

**VICTORIAN CIVIL AND ADMINISTRATIVE TRIBUNAL
CIVIL DIVISION**

BUILDING AND PROPERTY LIST

VCAT REFERENCE NO. BP54/2015

CATCHWORDS

Building and Property List – claims for variation, extension of time, defects, damages for delay and damages for wrongly cashing security – contract AS 2124-1992 – validity of superintendents’ certificates – whether superintendent has acted fairly and reasonably within the contract – ability to review superintendents’ determinations – reserve powers of superintendent in relation to extension of time – inconsistent clauses in contract.

APPLICANT	Mackie Pty Ltd (ACN 097 603 846)
RESPONDENT	Republic of Turkey
JOINED PARTY	Tectura Pty Ltd (ACN: 053 962 413)
WHERE HELD	Melbourne
BEFORE	Senior Member Robert Davis
HEARING TYPE	Hearing
DATES OF HEARING	5, 8, 9, 12, 13, 14, 15, 16, 19, 20, 21, 22 & 23 September 2016 and 4, 5, 7, 10, 11, 13, 14, 17, 18, 19, 20 & 21 October 2016, 15, 16 & 17 May 2017 and 13, 14 & 15 June 2017
DATE OF ORDER	25 August 2017
CITATION	Mackie Pty Ltd v Republic of Turkey (Building and Property) [2017] VCAT 129

ORDERS

- 1 The respondent pay the applicant the sum of \$693,824.58.
- 2 The joined party pay the respondent the sum of \$119,664.65.
- 3 As to the sum of \$123,641.00 held as security by the respondent the parties have leave to make submissions.
- 4 The respondent’s counter claim is dismissed.
- 5 Reserve costs.

Robert Davis
Senior Member

APPEARANCES:

For Applicant

Mr J.A.F. Twigg QC

For Respondent

Mr R. Andrew of Counsel with Mr N.J.
Phillpott of Counsel

For Joined Party

Mr J. M. Forrest of Counsel

REASONS

Dispute before VCAT

- 1 The dispute arises as a result of the Consul-General of Turkey wishing to have a new residence in the Melbourne suburb of Toorak. The applicant was engaged, on 18 December 2009, to demolish the previous residence of the Consul-General of Turkey and build him a new residence on the property known as and situated in Toorak Road, Toorak, Victoria ('the **Property**'). The joined party was the architect/superintendent in relation to the demolition of the old building and the erection of the new building.
- 2 Unfortunately, during the course and at the conclusion of construction, disputes arose between the builder and the respondent ('the **Owner**') and the builder and the architect/superintendent ('**Tectura**'). Those disputes have resulted in proceedings in both the Supreme and County Courts prior to coming to this Tribunal relating to the owner taking the security put up by the builder. As a result of those disputes, in particular in the County Court, the sum of \$264,000 is now held by the owner pending the outcome of the dispute in this Tribunal. That sum forms part of the applicant's claim against the owner.
- 3 Pursuant to the contract between the builder and the owner, alternatively, pursuant to s.38(6) of the *Domestic Buildings Contracts Act 1995* ('the **Act**'), those sums in dispute include, \$360,445.72 in respect of variations, \$232,331 in respect of delay or disruption costs and defects which the owner has had rectified and is claiming to be entitled to the cost of rectification of \$126,000. Of that sum the owner is holding \$108,750 by security as the balance is claimed by way of counter-claim.
- 4 The builder is further seeking specific performance requiring the owner to release the said sum of \$264,000 in respect of a substituted security.
- 5 The builder is also seeking declarations that:
 - (a) Tectura's directions as superintendent were not valid directions for the purpose of clause 37 of the general conditions of the contract;
 - (b) The owner's notice was not a valid notice for the purpose of clause 5.5(b) of the general conditions of the contract as amended;
 - (c) The owner is not entitled to have recourse to the substituted security;
 - (d) The time for practical completion be extended by 68 days pursuant to clause 35.5 of the general conditions (as amended); and
 - (e) Tectura's notice as superintendent, dated 23 April 2012, was not a valid certification of the amount of liquidated damages the owner was entitled to for late completion pursuant to clause 35.5(b).
- 6 On 23 April 2012, Tectura gave notice to the builder that, in its opinion, the work ought reasonably to have been brought to practical completion on 6 February 2012 and certified the sum of \$365,500 as the amount of

liquidated damages payable by the builder to the owner pursuant to clause 35.6 of the general conditions of the contract.

- 7 The builder seeks a declaration that any debt owed by it to the owner pursuant to clause 37 of the general conditions of the contract is limited to the cost of rectification for those items acknowledged as outstanding and the builder's responsibility in the schedule annexed to the points of claim.
- 8 It is noted, that the specific clauses in the contract referred to above will be dealt with in more detail below.
- 9 The owner's position is that it denies that the builder is entitled to any relief and claims by way of counter-claim damages and an adjustment of the date of practical completion by 32 days in favour of the owner.
- 10 Further the respondent, with leave, has joined Tectura as a party to the proceedings and seeks against it that it pay the owner compensation for any damages awarded against the owner including the costs of defending the claim herein. No indemnity or compensation is sought by the owner against the architect/superintendent with respect to defects.
- 11 Tectura denies any liability.

Background

- 12 The owner's Consul-General in Melbourne, resided at the property for many years. In or around 2008/2009 he, with the permission of his Government, decided to build a new residence for the Consul-General in Melbourne and in furtherance of that decision, engaged Tectura as architect/superintendent. It is noted that Tectura had previously done a number of jobs for the Government of Turkey, in Australia, as had the builder. Both had a previous relationship with the Government of Turkey.
- 13 In or about November 2009, through Tectura, the owner put out to tender for the demolition and construction of the building.
- 14 On 26 November 2009, the applicant put in a tender for the sum of \$4,350,000 plus GST.
- 15 Along with the builder's tender, a letter was delivered excluding four items of work in the documentation delivered by Tectura: those items were:
 - (a) Curtains to windows;
 - (b) Authority contribution fees;
 - (c) Relocation of overhead power lines to enable crane access to site; and
 - (d) Replacement of relocated trees if the relocation is not successful and the trees die.
- 16 Later the same day, after apparent complaint by Tectura and/or the owner, a letter was received from the builder which made it clear that the builder's tender 'included all work indicated within the documentation'.

- 17 The tender included all matters in the contract, specifications, drawings and other documents supplied by Tectura to the builder, including the tender document itself. More specifically the contract comprised:
- (a) The formal instrument of agreement;
 - (b) Tender made 26 November 2009;
 - (c) General conditions AS2124 (as amended);
 - (d) Annexure parts A and B;
 - (e) Special occasions; and
 - (f) Contract drawings, including architectural, structural, hydrolic etc.
- 18 As I have previously stated, the contract was signed by the parties on 18 December 2009, for a fixed price lump sum of \$4.35 million + GST. Subsequent to signing the contract there were a number of variations, a number of which referred to below are in dispute. The date of practical completion was 1 March 2011. In fact, the practical completion for the work was certified on 8 February 2012: approximately 256 days after the date of practical completion was originally due.
- 19 The parties disagree as to who caused the delay in practical completion. Tectura, and the owner, claim the builder. However, the builder says that there were events beyond its control, and which entitled it to an extension of time to the date of practical completion. Tectura, as superintendent, did not assess the extension of time claim to which the builder claims it was entitled, alternatively, it did not do so in accordance with the requirements of the contract.

Issues for Determination

- 20 The primary issues that I am required to determine in this proceeding concern:
- (a) The ascertainment of the price for the varied works, and a determination as to whether the superintendent, in the ascertainment of that price, acted fairly and reasonably;
 - (b) Where a variation is denied, a determination whether the scope of works was varied and the ascertainment of the price that the superintendent failed to undertake;
 - (c) Whether the works were delayed by an event that entitled the builder to an extension of time;
 - (d) The extent to which the builder was delayed in reaching practical completion and whether the delay was to be compensated by an extension of time to the date for practical completion. Also whether the architect/superintendent acted fairly and reasonably in determining these issues;

- (e) The entitlement of the builder to be reimbursed liquidated damages deducted from its contract sum; and, the payment of delay costs of damages; and
 - (f) The extent to which the works were defective (if at all) and the fair and reasonable cost to repair works.
- 21 The principal features of the contract that relate to the dispute between the parties include:
- (a) The tender Breakdown (TB1123 – 1124)
 - (b) The specifications and schedule (TB1319 – 1320.300)
 - (c) Annexure Part A (TB1263)
 - (d) General Conditions (TB1223 – 1262)
 - (e) The Amendments of the General Conditions (TB1301 – 1316)
 - (f) The Drawings
- 22 It is noted, that the contract contains a “cost saving provision” which is important in respect of particular items of work that are in dispute.
- 23 At the time that the contract was signed, the chief architect of the Republic of Turkey insisted upon a handwritten notation that variations are not to exceed 10% of the contract sum. This term seems to be in conflict with other terms of the contract which provide that Tectura can give directions for variations and that the builder is obliged to comply with those variations.

Contractual and Statutory Matters Concerning Variations

- 24 Both the contract and s.38 of the Act set out a scheme whereby variations can occur.

Evidence during the Hearing

- 25 The evidence during many days of hearing was notable, for:
- (a) Extremely lengthy and repetitive cross-examination by Counsel for Tectura and on occasions by Counsel for the building owner. It is noted Mr Twigg QC conducted a lengthy cross-examination of Tectura’s principal but it did not fall into the same category as described above; and
 - (b) The failure to call witnesses who had provided witness statements and who may have been helpful to the proceeding by the builder and the building owner.
- 26 The witnesses who gave evidence on behalf of the builder were a Mr Beattie, who was an estimator for the builder; Mr Ralph Mackie, who is the managing director of the builder; a Mr G. Cross, who was an expert called in regard to defects; and a Mr Watson, who was an expert in relation to extension of time claims.

- 27 The owner, shut its case without adducing any evidence-in-chief, even though it had filed expert witnesses' statements. Tectura called its principal, Mr Baycan; Mr Spencer, an engineer who worked for the structural engineering company that were engaged in relation to the construction of the building; Mr Joveski, who was the managing director of Global Enterprises, trading as Reckli Formliners and Moulds; and Mr Gebbie, who at the relevant time was an employee of Tectura.

Evidence of Mr Mackie

- 28 Mr Mackie was cross-examined by both Mr Andrew, for the owner, and Mr Forrest, for Tectura. Mr Forrest cross-examined Mr Mackie on the 13, 14 and 15 September 2016. Mr Mackie, who is an elderly gentleman with some medical problems of which he complained, at times, had difficulty remembering specific events or conversations, that occurred between 2009 and 2012. In all the circumstances, I did not find this surprising. However, I gained the impression, that under very difficult circumstances, Mr Mackie was doing his best to give an accurate account of the matters that he was asked. There were times, where his answers varied from the questions that were actually asked but I did not interpret that as deliberate prevarication. It was part of his process in trying to recall events. Which was difficult for him considering he spent 4 days in total in the witness box. Bearing these matters in mind, I must assess the witness in relation to the answers he gave relating to each item in dispute.

Evidence of Mr Baycan

- 29 Mr Baycan was subject to long cross-examination by Mr Twigg QC, Counsel for the builder, on 13, 14, 17, 18 and 20 October 2016. On numerous occasions, would give answers that did not relate to the questions put but were what he felt was in his best interest. Mr Twigg QC at paragraphs [44 – 46 inclusive] of his written submissions stated:

Tectura's vanguard, Mr Baycan, was less than impressive as a witness. He was unwilling to make the most basic and obvious concessions, he was argumentative, evasive, obstructive and from time to time lacked candour...

Mr Baycan kept no records that the VCAT could scrutinize to understand his decision-making process as Superintendent's representative under the Contract.

Mr Baycan assumed that his decisions were final and he took offence to the suggestion that his decision may be exposed to rational objective criticism...

- 30 Mr Forrest made lengthy submissions to the effect that I should not make adverse findings in relation to Mr Baycan's evidence, particularly in relation to his honesty. The basis of Mr Forrest's submissions was that Mr Twigg QC vigorously cross-examined Mr Baycan and made allegations of dishonesty against him. Mr Forrest said as a result the atmosphere became 'poisoned' and as such a proper decision as to Mr Baycan's credibility

could not be made as the atmosphere was ‘poisoned’. The builder alleged in its Further Amended Claim that:

The Superintendent acting honestly, impartially and fairly, ought reasonably have extended the date for Practical Completion.

Mr Forrest stated that the word “honestly” referred to in the quotation above, was an allegation of dishonesty against the architect/superintendent.

- 31 While Mr Twigg’s cross-examination of Mr Baycan may have been lengthy and vigorous, I do not believe it ‘poisoned’ the atmosphere. Any irrelevancies I put out of my mind. Further, the word “honestly” referred to in the last paragraph was no more than a quotation from Clause 23(a) of the contract. In the applicant’s submissions, Mr Twigg made clear he was not attacking the honesty of Tectura. Thus I do not accept Mr Forrest’s submission that I am not in a position to properly assess the evidence of Mr Baycan. As with Mr Mackie, it is proper for me to assess Mr Baycan on the answers he gave in relation to each item in dispute.

Evidence of Mr Gebbie

- 32 The oral evidence of Mr Gebbie was, by and large, elicited through lengthy and “friendly” cross-examination over a period of two days by Counsel for the owner. He gave what appeared to be rehearsed answers, in defence of his own decisions. Put a different way, his evidence was self-serving. It was difficult to follow his *ad hoc* note-taking system in the sense that during site meetings, he would make notes in the margin of the Minutes of previous site meetings. On the whole, I found Mr Gebbie to be an unimpressive witness, because a lot of the answers he gave, were matters that were put to him by a friendly cross-examiner, namely Counsel for the owner. He was not really tested.
- 33 While Mr Twigg QC had a chance to test Mr Gebbie’s answers, Mr Twigg’s cross-examination was relatively short. However, in that short cross-examination it became apparent that matters which Mr Gebbie had previously relied on may not be factually correct. For example, Mr Gebbie, when assessing the builder’s claim for a variation, had relied on the fact that in relation to the purchase and supply of tiles from DeFazio Commercial Tiling Pty Ltd included screeds, waterproof membrane and floor protection, whereas the previous quotation from Attila Natural Stones and Tiles did not include such items. When pressed, Mr Gebbie was unable to say how he formed this opinion and there did not appear to be any basis for Mr Gebbie’s opinion. In spite of that fact, Mr Gebbie, while begrudgingly making some concessions, would not concede that the items of screed, waterproofing and membrane were not included in the DeFazio quotation, in spite of evidence which I will refer to below, making it clear that third parties were paid by the builder for these items.
- 34 It was a shame that Mr Gebbie’s evidence was not more thoroughly tested in cross-examination from the builder’s Counsel. However, given the circumstances I will treat Mr Gebbie’s evidence on its own merits.

Failure to call Witnesses

- 35 There has been criticism of both the builder and the owner in relation to failure to call witnesses. The owner did not call any witnesses whatsoever as I have previously stated. It shut its case immediately after the opening from its Counsel. The builder, has been criticised for not calling witnesses, which the respondent and to some extent the joined party say I should draw an inference from as a result thereof.
- 36 The witnesses who there has been criticism of not calling are Terry Cross, project manager through 2010; Mr Sale, project manager following Mr Cross from December 2010 until August 2011; Dang Luong, project manager from August 2011 to 6 February 2012; Andrew Frank, site manager from January 2010 until the completion of the project on 6 February 2012; Harry Maherras, the builder's demolition sub-contractor; Jeff McGuinness, the building sub-contractor; Chris Fota, the builder's pre-cast concrete panel contractor; Karl Seitens, who prepared calculations of the builder's delay damages and was also involved in the management during the rectification during the defects liability period; and John Balthazar, the pre-cast concrete panel mould sub-contractor.
- 37 Mr Beattie gave evidence that Terry Cross was not called because he was in ill-health and had serious heart problems being just recovering from an operation.
- 38 It is said by Mr Andrew and Mr Phillipott, for the owner, that Mr Sale had direct knowledge of the builder's delay claims, variations and issues on site from December 2010 until August 2011 including critical issues concerning alleged design issues and pre-cast panels. It is also noted that the builder filed a statement from Mr Sale.
- 39 It is alleged that Mr Frank, had direct knowledge of the on-site delays, variations and on-site issues during the project.
- 40 Insofar as Mr Maherras was concerned, the allegation is that he had knowledge of the demolition delay claims. While that may be so, this was a case that was mostly dealt with on the documents.
- 41 The builder was also criticised by Mr Forrest, Counsel for Tectura, for not calling expert architectural evidence who would have been able to give evidence on the reasonableness or otherwise of the actions of Tectura. However, in my view, not a dissimilar criticism can be made in relation to the Tectura's own evidence which relied heavily on the evidence of Mr Baycan and Mr Gebbie. At paragraph [39] of Mr Forrest's written submissions he states:

The expert opinion referred to in (a) (competence and skill that is usual among architects...at the exercise of due care and skill), is critical as it would establish an appropriate yardstick or measure against which an architect's conduct can be measured. Without the evidence of the conduct of a reasonable and competent architect being established in the Tribunal, the yardstick or measure critical to the

cause of action and against which actual conduct the architect is compared is not available.

- 42 As a result, Mr Forrest referring to *New South Wales v Karen Therese Stevens* (2003) NSWCA 298 at [39] submitted that, in the absence of expert evidence, I should be reluctant to draw any conclusions of persons engaged in specialised activities.
- 43 While this may to some extent be correct, it does not mean that the architect/superintendent's conduct cannot be looked at with a critical eye to determine whether such conduct was fair, reasonable or otherwise and within the bounds of the contractual principles governing the case and the common law.
- 44 Insofar as the owner was concerned, an expert witness statement was filed from a Mr Andrews in relation entitlement or otherwise for the builder to claim extension of time. There was no explanation for Mr Andrews not being called to give evidence. This was in spite of the fact that Mr Watson, the builder's expert, was cross-examined for many days. In particular, by the Counsel for the Tectura. In my view, these issues should be considered on a point-by-point issue as I decide the issues in this case.
- 45 Both the owner and Tectura have spent considerable time both through the evidence and in submissions, in relation to the importance or otherwise of the different schedules of work produced by the builder pursuant to the contract. Again, these matters should be considered on an issue-by-issue basis. In particular, the importance of whether I should accept Revision B or Revision D of the Schedule of Works relating to the builder's claim for an extension of time as a result of alleged delays in abolishing the gas line prior to the demolition of the residence on site.

PRINCIPLES OF REVIEWING SUPERINTENDENT'S DETERMINATIONS

- 46 Both in relation to variations and extensions of time that are claimed by the builder, the question arose during the proceeding, as to whether the determination by the superintendent was reviewable by the Tribunal. This question involved matters concerning Clause 23 of the Contract, the superintendent's powers, and the requirement for it to act, 'honestly, fairly and arrive at a reasonable measure or value of work, quantities or time.' Clause 35 and Clauses 40.1, 40.3, and 40.5 to do with variations to work, pricing of the variations and the valuation of those variations. Mr Andrew and Mr Phillpott made submissions, which were adopted by Mr Forrest, that I was not permitted to look behind the determinations made by the superintendent.
- 47 At page [2389] of the Transcript, Mr Andrew and Mr Phillpott, when making the submissions for the owner, stated:
- ...Unless there is fraud or dishonesty which is well known and long-standing ground for review or setting aside certificates, that has now been abandoned, it is just not open to the Tribunal to conduct what is

now being called a ‘merits review standing in the shoes of the Superintendent’.

- 48 In support of this proposition, reliance was placed on the decision of the Court of Appeal of the Supreme Court of Victoria, Maxwell P, Ashley and Redlich JJA in *Dura (Australia) Construction Pty Ltd v Hue Boutique Living Pty Ltd* (2013) 41 VR 636. The facts of the *Dura* case are relevantly set out in the Headnote at 636 as follows:

A builder and an owner entered into a standard form contract in December 2004 in relation to certain building works. Disputes arose between the parties over alleged defects in the works, and in September 2006 the owner exercised its rights under the agreement by taking the whole of the remaining work out of the hands of the builder. The owner engaged another builder to complete the works (including rectifications) and to undertake additional works not part of the original scope of works. Clause 44.6 of the agreement relevantly provided as follows:

When work taken out of the hands of the Contractor under Clause 44.4(a) is completed the Superintendent shall ascertain the cost incurred by the Principal in completing the work and shall issue a certificate to the Principal and the Contractor certifying:

- (a) the amount of that cost and setting out the calculations employed to arrive at that cost;
- (b) the amount which would otherwise have been paid to the Contractor if the work had been completed by the Contractor;
- (c) the difference between (a) and (b).

...

The superintendent relied on the work of a quantity surveyor in certifying that the relevant difference was \$4,457.308, payable by the builder to the owner. Dixon J dismissed the builder’s claims, which were based on alleged breaches of the agreement, and gave judgment for the owner on its counterclaim for the amount certified by the superintendent, plus interest. The builder appealed against the judgment on the counterclaim on grounds that the superintendent’s processes had not complied with the requirements of cl 44.6 of the agreement. The builder’s contention was that for the superintendent to “ascertain” the cost to complete the works required the costs incurred to be known with precision, and did not permit an estimate to be arrived at using experience, judgment or discretionary decision-making...

- 49 It is apparent, that *Dura*’s case concerned the value of a whole contract whereas the present case concerns a situation where a number of different claims have been assessed and valued but no final certificate has been

issued. It is of some importance to this issue that the superintendent never, at any stage, issued a final certificate.

50 His Honour Maxwell P at paragraph [26] and [27] noted that the word “ascertain” is used in both Clause 44.6 and 40.5 of the Contract. (Similar provisions are used in this Contract). He therefore, looks at the use of the word “ascertain” in Clause 40.5 to ascertain its meaning in Clause 44.6. At [28] and [29], the President states:

[28] It is clear from the language of this clause that the parties intended by their use of the word “ascertain” to authorise a process of computation which would, where necessary, involve judgment, estimation and approximation. The determination of what might be “reasonable” is, quintessentially, an exercise involving judgment and experience. Moreover, the language of this clause is entirely consistent with the notion of “a reasonable measure or value”, which the parties used in cl 23(a) (above) to define how the Superintendent should carry out functions of this kind.

[29] It is to be presumed that the parties intended the word “ascertain” to have the same meaning in cl 44.6. There is nothing in the language or context of cl 44.6 to suggest otherwise. It follows that they intended to authorise the Superintendent, when carrying out the task of “ascertainment” under cl 44.6, to exercise judgment where necessary. What the Superintendent did (in reliance on the work of Mr Clack) was therefore within the scope of the “ascertainment” function conferred on him by cl 44.6. The parties are therefore bound by the Superintendent’s certificate. That conclusion is sufficient to dispose of this ground of appeal.

51 Mr Andrew and Mr Phillpott submitted, that although *Dura*’s case was dealing with cl 44.6, it was abundantly clear and cannot be argued to the contrary that the President was considering Clause 40.5 in the quotation above.

52 It is noted, that both the owner and Tectura also submitted that it was not feasible and it is not fair to expect the Tribunal to “step into the shoes” of the superintendent because the Tribunal did not have all the facts.

53 In answer to the submission of the owner and Tectura, Mr Twigg QC at [13] of his reply submissions stated:

[13] The respondents have adopted an uncritical and mindless application of *Dura* to apply the Court of Appeal’s reasoning in relation to 44.6 of Capital AS 2124-1992 more broadly to all decisions of Tectura concerning claims for extension of time (Clause 35.5) or variations (Clause 40.5) and the disputes concerning the merits of such claims and assessments dealt with by such decisions of the Superintendent are not justiciable by the VCAT.

- 54 In determining the validity of a determination by the Superintendent, it is important to look at the validity of that determination pursuant to the Contract. Put differently, whether the Superintendent at arriving at its decision acted “reasonably and fairly” and arrived within the times prescribed under the Contract (or where no time is prescribed within a reasonable time) and arrived at a reasonable measure of the value of work, quantities or time, pursuant to Clause 23 of the Contract.
- 55 I have mentioned previously, that the certificates issued by the Superintendent in the present case, were only interim certificates. There is authority that interim certificates issued pursuant to the relevant contract which I am dealing with in this situation have not been regarded by the Courts or VCAT as having finally resolved the merits of the matter with which those certificates have dealt and the merits of the matter with which the interim certificates have dealt with are justiciable as long as the proceeding is one which properly seeks to establish the final element under the contract in respect of matters dealt with by the interim certificate. There is no final certificate. That is, the interim certificates provide a provisional outcome only. See *LU Simon Builders Pty Ltd v HD Fowles* [1992] 2 VR 189, *J M Kelly (Project Builders) Pty Ltd v Toga Development No.31 Pty Ltd* (No.2) [2008] QSC 312 [15]. It is noted, that a final certificate is dealt with under a different clause of the Contract altogether being Clause 42. In particular, the final certificate provision of Clause 42.8 of the Contract formed an exception to the payment on account proposition.
- 56 Mr Twigg QC referred me to the decision of the Court of Appeal of Western Australia in *WMC Resources Ltd v Leighton Contractors Pty Ltd* [1999] 20 WAR 489. In that particular case, Ipp J, who delivered the decision with which other members of the Court agreed, drew a distinction between a valuation made by mechanical means and one made where a discretion was involved. However, before dealing with those matters, His Honour made it clear that the Court would only interfere if the valuation did not comply with the terms of the Contract. In dealing with the situation of a mechanical exercise in valuation at [18], Ipp J stated:
- [18] Ordinarily, in cases of this kind, where a certified valuation is to be made by reference to fixed, objective criteria (such that there is no discretionary element in the valuation) there will only be one uniquely correct value. If the certifying valuer, in these circumstances, arrives at the incorrect value, the valuation will be in breach of the contract. It is for that reason that an incorrect certificate will also be set aside. The court will then have the jurisdiction to hear the merits of the claim, the clause that gives the arbitrator jurisdiction to hear the merits of the claim, the arbitrator will have the same powers as the court...
- 57 In situations where the valuer is to use a discretionary judgment, that is where there is no fixed or readily available standard criteria, the position is somewhat different. In relation to the discretionary valuation, at [35] – [37], Ipp J stated:

[35] I think it would be helpful at this stage to summarise the principles applicable to the review of discretionary valuations by a third party. I shall then refer to the authorities from which they are derived.

[36] First, by the contract, the parties agree to be bound by a valuation made in terms thereof. Therefore, if the valuation complies with the contract, they are bound thereby. Because of the discretionary nature of the valuation, the contract will not require the valuation to be “correct”. There will indeed be no uniquely correct valuation. The valuation will merely have to be within the terms of the contract.

[37] Secondly, a court will not set aside a valuer’s determination merely on the ground that it is “incorrect” or that it reveals errors. The determination will only be interfered with if it is not made in terms of the contract; a mere mistake in the valuation will ordinarily not be a departure from the terms of the contract.

58 His Honour then referred to a number of Authorities in support of the above proposition, including *Legal and General Life of Australia Ltd v A Hudson Pty Ltd* (1985) 1 NSWLR 314 at [335] – [336] where it was stated:

The question is not whether there is an error in the discretionary judgment of the valuer. It is whether the valuation complies with the terms of the contract.

59 If I refer back to the case of *Dura* for a moment, it is clear that in that case it was never challenged that it did not comply with the terms of the contract. That is a clear distinction from the present situation.

60 At [52] of the *WMC* case, Ipp J makes it clear that a discretionary valuation, where the valuer has acted in breach of the contract being a breach of not acting pursuant to its “*obligations to act honestly, bona fide and reasonably*” [52] it is a discretion that can be reviewed by an arbitrator or a Court.

61 *McDougall J in Walton v Illawarra* [2011] NSWSC 1188 made it clear that the starting point in any analysis of the rights of the parties to review the determination of the superintendent is the language used by the parties in the contract. While the superintendent is not a party to the contract, nonetheless it should be expected by the parties that the superintendent would carry out its obligations, that is, to act honestly and fairly and when required to do so arrive at a reasonable measure or value of work, quantities and time. See [39] – [40].

62 It was also made clear by His Honour at [41] - [42], that reasonable extension of time provisions in cl 35.5 are to be read together with cl 23.

63 Specifically at [42] McDougall J stated:

...The contract requires in relation to an extension of time, both that the superintendent’s manner of exercise of the functions must be honest and fair and that the product of her deliberations must be reasonable. It follows that even if the superintendent had acted

honestly and reasonably, Walton could not be bound by her determination if the determination did not meet the description “reasonable extension of time”. That is because, by definition, it would not have got what it was entitled to received.

