallel duty of care to the plaintiff. The present case is different. Here, it is the owner who is arguing that a professional providing services to the owner's project manager owes a duty of care to the owner personally.

87 This is a material distinction. The person for whose benefit the services are provided, and to whom a duty of care might be said to arise, differs dramatically between these two categories of cases. In the first category, the third parties perform their services for the benefit of the owner, not for the benefit of the plaintiff asserting the duty of care. In the second category – which includes the present case and *RSP Architects* – the third party performs his services for the ultimate benefit of the owner. The duty of care in the present category of case follows the grain of the parties' arrangements rather than going against it. Thus proximity is more easily found.

88 I would also add that Lee Boon Pin and Declan Reilly of NGPL were only trainee architects, and thus could not be in a position to have provided the architectural services which the owner contracted with NGPL for in this case. Moreover, the evidence is that the architect had professional responsibility for supervising the work of Lee Boon Pin, who was then a trainee architect. [\[note: 62\]](#) So that is another reason for saying that the architectural services which NGPL provided to the owner ultimately originated from the architect, not from NGPL.

89 I note that the architect has submitted that he did not supervise Lee Boon Pin for this particular project and that, in any event, Lee Boon Pin was not working as an architect or carrying out or performing architectural functions for this project. [\[note: 63\]](#) But if this is true, that serves all the more to locate the architect as the ultimate source of the architectural services in this case, including the role of ensuring consistency between the various plans and supervising the works.

(3) The drawings duty

90 The question that follows from the above is whether assuming the responsibility of providing the architectural services necessarily encompasses the drawings duty and the supervision duty. In my judgment, it does.

91 So far as the drawings duty is concerned, the crux of the owner's case is that there is a duty on the part of an architect to ensure that the various drawings prepared by the architect and the engineer in any given project are consistent with the drawings approved by the authorities. Parties were unable to cite any legislation spelling out such a duty. The evidence of both the architect's expert [\[note: 64\]](#) and the engineer's expert, [\[note: 65\]](#) however, is that this is the norm and the expectation in the construction industry.

92 Although industry norms or expectations in themselves do not make law, I find that the drawings duty was within the scope of the architectural services which the architect assumed the responsibility of providing to the owner. This industry norm has arisen for a good reason. The architect is the QP overseeing the entire project. In a project involving a conservation building, he reports to both the key authorities: the URA and the BCA. He is best placed in terms of the skill and expertise of his profession to prepare, receive, and assess the various drawings, and ultimately to ensure that they are consistent with each other. Further, in a project involving Category 1 Works to a conservation building, a registered architect is the *only* person permitted to apply to the URA for written permission under the Planning Act. [\[note: 66\]](#) That is understandable as a registered architect is clearly better placed compared to an engineer to fulfil the objectives of the Conservation Guidelines by ensuring that the aesthetic features crucial for a conservation property are preserved.

(4) The supervision duty

93 As for the supervision duty, both the owner and the architect have heavily contested whether the duty is one of supervision, or of inspection; and further, if it is the former, whether it is a duty of continuous supervision, or of standing supervision. In my view, the architect does owe the supervision duty claimed by the owner.

94 The architect relies on extracts from a leading textbook, John Powell *et al*, *Jackson & Powell on Professional Liability* (Sweet & Maxwell, 8th ed, 2017) ("*Jackson & Powell*") and the Singapore Institute of Architect's Conditions of Appointment and Mode of Payment (2002 Edition) ("*SIA Conditions of Appointment*"). Both these extracts are cited for the proposition that the architect typically bears only a duty of inspection, and not a duty of supervision. [\[note: 67\]](#) Further, *Jackson & Powell* expresses the view that the distinction between "supervision" and "inspection" is an important one: supervision entails detailed and continuous direction, whereas inspections are expected to be limited in number, duration and frequency. Similarly, the SIA Conditions of Appointment indicate that constant or daily inspection is not part of the architect's basic services, and the architect is required to inspect the works only at periodic intervals as the architect deems necessary.

95 I do not accept that the architect owed only a duty of inspection. The architect's reliance on *Jackson & Powell* is misplaced. That extract addresses changes made to the architect's contractual duties across various editions of Royal Institute of British Architects' Conditions of Engagement for the Appointment of an Architect. That standard form has no application here. Similarly, as the owner has rightly pointed out, the architect was not appointed under the SIA Conditions of Appointment in the present case. Reliance on the contractual duties set out in that standard form contract too is misplaced.

96 I instead accept the owner's argument that the architect's duty of care encompassed a duty of supervision. The owner has drawn my attention to the Court of Appeal's decision in *Sim & Associates v Tan Alfred* [1994] 1 SLR(R) 146 ("*Sim & Associates*"). In that decision, the Court of Appeal considered it to be settled law that an architect in a building contract has a duty to supervise the building works to ensure that they are being carried out in conformity with the contractual

specifications; and that in the absence of specific provision in the contract, such a duty will be implied in law: at [39]. Further, that case was also a case where the owner did not have a contract with the architect – the building contract the Court of Appeal referred to was the building contract between the owner and the contractor. The Court of Appeal’s decision therefore applies equally here.

97 I do add, however, that in my view the supervision duty does not go so far as to oblige an architect to prevent all deviations before they occur. This is because I accept that the architect, in carrying out the supervision duty, does not have to be continuously present on site. An architect who complies with the supervision duty may nevertheless fail to prevent a deviation that occurs between the visits made to discharge the duty. That said, the supervision duty does entail in practical terms a duty to detect a gross deviation – in this case, either a fresh construction of a deviating new feature or a deviating reconstruction of a demolished feature – and to act promptly to get the deviation rectified in a timely manner so as not to jeopardise the completion date of the project.

(5) Reliance

98 Turning now to the issue of reliance, I also find that the owner did rely on the architect and did so reasonably. The owner had no expertise in dealing with construction projects, and in particular, construction projects involving conservation buildings such as the shophouse here. It was entirely reasonable for it to rely on the expertise that the architect had, and held himself out as having. Indeed, the architect himself recognises as much: [\[note: 68\]](#)

Q: So essentially, again, here the owner would rely on you to ensure that the works, when completed, comply with the WP plans, correct?

A: Oh, yes.

The requirement of reliance is therefore satisfied.

(6) Conclusion

99 I conclude my analysis on proximity by observing that the requirement of proximity is satisfied because of the parallels between this case and the decision in *RSP Architects*. The relevant indicia of voluntary assumption of responsibility and reliance are both present on our facts. I therefore consider that it is unnecessary to go further into a consideration of other indicia of proximity.

Stage 2: Policy considerations

100 The next stage of the universal test asks whether there are policy considerations that might militate against the finding of a duty of care: *Spandeck* at [83]. This stage is negative in nature and focuses on whether policy considerations negate or limit the duty that is found *prima facie* to exist at the proximity stage. However, it is legitimate at the policy stage to have regard to positive policy considerations which undermine any negative policy considerations raised by the defendant: *ACRES* at [77].

101 The owner contends that there are no policy considerations which would operate to negate the duty of care which I have found *prima facie* to have arisen at the proximity stage. On the contrary, the owner says that there are positive policy considerations which point in favour of a duty. In this regard, the owner cites the various responsibilities placed on the architect by the Planning Act and the Building Control Act. [\[note: 69\]](#)

102 The architect's response is that a duty of care should not be superimposed on a contractual duty, especially in this case where the owner is already protected by a contractual framework comprising two contracts: one with the contractor and another with NGPL. [\[note: 70\]](#)

103 I hold that there are no policy considerations which militate against a duty of care. While it is true that contractual arrangements can serve as a policy consideration at the policy stage of the *Spandeck* test, these arrangements can also be considered as an indicium at the proximity stage: *ACRES* at [66]. The Court of Appeal recognised that contractual arrangements could be relevant to both stages, and that it may in certain cases be appropriate to analyse the effect of these arrangements at the proximity stage: *ACRES* at [66]. This is such a case.

104 The architect's argument is essentially that the owner's contractual arrangements set out a complete framework for liability of all of the professionals involved in the owner's project, and thus there is no scope for the architect to be found to have assumed responsibility to the owner, nor for the owner reasonably to have relied on the architect. This is an argument that is best dealt with at the proximity stage. I have already done so above and concluded that there was nevertheless sufficient proximity between the architect and the owner for there to arise a duty of care owed by the former to the latter. I therefore do not need to revisit this point.

Conclusion

105 For the above reasons, I find that the architect did owe a duty of care in tort to the owner.

Issue 2: Did the engineer owe a duty of care in tort?

106 The owner also argues that the engineer owed it a duty of care. I analyse whether the engineer does owe this duty of care by adopting the framework I have already set out above in respect of the architect.

Threshold question of factual foreseeability

107 On the threshold issue of factual foreseeability, the owner points out that the engineer was appointed as QP (Structural) and argues that it was factually foreseeable that if the engineer failed to ensure consistency in the drawings and failed to supervise, the owner would suffer loss. [\[note: 71\]](#)

108 Like the architect, and no doubt for the same reason, the engineer does not contest factual foreseeability. Instead, his submissions jump straight to the issue of proximity.

109 I therefore hold that factual foreseeability is established against the engineer.

Stage 1: Proximity

110 As with its arguments on proximity as against the architect, the owner's arguments on proximity as against the engineer hinge on the indicia of assumption of responsibility and reasonable reliance. Again, for the same reason, I consider those to be the necessary and sufficient indicia for a claim of this nature.

111 The owner argues that the engineer assumed responsibility because he was the civil and structural engineer and the QP (Structural) for the project. In that capacity he was obliged by the applicable legislation to submit structural plans to the BCA for approval and to supervise the structural

works. [\[note: 72\]](#)

112 The engineer contends that he owed no duty of care to the owner. He does not specifically contest any particular indicia of proximity set out in *Spandeck*. Instead, he raises certain discrete arguments broadly relating to (a) his endorsement on the WP drawings; (b) the duties he owes as against duties that the architect owes; and (c) the scope of his contractual obligations. This is not the most helpful way to address proximity, but I shall deal with each of these three broad areas below.

113 I hold that the engineer did stand in a relationship of proximity with the owner such that a duty of care in tort arose. The principle to be drawn from *RSP Architects* is that a professional in the construction industry owes a duty of care to a person known to be the ultimate beneficiary of his professional skill and expertise. That principle applies in this case. The engineer knew that his professional skill and expertise was being applied for the ultimate benefit of the owner even though his contract was with NDAE.

114 The parties have, however, devoted lengthy submissions addressing me on proximity. I now go through them in detail to show how they do not disturb the applicability of the general principle I have just identified. There are three broad areas of contention between the parties.

115 The first broad area of contention I address concerns the statutory duties of the engineer, as compared to the architect. Both the owner and the engineer make much of these duties.

116 The owner relies on the engineer's statutory obligations to argue that the engineer assumed responsibility towards the owner, citing the engineer's responsibility to apply to the BCA for approval of the structural plans and for the permit to carry out building works. [\[note: 73\]](#) The owner also cites the engineer's assumption of duties as QP (Structural). [\[note: 74\]](#)

117 In response, the engineer distinguishes between the various duties which are imposed by statute upon him as opposed to those which are imposed upon the architect. [\[note: 75\]](#) He points to the fact that the architect was the QP for the URA and that the architect was also the QP for the BCA so far as the building plans were concerned. The engineer's own role was only as QP for the *structural* plans submitted to the BCA. The engineer does not submit specifically that this argument is directed towards contesting assumption of responsibility as an indicia of proximity. But I infer from his lengthy submission that it is his case either that: (a) that he owes statutory duties alone, and therefore cannot owe a duty of care at common law; or (b) that the operation of the statutory framework excludes the possibility of a duty of care arising in tort.

118 I agree with the owner that the engineer assumed responsibility to the owner for design and supervision. It bears repeating that a duty of care in tort at common law does not arise automatically out of a statutory duty on the engineer under either Act: *ACRES* at [22]. The statutory duty may, however, form part of the contextual backdrop or be a relevant factor pointing for or against a duty of care: *ACRES* at [22]. Here, I find that it is a factor pointing for a duty of care. I agree that the foremost purpose of the statutory duty of a QP (Structural) is to ensure the structural safety and integrity of the building works. But to achieve this purpose, the engineer needs to ensure that his drawings are consistent with those of the other professionals involved in the project – in this case, the architect – and also to ensure that any deviations from the drawings are identified and rectified in a timely manner.

119 With regard to the drawings, the engineer himself acknowledges in his closing submissions that

he owed a duty to incorporate the design intent of the architect in his structural drawings. Indeed, he recognises that the design in the written permission drawings – which are drawn up by the architect – is the dominant design, and that he should generally adopt the architect’s design in the written permission drawings. [\[note: 76\]](#)

120 Similarly, both the engineer’s expert [\[note: 77\]](#) and the architect’s expert [\[note: 78\]](#) confirmed that this is industry practice. I reiterate that industry practice or norms are not by themselves determinative of an assumption of responsibility or a duty of care. But I do consider that this industry practice is a powerful factor in favour of a finding that the engineer owes a common law duty to ensure consistency between his drawings and the architect’s drawings.

121 To my mind, this is a practice that supports and reinforces, and does not detract from, the purpose of the statutory duty of ensuring structural safety and integrity. It is conducive towards the structural safety and integrity of construction projects that the building professionals working on them coordinate their drawings to ensure that the contractors and builders who ultimately have to construct the building are not misled or confused by inconsistent plans and drawings. The engineer, as one of the professionals responsible for preparing one of these plans, has a key role to play in this endeavour. While it might be said that the engineer should not be liable for failing to ensure that his plans are consistent with the written permission drawings so long as no structural safety concerns are raised, I do not think that the engineer’s duty should be made dependent on something so fortuitous or arbitrary. No structural safety concerns may arise simply because the contractor, faced with inconsistent architectural drawings and structural drawings, opts for the latter. But he could well have chosen the former. The point is that the engineer has introduced a risk of there being a structural safety issue, and it cannot be that it is simply left to the contractor, whether consciously or fortuitously, to mitigate this risk. Nor can it be that the engineer should simply depend on the architect to check and discover the error, although the architect is also subject to this duty. I therefore find that the engineer did assume the drawings duty.

