

Supreme Court
New South Wales

Case Name:	White Constructions Pty Ltd v PBS Holdings Pty Ltd
Medium Neutral Citation:	[2019] NSWSC 1166
Hearing Date(s):	15, 16, 17, 18, 22, 23, 24, 25, 29 July 2019
Decision Date:	6 September 2019
Jurisdiction:	Equity - Technology and Construction List
Before:	Hammerschlag J
Decision:	Proceedings dismissed
Catchwords:	BUILDING AND CONSTRUCTION LAW – CONTRACT – DAMAGES – Contract to design a sewerage system for a subdivision and submit it for approval – alleged breach consisting of failure to create and submit a design acceptable to the approval authority allegedly having the effect of delaying completion of the subdivision – whether breach established – whether damages established – programming experts called on question of delay – appropriate method of delay analysis – requirement to have regard to evidence – requirement for the plaintiff to establish damages. HELD – no breach established – damages not established.
Legislation Cited:	Sydney Water Act 1994 (NSW) Uniform Civil Procedure Rules 2005 (NSW)
Cases Cited:	Adhesives Pty Ltd v Aktieselskabet Dansk Gaerings-Industri (1935) 55 CLR 523 Alstom Ltd v Yokogawa Pty Ltd (no 7) [2012] SASC 49 Donau Pty Ltd v ASC AWD Shipbuilder Pty Ltd [2019] NSWCA 185 JLW (Vic) Pty Ltd v Tsiloglou [1994] 1 VR 237 March v E & MH Stramare Pty Ltd (1991) 171 CLR 506 Placer (Granny Smith) Pty Ltd v Thiess Contractors Pty

Ltd (2003) 77 ALJR 768
State of New South Wales v Moss (2000) 54 NSWLR
536
Toulis v Vamvoukakis [1998] NSWCA 237

Texts Cited: NSW Civil Procedure Handbook 2019

Category: Principal judgment

Parties: White Constructions Pty Ltd - Plaintiff
PBS Holdings Pty Ltd - First Defendant
Illawarra Water & Sewer Design Pty Ltd - Second
Defendant

Representation: Counsel:
M. Dempsey SC with M. Sheldon - Plaintiff
G. Sirtes SC with D. Weinberger - First and Second
Defendants

Solicitors:
Jones Day - Plaintiff
Colin Biggers & Paisley - First Defendant
Indemnity Legal Pty Ltd - Second Defendant

File Number(s): 2017/285371

JUDGMENT

INTRODUCTION

- 1 **HIS HONOUR:** This is a claim for damages alleged to have been suffered by the plaintiff (**White**), a developer, by the conduct of the second defendant (**IWS**), a sewer designer and the first defendant (**SWC**), a water servicing coordinator, in connection with the development of a 100 lot subdivision, known as Cedar Grove, at 59 Jamberoo Road, Kiama NSW.
- 2 White is an experienced property developer. It has previously developed a number of subdivisions, including in the Illawarra region of NSW, into which Kiama falls.
- 3 IWS and SWC are associated with Mr Joel Edwards (**Edwards**), an accredited water and sewer designer. IWS and SWC were represented by Edwards in their dealings with White.

- 4 White retained Mr Trevor Unicomb (**Unicomb**) to be its project manager for the project. White and Unicomb had worked together before. In its dealings with IWS, White was, for the most part, represented by Unicomb. On White's side Mr Graham Morcom (**Morcom**), a director of White, was in charge of the project.
- 5 White contracted Cleary Bros (Bombo) Pty Ltd (**Cleary Bros**) to carry out the construction works.
- 6 The project required design and installation of sewer infrastructure, in respect of which Sydney Water is the statutory authority. A precondition for the registration by the Land Titles Office of the subdivision was the issue by Sydney Water of what is commonly referred to as a s 73 Certificate. This is a reference to s 73 of the *Sydney Water Act 1994* (NSW) (the **Act**), which makes provision for the issue of a certificate which certifies that the requirements of Sydney Water under the Act have been met.
- 7 White says that, in breach of contract, IWS failed to prepare a satisfactory sewer design within a reasonable time and that SWC, for its part, failed to ensure that IWS discharged its obligations to do so, with the consequence that completion of the development was delayed, which caused White to suffer loss and damage.
- 8 The substance of this complaint is that IWS proposed to Sydney Water an installation involving pumping stations rather than a gravity-based solution involving a deep underbore, which latter solution was eventually approved by Sydney Water.
- 9 White says that IWS's breach caused the completion of the project to be delayed from 15 July 2016 to 1 March 2017.
- 10 Both liability and damages are in issue.
- 11 The premises of White's case on liability are, first, that the project would have been completed by 15 July 2016 and, second, that IWS's delay in lodging for approval an acceptable sewerage design with necessary backup documentary support caused the whole project to be delayed.
- 12 White has the onus of establishing that by the delay so caused, it suffered loss.

- 13 On the issues of when the project would have been completed and whether IWS's default delayed the whole project, the parties each called an expert civil engineer programmer. White called Mr Jonathan Shahady (**Shahady**). IWS called Mr James Senogles (**Senogles**).
- 14 Senogles prepared the first report, and thereafter two more. Shahady prepared two reports. They also prepared a joint report.
- 15 Their disagreement commenced with what was the appropriate delay analysis method to be adopted. They then disagreed with how the other had applied the method which the other had selected. They reached profoundly differing conclusions. They did agree that nothing which occurred or did not occur up to and including 18 May 2016 had any delaying effect on the project. They also agreed what was the as-built programme.
- 16 Shahady's conclusion was that the project could have been completed by 15 July 2016 and that delay in approval of the underboring solution caused a critical delay of 240 calendar days to the project, of which 173 were due to the late provision of a complete sewer design (which prevented sewer works from being installed when required) and of which 67 were caused by changes to the sewer design, which caused additional work and took extra time to that planned by Cleary Bros.
- 17 Senogles' conclusion was that at best the works would have, in any event, not been finished before 10 February 2017, not least of all because of variations unrelated to the sewer works. On a series of assumptions (the correctness of which he did not embrace), he also expressed the opinion that at best the programme would have been completed only 19 days earlier than it in fact was.
- 18 Plainly, both experts are adept at their art. But both cannot be right. It is not inevitable that one of them is right.
- 19 Senogles used the so-called "collapsed as-built (or 'but-for') analysis", which involves extracting delay events from the as-built programme to provide a hypothesis of what might have happened had the delay events not occurred. This method requires the selection of "logic links" which link various

components of the works to assume relationships of dependency to determine a critical path.

- 20 Shahady used the so-called “as-planned versus as-built windows analysis”, under which the duration of the works is broken down into windows which are framed by revised contemporaneous programmes, contemporaneously updated programmes, milestones or significant events. Key measuring points are identified on the path taken by the analyst to be critical. Changes to the critical path, critical path delays and the causes of those delays within and between each of the windows are examined to determine slippages and causes of delays.
- 21 It is not inevitable that one of these methods is the appropriate one for use in this case.
- 22 The expert reports are complex. To the unschooled, they are impenetrable. It was apparent to me that I would need significant assistance to be put in a position to critically evaluate their opinions and conclusions.
- 23 Uniform Civil Procedure Rules 2005 (NSW) (**UCPR**) r 31.54(1) provides:¹

31.54 Assistance to court by other persons

[...]

(1) In any proceedings, the court may obtain the assistance of any person specially qualified to advise on any matter arising in the proceedings and may act on the adviser's opinion.

[...]

- 24 This is a useful rule, which is not used as often as it perhaps might (or should) be. It enables the Court to have the benefit of confidential, unbiased and competent scientific or other advice: see *Adhesives Pty Ltd v Aktieselskabet Dansk Gaerings-Industri* (1935) 55 CLR 523 at 580.
- 25 Under UCPR r 31.54, the Court obtained the assistance of Mr Ian McIntyre (on whose appointment the parties agreed), a fellow of the Institution of Engineers Australia, who has many years of programming and delay analysis experience, including in major projects.

¹ The editors of the NSW Civil Procedure Handbook 2019 point out in relation to this rule that it dates back to the Equity Act 1880, and was originally limited to the Equity Division of the Court and now has general application except for the Admiralty List or a jury cause.

- 26 I record that Mr McIntyre's assistance was invaluable to the Court. His advice demonstrated that the complexity that has been introduced is a distraction.
- 27 I have below revealed the advice I received from Mr McIntyre, upon which I have acted.

THE FACTS

Sewerage installation

- 28 The usual design goal of a new land development sewerage installation is to discharge sewerage from the development lots to a connection point with an existing sewer main, via "lead-in works". Ideally an installation will be naturally gravity-fed to the connection point, but sometimes pumping installations are required. Consent of adjoining land owners may be needed. Complications arise when the connection point is far from the development site.
- 29 Topography can create challenges. The site is not level. It has been described as "saddle shaped", with the high point near the centre. The topography of the land does not permit waste to flow naturally by gravity from different catchment areas to a single point. Figure 1 is an aerial photograph of the development site. The site is in the centre of the picture, bounded by marked out roads.

Figure 1



- 30 The Pacific Ocean (top right) is to the east of the site.

- 31 The southeast (**SE**) and southwest (**SW**) catchments of the site did not have direct access to a Sydney Water main. The northern section of the site falls to the northeast (**NE**) and northwest (**NW**) and could be serviced by existing sewer mains within the abutting development. The SE catchment falls to the east. The eastern boundary of the site abuts an area of vegetation, which contains threatened species and endangered ecological communities. The SW catchment falls to the west and abuts a combination of farmland and a treed area containing endangered ecological communities.
- 32 Pure gravity driven systems are preferred to systems which use pumps because they need less maintenance.
- 33 Pumping installations can vary in complexity. Sometimes, pumps which can be bought off the shelf, referred to as “packaged pumps”, can be used. In other cases, pumping machinery may need to be specifically designed.
- 34 One form of pump system is called “low pressure”. This is where a sewer collection well and pump is installed in every lot and a small diameter sewer pipe is installed in the footpath reserve along the roads. This is not a system generally favoured by Sydney Water because of the number of pumps potentially involving maintenance. White did not favour this system for this reason, and also because of perceived negative market reaction.
- 35 Sewerage installations inevitably involve some form of excavation. Excavation can be by trenching or by boring. The pipes and mains are underground with inspection points via manholes. Excavating through rock is expensive. This site was rocky, and known to be so.
- 36 According to Unicomb, a gravity sewer was not preferred because an initial option suggested by Edwards required a long lead-in sewer through hard rock and a section through native vegetation, which involved expense.
- 37 As early as 7 May 2012, White obtained a Rock Survey from geotechnical engineers Douglas Partners which revealed that the subsurface conditions generally comprised topsoil overlying clay, gravelly clay, boulder overburden and latite bedrock.

Sydney Water's idiosyncrasies

- 38 No doubt wisely, Sydney Water does not favour dealing with proposed sewer installations on an informal basis. Before it will formally move in connection with a proposed sewerage installation, Sydney Water requires an application for a s 73 Certificate.
- 39 Sydney Water will, however, provide a feasibility letter as a guide as to what its requirements could be if a developer applied for a s 73 Certificate.
- 40 Once Sydney Water receives an application for a s 73 Certificate, it issues a Notice of Requirements (**NOR**) which the developer must satisfy. These requirements inevitably require the developer to engage an authorised Water Servicing Coordinator to be the contact point with Sydney Water. Sydney Water does not have direct contact with the developer. Edwards was designated as a Key Person with SWC, which gave him direct access to Sydney Water.
- 41 Sydney Water requires the developer to engage appropriately capable Developer Infrastructure Providers (in this case IWS) and then to enter into a Developer Works Deed (incorporating Standard Terms) which sets out all parties' roles and responsibilities.

Events until the s 73 application

- 42 From as early as 2012, Unicomb was in discussions with Edwards about the development. In January 2012, Unicomb asked Edwards to prepare a sewer proposal. Unicomb had some communications with Sydney Water.
- 43 Sydney Water issued a Feasibility Letter, addressed to Unicomb, on 2 April 2013.
- 44 Edwards says that in about April or May 2014, he had a conversation with Unicomb to the following effect:

Edwards: Trevor, the full gravity system is the option that Sydney Water would prefer most, but I'm concerned that the geological conditions will prevent that from being a viable option.