64 His Honour then made it clear at [43] that he believed the same analysis applied to variations and the superintendent is required to arrive at a reasonable outcome.

65 His Honour then discussed the task of the Court, in deciding whether the superintendent had arrived at a reasonable outcome. At paragraph [55FF] His Honour stated:

What is a reasonable extension of time for a particular cause and in a particular situation is a question of fact to be assessed objectively. Likewise, what is a reasonable sum to be allowed for the cost of executing a variation to work is a question of fact to be assessed objectively. That is so in each case notwithstanding that as I accept, reasonable minds acting on a properly informed basis and in a rational way may differ as to what is, in either case, reasonable...

In relation to both extensions of time and the value of variations, the court is able to look at the product of the superintendent’s labours to see whether she has arrived at a reasonable extension of time or a reasonable valuation for a variation... If the superintendent did not do so, then she has not performed her task, and Walton has not received its contractual entitlement. [*underlining supplied*]

Accordingly, I conclude that it is open to the court to look at the challenged assessments (for extensions of time and the value of variations and the like), to determine whether or not they equated to the contractual standard of reasonableness, and to substitute its own determination for what should reasonably have been allowed if they do not...

66 Thus, in my view, it is appropriate that I should assess, on an objective basis, whether in each particular instance in dealing with an extension of time or the value of a variation, the superintendent has acted fairly and reasonably. If I conclude that the superintendent has not acted reasonably and fairly, then I will substitute my own determination of what should be reasonable in all the circumstances. Putting it more precisely, I must first look at the nature of the relevant clause to see if it is mechanical or discretionary. If the clause is a mechanical clause, I then must determine whether it is correct. If the superintendent made an error, I then may substitute my own valuation. With respect to discretionary aspects, I must examine the superintendent’s conduct and see if it acted according to the contract. If it did not act within the contractual terms, then it was conducted in accordance with the terms of the contract. If, the builder did not receive what he should have received pursuant to the contract, then, the discretion can be reviewed. Of course, a mere difference of opinion between myself and the Superintendent cannot be reviewed.

Reserve Power in relation to Extension of Time

- 67 Clause 35.5 of the contract contains a reserve power in relation to the superintendent extending time. It relevantly states:

Notwithstanding that the Contractor is not entitled to an extension of time the Superintendent may at any time and from time to time before the issue of the Final Certificate by notice in writing to the Contractor extend the time for Practical Completion for any reason.

- 68 The importance of the reserved power was made clear by the New South Wales Court of Appeal in *Peninsula Balmain Pty Limited v Abigroup Contractors Pty Limited* [2002] NSWCA 211 at [78]:

I accept that, in the absence of the Superintendent's power to extend time even if a claim had not been made within time, Abigroup would be precluded from the benefit of an extension of time and liable for liquidated damages, even if delay had been caused by variations required by Peninsula and thus within the so-called "prevention principle".

...In my opinion, this power is one capable of being exercised in the interests both of the owner and the builder, and in my opinion the Superintendent is obliged to act honestly and impartially in deciding whether to exercise this power. Of course, if a timely claim has not been made, and the ground on which an extension is claimed is one which is difficult to decide because of the time that has elapsed since the time when the claim should have been made, that may be a ground which the Superintendent can fairly refuse the extension;...

In my opinion also, the power to extend time, including the power to do so even if no claim has been made within time, does not automatically come to an end with the termination of the contract for the builder's breach. Clause 35.6, providing for liquidated damages, expressly operates after the contract has been terminated under cl.44; and in order for it to so operate there must be a date for practical completion on which the clause can operate on which the clause can operate after termination of the contract. If an application had been made within time before termination and not yet determined by the Superintendent at the time of termination, it is plain in my opinion that the Superintendent would have power to determine that claim after termination. If a claim had been made before termination but outside the time provide by cl.35, and the Superintendent had not made a decision in exercise of the Superintendent's power to extend time notwithstanding non-compliance, in my opinion the Superintendent could still do so after termination. In those circumstances, I do not think the Superintendent's power is lost on termination, even if the claim for exercise of the power to extend notwithstanding non-compliance had not been made until after termination.

- 69 In *620 Collins Street Pty Ltd v Abigroup Contractors Pty Ltd (No.2)* [2006] VSC 491, Osborn J considered the validity of an arbitrator's award which

he found to be correct. The case involved the exercise of the reserved power. At [26] ff His Honour stated his reasons:

In my view the Arbitrator was correct in his decision:

- (a) The primary mechanism of cl.35.5 gives the contractor an entitlement to an extension of time, subject to compliance with special conditions;
- (b) The penultimate paragraph reserves a discretionary power to grant an EOT in other circumstances effectively where it is just and equitable to do so;
- (c) Such power is expressly directed to situations where “the contractor is not entitled to or has not claimed an extension of time...”;
- (d) It is expressed to arise on a separate and distinct basis from the provision for the extension of time pursuant to the primary mechanism;
- (e) The grounds for exercise of the reserve power are expressed in the broadest possible terms as “for any reason”;
- (f) The potential prejudice to the principal flowing from a failure by the contractor to comply with s.35.5 (*sic*) is a matter going squarely to the equitable exercise of the Arbitrator’s discretion.

There is no basis in the objective language of the contract read as a whole to read down these last words by reference to one party alone.

The words are as the Arbitrator observed subject to the obligation of the Superintendent to act “honestly and fairly”.

It was open to the parties to modify the contract to give effect to the limitation for which 620 contends, by the use of relatively simple language. They did not do so.

To the contrary, as the Arbitrator observed, the parties adopted a form of condition which emphasised the independence of the Superintendent’s discretion, by use of the words “or has not claimed an extension of time”.

70 It is also noted, that in *Allmore Constructions Pty Ltd v K7 Property Group Pty Ltd* [2016] VCAT 1770, Senior Member Walker, while dealing with a different contract to the present, allowed an extension of time pursuant to the reserve power. At [151] that the Senior Member was influenced by the fact that no final certificate had been issued. The same applies in this present situation.

71 Thus, it is clear that the Superintendent had a reserve power pursuant to the contract.

72 The owner and Tectura submitted, that the reserve power had no application in this instance because claims had been made and therefore the reserve power was not available. However, this submission seems to “fly in the face” of the reasons of Senior Member Walker in the *Allmore* case. That is,

as no final certificate has been issued, the power conferred by the clause can still be exercised and it is open to be exercised by the Tribunal. Also, the owner's submission is contrary to what was stated in the *Allmore* case that the starting point is the language of the Contract. In this case, the superintendent must act fairly and reasonably. The assessment must be done objectively. The evidence of Mr Baycan and Mr Gebbie that they acted fairly and reasonably does not assist. What is important is the objective facts and circumstances surrounding the decision.

- 73 It is also made clear at [156] ff of the *Allmore* decision that I am permitted to “step into the shoes of the superintendent” should I find that the power should be exercised, or was not exercised fairly and reasonably. It should be noted, that I take the view that when I am “stepping into the shoes of the superintendent” I am not performing as a superintendent so much as having regard to the responsibilities in determining the case and deciding that it is fair and reasonable based on the evidence before me.

Ten Percent Clause

- 74 Previously in these Reasons, I referred to the clause that was handwritten into the Contract at Clause 40 of the same. Mr Forrest submitted, that in light of the handwritten clause, the builder is not entitled to be paid for any variation in excess of 10% of the Contract. He stated this was the clear intention of the parties and referred to the evidence of Mr Baycan and Mr Gebbie. The difficulty with Mr Forrest's submission, is “the parole evidence rule”. The evidence given to me in these circumstances, cannot amount to an exception to the parole evidence rule because the Contract speaks for itself and in any event the rule does not include subjective intentions and rarely, if ever, does it include negotiations between the parties which are a reflection of that subjective intention.
- 75 I note this is a commercial contract, and the parties have written their bargain into the Contract. It is difficult to understand, how one can have a 10% limit on variations written into the Contract, where the clause itself provides a scheme where the builder is to be paid for variations that are requested. That is, the handwritten clause does not sit with the imperative below it in the Contract: that ‘a superintendent may direct the contractor to execute a variation’.
- 76 Further, the words of the handwritten clause are unclear because not only could they mean that the contractor would not get paid for variations exceeding 10% of the contract sum, it could also mean that a warranty that variations not exceeding 10% shall not be ordered.
- 77 Further, the handwritten words sit uncomfortably with the provisions of s.37 and 38 of the Act which would otherwise direct a contractor to be entitled to recovery in circumstances where he had not otherwise complied with the terms of the Contract.
- 78 In any event, I am of the view that if a variation is ordered when the 10% has been exceeded or the variation would take the price over the Contract

price plus 10%, it must necessarily be that a new agreement has been entered into between the parties. In conclusion, on this point, I agree, with the comments made by Mr Twigg QC in his address at [P2566] of the transcript where he stated:

I commenced the case by saying that the term was merely aspirational and I maintain that position. It is merely an aspiration deposited in the Contract without any clear and evident intention that Mackie would be denied its rights with respect to the recovery of the price for the variation work performed pursuant to the provision that sits below.

- 79 Given these circumstances, I take the view that the handwritten words related to the 10% limit of Clause 40 of the Contract have no effect.

Allegation of a 52-Day “Buffer” or “Float” Period

- 80 Initially, the tender documents provided for a 200-day period for Practical Completion which would have been 19 November 2010. However, at a meeting between the parties, it was decided that the time of Practical Completion should be extended to 1 March 2011. It was that date that was written as the date of Practical Completion in the Contract. That is, the time for the building works to commence and be completed was from 18 December 2009 until 1 March 2011.
- 81 The extension came about according to Mr Baycan’s evidence, because he told the representatives of the owner that there could be a problem running into the Christmas period and therefore it was better to extend the time to 1 March 2011.
- 82 Mr Andrew and Mr Phillipott at [189] – [211] of their submissions set out the evidence on which they relied for the extra 52 days to be a “buffer” or a “float” period rather than an extension of time for the completion of the Contract.
- 83 The importance of this submission is that if it is accepted, the 52 days would be deducted from any extension of time that the builder may be allowed.
- 84 Both representatives from the builder and Tectura gave evidence, that they were of the view that the completion date of 1 March 2011 was the true completion date and that they did not believe that the 52 days were a “float” period. Or the parties intended that it should have been a “float” period.
- 85 In my view, the words of the contract are clear, and the date for Practical Completion is 1 March 2011. If the parties had intended the period between 19 November 2010 and 1 March 2011 to be a “float” or “buffer” period, that should have been stated clearly in the Contract. The clear reading of the Contract is that the date of Practical Completion is 1 March 2011 and, indeed, that conforms with the evidence that was given by Mr Mackie, Mr Baycan and Mr Gebbie.

86 Given those circumstances, I will treat 1 March 2011 as the date for the Practical Completion of the works in the Contract. I will not allow any “float” period between 19 November 2010 and 1 March 2011.

BACKGROUND IN RELATION TO CONSTRUCTION PROGRAMME

87 The builder claims it was delayed in commencing work on the site because of delays in the abolition of the gas line. However in determining a realistic start time the owner submits, that the builder as a competent contractor, should have known that the gas needed to be abolished and if a form or something of that nature needed to be signed by the owner, the builder should have organised the same.

88 In support of the proposition that the builder should have known about the gas line earlier is that Item 10 of the contract between the builder and the demolisher (TB3181.2) and (TB3181.3), “*the contract expressly excluded the abolition of the gas and electricity from the project*”. It was there that it was written “*owner/builder to arrange for abolishment of gas and electricity from property*” in that sub-clause.

89 It is noted, that in determining a reasonable extension time, the superintendent should take into account matters of currency and mitigation with respect to delay in determining the new Date for Practical Completion.

90 It is also noted that at clause 35.5 of the contract, contains reserve power, or a power in the superintendent to extend time, if the builder does not comply with the provisions of clause 35.5. The owner and superintendent contend that the builder did not comply with the provisions of clause 35.5 as it did not apply for extensions of time in the 28 day period provided and, they therefore submit that the contract is not entitled to an extension of time.

91 The reserve power which I have referred to is to be found in the penultimate paragraph of clause 35.5 above which I repeat:

Notwithstanding that the contract was not entitled to an extension of time the superintendent may at any time and from time to time before the issue of the Final Certificate by notice in writing to the contractor extend the time for Practical Completion for any reason.

92 Clause 23 of the contract which I have previously mentioned is also relevant in relation to an extension of time. It is worth reproducing clause 23 here containing the amendments referred to in part B of the contract. It states:

The principal shall ensure that at all times there is a superintendent and that in the exercise of the function of the superintendent over the contract, the superintendent:

- (a) Acted impartially, fairly and arrived at a reasonable assessment;
- (b) Acts within the time prescribed under the contract or where no time is prescribed within a reasonable time; and
- (c) Arrives at a reasonable measure of value of work quantity, quantities or time.

The principal shall ensure that in the exercise of the functions of the superintendent under clause 5.7, 6.2, 8.1, 21.5, 35, 40, 42 of the contract the superintendent acts fairly.

- 93 In its pleadings, the builder pleads that the reserve power pursuant to clause 35.5 of the contract and the discretion pursuant to clause 23 of the contract should be exercised and in particular, it states that no Final Certificate has been issued as this is the milestone trigger relieving the superintendent having to exercise the ‘reserve power’, under clause 35.5 of the contract.
- 94 Pursuant to clause 35.2 (f) the contract, the builder was required to bring the work under the contract to practical completion by the date for practical completion. The definition of ‘Date of Practical Completion’ is not fixed and will be expressly varied following either any extension of time granted by the Superintendent or importantly any extension “*allowed in any arbitration or litigation*”.
- 95 Date of Practical Completion means:
- Where the annexure provides a date for Practical Completion, the date;
 - Where the annexure provides for a period of Practical Completion, the last day of the period;
 - But if any extension of time for Practical Completion is granted by the Superintendent or allowed by any arbitration or litigation it means the date resulting therefrom. Thus Mr Twigg submitted, that where a claim is not made within the terms of clause 35.5, the Superintendent in the proper exercise of power pursuant to clause 23 of the Contract, ought to have granted an extension of time under the ‘reserve power’ (under clause 35.5 of the contract) and because the Final Certificate has not been issued, the power can be exercised by the Tribunal and the Date of Practical Completion, as defined, can be adjusted (being ‘the date resulting from the litigation’).
- 96 In the contract, there are other relevant clauses dealing with extension of time.
- 97 Clause 33.1 provides, ‘*a contractor shall proceed with the work under the contract with due expedition and without delay...*’.
- 98 Clause 33.2 provides,

Construction Programme

For the purposes of clause 33, a ‘construction programme’ is a statement in writing showing the dates by which, or the times within which, various stages or parts of the work under the contract are to be executed or completed.

A construction programme should not affect the rights or obligations in clause 33.1.

A contractor may voluntarily furnish to the superintendent a construction programme.

A superintendent may direct the contractor to furnish to the superintendent a construction programme within the time and in the form directed by the superintendent.

The Contractor shall not, without reasonable cause, depart from –

- (a) a construction programme included in the contract; or
- (b) a construction programme furnished to the superintendent.

The furnishing of a construction programme or of a further construction programme shall not relieve the Contractor of any obligation under the Contract including the obligation to: ‘*Not, without reasonable cause, depart from an earlier construction programme.*’

99 Further, the Preliminaries form part of the contract at TB1320.008 there are a requirement for a programme of works, construction sequencing and a programme critical path of work. There is also a requirement to do what the programme is to show in terms of all the activities, including offsite activities the sequence of work, RDOs etc.

100 Clause 40.4 of the contract has also taken some importance in this proceeding. That clause concerns variations for the convenience of the contractor. It reads as follows:

40.4 Variations for the Convenience of the Contractor

If the contractor requests the superintendent to approve a variation for the convenience of the contractor, the superintendent may do so in writing. The approval may be conditional.

Unless the superintendent otherwise directs in the notice approving the variation, the contractor shall not be entitled to –

- (a) An extension of time of practical completion; or
- (b) Extra payment,

in respect of the variation or anything arising out of the variation which would not have arisen had the variation not been approved.

The superintendent shall not be obliged to approve a variation for the convenience of the contractor.

101 Clause 40.5 reads as follows:

40.5 Valuation

Where the Contract provides that a valuation shall be made under Clause 40.5, the Principal shall pay or allow the Contractor or the Contractor shall pay or allow the Principal as the case may require, an amount ascertained by the Superintendent as follows—

- (a) if the Contract prescribes specific rates or prices to be applied in determining the value, those rates or prices shall be used:
 - i if Clause 40.5(a) does not apply, the rates or prices in a Priced Bill of Quantities or Schedule or Rates shall be used to the extent that it is reasonable to use them;

- ii to the extent that neither Clause 40.5(a) or 40.5(b) apply, reasonable rates or prices shall be used in any valuation made by the Superintendent;
- iii in determining the deduction to be made for work which is taken out of the Contract, the deduction shall include a reasonable amount for profit and overheads;
- iv if the valuation is of an increase or decrease in a fee or charge or is a new fee or charge under Clause 14.3, the value shall be the actual increase or decrease or the actual amount of the new fee or charge without regard to overheads or profit;
- v if the valuation relates to extra costs incurred by the Contractor for delay or disruption, the valuation shall include a reasonable amount for overheads but shall not include profit or loss of profit;
- vi if Clause 11(b) applies, the percentage referred to in Clause 11(b) shall be used for valuing the Contractor's profit and attendance; and
- vii daywork shall be valued in accordance with Clause 41.

When under Clause 40.3 the Superintendent directs the Contractor to support a variation with measurements and other evidence of cost, the Superintendent shall allow the Contractor the reasonable cost of preparing the measurements or other evidence of cost that has been incurred over and above the reasonable overhead cost.

- 102 Although there were three expert reports in the Tribunal Book relating to extension of time, only one of the experts, Mr Watson, was called. Mr Watson was called by the builder.
- 103 Mr Andrews, from Tracey Brundstrom and Hammond, prepared a report on behalf of the owner. Mr Andrews was not called by the owner to give evidence. His report did have some significance in that he revised a critical path of work, which to some extent was adopted by Mr Watson.
- 104 A Mr Degenhart also prepared an expert report on extension of time but he was not called because of ill health and it was Mr Watson who prepared a report in substitution for him for the builder. Mr Watson made some comments about matters contained in Mr Degenhart's report. As I stated above, the programme that was done by Mr Andrews is one where he rebuilt the construction programme from Revision D. There is a dispute about whether the contract programme is Revision B or Revision D.
- 105 In Mr Andrews' rebuilt programme, he provides a series of what he called 'stated programmes', and he does that for the purpose of assessing whether an event that has occurred, or assessed as having occurred, has caused the work to be delayed. A critical path was a requirement of the contract.
- 106 It is noted, that the time for commencing work by the contractor and having possession of the site is 18 December 2009 and the date of practical

completion was 1 March 2011. The contract provided, for liquidated damages in the sum of \$1,500 per calendar day (see TB1265).

- 107 The works were in fact not completed until 8 February 2012. The superintendent allowed 52 days for extension of time. However, taking into account the 52 days, the lateness was 256 days and liquidated damages were imposed on the builder in relation to those number of days at a rate of \$1,500 per day. I have already enumerated the conditions in clause 35.5 which would allow the builder to claim for an extension of time. It is noted, that that clause also deals with concurrent delays so that the builder cannot claim for a delay over the same period.
- 108 In this particular instance, there are a number of claims for extensions of time by the builder that have been considered and rejected by the superintendent. I will deal with those below.
- 109 The only expert witness to give evidence in relation to extension of time was Mr Watson. Mr Watson is trained as a civil engineer but during his engineering course he did structural engineering units, and has thus become competent over time as a structural engineer. He also gives opinions in relation to extensions of time in which he has expertise.
- 110 Mr Watson conceded in his evidence, that he did not determine extensions of time or consider the Superintendents determination as to whether there was or was not an extension of time. However, he did determine whether or not there had been a delay to the building in reaching practical completion and in particular having regard to matters whether or not regard shouldn't be had to reaching practical completion.
- 111 It is noted, that clause 35.5 of the Contract deals with whether a contractor can reach practical completion by the date for practical completion without an extension of time. No regard should be had as to whether or not the builder could commit additional resources or accelerate the programme.
- 112 In looking at the task performed by Mr Watson, it is important to look at his brief. As I have previously stated, Mr Degenhart was engaged by the builder for expert advice and to prepare a report. Unfortunately due to ill health he was prevented from giving evidence to the Tribunal. The builder having sufficient warning of this matter engaged Mr Watson to "step into his shoes."
- 113 It will also be remembered, that Mr Andrews, also an expert on extension of time prepared a report on behalf of the owner. Mr Andrews was not called to give evidence.
- 114 In January 2014, Mr Andrews and Mr Degenhart prepared a joint report titled Joint Summary of Table of Extension of Time. They had been instructed to prepare a report setting out the areas of disagreement between them, that is, Mr Andrews and Mr Degenhart, specifically with respect to the effect of the delays on completion of the builder's work.

- 115 With reference to the joint report and the Andrews and Degenhart report, Mr Watson was briefed to identify the delay on the effect of the builder's work. He was specifically instructed not to comment on an entitlement to an extension of time or whether the superintendent's determinations are appropriate.
- 116 What in fact Mr Watson did was to determine the effect of what the builder says the delays were.
- 117 What I am, inter alia, required to do, is to investigate whether the reserved power which I have referred to in clause 35(1) of the contract, is applicable. Bearing in mind that there has been no final certificate and whether the superintendent acted within Clause 23 of the Contract.
- 118 It is clear from Mr Watson's statement (see [TB692]) that he has been provided with a number of documents. These documents include, the report of Mr Degenhart, the report from Mr Andrews and the joint summary. Further, the documents included the contract, specifications and drawings. Electronic Construction Programme B, C, D, E and G. Site photographs. Minutes of site meetings and general site correspondence.
- 119 It is noted, that both Mr Forrest, and Mr Andrew with Mr Phillipott, made criticism that Mr Watson was not provided with sufficient documents including internal memos, documents relating to final design because there were errors in the shop drawings. It is also said that it would not have been clear to Mr Watson of the "shambolic way" in which the builder conducted the project.
- 120 In spite of what the owner and Tectura say about the lack of the documents that were provided to Mr Watson, Mr Watson makes it clear, in his witness statement that the documents he has considered are documents that are relevant and referred to in the body of the contract.
- 121 Further, it is clear that both Mr Degenhart and Mr Andrews used construction programme Rev D for their basis for the assessment of delays.
- 122 It should be noted, that in spite of Mr Andrews being the expert employed by the owner, Mr Andrew and Mr Philpot stated that it was Rev B, particularly in relation to the abolition of the gas line that should be used. However, it should be noted, that at [TB3173] the builder sent a note to the superintendent saying that as to duration dates in the previous programme (Rev B) are incorrect.
- 123 I found the submission of Mr Andrew and Mr Phillipott quite surprising in light of the fact that the owner's own expert was not called. Mr Andrews was instructed to have a joint report with Mr Degenhart and they both agreed on Rev D for a revision of the status to programme which Mr Andrews had previously made. Both Mr Degenhart and Mr Andrews acknowledged that there are deficiencies with the contract programme and that it has not been prepared using critical path methods and it does not show a critical path of works.

- 124 Mr Watson had in his possession Rev B, C, D, E and G. There was some criticism by Mr Andrew, because of Mr Watson not being provided with programme A, however, I do not see that that would have advanced the situation any further than Rev programme B.
- 125 Mr Watson had to consider the work that had been undertaken by Mr Degenhart and Mr Andrews because that is what he was asked to do. He acknowledged that the programme that they had used in their analysis had a critical path methods installed in the programming.
- 126 What Mr Watson did was look at the method undertaken by Mr Degenhart and determined the criticality of various activities. He then determined, through the critical path, delays and then at [TB695] he stated:
- Andrews considered Mackie's programme were unsuitable for assessing extensions of time claims as they cannot substantiate whether the contractor is or will be delayed in achieving practical completion.
- 127 Mr Andrews, states that he completed the initial assessment based on the programmes and contemporary records provided to make the assessment. The method adopted is described by Mr Andrews at para [65] of his report as a baseline programme. Mr Watson calls it the Andrews Amended Programme, which was developed. In that programme the baseline programme was updated with recorded progress based on relevant as built information, rescheduled and subsequently impacted with the delay event.
- 128 Mr Andrew and Mr Philpot, of Counsel suggested that this was all too difficult and could not be done. However, as Mr Twigg QC puts it, Mr Andrews did in fact create an updated programme with as built information.
- 129 While Mr Andrews' programme was not actually tendered in evidence because Mr Andrews did not give evidence, in part it was relied on by Mr Watson and incorporated in his witness statement. When giving evidence, Mr Watson was taken to specific programmes being created including the status programme. In any event, pursuant to s.98 of the *Victorian Civil and Administrative Tribunal Act 1998*, I am entitled to have regard to the information in the Andrews programme particularly as it was referred to by Mr Watson.
- 130 Mr Watson expressed the opinion to the affect that each of the events that he has referred to as having regard to the programming materials that Mr Andrews produced, and his opinion, inferring that the builder was delayed. I note that Mr Watson is the only expert whose opinion was tendered before me.
- 131 At (20(b)) [TB695], Mr Watson sets out the methodology which he has adopted. He states:
- For each delay the baseline programme was updated with recorder progress based on relevant as-built information, rescheduled and subsequently impacted with the delay event; the impact of the delay

event on the critical path for the current period and subsequent period was assessed to determine its impact on practical completion. ...

132 Then at paragraph [21] Mr Watson states:

The manner in which the Andrews amended programme was developed is set out in section G1, paragraph 72 of the Andrews report.

133 Mr Watson in his report goes on and describes the critical path that Mr Andrews identified which included bulk excavation, demolition, basement construction, construction of structure and internal works and then hand over. They are the activities in a critical straight line path.

134 At paragraph 23 of Mr Watson's report he states:

Andrews states the Andrews amended programme at a number of dates for use in his programme based on as built details extracted from meeting minutes, site photographs and Andrew Frank's diary records. (Andrews at paragraph 6 and Appendix G2 to determine the critical path of the works at the time of each delay considered in his report.)

135 Mr Watson then goes on to state those particular dates.

136 Mr Twigg has accurately summarised what Mr Andrews has observed to have done at transcript 2590 as follows:

(Mr Andrews took) the initial programme that was created by Mackie, and is known as the Revision D programme, and developed it into what is described as a baseline programme, and then at a date where an event of delay has been identified he updates the baseline programme and he puts it into information that has been generated from records of doctors (sic) that were produced at the time, and then what he does is to perform his analysis is impact (sic) it with an event to determine whether is that right prevented Mackie from reaching the practical completion.

137 At [26] ff of his statement at [TB697] Mr Watson outlined his approach in the following terms:

I have reviewed Mackie's contract programme (construction programme) Rev D04-03-10. I agree with both Degenhart and Andrews that there are deficiencies in this programme and as a result it does not display a critical path.

Because of the constraints of the activities in the programme which are identified and acknowledged by both Degenhart and Andrews, I am not able to identify a critical path from a review of the programme and its current form.

Therefore, I agree with Mr Andrews approach of amending the programme to remove constraints and include logic between activities to create an amended programme determine the critical path of the project.

Andrews Status Programme from 12 April 2010 to 20 December 2010 (ie all Andrews programmes with the exception of the Status

Programme of 26 September 2011) are in the period in which the structure is being erected and show the structure is critical.

Therefore the difference in approach in assessing critically does not make the difference between the assessment of Degenhart and Andrews for those delays in 2010 affecting the structure and building envelope (façade and roof). Therefore this is the only a reason for the difference in the respective assessments for the following delays:

Replacement of Sewer Part (EOT18);

Inclement weather delays for September and October 2011 (EOT19); and

Inclement weather delays for November 2011 (EOT20).

I have therefore adopted the statuses of the Andrews Amended Programme as the basis of my analysis for those delays affecting structure, façade and roofing (ie the Andrews Amended Programme Status 12 April 2010 and 20 December 2010).

For those delays occurring in 2011 where Andrews and Degenhart identified different critical paths, as outlined in paragraph 30 above, I discussed the difference in the critical paths in section 3.4 below and my opinion as to the critical path of the works at this stage of the project.

