COURT OF APPEAL OF YUKON

Citation: *Yukon (Government of) v. Norcope Enterprises Ltd.*
2024 YKCA 6

Date: 20240521
Dockets: 22-YU894; 23-YU900

Docket: 22-YU894

Between:

Government of Yukon

Respondent/
Respondent on Cross Appeal
(Plaintiff)

And

Norcope Enterprises Ltd.

Appellant/
Respondent on Cross Appeal
(Defendant)

And

Intact Insurance Company

Respondent/
Appellant on Cross Appeal
(Defendant)

And

Tetra Tech EBA Inc.

Respondent
(Third Party)

And

Norcope Enterprises Ltd., Norcon Concrete Products Inc., Yucal Properties Inc., and Douglas L. Gonder

Respondents
(Further Third Parties)

- and -

Docket: 23-YU900

Between:

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Respondent/
Appellant on Cross Appeal
(Plaintiff)

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Respondents
(Further Third Parties)

SEALED FILE (IN PART)

Before: The Honourable Madam Justice Shaner
The Honourable Mr. Justice Willcock
The Honourable Mr. Justice Abrioux

On appeal from: Orders of the Supreme Court of Yukon, dated November 14, 2022 and April 3, 2023 (*Yukon (Government of) v. Norcope Enterprises Ltd.*, 2022 YKSC 57 and 2023 YKSC 17, Whitehorse Docket 16-A0180).

Counsel for the Government of Yukon and Tetra Tech EBA Inc:	I.H. Fraser L. Banton
Counsel for Norcope Enterprises Ltd.:	J.R. Tucker
Counsel for Intact Insurance Company:	R.N. Beckmann
Place and Date of Hearing:	Whitehorse, Yukon November 20–21, 2023
Place and Date of Judgment:	Whitehorse, Yukon May 21, 2024

Written Reasons by:
The Honourable Mr. Justice Abrioux

Concurred in by:
The Honourable Madam Justice Shaner
The Honourable Mr. Justice Willcock

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Summary:

The appellants, Norcope Enterprises Ltd. ("Norcope") and Intact Insurance Company ("Intact"), appeal the trial order in which Norcope was found liable for damages for breach of contract and negligence relating to the removal and replacement of a concrete apron at the Erik Nielsen Whitehorse International Airport. Intact was also found liable under a performance surety bond which it issued on behalf of Norcope. The respondent Yukon cross appeals the trial order in which it was found to be 15% contributorily negligent. Central to the judge's decision was the cause of cracking of the concrete apron. Held: Appeals and cross appeal dismissed. This was a complex, 5-week trial that included several experts providing opinions on questions which involved concepts of technical engineering. The judge also made findings of credibility in order to reach her conclusions. No reviewable errors have been identified in either the appeals or cross appeal and the judge's conclusions are entitled to deference.

Reasons for Judgment of the Honourable Mr. Justice Abrioux:

I: Introduction

[1] This appeal arises from orders made following a trial (the "trial order") in which the appellant Norcope Enterprises Ltd. ("Norcope") was found liable for damages for breach of contract and negligence relating to the removal and replacement of the concrete apron at the Erik Nielsen Whitehorse International Airport in 2014 (the "Project") and in which the appellant Intact Insurance Company ("Intact") was found liable under a performance surety bond in the amount of $1,781,103.03 issued on behalf of Norcope in respect of the Contract (the "Bond").

[2] On March 18, 2014, the Government of Yukon ("Yukon") and Norcope, a general contractor, entered into a contract in relation to the Project (the "Contract"). Tetra Tech EBA Inc. ("Tetra Tech"), an engineering firm, entered into contracts with Norcope to provide the concrete mix design and quality control ("QC") for the construction of the apron, and with Yukon to provide quality assurance ("QA") in regards to the Project.