Unicomb: Joel, that's correct. Even though a full gravity system would be preferred by Sydney Water it would require us to carry out either open cut excavation or deep boring to achieve the result. Open cut excavation could significantly affect the lot-yield and I can't find someone that could bore to the

required depth in this dense rock. The full gravity options are completely off the table. Please find an alternative option for the sewer arrangements other than a gravity system.

- 45 Unicomb denies this conversation.
- 46 Edwards says that on a number of occasions he told Unicomb that Sydney Water's preferred option is a complete gravity feed system, unless it is persuaded otherwise.
- 47 Edwards says he recalls having discussed the possibility of boring and the geological composition of rock with Unicomb in the period April to October 2014. He says that Unicomb repeatedly indicated words to the effect:

Joel, the rock cannot be bored due to its hardness.
- 48 Unicomb says that no such conversations took place and that they never discussed the possibility of boring until Sydney Water requested in March 2016 that it be considered in an options report.
- 49 Edwards recalls such a conversation occurring when attending a meeting at Unicomb's home-office in Blackbutt in or about May 2014. He says Unicomb had plans and diagrams showing possible routes and depths, and that Unicomb again emphasised the hardness of the rock.
- 50 Edwards says that the topic of gravity feed on the site by deep boring was raised at various times. He says that he recalls Unicomb saying words to the effect:

Taking into account the hardness of the rock, horizontal boring is just not possible. The depth of the bore holes would have to be up to 11 meters for a considerable distance and I don't know anyone that has the capability to bore with the degree of accuracy required to put the sewer in. If the sewer was not bored, then it could only be achieved by open cut excavation which can't be done because it would probably significantly affect the yield on the development because of its effect on buildings adjacent to sewer lines.
- 51 Edwards says that whilst he was aware of horizontal boring generally, he had never had any experience or knowledge of it occurring in the area due to its rocky nature.
- 52 Unicomb says that at no time during his discussions with Edwards did Edwards suggest a boring option. He says that the boring option involved boring from a low point in the SW catchment to a low point in the SE catchment, then boring

from the low point in the SE catchment through the ridge between the SE catchment and the northern catchment. The bore would then discharge into the gravity sewer system in the northern catchment of the site. He says further that at no time during his discussions with Edwards did Edwards tell him that a detailed options report would need to be submitted to Sydney Water to get approval for the pumping station option.

- 53 Unicomb says that on a number of occasions between April and November 2014, Edwards said to him words to the effect of:

Pumping stations have been used on other sites in the Sydney Water distribution area. They are the best solution for the job.

- 54 Edwards says that Unicomb instructed him to research and advocate a packaged pump system. He recounts a conversation in about May 2014 to the following effect:

Edwards: Trevor, bearing in mind that the cost of full pump stations would be significant and the lead in time required lengthy, pump stations are typically very large and complex developments and the lots required to be serviced probably do not meet that criteria, I think the most appropriate pump system would be a package pump because they are relatively inexpensive and I have had previous experience with installing this type of system.

Unicomb: I agree, Joel. I think that the best way forward is to proceed with the package pump system.

- 55 On 7 November 2014, Unicomb obtained a further geological report from Douglas Partners. The report revealed very high-strength latite and that the rock was typically massive. The report stated that excavation into the high-strength rock would be difficult and would require heavy ripping, hammering, grinding or possibly rock-sawing.
- 56 I interpolate that Unicomb says (which appears to be inaccurate) that he only sought advice from White's geotechnical consultant regarding the hardness of rock when seeking costs from boring contractors in mid-2016. It is plain that Unicomb (consistently with what Edwards says) was conscious of the rock problems much earlier.
- 57 On 18 December 2014, IWS submitted to White (via Unicomb) a Fee Proposal for Design and Project Coordination Services (the **Fee Proposal**). The services offered included preparation of a sewer design package, preparing checklists, submission of the design to Sydney Water for approval, pursuing the design

approval and liaising with the constructor. The services excluded “Protracted negotiations with Sydney Water”. IWS quoted \$68,680 plus GST. White accepted the Fee Proposal.

- 58 By 3 February 2015, IWS had prepared a sewer design, incorporating pumping stations, with a connection to a lead-in main.
- 59 By 11 February 2015, Edwards had provided Unicomb with draft sewer plans.
- 60 On 16 June 2015, White obtained conditional consent from Kiama Municipal Council for the development.
- 61 White took transfer of the land on 26 June 2015, which it had contracted to purchase, from a Mr and Mrs Milne.

The Cleary Bros contract

- 62 On 7 July 2015, White entered into a works contract with Cleary Bros for the construction of the works necessary to achieve the subdivision, which included drainage works, road works, water reticulation and sewer works (the **Building Contract**).
- 63 The Building Contract incorporated the Australian Standard General conditions of contract (AS2124-1992). A Schedule to the Building Contract specified the Date for Practical Completion to be 30 weeks (presumably from date of contract). This period was later extended to 43 weeks.
- 64 The Building Contract made provision for the appointment of a Superintendent to give directions and to issue certificates. Unicomb was appointed Superintendent.
- 65 Clause 35 of the Building Contract is entitled “Times for Commencement and Practical Completion”. Clause 35.5 contains provisions for the granting of extensions of time for Practical Completion.
- 66 Clause 36 of the Building Contract provides:

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 (b)(i), 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.

67 The Building Contract includes the following Special Condition:

Clause 36 Annexure B

"delay damages capped at \$2500 plus GST per day, with the Contractor not to claim for the first 10 days of delay which give rise to delay damages under this Contract."

Events that give rise to delay damages are as follows

1. An act or omission of any other contractor employed other than by Cleary Bros.
2. Any breach of the contract or delays caused by the Principal; the Superintendent; the Principal's employees, consultants, other contractors or agents;
3. 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 (other than by reason of a variation directed under Clause 40);
4. changes in the law;
5. delays by municipal, public or statutory authorities or utility providers, not caused by the Contractor;
6. Claims referred to in Clause 17.1(v);

68 On 17 August 2015, Cleary Bros commenced work on the site.

The Deed

- 69 White applied to Sydney Water for a s 73 Certificate on 15 September 2015. Sydney Water issued a NOR on 4 November 2015.
- 70 On 24 November 2015, Sydney Water, White as Developer, SWC as Water Servicing Coordinator and IWS as Designer entered into a Developer Works Deed (the **Deed**).
- 71 Part B1 of the Deed records that the Deed comprises a number of instruments, including Sydney Water's Provider Instructions.

72 Part B2(a) of the Deed provides:

The Developer Works Deed makes up the entire agreement between the parties about the Developer Works. It completely replaces any previous understanding, agreement, representation or warranty.

73 The Deed incorporates, as Schedule 1, Standard Terms.

74 Part A of the Standard Terms is headed “Carrying out the works”.

75 Part A1 is entitled “General obligations”.

76 Part A1.1(b) provides:

(b) The Developer must engage a Water Servicing Coordinator (WSC) to manage the design and construction.

77 Part A1.1(c) provides:

(c) The WSC must ensure that Listed Providers design and construct the works in line with:

- (i) the Developer Works Deed and any document forming part of it, such as the Notice of Requirements (NOR), Job Specific Schedule Letter and Listed Provider Instructions
- (ii) relevant Sydney Water policies, forms and specifications
- (iii) relevant Legal Requirements and Standards.

78 Part A2 is headed “Design and preparation”.

79 Part A2.1(a)(i) provides:

(a) The WSC must:

(i) For Major Works, arrange for a Design Package to be prepared and then submit this package to Sydney Water

[...]

80 Part B of the Standard Terms is headed “Meeting other conditions”.

81 Part B6 is entitled “General warranties”. Part B6.1 is headed “Developer warranties”. It contains warranties by the developer including one that it has not been found guilty of corruption. Part B6.2 is headed “Listed Provider Party warranties” and contains warranties of the same general kind as Part B6.1. It provides:

B 6.2 Listed Provider Party warranties

(a) Each Listed Provider Party warrants to Sydney Water that it has:

(i) not been found by the ICAC to have engaged in Corrupt Conduct; and

(ii) read and will comply with Sydney Water's Business Ethics Guide on the website.

(b) Each Listed Provider Party warrants that, in performing the Developer Works, it will not employ or continue to employ an employee or subcontractor found by the ICAC to have engaged in Corrupt Conduct, or who has had their listing terminated by Sydney Water for a breach of the Business Ethics Guide.

Sydney Water may direct the Listed Provider Party to stop employing an employee or subcontractor to provide the Developer Works and stop them from being on Sydney Water's premises or worksites if the employee or subcontractor has:

(i) had their listing terminated by Sydney Water for a breach of the Business Ethics Guide

(ii) been found to have engaged in Corrupt Conduct by the ICAC.

The Listed Provider Party must then stop employing that employee or subcontractor for providing the Developer Works [sic] and appoint a replacement subcontractor under the Developer Works Deed.

(c) Each Listed Provider Party warrants that it:

(i) has entered into an agreement with the Developer; and

(ii) will perform all its obligations under that agreement in line with its terms.

(d) Each Listed Provider Party warrants that it will, while performing the Developer Works:

(i) be listed on Sydney Water's web site and maintain its obligation to meet the relevant Mandatory Criteria for Providers of Developer works; and

(ii) ensure that any person it nominates to perform any function (including signing documents) relating to the Developer Works or this Deed, is authorised to perform that function.

(e) Each Listed Provider Party warrants that it accepts the Novation Deed in Schedule 2.

(f) Each Provider Party warrants that it has a Quality Management System (QMS) and a Product Specific Quality Plan (PSQP) which will maintain the following minimum quality assurance certification requirements:

(i) third party certification of the Providers QMS including processes to address Sydney Water's requirements for PSQP by an independent JAS/ANZ registered certification company to AS/NZS ISO 9001. The QMS must address all warranties, activities and services that relate to the provider under this Developer Works Deed, or

(ii) third party certification of the providers QMS and the PSQP that documents the Providers processes to address Sydney Water's requirements for a PSQP by an independent JAS/ANZ registered certification company firm to AS/NZS ISO 9001; or

(iii) in the case of a provider that performs construction work only in relation to Developer works, a third party accredited Product Specific Integrated Management system that complied with the Civil Construction Management Code.

(g) The Provider will ensure and warrants to Sydney Water that developer works performed by it will be fit for the purpose or purposes detailed in its agreement with the developer.

Without limiting any other right which Sydney Water may have, if within 12 months of the date of Transfer of Ownership Notice, the Developer Works prove to be defective or not fit for purpose due to acts, errors or omissions of the Provider, the Provider must remedy the defects, by repairing, replacing or modifying the defects within the reasonable period specified by Sydney Water.

The Provider must meet all costs of the remedial work.

If the Provider does not remedy the defects by the period specified by Sydney Water, Sydney Water may remedy the defects at the cost of the provider. The provider must pay any costs Sydney Water incurs in remedying the defects within 30 days of the date of Sydney Water's invoice.

Sydney Water may consider it necessary to remedy the defects without first giving the Provider the opportunity to do so. The Provider must pay any costs Sydney Water incurs in remedying the defects within 30 days of the date of Sydney Water's invoice.

82 Part B7 is headed "Specific warranties, indemnities and release". Parts B7.1 and B7.2 are pertinent. They provide:

B 7.1 Designer warranties

- (a) As well as the warranties under B6.2, the Designer warrants that:
- (i) it will perform all its obligations under the Instructions to Designers – Major Works and related documents
 - (ii) it has prepared or will prepare the Design using due skill, care and diligence
 - (iii) the Design will be fit for purpose
 - (iv) the Developer Works depicted in the Design can be constructed in line with the Design.
- (b) The Designer also warrants that it has reviewed the NOR and is satisfied that a Design can be prepared that will:
- (i) meet these requirements
 - (ii) respond to any comments made by Sydney Water
 - (iii) satisfy all Legal Requirements and Standards that applied when the Design Package was completed.