- 138 It was put by Mr Andrew and Mr Phillipott, that if one extension of time is not granted, “the whole house of cards”, as it was referred to, collapses and all other extensions must be refused. In my view, the evidence of Mr Watson does not support this conclusion. Further, there is no evidence to support the submission that I have just referred to.
- 139 It necessarily follows, that as none of the builder’s programmes in fact showed a critical path, that they cannot be relied upon by themselves to calculate an extension of time. What is necessary is to prepare the Status Programme as has been done by Mr Andrews and adopted with modifications by Mr Watson and work from that programme.
- 140 One needs to look at each delay that has been claimed and see whether in fact it is a proper claim for delay and whether it was caused a delay in the critical path.
- 141 Clause 33.2 of the contract, provides that the builder is to provide a programme. The fact that the programme may not provide a critical path, and possibly in breach of 33.2 of the contract may have been breached, does not of itself disentitle the builder to claim for extension of time.
- 142 On 22 February 2010 Tectura acknowledged that Revision B programme was to be revised (TB1169). The programme was revised and Rev D programme was delivered to the superintendent (TB3173-3178).
- 143 The only evidence to support the fact that Rev B was a contract programme, was Mr Baycan’s statement [TB5797] [273] – [282] and Mr Gebbie (see transcript 2222). At that page of the transcript, Mr Gebbie says that he used Revision B programme because that was the programme that was agreed by

the builder as an acceptable programme for the purposes of administering the contract. However, later he confirms as transcript 2223 [15] that Tectura used in the Revision B programme to assess the claim regarding an extension of time for the abolishment of the gas line was a mistake.

144 It is also noted, that in an email dated 4 March 2010, Mr Cross from the builder sends to Ms Stewart from the superintendent an email enclosing Construction Programme Revision D (TB3173-3178). In that email Mr Cross tells Ms Stewart:

Please ignore previous issues of programme as duration dates are incorrect.

145 Mr Andrews and Mr Philpot supported by Mr Forrest, submitted that I should ignore the email from Mr Cross to Ms Stewart. They stated, that the builder, at the commencement of the project told the superintendent that they intended commencing the demolition on 22 February 2010 they should be bound by that date. They said that the construction programme reflects the builder's intention at the time.

146 Mr Andrew said Mr Cross was not called to give evidence to support the contention that the programme was a mistake. He said in any event it did not matter what he said in the email. However, by the same token Ms Stewart was not called by either the owner or Tectura to give her view on the matter and give evidence about the receipt of the email.

147 Looking at all the circumstances of the situation, I do not accept that the email from Mr Cross was carefully worded as suggested by Mr Andrew to avoid using the word date but I do accept the substance of the email that Revision B was in fact a mistake. The circumstances of the demolition and the abolishment of the gas line which I will go into in detail below, all suggested it was a mistake. I realised that Mr Meharras, the demolisher was not called to give evidence, but nonetheless the rule in *Jones v Dunkel* which I have previously referred to may apply, it does not mean that I cannot infer what happened in a situation. It only means that I should infer that Mr Cross's and Mr Meharras's evidence would not have helped the builder. In this case, I take into account the evidence given by Mr Mackie and other circumstances preparing for the demolition, and from that I infer that the builder was ready to demolish on or around the second of February 2010 at the latest or possibly in January 2010.

148 Thus, in assessing the extensions of time claims, I will use the Andrews Statuses Programme amended by Mr Watson.

149 Clause 2 of the contract provides that:

'Works' means the whole of the works to be executed according to the contract, including all variations provided by the contract, which by the contract are to be handed over to the principal.

‘Works under the contract’ mean the works which the Contract is or may be required to execute under the Contract and includes all variations.

- 150 Pursuant to clause 3.1 of the contract the builder must, ‘execute and complete the work under the contract’.
- 151 Relevantly, clause 40 of the contract remains preserved in its original iteration in AS2124. That is, the Annexure Part B (the amendment) does not contain any amendments that are material to the questions before the Tribunal.
- 152 However, there is handwriting at the commencement of clause 40 of the contract, which handwriting reads as follows:
- The total sum of all variations shall not exceed 10% in the total contract sum of \$4,300,000. (10% variation clause).
- 153 This 10% variation clause was inserted at the insistence of the chief architect of Turkey, Ms Tugtekin, who was present at the time the contract was signed on 18 December 2009.
- 154 It is noted, that the clause concerning the 10% variation in the contract, is said by Mr Twigg QC, Counsel for the applicant, to be ‘aspirational but in the context of a commercial contract it has no commercial purpose and is completely unenforceable, as being subject to subsequent agreement.’
- 155 Clause 40.1 of the contract provides that the superintendent may ‘direct’ the contractor in writing to perform variations which will fall within one of the following independent directions:
- The superintendent may direct the contractor to –
- (a) Increase, decrease or omit any part of the work under the Contract:
 - (b) Change character or quality of any material or work:
 - (c) Change the levels, lines, positions, dimensions of any part of the work under the Contract:
 - (d) Execute additional work: and/or demolish or remove material or work no longer required by the Principal. The Contractor shall not vary the work of the Contract except as directed by the Superintendent or approved in writing by the Superintendent under clause 40...
- 156 Clause 40.1 does not define the term ‘direct’. The non-inclusive definition is to be found in clause 23 of the contract:

If pursuant to a provision of the Contract enabling the Superintendent to give directions, the Superintendent gives a direction, the Contractor shall comply with the direction.

Clause 23 ‘direction’ includes agreement, approval, authorisation, certificate, decision, demand, determination, explanation, instruction, notice, order, permission, rejection, request or requirement except

where the Contract otherwise provides, a direction may be given orally but the Superintendent shall as soon as practicable confirm it in writing...

- 157 It is worthwhile noting at this stage, that clause 23 describes how the superintendent is to exercise its function. That clause as amended by Annexure Part B of the contract reads as follows:

The principal shall ensure that at all times there is a Superintendent and that in the exercise of the function of the Superintendent under the contract, the Superintendent –

- (a) acts honestly;
- (b) acts within the time prescribed under the contract or where no time is prescribed within a reasonable time; and
- (c) arrives at a reasonable measure of value of work quantities or time.

- 158 It is noted, that in the unamended text of clause 23(a) the words ‘honestly and fairly’ are used, however the words ‘and fairly’ are deleted by amendment. However, there is an addition of a new paragraph after the existing paragraph 1 of the contract which reads as follows:

The principal shall ensure the exercise of the functions of the Superintendent under clauses 5.7, 6.2, 8.1, 21.5, 35, 40 and 42 of the Contract the Superintendent acts fairly and reasonably.

Variations pursuant to *Domestic Buildings Contract Act 1995*

- 159 The builder relies on s.37 and s.38 of the Act where it is alleged the builder failed to comply with Clause 41 of the contract. This reliance is on to claim a variation where there is an alleged breach by it. Section 38 of the Act reads as follows:

38. Variation of plans or specifications—by building owner

- (1) A building owner who wishes to vary the plans or specifications set out in a major domestic building contract must give the builder a notice outlining the variation the building owner wishes to make.
- (2) If the builder reasonably believes the variation will not require a variation to any permit and will not cause any delay and will not add more than 2% to the original contract price stated in the contract, the builder may carry out the variation.
- (3) In any other case, the builder must give the building owner either—
 - (a) a notice that—

- (i) states what effect the variation will have on the work as a whole being carried out under the contract and whether a variation to any permit will be required; and
 - (ii) if the variation will result in any delays, states the builder's reasonable estimate as to how long those delays will be; and
 - (iii) states the cost of the variation and the effect it will have on the contract price;
 - or
 - (b) a notice that states that the builder refuses, or is unable, to carry out the variation and that states the reason for the refusal or inability.
- (4) The builder must comply with sub-section (3) within a reasonable time of receiving a notice under sub-section (1).
- (5) A builder must not give effect to any variation asked for by a building owner unless—
- (a) the building owner gives the builder a signed request for the variation attached to a copy of the notice required by sub-section (3)(a); or
 - (b) sub-section (2) applies.
- (6) A builder is not entitled to recover any money in respect of a variation asked for by a building owner unless—
- (a) the builder has complied with this section; or
 - (b) the Tribunal is satisfied—
 - (i) that there are exceptional circumstances or that the builder would suffer a significant or exceptional hardship by the operation of paragraph (a); and
 - (ii) that it would not be unfair to the building owner for the builder to recover the money.

- (7) If sub-section (6) applies, the builder is entitled to recover the cost of carrying out the variation plus a reasonable profit.
- (8) This section does not apply to contractual terms dealing with prime cost items or provisional sums.

160 It should be noted, that pursuant to the Act, a builder may not recover the price of a variation provided at the request of the owner unless the conditions in s.38(6) are satisfied.

161 In circumstances where notice is required pursuant to s.38(2) and (3) or if the Tribunal determines that the variations were at the request of the owner pursuant to s.37(2) and have not been complied with, the right of the builder to obtain payment is if one of the following two considerations is satisfied:

- (a) Exceptional circumstances; or
- (b) The builder will suffer ‘significant or exceptional hardship’; and
- (c) It is ‘not unfair’ to the owner to recover the money.

(For convenience, I have attached Annexure “A” to these Reasons which sets out relevant provisions of the Contract).

DISPUTED VARIATIONS

Imported Fill X09D

162 At the commencement of the proceeding, there was a dispute as to the amount to be allowed to the builder for the disputed ‘fill’, however, at paragraph [5] of Mr Baycan’s second statement (Mr Baycan is the principal of Tectura), he notes that the amount claimed by the builder for the ‘fill’ is correct. He states:

The correct amount for the variation should have been \$68,860 + GST rather than \$63,360 + GST.

163 As I stated in paragraph [38] above, Mr Baycan has conceded that he made a mistake in the additions relating to imported fill. Therefore, I will make an allowance for a variation of \$5,500 plus GST to the builder in respect of that item.

164 I do not believe that the architect/superintendent, should be responsible for the cost of this variation as it is something of which the owner has had the benefit and the variation was necessary for the construction of the building.

Telstra Asset Relocation X15D

165 This variation concerns a relatively small sum \$528 + GST which the builder claims for cleaning up after Telstra. When the work was performed by Telstra, the builder was required to clean up not only the actual site but the area extending in front of the premises to the West and in a street known as Glenbervie Avenue. The whole claim by the builder in relation to the Telstra asset is as follows:

- (a) The price of the work (\$22,502.73) plus labour costs for cleaning up the external to the site (8 hours)(\$60 per hour) totals \$22,982.73 add the builder's margin \$2298.27 totals \$25,281 + GST.
- (b) On 2 July 2010 the Superintendent issued a contract variation NI 018 in the sum of \$24,753 (ex GST), thus excluding the cost of clean up.

166 The owner and Tectura maintained that they are not obliged to pay for the clean-up of the site. On the other hand, the builder claims that the superintendent is in breach of clause 23 of the contract by not acting 'fairly' or arriving at a reasonable measure of value of the work quantities.

167 It is also claimed by the builder that there is a breach of the Act in that notice for the variation was unnecessary in the circumstances pursuant to variation 38(3) and the builder would suffer hardship if the extension was not granted and therefore there are exceptional circumstances. Further the builder says it would not be unfair for the owner to pay the sum as it has had the full benefit of the work.

168 The owners submit at [259] of their submissions that:

Cleaning up the site is part of the scope of works under the Contract that Mackie was obliged to perform. Page [12] of Part 1 of the Specifications requires Mackie to take full responsibility for ensuring the health, welfare and safety of all persons on, leaving or entering the site at which the works were carried out.

169 It is also stated that Clause 38 of the Contract requires the contractor to keep the site and the work clean and tidy and that the contractor was obliged pursuant to the tender documents (see [TB3614] and [3691]) to carry out works external to the site.

170 While the tender outlined that the builder may be required to carry out works external to the site, that did not in fact mean that if it was required to carry out those works, it could not be compensated. Further, the clean-up did not only involve work in front of the site but involved work going around the corner to the next street being Glenbervie Avenue.

171 I also note, that when Tectura rejected the builder's claim, it did not give reasons for such rejection. The Telstra work was not part of the scope of works. Therefore the cleaning up after the Telstra work can neither be expressly nor impliedly part of the scope of works.

172 Given these circumstances, in my view, Tectura has not acted reasonably or fairly in rejecting the claim for the clean up after the Telstra works and therefore the builder should be allowed the sum of \$528 plus GST as a variation.

Credit Variation to the Owner in Relationship to Compact and Fill X26D

173 After the works were commenced, Tectura ordered the builder to construct a suspended slab from the ground floor of the property to the western wall

of the property. The construction of the slab meant that there was no need for 'fill' from the basement level to the ground floor level in this particular area. The difference between the two parties' positions is that the superintendent has allowed a credit to the owner of \$14,850 for the 'fill' not having to be used pursuant to contract variation number 39A. On the other hand, the builder states that only the sum of \$3,870 should be allowed as a credit.

- 174 The difference between the builder's position and Tectura's position is as to the relevant level from which the amount of 'fill' that was not required to be placed is to be determined and the type of material to be placed and the applicable rates based upon the contract documents. The builder states that there should be 43 cubic metres of 'fill' that were required pursuant to the survey plan and allowing for credit variations in XO9. On the other hand, the superintendent claims that the variation is 165 cubic metres.
- 175 Further the owner claims that there needs to be compacted 'fill' pursuant to the geotechnical survey to a minimum density ration of 95%. Against this the builder claims that crushed rock was the appropriate 'fill' to be used.
- 176 As with other variations, the builder has claimed this variation pursuant to the contract or alternatively pursuant to the Act.
- 177 The two issues in relation to the credit for the deletion of fill is the quality of the fill that was to be used and the area in which the fill was to be placed. That is, the quantity of fill that would have been required pursuant to the original Contract and specifications.
- 178 The superintendent arrives at the calculation of 165 cubic metres of fill being the distance from the bottom of the basement to the ground level plus another void area to the north of the property. That is, the basement finished floor level and the ground floor level and then multiplied by the square metres as per the drawings. And then multiplying by the rate for engineered fill of \$90 per cubic metre.
- 179 On the other hand, the builder says that the quantity of the fill required should be measured from the existing level of the site at 82 cubic metres (less the sum already allowed in variation X09(39M3)), leaving 43 cubic metres at \$55 per cubic metres.
- 180 The rate of 55 cubic metres is derived from the schedule of rates in the Contract, item 5, which describes "imported fill – NOM. 20MM class 2 crushed rock" \$55 per cubic metre (see [TB1126]).
- 181 In relation to the area where the fill would have been required, Mr Twigg QC stated that the Contract drawings, required that the western retaining wall was to remain and it was only subsequent to the variation that it was required to be built which was approximately in April 2010. Therefore, Mr Twigg states that the Contract did not include the scope of excavating the retaining wall.

- 182 Mr Twigg's submission was criticised by Mr Forrest, in that Mr Beattie, the builder's estimator, stated in his oral evidence that the survey drawings and its reference to 2.6 metres in depth was incorrect in respect of the depth of the basement. The calculations that the builder had done in respect of the amount of fill was based on the survey drawings not the Contract engineering drawings. The Contract engineering drawings, allowed for a greater amount of backfill to the area to which this claim concerns.
- 183 The difficulty with the way that Mr Forrest uses Mr Beattie's evidence, is that the retaining wall on the western boundary was not going to be rebuilt until April 2010, many months after the Contract was signed. This would have allowed for the lesser amount of fill to be used. The removal and rebuilding of the retaining wall was not included in the original scope of works. Therefore, if the contract had not been varied, I find that only 43 cubic metres of compact fill would have been required as maintained by the builder.
- 184 In relation to the price of the fill, Tectura relied upon a report from the Geotechnical engineer who was engaged after the date of the Contract (see supplementary statement of Mr Baycan 5812.7 at [40] and 5812.8 at [43]). However, this recommendation was made after the date of the Contract.
- 185 Further, it is not particularly clear how Tectura chose the rate of \$90 per cubic metre as it did not produce notes or any documentation supporting this price.
- 186 The schedule of rates is clear that in item 5, which I have referred to, rock fill is \$55 per cubic metre. That appears to me to be the rate allowed pursuant to the Contract.
- 187 Therefore, it necessarily follows that the credit variation in favour of the owner against the builder is wrong. It is overstated by the sum of \$10,980. Therefore, there should be a refund to the builder of \$10,980 by the owner to the builder.
- 188 In coming to this conclusion it is clear that Tectura has made a mechanical error in assessing the variation. Therefore, it is quite proper for me to make my own assessment.
- 189 In any event, it is appropriate for me to conclude that the Tectura's assessment has not proper evidential basis. It is noted, that at the transcript page 1639, Mr Baycan was asked whether he did any independent analysis to determine the cost of provision of imported fill to which he replied "no". Therefore, I conclude that the superintendent's assessment is unfair and unreasonable.
- 190 As between the owner and Tectura, in my view, this item is not an item which should be borne by Tectura. The issue in the proceeding came about because of what I have found to be a wrong assessment by Tectura. If Tectura had assessed the matter correctly, it would undoubtedly have been the liability of the owner. Tectura has not caused the owner any loss by its

miscalculation. Therefore, the liability to repay the money will fall on the owner.

Variation X33 Structural Steel Deletion

191 At the time of filing closing submissions, the builder abandoned its challenge to the architect/superintendent's assessment in relation to the amount that should be credited to the owner for Structural Steel Deletion.

Variation X41D Increased Price of Structural Steel

192 The builder makes a claim in the sum of \$15,463.80 as a result of the price of steel increasing between the time of the contract and the time that the steel was required. Tectura and the owner say that the builder is not entitled to an increased price for the steel because this is no 'rise and fall item'. Therefore the claim is forbidden pursuant to the Contract.

193 However, the builder asserts that the extra cost of the steel resulted from delays in the approval process of the shop drawings. Mr Twigg stated as follows at paragraph [131] of his opening submissions:

The question is – was the superintendent required to approve shop drawings within a reasonable period? If so, did the superintendent do so? If so, can Mackie recover the cost of the increased steel as it was not permitted to commence the work until the drawings were approved and the cost of the steel increased within the period approval was delayed.

194 In particular, the builder says that on 19 May 2010 it submitted shop drawings number HD1, HD2, MP1, MP2 and MP3 to Tectura. However, it was not until 10 August 2010 being approximately three months later that Tectura approved the shop drawings for structural steel. It was in this time that the price of the structural steel increased.

195 Alternatively, the builder claims the price of structural steel pursuant to the Act.

196 It was submitted, on behalf of the owner and Tectura, that the Contract was "a lump sum" contract and that the Contract did not provide for "rise and fall" adjustments.

197 By letter dated 10 September 2010, Tectura advised the builder that upon review of the variation request, it rejected the same because the Contract provided for a fixed lump sum and the structural steel for the project was fully documented in the Contract (see [TB2117]). Further, the tender documents provided the Contract sum shall not be subject to "rise and fall adjustments" (see [TB3611] and [TB3616]).

198 In this particular matter, as I have previously stated, the builder relied on the delay in approval of shop drawings between 19 May and 10 August 2010. It is said that the delay meant that the approval was not timely and thus it was breach of contract.

199 It is also said that pursuant to the specifications relating to structural steel F3.03 that:

The contractor shall not stockpile, manufacture, assemble or supply anything affected by the shop drawings until he has obtained copies of the drawings endorsed with the approval of the engineer.

200 And the preliminaries related to shop drawings at [TB1320.009] allow two weeks for the superintendent's review of those drawings in this particular instance.

201 In my view, this is what Mr Andrew and Mr Phillipott, Counsel for the owner, described as a classic "rise and fall" situation.

202 While there may have been delay in the shop drawings, it is also said that part of the problem arose through the builder's management of the project in contracting for the steel earlier.

203 Given the situation which I have described above, I have taken the view that it is not reasonable in this situation to go behind the superintendent's determination. I do not believe that it has acted unfairly or unreasonably. Given those circumstances, I will not allow the structural steel variation X41D.

Variation X69D Additional Hydraulic Works

204 The builder claimed the sum of \$25,817 for additional hydraulic work while the superintendent only allowed \$12,870 making a difference in the claim of \$12,947.

205 In relation to many of these items which I will refer to below, the owner and Tectura rely on clause 1.3 of the services specifications. That clause reads as follows:

Allow for all work, including minor and ancillary work, to ensure no omissions of necessary work and allow for appropriate interfaces between the various trades, as necessary, for the complete and satisfactory installation, commissioning, operation and maintenance of the services in accordance with the intent of the drawings and the Specifications.

The architectural drawings show the services required and are intended to depict the installation in a diagram and/or schematic manner.

The Contract Core shall allow for the complete design, supply and installation.

When an item system or any aspect of the services is not indicated on the drawings and/or included in the Specification, but is obviously required, provide such work within the Contract sum.

Lodge all necessary applications to authorities and pay all fees and charges.

The work shall include, but not be limited to the design, supply, installation and commissioning of the following...(see 3831 of TB).

206 The builder's claim is in the sum of \$25,817. It is said by Tectura, that this item falls within the services specifications. However, the builder claims that it is not shown on the plans. It is further claimed that the builder did not design the hydraulics and could not infer from the drawings what was required.

207 A particular item in dispute in relation to the hydraulics is:

Installation of additional sewer for pool backwash and AC units for which the builder has claimed \$2,040 + margin + GST.

This claim has been rejected by the superintendent.

208 The next hydraulic item in dispute is the upsizing of the tempering valve from 15 mm to 20 mm and relocate sealings. The claim for this item is \$3,280 + margin + GST. However, the superintendent only allows \$1,260 which was the increased cost of the tempering valve but allowed nothing for extra labour that the builder claimed was involved as a result of the larger valves not being able to fit into the sealing space and therefore had to be relocated in the wall.

209 The next item claimed was roughing works for a glass washer on the ground floor in the sum of \$1,250 + GST. Which claim was rejected by the superintendent. The superintendent relies on the drawings which show that there was a glass washer to be installed and on the services specifications to which I have referred. In Mr Twigg's opening, he stated that the glass washer was not specified in the drawings or the equivalent list. However, during the hearing it was pointed out to me that the drawings in fact did specify a glass washer.

210 The next item claimed in relation to the hydraulics was gas reticulation to the kitchen, for which the builder claimed the sum of \$2,440 + GST. This claim was rejected, the superintendent relying upon the service specification. However, the builder stated that it was not shown on the plans and that the builder was not designing the hydraulics and could not infer from the drawings what was required.

211 The final item in relation to the hydraulics was to provide gas for pool heater as required, for which the builder claimed \$3,200 + GST. This claim was rejected by the superintendent as being included by the service specification to which I have referred. However, as with the gas reticulation to the kitchen, the builder claims it was not shown on the plans, and it was not the designer of the hydraulics and could not infer that the drawings were what was required.

212 The builder also made an alternative claim under the Act.

213 Clause 1.3 of the service specifications under the heading "scope of works" provides relevantly:

The architectural drawings show the services requirements and are intended to depict the installation in a diagrammatic and/or schematic manner.

The contractors shall allow for completed design, supply and installation.

Where an item, system or any aspect of the services are not indicated on the drawings and/or included in the specifications, but it is obviously required, provide such works within the contract sum...

The works shall include but not be limited to the design, supply, installation and commissioning of the following... (hydraulic services are included).

214 Mr Twigg QC submitted at [110] of his submissions that:

Stating the obvious, the words of a Contract are to be construed purposefully and commercially. The words of the Specifications themselves do not impose an obligation to design, and are expressed as an 'allowance' meaning that Mackie should in its price allow for the whole of the works as designed.

Tectura undertook the whole of the design including drawings, a specification and equipment lists...

The design obligation defence belatedly arose in order to deny Mackie an entitlement to be paid for extra work.

215 On the other hand, Tectura submitted that the installation works were included in the specifications in the sections which I have outlined above. It is therefore said, that when the variations were issued, no allowance was made for the extra work because that was already included in the Contract through the specifications.

216 The difficulty with this submission is that the work that was required, was based on what was provided in the Contract not what was provided in the variations. That is, it frequently happens when a variation occurs that there is extra work to be performed in installing or providing that variation. A good example of this is the tempering valve which was increased in size. An allowance was made by Tectura for the increased cost of the tempering valve but no allowance was made for work that may needed to have been undone as the result of the variation and the increased size of various pipes etcetera that were necessary as a result of the increased size of the tempering valve. Evidence was given that this, in fact, happened.

217 It is clear on the evidence, that the superintendent has failed to recognise extra work that was involved in the installations of the items required.

218 The exception to this is the installation of the glass washer. That was marked on the plan, and it should have been abundantly clear to the builder, that it would be responsible for its installation. The amount claimed in respect of the installation of the glass washer was \$1,250.

219 Therefore, I will allow what has been claimed as the difference between the allowance and the claim less \$1,250 for the installation of the glass washer. The difference in the amount claimed was \$12,947. Therefore subtracting from that amount the sum of \$1,250 in relation to the variation of the glass washer, I will allow the builder a variation in relation to hydraulics in the sum of \$11,697 plus GST.

220 In relation to this allowance, on the basis that the assessment of Tectura is necessarily unreasonable and not fair because it has not taken into account (save and except for the glass washer), the matters which I have referred to above. Further, if I did not allow the sums it would cause hardship to the builder who has expended extra labour and materials to perform the variation. The owner has had the benefit of the variation.

221 I do not believe that Tectura should be responsible for the payment of this sum, as the benefit fell on the owner. If Tectura had reasonably and fairly performed its job, its duty, the owner would have been required to pay. Therefore I find that the owner should pay the builder the sum of \$11,697 plus GST in respect of the hydraulics variation.

Variation X75D Reduction in Light Fittings

222 The parties dispute the amount of credit that should be given to the owner for the deletions of electrical fittings. The builder claims that a credit should be given to the owner in the sum of \$4,717 for light fittings whereas the superintendent has allowed the sum of \$9,499. Apparently the superintendent obtained the figure of \$9,499 as a result of enquiries made on the basis that the sum of \$38 + GST should be allowed for the 98 D1 downlights. Included in the superintendent's figures is also the cost of labour. The builder says that Tectura did not take into account:

- (a) 15% restocking fee for the return of the lights;
- (b) roughing for the cable and light fittings that had been formed before the variation was ordered; and
- (c) the electrical contractor returned to the site to terminate and make safe cable already installed.

223 There also appears to be a dispute as to the actual value of the light fittings. The builder has supported its claim by documents from the supplier of the light fittings and the "tastic" heaters being, "Living Electrics", which are to be found in the Tribunal Book 2209, 2201 – 2206.

224 The builder is also relying on a claim pursuant to s.37 and s.38 of the Act in relation to this matter.

225 Tectura, arrived at the credit to the Republic for the deletion of the light fittings and tastic heaters, by "making enquiries". As a result of those enquiries, the \$10,448.90 inclusive of GST was allowed as a credit to the owner.

- 226 On the other hand, the builder had a specific quote for the supply of units and the labour with a total sum of \$4,717.40 (see [TB1010-1016]).
- 227 There were no notes produced by Tectura, in relation to the enquiries which were made as to the costs of the electrical credits. Given all these circumstances, and matters which I have referred to above, I prefer the evidence of the builder to that of Tectura. The builder had a specific quote for the cost of the materials involved in the electrical credits, and I have no reason to believe that quote was anything but accurate.
- 228 Therefore, I find that the credit allowed to the owner was in excess by the sum of \$4,782 being the difference between the allowance of the superintendent of \$9,199 and the amount of the builder's assessment of \$4,417. Therefore, I will allow the builder a relief on what has been deducted of \$4,782. In my view, the superintendent has not acted reasonably and fairly as it did not take account sufficiently or as all the quotation supplied by the builder.
- 229 Having found, that the true cost of the variation of the light fittings was that stated by the builder, in my view it should be the owner and not Tectura who is responsible for the same. Further, having accepted the evidence of the builder in regard to the cost of variations and rejected the cost suggested by Tectura, it did not act fairly and reasonably, in assessing the costs of the electrical credits.