122 Similarly, in respect of the supervision duty, the engineer declared to the BCA that he was the appointed site supervisor under s 10 of the Building Control Act and that he would be supervising the structural works. [\[note: 79\]](#) The engineer argues that this declaration did not require him to exercise standing supervision over the works, citing the Second Reading of the Building Control Bill on 16 February 1989. [\[note: 80\]](#) In that reading, the former Minister for National Development Mr S Dhanabalan said that “for minor building works it is not necessary to have a full-time supervisor for all the works”. The engineer submits that the value of the works in this case categorises them as minor building works. He also notes that in the declaration, he undertook to exercise only “immediate supervision of critical structural works as required in Section 7(1)(c) of the Building Control Act” and not the alternative of exercising “[f]ull-time supervision of structural works as required in Section 7(1)(b) of the Building Control Act”. [\[note: 81\]](#) He says that because demolition works are not critical structural works, he was not required to supervise them. [\[note: 82\]](#)

123 I do not think these arguments are of much assistance to the engineer. The crux of the owner’s complaint on the supervision duty is not to do with a failure to supervise the demolition process or the reconstruction process, *ie* as a failure to prevent the deviations from being carried out. The crux of the complaint is that the engineer had a duty in carrying out his site inspections to detect deviations of the magnitude which occurred here. However one characterises the duty of the engineer – whether as a duty to supervise or to inspect – I am of the view that the engineer did indeed have a duty to detect gross deviations such as those which occurred here. This duty would be meaningless if gross deviations as the non-compliant demolition or reconstruction of an entire slab fell

outside its scope.

124 To round things off, I would also add that the owner is clearly within the class of individuals which the statutory duty was designed to protect. The engineer is engaged to provide his professional services for the project because the owner, not being a construction professional, and in particular, not being a structural engineer, requires professional assistance. The engineer takes it upon himself to provide that assistance by assuming the statutory duties of QP (Structural). That to my mind is another factor pointing towards the engineer bearing a duty of care in tort to the owner, unless there are countervailing factors that militate against this.

125 I would also add, for the sake of completeness, that my view that the engineer has assumed the drawings duty and supervision duty is fortified by the fact that the engineer is not correct in saying that his statutory duties encompass *only* ensuring the structural safety and integrity of the project. The URA representative, Lee Yan Chang, testified in cross-examination that the reasons the URA rejected the deviations in this project were not "related to aesthetic nor structural integrity" but were instead "related to the conservation principle of maximum retention". [\[note: 83\]](#) This principle is reflected in the URA Conservation Guidelines: [\[note: 84\]](#)

The '3R' Principle

The fundamental principle of conservation applicable to all conservation buildings, irrespective of scale and complexity, is **maximum Retention, sensitive Restoration and careful Repair – the "3R"s** [emphasis in bold in original].

126 The preface to those guidelines further expressly states that "[owners], architects and *engineers* intending to carry out restoration works or development within conservation areas are required to comply with the guidelines accordingly" [\[note: 85\]](#) [emphasis added]. The engineer himself recognised this, as evidenced by his endorsement on the architectural drawings:

As a qualified person, I agree with and endorse the alterations to the structure as shown on this plan and that they are generally in accordance with conservation principles and good engineering practice.

127 The upshot of this is that the engineer's duties, even as a structural engineer, were not confined to ensuring structural safety and integrity in the project. He also undertook that the structural alterations complied with the URA's conservation principles. In my view, discharging these duties required ensuring that his drawings were consistent with the written permission drawings. It is the written permission drawings which were approved by the URA, the competent authority under the Planning Act, and the issuer of the Conservation Guidelines. Moreover, an engineer should detect deviations which have taken place so that they can be rectified in a timely fashion. This therefore reinforces my views set out above that the engineer did assume responsibility in respect of the drawings duty and the supervision duty to the owner.

128 I now turn to address the engineer's specific submissions to show why each is not a bar to his having assumed responsibility to the owner. It is first necessary to distinguish between the material which the engineer cites, which in essence is nothing more than mere statements of fact, and those on which he hints at a legal argument. The engineer makes several statements of fact. The engineer points out that it was the architect, and not the engineer, who was the QP for the written permission drawings submitted to the URA, and also the QP for the building plans submitted to BCA. [\[note: 86\]](#) His submission is that he therefore cannot be the QP for those drawings. There is nothing wrong with

making mere statements of fact, but if the engineer means by this that he cannot have assumed responsibility for his own drawings, then that is a *non sequitur*. Another point which the engineer raises is that he cannot owe any duties of compliance with the URA's Conservation Guidelines because he is not the QP making submissions to the URA. [\[note: 87\]](#) But the owner is not pursuing this point against the engineer, so it is not necessary to consider this argument any further.

129 Turning now to material on which the engineer appears to make a legal argument, the engineer points to the architect's declarations to the URA and the BCA. He says that the upshot of these declarations is that it is the architect who assumed responsibility for reviewing the design in the structural drawings to ensure consistency with the written permission drawings. [\[note: 88\]](#) But even if the engineer is right on this, that does not automatically exclude a separate and parallel assumption of responsibility by the engineer to ensure that his own drawings – for which he undoubtedly assumed responsibility – are consistent with the architect's written permission drawings. This argument simply means that the architect has his own duty to review drawings.

130 The engineer next turns to his own duties. He acknowledges that he is the QP responsible for submitting structural drawings to the BCA and points out that the BCA approved these drawings. He says that the only conditions which the BCA imposed on the approval granted had to do with the safety and structural integrity of the building. [\[note: 89\]](#) Thus, he says, his duties are confined to ensuring that the works are structurally safe.

131 This must be correct so far as his statutory duties are concerned. But, as I have already observed above, the engineer also concedes that he has a duty to incorporate the architect's design intent into his structural drawings. I have found above that this duty, as supported by the industry practice, does include the drawings duty.

132 The engineer makes a further point on this. He argues that the duty to incorporate the architect's design intent is not immutable and rigid, because it is possible to apply to the URA for approval of an amended design or waiver of deviation from the approved design. [\[note: 90\]](#) But to my mind, this goes to a later element of the negligence analysis, *ie* breach of duty. The fact that the structural drawings are inconsistent with the written permission drawings is a *prima facie* breach which is capable of then being cured by the approval of amended structural drawings which are consistent with the written permission drawings, just as a deviation from the approved design may be a *prima facie* breach that is treated as cured if waived by the URA. This point does not really assist the engineer at this stage of the analysis in tort, where the focus is on the existence of a duty of care.

133 The next broad area of contentions as far as the indicium of assumption of responsibility is concerned is that the engineer did not himself endorse the drawings that were actually submitted for approval to the URA and which were ultimately approved, *ie*, the written permission drawings. [\[note: 91\]](#) It flows from this that he also did not endorse the declarations made on the face of those drawings, for example, the declaration that the alterations to the structure comprised in the drawings are in accordance with the conservation principles (see [126] above).

134 To make this point, the engineer draws a distinction between a statement on the face of a drawing that a particular professional has endorsed a drawing and the process whereby a particular professional applies his personal digital encryption to a drawing at the time the drawing is electronically submitted to the relevant authority. It is only the latter, he says, which represents the professional's assumption of responsibility for a specific drawing.

135 Here, the engineer applied his personal digital encryption to only one set of architectural drawings, those submitted on 21 January 2011. [\[note: 92\]](#) However, the architect continued to submit drawings on his own up until 22 February 2011, and it is on this last set of drawings that the WP drawings were based. By that time, the design had changed from that comprised in the 21 January 2011 drawings. [\[note: 93\]](#) The engineer did not apply his personal digital encryption to any of the later drawings, and thus argues that he cannot be said to have assumed responsibility for them. [\[note: 94\]](#)

136 The engineer further asserts that he applied his personal digital encryption on 21 January 2011 on the understanding and assurance from the architectural team at NGPL that these were merely preliminary architectural and structural drawings [\[note: 95\]](#) and that the drawings would be further amended and that he would be allowed to respond to those amendments and to update his structural drawings. [\[note: 96\]](#)

137 I should note for the sake of completeness that the engineer does not expressly submit that these arguments are directed towards contesting assumption of responsibility. But it is obvious to me that it is this indicium of proximity which the engineer is attacking by pointing out that he did not personally encrypt the written permission drawings.

138 I find, however, that nothing material turns on the absence of encryption. I asked counsel for the engineer specifically what material differences there are between the drawings which the engineer did personally encrypt and the drawings which the architect later submitted to the URA and which eventually became the written permission drawings. Counsel confirmed that there essentially “were no real, material differences”. [\[note: 97\]](#) I also asked counsel for the engineer whether the engineer knew that the drawings which the engineer did encrypt for submission to the BCA were also to be submitted to the URA. [\[note: 98\]](#) Counsel confirmed that this was the case. [\[note: 99\]](#)

139 It is apparent to me that the engineer gave thought to the structural drawings and assumed responsibility for them in the form in which they were submitted. It is of no assistance to him that he thought his drawings were only a preliminary drawing or a “draft” and that he could revisit or revise his drawings later. By encrypting his drawings and submitting them, he assumed professional responsibility for those drawings. His assumption of responsibility was tied to those *drawings*, not simply to that specific *submission* of those drawings. Nothing material in his drawings changed from the first submission which the engineer personally encrypted and the subsequent submissions which he did not. The engineer also knew full well that his drawings were being reused in subsequent submissions even if he did not personally encrypt them for each of those subsequent submissions.

140 In these circumstances, I find that the lack of personal encryption by the engineer does not allow him to disclaim any assumption of responsibility for his drawings whatsoever. It may be that the engineer cannot be held responsible under the relevant statute for the contents of the later structural drawings on the basis that he did not add his personal encryption to them before submission. But that is not the question before me. Insofar as the tort of negligence is concerned, and on the facts before me, the lack of encryption does not negate the assumption of responsibility.

141 Under the third broad area of contention, the engineer argues that the owner’s conscious and deliberate allocation of risk within the contractual framework between the parties militates against the engineer owing a duty of care to the owner. He also submits that this is a consideration to be accounted for at the policy stage of the *Spandeck* test. For the same reasons I have given in my analysis of proximity in relation to the architect, I consider this to be an argument which goes largely towards proximity and not policy. I therefore consider this argument now, at the proximity stage.

142 The engineer makes three points.

143 First, he submits that the owner contracted with the contractor on the Singapore Institute of Architects Articles and Conditions of Building Contract – Lump Sum Contract 9th Edition (“SIA Building Contract”). It is part of the structure of that contract that the contractor takes instructions from the architect rather than from the engineer.

144 Second, the engineer relies on the fact that the owner did not enter into a contractual relationship with him. Instead, the owner entered into contracts only with the contractor and with NGPL. Further, it was NGPL who in turn engaged NDAE and NDAE who then engaged the engineer’s services.

145 Finally, the engineer submits that the need for distributive justice militates against the engineer owing a duty of care to the owner. To support this submission, the engineer cites the Court of Appeal’s decision in *Tan Juay Pah v Kimly Construction Pte Ltd and others* [2012] 2 SLR 549. The engineer submits that participants in the construction industry are in the business of managing commercial risk through contracts and the imposition of a duty of care in tort risks undermining the private, consensual and bargained-for allocation of risk, and therefore the framework of distributive justice. The engineer points to his small fee of \$5,000 or 1% of the contract sum, [\[note: 100\]](#) and the limited scope of his work – confined to structural design and structural submissions to the BCA – as an indication of the limited risk which the engineer assumed. [\[note: 101\]](#)

146 The owner’s response is twofold. Its first point is that the contractual framework was not structured in the way it was in order to exclude a duty of care owed by the engineer. [\[note: 102\]](#) The owner points to the fact that its relationship with the engineer was under a single and linear chain of three contracts and that the engineer knew that his services were engaged for the owner’s ultimate benefit. On this point, the owner also notes that is not unusual in the construction industry for the owner to hire a project consultant who in turn hires the professionals. The owner’s second point is that the policy considerations pointing towards a duty of care resting on a QP (Structural) outweigh the engineer’s policy argument on distributive justice. Even accepting that the engineer’s fee under the contract was small and his scope of work limited, the engineer was aware that the owner relied on him to exercise reasonable care in rendering his professional advice and services.

147 To my mind, the owner’s contractual arrangements do not militate against a duty of care. The engineer’s point that the contractual arrangement between the owner and the contractor did not permit the engineer to direct the contractor does not really assist engineer. The owner’s complaints centre on the lack of consistency between the engineer’s and the architect’s drawings and on the professionals’ failure to supervise. The owner’s complaint does not centre on whether the contractor demolished or rebuilt the features under the architect’s or the engineer’s direction.

148 Further, the engineer is right in saying that there were several degrees of separation between him and the owner: there is one degree of separation between the owner and NGPL, another degree of separation between NGPL and NDAE, and a final degree of separation between NDAE and the engineer. But the fact of these degrees of separation is not itself enough to exclude a duty of care in tort from arising because the evidence does not suggest that these arrangements were deliberately made to exclude such a duty.

149 As regards the degree of separation between NGPL and NDAE, the engineer’s argument is that he did not know of this relationship when he agreed to take on this engagement. [\[note: 103\]](#) So for the purposes of this case, that degree of separation cannot be considered to be a deliberate structuring

of the contractual relationships to exclude a duty of care in tort arising. In fact, the engineer would have thought that there was only one intermediary between himself and the owner, *ie* NDAE. Moreover, the engineer would have seen NDAE as being owner's project consultants. The hurdle that NDAE presents as an intermediary between the owner and the engineer can then be overcome by the engineer's own admission that it is not unusual in the construction industry for an owner to hire a project consultant, who then hires the professionals. [\[note: 104\]](#) The project consultant can then be thought of as the owner's representative, and a duty owed to the project consultant can thus be thought of as being owed to the owner, as the engineer must have known that his services are performed for the owner's ultimate benefit, regardless of whether it is the owner who contracts directly with the engineer or whether it is the owner's representative, the project consultant, who contracts with the engineer. This therefore narrows that degree of separation between the owner and NDAE. Thus, the contractual arrangements, viewed holistically, and bearing in mind that the engineer must have known that his services were being performed for the ultimate benefit of the owner, do not suggest that they were structured to exclude a duty of care.

150 As for the point on distributive justice, I am not persuaded that it is an accurate depiction of the allocation of risk and liability between the parties to say that the engineer bears responsibility for his work only insofar as it affects safety and structural integrity. As indicated above, the engineer by taking on the duties of QP (Structural) took on more than simply that narrow duty. More specifically, the engineer did assume responsibility to comply with the conservation principles. So it does not appear to me that the scope of the engineer's responsibility is as narrowly confined as the engineer makes it out to be.