B 7.2 WSC warranties

As well as the warranties under B6.2, the WSC warrants that it:

- (a) will perform all its obligations under the relevant Instructions to Water Servicing Coordinators, its contract with Sydney Water and related documents
- (b) will monitor the performance of all Listed Providers in line with:
 - (i) the Developer Works Deed
 - (ii) any comments made by Sydney Water about the Design Package
 - (iii) all relevant Legal Requirements and Standards
- (c) will meet its obligations under its agreement with the Developer to help complete the Developer Works
- (d) for Major Works, will work with the Designer to monitor the design and construction of the Developer Works to ensure that they will be fit for purpose and comply with:
 - (i) the Developer Works Deed
 - (ii) any comments made by Sydney Water about the Design Package
 - (iii) all Legal Requirements and Standards
- (e) for Minor Works, will also act as the Designer and assume any obligations identified in the Developer Works Deed
- (f) if the Constructor vacates the site [see B7.3(d)], will notify Sydney Water in writing at least two days before the Constructor plans to resume construction.

83 Part B8 is entitled “Laws and other legal conditions”.

84 Part B8.1(c) provides:

- (c) the Developer works are governed exclusively by the Developer Works Deed, which is a specific agreement for the construction of works under section 57 of the Sydney Water Act. This is not affected by any other agreement between the parties, except for the WSC’s contract with Sydney Water.

85 Part B8.2 provides:

B 8.2 Joint and individual liability and benefits

Except where the Developer Works Deed states otherwise:

- (a) any agreement, covenant, representation or warranty by two or more people binds them all jointly and each of them individually
- (b) any benefit in favour of two or more people benefits them all jointly and each of them individually.

86 Part B8.4 provides:

B 8.4 Variations and further acts

- (a) No Variation to the Developer Works Deed will take effect unless it is in writing and signed by each party.
- (b) Each party must, at its own expense, promptly perform all further acts and execute all documents that another party reasonably requests to:

- (i) give effect to the Developer Works Deed
- (ii) complete the Developer Works.

87 Part B8.5 provides:

B 8.5 Waivers

- (a) A waiver of any right or remedy under the Developer Works Deed:
 - (i) must be in writing and signed by the party granting it
 - (ii) only effects the obligation or breach for which it is given, in the circumstances defined, and must not be taken as an implied waiver in any other circumstances
 - (iii) must not be taken as an implied waiver of any other obligation or breach.
- (b) If a party fails to do, or delays doing, something it is entitled to do under the Developer Works Deed, this does not amount to a waiver.

88 The Instructions to Designers – Major Works referred to in Part B7.1(a)(i) of the Standard Terms (the **Instructions to Designers**) is in evidence. Paragraph 3 of that instrument is headed “Role of the Designer”. The following paragraph is pertinent:

The Designer’s role is to carry out the design of any required water and sewerage works.

The Designer must:

[...]

(f) where the works are likely to include a sewage pumping station, provide documentary evidence demonstrating that the feasibility and life cycle cost of all servicing options have been thoroughly assessed, and that a gravity sewer is clearly uneconomic and/or inappropriate;

[...]

After the Deed

89 On 21 December 2015, SWC submitted IWS’ water (as distinct from waste water) design to Sydney Water.

90 Sydney Water approved the water design on 4 January 2016.

91 On 23 December 2015, Unicomb emailed Edwards:

Joel

How is the water and sewer approval going

Trevor

92 On 24 December 2015, Edwards replied.

Hi Trevor

Moving along, but seems hard going through Sydney Water's other areas, just due to the time of year. I'll try to give them a push again today, & then Tuesday. I'll also keep you informed of progress.

Kind Regards

Joel Edwards

Sydney Wide Coordinators (Jamberoo)

93 On 4 January 2016, Unicomb emailed Edwards:

Joel

I assume we haven't heard anything from Sydney Water regarding the approvals for the Cedar Grove Estate

Trevor

94 Edwards replied:

Hi Trevor

Expecting to get better results this week. (I had difficulty getting anyone to pickup last week, let alone getting on to the appropriate people). I'll let you know how I go.

Kind Regards

Joel Edwards

Sydney Wide Coordinators (Jamberoo)

95 On 12 January 2016, Unicomb sent the following email to Edwards:

Joel

Have you been able to speak to anyone at maintenance yet or has Margaret been able to assist

Trevor

96 Edwards replied:

Trevor

Water approval came through this morning. Just pushing them for the sewer.

Kind Regards

Joel Edwards

Sydney Wide Coordinators (Jamberoo)

97 Edwards' reply was misleading, and deliberately so, because he had not yet lodged the sewer plans with Sydney Water. This deception is not to be condoned in any way. My impression, nevertheless, was that he was a truthful

witness. Edwards readily admitted to the falsity. He was no doubt being pressured by White at the time to deliver.

- 98 IWS' sewer design was submitted to Sydney Water on 3 February 2016. The design provided for packaged pump stations.
- 99 On 9 February 2016, IWS lodged with Sydney Water a Waste Water Servicing Options Report, together with a contour plan. It included the following:

Introduction / History

Stage 2 of Cedar Grove Estate in Kama [sic] is an approved 100 lot residential subdivision off Lilly Pilly Way, on the outskirts of western Kiama. The land in question is cleared paddock, fringed by remnant vegetation. It has some attributes which make it particularly difficult to service with sewer. The predominate strata is extremely hard bluestone, at surface level or with minimal cover. There are also a number of distinct catchments within the site. Attached is a contour plan which illustrates these catchments.

Sewer Options

There were a number of options considered for providing sewer services to the site:-

- Gravity sewer to the DN300 trunkmain with the creek in unformed Bong Bong Rd.
- Complex works pump station within the site, & Rising Main joining gravity system to trunkmain.
- Low Pressure Sewer system joining gravity system to trunkmain.
- Packaged Pump Stations with pressure mains, joining gravity system to trunkmain.

The alternatives described have different advantages & disadvantages, for both Developer and Sydney Water, however the Package Pump Station option seemed a logical choice in this case.

Gravity Sewer

Due to the topography of the area & the difficult strata, it was determined early on that the gravity sewer system would not be viable in servicing this development. A high point of over 70m AHD isolates one of the catchments, which is at around 58m. Having run the invert levels, we are conservatively looking at 8 to 9m cuts in bluestone at a minimum of \$350 per cu metre.

This is not only uneconomical, but practically impossible.

[...]

Package Pump Stations with Low Pressure Mains to join Gravity System running to Bong Bong Rd:

[...]

Sydney Water's Phil Cheetham was consulted last year in relation to the possibility of a Package Pump Station option for this Development, & he considered it a viable option, though there was no system in place.

[...]

- 100 This options report did not find favour with Sydney Water.
- 101 On 19 February 2016, Ms Margaret McTainsh (**McTainsh**) of Sydney Water informed Edwards by email, relevantly:

Hi Joel

I have had feedback from Engineering Services and it was identified that the information provided to date is way short of justifying what the preferred servicing option is for this site.

A detailed options report detailing the total life cycle costs of each of the options, the pros/cons of each option, the operational/maintenance implications and some engagement of our operational/planning/design staff as part of the optioneering phase is required as a minimum for this.

Until this information is provided Sydney Water will not be in a position to consider what the preferred servicing option is.

Ideally, this should be prepared by a competent hydraulic consultant who are familiar with Sydney Waters detailed planning process (eg GHD, Jacobs). At this point the concept design cannot be approved until we agree on what the preferred servicing option is.

If I can further assist or if you have any problems let me know.

Thank you

Regards

Margaret McTainsh - Development Services Officer

- 102 Edwards forwarded the email to Unicomb, writing:

Hi Trevor

Please see Margaret's email below. We need to provide a more comprehensive options report as indicated, before Sydney Water will be in a position to approve the current design. I don't have the hydraulic expertise, & they have indicated engaging someone like GHD or Jacobs, but I'd be concerned about timeframe. I'm not sure whether you've previously dealt with someone local in this capacity, but I'll give you a call shortly.

Kind regards

Joel Edwards

Sydney Wide Coordinators (Jamberoo)

- 103 On 25 February 2016, Edwards wrote to Sydney Water saying, relevantly, that "gravity is impractical & impossibly expensive with up to 11.2m of excavation in bluestone".

- 104 Unicomb prepared a submission for inclusion in a new options report, and he sent it to Edwards on 2 March 2016. As recounted below, further options reports were prepared. They are all dated March 2016. Their precise dates have to be gauged from contemporaneous emails.
- 105 On 4 March 2016, McTainsh sent Edwards some documents including a pro forma table of contents for the options report and a document to be used for costing in the report. Edwards forwarded the documents to Unicomb.
- 106 On 6 March 2016, Unicomb sent Edwards further information for inclusion in the proposed draft options report.
- 107 A further draft, apparently prepared on 7 March 2016, was more comprehensive. Unicomb prepared and included an options table in the report. The report contained a statement that:
- Due to the complex nature of the site, IW&SD held preliminary discussions with a number of Sydney Water Officers to ensure that package pump stations were a viable option. This included general advice from Phil Cheetham, who indicated that it might be an ideal design solution, as well as assurances from Phil Cooper & Ric Facci that the Package Pump Station option would be acceptable to, & able to be considered by, Sydney Water. (Shell Heights were investigating a similar solution at the time).
- 108 This passage was included, self-evidently, to induce Sydney Water to approve packaged pumps.
- 109 The document considered various sewer options. It recorded that “the northern most 43 lots fall to the existing gravity sewer for Stage 1 of Cedar Grove Estate”. The report only dealt with 24 lots that have natural fall to the SW, and 33 that have natural fall to the SE. In the options table, gravity sewer options were discounted due to cost and environmental factors and not meeting standards. The only options identified as viable for the SW and SE catchments were packaged pump stations and a low pressure system.
- 110 The next draft seems to have been prepared on 16 March 2016, and sent by Unicomb to Edwards. It left space for Edwards to insert some information, including about his discussions with Sydney Water.
- 111 The options report was apparently sent to Sydney Water on or about 17 March 2016.

- 112 There was some debate during evidence as to who of Unicomb and Edwards prepared what in the options reports. There is little doubt that Unicomb's contribution was significant. I think it is fair to say that Unicomb was driving the process.
- 113 On 29 March 2016 at 2.31pm, Mr Matthew Stark (**Stark**) of Sydney Water responded:

Hi Joel,

I was hoping that Margaret would forward you these comments, but I found out she is on leave this week.

Please see below.

Regards

Matthew

Feedback on 148199 DRAFT Wastewater Options Report (March 2016) v3 :

- The report does not address the requirements sent through on 3rd March in the preparation guide. Things that specifically need to be included are: demand forecasting, any staging and timing of works requirements.
- Has a bore been considered for each SE/SW catchment rather than an SPS? It certainly seems as if the SE catchment can get adequate grade for a bore from proposed SPS location to the proposed pipe on Banksia Rd. While initial costs for the bore may be high, as permanent infrastructure it has substantially lower risk and operating costs than a SPS - this needs to be considered (rather than just deep gravity servicing houses) An option, maybe two, should be included that involve boring.
- Apart from the Appendix B gravity option. Have other options been considered through Stage 1 of Cedar Grove Estate? These may be considered instead of the current proposed Line 2 long the unformed Bong Bong St.
- The non-cost criteria ranking incorrectly considers advantages/disadvantages that should be covered in the cost and therefore not a factor. It needs to be totalled correctly, and the system (eg 1-4 score or 1-2 scoring) explained. It is also very lite on in its descriptions of each option.
- The cost basis needs to be provided (it is not clear where the costs have come from) and especially it is not clear what has been assumed to be included/excluded (eg what size pumping station/ wet well diameter/flow requirements. Has the cost of land for the packaged pumping station/s been included?
- The cost for the packaged pumping stations seems very low for both supply and install. Especially when compared to the cost used for the low pressure on-property equipment.
- There needs to be a discussion of the potential commercial arrangements for the various options (eg who is intended to own the SPS, OR who would install the low pressure on-property works?) The commercial arrangement affects the cost (eg are all LPS pots to be bought and installed by developer or individually; is the SPS to Sydney Water specification eg with telemetry)

- Once the above have been addressed we can lock in more detail to evaluate their actual options assessment.
- It should also be noted that the previous advice from Sydney Water staff was that a packaged SPS was appropriate to consider as one of the options in servicing this development. Not that it was the preferred option.
- The version of Appendix B plan 2 received is not clear enough. If it was colour it may be better.
- The executive Summary should start the document and summarise the proceeding discussion, it should not come at the end nor should it include new material. (In general the formatting leaves much to be desired and makes it a much harder read)

- 114 This communication from Sydney Water was significant. For the first time Sydney Water raised a solution by way of underboring.
- 115 Unicomb intervened, responding to Sydney Water directly. He also spoke to Stark.
- 116 At 6.07pm on the same day, Unicomb emailed Stark, copied to Edwards:

Matthew

Further to our conversation this afternoon regarding the options report please find attached an amended report which now includes the inclusion of a deep gravity bore option for both the SW and SE catchments. I have also completed a NPV calc for this option and updated the NPV table. I have also added some more notes regarding the costing of the various options.