[3] Significant issues arose between the parties regarding the construction of the apron, namely a dispute with respect to the cause of cracking of the apron. This resulted in Yukon commencing the underlying action against Norcope and Intact on

February 23, 2017. Norcope filed a counterclaim against Yukon and in August 2019, issued a third party notice against Tetra Tech.

[4] The cause of the cracking in the apron was a key issue at the trial which took place over approximately 5 weeks in May and June 2022 and included the evidence of numerous experts in engineering and related fields. The reasons for judgment, indexed as 2022 YKSC 57, are 90 pages in length and are dated November 14, 2022 (the "Reasons"). Supplementary reasons, indexed as 2023 YKSC 17, were rendered on April 3, 2023 following submissions from the parties relating to Intact's liability under the Bond and costs (the "Supplementary Reasons").

[5] The trial judge:

- apportioned liability under the *Contributory Negligence Act*, R.S.Y. 2002, c. 42. as follows: Tetra Tech, 50% for inadequate QC and QA and for the problematic mix design; Norcope, 35% for poor construction practices; Yukon, 15% for failing to "pay attention to what was happening on the project";

- assessed damages as the cost of repair of defective work as at the date of trial which included a deduction for "betterment" and the extended lifetime of the apron as a result of late repair work;

- granted judgment to Yukon against Norcope in the amount of $2,362,388 in damages for negligence and breach of contract;

- granted judgment to Yukon jointly and severally against Intact and Norcope under the Bond in the amount of $1,781,103.03;

- ordered Norcope to pay Yukon pre-judgment interest on its damage award; and

- ordered Norcope to pay Yukon and Tetra Tech its costs.

[6] Norcope and Intact each appeal from the trial order. Both seek an order quashing the trial order and dismissing the claims against them. Alternatively, they seek to have the trial order varied in so far as certain damages issues are concerned, including the date at which they should be assessed. In the alternative, they seek to have the case remitted to the Supreme Court of Yukon for retrial.

[7] Intact also raises a discrete issue relating to the proper interpretation of the Bond and whether there can be any liability at all in that Yukon did not meet its obligations under the Bond and was found 15% liable.

[8] Yukon cross appeals. It seeks an order that the apportionment of 15% liability against it be reversed and that the damage award be varied to reduce the deduction for betterment. Yukon submits that the appropriate deduction should be based on the "past use" of the apron, and therefore the original construction cost, rather than the approach the trial judge took, that being the "future use" of the apron and the cost to repair or replace.

[9] By way of summary, the appeal involves the following issues:

- the judge's rulings and consideration of the expert evidence including her gatekeeping responsibilities and the role of "*White Burgess*", litigation and participation experts;

- the judge's causation analysis including whether she reversed Yukon's burden of proof onto Norcope and erred in not properly considering the seasonal lift in the concrete as a cause of the cracking as opposed to construction defects;

- apportionment of liability as between Yukon, Norcope and Tetra Tech and the extent of any claim by Norcope for contribution and indemnity from Tetra Tech;

- the proper date for the assessment of damages, that is the date of the breach of the Contract or trial, and the basis for the deduction for betterment;

- the interpretation of the Bond and whether there can be any liability in that Yukon was found 15% responsible for the defects to the concrete apron; and

- the award of costs.

[10] Central to the issues on appeal is the judge's treatment and conclusions with respect to the expert evidence and her causation analysis. Norcope and Intact raise many challenges to the judge's rulings and findings with respect to this evidence and her conclusions regarding causation.

[11] Yukon's position is that deference is owed to the judge's consideration of the expert evidence as well as her conclusions as to the causation of the cracking of the concrete. It says the appellants are simply seeking to reargue on appeal the case at trial. On its cross appeal, it argues that the judge erred in her apportionment of liability against it and Tetra Tech and in relation to the deduction for betterment in the assessment of damages.

[12] For the reasons that follow, I would dismiss the appeals and the cross appeal.