151 I make a final point on the supervision duty. The supervision duty does not require the engineer to be on site at all times. The duty cannot therefore require the engineer to take pre-emptive action to prevent deviations from the written permission drawings before the deviations take place. What the supervision duty requires of the engineer in practical terms instead is to carry out inspections with reasonable frequency and with reasonable care. If such an inspection would have revealed the existence of deviations from the written permission drawings, he would be expected to draw the architect's attention to the deviation and the need for rectification. A deviation in this sense includes a feature which should not have been demolished, a feature which has been constructed but which should not be there at all and a feature which has not been reinstated correctly. The supervision duty thus framed takes account of the contractual power granted to the architect under cl 1.(1) of the SIA Building Contract to order the contractor to rectify works, a power which the engineer does not have. The engineer's supervision duty is therefore slightly narrowed in this regard.

Stage 2: Policy considerations

152 The engineer submits that the statutory regime militates against the engineer owing a duty of care to the owner. This is because the engineer's status was only the QP (Structural), with responsibility for making submissions only to the BCA under the Building Control Act and not to the URA. The focus of the BCA and the Building Control Act is only structural safety. Conversely, the URA's role arises under the Planning Act and is focused on aesthetics.

153 The owner's response is that the engineer's duties are not so narrowly confined. The engineer also owed a duty to comply with the Conservation Guidelines. Further, the owner submits that even if the engineer's duty is only to ensure structural safety and integrity, that duty nevertheless required the engineer to ensure that the structural aspects of the works complied with the authorities' requirements. That included ensuring that the engineer's structural drawings were consistent with the written permission drawings. [\[note: 105\]](#)

154 I hold that the statutory regime does not militate against the engineer owing a duty of care in tort to the owner. As I have already indicated above, such a finding serves only to reinforce the objectives of the statutory regime. Further, the owner is right in pointing out that the engineer's duties go beyond the ambit of the Building Control Act, and beyond the narrow confines of ensuring structural safety and integrity.

155 From the above analysis, I conclude that the engineer also owes a duty of care in tort to the owner to discharge the drawings duty and the supervision duty.

Issue 3: Breaches of obligations in respect of the deviations

156 I now turn to consider whether, in respect of each of the four deviating features, the contractor breached its contractual obligation to the owner and whether the architect and the engineer breached their duty of care to the owner.

Preliminary issue: contractor's arguments on acquiescence, waiver and estoppel

157 The contractor has mounted arguments on acquiescence, waiver, and estoppel. I understand these to be general arguments which are not specific to any particular feature. I therefore consider them here at the outset. I observe that these points were not pleaded and emerged only at the eleventh hour, in the contractor's submissions. [\[note: 106\]](#) I therefore consider that the contractor is not entitled to rely on them as defences to the owner's claim for breach of contract.

Feature 1: the rear roof slab

158 The first feature in respect of which deviations have occurred is the rear roof slab. There are two deviations complained of. The first deviation concerns the demolition of the slab even though the written permission drawings required the slab to be retained and even though the URA did not grant permission for the slab to be demolished. [\[note: 107\]](#) The second deviation concerns the reconstruction of the rear roof slab flush with the front roof slab, without the original 510 mm drop in elevation. [\[note: 108\]](#)

159 I first set out my findings on what the drawings indicate in respect of the rear roof slab.

What the drawings indicate

160 I find that the written permission drawings clearly show that the rear roof slab was to be retained. [\[note: 109\]](#) The slab is indicated in cyan, which under the colour coding in the Code of Practice means that that feature is to be retained. The written permission drawings also indicate a drop in elevation.

161 I find that the construction drawings also show that the rear roof slab was to be retained. [\[note: 110\]](#) The rear roof slab is not delineated with a dotted line, which is used to denote a feature which is to be demolished. [\[note: 111\]](#) There is also an annotation which indicates a 510mm drop in level from the front roof slab.

162 I find that the structural drawings do not show that the rear roof slab is to be demolished. But I do find that the structural drawings are inconsistent with the written permission drawings and the construction drawings. The inconsistency arises because the structural drawings are inconsistent on

their face. The evidence of both experts is that parts of the structural drawings indicate a drop in the finished floor level, while the beams that support the rear slab do not show such a drop. [\[note: 112\]](#)

The contractor

163 I first analyse the contractor's liability. The contractor does not deny that it demolished the rear roof slab and reconstructed it flush with the front roof slab. [\[note: 113\]](#) Its pleaded case, however, is that it demolished and reconstructed the roof slab in accordance with the architect's and the engineer's instructions given in an exchange of two emails on 1 September 2011. [\[note: 114\]](#) First, the contractor sent an email to Lee Boon Pin from NGPL, copied to the engineer. This email is important and deserves setting out in full: [\[note: 115\]](#)

Dear Mr. Boon Pin,

As discussed during my visit to your office yesterday afternoon, we write to confirm that we shall do away with the 510mm drop at rear portion of roof terrace at GL: B-D/ 2-4 since we are constructing the slab.

Pls refer to autocad file attached.

Regards,

Tan Kim Siong

164 Second, Lee Boon Pin acknowledged that email on the same day: [\[note: 116\]](#)

Dear Tan

We acknowledge, pls concur with [the engineer].

Regards,

BP

I shall collectively refer to these two emails as the "1 September 2011 correspondence".

165 In its submissions, the contractor also refers to an extended line of correspondence and face-to-face meetings beginning in 23 February 2011 and ending on 30 September 2011 which it claims shows that the project management team instructed it to demolish the rear roof slab and reconstruct it flush with the front slab. [\[note: 117\]](#)

166 The owner argues that the contractor must fail on its pleaded case because the rear roof slab had been demolished even before the 1 September 2011 correspondence and even before the discussions referred to in that correspondence. The owner also attacks the new line of correspondence and meetings the plaintiff now seeks to rely on, pointing out that the contractor was not copied on any of the emails it now purports to rely on and did not participate in any of those discussions. [\[note: 118\]](#)

167 I hold the contractor liable for breach of contract in respect of both of these deviations. The contractor fails on its pleaded defence. The evidence of Lau Teck Hwa, the contractor's sole witness

at trial, is that the rear slabs were demolished by the end of July. [\[note: 119\]](#) This is confirmed by the Minutes of Site Meeting for 13 July 2013 ("13 July 2013 Minutes") which at item 2.2 indicates that "WS inform that as of 13th July 2011 demolition works to rear of development have been completed". [\[note: 120\]](#) Indeed, the contractor's submissions rely on these very minutes as evidence that, by that date, it had brought its demolition of the rear roof slab to the attention of the parties and had failed to hear any objections. [\[note: 121\]](#)

168 This means that the 1 September 2011 correspondence which the contractor cites as being the instruction from the architect and the engineer to demolish and reconstruct the slabs cannot possibly be a written instruction to carry out such works. It simply came too late.

169 I note, however, that the contractor relies in its submissions on cl 1.(1) of the SIA Building Contract. That provision deems an oral instruction of the architect to have been given in writing and on the date it is given orally provided that: (a) the contractor confirms the oral instruction in writing within 14 days; and (b) the architect does not withdraw the instruction within 14 days after receipt of the contractor's confirmation. [\[note: 122\]](#) This is an important contractual provision: [\[note: 123\]](#)

... Any direction or instruction [of the Architect] given verbally shall be deemed to have been given in writing, and have retrospective effect from the date of the verbal direction or instruction, provided that the Contractor confirms the direction or instruction in writing within 14 days of its being given, and that the Architect does not within 14 days of receipt of the written confirmation dissent from or withdraw the direction of instruction... In addition the Architect may (but shall not be obliged to) at any time subsequently confirm in writing any direction or instruction previously given verbally by him, in which event the confirmation shall have retrospective effect as a written direction or instruction given at the time of the verbal direction or instruction...

170 This clause refers to instructions given "verbally". I have read that to mean "orally". The two words are not synonyms, even though they are often misused that way. An instruction is given verbally if it is embodied in words rather than in some other form, *eg*, by conduct or in symbols. An instruction is given orally if it is given by means of speech rather than in writing. A written instruction is not an oral instruction but is a verbal instruction if it is given in words. This point of usage aside, I understand the contractor's argument to be that the 1 September 2011 correspondence is its confirmation of an oral instruction given by the architect no more than 14 days earlier.

171 I do not accept this argument. In the first place, the argument contradicts the evidence of Lau Teck Hwa that the slab had been demolished by July 2011. That is well outside the 14-day window stipulated by cl 1.(1) of the SIA Building Contract. This argument also contradicts the demolition recorded in the 13 July 2011 Minutes.

172 But even if that finding is wrong, I am in any event not persuaded that the 1 September 2011 correspondence represents the contractor's confirmation within the 14-day window of an oral instruction from the architect. In particular, I am not persuaded that the architect gave any such oral instruction to the contractor in the first place. I am guided on this point by two aspects of the contractor's pleadings. First, the contractor's pleaded defence [\[note: 124\]](#) is that the architect and the engineer "on or about 1 September 2011 instructed" the contractor to demolish the slab. That plea is completely inconsistent with the case that the architect gave an oral instruction earlier which the contractor merely confirmed on 1 September 2011.

173 This reading is confirmed by further and better particulars which the contractor supplied to the

owner of this same paragraph of its defence. [\[note: 125\]](#) The owner asked for particulars of the instruction which had been pleaded, and asked specifically whether it was the contractor's case that the instruction had been given orally. The particulars supplied by the contractor asserted that the instruction was "confirmed in writing". That does not shed much light. [\[note: 126\]](#) But the owner also asked for the following particulars, in the event that the contractor's case was that the alleged instruction had been given orally: (a) the date the alleged instruction was communicated; (b) the person(s) who communicated the alleged instruction and to whom the alleged instruction was communicated; and (c) the full terms of the alleged instruction. [\[note: 127\]](#) The particulars supplied by the contractor in response said that all of these requests were "Not Applicable". That indicates to me that an oral instruction before 1 September 2011 was never part of the contractor's case. I infer that that there was in fact no such oral instruction. These particulars were given much closer in time to the acts which gave rise to the parties' dispute. I consider the position which the contractor took in its particulars are more reliable and free of artifice than the contractor's belated attempt now to rely on cl 1.(1) of the SIA Building Contract.

174 The contractor's pleaded defence therefore fails.

175 The above analysis is sufficient to dispose of the contractor's breach of contract for the deviations in respect of the rear roof slab. I will, however, make some brief observations on the other arguments offered by parties.

176 I agree with the owner that the contractor's belated reliance on the line of correspondence and discussions over a period from 23 February 2011 to 30 September 2011 does not assist it. The evidence before me does not suggest that the contractor knew of the correspondence or participated in the discussions at the relevant time.

177 So far as the correspondence is concerned, the contractor was not a recipient of the 23 February 2011 email, [\[note: 128\]](#) and was not copied on the reply. [\[note: 129\]](#) I therefore fail to see how the contractor could have "accordingly" proceeded to demolish the rear roof slab. [\[note: 130\]](#) I have already dealt with the 1 September 2011 correspondence above, and found that it does not assist the plaintiff. And similarly, the contractor was also not party to the emails of 28 September 2011 [\[note: 131\]](#) and 30 September 2011. [\[note: 132\]](#) In those emails, the owner queried Lee Boon Pin why the original roof slab had not been retained. His reply was that the engineer had indicated that the slab should be new and thus was cast flush with the existing front roof slab. This exchange of emails therefore also cannot serve as an instruction to demolish, especially because it was far too late at that point in time in any event.

178 In sum, I do not see how the correspondence represents an instruction on the part of the owner, or the architect, or the engineer, to the contractor to demolish the rear roof slab and recast it flush with the front roof slab.

179 And as for the discussions, the contractor makes reference to the 13 July 2011 Minutes as evidence of it having informed the owner, the project management team and the engineer – all of whom were present at the meeting – of the fact that the rear roof slab had been demolished by that time. [\[note: 133\]](#) I accept that this is what item 2.2 of the minutes indicate. [\[note: 134\]](#) I also accept that the minutes record no objection to this. But the lack of objection does not in itself amount to an instruction – belated or otherwise – that the rear roof slab be demolished.

180 In any event, I would add that the contractor has also not pointed me to a legal basis on

which a failure to object relieves the contractor of his obligation to carry out his works in compliance with the SIA Building Contract. The architectural drawings became the written permission drawings and the structural drawings, both of which are part of the Contract Documents, as defined in the SIA Building Contract: see [206] below.

The architect

181 I now examine the architect's liability. The owner has not vigorously advanced arguments in its written submissions against the architect in respect of the rear roof slab, and seems to be content for the contractor to be responsible alone for this breach. [\[note: 135\]](#) The owner did, however, repeat in its oral closing submissions the arguments for a breach of the supervision duty because of the architect's failure to detect, after the fact, either that the rear roof slab had been demolished or that it had been reconstructed without the required drop in elevation. [\[note: 136\]](#)

182 The architect's arguments are pitched both quite generally in respect of the architect's standard of care as a whole, and also more specifically in respect of these particular deviations. At the more general level, the architect argues that the standard of care he should be held to requires him to exercise only reasonable care and skill and not to discover each and every defect. In this regard, he relies on the following passage in *Jackson & Powell* which sets out the standard of care of an architect: [\[note: 137\]](#)

The standard of reasonable care and skill is not a standard of perfection. It does not make an architect, for example, the insurer or guarantor that work has been properly done. It is not sufficient to prove an error in order to show that there has been a failure to exercise reasonable care and skill. Actual negligence must be proven. Similarly, an error of judgment or wrong opinion is not necessarily negligent.

183 The architect also relies on another passage in *Jackson & Powell* to argue that an architect can fulfil his obligation to carry out a reasonable examination of the works even if he does not discover every defect in the works: [\[note: 138\]](#)

Reasonable examination of the works does not require the architect to go into every matter in detail. It is recognised that some defects and insufficiencies may escape his notice. Further, it by no means follows that in failing to discover a defect which a reasonable examination would have disclosed the architect is necessarily negligent.

184 Finally, at the more specific level, the architect also argues that it was not his role to supervise the contractor's method of working and thus not his responsibility to stop the contractor from demolishing and reconstructing the slabs if the contractor had adopted that as his chosen method of working. [\[note: 139\]](#)

185 In his reply submissions, the architect also argues [\[note: 140\]](#) that the owner's approach in its submissions does not assert any liability on the part of the architect for this deviation. The architect relies on this as the owner conceding that the contractor alone is responsible for this deviation and as absolving the architect of liability for it.