Joel still needs to do further works on this report in regard to the drawings, technical aspects of the SPS and also to review the cost of telemetry. It is noted that the actual costs of the packaged SPS used in the NPV calculations is the contract price for the supply and installation of the 2 SPS.

In regard to the proposed external sewer main along Bong Bong Street we originally showed a connection through a lot in Lilly Pilly Way but we were advised by SW that we needed to change the design and extend the main along Bong Bong Street. Now several months later we asked to reconsider this matter once again. Through Joel I have been trying to organise a meeting with relevant staff to discuss this matter. Bulk earthworks and drainage works are complete on the site and kerb and gutter works have commenced. The developer is now in a precarious position regarding delays and contract conditions and we request that a meeting be arranged this week so that this matter can be finalised

Regards

Trevor Unicomb

Project Manager

[...]

- 117 He then emailed Edwards at 6.15pm:

Joel

I had a discussion with Matthew this afternoon. He really had no idea about the email he sent you.

Nearly all the comments are from the engineers.

I advised him that the works were not progressing and that both you and I will be in contractual [sic] problems in the near future if this matter is not resolved (I laid this on really thick to impress with him how urgent this matter is). I also talked to him about how long this has been with SW and further how we are now getting conflicting advice (sewer down Bong Bong Street). He advised we should meet (YAH).

This meeting should be ASAP. I can't meet next Tuesday but we need it this week anyway. Let me know what you can organise

Trevor

118 The options report provided by Unicomb showed as viable options:

- a 300m bore from the low point in the SW catchment to join with the sewer through lot 5,
- a 150m bore from the low point in the SE catchment to a point in lot 14. Then a 50m extension in rock,
- packaged pump stations (SE & SW catchments) See Plan No.3 in Appendix B, and
- low pressure system in SW & SE catchments.

119 On 30 March 2016 at 10.44am, Unicomb emailed Edwards:

Joel

I think you need to be a lot more forceful. I have just got a phone call from CB advising a letter is being prepared regarding extensions of time and cost variations due to delays in sewer approval.

Trevor

120 On the same day at 12.28pm, Stark emailed to Unicomb and Edwards:

Trevor / Joel,

Are these two proposed packaged pumping stations to be handed over to Sydney Water to own and operate?

To date it has been assumed by Sydney Water that they are.

If they are, and it turns out that they end up as a preferred option, then there is still a significant amount of work to done [sic] both prior to the option being approved and after.

The cost used for the stations in the cost comparison in the options report will need to include the telemetry (which can be significant) and will need to include the cost of excavation for the wet well (minimum 2.4 metre diameter), the cost of the pressure main/s and there will need to be land dedicated for

each station. Driveways / bunded areas etc all need to be costed. The station/s cannot be located in the footpath or road.

A needs specification will need to be prepared (a template is available)

Pumping station specific electrical drawings will need to be produced (templates available)

The provision of pumping stations falls under the Complex works process:

I have attached two process routes for complex works:-

1. No funding by Sydney Water (ACDP0272 attached)

2. With funding by Sydney Water (ACDP0274 attached)

One of these processes would need to be followed to get approval of the proposed stations.

I have some feedback about the “non-cost criteria comment:

In the options table in Section 5 there are things listed as disadvantages that can/should still be costed. As an example just because an option goes through environmentally sensitive land doesn't necessarily discount the option. If the option comes in with a million dollar cost then it could be discounted.

As a result the ranking table would include more options and may provide a clearer picture of the preferred servicing

As discussed yesterday please provide some examples of packaged stations for comparison. They will need to be ones that have been constructed for Sydney Water. I believe that Flygt are fully aware of the requirements that Sydney Water has for packaged stations and should be able to provide guidance and an order of cost.

Can you please provide some details about the previous proposal for a gravity sewer through LillyPilly Way, was it under a Case ? If so what number. I couldn't see any reference to that proposal under the current Case (148199). You don't need to consider it as an option. That was actually a comment from myself trying to help find a cheaper overall servicing option that could be considered.

Joel called while I was writing this email and I raised with him the need for the engagement of a specialist to prepare this type of report. He indicated that no one had been engaged.

There may be other options or combinations of existing options that should be considered and may produce the option that becomes the most appropriate to serve the 57 lots.

Please be creative in looking at options.

In view of the above work that still needs to be done to get this options report into a shape that can be signed off there seems no point in meeting this week.

Christian is not available until next week either.

All of the comments that I sent yesterday need to be addressed. The comments email is attached for completeness.

Regards

Matthew Stark | Planner

...

- 121 Stark also raised with Edwards, in a phone call whilst drafting this email, the need for the engagement of a specialist to prepare the report.
- 122 Edwards says that Sydney Water's indication that it would not permit the pump stations to be located in the footpaths or the road and that specific land would need to be dedicated to each station meant that at least two lots would be lost for sale regardless of whether they were pre-sold. Edwards recounts a conversation with Unicomb about this.
- 123 Edwards says that after receipt of Stark's email, he had a conversation with Unicomb, which included Unicomb saying words to the following effect:

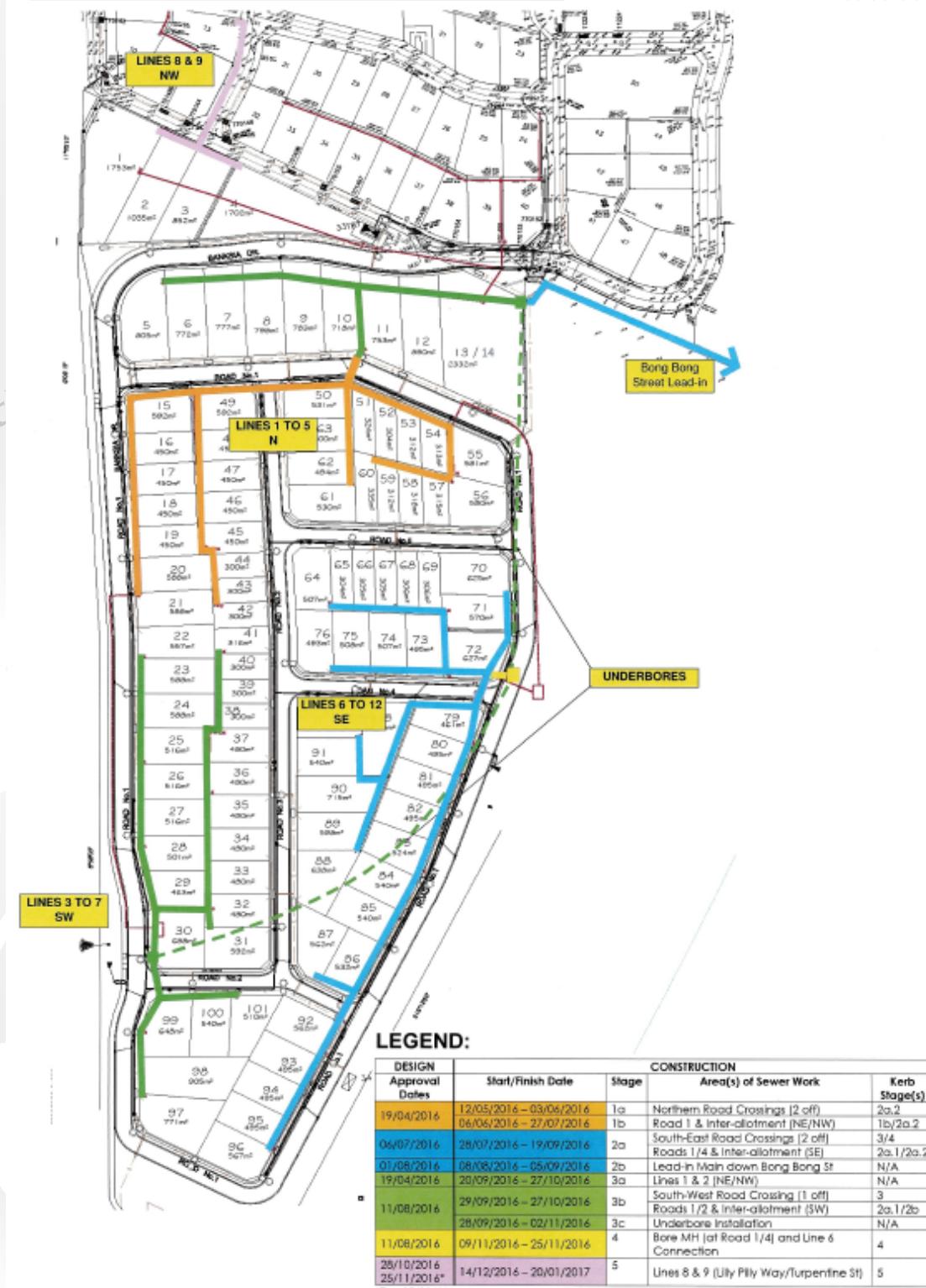
Joel, Sydney Water's requirement that the pump stations have to have their own dedicated land have really complicated things for us. There are significant implications arising out of this. We have sold some of the lots off the plan and we do not want to enter into negotiations with lot owners because of changes in sewer connection arrangements. The developer is not willing to sacrifice any lots or lot area.

Sydney Water's email 24 March that they sent to you 29 March suggested that the boring option be investigated further. I had previously discounted it because I didn't think it could be done. I haven't costed it and don't know what it would look like. It's why I didn't go into any specific detail about that in the options report. Get some quotes on the boring and see what that looks like compared to the cost of the package pump stations and also the loss of two lots so the developer can decide what is the most financially efficient response. I'll have to include it in any future options report.

- 124 On 19 April 2016, 6 July 2016 and 1 August 2016, Sydney Water gave approvals for various components of the sewerage works, excluding the underbore component.
- 125 On 16 May 2016, Edwards sent Sydney Water what appears to be the seventh and final options report. The options remained the same as they were in the previous report. Sydney Water favoured the boring solution, and despite considering that the report did not address its comments about requiring more information on the cost basis, indicated its confirmation that the matter could proceed "beyond options".
- 126 Sydney Water finally approved the underbore design on 11 August 2016.
- 127 Figure 2 below depicts the various components of the sewer works. The legend indicates the date of the relevant approvals and the start/finish date of the

various components of construction. Lines 8 and 9 (to the north) were constructed last and are not impacted by the underbore work.

Figure 2



- 128 Trenching was required for each of the sewerage lines depicted. The bores are shown by the broken green line. Manholes needed to be excavated at the points where the bores joined the sewerage mains. A manhole was excavated at the confluence of roads one and four. This was the point from which the underbores were carried out. Save for at the point where the boring was carried out, the entirety of the boring work is underground and would have had no effect on any other work on the surface. There was some suggestion that lines 1 and 2 could not be constructed until the underbore was complete to the point where it was to intersect with those lines. This is wrong. This is because the point of intersection would have been known in advance and the pit with which the underbore was to intersect was constructed first.
- 129 All the work, including the sewer works, was effectively complete on 24 February 2017. A Certificate of Practical Completion was issued on 1 March 2017.