Variation X077D Claim for Increased Cost of Supplying and Labour Relating to Stonework for the Building

- 230 The dispute in relation to the stonework, involves the most money involved in the disputed variations. The builder claims the sum of \$151,980 while the superintendent has not allowed any sum for increased price of the stone. The specifications required the stonework should be supplied and laid by a selected sub-contractor called "Atilla Natural Stone Tiles Pty Ltd" ('Atilla').
- 231 On 18 November 2009, Atilla provided the builder with the quotation for the sum of \$378,580.58 (inclusive of GST) for the supply and installation of stone.
- 232 On 26 November 2009, the builder tendered for the project including the tile and stonework incorporating the price from Atilla. On 10 December 2009, Atilla reduced its quotation for the supply and installation of stone to the amount of \$345,000. This reduced quotation was after Mr Baycan from Tectura had spoken to Atilla about having the stone cut in a different way. It is also noted, Atilla's quotation contained three exclusions, namely water coating membrane, screed and flood protection. The cost saving in the sum of \$30,525 was recognised by the superintendent in variation X145 (TB2227).
- 233 On or about June 2010, the builder provided a sub-contract form to Atilla which included the price and scope of the work provided to Tectura on 10

December 2009. On 29 December 2011, the builder sent an email to Attila asking it to sign the sub-contract. Attila refused to sign the sub-contract.

- 234 As a result of Attila refusing to sign the sub-contract, the builder was no longer able to proceed with the selected sub-contractor. Therefore a change in the stonework sub-contractor followed because Attila would no longer supply and install the stone as specified in Clause 128 of the specifications.
- 235 On 21 October 2011, the builder made a variation request number X077 (TB2225) as a result of a quotation it had obtained from “DeFazio Commercial Tiling” (‘DeFazio’). The quotation from DeFazio was \$490,000 inclusive of GST.
- 236 It is alleged by the owner and Tectura, that the builder should have ‘locked in’ the quotation of 10 December 2009 from Attila, at an earlier period of time and as a result, there would not have been a problem of obtaining a different sub-contractor and an increase in price. It is further alleged by Tectura, that the DeFazio quotation did not exclude screed, waterproofing and floor protection. The owner and Tectura further say that the provision of stone is a lump sum, and any increase in price should not be allowed in the fixed lump sum contract or under amendments to clause 35 of the contract.
- 237 The builder submitted, that Tectura breached clause 23 of the contract by not acting fairly or arriving at a reasonable measure of value of work and quantities. The builder also relies on s.38(1) of the Act.
- 238 When Mr Baycan, principal of Tectura, was giving evidence about this variation and other matters, he refused to accept matters that were put to him even when it was obvious. For example, he would not admit that he should have designed the tiling so the tiles could be placed under the panels before rebate (see transcript p1882 ff) or that it was not practicable to install the tiles without a rebate.
- 239 The background in relation to the supply and installation of the stone work for the building is set out above.
- 240 It seems clear and I find, that on 3 June 2010 the builder accepted the Attila’s quotation, which had been given to Mr Baycan 10 December 2009. However, there is no explanation whatsoever as to why Attila did not accept the contract which was offered by the builder. There were suggestions by the owner and Tectura, that the builder was being difficult. However, these suggestions appear to have no basis in any evidence that was put before me. It was submitted by both Mr Andrew and Mr Forrest that the builder should have accepted Attila’s quotation, in January 2010 and, if it had done so, Attila would have agreed to a contract and the contract would have been “locked in”. They therefore said, that the increased price was the fault of the builder for not acting earlier in securing the contract with Attila. However, apart from evidence by Mr Mackie, principal of the builder, that he had a cordial visit to Attila in January 2010,

there is no evidence that Attila would have accepted a contract in January 2010.

241 Attila was the nominated contractor by Tectura, and there was obviously a relationship between Attila and the Tectura. However, there was no explanation offered or evidence called as to why Attila refused the builder's contract. It would be quite wrong of me to assume that Attila, who refused the builder's contract in June 2010, but would have accepted the same in the preceding January.

242 I also note, that on 10 June 2011, Mr Sale, from the builder, sent Mr Gebbie advice that Attila would not honour the quote in the tendered document ([TB6368]). However, Tectura did nothing about this despite having previously contacted Attila and nominated them as the supplier and layer of the stone. As Mr Twigg QC stated, "Mr Baycan walked away from the situation" (see [138] of the builder's closing submissions).

243 It is also submitted, by Tectura, that the work was not varied because it was the same stone work laid by a different person.

244 The difficulty with this submission is that it "flies in the face" of Clause 10.2 of the Contract. That clause reads as follows:

If contract includes selected Sub-contract Work, the Contractor shall Sub-contract the Selected Sub-contract Work to a Selected Sub-Contractor. If the tender documents specify the terms and conditions upon which the Sub-contract is to be entered into, the Sub-contract shall include those terms and conditions.

245 Thus, in order to avoid the difficulties imposed by Clause 10.2, it was necessary for the contract to be varied which it in fact was. That is, the contract was varied by allowing DeFazio to perform the work.

246 Tectura said, that the amount claimed by the builder is wrong because the quotation from DeFazio, included screeds, waterproofing and floor protection whereas the quotation from Attila did not.

247 The inference in relation to the inclusion in the DeFazio work of screed, waterproofing and floor protection by the owner, and Tectura does not appear to have any basis in the evidence that was put before me. In fact, the quotation from DeFazio expressly excluded waterproofing. Further, it is noted that other third parties provided the works of screeds, waterproofing and floor protection (see [TB2229]). When it was put to Mr Gebbie, from Tectura, by Mr Twigg QC, at transcript (2312) at [12] that De Fazio's quotation had excluded waterproofing, Mr Gebbie could not identify an item or anything from which to infer that screeds and floor protection were part of the provisions of the supply and installation as quoted by Mr DeFazio (see transcript (2314) at [21]). Mr Gebbie stated that he did not know who supplied the screeds, waterproof membrane and floor protection (see transcript (2316) at [27]).

248 Thus, it is abundantly clear that the reason for the superintendent rejecting the variation, that is because Mr DeFazio's quotation included screeds, waterproofing and floor protection was factually incorrect. Therefore, the superintendent did not act reasonably and fairly in rejecting the variation. To reject the variation would cause hardship to the builder because it has paid the extra money. The owner had had the benefit of the variation and it would be unfair for it not to pay for the same.

249 Thus I find for the above reasons, that the builder should be paid the sum of \$151,980 by the owner. That sum represents the extra cost that was involved as the result of a variation in the builder being required to engage Mr DeFazio to supply and lay the stone work.

250 In dealing with this variation, at paragraphs [213] – [218], Mr Andrew and Mr Phillpott did not make any submissions that Tectura should be liable to the owners for the extra sum in relation to the stone caused by having to contract Mr DeFazio. However, I note, that at paragraph [289] of their submissions, they refer to paragraph [J] of the architect's obligations which states:

The architect must:

- (a) provide services described in this agreement with the skill and professionalism of a reasonably competent architect (see [TB4492] Clause J(A)).

251 I also note, that Mr Baycan, did not seek assurances or guarantee from Attila with respect to the quoted price (see transcript 1701 at [14]). In giving evidence, Mr Baycan asserted that it was up to the contractor to secure the price as stipulated in the Contract.

252 While it would have been prudent of Mr Baycan to secure the price offered by Attila, I do not believe that he was obliged to do so. Given those circumstances, I will not make an allowance for Tectura to pay the extra cost of the stone work to the owner. Thus I find, that Tectura breached Clause 33.23 of the Contract by not acting fairly or arriving at a reasonable measure of value of work and quantities.

Variation X81D Curtains

253 The documents including the initial contact provided that the builder should supply and install curtains as specified. It will be recalled, that the builder, at the time of delivering its tender gave a letter excluding inter alia curtains to windows. However, the owner and Tectura were unhappy with this variation and as a result a further letter was delivered, deleting the exclusions from the builder's tender.

254 At the commencement of the proceeding, the builder claimed a variation in respect of the curtains relating to lining of \$14,756.50 and the superintendent allowed \$11,731.50 being a difference of \$3,025. However, during the builder's opening, Mr Twigg stated that the claim that the builder makes for the cost of the curtains is, '\$28,490 + a margin + GST'. That

being the total cost of the curtains. Although no formal leave was given to the builder to amend the claim the hearing proceeded on the basis the claim was amended.

- 255 Both the owner and Tectura say that the claim for the total cost of the curtains is not a valid claim because the builder accepted that he would have to supply the curtains as part of its contract sum. Further, it is said that making an additional claim at such a late time contradicts the provision of clause 42.7 of the contract. Clause 42.7 provides that:

Within 28 days after the expiration of the defects liability period, or where there is more than one, the last to expire, the contractors shall lodge with the superintendent a final payment claim and endorse it 'final payment claim... after the expiration of the period for lodging a final payment claim, any claim which the contractor could have made against the principal, and has not been made shall be barred.'

- 256 Alternatively the builder makes the claim for the curtains both pursuant to the contract and pursuant to s.38(1) of the Act. In relation to the contract, the builder says that the superintendent failed to act fairly pursuant to clause 23 of the contract in properly assessing the cost of the lining.

- 257 The builder has made a claim of \$18,357.90 for additional works, whereas the superintendent has only allowed \$5,031.80 making a difference of \$13,326.10. The variation arose because the original design of the curtains required a wave design. It changed to a 'pinched pleat fabric'. It is alleged by the owner and Tectura that the curtains to be supplied and installed by the builder put up as part of the original scope of works were nominated in the specifications.

- 258 Mr Twigg QC submitted, that the second letter delivered at the meeting of the 26 November 2009, which included the curtains in the tender price, did not form part of the Contract because at the time the letter was delivered, the tender was closed.

- 259 The evidence of both Mr Gebbie and Mr Baycan is that Mr Mackie had said at the meeting of 26 November 2009 that Mackie had made an allowance in its price of \$100 per metre for curtain fabric. Mr Twigg QC submitted at [156] of his closing submissions:

The evidence of this conversation (at the meeting of 26 November 2009) and the note from Mr Gebbie is parole evidence, and it is not admissible to contract him. Further these negotiations reflect the subjective intent of the parties and do not provide the matrix of facts against which the contract is to be construed.

- 260 Mr Twigg QC placed considerable emphasis on the fact that the second letter was not produced until after the tender was closed. While that may be so, it is clear that the second letter was produced prior to the Contract being executed, and I find on the objective evidence that the parties believed, that the second letter would in fact be part of the Contract. In my view, the second letter is not parole evidence as submitted by Mr Twigg, because it is

a document that forms part of the Contract. There is a discrepancy between the first and second letters which requires explanation. That type of explanation is permitted pursuant to an exception to the parole evidence rule. The explanation was given by Mr Baycan and Mr Gebbie. That is, the tender would not be accepted unless it was a conforming tender. I accept that explanation and I will find that the second letter was in fact part of the Contract. Therefore, I find that the curtains were included in the Contract.

- 261 The next question that I must determine is whether the allowance made by Tectura, for the variation in the curtains, was appropriate. Mr Twigg QC has not submitted that the variation was inappropriate per se; however, he stated that the Contract sum did not include curtain lining and therefore he submitted that the lining was valued at \$3,025 being \$2,750 + 10% margin. In my view, the term “curtains” is an all inclusive term, which includes material making up the curtain and the lining. Lining usually goes with the production of the curtains. The fact that the “liner” was not specifically included in the specifications, in my view does not take the matter any further. High quality curtains, which clearly these were, would have to be lined. Further, I am not satisfied that the change of design from “wave” to “pinch pleat” incurred extra cost.
- 262 Therefore, I reject the claimed variation by the builder in respect of the curtains.

Variation X103D Additional Structural Works

- 263 The builder claims that the plans did not show details for attachment of the roof to the building. (See TB1519). The builder referred to TB1466 and the sectional details required a connection between the precast panel and the roof beam which is RB4. In order to make that connection, 64 brackets were required, which is the basis of the claim. The builder claims that the contract drawings (see TB1519) showed no detail for the connection of the concrete panels to the roof brackets holding the roof beam. The superintendent issued directions in S1 which are to be found in TB 2334 and 2345.
- 264 Further, this claim also involves the length of a laminated LVL beam to the external fascia to hold the gutter, which was not specified in the roof plan.
- 265 As a result of these matters, there appear to be three items in dispute:
- The supply and installation of 12 mm thick angles to the panels;
 - The 64 brackets (which I have already mentioned); and
 - The laminated LVL beam to external fascia beams.
- 266 Tectura says, that the cause of these items having to be supplied was that the panels arrived on site without ferrules and so something had to be done to enable the two panels to be connected to other nearby panels. Further, spandrel panels which required connection plates, arrived on site without

connection plates so angles were introduced to overcome the deficiency. It is said by Tectura that the 64 angle brackets were only necessary because the builder failed to manufacture the external panels for the roof with cast-in plates as originally drawn.

- 267 The builder makes the claim, based on the superintendent's contract variation number 089 dated 1 February 2012 stating, '*Contractor is authorised to carry out the following variations to the contract*' and as a result the three items that I have referred to were supplied by the builder. This claim is made pursuant to both the contract and the Act.
- 268 It is noted, that in relation to these additional structural works the builder claimed \$18,357.90 while Tectura allowed \$4,031.80 making a difference of \$13,326.10 plus GST which is in dispute. The variations occurred as a result of Tectura's instructions SI 77 [TB4709], SI 81 [TB6343], SI 82 [TB6350], SI 87 [TB6354] and SI 88 [TB6363]. The dispute in relation to this variation concerns a number of items.
- 269 In relation to Item 6, the builder supplied and installed 12mm thick angles to panels P20 and P22 (including chemsets and hard-rammed mortar due to steel beams located in the way) - \$815 plus GST (SI 77).
- 270 The contract drawings did not describe any attachment of the panels where the floor beam was located behind the panel. The structural engineer, in his sketch, identified the connection between the panel and the floor to overcome the missing detail (see [TB4711]). At [TB5788] at [2100] in his statement, Mr Baycan said words to the effect that "ferrules were not installed, and the work was defective and the design was to overcome the defect".
- 271 The difficulty with this assertion is that the ferrules did not provide a connection to the beam. It was not a result of the failure of the ferrules to provide a connection to the beam that a redesign became necessary in order to overcome the defect. Thus I find, that this particular problem was not caused by the builder, but rather by the original design and an extra expenditure by the builder in the sum of \$815 plus GST became necessary.
- 272 Item 9 concerns the supply and installation by the builder of 64 brackets for additional fixing to the top external panels because it is alleged by the builder that there was no fixing details in the drawing for the connection to the top of the external panels and RB4. Therefore, SI 77 was issued so ferrules could be installed in the panels to connect to the RB4 (roof beam).
- 273 Both Mr Baycan at transcript [1853] – [1854], and Mr Spencer, the engineer, at transcript [2115] and [2116], stated that it was relatively easy to install external panels by lifting the same over the starter bars and under the outriggers on an angle. However, Mr Spencer, the engineer, stated that it was not good practice to lift panels over starter bars and under outriggers on an angle.

- 274 Mr Baycan, in spite of not being an engineer, was not inclined to make any concessions at all. Instead, he gave lengthy answers in cross-examination as to why it was in his view, “incredibly easy” to construct the external panels in this manner (see transcript [1853]).
- 275 For reasons which I have stated in the preceding paragraph, I do not accept Mr Baycan’s evidence in this regard. While it may be possible, to install the panels in the way described above, in my view it was sufficiently difficult as to be impractical that such a method was not good building practice.
- 276 I do not accept, what Tectura wrote in the certificate [TB5812] that:
- The angle brackets were supplied because Mackie had failed to manufacture the external panels for the roof with cast in plates as originally drawn or in accordance with the alternative design as it had been requested in its email correspondence in October 2010...
- 277 As a result, of the plans not being drawn in a practical manner, for the design of the brackets to connect the RB4, the expenditure of \$7,392 in relation to the 64 angle brackets for fixing to the top of the external panels became necessary.
- 278 Item 10 concerned the supply and installation of the 60mm x 240 x 45 laminated LVL beams to support the roof rafters. The architectural drawings, showed that the roof rafters were to be supported by a tile batten ([TB1509] – PCA-CD-08-02/1]). In Mr Baycan’s supplementary statement ([TB5812.28] at [159]), he referred to the laminated beam showing drawing PCA-CD-13-07, which was in fact a reference to the roof rafter. This roof rafter is not the same dimensions as the support beam and it runs in a different direction. I can only infer from this matter that Mr Baycan was very confused in his evidence.
- 279 As a consequence, I find that the supply and installation of the laminated LVL beam to support the roof rafters was necessary.
- 280 It was submitted on behalf of the owner and Tectura, that the claim variation was submitted 9 months out of time on 16 November 2011. It is therefore said, that pursuant to the terms of the Contract, it was outside the 28 days required by the Contract. However, in my view, it would be unfair and unreasonable, for the variation to not be assessed because it was out of time. Neither the owner nor Tectura are in any way prejudiced by the request coming out of time. I am satisfied, that in the circumstances of this variation and the request therefor, the builder has complied with s 38 of the Act and in particular, pursuant to s 38(6)(b) the builder would suffer a significant hardship and it would not be unfair to the building owner to recover the money. The reason I make these findings, is that the provision of these items was necessary in order to complete the building. The builder was required to expend the extra money for these items, because they were not in the plans. Further, I do not believe that it would be unfair to the owner to order the recovery of these monies both because the work was

necessary and because of the order which I intend to make, allowing the owner to recover the money for this variation from Tectura. When assessing the variation I infer that Tectura failed to take into account matters I referred to herein.

- 281 This variation was brought about by deficiencies in the plan drawn by Tectura. It was not brought about by any wrongdoing of the owner per se. Therefore, in my view, I will provide that the owner pay the builder \$19,677.90 + GST but the owner can recover this amount from the architect/superintendent. To do otherwise, would be unfair and unreasonable.

Variation X119D Three Flues to the Basement for Hot Water Service

- 282 The builder claimed for extra flues for the hot water service, the sum of \$13,946.90 but Tectura only allowed \$9,622.80 making a difference of \$4,324.10. As a result of the suspended slab being created on the west side of the building, Tectura decided as a variation, it was possible to construct three flues from the three hot water services to the west fence of the property whereas before, the vent would have been somewhere near the front door. In order to fulfil the re-design of the position of the flues for the hot water systems, drilling was required through and coring through the panel wall of the west side of the building at the basement and coring through the planter boxes and providing a sophisticated flue system on the west side of the building. While Tectura allowed a substantial cost of this extra work, the builder's claim was reduced because the superintendent contended that a single flue was already provided within the design. The builder submitted, that there was no flue specified in the contract with respect to the provisions of the three hot water services.
- 283 These items are claimed both pursuant to the contract and pursuant to the Act.
- 284 The reasons for difference of the sum of the variation claimed by the builder and allowed by Tectura (\$4,324.10) is because Tectura did not include the following sums in relation to the builder's variation request:
- (a) The builder claimed 3 x flue adaptors in the sum of \$314 which Tectura said were not additional works;
 - (b) The builder claimed \$768 for the supply of 6 x 90° bends whereas Tectura assessed that 3 such bends would have been required to complete the original installation and therefore reduced the claim by half, i.e. 50% of \$768 was allowed;
 - (c) The builder claimed \$3,381 for the supply of 21 x lengths of 900mm flue whereas Tectura assessed that 6 lengths would have been required to complete the original installation and so 15 lengths was approved in the sum of \$2,415;

- (d) The builder claimed \$450 for the supply of 18 x brackets whereas Tectura was of the view that 6 brackets were required to completed the original installation and therefore only certified for \$150;
- (e) The builder claimed \$174 for 3 x condensate trap kits whereas Tectura did not allow any sum for this item as he believed the original was required for the installation in the specifications;
- (f) The builder claimed \$288 for the supply of 3 x flue adaptors whereas Tectura made no allowance on the basis that the same would have been required for the installation as required by the specifications;
- (g) The builder claimed \$384 for 3 x condensate drains whereas Tectura made a nil allowance believing that the same were required for installation in the specifications;
- (h) The builder claimed \$3,000 for plumbing, labour, bill being 2 men @ 20 hours, whereas Tectura allowed \$2,100 believing that 12 hours would have been required for the original installation. This was based on the superintendent's experience;
- (i) The builder claimed \$600 for coring holes in the existing concrete; however, Tectura only allowed \$450 because 3 holes were required in accordance with its variation design drawings [TB1527]; as referred to in Tectura's instruction no. 197 dated 25 November 2011 [TB2361]; and
- (j) The builder claimed \$480 for clean up where Tectura allowed \$380 as \$100 would have been required for the original installation based on Tectura's experience and judgment.

285 In relation to Tectura's interpretation of the Contract documents, there appears to have been some error made by it. This error can be seen if one compares, the "new works" as described in the superintendent's sketch at [TB2361] with the original Contract documents. The details provided in the sketch were after the Contract and, represent a scope of works not included by the Contract.

286 Further, Tectura rejected the supply of 3 x flue adaptors, 6 x 90° bends, 18 x brackets on the basis that some of these items were required in the original Contract.

287 In my view, Tectura's reasons for reducing the amounts claimed by the builder that the original installation required some of these items in the Contract documents were wrong.

288 Thus I find the superintendent had no evidential basis upon which to assert the matters and facts in its assessment. That is, the determination of the superintendent has no evidential support.

289 While this claim was made late, the builder has complied with the provisions of s.38 of the Act, and I am satisfied, that there are exceptional circumstances and the builder would suffer exceptional hardship if the

variation was not allowed as the builder has paid for these extra items which it has claimed, and the owner has had the benefit of the same. There was no allegation that the change occurred as a result of any wrongdoing by the builder.

- 290 Further, I am satisfied pursuant to s.38(b)(ii) of the Act that it would be unfair to the builder not to be able to recover the sums which it has claimed as the variation. This unfairness is because the owner will suffer no hardship as a result of the late claim, but the builder would as he has expended his work and money.
- 291 I am also satisfied that the certificate of Tectura was unreasonable and not fair. It did not take into consideration the original Contract documents and compare those properly with the variation that was required. Given those circumstances, I have formed the view that the builder should be allowed the sum of \$4,324.10 plus GST, being the difference between what it claimed of \$13,946.90 and what it was allowed of \$9,622.80.
- 292 I do not believe that Tectura should be responsible for this sum. This was brought about by a variation that was notified to the owners, which improved the building works. The owners did not object. Given those circumstances, I will order the owner to pay the sum of \$4,324.10 plus GST to the builder in respect of the variation concerning the flues.

Variation X139D (Angle Brackets for Suspended Slab)

- 293 The builder has claimed the sum of \$918.50 and the superintendent has disallowed this total sum in respect of the angle brackets for the suspended slab.
- 294 When the suspended slab on the western side of the building was formed, the form work had to be held by angle brackets. The builder claimed as one of its costs the angle brackets for the form work and the superintendent disallowed such costs on the basis that it was analogous to propping for the erection of concrete panels.
- 295 The superintendent, took the view that this particular variation and variation 8084, both dated 8 September, were the same variation claim and both referred to the superintendent's instruction number 153.
- 296 The builder's claim is made both pursuant to clause 23 of the contract and pursuant to s.38(1) of the Act.
- 297 Mr Baycan gave evidence, that the installation of the angle brackets, was to do with the propping up of concrete panels. He stated this was included in the scope of works under the building contract and therefore not included in the variations to the building contract.
- 298 Given those circumstances, in this situation I will accept Mr Baycan's evidence in preference to Mr Beattie who said it was for the suspended slab. Therefore no allowance will be made for this variation.

Variation X140D Stone Cladding to the Wall around the Reflection Pool

- 299 The builder claims the sum of \$1,941.50 and Tectura has made no allowance for this item whatsoever. This item refers to stone cladding to the wall around the Reflection Pool. The builder claims that the design specified one feature wall, but it was instructed to provide stone to another wall.
- 300 Tectura claims that the builder claimed the cost by way of variation of supplying and installing stone tiles to the internal face of the wall after the work the subject of the variation had already been performed. Further the superintendent says that the area around the Reflection Pool was to be clad in stone and tiles and it referred to the architect's drawings at TB1478 and the specifications for tiling and stonework. Further, this is also shown on the drawing on the specifications at TB5118.
- 301 Contrary to Tectura's submissions, the builder says that the contract documentation (TB1072) shows the feature wall is on the eastern side of the Reflection Pool but there is no feature wall specified on the southern side.
- 302 The background in relation to the stone cladding to the wall around the Reflection Pool is set out above.
- 303 When one looks at the drawings, the area around the Reflection Pool was to be clad in stone and tiles as referred to in drawing PCA-CD-01-02 [TB1478] and in the specifications at Tiling Stone Work 128.
- 304 The difficulty with the builder's claim in relation to this work is that Mr Beattie's evidence, who attempted to substantiate the variation for the builder, focused on the drawing and not the specifications and the language used in the specifications where the conjunctive 'and' was used in conjunction with the expression 'and not limited to'.
- 305 Therefore, in my view, the builder is not entitled to the variation claimed in respect of the stone cladding to the Reflection Pool.

Variation X144 Balustrade

- 306 Tectura claimed a variation in favour of the owner in the sum of \$10,602 while the builder claimed the variation to be \$8,580 being a difference of \$2,222. This variation relates to the amount of the credit that is due to the owner as the result of a change of plan relating to the decorative balustrade inside the building. The original specifications required the balustrade be made from wrought iron. However that was changed by way of a variation to tensile steel which was laser cut.
- 307 It is clear, that the balustrade required 7.6 lineal metres of wrought iron. However, Tectura allowed the sum of \$1,395 per lineal metre while the builder allowed the sum of \$1,144 per lineal metre.
- 308 Tectura requested a stair contractor to provide a quotation for the balustrade as originally designed. As a result, a quotation from Colour Earth Design was filed at TB4799 – 4809 for the cost of the original stair balustrade. It

was on this basis, that the superintendent calculated the value of the variation. Further, the superintendent submitted, that the trade supply rates for painted mild steel were \$450 per lineal metre and that was a total of \$3,420. This estimate was based on a verbal advice from Eric Jones Stair Building to Mr Baycan.

- 309 Thus the dispute between the parties is the cost of the wrought iron as compared with the steel that was supplied.
- 310 Again, the builder's claim is made pursuant to clause 23 of the contract and alternatively pursuant to s.38(1) of the Act.
- 311 In relation to the balustrade, Tectura based its information on verbal advice from "Eric Jones Stair Building".
- 312 Contrary to the information supplied, Mr Beattie, an experienced estimator, formed the opinion that there was no price difference when proper allowance was made for the cost of work involved in the balustrade as varied (see [TB0948]).
- 313 There were no contemporaneous notes in relation to the verbal quote from "Eric Jones Stair Building", and the people from that organisation were not called to give evidence.
- 314 Given those circumstances, I accept the evidence of Mr Beattie that there was no price difference between the work contracted for and the work in the variation.
- 315 In my view, Tectura has assessed the variation in an unfair manner that is not reasonable. Tectura, should not have assessed the variation, on the evidence before it in the way it did. Given those circumstances, in my view I will not allow the variation as assessed by the superintendent in favour of the owner and therefore I will credit the builder in the sum of \$2,222.
- 316 I do not believe that Tectura should be responsible for the reduction in the amount credited by the superintendent to the owner in relation to the balustrade. The variation was sent to the owner and no objection was made. While the superintendent may have got it wrong, that does not mean, that the superintendent is responsible for the mistake. Thus there will be a credit to the builder in the sum of \$2,222 as that was the amount that was over-credited against the builder.

Variation in X145D Relating to Marble Stone

- 317 As referred to earlier, there was a variation in the cost of the marble stone which was to be supplied by Atilla. (see variation 077D). As will be recalled, there was a variation in the sum of \$36,049 between the quotation obtained from Atilla by the builder in November 2009 and the quotation obtained by the superintendent on 10 December 2009. As a result of the difference in that quotation, the superintendent believed that the owner was entitled to a cost saving of \$30,525. However, the builder says that Atilla

did not supply the stone and that the superintendent still deducted the same from the contract price.

- 318 The valuation of this variation is contained Contract variation no. 004 dated 10 May 2010 [TB2403]. It is the difference between the price quoted by Attila to the builder in the sum of \$378,000 and the price quoted by Attila to the architect/superintendent of \$345,000. I have already referred to the increased price of the stone in variation X077D, and made findings in relation to that matter. It is clear from my findings there that Attila did not accept a contract based upon the quotation it gave to Tectura. Given those circumstances, it is not legitimate to reduce the builder's contract price by \$30,527.80.
- 319 In my view, in reducing the contractor's price by the sum referred to above, Tectura's action was unreasonable and unfair given that Attila would not contract with the builder in June 2010. Thus there will be a credit back to the builder of \$30,527.80. For the reason I stated when dealing with variation X077D, it is not appropriate for Tectura to reimburse the owner this sum.