186 I hold that the architect is liable for breaching both his drawings duty and his supervision duty in relation to the demolition of the rear roof slab. I do not perceive the owner's failure to pursue arguments against the architect in his written submissions as an abandonment of the owner's pleaded case that the architect is liable for this breach. Indeed, I take the view that the analysis of the

deviation in respect of the rear roof slab is virtually identical to the analysis of the deviations in respect of the second and third storey rear slabs, which I consider below. If the architect is liable for one, he must also be liable for the other.

187 So far as the drawings duty is concerned, the evidence before me is that there is a divergence between the structural drawings on the one hand, and the written permission drawings and the construction drawings on the other. The drawings duty requires the architect to ensure consistency between the drawings. This he has failed to do. He has therefore breached his drawings duty. I do not consider this, however, to be a significant breach in that the inconsistencies he failed to identify did not indicate that the slab was to be demolished. And, in any event, all three drawings show that the drop in elevation between the front and the rear slab was to be retained.

188 Similarly, as far as the supervision duty is concerned, there has been a failure to identify the deviations and have them rectified in a timely manner. I accept that the 13 July 2011 Minutes do not record the architect as being present at that meeting. I therefore accept that he did not learn of the demolition at the same time as the engineer or the owner. But I nevertheless repeat my observations earlier that although it was not incumbent on the architect to prevent the deviations from occurring – as it was not his duty to visit the site frequently enough to do so – for this case at least, he should have noticed that the rear roof slab had been reconstructed in a way that deviated from the written permission drawings, and have the deviation either rectified or waived prior to the project completion date.

The engineer

189 I now come to consider the engineer's liability. As with his arguments against the architect on this feature, the owner has not vigorously pursued the engineer for breach of duty in his written submissions for the rear roof slab deviation. The owner did, however, cite breaches of the supervision duty because of the failure to detect the deviations in a timely manner. [\[note: 141\]](#)

190 The engineer admits that he did recommend that the original roof slab be demolished and replaced by a thicker slab. His evidence is that he did so for reasons of safety, in order to increase the loading for the rear roof terrace area. [\[note: 142\]](#) He denies, however, that he is responsible for eliminating the drop in elevation, as this was the architect's decision. [\[note: 143\]](#)

191 I hold that the engineer has also breached both his drawings duty and his supervision duty. The drawings duty was breached because the structural drawings were inconsistent with the written permission drawings.

192 The engineer also breached his supervision duty because he failed to detect the deviation in a timely manner and insist on its rectification. Quite apart from whether demolition and recasting of the slab was necessary for safety, the engineer should have detected that the rear slab should not have been reconstructed flush with the front slab, because his own structural drawings indicated a drop in elevation. I appreciate that the engineer does not have the power under the SIA Building Contract to order the contractor to rectify the deviation. But he could and reasonably should have detected this deviation and drawn the architect's attention to it and the need for it to be rectified. The engineer opted instead to co-operate with the architect in seeking a waiver from the URA of the reconstructed slab. [\[note: 144\]](#) In this light, I consider that the engineer took on the risk of not obtaining that waiver by the project completion date. The engineer therefore remains liable for breaching his supervision duty, notwithstanding that the architect had come to know that the slab had been incorrectly reconstructed without the drop in elevation.

193 In summary, in relation to this deviation, I hold that the contractor is in breach of contract and that the architect and the engineer both breached their duties of care in tort.

Feature 2: the second and third storey slabs

194 The next feature in respect of which deviations occurred is the second and third storey roof slabs. There are two key deviations. First, the contractor demolished the slabs even though they were to be retained. Second, the contractor reconstructed both slabs without the original drop in elevation, which should never have been eliminated.

195 I first set out my findings on the drawings.

What the drawings indicate

196 The written permission drawings at Section 1-1 depict the original second and third storey rear slabs in cyan. [\[note: 145\]](#) A feature indicated in cyan, under the recognised colour-coding convention for AutoCAD drawings, is a feature which is to be retained. In addition, I find that there is nothing in the written permission drawings to indicate in any way that the existing drop in elevation is to be eliminated structurally. Although there are magenta or purple lines in the written permission drawing to indicate that the height of the rear section of the second and third storeys should be raised to the same level as the rest of those storeys, this is to do with the level of the floor to be laid over these rear slabs and not with any change in the slabs themselves as structural elements. These lines do not by themselves mean that the original slabs are to be demolished and reconstructed flush.

197 The construction drawings, unlike the written permission drawings, are in black and white. [\[note: 146\]](#) Like the written permission drawings, however, I find that there is nothing in the construction drawings to indicate that the second and third storey rear slabs are to be demolished. Although the construction drawings indicate that the height of the rear section of the second and third storeys should be raised to the same level as the rest of the storey, the lines indicating the new flush level are thinner than those indicating the original rear slabs. This does not by itself mean that the original slabs should be demolished and reconstructed at the new level.

198 I also find that there is nothing in the structural drawings [\[note: 147\]](#) to indicate that the second and third storey rear slabs are to be demolished. Where the structural drawings call for elements to be demolished, that intent is indicated by drawing the elements using dotted lines and by the accompanying annotations. But no such lines or annotations were used for the second and third storey rear slabs. I do find, however, that the structural drawings differ from the written permission drawings and the construction drawings in that they suggest that a new concrete slab should be built on top of the existing slabs, instead of the floor being raised using lightweight material instead.

The contractor

199 I first examine the contractor's liability. The contractor does not dispute that it demolished the second and third storey rear slabs and constructed them without a drop in elevation. [\[note: 148\]](#) It justifies its actions in doing so on various grounds.

200 The contractor's pleaded case is that the architect and the engineer instructed the contractor around 1 September 2011 [\[note: 149\]](#) that there was no need to accommodate any drop in elevation between the front and rear slabs at the second and third storeys, thereby implying that the contractor was to demolish the rear slabs and also to replace them with new rear slabs flush with the

front slabs. [\[note: 150\]](#) The pleadings are not entirely clear as to what form the contractor says these instructions took. The contractor's counsel confirms in his closing submissions that the contractor's case is that these instructions were reflected in the structural drawings. [\[note: 151\]](#)

201 Evidence was given at trial in support of this argument. That evidence was that the structural drawings showed that steps which covered the drop in elevation from the front slab to the rear slab were to be removed. [\[note: 152\]](#)

202 The contractor's final argument in its closing submissions is that it could not have complied with the written permission drawings because it was never given those drawings. [\[note: 153\]](#) The contractor then submits, however, that in any event the finished floor level for both these slabs in the written permission drawings indicates that no drop in elevation from the front slab was meant to be accommodated. [\[note: 154\]](#) It also submits that because the architect, the engineer and NGPL were aware of the deviations but did not object to them, that there has been acquiescence in the deviations. [\[note: 155\]](#) Alternatively, the contractor argues that the owner is estopped from enforcing its rights against the contractor.

203 The owner argues that the contractor has taken an incomplete view of the drawings and ignored other aspects of the drawings which clearly indicate no demolition and no reconstruction. The owner also argues that the "instructions" referred to in the contractor's pleaded case is a reference to the 1 September 2011 correspondence. [\[note: 156\]](#)

204 I hold that the contractor is liable for the deviations in respect of the second and third storey slabs. I have found that there is nothing in the structural drawings to indicate that the slabs were to be demolished. That finding is sufficient to dispose of the contractor's case on the demolition, even on its own interpretation of its pleaded case.

205 Further, if the owner is correct that the pleaded "instructions" can only mean the 1 September 2011 correspondence, I adopt my observations set out above in respect of the rear roof slab. This correspondence could not possibly have formed the instructions to demolish the second and third storey slabs either. The evidence from Lau Teck Hwa is that the slabs had been demolished by [\[note: 157\]](#) July 2011. This is confirmed in the 13 July 2011 Minutes. As mentioned above, the minutes speak of the "demolition works to rear of development [having] been completed" as of 13 July 2011. [\[note: 158\]](#) Those words are apt to cover not just the roof slab but also the second and third storey slabs. So the 1 September 2011 correspondence would have come too late to serve as instructions, whether one reads them as being the architect's written instruction themselves, or as written confirmation of the architect's earlier oral instructions.

206 As for the other deviation concerning reconstruction of the slabs at the wrong height, the contractor's pleaded reliance on the structural drawings as instructions to do so also do not assist it. The contractor's obligations are set out in the SIA Building Contract. Clause 14 of the SIA Building Contract requires the contractor immediately to give notice to the architect of any "discrepancy or divergence... in or between any of the Contract Documents". [\[note: 159\]](#) Article 6 of the SIA Building Contract defines "Contract Documents" as including "Drawings identified and signed by the parties as the Contract Drawings on which the Contractor has based his prices". [\[note: 160\]](#) This category of documents can be identified by having regard to the tender documents, because the contractor based his prices on the tender that was offered. [\[note: 161\]](#) In this case, the tender documents for

the project include a "List of Drawings". [\[note: 162\]](#) And this list in turn includes the architectural drawings that were eventually submitted and approved as the written permission drawings, as well as the structural drawings. [\[note: 163\]](#) Further, the contractor's counsel has also confirmed that the construction drawings form part of the Contract Documents. [\[note: 164\]](#)

207 What this means, therefore, is that the contractor was contractually obliged to give notice to the architect about the divergence between the drawings. The contractor had no contractual power to decide unilaterally to follow one set of drawings and ignore the other. Indeed, Article 7 of the SIA Building Contract expressly provides that the "Contract Documents shall be read and construed as a whole, and no special priority other than that accorded by law shall apply to any one document or group of documents". [\[note: 165\]](#) So it is all the more the case that the contractor could not, at his own whim and fancy, favour the structural drawings over the written permission drawings.

208 A possible defence that might be raised is that the contractor's obligation to give notice to the architect about a divergence between the drawings is not an absolute obligation but one which arises only in respect of a divergence between the drawings which a contractor exercising reasonable care and skill would have noticed. The expert evidence before me, however, suggests that any contractor exercising reasonable care and skill would have noticed this divergence. [\[note: 166\]](#)

209 The above sets out my views on the contractor's pleaded case. I will, however, set out my observations on other arguments as parties devoted lengthy submissions to them. I first deal with the contractor's contention that it had only the tender drawings and never received the written permission drawings. Even if this were true, the contractor's own list of tender drawings includes architectural drawings "80085_A_100_FP01" and "80085_A_100_FP02". [\[note: 167\]](#) These are the same architectural drawings that were submitted to the URA and approved as the written permission drawings. [\[note: 168\]](#) So the contractor would have been contractually obliged to comply with the *content* of the written permission drawings in any event, which content indicates that there should not be demolition of the slabs. Indeed, it bears noting that the contractor has also relied on the finished floor levels indicated in these architectural drawings as justification for the deviations. [\[note: 169\]](#) This argument therefore does not assist the contractor.

210 I turn now to the contractor's arguments concerning the demolition of the steps and the finished floor levels. In my view, neither of these arguments assist the contractor. The fact that the finished floor level at the rear portion of the building is flush with the front portion does not mean that the rear *slabs* must be demolished and reconstructed flush. Instead, it is consistent with a new deck being placed on top of the rear slab, with the finished floor level at the front and rear rendered flush by the construction of the deck rather than by the demolition and reconstruction of a structural element. Indeed, this much was conceded by Lau Teck Hwa in cross-examination. [\[note: 170\]](#) This in turn explains why the indications that the steps were to be removed do not necessarily require the demolition of the rear slab. The steps that led down from the front slab to the rear slab would not be necessary once a deck made the finished floor level of the rear flush with the front. The removal of the steps does not mean that the rear slab must be demolished and reconstructed flush.

211 In any event, I also agree with the owner's arguments that the contractor has taken a selective view of the drawings and ignored clear indications that the slabs were not to be demolished and reconstructed. Even if it were true that the contractor did not have the written permission drawings in colour at the time it demolished the slabs, it did have black and white construction drawings at that time. [\[note: 171\]](#) The Code of Practice indicates that dashed lines are to be used for

deleted elements. [\[note: 172\]](#) The demolished slabs were not indicated using dashed lines, as conceded by Lau Teck Hwa in cross-examination. [\[note: 173\]](#) The contractor should have observed these clear indications that the slab were to be retained.

The architect

212 I now analyse the architect's liability. The owner argues that the architect breached his drawings duty because the written permission drawings show that a non-permanent lightweight flooring system was meant to be built over the second and third storey rear slabs to make the rear of the building flush with the front, whereas the structural drawings indicate that the floor level at the rear was to be achieved by constructing a new concrete slab on top of (and not instead of) the existing rear slab. [\[note: 174\]](#)

213 The owner also argues that the architect breached his supervision duty because he failed to detect the deviations in a timely way. The owner relies on the contractor's progress claim submitted on 12 July 2011 in which the contractor claimed payment for demolishing these slabs. [\[note: 175\]](#) The owner also points out that the architect failed to notice these demolitions when he conducted a site inspection on 20 July 2011. [\[note: 176\]](#)

214 The architect's arguments in response to the owner essentially parallel those which I have summarised in respect of the rear roof slab at [182]–[184].

215 I hold that the architect is in breach of his drawings duty because there is a failure to ensure consistency between the written permission drawings and the structural drawings. I consider, however, that this breach did not cause significant loss to the owner. The inconsistency did not suggest that the rear slabs were to be demolished or reconstructed. Instead, the inconsistency concerned the material to be used to render the finished floor level at the rear of the building flush with the front.

216 As for the supervision duty, I hold that the architect has also breached this duty. The Court of Appeal held in *Sim & Associates* at [57] that an architect is required to exercise only reasonable supervision over building works, to be measured against the standard of the reasonably skilled architect. I accept that this standard of supervision does not entail detection of every defect and breach. Similarly, I accept that the architect is not obliged to be, and therefore may not be, physically present at the site at all times. That said, I take the view that an architect exercising reasonable care and skill would have detected these deviations from the approved plans.