Cleary Bros' claims

- 130 On 1 April 2016, Cleary Bros gave a Notice of Delay to the work reaching Practical Competition, allegedly because of delay in approval of the sewer works. On 18 May 2016, Cleary Bros made a claim for delay costs at \$2500 per day, plus GST, purportedly under clause 36 Annexure B of the Building Contract.
- 131 Separately, on 1 April 2016, Cleary Bros directed Progress Claim Number 18 to White. It included the following claim:

Delay Costs (as agreed 175k now, 100k later)

- 132 \$175,000 represents \$2500 per day for 70 days.
- 133 On 26 February 2018, Cleary Bros invoiced White for \$166,637.92, being the remainder of the cash retention then being held by White under the Building Contract. The body of the invoice is as follows:

Value of Scheduled Work Completed (excl. GST)	\$ 6,301,078.86
Plus: Variations Completed (excl. GST)	\$ 3,070,975.40
Total Value of Work Completed to Date (excl. GST)	\$ 9,372,054.26
Less: Part Delay Damage Costs	\$ 397,000.00
CLAIM TOTAL (excl. GST)	\$ 8,975,054.26
Less Previously Paid (excl. GST)	\$ 8,823,565.24
Amount Payable this Period (excl. GST)	\$ 151,489.02
Plus: GST	\$ 15,148.90
Total Payment this Claim (incl. GST)	\$ 166,637.92

134 Unicomb approved this invoice for payment over his signature on 27 March 2018.

135 Somewhat peculiarly, and in circumstances which were not adequately explained by either Unicomb or Morcom, on the same day Cleary Bros issued another invoice, also certified by Unicomb over his signature, the body of which is as follows:

Value of Scheduled Work Completed (excl. GST)	\$ 6,301,078.86
Plus: Variations Completed (excl. GST)	\$ 2,673,975.40
Total Value of Work Completed to Date (excl. GST)	\$ 8,975,054.26
Less: Retention (excl.GST)	
CLAIM TOTAL (excl. GST)	\$ 8,975,054.26
Less Previously Paid (excl. GST)	\$ 8,823,565.24
Amount Payable this Period (excl. GST)	\$ 151,489.02
Plus: GST	\$ 15,148.90
Total Payment this Claim (incl. GST)	\$ 166,637.92

136 On about 27 March 2018, Cleary Bros made Payment Claim Number 20 on White. The claim was for February 2018. The claim included \$572,000 for "Delay Costs". The claim appears to acknowledge that payment of \$175,000 for Delay Costs had already been made by White to Cleary Bros. The final

amount claimed was \$151,489.04. Acting as Superintendent under the Building Contract, on 27 March 2018, Unicomb certified that amount to be payable by White to Cleary Bros.

The works

137 The major components of the works were:

- earthworks,
- roadworks and kerbing,
- sewerage,
- electrical and National Broadband Network (**NBN**) installation,
- footpaths, and
- landscaping.

138 The electrical and NBN installation was contracted to and carried out by an organisation called Transelect. Landscaping was contracted to RK Evans Landscaping Pty Ltd. The as-built program is not in dispute.

139 I shall deal first with liability and then with damages.

LIABILITY

140 Initially White relied only on the Deed as constituting the contract between it, and IWS and SWC.

141 White argued that, under B7.1 of the Standard Terms, IWS undertook and warranted to it:

- to comply with the Instructions to Designers,
- to prepare a design that was fit for purpose,
- to prepare the design using due skill and diligence, and
- to perform services under the Deed within a reasonable time.

142 White argued that IWS breached these obligations by:

- not preparing a gravity sewer design which was the only feasible design acceptable to Sydney Water,
- submitting a non-gravity design relying on pumping stations without an options report demonstrating that a gravity sewer was clearly uneconomic and/or inappropriate, as was required by paragraph 3(f) of the Instructions to Designers,

- continuing to pursue a packaged pump station design instead of a gravity boring solution,
- failing to prepare and formulate an appropriate sewer design within a reasonable time, and
- failing to respond in a timely and adequate fashion to Sydney Water's comments.

143 White argued that under Part B7.2 of the Standard Terms, SWC undertook and warranted to it:

- to ensure that IWS prepared a design in line with Instructions to Designers and related documents,
- to work with IWS to monitor the design and construction to ensure that they would be fit for purpose and comply with the Deed and any comments made by Sydney Water about the design package,
- to perform its services under the Deed with due care, skill and diligence, and
- to perform its services under the Deed within a reasonable time.

144 In substance, it argued that SWC breached these obligations by failing to ensure that IWS did not breach its obligations to White.

145 IWS and SWC took issue with White's contention that under the Deed they gave any warranties to White. They argued that they gave warranties only to Sydney Water. There is substance in this contention, and I uphold it.

146 Neither Part B7.1 nor Part B7.2 of the Standard Terms state expressly that the warranties are given in favour of White. If warranties in favour of White had been intended, the Deed could easily have said so. White's contention requires words to be read in. The opposing contention does not require words to be read in, because both Parts B7.1 and B7.2 commence with the words "As well as the warranties under B6.2...", and Part B6.2(a) commences with the words "Each listed provider warrants to Sydney Water...". The warranties in Parts B7.1 and B7.2 are clearly given in favour of Sydney Water. It is not necessary to read in words such as "to the other parties to this Deed" to give these paragraphs effect.

147 But this does not affect the outcome.

148 IWS and SWC had not pleaded lack of privity with White in connection with the warranties. At the hearing, they sought leave to amend to take the point. I

permitted them to do so in the following circumstances. First, White was granted leave to plead an equivalent breach by IWS of the Fee Proposal under which, in my opinion, IWS's obligations to White were in substance no different to those pleaded by White as arising from the Deed, that is, to prepare, within a reasonable time and with due care, skill and diligence, a design fit for purpose, which means a design which meets Sydney Water's (reasonable) requirements. Second, IWS agreed that it could not rely on circumstances which occurred between the Fee Proposal and 24 November 2015, that is the date of the Deed, as being adverse to White's case.

- 149 SWC is in a slightly different position.
- 150 SWC put that it had no contract with White at all and that it merely performed a function for White's benefit and received payment. I reject this submission. White, as it was obliged to do under part A1.1(b) of the Standard Terms, retained SWC as its Water Servicing Coordinator to manage the design and construction, and it paid for those services. It is in the nature of this appointment that SWC had obligations to do what it could to ensure that IWS performed. Because SWC had to supervise IWS it follows, I think, that SWC is to be taken as having an obligation to perform its duties within a reasonable time. It therefore does not matter that SWC did not give the warranties in Part B7.2 of the Standard Terms of the Deed to White.
- 151 Save insofar as an obligation to perform within a reasonable time is concerned, Part A1.1(c) of the Standard Terms, which requires the WSC to ensure that Listed Providers design and construct the works in line with the Deed, Sydney Water's policies, forms and specifications, and relevant legal requirements and standards, also would not assist White because the works were so designed and constructed. The same applies to Part A2.1(a)(i), which requires the WSC to arrange for a design package to be prepared and submitted to Sydney Water. It did this.
- 152 It is not seriously in dispute that IWS's initial design transpired to be unacceptable to Sydney Water. Its original submission, which entailed a sewage pumping station, should, if paragraph 3(f) of the Instructions to Designers had been complied with, have provided documentary evidence

demonstrating that the feasibility and life cycle cost of all servicing options had been thoroughly assessed and that a gravity sewer was clearly uneconomic or inappropriate. The evidence does not extend to establishing that it would not have been possible to so demonstrate.

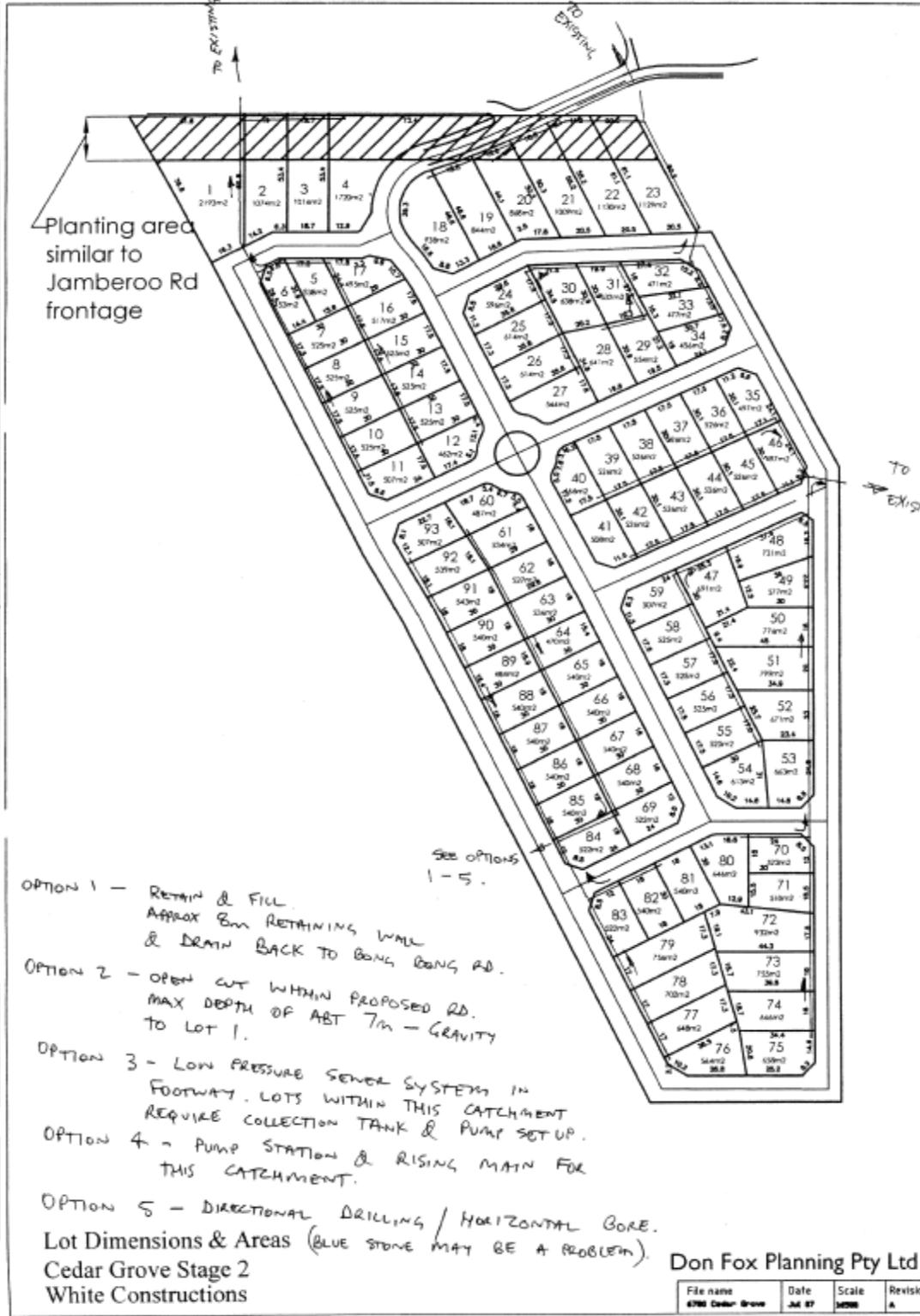
- 153 The parties each called an expert water servicing coordinator. White called Mr Robert Dowey, and SWC and IWS called Mr David Filmer. They agreed that gravity sewerage options are generally preferred over pumping stations, although they did not say they are always preferred.
- 154 They agreed that designs submitted were not of a standard that complied with the requirements of Sydney Water until on or about 17 May 2016, being the date that the final options report was submitted to Sydney Water. It is to be remembered that it is common cause that nothing that happened or did not happen before 18 May 2016 caused any delay to the sewerage installation.
- 155 They agreed that a design should have been submitted by 24 November 2015 and, if prepared to the prescribed standard, would likely have been approved on or about 4 January 2016. They say there is no defined timeframe for Sydney Water to give design approval, although generally for gravity sewers approval could be expected within six to eight weeks of lodgement.
- 156 White does not claim that it suffered any loss by IWS breaching its obligation to prepare an acceptable design (or submit a complying options report) per se. Clearly it suffered no loss from this. It did not implement the packaged pump design, and it does not claim that it wasted any money in propagating it. Also, IWS (supervised by SWC) ultimately complied with its obligation to prepare an acceptable design. The ultimate design was accepted and implemented.
- 157 White's essential complaint is about delay. Its loss was allegedly caused because the underbore design was not prepared and submitted earlier.
- 158 IWS argued that:
 - the delay was not a breach of its contract with White, because Unicomb had instructed Edwards not to propose an underboring solution,
 - IWS cannot be said to have failed to use due care and skill in proposing its initial design when it acted in accordance with Unicomb's instruction, and

- White's loss, if any, was not caused by IWS's breach but by White itself because of Unicomb's instruction.
- 159 White disputes that Unicomb gave the instruction. It argues, however, that even if he did, it is irrelevant because:
- IWS did not plead a variation or waiver of its obligations under the Deed, and could not successfully plead it because of Part B2(a) of the Deed and Parts B8.4 and B8.5 of the Standard Terms,
 - the instruction, if it was given, preceded the date of the Deed and thus the date upon which the breached obligation arose,
 - the instruction preceded the breach and therefore could not have broken the chain of causation, and
 - in any event, whilst the direction may have been one cause, it was not the only cause of White's loss.
- 160 I have already found that White has no claim against IWS or SWC for breach of the Deed. It follows that exclusion provisions in the Deed (whatever might be their effect) have no role to play here.
- 161 The Fee Proposal, however, contains no such exclusionary provisions.
- 162 If White had instructed IWS not to propound the underbore solution, but to propound the pumping stations solution, it can hardly be suggested by White that IWS's failure to propound the underbore solution was a breach of the Fee Proposal or that, if it is a breach, damages suffered by it (if it suffered them) were caused by that breach as opposed to its own conduct.
- 163 It would not matter (in assessing whether IWS acted too slowly) whether Unicomb gave the instruction before or after acceptance of the Fee Proposal, the date the first design was submitted or at any time before Sydney Water first raised the underboresolution, because the instruction, if he gave it, was not withdrawn until the last of these events: see generally *Donau Pty Ltd v ASC AWD Shipbuilder Pty Ltd* [2019] NSWCA 185 at [109].
- 164 It is clear that both Edwards and Unicomb favoured a non-gravity solution. If Unicomb gave the instruction, the most White could say was that Edwards should have deflected it from doing what it wanted to. Having regard to the respective personalities of Unicomb (and Morcom) on the one hand and Edwards on the other, I am not persuaded that Edwards would have prevailed.