Variation X146D Precast Mould Savings

- 320 Tectura allowed a credit to the owner in the sum of \$36,049 as a result of the precast moulds for the concrete panels outside the building, to be made from polystyrene rather than rubber, supplied by Reckli as specified in the contract. The builder states that the polystyrene moulds that were used were necessary because it expedited the production of the different types of decorative panels that were required and that the panels could be poured in one length of 9.1 metres instead of 2 different panels of no more than 5 metres and thus there would be no join lines.
- 321 Tectura submits, that the Reckli rubber moulds could have been made so that the panels could have been poured in one length as required and have in the past been made as such.
- 322 It is noted, that the panels were for precast concrete were in a decorative form in four types of wall panels. The panels would be a three-dimensional feature, so a decorative pattern was to be cast into the wall panels. For each wall type, the contract specified a Reckli Australia Four Liner. Panel type No. 1 was the 'Columbia' panel. The contract provided for the panels to be supplied by 'Reckli Australia' or similar approved by the superintendent. The polystyrene mould that was used and which the builder ordered was generated by a company called Industrial Tiling Services who provided the mould to a precast concreter who was called 'Fota'.
- 323 The builder's position is that there was no cost saving between the rubber mould and the polystyrene mould for the decorative panels.
- 324 At TB 4812 there is a calculation as to the cost saving calculated by Tectura. This cost saving derives from a discussion which took place between Mr DiClemente of Tectura and Mr John Joveski from Reckli

Australia (TB2440). Apparently Mr Joveski advised Mr DiClemente that the foam liners cost 30% less than the price of the Reckli rubber moulds. The builder's contention that there was no cost saving by the use of the polystyrene moulds is based on the following:

- (c) The tender documents in the contract show that the builder specified an allowance of \$305,830 for precast concrete (TB1123);
- (d) The trade package which begins at TB1140 shows that:
 - viii Westkon offered \$467,000; and
 - ix CPC offered \$370,180.
(other pre-cast concrete contractors)
- (e) The builder engaged Fota Constructions Pty Ltd for the sub-contract sum of \$301,760 (TB2443);
- (f) When the builder substituted the Reckli moulds with the form moulds it enquired from Chris Fota of Fota Constructions as to whether there was a cost saving. Christ Fota advised Terry Cross, from the builder, that there was no cost saving (TB2405).
- (g) The builder relies on an email dated 16 September 2010 from Chris Fota of Fota Constructions Pty Ltd to Terry Cross – *no cost saving replacing Reckli 'Columbia' Mould* (TB2405).

325 Thus, the builder relies on clause 23 of the contract and the s.38(1) of the Act.

326 It is clear from Mr Joveski's evidence, that while Rekkli could have made the moulds in excess of 9 metres in length, in order to make that length the moulds would need to have been customised. It was not something that would have come directly out of the brochure which provided for a smaller standard length mould.

327 Mr Forrest, Counsel for Tectura, alleges at [473] of his submissions that the builder did not cross-examine Mr Baycan or Mr Gebbie with respect to the calculations of the cost-saving by Tectura concerning the use of polystyrene moulds rather than Rekkli rubber moulds.

328 However, it is noticeable that the only evidence which Tectura relied on in relation to this matter was a handwritten note on contract variation no. 40 (note). That note provided:

Discussions between Ben De Clemente and John Joveski from Rekkli on 29/1/2014:

John advised 'foam' lines cost 30% of the price of Rekkli Rubber Moulds

John advised 'Columbia' cost \$1,160/m² today cost \$900 in 2011

- 329 Neither the owner nor Tectura provided any evidence regarding the discussions with Mr Joveski referred to in the note. This is despite Mr Joveski having been called by Tectura to give evidence. Nor was any evidence called from Mr Joveski regarding the discussions referred to in the note. However, the email of 16 September 2010 from Fota makes it clear there is no cost saving.
- 330 Therefore I find, that neither the owner nor Tectura have provided to me any credible objective evidence to prove that the builder made a cost saving as calculated in the contract variation.
- 331 Bearing in mind that Mr Joveski was called to give evidence, I find it incredible, that he was not asked questions on this point. I do not believe it was appropriate, for Mr Twigg QC to remedy this failure by asking Mr Joveski questions about this in cross-examination. Therefore, pursuant to the principles of *Jones v Dunkel* (1950) 101 CLR 298, I infer that the evidence from Joveski on this point would not have assisted the case of Tectura or the owner, who had a chance to ask Mr Joveski questions on this matter. Therefore, in my view, the preferable course for me to take is to draw an inference in favour of the builder concerning this contract variation on the basis of the evidence that was tendered by the builder (see *Cadbury Schweppes Pty Ltd v Darrell Lea Chocolate Shops Pty Ltd* (No 4) [2006] FCA 446 at [50]). Therefore I will not allow this variation in favour of the owner. As a result, I must credit it back to the builder in the sum of \$36,049. In coming to this conclusion, I take into account that the superintendent did not act reasonably and fairly because it did not take into account matters I have referred to above. This is not an appropriate matter for making Tectura liable to the owner.

Citipower Pole X147

- 332 In relation to the Citipower works, there is a dispute as to the amount to be allowed to the owner. Tectura claims this should be an amount of \$60,000 allowed to the owner for electrical works which were not performed by the builder but performed by Citipower. On the other hand, the builder claims that only a sum of \$26,070 should be allowed. Thus there is a difference in the sum of \$33,930 as to which sum should be allowed to the owner.
- 333 The relocation of underground power was excluded from the contract. But, the contract drawings provided that a power pole which was identified had to be removed. The builder made an allowance of \$26,070 for the removal of that pole. However, Tectura asserted that the builder gave its estimate at a meeting before entering into the contract and said that its allowance was of \$60,000 and not \$26,070.
- 334 Tectura contends that at the time of the tender the builder made an allowance of \$60,000 for cable relocation which was actually done by Citipower.

- 335 Thus there is a dispute as to the nature of the work that was required in the original contract and the cost that should be allowed for the removal of the power pole and the placement of the wires underground.
- 336 Again, as with other variations, the builder claims that Tectura has breached clause 23 of the contract by not making proper calculations as to the value of the removal of the power pole.
- 337 It will be remembered in relation to the curtain variation that in the builder's initial tender documents it purported to exclude underground power works. I have already made findings in relation to the second letter and I will not repeat those findings.
- 338 In spite of the letters to which I have referred, it is clear from Mr Beattie's evidence (see [TB949]) that the builder claims only the sum of \$26,070 should be allowed to move the power pole from the street in front of the site.
- 339 There has been conflicting evidence as to whether Mr Mackie stated that the builder would make an allowance for the \$60,000 for the Citipower cable relocation. I prefer the evidence of Mr Mackie to others stating the contrary. Mr Mackie appeared to have a clear recollection of this matter. Although Mr Baycan and Mr Gebbie had contrary recollections, I took the view that Mr Mackie's evidence on this point was accurate. Further, my view is supported by the fact that \$60,000 for the removal of the power pole seems quite extraordinary.
- 340 There is no evidence of any allowance made in the Contract and it makes no sense that the builder included an allowance of \$60,000 in its tender to relocate the power pole when initially in its tender it expressly excluded the work from the Contract.
- 341 Given these circumstances, in my view the amount in relation to the deletion of the power pole should be \$26,070 which should have been credited to the owner and as a consequence there will be a credit back to Mackie of \$33,930 being the difference between \$60,000 and \$26,070.

Variation X148D Design for Power Poles

- 342 The builder has claimed the sum of \$4,930 for the design and relocation of power poles while Tectura has allowed the builder nil for this item. The builder claims that it paid the sum of \$3,930 to remove the power pole which was not in its contract. The cost of such variation is set out in a quotation provided by Citipower to the builder (see TB2456).
- 343 The owner and Tectura claim this is a new claim because it does not appear in those amounts that were originally claimed (prior to the proceeding) (see TB4916 no. 18). Further Tectura states that it did not undertake any assessment and has not issued a new variation in respect of that claim. That is, the claim was not made within 28 days as required by clause 42.7 of the contract.

344 I note, that the sole matter of defence that was brought forward in relation to this matter is the claim is barred by Clause 42.7 of the Contract. That Clause read as follows:

Within 28 days after the expiration of the defects liability period, where there is more than one, the last to expire the Contractor shall lodge with the Superintendent a final payment claim and endorse it 'final payment claim'.

345 As there was no final claim, Tectura did not assess this claim.

346 I note the cost of this variation is set out in the quote provided by Citipower to the builder [TB2456]. Mr Twigg QC, submitted, that the refusal of Tectura to assess this claim is not explained and cannot be justified.

347 It is apparent, that the builder has not lodged the claim for this variation with Tectura, and as such, it would be unreasonable to expect it to be assessed or for the builder to make a claim at this stage. Therefore I will not allow the same.

Undisputed variations X130, X131 and X136

348 These variations had been described by Mr Twigg as not disputed variations. X130 is in the sum of \$387, X131 is in the sum of \$3,805, and X136 is in the sum of \$2,099.

349 However, Tectura and the owner say these claims are barred by clause 42.7 of the contract to which I have referred before.

350 Thus the dispute in relation to these claims seems to be as to whether they are barred by the provisions of the contract.

351 Again, like the issue with the design of the power pole, the owner and the architect/superintendent both submit, that these claims are barred by reason of Clause 42.7 of the Contract. I will not repeat what I have said in relation to that matter regarding the design of the power pole except to say that the same principles apply in this situation and therefore I will not make an allowance.

EXTENSION OF TIME CLAIMS

Demolition of Gas Line EOT2A

352 Before demolition of the old house on the property took place, it was necessary for the existing gas line to be abolished. It is noted, that in the Construction Program Revision B scheduled demolition of the old residence was to commence on 22 February 2010. However, in Construction Program Revision D Scheduled demolition to commence on 2 February 2010.

353 Document RFI (Request for Information) 001 suggests that the builder did not discover the gas line until 14 January 2010 (see TB3187). As a result, there was a meeting on 14 January 2010 where Mr Cross from the builder prepared a note that stated, "*disconnection of the gas meter to be organised by the Turkish Consul*".

- 354 There is some dispute between the parties as to who was responsible for the abolishment of the gas line. The contract seems to refer to “*owner/builder to arrange abolishment*”. In any event, the builder claims that the owner was responsible for the abolishment of the gas line.
- 355 Mr Twigg submitted, that the builder planned to commence demolition of the old residence in January 2010 and as a result, of the gas line not being abolished until 23 February 2010, the builder was prevented from demolishing the building when planned and thus should be granted an EOT.
- 356 It is clear from document at TB3197, that the builder did not engage the demolisher until 19 January 2010. The owner says that should have been done earlier.
- 357 On 2 February 2010, the builder emailed Victoria Electricity for the abolishment of the gas supply (see TB3184). This was signed on behalf of the owner. Thus the actual dispute in relation to the abolishment of the gas line and the amount of days to be allowed whether it be 8 as allowed by the superintendent or 16 as claimed by the builder, will depend on whether I accept Revision B or Revision D as italicised by Mr Watson, the extension of time expert called by the builder. It is noted, that Mr Andrews, who prepared a report for the owner but was not called, in his report allowed no days for the abolition of the gas line pursuant to Revision B. However, Mr Watson, allowed 15 working days. It is clear, that Revision D was made after the event, but the builder says that at that time the delay was finished and could be assessed.
- 358 Mr Andrew and Mr Philpot submitted, that the builder was not ready to proceed with the demolition on 2 February 2010 and that the exclusion of the demolition in the gas line from the contract letter to Mr Meharras (the demolition sub-contractor) in December 2009, the builder should have known that it had a responsibility for the abolishment of the gas line. They further relied on construction programme Rev B which indicated that the demolition would not commence until 22 February 2010.
- 359 The owner also says that if the builder had believed that the abolition of the gas line was to be done by the owner then it could have been arranged for the owner to sign the form earlier. It is noted that the builder was provided with a form signed by a member of Consular staff on 29 January 2010, which Mr Andrew says appears to have been requested by Mr Cross of the builder (TB3184.4). The owner further notes, that the builder through Mr Cross signed the form and submitted it itself to the relevant authority (Victoria Electricity) on or around 2 February 2010 [TB3184.1].
- 360 It was also emphasised by Mr Andrew and Mr Philpot the position of the Rev B programme and that programme was they say the relevant programme because Rev D was made after the event.
- 361 As I have said earlier, the Rev B programme does not contradict the fact that the demolition contractor was ready to proceed with the work on 2 February 2010 and it could have proceeded with the work on that day

(TB1529-1530). The fact that the demolition contract was let to the demolisher earlier and that the gas line was excluded in my view does not alter the situation.

- 362 It is also important to note, that the gas line was owned by the supply authority Victoria Electricity and that was the only organisation that could abolish the gas line which they did on 23 February.
- 363 If the owner's submission is correct, then it is curious, that eight days extension of time were allowed to the builder for the abolition of the gas line. Mr Gebbie was asked on at least three occasion whether the extension of time granted by the superintendent for the delay was an error. He refused to accept that was the case.
- 364 Further it appears, that the demolisher could not demolish the old house, for occupational health and safety reasons. Namely, that the gas line was still a live and had not been abolished.
- 365 It is further noted, that on 14 January 2010, the builder discussed abolishing the gas line with Tectura and they were to undertake the task through the consul. It was not until late January, that the authority arrived from the consul to abolish the gas line. In spite of submissions by the owner, that Mr Cross was mistaken as to the arrangement for the owner to arrange for the abolition of the gas line, the evidence does not seem to support such a submission for the following reasons:
- 366 Georgie Stewart from Tectura contacted Connection Services to apply to have the gas line abolishment (see TB3184.3);
- 367 The application to abolish the gas line was first signed by a representative of the consul (TB3184.2);
- 368 Ms Stewart from Tectura asked Mr Cross from the builder to sign the form because the builder would receive the invoice for the abolition of the gas line (see email dated 2/2/10 TB3184.1).
- 369 The owner has invited me to draw the inference that as the builder through Mr Cross signed the form that the builder was responsible for the abolition of the gas line. However the evidence does not support this inference, particularly because the submission ignores the emails from Connection Services to Ms Stewart, from Tectura and from her to Mr Cross of the builder. The owner also submitted, that the demolition of the property of the house was complete by 13 April 2010. At [121(j)] of the owner's submissions, it produced a photo to show that demolition was completed on that date. However, at [TB0715-0717] Mr Watson produced photographs of the site on 15 to 20 May 2010, which appears from a different angle to the photo that the owner relies on. The photos produced by Mr Watson show that the wall of the building remains and is supporting the retaining wall that were later demolished and rebuilt. Therefore it is clear, that demolition was not complete until roundabout or after 20 May 2010.

- 370 The owner has also relied on the fact that Mr Mehearras was not called to give evidence and suggested that I should draw a Jones Dunkel inference in relation to the same. The difficulty with this submission is that it appears clear from the correspondence between the superintendent and the builder that it was the consul through the superintendent that had taken responsibility for the demolition of the gas line. By that I do not mean performing the work, what I mean is the gaining of permission for its abolition.
- 371 There is nothing to suggest that Mr Meharras would not have been ready to form the demolition on the 2 February 2017 had the gas line been abolished at that time. In fact all the evidence points the other way. In particular, the contract with the demolisher was signed on 19 January 2010. That, save for the difficulty of the abolition of the gas line would have given the demolisher plenty of time to commence the demolition of the house by 2 February 2010. The fact, that the demolisher when it gave its quote on 7 December 2009 it expressly excluded the abolition of the gas line does not take the matter any further. Because that was something that was to be arranged by the owner's consul and the superintendent. It is also worth noting that while criticism was made of the builder for not calling Mr Meharras, a similar criticism could be made of the owner for not calling the person responsible at the consul and for not calling Ms Stewart. I note that Ms Stewart was a former employee of Tectura.
- 372 Given these circumstances, I have taken the view that Tectura has acted unreasonably and unfairly in giving the builder an extension of time for eight days rather than the 15 days that were claimed. Mr Watson's evidence makes it clear that on the status programme which he has adopted, that 15 days is the appropriate figure. In those circumstances I will allow the builder an extension of time for 15 days which is a further seven days to the eight which is already allowed. That is seven days at a rate of \$1,500.00 per day which equals an allowance to the builder of \$10,500.00.
- 373 I have considered whether the superintendent should be responsible in relation to the extension of time which I have allowed in relation to the abolition of the gas line. While I place considerable weight, on the correspondence between Mr Cross and Ms Stewart, I nonetheless cannot be satisfied, that the holdup did not occur as a result of something happening in the office of the superintendent. Put a different way, the consulate may have held up giving authority to abolish the gas line. I heard no evidence from the consulate whatsoever. Therefore, I cannot be satisfied that the delay was caused by Tectura.

Delays to Demolition and Excavation and Foundation Works EOT 13, EOT 4 & EOT 14)

- 374 The second claim by the builder for an extension of time concerns works to the western boundary and to the removal of contaminated fill from the site. Items 13, 4 and 14 will be considered together, as Mr Watson gave

evidence that they concerned similar events. There were two issues. The first is the western boundary wall. There was no retaining works to be performed pursuant to the contract. However, when the builder started excavating the site on the western boundary there was no retaining wall. This deficiency was identified on 1 April 2010. At the same time, the site fill was identified as being contaminated. As a result, a design was prepared by the project engineer for a retaining wall. After a number of iterations, a design was completed on 28 April 2010. An instruction was also given in the middle of April that the builder obtain advice from a geo-technical consultant to determine whether the fill could be re-used. The geo-technical consultant provided advice on 6 or 7 May that it could not be used. At that time, the builder was given instruction to replace the contaminated fill with engineered fill. That work took place between 14 and 18 May 2010. After that work had been completed, work then commenced on the reconstruction of the western boundary wall. The builder maintains that as the site was confined only having an entrance from Toorak Road to the south, the building of the western boundary wall could not be done parallel with any other work concerned in the construction of the residence.

- 375 I have to some extent set out the background of this extension of time claim above. It should also be noted, that the builder claims a total 26 days extension of time No. 13 dated 26 September 2011 [TB2242].
- 376 It is noted, that Mr Watson was not cross-examined on the issues concerning these extensions of time.
- 377 The owner and Tectura rely on the fact that none of these extensions of time were claimed within the 28 days as required by the contract.
- 378 Mr Watson commenced his analysis of this issue by making it clear that there is no dispute that these works caused the delay that is claimed. He then went on to analyse why the delay was caused. In making this analysis, Mr Watson noted, that the walls on the western side of the property and the existing fill of the building footprint were incompetent. He noted, that delay commenced on 1 April 2010, when the builder sought advice from the superintendent for the design of the retaining wall an existing fell RFI19 [TB3206].
- 379 Shortly after the delay occurred, the builder and the superintendent inspected the retaining walls and the contaminated fill material [TB3205].
- 380 The advice from the engineer was that the boundary wall was not performing as a retaining wall, and an engineering design was required to build a new wall [TB3207-3210].
- 381 Until the western retaining wall was designed and built, parts of the existing building could not be removed, as they were holding up the existing retaining wall on the western wall of the site [TB3211-3212].

- 382 The design of the retaining wall to the western boundary resulted in a design change to the slab between the western boundary and the building. As a result, the engineers designed a suspended slab which I have already referred to in these reasons.
- 383 The engineer prepared the basement structure and retaining wall design drawing issued on 14 and 28 April 2010.
- 384 On or about 5 or 6 May 2010, the builder removed the contaminated fill covering a substantial portion of the site.
- 385 On 26 May 2010, the builder obtained advice from several Civil Technical Services that the existing fill material was unsuitable and controlled fill was to be replaced on this site [TB3250].
- 386 On 10 May 2010, the Superintendent provided SI 126 in response to the Civil Technical Service Report, approving the use of engineered fill.
- 387 From 14 May 2010 to 18 May 2010 the builder imported and placed crushed rock having removed contaminated fill beforehand on 5 and 6 May 2010, the fill covered a substantial portion of the site.
- 388 Due to the confines of the site, and the size of the excavator required to remove and replace the fill materials, progress of the construction of the basement works could not progress and the excavation of the basement was delayed until 19 May 2010 (see Watson Report [68] [TB0716]). The delay period was assessed by Mr Watson from 15 April 2010 to 19 May 2010 a period of 26 working days. It is noted, that the owner did not call Mr Andrews to contest this finding by Mr Watson.
- 389 While construction of the retaining wall did not have to be completed before construction of the basement commenced, Mr Watson observed, from photographs, due to the confines of the site that additional works for the construction of the retaining wall could not be done in parallel with the basement works without interruption (see Watson Report [68] [TB0716]).
- 390 The retaining wall was completed on 8 June 2010 delaying the construction of critical basement works for a further four days.
- 391 Thus I find, that the works in relation to EOT13, 4 and 14 were on the critical path and it was not practicable for any other work to be performed while this work was been carried out. Thus, the builder is entitled to an extension of time of 26 days.
- 392 The next question to ask is whether the reserve power in clause 35.5 of the contract should have been exercised by the superintendent, bearing in mind that the builder was outside the 28 day period when it applied for an extension of time. As to the question of the reserved power and the circumstances in which it should be exercised, the question is, whether in these circumstances it is just and equitable that the superintendent should have exercised the reserve power. In my view, it is clear on the evidence that the builder was entitled to the extension of time of 26 days should it

have applied within the proper timeframe. However, that does not exclude it from applying pursuant to the Reserve Power. I further note, that clause 23 of the contract, provides that the superintendent is required to act reasonably and fairly. In my view, given these circumstances a superintendent acting reasonably and fairly would come to the conclusion that it was just and equitable to grant an extension of time in these circumstances. These were matters completely beyond the builder's control and not within its knowledge and could not reasonably have been within his knowledge when he signed the contract. It would be quite wrong for the owner to gain an advantage in this situation, merely because the builder did not put the extension of time claim in in the timeframe provided by the contract.

393 Given these circumstances, I have come to the conclusion, that Tectura has not acted fairly and reasonably in the exercise of its discretion, by refusing to exercise its reserve power. Under these circumstances, I find that the builder is entitled to the extension of time of 26 days and I will make those orders accordingly. That is, an extension of time of 26 days x \$1,500.00 per day equalling \$39,000.00 should be credited in the builder's favour.

394 I do not believe, there is any responsibility in relation to Tectura in relation to causing this extension of time claim. It was a defect on the site and was unlikely to have been discovered by proper investigation. Therefore in relation to this matter there is no liability of Tectura.

Precast Panels – EOT 15, 16 & 17

395 The builder has claimed extension of time relating to the design and fabrication of the precast panels and the construction of the building:

- (h) EOT 15 – 26 working days are claimed from the 23 June 2010 to 2 August 2010 in respect of latent conditions, existing site conditions, resulted in structural changes and additional works including:
 - x SM7 lift shaft and dumb waiter change to *in situ* in lieu of precast concrete;
 - xi Basement wall upgrade from 120 mm to 150 mm thick;
 - xii Basement concrete slab and footing upgrade;
- (i) EOT 16 – 25 working days are claimed from 13 July 2010 to 30 July 2010 as a result of the delayed approval of structural steel shop drawings.
- (j) EOT 17 – 14 working days are claimed from 6 September 2010 to 24 September 2010 as a consequence of a revised structural steel lift shaft awaiting approval; and
- (k) Twenty-three working days are claimed as a consequence of delay to the manufacture of the 'Columbia' panels due to the unsuitability of the specified 'Columbia 2/169 Formliner Pattern'.

- 396 The contract drawings PCA-CD-07-01/3, “Proposed Elevations” shows the layout of the exterior precast panels for the building. The Precast Panel Schedule is set out in drawings PCA-CD-07-02 and PCA-CD-07-03. These drawings set out the dimensions and wall finish type for each of the panels (TB3285).
- 397 The external colour schedule – ECL1 to the specification sets out the Colour Selection for the precast panels (TB3288-3290).
- 398 Mr Twigg QC in his Opening set out a chronology of events in relation to these extensions of time claimed. That chronology is reproduced in Annexure B to this decision.
- 399 In regard to the lift panel delays, the builder claims that the actual delay to the project as a result of the changes was from 7 September 2010 until 26 October 2010 which is 32 working days and not the 14 days as originally claimed.
- 400 It is said that the builder made the claim over a year after the extension of time for the change of lift panels in the basement and therefore it is not permitted to claim such extension.
- 401 The builder says that Tectura acting fairly and reasonably would have allowed the extension of time and that an examination of the chronology makes it clear, that the delay was caused by the nature of the drawings and the delay in approving the shop drawings.
- 402 At [398] Mr Twigg makes the following points based on the chronology:
- 398 Based on the chronology above (see Annexure B):
 - (a) On 8 September 2010 the Superintendent provided revised structural drawings to the precast lift panels showing revised reinforcing details;
 - (b) Shop Drawings for Lift Panels LP1 to LP5 Revision 0 were submitted for review on 17 September 2010 and approved under SI 53 on 24 September 2010;
 - (c) Shop Drawings for Lift Panels LP1 and LP4 Revision 1 showing cast in plates for connections to the structural steel at Levels 1 and 2 were approved on 27 September 2010 under SI 55;
 - (d) External Precast Panels to the back of the lift and dumb waiter, PT51 and PT53 were approved on 27 September 2010 under SI 55, but the colour of the panels was not approved at this time, or by the time the lift panels were erected on about 26 and 27 October 2010;
- 403 As a result, Mr Twigg states that the “Andrews Status Programs” demonstrate an actual delay from 9 September to 26 October 2010: a period of 31 working days. Further, in relation to the design of the panels, Mr Twigg made the comment that the external precast panels were not approved until 29 November 2010. He stated that, based on the chronology there was a delay in finalization of the design of the external precast panels

and therefore the shop drawings of these panels until 29 November 2010. He further states at paragraphs [403] –[405] of his opening submissions as follows:

403. The Andrews Status Program for 4 October 2010 [TB768-906] shows Activity ID 59 “Erect Precast Panels” as critical and planned to be erected on 2 December 2010. This erection date was dependent on the progress of site activities, and its predecessor was Erect Steel L2 to roof (ID57). The completion of this program is 2 June 2011.

404. Andrews Program EOT23 [TB768-906] shows that based on a commencement of casting of precast panels following receipt of SI 68 on 29 November 2010, commencement of Erect Precast Panels was delayed to 17 February 2011, and the completion of the program was delayed to 26 July 2011.

405. This represents a delay of 34 working days.

404 It is further noted, that Tectura claim that in relation to the erection of the lift panels, the delay was also caused by the builder for its convenience, because it ordered a lift other than the “Superdomus Lift” that was specified (TB3641). However, the builder supplied a “Supermec Lift”. This had two effects on the design and construction of the lift panels. First, the lift shaft was required to be higher and secondly, the doors opened off-centre which required a redesign of the lift panels. It is said, as a consequence that the delay in the design and erection of the lift panels was caused by the builder. Again, Tectura says clause 40.1 is applicable and no extension of time should be granted.

405 However, I believe it is desirable that I should deal with each of these extensions of time claims separately. Mr Twigg at [291] of his closing submissions, summarised each of these claims:

Mackie was delayed when:

The superintendent laid the design for the change of the Lift shaft and dumbwaiter to in situ concrete construction in lieu from precast concrete;

The superintendent delayed completing its design of the panels, including provision for rebates to the panels, window size etc; and

The superintendent delayed in the design of the “Colombia” panels form work.

Lift Panel delay claim EOT 17

406 Mr Watson found, that the builder’s works were delayed from 9 September 2010 to the 26 October 2010 (see Watson Report [TBO733] at [107]) which is a period of 31 working days and not 14 days as originally claimed in extension an EOT No 17.