217 The 13 July 2011 Minutes indicate at item 2.2 that "demolition works to rear of development have been completed with partial completion to 2nd and 3rd stories at front of development". [\[note: 177\]](#) This indicates that the second and third storey rear slabs had been demolished at that date. The architect's evidence is that he conducted a site inspection on, among other dates, 20 July 2011. [\[note: 178\]](#) But his evidence is that he did not detect the deviations at that time. Indeed, he only came to know of these deviations only in November 2012. [\[note: 179\]](#)

218 I take the view that the architect's failure to detect these deviations was a breach of his supervision duty. These were not minor defects that might have escaped the notice of a reasonable architect exercising reasonable care and skill in supervision. This deviation involved gross structural features being completely removed from the building. I accept that the architect may not have been able to prevent the demolition. He was not obliged to be on-site at all times and the demolition may

have taken place between his site visits. But in my view the supervision duty does require him to have detected the demolition once it occurred, and to raise it with the contractor and require rectification, or to obtain a waiver of the deviations from the URA before the project completion date.

219 Further I do not think the argument as to the contractor's method of working assists the architect in any way. I do not consider demolition of entire parts of the building to be merely a "method of working". A method of working, as the name suggests, is the process by which the contractor achieves the intended outcome of a construction project. At any rate, it must refer to a process that does not contravene the project intent. So any act which breaches that intent, as shown in the project documents, cannot be characterised as merely a "method of working".

The engineer

220 I now consider the engineer's liability. The owner argues that the engineer breached both the drawings duty and the supervision duty. The drawings duty was breached when the structural drawings did not conform to the written permission drawings, as the former indicated that new concrete slabs would be added on top of the existing rear slabs, instead of a lightweight material as indicated in the latter. The supervision duty was breached when the engineer failed to prevent the demolition of the slabs and when he failed to ensure that the original drops in elevation were retained when the slabs were reconstructed.

221 The engineer argues that his drawings duty was discharged once he had submitted the structural drawings to the architect and received no instructions from the architect to change the design. [\[note: 180\]](#) According to the engineer, the architect's express approval, failure to comment or failure to object to the structural drawings must mean that the engineer's design obligations are fulfilled. [\[note: 181\]](#)

222 As for the supervision duty, the engineer contends that he did not breach that duty because he was required to supervise only critical structural works. [\[note: 182\]](#) Demolition works are not critical structural works. There was thus no breach of the supervision duty.

223 I hold that the engineer is liable for breaches of both the drawings duty and the supervision duty. The drawings duty requires the engineer's structural drawings to conform to the written permission drawings, so far as structural defects and irregularities are not contemplated within the latter. In that event, the engineer's duty is to draw the architect's attention to them. There is no allegation here that the written permission drawings contained any structural defect or irregularity which required the structural drawings to depart from the written permission drawings in respect of these particular features. This being the case, the engineer is liable for breaching his drawings duty. I add also that this must be the right result, because accepting the engineer's argument effectively makes the architect the insurer of the engineer's design obligations, which cannot be right.

224 As for the supervision duty, I take the view that this duty was also breached. I do not think that the supervision duty is as narrow in scope as the engineer submits. A duty of care in tort does not necessarily mirror the statutory duties to which the engineer is subject. As I observed above, the duty of care that the engineer owes in this case is wider than the scope of his statutory duties. I take the view that the supervision duty in this case also extends to the detection of deviations from the written permission drawings as occurred here. The engineer's failure to detect the deviations is therefore a breach of the supervision duty. The engineer, just like the architect, was not required to be on site at all times and owed no duty to prevent the demolition works from being carried out. But he should have noticed that these features had been demolished and should have drawn the

architect's attention to them.

225 But should I be wrong on this, I would also add that there has been a breach of the supervision duty even on the engineer's preferred interpretation. The engineer has cited s 7(1)(c) of the Building Control Act as authority for what is comprised in critical structural works. That provision indicates that "concreting" is critical structural work. The reconstruction of the demolished slabs would have involved concreting. The failure of supervision lies in the failure to ensure that the slabs, upon reconstruction, would be at the height specified in the written permission drawings, *ie*, with a drop in elevation. This would hence be a breach of the supervision duty in any event.

226 In summary, in relation to this deviation, I hold that the contractor is in breach of contract and that the architect and the engineer both breached their duties of care in tort.

Feature 3: the rear external staircase

227 I come now to the third feature in respect of which a deviation from the approved plans – the written permission drawings – occurred. This involves the construction of a rear external staircase towards the back of the building using an "H" structure comprising thick columns and beams. The URA indicated that this structure was non-compliant because it (a) did not end at the original roof level of the rear service block; and (b) the beams and columns "[were] too heavy looking and change[d] the architectural character of the rear service block". [\[note: 183\]](#)

What the drawing indicate

228 I first set out my findings on what the various plans indicate in respect of this feature. I find that the "H" structure was not indicated in the written permission drawings and construction drawings. Conversely, I find that the "H" structure was indicated in the structural drawings.

229 Before I turn to analyse the breaches committed each party, I note a preliminary issue concerning the scope of this set of deviations. The owner has submitted that the true issue concerning the rear external staircase is the use of the "H" structure, as the deviation in respect of the staircase failing to meet the original roof level of the rear service block is merely a consequence that flows from the deviations in respect of the demolition and reconstruction of the rear roof slab at a new, raised height. [\[note: 184\]](#) I accept this submission. I have already analysed the deviations in respect of the rear roof slab above. In the analysis which follows, therefore, I focus only on the "H" structure.

The contractor

230 I now analyse the contractor's liability. The owner accepts that the contractor is not responsible for the inconsistency in the drawings, but argues that the contractor is liable for failing to clarify the divergence between the two drawings, and simply electing to follow the structural drawings over the written permission drawings and the construction drawings. [\[note: 185\]](#) The engineer has also makes these same arguments, although with the different aim of absolving himself of liability. [\[note: 186\]](#)

231 The contractor submits that there were project managers, the architect, engineers, an RTO, and an Accredited Checker engaged for the project, and any one of these personnel could have stepped in to verify and ensure consistency between the various drawings. [\[note: 187\]](#)

232 In any event, the contractor argues that it was reasonable for it to have constructed the “H” structure in accordance with the structural drawings. This was a structural element, and therefore the structural drawings should take precedence over the written permission drawings and the construction drawings, bearing in mind that the contractor only had in its possession the structural drawings, the tender drawings, and the construction drawings. [\[note: 188\]](#)

233 The owner has rightly indicated that the contractor is not to be liable for the inconsistency in the drawings. I agree, and I speak no more of this matter.

234 I do find, however, that the contractor has nevertheless breached his contractual obligations by constructing the “H” structure and simply choosing to follow the structural drawings over the other drawings available to it. As I have previously elaborated, cl 14 of the SIA Building Contract requires the contractor to give notice to the architect of any divergence it identifies between the drawings. [\[note: 189\]](#) Similarly, Article 7 of the SIA Building Contract indicates that no one Contract Document is to be given precedence over another. [\[note: 190\]](#) The expert evidence before me indicates that this is not a divergence which a reasonable contractor exercising reasonable care and skill could have failed to identify. [\[note: 191\]](#) Thus, the contractor was in breach of contract in unilaterally electing to follow the structural drawings over the other drawings. I would also add that the contractor’s point about not having the written permission drawings does not assist it. The written permission drawings are materially the same as the tender drawings, as confirmed by the contractor’s own witness Lau Teck Hwa. [\[note: 192\]](#) Indeed, the tender drawings held by the contractor included the architectural drawings that were essentially the same drawings approved by the URA as the written permission drawings, as I observed earlier at [209]. Nothing turns, therefore, on the different names of the drawings.

The architect

235 I now analyse the architect’s liability. The owner argues that the architect is liable for breaching both his drawings duty and his supervision duty. The architect breached the drawings duty because he failed to ensure that the structural drawings were consistent with the written permission drawings. [\[note: 193\]](#) The architect breached the supervision duty because he failed to supervise the contractor’s work and to ensure that it was carried out in accordance with the written permission drawings in such a way as would allow the project to obtain TOP. [\[note: 194\]](#)

236 On his part, the architect points out that it is patently clear that the “H” structure was not part of his design and was not present in the written permission drawings. The structural drawings which included the “H” structure are incorrect. He submits that the written permission drawings must take precedence over all other drawings. [\[note: 195\]](#)

237 I hold that the architect breached both his drawings duty and his supervision duty. He breached the drawings duty because he failed to ensure consistency between the written permission drawings and the structural drawings. Similarly, the architect breached the supervision duty because he failed to detect the deviation and failed to insist that the contractor rectify it in a timely manner, even though the architect knew that it did not comply with his own drawings.

The engineer

238 I next analyse the engineer’s liability. The owner argues that the engineer breached both his drawings duty and his supervision duty. The engineer breached the drawings duty when he failed to

prepare his structural drawings in accordance with the written permission drawings. The written permission drawings ought to take precedence because only they are approved by the URA. [\[note: 196\]](#) The engineer also breached his supervision duty by failing to supervise the contractor's work and to ensure that it was carried out in accordance with the written permission drawings in such a way as would allow the project to obtain TOP. [\[note: 197\]](#)

239 The engineer argues that he had no duty to bring the "H" structure to the architect's attention. Instead, it was the architect whose duty it was to review the structural drawings, together with the drawings of all the consultants, before calling for tenders. There would have been no issue with the "H" structure had the architect sought URA's approval for it before awarding the tender or allowing the works to start. [\[note: 198\]](#) The engineer also argues that even if he had a duty to bring the "H" structure to the architect's attention, he did so. Alternatively, if he failed to do so, the failure did not cause loss to the owner. [\[note: 199\]](#)

240 I first deal with a preliminary point raised by the engineer: that he owed no duty to ensure that his design was compliant with the Conservation Guidelines, but only a statutory duty to ensure structural safety and integrity of the project. This, strictly speaking, belongs under the duty of care analysis, and I have already found that the engineer's duty was not confined to the statutory duty. It goes beyond that to include, in this case, the drawings duty and the supervision duty. The engineer's argument that the "H" structure is a mere aesthetic feature therefore is neither here nor there. Indeed, I am not sure how this submission that it is a mere aesthetic feature can even be correct when this feature appeared only in the structural drawings prepared by the engineer. One would expect the engineer to introduce structural features and the architect to introduce aesthetic features.

241 I turn now to the substantive arguments on the "H" structure. The engineer is correct that the architect has a duty to review drawings sent to him. But he is wrong that this duty means that the engineer is given a free hand to ignore the written permission drawings and design whatever he wishes, safe in the knowledge that the architect will catch his errors. The architect is not the insurer of the engineer's mistakes. Nor is the engineer absolved of a breach simply because he sends his structural drawings to the architect and the architect fails to notice the breach. In that scenario, as here, both parties are liable.

242 The simple fact of the matter is that the engineer's drawings duty included ensuring that his structural drawings conformed to the written permission drawings save as required by his own discipline. He has breached that duty here. I therefore find that he has breached his drawings duty.

243 I also hold that the engineer breached his supervision duty. The engineer owes this duty not only in respect of detecting deviations that might affect the building's structural integrity and safety. The engineer's duty of care is not confined only to the strict confines of his statutory duty. What this means is that the engineer should have detected deviations from the approved plans, *ie*, the written permission drawings, and brought them to the attention of the architect to ask that they be rectified in a timely fashion. This duty is not discharged by merely sending structural drawings to the architect, contrary to the engineer's submissions. [\[note: 200\]](#) Even if that can be said to be notification, it addresses only deviation in *design*. The breach here is that the engineer should have drawn to the architect's attention the fact that the "H" structure, as built, did not comply with the written permission drawings, and asked that it be rectified. It is not disputed that the engineer failed to do this. [\[note: 201\]](#)

Feature 4: The rear boundary wall

244 I come now to the final feature in respect of which deviations occurred, the rear boundary wall. Before proceeding further, I note that the owner has conceded that the engineer does not bear any liability for this particular feature. [\[note: 202\]](#) I therefore focus only on the liability of the contractor and the architect.

245 The deviation in respect of the boundary wall is that it was constructed to a height above one metre, contrary to the written permission drawings.

246 I find that the written permission drawings and the construction drawings both show a rear boundary wall of only one metre in height.

The contractor

247 I turn to analyse the contractor's liability first. The contractor's pleaded defence is that it complied with all relevant construction drawings which NGPL provided to it and that it complied with the instructions issued by NGPL. [\[note: 203\]](#) When asked to supply further and better particulars of where those instructions could be found, [\[note: 204\]](#) the contractor identified specific drawings as reflecting the instructions it was relying on.

248 The contractor took a different position at trial, however. At trial, the contractor's position is that the instructions are evidenced by an email from Lau Teck Hwa on 9 December 2011 ("9 December 2011 email") which purports to record the agreement of the parties that the "[p]arty wall at 2nd storey adjacent to rear spiral staircase to be extended to 1800mm high". [\[note: 205\]](#) The contractor contends that a "party wall" and a "boundary wall" are the same thing. It also points to the fact that no other walls required work at the time to argue that this could only have been a reference to the rear boundary wall. [\[note: 206\]](#) In this respect, it notes the sustained failure of the project management team to object [\[note: 207\]](#) and points to evidence from the architect and engineer that no work was required to be done save for the rear boundary wall. [\[note: 208\]](#)

249 It also notes that in any event this deviation did not require a great deal of time to rectify, with rectification time measured in hours rather than days. [\[note: 209\]](#) It was therefore not a serious deviation.

250 The owner argues that the contractor is solely responsible for the breach as both the written permission drawings and the construction drawings indicate a rear boundary wall of only one metre in height. [\[note: 210\]](#) The owner points out that the contractor has departed from its pleaded case [\[note: 211\]](#) and, in any event, is wrong on its interpretation of the 9 December 2011 email. A party wall is quite different from a boundary wall, and no reasonably skilled contractor could have mistaken one for the other. [\[note: 212\]](#) The owner also argues that the contractor has taken the evidence of the architect and the engineer out of context.

251 I find that the contractor breached his contractual obligation by constructing the rear boundary wall at a height exceeding one metre. The contractor's pleaded defence fails for lack of evidence. Insufficient evidence was given on how the drawings it relied on showed that the wall should be built in excess of one metre in height, let alone how those drawings reflected instructions from NGPL.

252 As for the contractor's unpleaded defence, raised only at trial and in arguments, I accept that a reasonably skilled contractor could not have mistaken a party wall for a boundary wall. The 9 December 2011 email is therefore of no assistance to the contractor. Further, I agree that the engineer and the architect's evidence was taken out of context, and no weight should be placed on it in that regard.

The architect

253 The owner does not appear to have pursued arguments against the architect for breach of duty in respect of the rear boundary wall. In my judgment, it is clear that there is no breach of the drawings duty as the relevant drawings were consistent and showed that the rear boundary wall was not to be built in excess of one metre in height. But I do consider that there is a breach of the supervision duty in failing to ensure compliance with the written permission drawings, and timely rectification of the deviation once it had been identified.