Morcom and Unicomb are demonstrative and dominant. Edwards is restrained and less dominant. I am not satisfied in any event that the pumping station solution was hopeless.

- 165 Did Unicomb give the instruction?
- 166 I find that he did.
- 167 I prefer Edwards' evidence to that of Unicomb. The probabilities, supported by the objective contemporaneous circumstances, favour Edwards.
- 168 There is no doubt that White would have wished to keep the cost of the project down. White had obtained two geological reports – which have been referred to earlier. His failure to disclose them is not without significance.
- 169 I believe Edwards when he says he had never heard of an underboring solution being implemented in the area because of rocks.
- 170 In evidence is a document created by Edwards on 6 February 2012, which includes his handwritten description of five available sewer options. Option number 5 is a horizontal bore. There is no record of the document being emailed to Unicomb. Edwards' evidence is that this is unsurprising because it is very likely that he attended Unicomb's office to deliver the document by hand. The existence of this document in itself supports Edwards. Figure 3 is a copy of this document.

Figure 3



- 171 The first options report lodged with Sydney Water by IWS on 9 February 2016 makes reference to a gravity option, but makes no reference to an underbore. The gravity sewer is described as not only “uneconomical”, but “practically impossible”. This is consistent with the instruction having been given.

- 172 During Edward's cross-examination the following exchange occurred about the document, which is Figure 3, and Edwards' assertion of the instruction:

Q. I suggest such conversations never took place and the first time there was any discussion of a horizontal boring option between you and Mr Unicomb was after 29 March 2016; that's correct, isn't it?

A. That doesn't even make sense, I don't think. I think if I prepare a document, you said - you mentioned before that I forgot about that over a couple of days, but I prepared a document with that option, then why would I - it doesn't make any sense to say that I just forgot that was an option altogether. That discussion took place.

- 173 I consider Edwards' response to be compelling.

- 174 The underbore option was first included when Unicomb sent an amended options report to Stark on 29 March 2016. There then followed a series of options reports until the final one on 16 May 2016.

- 175 The significant aspect of this is that Unicomb, in my view, took effective control of this process, starting with his direct communication with Stark.

- 176 The options reports required financial analysis which plainly it was not Edwards' function, nor within his capability, to provide. Edwards also made it clear at an early point that he did not have hydraulic expertise, yet White did not instruct hydraulic experts.

- 177 Although no point was made of it, it is worthwhile to observe that the Fee Proposal excluded protracted negotiations with Sydney Water.

- 178 White has not established that any of the delay between 29 March 2016 and 16 May 2016 was fairly caused by Edwards.

- 179 The consequence is that White has failed to establish any breach of contract by IWS or SWC and its case must be dismissed.

- 180 White's final submissions did not include any argument based on breach of a non-contractual duty. Given my findings, no such breach would have been established in any event.

- 181 Although it is not strictly necessary to do so, I will nevertheless consider the question of quantum, on the hypothesis that White had succeeded in establishing breach of contract.

- 182 For the reasons which follow, White has not established that on that hypothesis it suffered any loss. The same conclusion would be reached if White had made out breach of a non-contractual duty.

DAMAGES

- 183 White abandoned a number of manifestly insupportable claims, including for a profit margin on alleged disruption costs of construction, a proportion of head office overheads unrelated to this dispute (which would have been incurred anyway) and consultants fees in relation to an application for funding from Sydney Water which application succeeded. As is dealt with below, it still persisted in a number of manifestly insupportable claims.

The law

- 184 White bears the onus of establishing that it suffered loss and the quantum of it.
- 185 White's damages are based on delay to the whole project, said to be attributable to the late (underbore) sewer design. This is not the type of subject upon which precise evidence cannot be adduced. It is not a subject which involves the Court having to make an estimation or engage in some degree of guesswork. It is not the kind of case where it is necessary for the Court to do its best, in the absence of evidence which White was capable of adducing see: *Placer (Granny Smith) Pty Ltd v Thiess Contractors Pty Ltd* (2003) 77 ALJR 768, 774 at [38]; *State of New South Wales v Moss* (2000) 54 NSWLR 536 at 554; *Troulis v Vamvoukakis* [1998] NSWCA 237; *JLW (Vic) Pty Ltd v Tsiloglou* [1994] 1 VR 237 at 243-246.

White's claims

- 186 White claims \$1,935,199 (down from over \$3 million originally claimed) as damages under the following heads:

Disruption costs of construction activities by reason of sewer approval delay

Removing rubbish and
re-trimming base course

\$12,621

Extra road base due to exposure during delay	\$32,092
Constructing temporary ramps over kerbs and reinstatement	\$7,611
Cleary Bros charging to supervise the electrical subcontractor	\$69,340
extra excavation costs over the sewer trench, being the actual invoiced excavation plant hire costs less contract rates for scope works	\$181,195
Modifications to drainage works, and kerbing and Guttering	\$40,086
Overhead, management and supervision costs incurred in the prolongation period from 15 July 2016 to 1 March 2017	
Cleary Bros site management and supervision during the delay at \$2,500 per day, with no claim	\$547,000

for the first 10 days of delay	
Developer's project supervision during the delay period, being a retainer fee of \$100,000 and consultant fees of \$102,300	\$202,300
Funding costs, loss of interest income of land sales revenue, bank fees and land taxes until land sale settlements end April 2017	
Funding costs of a \$15,000,000 loan facility	\$346,206
Funding costs of a \$6,960,000 loan facility	\$89,843
Loss of interest income on residual funds (profit) of \$15,887,286 from land sales	\$236,233
Land taxes incurred on 13 February 2017 in delay period	\$170,672
Total	\$1,935,199

Delay

187 The first head of damages does not, as White correctly points out, require the Court to find a specified period of delay to the project caused by the sewer works. This head of damages is said to have been sustained because the delay (whatever its duration) interfered with the sequencing of works. It is

nevertheless at this point appropriate to deal with whether White has established that the project was delayed as it says.

- 188 The descriptions of the methods adopted by Shahady and Senogles respectively are evidently derived from the publication of the United Kingdom Society of Construction Law, the Delay and Disruption Protocol (the **Protocol**).²
- 189 The Protocol enumerates six different methods of delay analysis, including those adopted by Shahady and Senogles.
- 190 The Protocol methods have apparently been accepted into programming or delay analysis lore. In *Alstom Ltd v Yokogawa Pty Ltd (no 7)* [2012] SASC 49 at [1282], Bleby J described a method of delay analysis adopted by an expert as not being an accepted method of delay analysis for construction programming practitioners and observed that it was not mentioned in the Protocol as an accepted method of delay analysis.
- 191 Mr McIntyre's opinion, upon which I propose to act, is that for the purpose of any particular case, the fact that a method appears in the Protocol does not give it any standing, and the fact that a method, which is otherwise logical or rational, but does not appear in the Protocol, does not deny it standing.
- 192 White, supported by Shahady, made a sustained attack on Senogles' approach. White argued that:
 - Senogles' method did not accord with common sense,
 - the logic links inserted by Senogles were not sustainable, and
 - Senogles' method obscured the inefficient performance of the work (caused by delays in sewer approvals).
- 193 Shahady opined that detail sufficient to justify selection of appropriate logic links was absent from Senogles' approach.
- 194 Senogles, for his part, was critical of Shahady's approach. Amongst others, he opined that Shahady did not properly consider the additional time that was required to complete additional non-sewer works or other delays unrelated to the sewer design, and the fact that the Building Contract did not include the

² The second edition of the Protocol was published in February 2017.

whole scope of work required to complete the subdivision. He considered that Shahady assumed unjustifiable critical as-built logical relationships and that his method was flawed from both a factual and analytical point of view. In this regard, I think that one of the logical flaws in Shahady's approach is that it assumes causation rather than identifies actual evidence of it.

- 195 Mr McIntyre's opinion, upon which I propose to act, is that neither method is appropriate to be adopted in this case. This view is consistent with me accepting Shahady's view of Senogles and Senogles' view of Shahady.
- 196 Mr McIntyre's opinion, upon which I propose to act, is that close consideration and examination of the actual evidence of what was happening on the ground will reveal if the delay in approving the sewerage design actually played a role in delaying the project and, if so, how and by how much. In effect, he advised that the Court should apply the common law common sense approach to causation referred to by the High Court in *March v E & MH Stramare Pty Ltd* (1991) 171 CLR 506.
- 197 The Court is concerned with common law notions of causation. The only appropriate method is to determine the matter by paying close attention to the facts, and assessing whether White has proved, on the probabilities, that delay in the underboring solution delayed the project as a whole and, if so, by how much.
- 198 This requires it to establish that:
 - the whole project would have been completed by 15 July 2016,
 - the final sewer approval delay delayed sewer works,
 - the sewer works delay prevented non-sewer works from otherwise proceeding, that is, that the programme could not reasonably have been varied to accommodate the consequences of late approval, and
 - other works could not have been done to fill downtimes so as to save time later.
- 199 For the reasons which follow, White has failed to discharge this burden.
- 200 Shahady aptly commented that his report does not purport to prove facts. It does not.

- 201 This case demonstrates the importance of paying close attention to the actual facts rather than opinions about what the evidence establishes.
- 202 White sought to rely on the affidavit evidence of Mr Joel Carter, who worked as the site foreman and supervisor for Cleary Bros. He gave evidence about delays and disruptions to the works due to the delay in the sewer approval. He described the works as “delayed, piecemeal and disrupted”. The difficulty is that his evidence is couched in generalities such as:
- The works were not carried out in the sort of continuous manner that, in my experience, is usual for a subdivision. Rather Cleary Bros was required to do the most work it could on any given day and in response to available work fronts. It was the availability of work fronts which drove where work was carried out on any given day and determined the number and type of crews used. Therefore while the work was “more or less continuous” in the sense that on most days works were conducted, the works were not carried out in the same manner and with the same amount of people as I would have liked to have carried them out in if I was not restricted by the availability of work fronts.
 - To mitigate the delay caused by the delay in receiving the final sewer design, Cleary Bros progressed works out of the usual order where possible, including doing the earthworks, retaining wall construction, stormwater construction, water main, road pavements and kerbs and gutter before sewer. These works were progressed despite the works sitting above the sewer.
 - The carrying out of work out of order also had other flow on effects. For example, Cleary Bros could not blast rock or use heavier rock excavation machinery in certain areas because services had already been installed nearby. Instead Cleary Bros was required to hammer the rock. This would not have been a problem if the trench excavation was carried out first as planned.
 - The electrical and NBN subcontractor, Transelect, was not able to complete its works in an efficient manner.
- 203 This evidence is incapable of founding any satisfactory specific findings of delay.
- 204 The primary source of evidence as to what was happening on the ground is the Cleary Bros site diary (the **diary**).
- 205 The diary is comprehensive, and appears to have been well kept. It is divided into headed sections which, amongst others, include:
- Contract Works Underway / Completed Today,
 - Client Instructions Received Today,
 - Delays Today,
 - Personnel Onsite Today, and

- General Miscellaneous.
- 206 For present purposes the diary is more significant for what it does not say than for what it does.
- 207 Despite the Court repeatedly emphasising the necessity to be directed to “raw data”, White took the Court to very little of the contents of this important contemporaneous record. The inference is open that the Court was not directed to much of it because of the paucity of relevant entries evidencing relevant delay. This did not relieve the Court of the burden of examining the site diary carefully.
- 208 The sewerage installation involved, broadly, the following activities:
- mobilisation, including of the necessary equipment,
 - excavating trenches for each of the lines,
 - excavating for and constructing manholes including the manhole from where the underbores were performed,
 - laying pipes,
 - backfilling, and
 - testing.
- 209 It is agreed that up until 18 May 2016, the delay in approval of the boring solution had no delaying effect on the project.
- 210 An examination of the diary and the agreed as-built programme reveals that as at 18 May 2016, the following was the state of the works:
- the subdivision earthworks were complete (and had been complete since December 2015),
 - the east and west retaining walls had been completed,
 - a significant portion of the stormwater drainage works had been completed,
 - road crossings for the water reticulation system were complete,
 - kerbing and guttering work was in progress, and
 - earthworks and preparatory works for a cycle-way near Cuba St had begun.