- 407 Mr Twigg in his submissions [293] to [301] deals in detail with how the design and engineering drawings caused the delay that is being claimed in regard to the Lift panels.
- 408 He then concludes, at [312] that “Tectura missed the point – it is not the fact of the work constituting a variation that delayed the work. It was the superintendent’s late design that caused the delay.” He further stated, “that delay of works was caused by the redesign of the western wall and the additional fill, meant that the precast works became critical only in September. Fota and Weitons in May 2010 did not delay precast work critically”.
- 409 While the works to the western retaining wall and the excavation works for the foundations clearly delayed the project as I have found, that does not mean, that the builder should not have been in a position so that the precast concrete contractor was engaged early, all the shop drawings were prepared and the designated lift (super mac) ready to be installed in September of 2010. I also note, that Mr Watson’s opinion did not take into account that the shop drawing design, manufacture and placement of the panels on site was all work that was included in the original scope of works. Mr Watson assumed that it was not.
- 410 Further, no evidence has been led by the builder to explain how and why the design, manufacture and placing of the lift panels took the 31 days. In fact, the design was provided by 3 August 2010 (TB3298/3295 – 330, TB5826.2 statement). It is unclear, why it took the building from 3 August 2010 until 17 September 2010 to produce the first shop drawings for lift panels for approval.
- 411 The evidence points strongly to the fact, that the basement lift panels needed to be designed in situ, to suit the convenience of the builder because he had not yet let precast concrete panel contract. The following points may be made in relation to the delay in letting the contract:
- (a) The original design of the walls for the dumbwaiter and lift in the basement required precast concrete panels;
 - (b) The builder’s budget breakdown showed that the quotes for the cost of the manufacture of the panels confirmed that two contractors it had to price for the works Westcon (\$467,600.00 and CPC \$370,180.00) were well in excess of the builder’s internal budget for the works (\$305,830.00);
 - (c) The builder then moved towards contracting another precast concrete contractor (Fota) and a shop drawer (Weitons). It is noted that Weitons was tied up with Fota;
 - (d) On 27 January 2010 the builder requested to be able to alter the basement lift walls to core filled block work which was refused on the basis that it was lesser quality than the precast concrete panels (see [TB3290.1-3290.3]);

- (e) The builder requested in 22 June 2010 and 8 July 2010 that the concrete panels be changed to in situ concrete. These issues were apparently discussed at site meetings. Mr Gebbie gave evidence, that the request made by the builder was because it was not ready to proceed with the manufacturing of precast panels in the basement in June 2010. Mr Gebbie also said that the change had nothing to do with the retaining wall or conditions on the ground in relation to a previous extension of time claim;
- (f) Mr Gebbie was firm in his response, to questions about this extension of time claim (lift panels at the basement) when he stated:

The lift and dumbwaiter shafts at basement level were changed to in situ concrete in lieu of precast concrete at the specific request of the contractor construction sequences purposes, as the letting of the precast subcontract was late (see EOT No. 6TB4882).

- (g) The contracts for the preparation of shop drawings and the manufacture of the panels were not finalised by the builder until late May/June 2010.
- (h) An email from the builder to the engineer (Mr Spencer), for his approval referred to a design change of 1 July 2010. Approval was given indicating that it will require a change to precast panel connections which will incur additional design fee to builder.
- (i) Thereafter a new design was produced on 3 August 2010 (not on 8 December 2010 as Mr Watson has stated in his report).
- (j) Mr Baycan and Mr Spencer gave evidence that the new engineering design was limited to provide reinforced concrete in situ walls in the basement only, terminating at the ground floor. However, it is noted, that necessarily the design provided for new connection details of the in situ walls with the reinforced concrete panels which would have been installed at ground floor level of the building for the lift and dumbwaiter.
- (k) Apart from Mr Mackie suggesting that the design of the walls for the lift and dumbwaiter in the basement was inadequate and caused the design change, no other evidence was led in this regard.

412 Thus I conclude, that the change of the design in relation to the precast concrete panels to the lift and dumbwaiter in the basement was as a result of the builder's request for its convenience.

413 Mr Watson did not take into account, when making his report that the lift panels needed to be changed in size and "door openings", as a result of the builder deciding to install a Supermec lift rather than a Superdomus lift as was specified. As a result of a different lift being used, the door openings for the lift panels were off centre, and the panels at the top of the lift needed

to be made marginally higher. This change meant that the plans needed to be revised and they needed to be a revision of the engineering drawings.

- 414 There does not appear to be any preapproval by Tectura, before the builder decided to change the type of lift and purchase the Supermec lift.
- 415 I find, that had a Superdomus lift been used, as was specified, it would have been unnecessary to redesign the lift panels so that the same would have had offset openings and an increase height at the top.
- 416 For all these reasons I conclude that the delay between 9 September and 26 October 2010 was caused by requesting a change to in situ concrete for the basement lift panels and changes to the upper panels as a result of the purchase of a different lift and because the builder was slow in letting the precast panel subcontract.
- 417 I am not satisfied that once the changes were approved that I have referred to, that there was any delay in the preparation of the plans and engineering drawings. Mr Watson, believed that the new engineering designs were provided on 8 September 2010 and 17 September 2010. In fact that is wrong. The shop drawings took from the 3 August 2010 to the 8 September 2010 to be supplied. The inquiry concerning the door openings were made and responded to the same day on the 8 September 2010.
- 418 The builder submitted the shop drawings for the reinforced concrete panels for the lift upper floors (levels ground to two) for review on 17 September 2010, that is six weeks after the new engineering design was provided on the 3 August 2010. Shop drawings LP1-5 were approved on 24 September 2010 and returned to the builder.
- 419 In preparing the shop drawings, Weitons, the builder's shop drawing detailer had not followed the original engineering design ie M08504-S11 [TB1523 and specifications TB347].
- 420 By S1 55 dated 27 September 2010 [TB3339, 3339.1 – 3339.6] these shop drawings were approved after they were submitted by Weitons albeit second review was not required by Tectura. However the review did identify various omissions in the shop drawings as to the structure steel integrity placed in the perimeter of the panels and the cast in plates for the design integrity was missing and it was marked for the attention and action by the shop detailer, Weitons (see Mr Spencer's statement 5826.2-5826.3).
- 421 Thus the changes that were made by Tectura or the engineer, were generally made because the shop drawings were incomplete or not correct. That is the responsibility of the builder.
- 422 For all these reasons, I have come to the conclusion that the builder has not made out the claim for extension of time in relation to the lift and dumb waiter panels.

External Precast Panels

- 423 In relation to the delay of 18 working days claimed in relation to the manufacture of the **Colombia Panels**, it is stated by the builder that this delay was caused by the unsuitability of the specified Colombia 2/169 Formliner Pattern.
- 424 The builder submitted that the erection of the external façade precast panels was critical to the completion of the building and the delay in approving the panels finish then specified an alternative which delayed the production of the external precast panels and hence the completion of the external façade precast.
- 425 I have already referred to the change from the Formliner to the Polystyrene when dealing with variations.
- 426 It will be a matter of fact that I will have to find, as to whether the Reckli Formliner was suitable for the purpose. That is, as it is alleged by the builder that the Reckli Formliner would not have allowed the panels to be poured in a 9.1 m length, which would have created a join in the middle of the panel. Tectura, say this is not correct and the Reckli Formliner would have allowed the panels to be properly poured.
- 427 It is quite clear, that the superintendent did eventually give instructions for the Polystyrene Moulds to be used. It is also clear, that the manufacture of the panels required a design to be copied from the Reckli design, and that copying took a considerable amount of time to be performed by Industrial Carving Services Pty Ltd.
- 428 It is also clear, that the approval of the design for the Polystyrene moulds was not achieved until the end of December 2010. Thus this delay had an effect on the critical path.
- 429 However, whether an extension of time should be allowed, as I have said, this matter will depend on the ultimate finding by me as to whether the Reckli Rubber Formliners could or should have been used and whether such use would have been practicable in all the circumstances.
- 430 On the basis of the opinion given by Mr Watson, the builder has claimed 34 working days as an EOT in relation to the external panels. The allegation of delay is based on the alleged failure of Tectura in not ‘finalising the design in a timely manner but instead finalised the design between September 2010 and November 2010.
- 431 The owners and Tectura alleged that the delay in approval of the shop drawings was caused by the builder’s shop drawing detailer who produced poor quality and incorrect shop drawings for approval repeatedly and the builders changed the design of the external panels in September and October 2010. Further it is stated by the owner and the superintendent that the changes resulted as a convenience to the builder.

- 432 It is noted, that the external precast panels design was not approved until 29 November 2010 (see SI No. 68 [TB3411]).
- 433 The status programme for 4 October 2010 (see Mr Watson's statement [110] [TB0733]) shows activity ID 59 'erect precast panels' as critical and planned to be erected on 2 December 2010.
- 434 Programme EOT shows that based on the commitment of casting of precast panels following receipt of SI 68 on 29 November 2010, commencement of correct precast panels was delayed to 17 February 2011. This was a delay of 34 working days which is the claim made in relation to this extension of time.
- 435 On 30 March 2010, Tectura issued SI 13 with attached revised elevation drawings which confirmed the finish of type two panels and revised panel sizes and joint match structure drawing M08504-SO8/2 (see TB3291).
- 436 On 14 April 2010, Tectura issued SI 18 with revised civil and structural drawings and provided amendment details of the panel support at ground floor level (see TB3222 – 3226).
- 437 On 30 May 2010, Tectura issued SI 30 attached revised drawings and structural drawings Revision 9 and Revision 3 which revised precast panel dimensions and the Corbel size supporting the precast panels and suspended slabs at ground floor level (see TB3292).
- 438 On 6 July 2010, the builder submitted precast panel shop drawings (see SI57 dated 4 October 2010). [TB3341].
- 439 On 15 July 2010, the builder's precast shop detailer submitted preliminary precast panel drawings.
- 440 On 3 August 2010, Tectura issued SI 37 [TB3301-3314] referring to a review of precast panel samples of 4 August 2010 and advising that the panels were not approved.
- 441 On 16 August 2010, Tectura issued SI 40, which responded to the builder's precast shop detailer (RFI No. 4 dated 9 July 2010) which:
- (a) advised that details of Chamfer to corner of panels No. PT36 and PT37 were in accordance with the revised construction detail drawings.
 - (b) attached revised drawings in which location of air vents were detailed and a note was added relating to 110 metre allowance for floor finish depth; and
 - (c) confirmed discussion with photo constructions on 16 August 2010 concerning the colour of the panels.
- 442 On 13 September 2010, Tectura issued SI 49 attaching revised drawings and sketch SK1 dated 13 September 2010 in relation to the finish to pre-cast panels (TB3327).

- 443 On 27 September 2010, Tectura issued SI 52 attaching revised drawings in relation to the beam at the roof and external wall intersection (CTB3329).
- 444 On 24 September 2010, Tectura issued SI 53 (CTB3330-337) attaching revised drawings and revised the beam at the roof and external wall intersection and attached Consultants' Advice No. 23 which approved (subject to comment) the lift panel drawings being revision 0 stamped by the engineer on 17 September 2010.
- 445 On 27 September 2010, Tectura issued SI 55 (TB3339) approving pre-cast panels shop drawings issued on 22 September 2010 (subject to comment).
- 446 On 4 October 2010, Tectura issued SI 57 (TB3341) regarding revision to pre-cast concrete panels following inspection of the form work on 5 October 2010 attached mark-up panel drawings revised on 6 July 2010 including:
- (a) providing a 150 mm high rebate to the base of the pre-cast panels that extend to ground floor level; and
 - (b) set out pre-cast wall finish type 3 from top of 150 mm rebate.
- 447 On 19 October 2010, the architect/superintendent issued SI 58 (TB3342) regarding revision to precast concrete panels:
- (a) attached revised drawings;
 - (b) revised panels PT34 – PT41, PT16 and PT28 to suit location of down pipe;
 - (c) panel PT07 vent location (confirmed by email dated 22 September 2010);
 - (d) panels PT1, PT4, PT13, PT16, PT17, PT18, PT34, PT49 and PT55 being window openings revised; and
 - (e) panel shop drawings approved subject to comment for PT33 – PT43 inclusive.
- 448 On 19 October 2010 Tectura issued SI 59 (TB3343 3345) advising the builder that pre-cast panels PT51 and PT53 shop drawings were approved subject to comments.
- 449 On 21 October 2010 Tectura issued SI 60 (TB3346) regarding 'review of pre-cast panel 200 x 200 grid pattern as revised by email dated 20 October 2010' required corrections to be made to two pre-cast panel drawings for PT31–PT33 and PT43–PT46.
- 450 On 22 October 2010, Tectura issue SI 61 (TB3347) regarding 'review of pre-cast panel shop drawings as revised by email from Wheaton's (stamped received 19 October 2010)' and advised corrections were to be made to PT01, PT02, PT04, PT07, PT08, PT11–PT18, PT20 PT22, PT25-PT32, PT38, PT39, PT48-PT47, PT49, PT51, PT53, PT55 and PT59.

- 451 On 3 November 2010, Tectura issued SI63 (TB3348 3349) regarding ‘response to query via email from Terry Cross dated 28 October 2010-cast in plates on top of pre-cast panels; attach consultants advice No. 31 and sketch SK1 which showed the connection details for pre-cast panels to roof beam RB4 as 1-m20 bolt in Pre-cast Panel Ferrule, minimum three per pad.
- 452 On 29 November 2010, Tectura issued SI 65 (TB3350 3370) attaching ten pre-cast panel pattern type two shop drawings and advised that they were approved subject to comments.
- 453 On 19 November 2010, Tectura issued SI 66 (TB3372 3374) referring to Consultants Advice No. 36 and attached 37 pre cast panel shop drawings which were approved subject to comment and attached 11 pre-cast panel type 3 drawings which were approved subject to comment.
- 454 On 25 November 2010, Tectura issued SI 67 (TB3375) confirming verbal advice of 23 November 2010 that 6 mm gaps were to be provided at the intersection points of the raised (polished) sections of pre cast concrete panels pattern type 2 and the pattern to pre-cast concrete panels No. 31 and 32 were to be pattern type 3 as shown on drawing.
- 455 On 23 November 2010, Tectura issue SI 68 (TB337 3385) attaching 9 pre-cast panel pattern type 2 drawings revised on 23 November 2010 were approved subject to comments.
- 456 While I have formed the view (stated above) that the extension of time in relation to the lift panels was brought about by the conduct of the builder, I have formed a different view in relation to the external panels.
- 457 Although, letting of the pre-cast concrete contract to the sub-contractor and shop drawer was later than it should have been, for which I criticised the builder earlier, such delay in this instance did not have any effect on the program as it was not a critical activity nor did it cause any other activity to become critical.
- 458 As I have previously said, Mr Gebbie’s evidence on this matter was largely of a subjective nature. The objective facts which I have outlined above and below do not support Tectura or the owner’s submissions in this regard.
- 459 It is clear that the critical path reviewed by Mr Watson in the period from February to November 2010 is not affected by the letting of the pre-cast concrete contract.
- 460 I also note, that there were a number of errors on the drawings which comprised comments from the engineer that –
- the top of certain panels, the drafter had omitted ferrules and/or cast-in plates;
 - the bottom of certain panels, the drafter had not drawn a rebate; and
 - with respect to panels, the drafter had omitted reference to reinforcement to cast in plates of the perimeter of the panel.

461 In spite of protests in the evidence of Mr Baycan and Mr Spencer to the contrary, it is clear, on the documents that connection between the top of the external panel and the roof beam RB4 was not close to finally being completed until 27 October 2010 when the engineer produced a sketch for the connection (Consultants Advice No. 39 TB21.9-21.20). The engineering drawings (No 8504-SO7) did not include sufficient detail for the panel designer to identify the connection from the panels to the roof beam. And new details would need to be provided (CTB2334-2335).

462 On 5 July 2010, Tectura were aware the panel designer did not have sufficient information to design this connection. This was made clear from the panel detailer to Mr Shah from Tectura asking for response to RFI4 (TB18.4) and again asking Mr Shah from the superintendent for answers to RFI4, (TB18.42-TB18.48). During cross-examination, Mr Baycan did not give any credible reason why these requests were ignored (see transcript 1840).

463 The situation as to Mr Baycan's cross-examination was put by Mr Twigg QC at [353] of his submissions when he stated:

During cross examination by Counsel for Mackie, Mr Baycan made baseless allegations concerning, the incompetence of the panel detailer. Mr Baycan alleged that the reasons for the request from the panel detailer was a 'simple case of them not understanding the requirements'(transcript 1840).

This allegation was made despite the fact revised drawings were subsequently required from the structural engineer in response to the panel detailer's requests.

Further, despite the fact both the steel detailer and the panel detailer required clarification on this connection detail, and the engineer provided revised engineering drawings in response to these requests, Tectura alleged that the need for clarification regarding the connection detail was due to the detailers lack of experience (TB2328.28 at [26])

464 In September 2010 engineering drawing (SO7) was amended to incorporate the details for the connection:

- On 6 September 2010 SO7 REV2 (TB2328.22(26))
- On 14 February 2010 SO7 REV3 (TB2328.27 at (29))
- On 21 September 2010 SO7 REV4 (TB2384.3 at (31))
- On 23 September 2010 SO7 REV5 (TB2328.32 at [33])

465 Following the revisions, on 6 October 2010, the designer sought confirmation that 'cast in plates' to the top panels had been removed. This resulted in a 'round robin' of communication between the engineer, the architect/ superintendent, the panel detailer and the builder (TB2328.1-15). The correspondence reveals that in February 2011 the cast-in plates were omitted.

- 466 On 9 November 2010, the engineer provided a sketch of the detail, obviously omitting the cast-in plates. But it was not until mid-late November 2010 that the set out details of the grid pattern and the 3D pattern were provided by the architect/superintendent (TB21.17-22.74).
- 467 Thus I conclude from the long chronology which I have set out above, that the delay in relation to this particular issue, was not caused by the builder and as a result 34 working days should be allowed to the builder.
- 468 I have come to the conclusion, that Tectura has failed, in relation to the external panels, to deal with the extension of time reasonably and fairly. If it had done so, it would have come to the conclusion, that Tectura would have been entitled to the 34 days which I have mentioned. It has failed to do so.
- 469 I take the view, that the 34 days in relation to the external panels is something that has occurred due to delay in design by Tectura and the engineer. This responsibility was passed from the owner to Tectura. Given these circumstances, in my view it is Tectura that should be responsible for reimbursing the owner for the amount of 34 days that I find is liable to the builder.
- 470 Before leaving this topic, I note that it has been submitted by the owner and Tectura that the panel design in part at least came about for the convenience of the builder. It was stated that the builder wanted the rebate at the bottom of the panel in order to make it easier for the tiler. Mr Baycan could not answer whether it was practicable for a tiler to make the indentations identical to the indentations on the panels (see transcript 1883 and 1884). I thus conclude, that in practical terms, the design of the panels without the rebate and the design of the height of the panels above the outrigger (which I have discussed in relation to variations), was not practicable. While it may have been possible, to build in such a fashion in practical terms it was not realistic.
- 471 Also Mr Baycan admitted that the clash between the down pipe and the structural steel beam needed to be resolved during the design phase (transcript 1873), although he attempted to assert that the clash needed to be resolved through coordination between the pre-cast detailer and the structural steel detailer (see transcript 1877 and 1878). It is noted, that contrary to what Mr Baycan stated in his evidence, it was decided by the Consultants Advice No. 25 that the phalange of the balcony beam would be notched to allow for the down pipe to pass between the beam.
- 472 Therefore, I will allow an extension of time of 34 days to the builder which calculates to \$51,000.00 which should be paid by the owner. However, there will be orders for the owner to recover this amount from Tectura because as I have stated this was as a result of a design matter.

COLUMBIA PANELS

Extension of time for Columbia panels

- 473 The builder claims an 18 days allowance for extension of time, because of the delay in the manufacture of the Columbia panels. It will be remembered, that Reckli was preapproved by the architect/superintendent for the manufacture of the Columbia panels. However, it is also noted, that the panels could not be produced from the brochure because they required to be extended for 5 metres to 9.1 metres which would have required purpose built panels by Reckli.
- 474 The owner and Tectura, submitted, that if the builder had engaged Reckli to prepare the rubber mould form liner as suggested in its specifications, there would not have been a delay. It is said that the delay occurred because the builder engaged Industrial Carving Services to make the moulds out of polystyrene to pour them.
- 475 Mr Watson agreed, that if Reckli rubber moulds had been used, then the development of a design for a pattern based on the Reckli moulds would not have been required as the pattern was within the moulds themselves. He agreed that by not using Reckli rubber form liners, the builder had increased the amount of work it had to do to achieve a pattern to replicate the Reckli patterns and the works the builder was doing from 22 October 2010 to develop the design for the sub-contractor to replicate the panels was work that would not have been necessary (see transcript 969 and 970).
- 476 When asked in cross-examination as to why the builder did not use the Reckli rubber mould, Mr Mackie stated that those moulds could not be made in 9 metre long patterns and a join would be created (see transcript 301-302).
- 477 The evidence of Mr Mackie in this regard flies directly in the face of Mr Joveski's evidence who stated that the rubber form liners, for the panels, could have been manufactured in excess of 9 metres long by Reckli but they would require a special manufacturer as opposed to one straight from the brochure. He said it would not have really been a problem for him to manufacture such form liners and he has done so in the past.
- 478 I have no reason not to accept what Mr Joveski said, particularly in light of the fact, that pictures were shown to me of panels that were made from Reckli form liners, that were in excess of 9 metres.
- 479 Mr Twigg submitted, that it was irrelevant that the builder used non Reckli form liners and he blamed the 18 day delay of having the design approved by Tectura as referred to in the status program adopted by Mr Watson.
- 480 It is clear on the evidence, that on 15 December 2010, Tectura asked Industrial Carving Services, to extend the angle lines through to the end of three pattern repetitions so that they could eliminate the bumps forming at the two intersections of the three pattern repetitions as per attached image of industrial carving on a file received on 9 December 2010.

- 481 Further on 21 December 2010 Tectura issued SI 173 (TB3398-3402) advising that the Columbia pre cast panel pattern type one, drawing submitted by email from Industrial Carving Services was approved subject to the panel being manufactured with a minimum of 120mm structural thickness and 30mm thick grooved/pattern with an overall thickness of 150mm as per contract documents.
- 482 On 14 January 2011, Industrial Carving Services noted in invoice that approximately four weeks would be taken for them to perform their work.
- 483 Looking at all the evidence, I have come to the conclusion that if the builder had used Reckli form liner as a sub-contractor to produce the form liners for the Columbia panels, the delay would not have occurred. The delay occurred because it was difficult, for Industrial Carving to have the correct design.
- 484 I do not believe it is appropriate as Mr Twigg has suggested to not have regard to the time that Reckli would have taken to perform their work on the basis, that Industrial Carving and Design, and Fota Constructions were not approved as sub-contractors.
- 485 While Mr Watson's written evidence was correct, he did not take into account that the moulds could have been produced in a more timely manner without a number of problems, if Reckli had been used.
- 486 While it was clearly permissible for the builder to use moulds other than Reckli form liners, in my view, the fact that an alternate product to what was used was available (the Reckli form liner) militates against any discretion that I should have in granting an extension of time in regard to this particular matter.
- 487 Thus, I will not allow any extension of time in respect of the Columbia moulds.

Replacement of Sewer Pipe (EOT 18)

- 488 On 12 August 2011, the builder came across a ceramic sewer pipe along the western boundary of the property. The pipe was in an easement along the boundary over which the suspended slab was to be constructed. The engineers needed to consider the complexity of replacing the sewer pipe in a very narrow confine. The angle proposed meant that digging too wide would undermine the foundation both of the building and the newly-constructed retaining wall. As a result, of needing engineers' designs and appropriate consent, the work on the sewer pipe was not complete until 21 September 2011. That is, the work on the pipe ran from 12 August to 21 September 2011 and as a result the builder has claimed an extension of time being 26 working days between 12 August and 21 September 2011.
- 489 There is a dispute between the parties, as to whether the work on the sewer pipe was on the 'critical path'. Put differently, the builder states that the external works were critical whereas the owner submits that the internal works were critical.

- 490 It is noted that on 8 December 2011 the certificate of occupancy was given for the property. However it was not until February 2012 that the external works were completed, that is, practical completion was achieved. That is, the builder says that it could have achieved practical completion of the building on 9 December 2011 when the internal works were completed if the external works had been completed by that time.
- 491 It is noted Tectura approved a total of 9 working days in relation to this claim, as follows:
- (a) Tectura's time extension certificate No 2 dated 22 August 2011 approved three working days for the removal of existing earthenware sewer pipe at easement on the west side of the site and replacement of a new PVC sewer pipe, with reference to SI 137 dated 19 August 2011 and SI 138 dated 22 August 2011; and
 - (b) Tectura's time extension certificate No 3 dated 9 September 2011 approved a further six working days for relining of 8 lineal metres of existing earthenware sewer pipe and removal of the existing 28 lineal metres of earthenware pipe in the easement on the western side and replacement with a new PVC sewer pipe.
- 492 At [385] Mr Twigg outlines the uncontested facts of this matter:
- (a) On 12 August 2011, a clay sewer pipe was discovered in the west boundary easement and the builder notified Tectura;
 - (b) In its email to the superintendent, dated 17 August 2011, the builder requested confirmation that building over the easement had been approved by Stonnington Council and it advised that the sewer pipe in the easement from the property to the north side of the site was blocked;
 - (c) On 18 August 2011, Mackie received consent from the owners of the sewer to replace the full section of the sewer line;
 - (d) On 19 August 2011, a meeting was held between the superintendent and Kukula Consultants to discuss building over the easement;
 - (e) The superintendent (SI 137 dated 19 August 2011) instructed the builder to remove the earthenware sewer pipe and replace it with a 150mm PVC pipe and provide a new sewer inspection opening once approval from the owner had been received;
 - (f) The superintendent (SI 138 dated 22 August 2011) provided consent for the replacement of the sewer drain;
 - (g) In its email to Tectura dated 23 August 2011, the builder referred to its earlier email dated 17 August 2011 and requested written advice from Tectura that a consent from the water authority and or council to build over the easement was not required for the project and confirming that works were to proceed as documented;

- (h) The Superintendent (SI 142 dated 23 August 2011) provided a Revision Building Permit and stamped drawings;
- (i) The Superintendent, by SI 144 dated 24 August 2011, provided the revised Building Permit documentation and a letter from Kakula Consultants dated 23 August 2011 and approved the works to be undertaken within the drainage and sewerage easement;
- (j) The letter from Kakula Consultants dated 23 August 2011 proposed that a concrete floor graded with a spoon drain be provided under the suspended slab to be constructed between the house and the boundary retaining wall/fence and advised that as the structures were to be constructed above the easement were not regarded as 'building' the consent of the service authority was not required;
- (k) SI 147 dated 25 August 2011, refers to and attaches a Brown Consulting Site Inspection Report dated 22 August 2011;
- (l) Brown Consulting Site Inspection Report dated 22 August 2011 states:
 - i The proposed sewer pipe was to be located between the foundations of the basement and the boundary fence, beyond the angle of repose in accordance with the attached sketch;
 - ii The slab at basement level and retaining wall have to be installed to the north of the site and Brown requested documentation of these works;
 - iii It was proposed the slab be locally demolished for the installation of the sewer pipe, with the works to be approved by the design engineer of the retaining wall;
- (m) The builder (RFI19 dated 30 August 2011) refers to SI 146 and Brown Consulting Inspection Report and requests:
 - i To stabilise the cut to the northern end of the sewer pipe as the cut could be approximately 130mm below the footing; and
 - ii Due to the fall in the drain the southern end of the pipe would be lower than shown on drawing SK-1 attached to SI147 and detail was required;
- (n) The superintendent (SI 152 dated 1 September 2011) refers to queries raised in RFI19 dated 20 August 2011 and correspondence from Brown Consulting dated 30 August 2011 as attached an extract from drawing PCA-CD-01/3 showing the extent of the existing earthenware sewer pipe to be removed and replaced with a new 100mm diameter PVC pipe and the extent of the existing earthenware sewer pipe to be realigned using the 'nuflow' pipe rehabilitation system by Australian Drain and Pipe Repairs. The attached consulting advice, from Brown Consulting dated 30 August 2011 regarding RFI19 required the footings to be designed by Mackie, and a stability design was to be

provided by Mackie's engineer, and invest levels of the existing sewer were to be at six locations along the full length of the site, and once provided, Brown Consulting could assess the stability of the existing footing;

- (o) Mackie variation request SO85 dated 8 September 2011 provided a quotation to reline and replace the existing earthenware pipe;
- (p) Mackie (RF1127 dated 13 September 2011) advised that:
 - i The hydraulic contractor had completed the camera inspection of the existing pipe that was to be relined and advised the pipe was suitable to be relined as directed; and
 - ii There was no Inspection Opening in the neighbouring property and requested advice as to what action was to be taken.
- (q) Tectura (SI 157 dated 13 September 2011 referred to RFI127) directed the builder to proceed with relining existing earthenware pipe within the easement to the extent indicated on the drawing Prostitution Control Act-CD-01/3 dated 1 September 2011 issued in SI152 dated 1 September 2011 and confirmed there was no requirement to supply and install sewer Inspection Opening to the adjoining property.
- (r) SI 159 – 6 September 2011 referred to RFI130 and approved to supply and install Inspection Opening to the sewer pipe within the site boundary of 3 Glenbervie Road, Toorak to the location indicated on the attached drawing extract of PCA-CD-01-01/3 in order for the relining work to the existing earthenware sewer to be complete;
- (s) The sewer relining replacement work were completed on or about 21 September 2011.