Issue 4: Causation

254 I come now to the issue of causation. It is first necessary to be clear about what loss the owner claims it has suffered. The loss which the owner claims can be classified under two broad headings. The first is the loss suffered by reason of having to rectify the deviations. [\[note: 213\]](#) The second is the loss suffered by reason of the delay in obtaining TOP for the shophouse. As against the contractor, this would include liquidated and other contractual damages for the delay. Additional losses which flowed from the delay include the loss arising from the owner being unable to occupy or utilise the shophouse until December 2014. [\[note: 214\]](#)

255 The owner has taken the position that the contractor, the architect, and the engineer should be jointly and severally liable for all of the owner's loss. [\[note: 215\]](#) This is because each feature for which a deviation occurred was an effective cause of the delay in the TOP being issued. Thus, should any party be found to have caused even one deviation, that party becomes liable to bear the entire loss which the owner has suffered.

256 The contractor, [\[note: 216\]](#) the architect, [\[note: 217\]](#) and the engineer [\[note: 218\]](#) have indicated to me that should I find any one of them liable in respect of a particular deviation, they would like me to apportion liability as between them. They have further agreed amongst themselves to waive the requirement of serving contribution notices. [\[note: 219\]](#) This affects only the rights as between the parties found liable and not the owner's rights against them. Regardless of the apportionment, the owner remains entitled to claim the entire loss from any one of the parties held liable. [\[note: 220\]](#)

257 Despite the parties' agreement, I decline at this stage to decide the issue of apportionment between the defendants to the counterclaim. It appears to me wrong in principle to decide that issue without hearing specific submissions made by each defendant to the counterclaim in the light of my findings in this judgment, in light of the specific heads of loss claimed against that party. All of that can be done in the quantum phase of this action. I therefore deal now only with causation.

258 I begin by considering the respective liabilities of the parties with respect to each individual feature, before setting out my views on the liabilities of the defendants collectively as against the owner.

Feature 1: rear roof slab

259 It is necessary to be clear about the loss to the owner by reason of this deviation. The immediate loss to the owner is the cost of rectification. Rectification involves reinstating the drop in elevation between the front roof slab and the rear roof slab by demolishing the wrongly constructed rear roof slab and constructing a new rear roof slab reinstating the drop in elevation indicated in the written permission drawings. The loss to the owner also includes the delay in obtaining TOP. It does not, however, include the demolition of the original slab as that did not have to be rectified. What had to be rectified was the reconstructed rear roof slab that was built flush. Indeed, it appears that the elimination of the drop in elevation between the front roof slab and the rear roof slab was the key cause for the URA refusing to approve the TOP. The evidence before me suggests that the URA was prepared to accept reconstruction of the rear roof slab if it had been necessary for safety, *ie* to accommodate additional loading. [\[note: 221\]](#)

260 Having defined the scope of the owner's loss on this aspect of its case, I now consider each party's liability. I consider that the contractor caused this loss. It constructed the slab flush despite the written permission drawings and the construction drawings indicating a drop in elevation. The contractor should have given notice to the architect of the divergence between the structural drawings and the written permission drawings.

261 I consider that the architect and the engineer also caused this loss. The architect and engineer breached their respective drawings duties in failing to ensure consistency between the drawings. That said, this was not as potent a cause given that the divergence was not large. The finished floor levels indicated in the structural drawings do indicate a drop in elevation, consistent with the written permission drawings and the construction drawings, even if other parts of the structural drawings suggest otherwise. This being the case, the structural drawings are inconsistent on its face and should have invited greater scrutiny from the contractor.

262 The architect's and engineer's breaches of their supervision duties also resulted in the loss occasioned by the delay in obtaining TOP. Upon identifying that the slab had been wrongly reconstructed flush they did not instruct rectification of the deviation by having the slab removed and drop in elevation reinstated. Instead, they chose to seek a waiver of this deviation from the URA. They failed to obtain that waiver. I consider that this too is a cause of the owner's loss.

263 In summary, I find that the contract, the architect and the engineer have all contributed to the owner's loss suffered in respect of the rear roof slab deviations.

Feature 2: the second and third storey rear slabs

264 In my judgment, the relevant loss arising from the deviations to this feature as are follows. First, there is the loss and damage involved in rectifying the deviation. This is the cost of demolishing the reconstructed slabs and reinstating the drop in elevation, as indicated in the written permission drawings.

265 Second, so far as delay in obtaining TOP is concerned, the loss caused is the delay in carrying out the rectification works I have just described. This much is clear from the URA's Direction of 12 December 2012, refusing permission for the deviation as the wrong material was used (*ie*, the reconstruction of the slabs using cement instead of a lightweight material as indicated in the written permission drawings). [\[note: 222\]](#)

266 The relevant loss therefore arises out of the reconstruction of the slabs with no drop in elevation, and a failure to ensure timely rectification or waiver before the project completion date. I consider that the contractor, the architect, and the engineer have each caused this loss.

267 The contractor contributed by reconstructing the slabs with no drop in elevation. I accept, however, that based on the way the loss is characterised, his breach of contract in demolishing the slabs does not go to this particular loss.

268 The architect and the engineer also contributed to the loss by failing to ensure that the structural drawings were consistent with the other drawings, in particular the written permission drawings. This breach of their respective drawings duties resulted in the contractor reconstructing the slabs with the wrong material, which was a reason why the URA refused to grant permission for them.

269 Further, the architect's breach of his supervision duty in failing to have the slabs rectified before the project completion date also contributed to the loss, as did the engineer's breach of his supervision duty. Even on his own case, the engineer failed to supervise the concreting works to ensure that the slab would not be reconstructed flush.

270 In the circumstances, I consider that all parties have caused the loss.

Feature 3: the rear external staircase

271 The deviation which occurred in respect of this feature was the construction of the unauthorised "H" structure, to which the URA objected. [\[note: 223\]](#) Rectifying this defect involved demolishing this structure. The loss suffered by the owner was therefore the cost of the rectification and the loss occasioned by the delay in obtaining TOP as a result of the belated rectification.

272 I hold that all three defendants are equally liable for the loss here. The engineer failed to follow the written permission drawings and decided unilaterally to include the "H" structure in his structural drawings. This was a breach of his drawings duty. The architect failed to discover the divergence between the drawings. That was a breach of his drawings duty. The contractor failed to give notice of the divergence to the architect and instead unilaterally chose to follow the structural drawings. That was a breach of the contractor's contractual duty.

273 The engineer argues that his breach did not cause the loss, because the architect believed that the "H" structure was compliant with the URA's requirements, and would not have applied for a waiver or amendment in any event. [\[note: 224\]](#) I accept that the architect conceded in cross-examination that he did not believe that the "H" structure was non-compliant and therefore never sought a waiver of it. [\[note: 225\]](#) This was a failure of the supervision duty on the architect's part. But I am not persuaded that this concession necessarily means that the architect would still not have sought a waiver of this deviation or attempted to have it rectified if the engineer had properly discharged his supervision duty and pointed out the non-compliance to the architect. The engineer's own submissions suggest this was never done. [\[note: 226\]](#) I therefore consider that both the architect's and the engineer's breaches of their respective supervision duties also effectively caused the loss.

274 There was thus a cascading series of breaches committed by all three defendants to the counterclaim which compounded one another's breaches and ultimately caused the loss.

Feature 4: the rear boundary wall

275 The deviation here involves the wall being built to a height of 1.8 metres, when it should only

have been built to one metre. The loss suffered was the cost of rectifying the deviation by removing the top part of the wall. I do not, however, consider that the delay suffered in having the rectification done contributed to the delay in obtaining TOP. I accept the contractor's submission, [\[note: 227\]](#) which was supported by the engineer's evidence, [\[note: 228\]](#) that the deviation in respect of the excess height of the rear boundary wall could have easily been remedied and thus was not an effective cause of the delay. I have therefore not characterised delay caused by this deviation as a loss suffered by the owner. So the owner's only loss on this feature is the cost of rectification.

276 I consider that the contractor and the architect have both caused this loss. The contractor is primarily responsible for the loss because nothing in the drawings indicated that the rear boundary wall should be constructed above one metre. Insofar as there is any loss going beyond the cost of rectification, the architect's breach of his supervision duty will have caused that loss together with the contractor's breach of contract.

The contractor's claim

277 Having dealt with the owner's counterclaim, I come now to the contractor's claim. This is a claim against the owner for outstanding payments due under the contract. The dispute concerns primarily the amount which is due to the contractor for certain variation works under the contract. Both parties have made a number of concessions since they pleaded their case. I set these out here for the sake of clarity as to what ultimately remains in dispute before me.

278 The contractor claimed several sums in its statement of claim. First, a sum of \$420,376.93 (the "Outstanding Sum"). [\[note: 229\]](#) Second, a balance sum of \$300,367.27 comprising the aggregate sum certified under Progress Valuation No 8 (\$39,421.31) and the sum under Progress Claim No 9 (\$260,945.96). [\[note: 230\]](#)

279 The Outstanding Sum is no longer in issue. The owner and the contractor have consented to judgment in the contractor's favour [\[note: 231\]](#) on the condition that the execution of that judgment be stayed until determination of the owner's counterclaim. [\[note: 232\]](#) This aspect of the contractor's claim is therefore no longer in issue.

280 As for the balance sum, the owner does not now dispute the sum of \$39,421.31 assessed in respect of Progress Valuation No 8. [\[note: 233\]](#) This aspect of the contractor's claim is also no longer in issue.

281 Of the remainder of the balance sum, *ie*, the sum due under Progress Claim No 9, the contractor has reduced the amount claimed from \$260,945.96 to \$192,553.42. [\[note: 234\]](#) This sum comprises eight disputed items and certain undisputed amounts. The undisputed items need not be considered further. I deal now with the eight disputed items in turn.

Item 1: Omission of timber decking

282 The first item concerns the amount due for omission of timber decking pursuant to Variation Order No 16. The contractor is now willing to accept the owner's valuation of the omission at \$16,556.80. [\[note: 235\]](#) I therefore do not need to decide this item.

Items 2: Provision of rainwater down pipe

283 This is the subject of the contractor's claim under Variation Order No 2. The plaintiff claims that it is owed a sum of \$4,140 for this provision of this pipe. It argues that this pipe was not indicated in the architectural drawings provided to it. Hence, it was additional work for which it should be paid an additional sum. It further notes that the Minutes of Site Meeting for 7 September 2011 indicates that an "additional RWDP" or additional rainwater down pipe was to be included in the works. [\[note: 236\]](#)

284 The owner points to the Schedule of Works and contends that this item was included in the contractor's original scope of work. [\[note: 237\]](#) The owner therefore submits that the contractor is not entitled to any sum at all for this particular item.

285 On balance, I accept the evidence of the contractor. The fact that the contract provided for a rainwater down pipe does not exclude the possibility that the owner asked for an additional rainwater down pipe. The qualifier "additional" which the parties used is significant to me. On balance I find that this was outside the original scope of works in the contract and is therefore a variation for which the contractor is entitled to be paid.

Items 3 – 6: spiral staircase; overtime works; changes to first storey kitchen layout; additional brick walls

286 I have grouped the next four items together because the owner makes the same complaint in respect of each of them. This complaint is that they were variation works done without an architect's instruction. As a result, they are unauthorised variations for which the contractor has no contractual entitlement to be paid.

287 These items are the subject of these variation orders: [\[note: 238\]](#)

- (a) Variation Order No 6: spiral staircase;
- (b) Variation Order No 7: overtime works;
- (c) Variation Order No 8: changes to first storey kitchen layout; and
- (d) Variation Order No 9: additional brick walls.

288 The owner's argument centres on cl 12.(1) of the SIA Building Contract. That clause empowers the architect to direct or instruct the contractor to carry out a variation to the contract work:

"In conformity with Clause 1.(3) or 1.(4) of these Conditions the Architect shall have power at any time to give directions or instructions, as the case may be, requiring a variation to be made in the original Contract work. The Architect shall also have power at any time subsequently to sanction by way of direction a variation previously carried out by the Contractor without any authority, direction or instruction from the Architect. Such subsequent sanction shall not entitle the Contractor to additional payment or compensation or an extension of time, unless such variation was due to the negligence or omission or default on the part of the Architect or the Employer or was reasonably carried out in an emergency when it was not practicable to obtain the prior instructions of the Architect, but shall relieve the Contractor from liability to the Employer for departing from the contract requirements without authority, and may involve a reduction in the Contract Sum if any reduced value to the Employer or reduced cost to the Contractor, whichever is greater, is involved in the sanctioned variation."

289 Clause 12.(1) does not, however, deal directly with the contractor's right to be paid for variation work. That is covered by cll 1.(1) and 1.(2) of the contract. The critical distinction is between an architect's direction and an architect's instruction.

290 Clause 1.(2) explains that a "direction" is an order of the architect, "compliance with which will not under the terms of the Contract entitle the Contractor to additional payment or compensation or to an increase in the Contract Sum, but which may in some cases result under the terms of the Contract in a reduction of the Contract Sum". Conversely, an "instruction" means an order of the architect "compliance with which, while it may in some cases involve a reduction of the Contract Sum, will in principle entitle the Contractor in an appropriate case under the terms of the Contract to additional payment or compensation or to an increase in the Contract Sum". The Contract Sum in this case is an amount of \$1,129,700 (excluding GST). [\[note: 239\]](#)

291 Clause 1.(1) explains how directions and instructions are to be given:

All orders of the Architect shall be expressed to be either directions or instructions, and shall be given in writing if requested by the Contractor. Any direction or instruction given verbally shall be deemed to have been given in writing, and have retrospective effect from the date of the verbal direction or instruction, provided that the Contractor confirms the direction or instruction in writing within 14 days of its being given, and the Architect does not within 14 days of receipt of the written confirmation dissent from or withdraw the direction or instruction... In addition the Architect may (but shall not be obliged to) at any time subsequently confirm in writing any direction or instruction previously given verbally by him, in which event the confirmation shall have retrospective effect as a written direction or instruction given at the time of the verbal direction or instruction. Verbal directions or instructions of the Architect Clerk-of-Works [sic], or written or other orders or requests not expressed to be directions or instructions, need not be complied with by the Contractor if the Architect fails or refuses to confirm the same in writing in properly expressed terms with the minimum of delay when requested to do so, and no claim will be permitted under this contract based on an order or request of the Architect unless expressed as a written direction or instruction of confirmed in writing to or by the Architect under the terms of this Sub-Clause of the Conditions.