- 211 The diary reveals that Cleary Bros' plumber and sewerage contractor, Mr Adam Christofides, was on site working on a sewer road crossing of Road 1 (at Ch 870).³
- 212 There are repeated references in the diary, in the Delays Today section, to "Waiting for approved sewer design", "Waiting for sewer and water subcontractor to start re-design work" and "Waiting for sewer design to be approved". However, the diary does not identify the activities, if any, which were being adversely affected by the wait. The entries do not enable a finding of particular consequences. The diary reflects significant activities happening on site in any event.
- 213 The diary reveals that a significant aspect of the sewerage installation was having to get through rock. It reveals that at any one time, there were up to four excavating machines there at the instance of the plumber and sewerage contractor. Rock was unquestionably a major delaying factor for the project as a whole.
- 214 An organisation called UEA (frequently wrongly referred to in the evidence – including in the agreed as-built programme – as UAE) was retained as the boring contractor.
- 215 The sewerage installation was carried out as follows:

ID	Task Name	As-Built Dates	
		Start	Finish
56	Sewer		
57	North Section		
58	Install Sewer Crossings	12/05/2016	3/06/2016
59	Install Sewer lines 1-5 N	6/06/2016	27/07/2016

³ Chainage 870. This appears to be to the north of the site at lots 10 and 11, and 50 and 51.

60	Install Sewer lines 6-12 SE	28/07/2016	19/09/2016
61	Install Lead-In Connection to Willow Creek	8/08/2016	5/09/2016
62	Install Sewer Lines 3-7 SW; remainder of Lines 1 & 2 N	20/09/2016	27/10/2016
63	Complete manholes	28/10/2016	11/11/2016
64	Underbores		
65	Excavate MH Shaft and lead-in trench	12/08/2016	17/09/2016
66	UAE mobilisation	15/08/2016	15/08/2016
67	UAE remobilisation	26/09/2016	26/09/2016
68	Install underbores	28/09/2016	2/11/2016
69	UAE demobilisation	2/11/2016	4/11/2016
70	Reinstate area where drill rig located	7/11/2016	7/11/2016
71	UAE grouts bore lines 1 & 2	15/11/2016	16/11/2016
72	Construct Bore MH & Line 6 Connection	9/11/2016	25/11/2016
166	Sewer Lines 8 & 9		
167	Install Sewer Line 8 NW (Turpentine St & Road Crossing)	14/12/2016	22/12/2016

168	Install Sewer Line 8 & 9 NW (Lilly Pilly Way)	10/01/2017	20/01/2017
169	Backfill & make good batter; turf to nature strip; offhire 1.5t excavator	23/01/2017	25/01/2017
170	Final sewer connection	15/02/2017	15/02/2017
171	Reinstate 3 Turpentine driveway	9/02/2017	9/02/2017
172	Seal 3 Turpentine driveway	22/02/2017	22/02/2017

- 216 As can be seen from Figure 2, sewer lines 8 and 9 are distant from the other works and from the deep underbore, and could not physically have been impacted by construction of the other lines. They were installed last and are nonetheless said to be part of the delay caused by IWS. White has not established that this is the case.
- 217 White contends that the particular areas of work which were disrupted by the late approval of the underbore are roadworks and kerbing (and guttering), Transelect and the landscaping. It is necessary to examine each of these activities.

Roadworks and kerbing

- 218 The following is the agreed as-built programme for roadworks and kerbing:

ID	Task Name	As-Built Dates	
		Start	Finish
98	Roadworks & Kerbing		
99	Place 2nd stage - Subbase Layer	18/05/2016	27/05/2016

100	Inspection Point Subbase	27/05/2016	27/05/2016
101	Construct Kerb		
102	'Stage 1a' Kerb & Gutter: Banksia Drive incl pit tie-ups	3/03/2016	14/03/2016
103	'Stage 1b' Kerb & Gutter: Part Spine & Internal Roads (including lintels/tie-ups at Rd1/Banksia Dr)	12/04/2016	21/04/2016
104	'Stage 1b' Kerb: Lintels & Tie-ups	6/05/2016	10/05/2016
105	Set out for Stage 2a Kerb	24/05/2016	2/06/2016
106	'Stage 2a' Kerb & Gutter: Majority of Road 1 (N, E & S), Rds 4 & 5	31/05/2016	17/06/2016
107	'Stage 2a' Kerb: Lintels & Tie-ups	20/06/2016	5/07/2016
108	'Stage 2b' Kerb & Gutter: Part Road 1W and Road 2	8/07/2016	16/07/2016
109	'Stage 2b' Kerb: Lintels & Tie-ups	20/07/2016	26/07/2016
110	'Stage 3' Kerb: Returns disrupted by sewer		
111	Prepare Kerb returns disrupted by sewer ('Stage	24/10/2016	27/10/2016

	3')		
112	Pour kerb returns disrupted by sewer ('Stage 3')	28/10/2016	28/10/2016
113	Pit lintel/tieups due to disrupted sewer ('Stage 3')	31/10/2016	2/11/2016
114	Drainage, Basecourse, Kerbs ('Stage 4'), AC Road 1/4 following Underbore	28/11/2016	14/12/2016
115	Retrim and Repair first layer subbase to make ready for final layer of roadbase	8/11/2016	14/11/2016
116	Place Final Roadbase	10/11/2016	23/11/2016
117	Inspection Point Roadbase	24/11/2016	24/11/2016
118	Lay AC Wearing Course	23/11/2016	28/11/2016
119	Install Concrete Thresholds		
120	Banksia Drive Threshold	30/11/2016	7/12/2016
121	Eastern Threshold	19/12/2016	22/12/2016

219 The agreed as-built programme records that the roadworks and kerbing were done in four stages. Stages 1 and 2 were done from 3 March 2016 to 26 July 2016. There does not appear to be anything to suggest, and nor does the evidence establish, that the work in these stages was adversely affected by any delay in the sewer design approval or installation. The diary does, however, record that the kerb works were significantly affected by inclement weather between 31 May 2016 and 10 June 2016.

- 220 Stage 3 appears to consist of four returns (corners) near lots 30, 86, 92 and 99. This work was done between 24 October 2016 and 2 November 2016. The diary entries for 24, 25, 26 and 27 October 2016 do not provide any meaningful support for the suggestion that “disrupted sewer” means disrupted by any relevant delay. The diary entry for 24 October 2016 says “We dug out & retrimmed for kerb returns on Rd 2, both ends”. The diary entries for 25, 26 and 27 October 2016 shed no additional light on the matter.
- 221 Stage 4 appears to be work on the road base near a proposed kerb return on roads 1 and 4 to the south of lot 72, in the vicinity of the manhole excavation for the underbores. There is the possibility that work already done on the road base was damaged by the underbore work and had to be done in the vicinity of the manhole near lot 72. The evidence, however, does not establish when the initial work was done and, more particularly, whether this happened after 11 August 2016 when the underbore was approved. The evidence does not persuade me that if work had to be done, it was because of any relevant delay (that is, to the sewer design approval).

Triselect

- 222 The following is the agreed as-built programme for the Triselect works:

ID	Task Name	As-Built Dates	
		Start	Finish
122	Triselect Electrical & NBN		
123	Mobilise to site	4/07/2016	7/07/2016
124	North Sections		
125	Banksia Drive	25/07/2016	19/08/2016
126	Road 1	8/08/2016	30/08/2016
127	Lot 14 & N Padmount	24/10/2016	31/10/2016

	connection		
128	Road 3 (North)	12/07/2016	26/07/2016
129	Road 5	10/08/2016	15/08/2016
130	SE Section		
131	SE (Roads 1, 2E, 3S) & works on/near padmount substation	16/09/2016	24/10/2016
132	Road 4 & Road 1 between Roads 4 & 5	12/10/2016	8/11/2016
133	SW Section incl Road 1 SW & Road 2W	20/10/2016	10/11/2016
134	Cuba St HV Supply	1/09/2016	26/09/2016
135	Finishing Works		
136	General works - street lights, NBN pits, mini pillars, general cleanup & Outage on 15/11/16. [note 2]	9/11/2016	16/11/2016
137	Remaining works - street lights, NBN pits, mini pillars, defect works & general cleanup	17/11/2016	29/11/2016

223 Transelect mobilised to site on 4 July 2016. It had substantially completed its work by 16 November 2016. It returned sporadically thereafter, but the evidence does not establish either that it could not have completed all its work by 16 November 2016 or that any delay beyond that point had any relationship

to the sewerage installation. The evidence does not establish that any of the Transelect works were delayed by sewer design approvals.

- 224 Shahady prepared an analysis of electrical and NBN installation works to create what he opined should have been the verified as-built programme that Senogles, adopting his method, should have reached.
- 225 The analysis included a histogram (which was referred to during the hearing as "the Manhattan") which tracked the number of workmen from Transelect working on site from time to time. The significant feature of the Manhattan is that it reveals that, from mid-November, Transelect had minimal manpower resources on site. The sewerage works, bar lines 8 and 9, had been completed
- 226 There is one matter worthy of observation. The Transelect work was undoubtedly affected by rock excavation. Yet Shahady opined, as it transpired mistakenly, that this was not a factor.

Landscaping

- 227 The as-built programme shows that the landscaping was done from 10 January 2017 to 24 February 2017. The AC wearing course was completed by 29 November 2016.
- 228 The diary entry for 4 November 2016 contains the following:
 - Trevor was on site today, conducting an inspection of works to date. He spoke to me about bringing the landscapers in early, but he told him not until the AC has been laid [sic].
 - UEA have left site today & removed all their gear.
- 229 The evidence did not establish that landscaping could not have been done earlier. The selected timing appears to have been that of Unicomb. This delay is not established to be connected with the sewerage works.

Claim for disruption costs of construction activities

- 230 As mentioned earlier, these particular claims do not require White to establish any specific duration of delay to the project, but merely that the project was delayed because of the delay attributable to the sewer works. I have already found that White has not established such delay. White has also not established that these specific amounts are sufficiently causally linked to

relevant delay in any event. It follows that White has not established an entitlement to these amounts.

- 231 White relies on Unicomb as Superintendent under the Building Contract having certified these amounts. The existence of certifications by Unicomb, and the fact that White paid Cleary Bros according to those certifications, is not in dispute.
- 232 However, Unicomb as Superintendent certifying that an amount is payable by White to Cleary Bros does not establish any entitlement in White (or the amount of any entitlement) to claim it from IWS and SWC. IWS and SWC are not bound by a certification process agreed between White and Cleary Bros. It is incumbent on White to establish an actual liability for an actual amount for it to be entitled to damages from IWS and SWC.
- 233 There are other specific reasons why these claims have not been established in any event.