493 It is clear, from the above chronology, that there was a delay resulting from the sewer pipe works which were not in the original contract, from when the same were discovered on the 12 August 2011 until 21 September 2011 when the relining and replacement works were completed. This is a delay of 26 days.

494 It is said by the owner and Tectura that this delay is a concurrent delay with other works and the sewer type work was not on the critical path.

495 However, Mr Watson's amended status on 26 September 2011 shows internal works as critical to the completion of the project at the time, and the completion of the external works having float and not being critical. This is because the Andrew's amended program status on 26 September 2011 shows:

- (a) External works (IDs 200 – 209) completed by 23 November 2011;
- (b) Whereas internal works (IDs 122 – 191) were being completed later and were driving completion forecasts for 24 January 2011.

496 It is noted:

- (a) The certificate of occupancy was issued for the premises on 9 December 2011 following an inspection on 8 December 2011;
- (b) Tectura completed its defect inspection of internal works and issued a report on 9 December 2011; and
- (c) The practical completion was not issued until 12 February 2012 because external works were not completed.

497 I thus find, from the evidence before me taking into account both the chronology which I have set out in detail above and the other matters that I have referred to, that save and accept for the sewer part problem, practical completion of the project could have been achieved on 9 December 2011 when the internal works were completed if the external works had been completed by that time.

498 Thus I will allow for works actually being delayed by the project from 9 December 2011 to the 8 February 2011 a period of 25 working days. From this should be deducted the 9 working days allowed by the superintendent making 16 working days in total for an allowance totalling \$24,000.00. That amount should be refunded by the owner to the builder.

499 I do not believe that Tectura is responsible for this delay. The sewer pipe was something that was unforeseen at the time of the design, and although matters could have perhaps been attended to quicker, I do not see that what Tectura did was unreasonable. Save and accept for, I do not believe Tectura properly and reasonably and fairly assessed the builder's claim in relation to this extension of time because it did not take into account the matters that I have referred to above. That is in particular that the sewer pipe stopped the external works from being completed and indeed the certificate of completion was delayed as I have stated.

500 In coming to the conclusion, I have taken into account the reserved power contained in Clause 35 of the contract. I believe it is fair and equitable that the builder should be allowed the extension of time to which I have referred. Further, it is just and reasonable that such an extension should be allowed and therefore, it is appropriate that I should make the allowance which I have stated.

Inclement weather

501 The builder has made a claim for a further 19 days caused by inclement weather to what was allowed by the superintendent. The other parties do not seem to have addressed me on this matter. The builder relies on the records that are available.

502 The assessment of 19 days has been performed by Mr Watson (see TB0748 – 0758). That evidence has not been contradicted therefore I will allow the builder 19 days for inclement weather.

503 In coming to the conclusion that the builder is entitled to a further 19 days of extension of time for inclement weather, I take into account the reserved

power contained in Clause 35 of the contract and it is just and equitable, that that power should be exercised. In exercising that power, it is fair and reasonable, that the builder should have the extension of time allowed in this particular instance which is 19 days, at \$1,500.00 per day equalling \$28,500.00 which should be paid by the owner.

504 I cannot see in any way why the superintendent should be responsible for this sum.

COST DAMAGES FOR DELAY

505 The builder claims against the owner 'delay and disruption costs' in the sum of \$232,331 (ex GST) pursuant to clause 36 of the General Conditions of Contract (as Amended) ("Delay and Disruption Claim"). It also seeks to recover the sum paid for liquidated damages.

506 The owner deducted \$1,500 per day for 256 days from the final sum it paid the builder as liquidated damages as the result of the alleged delays by the builder. However, the builder's contention is, if it receives 168 days by extension of time, it is entitled to recover liquidated damages that have been levied and set off against its contractual entitlements.

507 The owner and Tectura claim, that:

- (a) The extra costs pursuant to clause 36 of the contract are only available if the builder has been granted an extension of time pursuant to clause 35.5 for any delay set out in clause 36; and
- (b) The builder has failed to give the owner and the superintendent the prescribed notice pursuant to clause 46.

508 Clause 36 of the contract reads as follows:

[36] DELAY OR DISRUPTION COSTS

Where the Contractor has been granted an extension of time under Clause 35.5 for any delay caused by any of the events referred to in Clause 35.5 above, the Principal shall pay to the Contractor such extra costs as are necessarily incurred by the Contractor by reason of the delay.

Where the Contractor has been granted an extension of time under Clause 35.5 for any delay caused by any other event for which payment of extra costs for delay or disruption is provided for in the Annexure or elsewhere in the Contract, the Principal shall pay to the Contractor such extra costs as are necessarily incurred by the Contractor by reason of the delay.

Nothing in Clause 36 shall –

- (a) Oblige the Principal to pay extra costs for delay or disruption which have already been included in the value of a variation or any other payment under the Contract; or
- (b) Limit the Principal's liability for damages for breach of contract.

509 The Amendments to Clause 36 of the General Conditions provides:

Adding the following paragraph to the clause:

For the purpose of clause 36, an event referred to in clause 35.5(b)(i) shall be an event which relates solely to the contract.

The Contractor shall be entitled to any payment from the Principal (other than payment which may become due by reason of other provisions of the Contract), including payment by way of damages for breach of contract or other obligations whether payment relates to any delay or disruption which the contractor may have encountered, irrespective of the cause of the delay or disruption, and including delay or disruption caused by the events referred in clause 35.5(b)(i) or clause 35.5(b)(x).

510 Mr Twigg, in his opening statement [450] and [451] and [452] argues, that claims excluded by clause 36 can be claimed pursuant to clause 40.5. He stated as follows:

450. The exclusion clause contains a phrase, in parenthesis, (“other than a payment which may become due by reason of any other provision of the Contract”). This phrase reflects the parties’ intention that clause 36 operates to give effect to the rights to extra costs under a first principal phrase. Even though the proviso refers to other provisions of the Contract, the exclusion clause is construed strictly and is intended to limit recovery of costs/damages caused by delay events, other than those described in clause 35.5(b)(i) (which is subject to an amendment (described above)) and clause 40.5 of the Contract (variation costs). Unless the provision of the exclusion is read this way, the provisions of the first principal phrase would have no work to do; this cannot be the case, as the words were specifically amended and, unlike the second principal phrase, were not deleted.

451. Further, at the end of the amendment, the expression “Clause 35.5(b)(i)-(ix)” is used in the exclusion clause which may be construed to exclude extra costs from a delay from an event referred to in clause 35.5(b)(i). However, this amendment reflects the parties’ intention that the only costs recovered are those described in the first principal phrase in clause 36 and clause 40.5.

452. Mackie submits that clause 36 is sufficiently clear so that all damage or cost is excluded except the ‘extra costs’ referred to in the first phrase in clause 36 and costs of delay allowed in clause 40.5.

511 Further, Mr Twigg stated that even though clause 35 excludes a claim that is not timely made, it is open to the superintendent and in this case VCAT to do what the superintendent should have done in relation to the builder’s claim. In the present case it would not be fair and reasonable to allow the builder to claim delay costs.

512 It is also noted, that clause 46 of the contract has no application to clause 35.5 and clause 42.7 does not bar recovery.

513 Mr Twigg thus concluded at [475] as follows:

475. The progress claim was made seeking the costs of delay and recovery of liquidated damages. This rejection was disputed under clause 47 and is properly subject to the VCAT's jurisdiction.

(I have attached Annexure "B" to the Reasons setting out a relevant chronology).

514 The builder claims against the owner costs for delay and disruption in the sum of \$232,331.00 (ex GST) pursuant to cl 36 of the general conditions of the contract.

515 The builder has claimed delay cost is \$232,331.00. This amounts to an average delay cost of \$1,382.93. This calculation has been made by Ralph Mackie at [241] of his witness statement (TB Volume 2A, 0935.047).

516 The calculations made by Mr Mackie and the exhibits attached to the witness statement showing those calculations, have not been challenged by any of the parties to this proceeding. The sum of the extensions of time that I have granted to the builder, that come within cl 36 amount to 102 days. This calculation is made up of:

EOT2A gasline	7 days
Demolition and foundation works EOT 13.4 & 14	26 days
External panels	34 days
Sewer matters	16 days
Inclement weather	19 days
Total:	102 days

517 As there has been no challenge on Mr Mackie's evidence as to delay costs and I accept the submissions of Mr Twigg QC, the total amount that I will allow the builder for delay costs is \$141,058.86. Which shall be paid by the owner to the builder.

518 Thirty-four of those days, relate to the external panels which I have found, were a delay which resulted from the design by the architect superintendent and therefore the architect superintendent should be responsible for the same. Thus, the architect superintendent should reimburse the owner the sum of \$47,019.62, being 34 days x \$1382.93 per day.

DEFECTS

- 519 The owners claim a long list of defects which were fixed by an outside sub-contractor at a cost of \$126,000. The contractor's fee was approximately \$98,000 and the balance of \$27,500 was paid to Tectura as their fee for designing and supervising the rectification of the defects. It is noted, that in the contractual relationship between Tectura and the owner at clause A6 'Contract Administration', under 'Post Construction', Tectura, "*if required advised the client and coordinate procedure for rectification of any defective work by others*".
- 520 Thus, it may well be that Tectura have double-charged the client for its work in relation to the defects as it was obliged pursuant to Clause A6 to perform the work.
- 521 It is noted, that the practical completion was on 6 February 2012 and the defect liability period ran for a period of 12 months. During the 12-month period, there were numerous instructions issued by Tectura to Mackie to rectify the defects that had been identified by it.
- 522 The only independent expert evidence given in relation to the defects was by Mr G. Cross, a witness called on behalf of the builder. Mr Cross stated in his report at page [7](TB0362):

Of the 190 defects on S1244, sixty-seven (67) were accepted by the architect leaving 128 outstanding defects.

Tab (TB0385) of this expert report shows that the outstanding 128 alleged listed defects, 78 defects have been rectified, leaving a balance of 50 defects. In my opinion, most of the remaining defects are minor.

The most significant defects in dispute in my opinion is the reflection pool and the planter boxes outside the front entry. The reflection pool and planter box structures have been varied from the original contract words. The Republic of Turkey ('owners') have also altered the reflection pool structures since the builder ceased work, and it is no longer resembles either the plan or the contract variation.

Notwithstanding, the defect is simple to rectify. Further while the defect is the most significant defect in dispute, it is not significant in terms of rectification procedure(s).

Cost to Rectify

My calculations reveal that the total cost to rectify the defective work irrespective of whether or not it is the builder's responsibility is \$25,000 including profits and GST.

The cost quotation obtained on behalf of the owners to rectify the alleged defective works are in part conditionalized, inaccurate, undefined, and do not cost each of the individual items listed in SI 244. In my opinion, there is no basis to rely on the costs contained on the various quotations.

- 523 The defects that the builder states that the owner alleged that the builder did not complete include:

7. DEFECTS

476. ...:

- (a) Sashless windows;
- (b) Emergency phone in the lift;
- (c) Hydraulic heating;
- (d) Paint cracking in the door jambs and architraves;
- (e) The airconditioning not working properly;
- (f) The dumb waiter not working on all levels;
- (g) The video intercom to the lift;
- (h) Gaps in the parquetry floor;
- (i) Pins to door hinges;
- (j) Crack to plasterboard;
- (k) Cupboard joinery dropping;
- (l) Powder coating to the front door frame;
- (m) Reflection pool planter boxes;
- (n) Membrane to the planter boxes and the reflection pool.

524 Mr Forest (although no claim is made against his client as to defects) stated that Mr Cross's scope of works is far too narrow, and that I should have regard to the fact that there were defects which were nominated and the builder refused to rectify the same, as a consequence that flowed on to lead to other matters in the dispute, whereby the owner was required to spend the \$126,000 in order to get the defects rectified. He further stated, that the builder had a contractual liability to fix the defects or, failing to fix the defects outside the defect liability period, pay the owner of the cost of the rectification of such defects.

525 The relevant clause relating to the defective materials and work is clause 30.3 of the contract (TB1245) which relevantly reads as follows:

If the superintendent discovers material or work provided by the Contractor which is not in accordance with the Contract, the Superintendent may direct the contractor to...

- (c) Reconstruct, replace or correct material or work...

The superintendent may direct the times within which the contractor must commence and complete the removal, demolition, replacement or correction.

If the contractor fails to comply with the direction issued by the superintendent, pursuant to clause 30.3 within the time specified by the superintendent, in the direction provided and the superintendent has given the contractor notice in writing after the expiry of the seven days from which the contractor receives the notice the principal intends to have the work carried out by other persons, the principal

may have the work of removal, demolition, replacement or correction carried out by other persons at the cost incurred by the principal if the works are carried out shall be a debt due from the contractor to the principal.

- 526 Also clause 37 of the contract provides for the defects liability period which in this case is 12 months and then it provides:

At any time prior to the 14th day after the expiration of the Defects Liability Period, the Superintendent may direct the Contractor to rectify any omission or defect in the work under the Contract existing at the Date of Practical Completion or which becomes apparent prior to the expiration of the Defects Liability Period. The direction shall identify the omission or defect and state a date by which the Contractor shall complete the work of rectification and may state a date by which the work of rectification shall commence...

If the work of rectification is not commenced or completed by the stated dates, the Principal may have the work of rectification carried out at the Contractor's expense, but without prejudice to any other rights that the Principal may have against the Contractor with respect to such omission or defect and the cost of the work of rectification incurred by the Principal shall be a debt due from the Contractor.

- 527 Thus, the dispute is whether the defects should be limited to the liability as stated by Mr Cross, or for the whole rectification amount paid to the new contractor plus the extra sum paid to Tectura.
- 528 It is noted, that the owner took monies from bank guarantees supplied by the builder, in order to pay what it alleged was part of the cost of rectifying the defects. It is noted, that the owner now claims the sum of \$17,310.00 by way of counter claim for the difference between what it paid to rectify the defects (\$126,000.00) and what it was able to gain from the bank guarantee.
- 529 It is also noted, that in [259] of the submissions of Mr Andrew and Mr Philpott, that the owner does not make any claim against the architect superintendent in relation to defects claimed in the proceeding or the cashing of the guarantee.
- 530 At paragraphs [269] and [270] of the owners submissions, the owner puts its case in relation to the entitlement of the payment of defects. It there states:

Each of the superintendent instructions issued to Mackie during the defect liability period was a direction in accordance with clause 37 of the contract. Such directions required Tectura to make discretionary assessments using its judgement and experience. As such, the parties by entering into the contract agreed to be bound by the directions and instructions issued by Tectura in accordance with the contract, without review or challenge. In the circumstances, Tectura's Superintendent's Instructions relating to defective work are unable to be challenged and reargued in this proceeding. To this extent the evidence of Mr George Cross (the expert employed by the builder

who made a report and gave oral evidence) is of little to no utility in this proceeding. Further Mr Cross in his evidence does not cost many of the items. Where he does do so, that is merely his opinion. The actual cost paid by the Republic are what is relevant.

531 In so far as the builder is concerned, it disputes:

- The defects;
- The efficacy of Tectura's notice under cl 33.3 and 5 of the contracts; and
- The Republic's claim for loss and damage.

532 It is common ground that Tectura served the builder with a number of lists of defects the last of which is SI 244 (TB 1667 1679). Mr Twigg states that except for SI 244, the defect list is irrelevant. The builder disputed SI 244.

533 It is noted, that the only expert to give evidence in relation to defects was Mr G. Cross who gave a report which was tendered in evidence and attended for cross examination. The owner engaged a Mr Miller to prepare a report, which was filed in the proceeding; however, it did not call him and did not tendered his report in evidence.

534 As stated previously, Mr Cross observed that the defects in SI 244 comprises 195 items of which:

- Architect/superintendent had accepted 67 items of the list as not being defects;
- 78 items on the list had been rectified; and
- 50 items on the list remained.

Of the 50 remaining defects, Mr Cross categorised those as minor.

535 Mr Andrew and Mr Phillipott in their submissions at [271] ff submitted that Mr Cross' evidence was irrelevant and should be disregarded. They said that he did not assess some of the defects [e.g. dumbwaiter or door hardware]. They further said that he was only provided with a limited list of defects and was not properly briefed. They further criticised that he was not given SI 230 or SI 244. They therefore concluded without detail and especially without the photographs included in SI 230, it was impossible for Mr Cross to properly identify the defects referred to and ascertained by the architect/superintendent.

536 It is further noted, by Mr Andrew and Mr Philpott, that Mr Cross was not given a copy of the Contract, specifications or any of the engineering drawings for the project.

537 The difficulty with the submissions of Mr Andrew and Mr Philpott, is that I have been provided with no contrary evidence to that of Mr Cross. He was the only expert called. The owner chose not to call Mr Miller. I therefore draw an inference, that Mr Miller's evidence would not have assisted the owner's case.

538 As Mr Twigg submits, the contract provides a code for rectification of defects in the works, and there is no room in common law for a party to claim damages for breach of contract.

539 In *Turner Corporations Ltd (receiver and manager appointed) v Austotel Pty Ltd* (1994) 13 BCL 378 per Cole J. His Honour noted [at 395]:

There is, in my view, no room for a wider common law right in the Proprietor to treat non-compliance with the contractual obligation with the Builder as a separate basis for claiming damages being the cost of having a third party rectifying or completing defective or omitted works. This is because the contract specifies and confirms upon the Proprietor its right flowing from such breach; that is, the parties have, by contract agreed upon the consequences for each of the Proprietor and the Builder, both as to rights and powers flowing from and the consequences of, such breach... It also follows, in my view, that the Proprietor has no entitlement to recover the costs of works performed by others at the request of the Proprietor unless prior to such work being performed the Architect has given the notice required by cl 5.06.1 prior to the date of practical completion or pursuant to cl 5.06.01 as incorporated by cl 6.11.05 after the date of practical completion.

540 His Honour then went on to consider the argument put by the respondent that if a party's common law right to sue for damages for breach of contract is to be contractually removed, it must be done by clear words. This was adopted by *Giles J in Baese Pty Ltd v RA Braken Building Pty Ltd* (1990) 6 BCL 370. His Honour accepted this position, but rejected the express works as required [at 395]:

If on the proper construction of the contract as a whole, it can be said that a party has surrendered its common law rights to damages, that construction must be given effect to, notwithstanding the absence of express words to render the common law right to damages.

541 Cole J then distinguished *Baese* on the basis that the clause relied upon by the proprietors was not an exhaustive statement of the proprietor's entitlement. In *Turner*, as in the present case, the contract wholly provided for the proprietor's right to recover from Mackie the costs of rectification work done by a third party. The proprietor is not entitled to disregard those provisions and claim costs as common law damages.

542 Clause 30.3 of the contract provides that the architect/superintendent may direct the builder to remove, demolish, replace or correct any material or work ('the rectification work') provided by the builder that is not in accordance with the Contract and may specify the time to commence and complete the direction.

543 The obligation to rectify the defects is a term for the benefit of the builder (see *Turner's* case). The owner does not have the right to damages for 'breach of contract', its right with respect to defects is wholly contained within the contract. If it does not follow the procedures set out in the

contract, it cannot claim damages in lieu of the proper exercise of those rights (see Turner's case).

- 544 As I previously stated, the owner submitted that pursuant to cl 30.3 of the contract it elected to have others correct the defects and that the builder must now pay for the costs of the rectification of the works as a debt due.
- 545 However, Clause 30.3 is conditional upon Tectura providing the builder with notice in writing after the expiry of seven days from the date on which the builder receives the notice the owner intends to have the rectification works carried out by other persons.
- 546 On 24 January 2013 Tectura provided the builder with SI 244 enclosing a copy of the Defects Inspection Schedule dated 24 January 2013 and written direction to rectify all defects noted in the Schedule by 4pm 6 February 2013.
- 547 SI 244 makes no reference to the owners' intention to have rectification works carried out by other persons. Tectura did not follow the procedure set out in the contract because it did not give the builder seven days' notice of the owners' intention to have rectification work carried out by others. Therefore, the owner did not exercise its rights under the contract and as a consequence no debt at law was created.
- 548 Further, on 15 March 2013 the builder received written notice from the Principal that due to the builders failure to rectify the defects:
- (a) Building and Property Services Pty Ltd had been retained to carry out rectification works; and
 - (c) The builder was liable for a debt of \$126,060.00 to the Principal.
- 549 The letter of 15 March 2013 is a breach of contract in that it was the builders' obligation and right to correct the defects in the work. By removing this right from the builder without giving proper notice, the owner breached the contract. Therefore, it follows, that the owner cannot take advantage of its own breach.
- 550 As Mr Twigg notes, in breach of the contract the owner caused the security to be cashed. As it had no right to this security it is liable for damages. It is noted that the security was \$108,750.00.
- 551 The only damage for rectification that I can be satisfied that existed, was that assessed by Mr Cross. There is no evidence otherwise. He gave evidence that the reasonable and necessary cost of rectification was \$25,066.00. That is the sum that I accept. There was no better evidence before me.
- 552 As a result, I will order that the owner repay the builder the cashed security in the sum of \$108,750.00 less the amount of defective work as assessed by Mr Cross in the amount of \$25,066.00 which equals \$83,684.00. That is the damages that I assess as a result of the owners wrongfully cashing the security.

553 As I have noted above, Tectura was charged the sum of \$27,500.00 for his work in managing the rectification of defects. However, as I have stated, the contract did not provide for it to charge the sum and in fact it was responsible for the same. However, in light of the conclusion I have come to above and in light of the concession made by the owner that it is not seeking any amount from the Tectura in relation to defects, I will make no order against Tectura about this matter.

Security

554 I have made findings in relation to one amount of substitution security (\$108,690) held by the owner. In relation to the other amount of substituted security (\$123,641) there have been no submissions made to me as to its fait. The sum has been claimed by the builder in the pleadings. Therefore, I will give the parties leave to make submissions, if they so desire, as to what orders should be made in relation to the substituted security sum of \$123,641.

Counter claim

555 The owner makes a counter claim against the builder in the sum of \$17,300.00 by way of a short fall with respect to damages that it did not received by cashing the security. However, in light of the findings I have made above in relation to the defective work, it necessarily follows that this counterclaim must fail. Therefore the counter claim will be dismissed.

Conclusion

556 In light of the reasons that I have stated above, I will now summarise the payments that need to be made from the owner to the builder, and the amount of reimbursement from the architect superintendent to the owner.

Payments to be made by the owner to the builder

Name	Amounts claimed	Total amounts claimed
VARIATIONS		
Imported fill XO 9	\$5,500.00 plus GST = \$6,050.00	
Telstra clean up XO 15	\$528.00 plus GST = \$580.80	
Imported fill XO 26	\$10,980.00	
Structural steel increase X 41	Nil	
Hydraulic variation XO 9D	\$11,697.00 plus GST =	

	\$12,866.70	
Electrical credits wrongly made X 75D	\$4,782.00	
Stone work X 077D	\$151,980.00	
Curtains X 81	Nil	
Additional structural work X 03D	\$19,677.90 plus GST = \$21,644.70	
Flues X 119D	\$4,324.10 plus GST = \$4,756.51	
Angle brackets X 139d	Nil	
Stone cladding for reflection pool X 140D	Nil	
Balustrade X 144D	\$2,222.00	
Marble tiles X 145D	\$30,527.00	
Pre-cast mould X O146D	\$36,490.00	
Power pole X O147D	\$33,936.000	
Design fee for city power X 148	Nil	
Total for variations:		\$316,816.70
EXTENSION OF TIME TO BUILDER		
Gasline EOT 2A	\$10,500.00	
Demolition and foundation work EOT 13.4	\$39,000.00	
Lift panels EOT 17	Nil	
External panels	\$51,000.00	
Columbia panels	Nil	
Sewer works	\$24,000.00	
Inclement weather	\$28,500.00	

Total allowance to builder for extension of time:		\$153,000.00
Delay costs to builder		
Delay		\$141,058.86
DAMAGES FOR WRONGLY CASHING SECURITY RELATING TO DEFECTS		
Wrongly cashing security		\$83,684.00
Total sum payable by owner to builder		\$693,824.58

Reimbursement to owner by architect superintendent

Name	Total amounts claimed
Variation additional structural works X 103	\$19,677.30 plus GST = \$21,645.03
EOT external panels	\$51,000.00
Delay costs	\$47,019.62
Total amount to be reimbursed by Architect/ Superintendent to owner	\$119,664.65

557 The respondent pay the applicant the sum of \$693,824.58.

558 The joined party pay the respondent the sum of \$119,664.65.

559 The owner held and retained two sums lodged as security by the builder. As a result of matters stated in these reasons, the security sum of \$108,690 has been allowed for in relation to orders made in relation to deficits; however, in relation to the other security sum of \$123,641 the parties have leave to make submissions.

560 The respondent's counter claim is dismissed.

561 Reserve costs.

Robert Davis
Senior Member

ANNEXURE A
Extract of Contract

23 SUPERINTENDENT

The Principal shall ensure that at all times there is a Superintendent and that in the exercise of the functions of the Superintendent under the Contract, the Superintendent—

- (a) acts honestly and fairly;
- (b) acts within the time prescribed under the Contract or where no time is prescribed, within a reasonable time; and
- (c) arrives at a reasonable measure or value of work, quantities or time.

If, pursuant to a provision of the Contract enabling the Superintendent to give directions, the Superintendent gives a direction, the Contractor shall comply with the direction.

In Clause 23 ‘direction’ includes agreement, approval, authorization, certificate, decision, demand, determination, explanation, instruction, notice, order, permission, rejection, request or requirement.

Except where the Contract otherwise provides, a direction may be given orally but the Superintendent shall as soon as practicable confirm it in writing.

If the Contractor in writing requests the Superintendent to confirm an oral direction, the Contractor shall not be bound to comply with the direction until the Superintendent confirms it in writing.

33.2 Construction Program

For the purposes of Clause 33, a ‘construction program’ is a statement in writing showing the dates by which, or the times within which, the various stages or parts of the work under the Contract are to be executed or completed.

A construction program shall not affect rights or obligations in Clause 33.1.

The Contractor may voluntarily furnish to the Superintendent a construction program.

The superintendent may direct the Contractor to furnish to the Superintendent a construction program with the time and in the form directed by the Superintendent.

The Contractor shall not, without reasonable cause, depart from—

- (a) a construction program included in the Contract; or
- (b) a construction program furnished to the Superintendent.

The furnishing of a construction program or of a further construction program shall not relieve the Contractor of any obligations under the Contract including the obligation to not, without reasonable cause, depart from an earlier construction program.

34 SUSPENSION OF THE WORKS

34.1 Suspension by Superintendent

If the Superintendent considers that the suspension of the whole or part of the work under the Contract is necessary—

- (a) because of an act or omission of—
 - (i) the Principal, the Superintendent or an employee, consultant or agent of the Principal; or
 - (ii) the Contractor, a subcontractor or an employee or agent of either;
- (b) for the protection or safety of any person or property; or
- (c) to comply with an order of a court,

The Superintendent shall direct the Contractor to suspend the progress of the whole or or part of the work under the Contract for such time as the Superintendent thinks fit.

34.2 Suspension by Contractor

If the Contractor wishes to suspend the whole or part of the work under the Contract, otherwise than under Clause 44.9, the Contractor shall obtain the prior written approval of the Superintendent. The Superintendent may approve of the suspension and may impose conditions of approval.

34.3 Recommencement of Work

As soon as the Superintendent becomes aware that the reason for any suspension no longer exists, the Superintendent shall direct the Contractor to recommence work on the whole or on the relevant part of the work under the Contract.

If work is suspended pursuant to Clause 34.2 or 44.9, the Contractor may recommence work at any time after reasonable advance notice to the Superintendent.

34.4 Cost of Suspension

Any cost incurred by the Contractor by reason of a suspension under Clause 34.1 or Clause 34.2 shall be borne by the Contractor but if the suspension is due to an act or omission of the Principal, the Superintendent or an employee, consultant or agent of the Principal and the suspension causes the Contractor to incur more or less cost than otherwise would have been incurred but for the suspension, the difference shall be valued under Clause 40.5.

34.5 Effect of Suspension

Suspension shall not affect the Date for Practical Completion but the cause of suspension may be a ground for extension of time under Clause 35.5.