292 The following can be discerned from cl 12.(1) of the contract:

(a) The architect is empowered to give a direction or an instruction for a variation to the contract, in advance of work being done;

(b) If the contractor proceeds to carry out a variation without a direction or instruction, he will have done so "without any authority, direction or instruction" from the architect. The contractor is then liable to the owner "for departing from the contract requirements without authority" unless the variation was necessitated by the negligence or default of the architect or the owner or was done in an emergency; and

(c) A variation carried out by the contractor in situation (b) above may be subsequently sanctioned by an architect's direction. This direction will not entitle the contractor to additional payment or compensation or an extension of time, but it will relieve him from the liability to the owner described in (b) above.

293 It might then be said that there is no architect's instruction or direction in writing, but that it was orally given. Clause 1.(1) then enters the picture. Clause 1.(1) certainly contemplates that oral directions may be given, but it also pertinently provides that "no claim will be permitted under this

Contract based on an order or request of the Architect unless expressed as a written direction or instruction or confirmed in writing under the terms of this Sub-Clause of the Conditions.”

294 I now apply the above clauses to the facts of this case. The very fact that the Variation Orders are described as such is a clear indication that they are variations from the original contract. That being the case, the question is whether they were approved by the architect before they were carried out, or were subsequently sanctioned by the architect. It appears to me that these variations were carried out entirely without the architect’s approval.

295 The summary of variation works is set out in a document prepared by the quantity surveyor (“QS”) for the project. [\[note: 240\]](#) In this document, the QS sets out the various variations, and the value ascribed to each item by the contractor and by the owner. He has also indicated in a “remarks” column whether or not an “AI” or architect’s instruction was issued. His remarks for all these items, excepting the overtime works, are that no architect’s instruction was issued. [\[note: 241\]](#) The evidence before me is also that no architect’s instruction was issued in respect of the overtime works. [\[note: 242\]](#) The owner relies on the QS’s figures as being the correct value for each item. [\[note: 243\]](#)

296 The fact that the QS could find no architect’s instruction for these four items is not necessarily fatal to the contractor’s case. Clause 12.(1) of the contract provides that the architect is also empowered to sanction after the fact any variations carried out without authority. That said, there is no evidence before me that the architect gave any sanction for these variations after the fact. I further note that contractor in its reply submissions does not deny that the architect gave no instructions so far as Variation Orders No 8 and 9 are concerned, even after the owner raised this specific issue in its closing submissions. Further, insofar as the contractor might argue that there was in fact an oral direction or instruction given, cl 1.(1) is clear that a direction or instruction must be given in writing if the contractor wishes to pursue a claim on it.

297 In light of the above, I am satisfied that the architect did not instruct these variations or approve them retrospectively. The scenario I described above at [292(b)] therefore applies. The contractor – far from being contractually entitled to compensation – is in fact in breach of contract by having carried out these variations. It is therefore unnecessary for me to go further to consider the arguments mounted by each party on the individual items concerned.

Item 7: Teflon membrane

298 A substantial item in dispute is the omission of a Teflon membrane. This is the subject of Variation Order No 15. The contractor submits that the amount to be omitted should be \$11,496. The contractor relies on the Schedule of Rates (“SOR”) in the contract. [\[note: 244\]](#) The owner submits that the amount to be omitted should instead be \$46,000. The owner takes this figure from the Bill of Quantities (“BQ”), also to be found in the contract. [\[note: 245\]](#)

299 Clause 12.(4) of the SIA Building Contract deals with the valuation of variations. Clause 12.(4) provides that “[variations] shall be valued as closely as possible on the basis of the Contractor’s prices without regard to any alleged element of high or low profitability in those prices”. The clause then sets out certain rules for valuing variations. The applicable rule is found at clause 12.(4)(f). That rule provides that in the case of omitted work, “an allowance for the increased cost or reduced profitability (if any) of the remaining work may ... be made ... against the prices for the remaining work, but not for loss of profit on the omitted work itself.”

300 I accept the owner’s submission that the amount specified in the BQ is the correct value to use

here. The contractor sought to rely on the rule set out in cl 12.(4)(a) of the SIA Building Contract. [\[note: 246\]](#) That rule provides that “[work] ordered ... shall be valued at the same prices as those in the Schedule of Rates”. To my mind, that provision applies when *additional* works are ordered. This means that the general rule – that variations are to be valued as closely as possible on the basis of the contractor’s prices – points to values actually specified in the BQ. That is, after all, the part of the contract in which the contractor indicates the value it ascribes to those works. The specific rule dealing with omissions found in cl 12.(4)(f) does not disturb this conclusion. That rule merely entitles the contractor to claim an allowance on the remaining works where a part of it is omitted, thereby affecting any applicable economies of scale.

301 I am conscious that the evidence of the QS was that he would use the SOR rates even to value an omission. [\[note: 247\]](#) But he qualified that evidence by indicating that where there was a *wholesale* omission, then the BQ rates would be most accurate, because the BQ rates indicate the contractor’s pricing for that entire item. [\[note: 248\]](#) So this evidence does not assist the contractor.

302 The contractor accused the QS of cherry-picking between the SOR and the BQ to favour the owner. In respect of another omitted item, the QS valued the omission by using the rates in the SOR. [\[note: 249\]](#) In the case of that item, the value arrived at by referring to the SOR was higher than the value stated in the BQ. The QS’s approach valued the omission at a higher sum and was therefore to the owner’s benefit. I do not accept that the QS was cherry-picking his data. His evidence is that he adopted a different approach for this different item because the contractor offered to use the higher figure, as the difference between the two approaches was not large. [\[note: 250\]](#) I accept this evidence.

Item 8: Light fittings

303 The final item in dispute are certain light fittings which are the subject of Variation Order No 20. The contractor has produced a sales order as evidence of this work having been done. [\[note: 251\]](#) It claims a sum of \$1,383.18. The owner’s key contention is that the contractor is unable to substantiate that the work was indeed carried out. A sales order is not the same as receipt or an acknowledgement of payment by the supplier of the light fittings. [\[note: 252\]](#)

304 On balance I accept the owner’s arguments. A sales order does not prove that the fittings were actually ordered and *paid for*, let alone installed. I therefore reject this item.

Summary of findings on the contractor’s claim

305 In summary, I make no finding on the omission of the timber decking, I find in favour of the contractor for the additional rainwater down pipe, and I find in favour of the owner in respect of the remaining six items, for the reasons given above.

Conclusion

306 For the reasons given above, I hold largely in favour of the owner on both its counterclaim, and on its defence to the contractor’s claim.

307 I will hear the parties on costs.

[\[note: 1\]](#) 2.2.1 of Part 1 of the Conservation Guidelines, 12AB6156.

[\[note: 2\]](#) 2.1.1.1 of the Conservation Guidelines, 12AB6165 and 6167.

[\[note: 3\]](#) 3AB1277 – 1284.

[\[note: 4\]](#) 1AB563 – 566.

[\[note: 5\]](#) 1AB563.

[\[note: 6\]](#) Second Defendant's Reply Submissions at para 13.

[\[note: 7\]](#) Third Defendant's Closing Submissions at para 8; 6AB3022 – 3023.

[\[note: 8\]](#) 4AB1732 – 1817.

[\[note: 9\]](#) Exhibit C1.

[\[note: 10\]](#) 4AB1843 – 1848.

[\[note: 11\]](#) 4AB1854 – 1868.

[\[note: 12\]](#) Exhibit C3.

[\[note: 13\]](#) 4AB1923.

[\[note: 14\]](#) Exhibit 1PB1 and 1PB2.

[\[note: 15\]](#) Certified Transcript (29 March 2016) at page 24 (lines 27 – 29).

[\[note: 16\]](#) Certified Transcript (30 March 2016) at page 73 (lines 25 – 28).

[\[note: 17\]](#) Exhibit C2.

[\[note: 18\]](#) Certified Transcript (29 March 2016), p 53, lines 7 – 28; See also Guidelines for Submission of CAD Files to URA, Exhibit B2, SecondDefendant by Counterclaim, Bundle of Documents.

[\[note: 19\]](#) 3AB1326 at para 3 of the table.

[\[note: 20\]](#) 4AB1904 – 1905.

[\[note: 21\]](#) Certified Transcript (8 May 2017) at p 82 (lines 14 – 27).

[\[note: 22\]](#) Certified Transcript (3 May 2017) at p 116 (lines 5 -10); Second Defendant's Closing Submissions at para 17.

[\[note: 23\]](#) 6AB3050; Certified Transcript (31 March 2016) at p 108 (lines 19 – 22).

[\[note: 24\]](#) Certified Transcript (31 March 2016) at p 108 (lines 19 – 32); 109 (lines 1 – 5).

[\[note: 25\]](#) Certified Transcript (3 May 2017) at p 119 (lines 1 – 3) (Hector Chia); Certified Transcript (8 May 2017) at p 18 (lines 9 – 10).

[\[note: 26\]](#) Lee Yan Chang's AEIC at para 70.

[\[note: 27\]](#) Lee Yan Chang's AEIC at para 71.

[\[note: 28\]](#) Lee Yan Chang's AEIC at para 72.

[\[note: 29\]](#) 1AB125; 3AB1277 – 1284.

[\[note: 30\]](#) Plaintiff's Closing Submissions at para 201.

[\[note: 31\]](#) 7AB3707 – 3728.

[\[note: 32\]](#) 4AB2057 – 2064.

[\[note: 33\]](#) 4AB2160 – 2171; 4AB2203 – 2220.

[\[note: 34\]](#) 4AB2190 – 2197; 4AB2224 – 2229.

[\[note: 35\]](#) 10AB5377 – 5381.

[\[note: 36\]](#) 4AB2233 – 2251.

[\[note: 37\]](#) 4AB2260 – 2267.

[\[note: 38\]](#) 5AB2327 – 2353.

[\[note: 39\]](#) 5AB2369 – 2372.

[\[note: 40\]](#) Defendant's Closing Submissions at para 76.

[\[note: 41\]](#) Defendant's Closing Submissions at para 77.

[\[note: 42\]](#) 10AB5338.

[\[note: 43\]](#) HC/ORC 7105/2015, Order of Court dated 25 September 2014.

[\[note: 44\]](#) Defendant's Closing Submissions at para 95(a).

[\[note: 45\]](#) Defendant's Closing Submissions at para 95(b).

[\[note: 46\]](#) Defendant's Closing Submissions (21 July 2017) at para 129.

[\[note: 47\]](#) Second Defendant's Closing Submissions (21 July 2017) at paras 64 and 66.

[\[note: 48\]](#) Defendant's Closing Submissions (21 July 2017) at para 134.

[\[note: 49\]](#) Defendant's Closing Submissions at para 137.

[\[note: 50\]](#) Defendant's Closing Submissions at para 137.

[\[note: 51\]](#) Defendant's Closing Submissions at para 145.

[\[note: 52\]](#) Defendant's Closing Submissions at para 150.

[\[note: 53\]](#) Certified Transcript (13 November 2017) at p 131 (lines 17 – 32); 132 (lines 1 – 2).

[\[note: 54\]](#) Second Defendant's Closing Submissions (21 July 2017) at paras 78 – 83.

[\[note: 55\]](#) Second Defendant's Closing Submissions at para 80.

[\[note: 56\]](#) Second Defendant's Reply Submissions (19 September 2017) at para 3.

[\[note: 57\]](#) Certified Transcript (13 November 2017) at p 135 (lines 1 – 31); 136 (lines 1 – 18).

[\[note: 58\]](#) 1AB563 – 566.

[\[note: 59\]](#) Certified Transcript (3 May 2017) at p 112 (lines 31 – 32); 113 (lines 1 – 9).

[\[note: 60\]](#) Certified Transcript (3 May 2017) at p 113 (lines 2 – 4).

[\[note: 61\]](#) Certified Transcript (31 March 2016) at p 59 (lines 27 – 31); 61 (lines 7 – 10).

[\[note: 62\]](#) Certified Transcript (13 November 2017) at p 136 (lines 20 – 22).

[\[note: 63\]](#) Certified Transcript (13 November 2017) at p 159 (lines 1 – 17).

[\[note: 64\]](#) Certified Transcript (11 May 2017) at pp 31 (lines 5 – 11); 34 (lines 20 – 32); 35 (lines 1 – 5).

[\[note: 65\]](#) Certified Transcript (9 May 2017) at pp 84 (lines 8 – 29); 85 (lines 11 – 14).

[\[note: 66\]](#) URA Guidelines and Procedures, 6AB3050.

[\[note: 67\]](#) Second Defendant's Closing Submissions at paras 88 – 95.

[\[note: 68\]](#) Certified Transcript (3 May 2017), p 123 (lines 14 – 16).

[\[note: 69\]](#) Defendant's Closing Submissions at paras 153 – 161.

[\[note: 70\]](#) Second Defendant's Closing Submissions (21 July 2017) at para 85.

[\[note: 71\]](#) Defendant's Closing Submissions at paras 129 – 133.

[\[note: 72\]](#) Defendant's Closing Submissions (21 July 2017) at paras 140 – 143.

[\[note: 73\]](#) Defendant's Closing Submissions at para 141.

[\[note: 74\]](#) Defendant's Closing Submissions at para 140.

[\[note: 75\]](#) Third Defendant's Closing Submissions at para 88.

[\[note: 76\]](#) Third Defendant's Closing Submissions at para 119.

[\[note: 77\]](#) Certified Transcript (9 May 2017) at pp 83 (lines 14 – 29); 84 (lines 8 – 15); 86 (lines 6 – 9).

[\[note: 78\]](#) Certified Transcript (11 May 2017) at pp 28 (lines 17 – 30); 29 (lines 6 – 8).

[\[note: 79\]](#) 4AB1904 – 1905.

[\[note: 80\]](#) Third Defendant's Closing Submissions at para 141.

[\[note: 81\]](#) Third Defendant's Closing Submissions at para 143.

[\[note: 82\]](#) Third Defendant's Closing Submissions at para 144.

[\[note: 83\]](#) Certified Transcript (1 April 2016) at p 3 (lines 19 – 23).

[\[note: 84\]](#) 12AB6155.

[\[note: 85\]](#) 12AB6152.

[\[note: 86\]](#) Third Defendant's Closing Submissions at para 88.