Removing rubbish, re-trimming base course and extra road base

- 234 \$44,713 is claimed for removing rubbish and re-trimming base course (\$12,621) and extra road base due to exposure (\$32,092). Unicomb's evidence was that he certified these costs because Cleary Bros could not lay the final layer of the road base pavement at the time it was originally scheduled to be laid because the locations needed to be excavated for the sewer works, which meant that the sub-base was exposed for an additional length of time during the delay and became contaminated by dirt and eroded. This required extra work.
- 235 Morcom also gave evidence. His evidence was that the road base pavement was eroded by storm damage after exposure for many months during the delay, which required additional road base pavement material and work. He says that because of the delay to the sewer works, the final layer of the road base pavement could not be put down.
- 236 Their evidence is conclusionary. It rises no higher than assertion, without particularising precisely how the programme was affected. As well, their

evidence does not establish what level of erosion was suffered by the delay, as opposed to that which would have occurred in any event.

- 237 Additionally, Special Condition 8 of the Building Contract provides:

The contractor shall be responsible for erosion and sediment control during the course of the work.

Temporary ramps and kerbs

- 238 \$7,611 is claimed for constructing temporary ramps over kerbs and reinstating them, comprising \$2,840.23 to supply and install road base ramps, \$1,728.72 to remove road base ramps and \$3,041.69 to repair cracks in kerbs.

- 239 Both Unicomb and Morcom gave affidavit evidence about these amounts, again in conclusionary form. The third component, according to Unicomb, was to repair kerbs damaged as a result of machinery crossing to access the sewer works. He asserts that had the sewer works been constructed prior to kerbing and guttering as programmed, the kerbs would not have been damaged by this work because they would have been installed after the sewer works. This does not establish that the damage was caused by any delay in any event. I am not satisfied that steps to avoid the damage were not available.

Managing Transelect

- 240 \$69,340 is claimed for Cleary Bros charging White to supervise Transelect. The basis for this claim is not clear. Unicomb's affidavit evidence is that "due to site constraints caused by the delay in sewer approval, the management of the electrical reticulation works was added to Cleary Bros' contract". It is not clear what Unicomb means by "site constraints", and it is not explained why Transelect did not do the work they had contracted to do.

- 241 Cleary Bros added a 10% over cost for management of these works.
- 242 Morcom's affidavit evidence is that he had a conversation with Mr Tapp Lautasi (**Lautasi**), the Cleary Bros site manager, and Unicomb to the following effect:

Morcom Due to the sewer design and approval delay the project has been reprogrammed and will require detailed interfacing with Transelect on a daily basis. This can only be managed by the civil contractor. Can you do this?

Lautasi We can, we will just claim this as a variation in our progress claims, including an additional amount for our work in managing the electrical subcontractor. The contract allows 15% for overhead and profit.

Morcom I'm not giving you 15%. You are already on site. I will pay 10% on the amount Transelect quoted to manage these works so that we don't lose any further time on this project because of the sewer delay.

- 243 Neither Unicomb nor Morcom reveal whether Transelect were paid for management services which they did not perform. If White paid Transelect less, to take into account the reduction in services as one might expect, IWS and SWC would be entitled to the benefit of this reduction, if they were otherwise liable. It is to be inferred that White's evidence on this issue would not have assisted it.

Rock excavation costs

- 244 \$181,195 is claimed on the footing that by reason of the sewer delay, part of the rock excavation needed to be done at day work rates which were higher than the rates contracted for and with plant hire rates, rather than under the bill of quantities rate provided in the Building Contract.
- 245 White has not established any contractual entitlement on the part of Cleary Bros to charge on this basis.
- 246 According to Unicomb, he and Carter jointly calculated, to the best of their ability, the amount of rock in each sewer trench excavated under daily plant hire rates. Their calculation estimated the total volume of rock to be 498 m3. IWS and SWC point out that there is no evidence of the amount actually excavated.

Modifications to drainage works and kerb and guttering

- 247 White claims \$40,086 for modifications to drainage works and kerb and guttering. Unicomb says that this claim is for amounts claimed and recorded by Cleary Bros due to the disruption to the drainage works and kerb and guttering as a result of them being completed out of sequence due to the delay in sewer works as a result of the delay in sewer design approval. He says that he instructed Cleary Bros to construct the stormwater drainage and kerb and guttering before the sewer works, which resulted in additional costs.
- 248 Leaving aside that this evidence does not establish that delay in sewer approval disrupted drainage works and kerb and guttering, it does not establish the necessity, or indeed any advantage, of having instructed Cleary Bros to

construct the stormwater drainage and kerb and guttering before the sewer works.

- 249 White submitted, in the alternative, that this was a reasonable step in mitigation. No foundation for this submission was provided.

Overhead, management and supervision costs from 15 July 2016 to 1 March 2017 (229 days)

Cleary Bros delay claim

- 250 Clause 36 and Special Condition Clause 36 Annexure B of the Building Contract are set out above.
- 251 White asserts that it is liable to Cleary Bros for delay costs of \$547,000, being \$2,500 a day for 219 days (229 days of delay, less the first 10 days excluded by Special Condition Clause 36 Annexure B). It claims this amount from IWS and SWC.
- 252 This claim rests on White establishing a genuine liability to Cleary Bros.
- 253 I am not persuaded that this claim is genuine. I consider it to be a contrivance to facilitate recovery from IWS and SWC.
- 254 Even if it is real, White has not established its quantum.
- 255 Morcom gave affidavit evidence that on or about 25 October 2016, he attended a meeting with Unicomb, Mr Matt Bennet (General Manager for Cleary Bros) and Lautasi. He says that at this meeting, he said words to the following effect:

I agree to pay part of delay claim up to now of \$175,000 as the delay rate of \$2,500 per day under the contract. I do not know at this stage how long the project will be delayed and when the delay is known the balance of the delay claim at \$2,500 per day will be paid as stated in contract.

- 256 He says that at this meeting he also said words to the following effect:
- This final delay cost will be going into an insurance claim against SWC and IWS. White Constructions will be lodging an insurance claim against SWC & IWS under their professional indemnity insurance and will pay the balance of the claim to Cleary Bros when that process has run its course.
- 257 His affidavit does not record any assent by or on behalf of Cleary Bros, and there is no objective contemporaneous material to support it. Unicomb makes no mention of it.

258 Under cross-examination, Morcom gave evidence that White will pay it to Cleary Bros even if they are not held by the Court to be entitled to it. He says that there is an agreement to delay payment and that White will pay win, lose or draw. I do not believe him.

259 He gave the following evidence:

Q. You say in your evidence that you have some kind of agreement with Cleary Brothers whereby you don't need to pay the balance of whatever you say you've paid to date until after these proceedings. Is that correct?

A. I think it says "until I've settled with the insurance company", from memory.

Q. You say whether you settle with the insurance company, whether you don't settle with the insurance company, win--

A. I still pay them.

Q. Win, lose or draw, you say to his Honour that you have to pay that amount.

A. Correct.

Q. So why haven't you paid it to date?

A. Well, because I have an agreement on cash flow wise I don't have to. I've, I've already out-spended a lot more cash on the project and they were, they were quite happy with that arrangement.

260 There is an insurer involved, which it is thought will be the source for payment. In his own words, the agreement is that he does not need to pay the balance until he has settled with the insurance company. From Cleary Bros' point of view, the alleged agreement is uncommercial. It has been out of its money for well over two years. No one from Cleary Bros gave evidence of it. According to Morcom, White made about \$16 million profit on the job, yet it has not paid what it says is money genuinely owed. The alleged arrangement was made months before the project was finished.

261 Added to this, as set out earlier, on 26 February 2018, Cleary Bros rendered two inconsistent invoices to White, both of which Unicomb certified. The first invoice recognised Cleary Bros' delay damage costs by increasing the amount for variations and deducting damage delay costs. The second made no mention of damage delay costs. No obligation to pay them is thus reflected, but the economic effect of the invoice is the same. In my view, this change is to be explained by the fact that as between White and Cleary Bros, any obligation to pay these delay costs is contingent upon White recovering them in this case.

Unicomb says he certified the second invoice on instructions. This is not the hallmark of independence.

- 262 White has displayed no reluctance to make manifestly insupportable claims.
- 263 The provisions of the Building Contract relied upon for the delay damages claim do not provide that \$2500 per day is payable as liquidated damages. This figure is a cap. Morcom's agreement to pay "\$175,000 as the delay rate of \$2,500 per day under the contract" is misconceived.
- 264 Clause 36 entitles Cleary Bros to such extra costs as are necessarily incurred by it by reason of the delay, capped at \$2500 per day under Clause 36 Annexure B. There is no admissible evidence to establish that Cleary Bros necessarily incurred extra costs exceeding \$2500 per day.
- 265 Perhaps surprisingly (or perhaps not, given the circumstances surrounding the alleged arrangement between White and Cleary Bros), rather than Cleary Bros asserting a claim for extra costs, Unicomb apparently asked Cleary Bros for an estimate of their daily costs.
- 266 On 12 September 2018, Lautasi emailed Unicomb:

Hi Trevor,

Please find attached our Delay Damages estimate of our daily costs as requested,

Regards,

[...]

Delay Costs per day	
Item	Daily Costs
PM	\$762.28
Supervisor	\$762.28
Labour	\$514.96

water & electricity consumption	\$90.00
pumping for sewer	\$35.00
Telephone consumption	\$35.00
Water consumption for watercart suppression	\$61.73
CONTAINERS	\$15.00
OFFICE SITE	\$14.29
TOILET	\$13.00
LUNCH ROOM	\$14.29
Safety Room	\$12.29
WATER AND SEWER CONNECTIONS	\$ -
ELECTRICAL CONNECTION	\$ -
Float of plants	\$ -
small rubbish bin	\$15.25
Mixed waste 10m3 bin	\$61.90
Steel Bin	\$ -
Erosion Sed Controls and risk of Rain Events (not included yet)	\$ -
Fencing (extension \$2187.50 til 18/11/16)	\$22.06
Watercart for suppression	\$1,085.00

Test and Tag onsite	\$27.50
<u>TOTAL =</u>	<u>\$3,543.83</u>

267 This estimate does not prove that any costs were necessarily incurred or the amount of any such costs.

Consultant fees paid to Unicomb

268 White claims \$202,300 consisting of:

- a “Retention fee” paid to Unicomb of \$100,000, and
- time charges of \$102,300 invoiced by Unicomb to White for attendances asserted to have been made by Unicomb at the project as a consequence of the sewer delay.

269 The claim for the Retention fee is untenable, and borders on the eccentric.

270 Morcom gave affidavit evidence that on or about 2 August 2016 he met with Unicomb. He said he had previously held discussions with Unicomb regarding Unicomb’s desire to retire. He says he and Unicomb had a conversation in words to the following effect:

Unicomb The Project was supposed to be finished by now. As I have told you I want to retire.

Morcom Trevor we need you to stay to get this finished. I have sold all the blocks. I cannot bring someone new in now.? [sic] I’ll give you a \$100,000 retention fee if you stay on and get this finished.

Unicomb I agree, I will accept this retention fee to complete the project.

271 Money paid by White to induce Unicomb not to retire cannot be characterised as a loss caused by IWS and SWC.

272 Unicomb continued to charge, and was paid his normal hourly rate, for all his attendances.

273 There is clear evidence that Unicomb continued to work for White on other projects during the asserted extension of his career.

274 It seems that Unicomb has still not retired.

275 The second component of this claim is said to be the subject of a series of invoices rendered by Unicomb to White over the period July 2016 to March

2017. The attendances described in the invoices cover the project and two other projects, indicating that Unicomb was engaged for White on other things.

- 276 The amount claimed in respect of the project covers activities unrelated to the sewer works such as a meeting with Shellharbour Council for “land valuation” and a meeting at Kiama Council “re heritage matters”, to name a couple. It is difficult to see how these charges would not have been incurred anyway. It is not the obligation of the Court to sift through these invoices.
- 277 It is not established that any of these charges is attributable to the delay in sewer approval.

Funding costs, loss of interest income of land sales revenue, bank fees and land taxes until land sale settlements end April 2017

- 278 The figures are not in dispute.

CONCLUSION

- 279 The proceedings are dismissed.

- 280 I provisionally order that White is to pay the costs of IWS and SWC. This order will solidify after seven days unless any party notifies my Associate in writing that some other order is sought, stating brief reasons why, in which event the order will not be made and directions will be made for the determination of costs.

- 281 The Exhibits are to be returned.

Amendments

10 September 2019 - paragraph [135] - corrected orientation of image