35 TIMES FOR COMMENCEMENT AND PRACTICAL COMPLETION

35.1 Time for Commencement of Work on the Site

The Contractor shall give the Superintendent 7 days' notice of the date upon which the Contractor proposes to commence work on the Site.

The Superintendent may reduce the period of notice required.

The Contractor shall commence work on the Site within 14 days after the Principal has given the Contractor possession of sufficient of the Site to enable the Contractor to commence work.

35.2 Time for Practical Completion

The Contractor shall execute the work under the Contract to Practical Completion by the Date for Practical Completion.

Upon the date of Practical Completion the Contractor shall give possession of the Site and the Works to the Principal.

35.3 Separable Portions

The interpretations of—

- (a) Date for Practical Completion;
- (b) Date of Practical Completion;
- (c) Practical Completion,

and Clauses 5, 7, 16, 35, 37, 38, 42.3 and 42.5 shall apply separately to each Separable Portion and references therein to the Works and to work under the Contract shall mean so much of the Works and the work under the Contract as is comprised in the relevant Separable Portion.

If the Contract does not make provision for the amount of security, retention moneys, liquidated damages or bonus applicable to a Separable Portion, the respective amounts applicable shall be such proportion of the security, retention moneys, liquidated damages or bonus applicable to the whole of the work under the Contract as the value of the Separable Portion bears to the value of the whole of the work under the Contract.

35.4 Separable Portions

If a part of the Works has reached a stage equivalent to that of Practical Completion but another part of the Works has not reached such a stage and the parties cannot agree upon the creation of Separable Portions, the Superintendent may determine that the respective parts shall be Separable Portions.

In using the Separable Portion that has reached Practical Completion, the Principal shall not hinder the Contractor in the performance of the work under the Contract.

35.5 Extension of Time for Practical Completion

When it becomes evident to the Contractor that anything, including an act or omission of the Principal, the Superintendent or the Principal's employees, consultants, other contractors or agents, may delay the work under the Contract, the Contractor shall promptly notify the Superintendent in writing with details of the possible delay and the cause.

When it becomes evident to the Principal that anything which the Principal is obliged to do or provide under the Contract may be delayed, the Principal shall give notice to the Superintendent who shall notify the Contractor in writing of the extent of the likely delay.

If the Contractor is or will be delayed in reaching Practical Completion by a cause described in the next paragraph and within 28 days after the delay occurs the

Contractor gives the Superintendent a written claim for an extension of time for Practical Completion setting out the facts on which the claim is based, the Contractor shall be entitled to an extension of time for Practical Completion.

The causes are—

- (a) events occurring on or before the Date for Practical Completion which are beyond the reasonable control of the Contractor including but not limited to—
 - industrial conditions;
 - inclement weather;
- (b) any of the following events whether occurring before, on or after the Date for Practical Completion—
 - i delays caused by—
 - the Principal;
 - the Superintendent;
 - the Principal's employees, consultants, other contractors or agents;
 - ii actual quantities of work being greater than the quantities in the Bill of Quantities or the quantities determined by reference to the upper limit of accuracy stated in the Annexure (otherwise than by reason of a variation directed under Clause 40);
 - iii latent conditions;
 - iv variations directed under Clause 40;
 - v repudiation or abandonment by a Nominated Subcontractor;
 - vi changes in the law;
 - vii directions by municipal, public or statutory authorities but not where the direction arose from the failure of the Contractor to comply with a requirement referred to in Clause 14.1;
 - viii delays by municipal, public or statutory authorities not caused by the Contractor;
 - ix claims referred to in Clause 17.1(v);
 - x any breach of the Contract by the Principal;
 - xi any other cause which is expressly stated in the Contract to be a cause for extension of time for Practical Completion.

Where more than one event causes concurrent delays and the cause of at least one of those events, but not all of them, is not a cause referred to in the preceding paragraph, then to the extent that the delays are concurrent, the Contractor shall not be entitled to an extension of time for Practical Completion.

In determining whether the Contractor is or will be delayed in reaching Practical Completion regard shall not be had to—

- whether the Contractor can reach Practical Completion by the Date for Practical Completion without an extension of time;
- whether the Contractor can, by committing extra resources or incurring extra expenditure, make up the time lost.

With any claim for an extension of time for Practical Completion, or as soon as practicable thereafter, the Contractor shall give the Superintendent written notice of the number of days extension claimed.

If the Contractor is entitled to an extension of time for Practical Completion the Superintendent shall, within 28 days after receipt of the notice of the number of days extension claimed, grant a reasonable extension of time. If within the 28 days the Superintendent does not grant the full extension of time claimed, the Superintendent shall before the expiration of the 28 days give the Contractor notice in writing of the reason.

In determining a reasonable extension of time for an event causing delay, the Superintendent shall have regard to whether the Contractor has taken all reasonable steps to preclude the occurrence of the cause and minimise the consequences of the delay.

Notwithstanding that the Contractor is not entitled to an extension of time the Superintendent may at any time and from time to time before the issue of the Final Certificate by notice in writing to the Contractor extend the time for Practical Completion for any reason.

A delay by the Principal or the failure of the Superintendent to grant a reasonable extension of time or to grant an extension of time within 28 days shall not cause the Date for practical Completion to be set at large but nothing in this paragraph shall prejudice any right of the Contractor to damages.

35.6 Liquidated Damages for Delay in Reaching Practical Completion

If the Contractor fails to reach Practical Completion by the Date for Practical Completion, the Contractor shall be indebted to the Principal for liquidated damages at the rate stated in the Annexure for every day after the Date for Practical Completion to and including the Date of Practical Completion or the date that the Contract is terminated under Clause 44, whichever first occurs.

If after the Contractor has paid or the Principal has deducted liquidated damages, the time for Practical Completion is extended, the Principal shall forthwith repay to the Contractor any liquidated damages paid or deducted in respect of the period up to and including the new Date for Practical Completion.

35.7 Limit on Liquidated Damages

The Contractor's liability under Clause 35.6 is limited to the amount stated in the Annexure.

35.8 Bonus for Early Practical Completion

If the Date of Practical Completion is earlier than the Date for Practical Completion the Principal shall pay the Contractor the bonus stated in the Annexure for every day after the Date of Practical Completion and including the Date for Practical Completion.

The total of the bonus shall not exceed the limited stated in the Annexure.

36 DELAY OR DISRUPTION COSTS

Where the Contractor has been granted an extension of time under Clause 35.5 for any delay caused by any of the events referred to in Clause 35.5 above, the Principal shall pay to the Contractor such extra costs as are necessarily incurred by the Contractor by reason of the delay.

Where the Contractor has been granted an extension of time under Clause 35.5 for any delay caused by any other event for which payment of extra costs for delay or disruption is provided for in the Annexure or elsewhere in the Contract, the Principal shall pay to the Contractor such extra costs as are necessarily incurred by the Contractor by reason of the delay.

Nothing in Clause 36 shall –

- (a) Oblige the Principal to pay extra costs for delay or disruption which have already been included in the value of a variation or any other payment under the Contract; or
- (b) Limit the Principal's liability for damages for breach of contract.

37 DEFECTS LIABILITY

The Defects Liability Period stated in the Annexure shall commence on the Date of Practical Completion.

As soon as possible after the Date of Practical Completion, the Contractor shall rectify any defects or omissions in the work under the Contract existing at Practical Completion.

At any time prior to the 14th day after the expiration of the Defects Liability Period, the Superintendent may direct the Contractor to rectify any omission or defect in the work under the Contract existing at the Date of Practical Completion or which becomes apparent prior to the expiration of the Defects Liability Period. The direction shall identify the omission or defect and state a date by which the Contractor shall complete the work of rectification and may state a date by which the work of rectification shall commence. The direction may provide that in respect of the work of rectification there shall be a separate Defects Liability Period of a stated duration not exceeding the period stated in the Annexure. The separate Defects Liability Period shall commence on the date the Contractor completes the work of rectification. Clause 37 shall apply in respect of the work of rectification and the Defects Liability Period for that work of rectification.

If the work of rectification is not commenced or completed by the stated dates, the Principal may have the work of rectification carried out at the Contractor's expense, but without prejudice to any other rights that the Principal may have against the Contractor with respect to such omission or defect and the cost of the work of rectification incurred by the Principal shall be a debt due from the Contractor.

If it is necessary for the Contractor to carry out work of rectification, the Contractor shall do so at times and in a manner which cause as little inconvenience to the occupants or users of the Works as is reasonably possible.

38 CLEANING UP

The Contractor shall keep the Site and the work clean and tidy. The Contractor shall regularly remove rubbish and surplus material.

Within 14 days after the Date of Practical Completion the Contractor shall remove Temporary Works and Constructional Plant.

The Superintendent may extend the time for removal of Temporary Works or Constructional Plant necessary to enable the Contractor to perform remaining obligations.

VARIATIONS

40.1 Variations to the Work

The Superintendent may direct the Contractor to—

- (a) increase, decrease or omit any part of the work under the Contract;
- (b) change the character or quality of any material or work;
- (c) change the levels, lines, positions or dimensions of any part of the work under the Contract;
- (d) execute additional work; and/or
- (e) demolish or remove material or work no longer required by the Principal.

The Contractor shall not vary the work under the Contract except as directed by the Superintendent or approved in writing by the Superintendent under Clause 40.

The Contractor is bound only to execute a variation which is within the general scope of the Contract.

The Contractor shall not be bound to execute a variation directed after Practical Completion unless the variation is in respect of rectification work referred to in Clause 37.

The total sum of all Variations shall not exceed 10% of the total Contract sum of \$4,300,000 + GST.

40.3 Pricing the Variation

Unless the Superintendent and the Contractor agree upon the price for a variation, the variation directed or approved by the Superintendent under Clause 40.1 shall be valued under Clause 40.5.

The Superintendent may direct the Contractor to provide a detailed quotation for the work of a variation supported by measurements or other evidence of cost.

40.4 Variations for the Convenience of the Contractor

If the Contractor requests the Superintendent to approve a variation for the convenience of the Contractor, the Superintendent may do so in writing. The approval may be conditional.

Unless the Superintendent otherwise directs in the notice approving the variation, the Contractor shall not be entitled to—

- (a) an extension of time for Practical Completion; or
- (b) extra payment,

in respect of the variation or anything arising out of the variation which would not have arisen had the variation not been approved.

The Superintendent shall not be obliged to approve a variation for the convenience of the Contractor.

40.5 Valuation

Where the Contract provides that a valuation shall be made under Clause 40.5, the Principal shall pay or allow the Contractor or the Contractor shall pay or allow the Principal as the case may require, an amount ascertained by the Superintendent as follows—

- (a) if the Contract prescribes specific rates or prices to be applied in determining the value, those rates or prices shall be used:
 - i if Clause 40.5(a) does not apply, the rates or prices in a Priced Bill of Quantities or Schedule or Rates shall be used to the extent that it is reasonable to use them;
 - ii to the extent that neither Clause 40.5(a) or 40.5(b) apply, reasonable rates or prices shall be used in any valuation made by the Superintendent;
 - iii in determining the deduction to be made for work which is taken out of the Contract, the deduction shall include a reasonable amount for profit and overheads;
 - iv if the valuation is of an increase or decrease in a fee or charge or is a new fee or charge under Clause 14.3, the value shall be the actual increase or decrease or the actual amount of the new fee or charge without regard to overheads or profit;
 - v if the valuation relates to extra costs incurred by the Contractor for delay or disruption, the valuation shall include a reasonable amount for overheads but shall not include profit or loss of profit;
 - vi if Clause 11(b) applies, the percentage referred to in Clause 11(b) shall be used for valuing the Contractor's profit and attendance; and
 - vii daywork shall be valued in accordance with Clause 41.

When under Clause 40.3 the Superintendent directs the Contractor to support a variation with measurements and other evidence of cost, the Superintendent shall allow the Contractor the reasonable cost of preparing the measurements or other evidence of cost that has been incurred over and above the reasonable overhead cost.

DEFAULT OR INSOLVENCY

44.6 Adjustment on Completion of the Work Taken Out of the Hands of the Contractor

When work taken out of the hands of the Contractor under Clause 44.4(a) is completed the Superintendent shall ascertain the cost incurred by the Principal in completing the work and shall issue a certificate to the Principal and the Contractor certifying the amount of that cost.

If the cost incurred by the Principal is greater than the amount which would have been paid to the Contractor if the work had been completed by the Contractor, the difference shall be a debt due from the Contractor to the Principal. If the cost incurred by the Principal is less than the amount that would have been paid to the Contractor if the work had been completed by the Contractor, the difference shall be a debt due to the Contractor from the Principal. The Principal shall keep records of the cost in a similar manner to that prescribed in Clause 41.

If the Contractor is indebted to the Principal, the Principal may retain Constructional Plant or other things taken under Clause 44.5 until the debt is satisfied. If after reasonable notice, the Contractor fails to pay the debt, the Principal may sell the Constructional Plant or other things and apply the proceeds to the satisfaction of the debt and the costs of sale. Any excess shall be paid to the Contractor.

--- End of Extract of Contract ---

ANNEXURE B

Chronology

Chronology of event

385. The following chronology concerns the design and fabrication of the precast panels:
- (a) On 30 March 2010, the Superintendent issued SI 13 with attached revised Elevation Drawings PCA-CD-07-01/5, PCA-CD-07-02/2, PCA-CD-07-03/2 which confirmed the finish to Type 2 panels and revised panel sizes and joints to match Structural Drawing M08504-S08/2 [**TB3291**];
 - (b) On 14 April 2010 the Superintendent issues SI 18 with revised Civil and Structural Drawings M08504-C01/6, M08054-C02/6 and M08504-S11/2 and provided amended details of the panel support at the ground floor [**TB3222-3226**];
 - (c) On 30 May 2010 the Superintendent issued SI 30 and attached revised Drawings PCA-CD-07-02/3, PCA-CD-07-03/3 and Structural Drawing M08504-C02 Revision 9 and M08504-S11 Revision 3 which revised precast panel dimensions and the corbel size supporting the precast panels and suspended slabs at ground floor level [**TB3292**];
 - (d) Minutes of Site Meeting No 7 [**TB3293-3294**] recorded at Item 7.8.7 that
"Change lift shaft and dumb waiter walls in basement to in situ concrete in lieu of pre-cast panels";
 - (e) On 6 July 2010 Mackie submitted precast panel shop drawings (see SI 57 dated 4 October 2010) [**TB3341**];
 - (f) On 15 July 2010 Mackie submitted preliminary precast panel shop drawings;
 - (g) On 3 August 2010 the Superintendent issued SI 36 with the attached revised Drawings M08504-S02/2, M08504-S04/2, M08504-S09/3 and M08504-S10/2 in relation to the lift shaft walls and provided details of the insitu lift shaft walls at basement level [**TB3295-3300**];
 - (h) On 3 August 2010 the Superintendent issued SI 37 referring to a review of precast panel samples on 4 August 2010 and advising that the panels were not approved [**TB3301-3314**];
 - (i) On 16 August 2010 the Superintendent issued SI 40 [**TB3315-3317**]:
 - (i) Providing a response to Mackie's precast shop detailer) RFI No 4 dated 9 July 2010 which:
 - (1) Advised that details of chamfer to the corner of Panel Nos PT36 and PT37 were in accordance with revised Construction Detail Drawing No PCA-CD-13-13 /2;
 - (2) Attached revised Drawing Nos PCA-CD-07-01/7, PCA-CD-07-02/4 and PCA-CD-07-03/4 in which the location of air vents were detailed, and a note was added relating to 110mm allowance for floor finish depth; and
 - (ii) Confirmed discussions with Fota Constructions (Mackie's precast concrete fabricator) on 16 August 2010 that:

- (1) The specified Abilox "Almond" colour sample was to be prepared with grey cement in lieu of the off-white cement for review at an inspection on 20 August 2010; and
 - (2) The specified Abilox "Almond" colour sample was to be prepared with grey cement in lieu of the off-white cement for review at an inspection on 20 August 2010;
- (j) On 17 August 2010 the Superintendent issued SI 41 [**TB3318-3319**] and confirmed the Superintendent's telephone discussion with Fota Construction on 17 August 2010 regarding revisions to the colours for the Specified Precast Panels as follows:
- (i) Specified Wall Finish Type 1 - Provide Abilox "Muscatel" dose rate 8.3% in grey cement in lieu of specified Abilox "Almond" colour;
 - (ii) Specified Wall Finish Type 2 - Provide Abilox "Cinnamon Buff" dose rate 8.3% in grey cement in lieu of the specified Abilox "Riverblend Beige" colour;
 - (iii) Specified Wall Finish Type 3 - Provide Abilox "Glo Peach" dose rate 8.3% in grey cement in lieu of the specified Abilox "Riverblend Beige" colour;
 - (iv) Specified Wall Finish Type 4 - Provide Abilox "Muscatel" dose rate 8.3% in grey cement in lieu of the specified Abilox "Almond" colour;
- (k) On 1 September 2010 the Superintendent issued SI 45 [**TB3320**] referring to Precast Panel Inspections held on 26 August 2010 and 31 August 2010 and confirmed that:
- (i) Specified Wall Finish Type 1 - Sample panel with Abilox "Muscatel" dose rate 8.3% in grey cement was approved;
 - (ii) Specified Wall Finish Type 4 - Sample panel with Abilox "Muscatel" dose rate 8.3% in grey cement was approved;
 - (iii) Specified Wall Finish Type 2 and Type 3 - The final colour selection would be further reviewed and inspected following the polishing of the raised section of Wall Finish Type 2 with Abilox "Cinnamon Buff" dose rate 8.3% in grey cement as polishing had not occurred at the time of the inspection;
- (l) Email from Mackie to Tectura dated 8 September 2010 requested confirmation from the structural engineer that there were no amendments to reinforcement details for the lift panels shown on Section 2 of Drawing M08504-S09/4 with the offset to the lift door;
- (m) Email from Tectura to Mackie dated 8 September 2010 [**TB3321-3322**] responded to Mackie email dated 8 September 2010 and attached revised structural drawings M08504-S09/6 and M08504-S11/4 indicating the reinforcing requirements for Lift Panels PC 2;
- (n) On 13 September 2010 the Superintendent issued SI 49 attaching revised Drawing Nos PCA-CD-13-09/5, PCA-CD-13-10/4 and Sketch SK1 dated 13 September 2010 in relation to the finish to Precast panels PT34, PT35, PT40, PT41 [**TB3327**];

- (o) On 15 September 2010 the Superintendent issued SI 51 [**TB3328**] referring to Precast Panel Inspections of 26 August 2010, 31 August 2010 and 10 September 2010 and confirmed that:
 - (i) Specified Wall Finish Type 2 - Sample panel with Abilox "Cinnamon Buff" dose rate 8.3% in grey cement was approved; and
 - (ii) Specified Wall Finish Type 3 - Sample panel with Abilox "Cinnamon Buff" dose rate 8.3% in grey cement was approved;
- (p) On 21 September 2010 the Superintendent issued SI 52 [**TB3329**] attaching revised Drawing No M08504-S07/4 in relation to the beam at the Roof and External Wall intersection;
- (q) On 24 September 2010 the Superintendent issued S 53 [**TB3330-3337**] attaching revised Drawing No M08504-S07/5 and revised the beam at the Roof and External Wall intersection and attached Consultant's Advice Notice No 23 which approved subject to comments the Lift Panel Shop Drawings LP1-LP5 Revision 0 stamped as received by Brown on 17 September 2010;
- (r) On 27 September 2010 the Superintendent issued SI 54 [**TB3338**] referring to SI 45 dated 1 September 2010 and Mackie Variation Request XO43 dated 22 September 2010 advising of cost for the colour change, and requested 2 samples be provided of:
 - (i) Specified Wall Finish Type 4 - Abilox "Black CAF-X2" dose rate 2.78% in off-white cement in lieu of the nominated Abilox "Muscatel" colour dose rate 8.3% in grey cement; and
 - (ii) Specified Wall Finish Type 4 - Abilox "Black CAF-X2" dose rate 2.78% in off-white cement at 60% strength in lieu of the nominated Abilox "Muscatel" colour dose rate 8.3% in grey cement;
- (s) On 27 September 2010 the Superintendent issued SI 55 [**TB3339**]:
 - (i) Referring to Consultant's Advice Notice No 24 from Brown & Tomkinson dated 24 September 2010 and Lift Panel Shop Drawings LP3 Revision 1 and LP4 Revision 1 from Brown & Tomkinson which were approved subject to comments; and
 - (ii) Providing approval of Precast Panels PT51 and PT53 shop drawings issued 22 September 2010 subject to comments;
- (t) On 1 October 2010 the Superintendent issued SI 56 [**TB3340**] referring to Precast Sample Panel inspections on 4 August 2010, 26 August 2010, 31 August 2010, 10 September 2010 and 1 October 2010 and confirmed that:
 - (i) Specified Wall Finish Type 1 - Abilox "Almond" dose rate 4.15% in off-white cement as approved at the sample panel inspection on 1 October 2010;
 - (ii) Specified Wall Finish Type 4 - Abilox "Almond" dose rate 4.15% in off-white cement as approved at the sample panel inspection on 1 October 2010;
 - (iii) Specified Wall Finish Type 2 - Sample panel with Abilox "Cinnamon Buff" dose rate 8.3% in grey cement was approved; and
 - (iv) Specified Wall Finish Type 3 - Sample panel with Abilox "Cinnamon Buff" dose rate 8.3% in grey cement was approved

- (u) On 4 October 2010 the Superintendent issued SI 57 [**TB3341**] regarding Revisions to Precast Concrete Panels following inspection of the Formwork on 5 October 2010 attached mark-up of the Precast Panel Shop Drawings received on 6 July 2010, including:
 - (i) Provision of a 150mm high rebate to the base of precast panels that extend to Ground Floor Level;
 - (ii) Set out of Precast Wall Finish Type 3 from top of 150mm rebate;
- (v) On 19 October 2010 the Superintendent issued SI 58 [**TB3342**] regarding Revisions to Precast Concrete Panels in relation to window heights:
 - (i) Attached revised Drawings PCA-CD-07-02/5 and PCA-CD-07-03/5;
 - (ii) Revised Panels PT34, PT35, PT36, PT37, PT38, PT39, PT40, PT41, PT16, PT28 to suit location of downpipe;
 - (iii) Panel PT07 vent location relocated (confirmation of email dated 22 September 2010);
 - (iv) Panels PT1, PT4, PT13, PT16, PT17, PT18, PT32, PT49, PT55 window openings revised;
 - (v) Panel Shop Drawings approved subject to comments for PT33, PT36, PT37, PT38, PT39, PT40, PT41, PT43;
- (w) On 19 October 2010 the Superintendent issued SI 59 [**TB3343-3345**] advising Mackie that Precast Panels PT51 and PT53 shop drawings were approved subject to comments;
- (x) On 21 October 2010 the Superintendent issued SI 60 [**TB3346**] regarding "Review of Precast Panel 200 x 200 Grid Pattern as received by email dated 20 October 2010" required corrections to be made to 2 Precast Panel Shop Drawings for PT31, PT32, PT33, PT43, PT44, PT45, PT46;
- (y) On 22 October 2010 the Superintendent issued SI 61 [**TB3347**] regarding "Review of Precast Panel Shop Drawings as Received via Email from Weitons (stamped received on 19 October 2010)" and advised that corrections were to be made to PT01, PT02, PT04, PT07, PT08, PT11 to PT18, PT20 to PT 22, PT25 to PT32, PT38, PT39, PT45 to PT47, PT49, PT51, PT53, PT55, PT59;
- (z) On 3 November 2010 the Superintendent issued SI 63 [**TB3348-3349**] regarding "Response to Query via Email from Terry Cross dated 28 October 2010 - Cast in Plates on Top of Precast Panels" attached Consultant's Advice Notice No 31 and Sketch SK1 which showed the connection detail for Precast Panels to Roof Beam RB4 as 1-M20 Bolt in Precast Panel Ferrule, minimum 3 per panel;
- (aa) On 12 November 2010 the Superintendent issued SI 65 [**TB3350-3370**] attaching 10 Precast Panel Pattern Type 2 Shop Drawings and advised that they were Approved Subject to Comments;
- (bb) Email from Tectura to Industrial Carving Services and Mackie dated 12 November 2010 [**TB3371**] refers to a request from Fota Constructions and *"attached a copy of the proposed Columbia 2/169 Pattern generated from the pattern in the Reckli Form Liner Brochure in AutoCAD format"*;
- (cc) On 19 November 2010 the Superintendent issued SI 66 [**TB3372-3374**] referring to Consultant's Advice Notice No 36 and attached 37 precast panel

shop drawings which were approved subject to comments, and attached 11 precast panel pattern Type 3 shop drawings which were approved subject to comments;

- (dd) On 25 November 2010 the Superintendent issued SI 67 [**TB3375**] confirming verbal advice of 23 November 2010 that 6mm gaps were to be provided at the intersection points of the raised (polished) sections of Precast Concrete Panels Pattern Type 2 and that the pattern to Precast Concrete Panels No 31 and 32 was to be Pattern Type 3 as shown on Drawing No PCA-CD-07-01/8;
- (ee) On 29 November 2010 the Superintendent issued SI 68 [**TB3376-3385**] attaching 9 precast panel Pattern Type 2 shop drawings received on 23 November 2010 were Approved Subject to Comments;
- (ff) Email from Industrial Carving Services to Fota Constructions, copied to Mackie and Tectura, dated 6 December 2010 [**TB3387**] advised that it had produced a pattern which utilised a straight line which followed profile section 01 and 03 and requested advice as to whether this was an acceptable compromise;
- (gg) Email from Industrial Carving Services to Fota Constructions dated 6 December 2010 [**TB3386-3387**] regarding hard coating of the form liner moulds stated that:
 - (i) The company which undertakes the hard coating must have the panels by 15 December 2010 at the latest, but it was doubtful that Industrial Carving Services could meet this deadline;
 - (ii) They did not re-open until 17 January 2011;
 - (iii) They could not hard coat a panel which was 3000mm wide x 3000mm long, so they would have to be provided with panels 1500mm x 3000mm long which meant there would be more joining and filling required at Fota Constructions;
 - (iv) Industrial Carving Services could not make any guarantees of how many times the patterns could be used to cast concrete panels from
- (hh) Email from Industrial Carving Services to Tectura and Mackie dated 9 December 2010 [**TB3388-3390**] attached a 3D surface model of the proposed pattern;
 - (i) Email from Tectura to Industrial Carving Services dated 15 December 2010 [**TB3391-3393**] requested that Industrial Carving Services extend the angled lines through to the end of the 3 pattern repetitions so that they could eliminate the bumps forming at the 2 intersections of the 3 pattern repetitions as per the attached image of Industrial Carving Services' CAD file received on 9 December 2010;
- (jj) On 17 December 2010 the Superintendent issued SI 72 [**TB3394-3397**] advising that:
 - (i) In respect of cast in plates within the Level 1 and 2 slab for precast panel connections, Mackie was to organise an independent welding inspection and verification of all full penetration butt welds at the rear of the property (Consultant's Advice Notice 38) and Mackie was to provide calculations and detailed drawings of the proposed precast panel

connections and submit them for approval because Mackie did not install cast in plates to the first and second floors; and

- (ii) Attached extract of Drawing PCA-CD-07-02/5 increasing the widths of Precast Panels No 1 and No 2 to the South Elevation;
- (kk) On 21 December 201 the Superintendent issued SI 73 [TB3398-3402] advising that the Columbia Precast Concrete Panel Pattern Type 1 AutoCAD drawing submitted via email from Industrial Carving Services was approved subject to the Precast Panel being manufactured with a minimum 120mm structural thickness and 30mm thick grooved / fluted pattern with an overall thickness of 150mm as per the Contract Documents;
- (ll) Industrial Carving Services Invoice 11012372 [TB3403-3404] to Fota Constructions dated 14 January 2011 provides:
 - (i) *"Please allow Approx. 4 to [sic] weeks for delivery from Confirmation of Deposit";*
and
 - (ii) *"NOTES: WE CANNOT GUARANTEE HOW MANY CONCRETE PANELS CAN BE MADE FROM THIS TYPE OF PATTERN";*
- (mm) Industrial Carving Services Invoice 1103-237 to Fota Constructions dated 3 March 2011 [TB3405] included for the following:
 - (i) 15 February 2011 - Labour 2 people to join 6 panels; and
 - (ii) 18 February 2011 - Labour 1 person to finish panels;

--- End of Chronology ---