[\[note: 87\]](#) Third Defendant's Closing Submissions at para 115.

[\[note: 88\]](#) Third Defendant's Closing Submissions at paras 93 – 101.

[\[note: 89\]](#) Third Defendant's Closing Submissions at para 111.

[\[note: 90\]](#) Third Defendant's Closing Submissions at para 119.

[\[note: 91\]](#) Third Defendant's Closing Submissions at paras 67 – 75.

[\[note: 92\]](#) Third Defendant's Closing Submissions at para 71.

[\[note: 93\]](#) Third Defendant's Closing Submissions at para 73.

[\[note: 94\]](#) Third Defendant's Closing Submissions at para 75.

[\[note: 95\]](#) Third Defendant's Closing Submissions at para 72.

[\[note: 96\]](#) Certified Transcript (13 November 2017) at p 164 (lines 1 – 31).

[\[note: 97\]](#) Certified Transcript (13 November 2017) at p 165 (lines 1 – 4).

[\[note: 98\]](#) Certified Transcript (13 November 2017) at p 165 (lines 31 – 32).

[\[note: 99\]](#) Certified Transcript (13 November 2017) at p 166 (lines 1 – 2).

[\[note: 100\]](#) 6AB3022 – 3023.

[\[note: 101\]](#) Third Defendant's Closing Submissions at para 168.

[\[note: 102\]](#) Defendant's Reply Submissions at para 158.

[\[note: 103\]](#) Third Defendant's Closing Submissions at para 10; Certified Transcript (13 November 2017) at p 195 (lines 2 – 15).

[\[note: 104\]](#) Certified Transcript (8 May 2017) at p 78 (lines 11 – 32).

[\[note: 105\]](#) Defendant's Closing Submissions at paras 160 and 162.

[\[note: 106\]](#) Plaintiff's Closing Submissions at paras 155 – 174.

[\[note: 107\]](#) Defendant's Closing Submissions at para 233.

[\[note: 108\]](#) Defendant's Closing Submissions at para 233.

[\[note: 109\]](#) Exhibit C1.

[\[note: 110\]](#) 1PB1 and 1PB2.

[\[note: 111\]](#) See Legend on Construction Drawings.

[\[note: 112\]](#) Certified Transcript (11 May 2017) at pp 49 (lines 1 – 32), 50 (lines 1 – 32), 51 (lines 1 – 32), 52 (lines 1 – 5) [Huay Kwok Meng]; Certified Transcript (9 May 2017) at p 100 (lines 15 – 17) [Dr Tan Teng Hooi].

[\[note: 113\]](#) Plaintiff's Closing Submissions at para 122.

[\[note: 114\]](#) Plaintiff's Reply & Defence to Counterclaim (Amendment No 4) at para 22.

[\[note: 115\]](#) 7AB3590.

[\[note: 116\]](#) 7AB3592.

[\[note: 117\]](#) Plaintiff's Closing Submissions at paras 124 – 134.

[\[note: 118\]](#) Defendant's Reply Submissions at para 76.

[\[note: 119\]](#) Certified Transcript (29 March 2016) at p 59 (lines 1 – 8).

[\[note: 120\]](#) 1AB538.

[\[note: 121\]](#) Plaintiff's Closing Submissions at para 128.

[\[note: 122\]](#) Plaintiff's Reply Submissions at para 19.

[\[note: 123\]](#) 1AB82.

[\[note: 124\]](#) Contractor's Reply & Defence to Counterclaim (Amendment No 4) at para 22.

[\[note: 125\]](#) Plaintiff's Further & Better Particulars ("F&BP") (15 March 2013).

[\[note: 126\]](#) Plaintiff's F&BP (15 March 2013) at para 2(i).

[\[note: 127\]](#) Plaintiff's F&BP (15 March 2013) at para 2(iii); (vi); (ix).

[\[note: 128\]](#) 6AB3066 – 3067.

[\[note: 129\]](#) 6AB3068.

[\[note: 130\]](#) Plaintiff's Closing Submissions at para 128.

[\[note: 131\]](#) 7AB3649.

[\[note: 132\]](#) 7AB3649.

[\[note: 133\]](#) Plaintiff's Closing Submissions at para 116.

[\[note: 134\]](#) 1AB538.

[\[note: 135\]](#) Defendant's Closing Submissions at para 271.

[\[note: 136\]](#) Certified Transcript (13 November 2017) at p 48 (lines 1 – 8).

[\[note: 137\]](#) Second Defendant's Closing Submissions at para 94.

[\[note: 138\]](#) Second Defendant's Closing Submissions at para 92.

[\[note: 139\]](#) Second Defendant's Closing Submissions at para 96; second Defendant's Reply Submissions at para 22.

[\[note: 140\]](#) Second Defendant's Reply Submissions, para 24.

[\[note: 141\]](#) Certified Transcript (13 November 2017) at p 48 (lines 1 – 8).

[\[note: 142\]](#) Third Defendant's Closing Submissions at para 296.

[\[note: 143\]](#) Third Defendant's Closing Submissions at para 296.

[\[note: 144\]](#) Third Defendant's Closing Submissions at para 299; 8AB4237 – 4239.

[\[note: 145\]](#) Exhibit C1.

[\[note: 146\]](#) 1PB1 and 1PB2.

[\[note: 147\]](#) Exhibit C3.

[\[note: 148\]](#) Plaintiff's Closing Submissions at para 96.

[\[note: 149\]](#) 7AB3590.

[\[note: 150\]](#) Plaintiff's Reply & Defence to Counterclaim (Amendment No 4) at para 22.

[\[note: 151\]](#) Certified Transcript (13 November 2017) at p 79 (lines 18 – 27); 82 (lines 8 – 12); 94 (lines 8 – 15).

[\[note: 152\]](#) Certified Transcript (29 March 2016) at p 25 (lines 8 – 12); 26 (lines 7 – 14).

[\[note: 153\]](#) Plaintiff's Closing Submissions at para 66.

[\[note: 154\]](#) Plaintiff's Closing Submissions at para 100.

[\[note: 155\]](#) Plaintiff's Closing Submissions at para 115.

[\[note: 156\]](#) Certified Transcript (13 November 2017) at pp 212 (lines 18 – 32); 213 (lines 1 – 9).

[\[note: 157\]](#) Certified Transcript (29 March 2016) at p 58 (lines 18 – 32); 59 (lines 1 – 8).

[\[note: 158\]](#) 1AB538.

[\[note: 159\]](#) 1AB93

[\[note: 160\]](#) 1AB79.

[\[note: 161\]](#) 1AB63.

[\[note: 162\]](#) 1AB55, 411 – 414.

[\[note: 163\]](#) 1AB411 – 414.

[\[note: 164\]](#) Certified Transcript (13 November 2017) at p 88 (line 32); 89 (line 1).

[\[note: 165\]](#) 1AB79.

[\[note: 166\]](#) Certified Transcript (9 May 2017) at p 98 (lines 13 – 28).

[\[note: 167\]](#) 1AB411 – 414.

[\[note: 168\]](#) See Exhibit C1 (bottom right corner).

[\[note: 169\]](#) Plaintiff's Closing Submissions at para 100.

[\[note: 170\]](#) Certified Transcript (29 March 2016) at p 77 (lines 22 – 32).

[\[note: 171\]](#) Plaintiff's Closing Submissions at para 66.

[\[note: 172\]](#) DBOD, p 138.

[\[note: 173\]](#) Certified Transcript (29 March 2016) at p 82 (lines 9 – 15).

[\[note: 174\]](#) Defendant's Closing Submissions at para 215.

[\[note: 175\]](#) Defendant's Closing Submissions at para 185(a).

[\[note: 176\]](#) Defendant's Closing Submissions at para 217.

[\[note: 177\]](#) 1AB538.

[\[note: 178\]](#) Hector Chia's AEIC at para 16.

[\[note: 179\]](#) Hector Chia's AEIC at para 80.

[\[note: 180\]](#) Third Defendant's Closing Submissions at paras 210 – 212.

[\[note: 181\]](#) Third Defendant's Closing Submissions at para 212.

[\[note: 182\]](#) Third Defendant's Closing Submissions at paras 232, 238 – 240.

[\[note: 183\]](#) 3AB1326 at para 3 of the table.

[\[note: 184\]](#) Defendant's Closing Submissions at paras 276 – 278.

[\[note: 185\]](#) Defendant's Closing Submissions at para 288(c).

[\[note: 186\]](#) Third Defendant's Reply Submissions at paras 77 – 78.

[\[note: 187\]](#) Plaintiff's Closing Submissions at para 141.

[\[note: 188\]](#) Plaintiff's Closing Submissions at para 142.

[\[note: 189\]](#) 1AB93.

[\[note: 190\]](#) 1AB79.

[\[note: 191\]](#) Certified Transcript (9 May 2017) at pp 89 (lines 8 – 32); 90 (lines 1 – 10).

[\[note: 192\]](#) Certified Transcript (29 March 2016) at p 108 (lines 13 – 17).

[\[note: 193\]](#) Defendant's Closing Submissions at para 288(a).

[\[note: 194\]](#) Defendant's Closing Submissions at para 288(d).

[\[note: 195\]](#) Second Defendant's Reply Submissions at para 27.

[\[note: 196\]](#) Defendant's Closing Submissions at para 288(b).

[\[note: 197\]](#) Defendant's Closing Submissions at para 288(d).

[\[note: 198\]](#) Third Defendant's Closing Submissions at para 323(i) and (ii).

[\[note: 199\]](#) Third Defendant's Closing Submissions at para 323(iii) and (iv).

[\[note: 200\]](#) Third Defendant's Closing Submissions at paras 323(iii) and 335.

[\[note: 201\]](#) See also third Defendant's Closing Submissions at para 338 and 345.

[\[note: 202\]](#) Certified Transcript (13 November 2017) at p 50 (lines 18 – 21).

[\[note: 203\]](#) Contractor's Reply & Defence to Counterclaim (Amendment No 4) at para 25.

[\[note: 204\]](#) Contractor's F&BP (15 March 2013) at Answer 4(i).

[\[note: 205\]](#) 11AB5595.

[\[note: 206\]](#) Plaintiff's Closing Submissions at para 149.

[\[note: 207\]](#) Plaintiff's Closing Submissions at para 150.

[\[note: 208\]](#) Plaintiff's Closing Submissions at para 149.

[\[note: 209\]](#) Plaintiff's Closing Submissions at para 152.

[\[note: 210\]](#) Defendant's Closing Submissions at para 306.

[\[note: 211\]](#) Defendant's Closing Submissions at para 298.

[\[note: 212\]](#) Defendant's Closing Submissions at para 301.

[\[note: 213\]](#) Defendant's Closing Submissions at paras 378 – 379.

[\[note: 214\]](#) Defendant's Closing Submissions at paras 378 – 379.

[\[note: 215\]](#) Certified Transcript (13 November 2017) at p 59 (lines 22 – 30); 60 (lines 1 – 32); 61 (lines 9 – 19).

[\[note: 216\]](#) Certified Transcript (13 November 2017) at p 118 (lines 24- 25); 119 (lines 19 – 31).

[\[note: 217\]](#) Certified Transcript (13 November 2017) at p 119 (lines 19 – 31); 121 (lines 3 – 6).

[\[note: 218\]](#) Certified Transcript (13 November 2017) at p 206 (lines 28 – 30).

[\[note: 219\]](#) Certified Transcript (13 November 2017) at p 160 (lines 8 – 14).

[\[note: 220\]](#) Certified Transcript (13 November 2017) at p 119 (lines 23 – 31); 121 (lines 3 – 6).

[\[note: 221\]](#) 3AB1322 at para 5; Certified Transcript (1 April 2016) at p 7 (lines 1 – 5).

[\[note: 222\]](#) 4AB2252 and 4AB2256 (item 5 of the table).

[\[note: 223\]](#) URA's Written Direction of 12 December 2012 at 4AB2252 – 2259.

[\[note: 224\]](#) Third Defendant's Closing Submissions at para 340.

[\[note: 225\]](#) Certified Transcript (5 May 2017) at p 2 (lines 8 – 32); 3 (lines 1 – 6, 18 – 27).

[\[note: 226\]](#) Third Defendant's Closing Submissions at paras 338 and 345.

[\[note: 227\]](#) Certified Transcript (13 November 2017) at p 104 (lines 16 – 30).

[\[note: 228\]](#) Certified Transcript (8 May 2017) at p 40 (lines 23 – 32).

[\[note: 229\]](#) Statement of Claim (Amendment No 2) at para 11.1.

[\[note: 230\]](#) Statement of Claim (Amendment No 2) at para 11.1A.

[\[note: 231\]](#) Plaintiff's Closing Submissions at para 5.

[\[note: 232\]](#) JUD325/2013 at para 2.

[\[note: 233\]](#) Defendant's Closing Submissions at para 335.

[\[note: 234\]](#) Plaintiff's Closing Submissions at paras 9(b) and 15(f).

[\[note: 235\]](#) Certified Transcript (29 March 2016) at p 18 (lines 15 – 18).

[\[note: 236\]](#) Plaintiff's Closing Submissions at para 26; 2PB21.

[\[note: 237\]](#) 2AB938.

[\[note: 238\]](#) Plaintiff's Closing Submissions at paras 20 and 28.

[\[note: 239\]](#) 3AB1278.

[\[note: 240\]](#) 3AB1293.

[\[note: 241\]](#) See items 9 – 12 on 3AB1293.

[\[note: 242\]](#) Supplementary AEIC of Teo Jessica @ Zhang Jia Rong at para 16.

[\[note: 243\]](#) Defendant's Closing Submissions at para 339.

[\[note: 244\]](#) Plaintiff's Closing Submissions at para 33.

[\[note: 245\]](#) 2AB938; Defendant's Closing Submissions at para 370.

[\[note: 246\]](#) Plaintiff's Closing Submissions at para 36.

[\[note: 247\]](#) Certified Transcript (5 April 2016) at p 32 (lines 17 – 19).

[\[note: 248\]](#) Certified Transcript (5 April 2016) at p 33 (lines 5 -25).

[\[note: 249\]](#) Plaintiff's Closing Submissions at para 37.

[\[note: 250\]](#) Certified Transcript (5 April 2016) at p 34 (lines 7 – 32).

[\[note: 251\]](#) Plaintiff's Closing Submissions at para 40.

[\[note: 252\]](#) Defendant's Closing Submissions at para 374.

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