II: Background

[13] Since many of the grounds of appeal relate to factual matters and the judge's causation and apportionment analysis, it is necessary to review in some detail the background to the Project and what occurred thereafter which led to the proceedings in the Supreme Court of Yukon. Apart from disagreements regarding the cause of some of the cracking, much of the background is not in dispute. What follows is taken largely from the Reasons and I will outline below some of the key evidence with respect to the issues on appeal.

The Contracts

[14] Norcope was advised it was awarded the Contract for the replacement of the apron on February 14, 2014. The Contract price was $3,562,206.05 with Norcope being the lowest bidder. On February 27, 2014, in a tender review meeting between Yukon and Norcope, the following was noted by the parties:

- Norcope would engage Tetra Tech to design the Portland Cement Concrete ("PCC") mix, that is the top layer of the apron, and perform QC;

- Mr. Beecher, who was employed by General Enterprises Ltd. a concrete supply company working for Norcope, would oversee the formwork and the paving operations;

- Mr. Gonder, Norcope's principal, confirmed that it was satisfied with its bid;

- Mr. Gonder raised the issue of the suitability of the sub-base based on his familiarity with other projects at the airport. In response, Mr. Jansson, Yukon's project engineer, said that if any issues arose with the sub-base they could be addressed on a case-by-case basis; and

- Mr. Lasker, the Norcope project manager, proposed using a lean mix concrete for the cement stabilization base.

  Reasons at para. 6.

[15] The Contract between Yukon and Norcope was signed on March 18, 2014. The Articles of Agreement attached detailed conditions and specifications of the manner in which the Contract was to be performed. The judge outlined what she considered to be the relevant sections:

(a) The Articles state that Norcope will by August 15, 2014, rehabilitate the airport apron in a careful and professional manner and complete the work in accordance with the plans and specifications;

(b) The General Conditions provide that:

a. The Engineer is the engineer designated by Yukon who carries out the functions designated to 'the Engineer' under the contract, and his role is to ensure that the work is performed in accordance with the contract.

b. Yukon may appoint an expert to examine the work if the Engineer has reason to believe that the work is not being performed in accordance with the contract, and Norcope may be responsible for paying the costs of that examination.

c. The Engineer makes the final decision on any question about whether anything has been done under the contract, including the meaning and interpretation of the Plans And Specifications, the quality or quantity of any material or workmanship; whether the materials or labour are adequate to carry out the work, and the timing and scheduling of various phases.

d. Norcope will make good any defects within 12 months from the date of the certificate of Substantial Completion (the Warranty period).

e. If Norcope fails to comply with a decision or direction of the Engineer, the Engineer may use whatever methods he deems advisable to do what Norcope has failed to do and Norcope will pay all costs and damages incurred by Yukon.

f. Norcope may protest decisions of Yukon about changes in work or a decision by the Engineer by providing written notice of that protest.

(c) Defective PCC is defined by a list, which includes honeycombing, uncontrolled shrinkage cracking, other surface defects, damage by freezing, air content above or below specifications, a slab containing full-depth cracks, or if the joints are spalled.

(d) Repair and restoration of defective concrete is to be directed by the Engineer and includes removal of defective slabs where appropriate.

(e) Sawcutting and sealing of joints is particularized.

Reasons at para. 7.

[16] Work on the apron began in April 2014.

The June 11 Warranty Letter to Norcope

[17] On June 11, 2014, Yukon sent Norcope a letter with respect to apparent settlement in the apron lean mix concrete (the "Warranty Letter") in which Yukon stated that Norcope was not responsible for subsurface conditions. The Warranty

Letter provided Norcope would not be responsible for any vertical shifts due to seasonal fluctuations, and both Norcope and Yukon would investigate any cracking in the concrete panels. If a crack was shown to be caused by differential settlement, it would not be covered by the Norcope warranty to repair damage.

[18] Mr. Jansson testified the Warranty Letter was intended to indicate Norcope would not be responsible for cracking caused by lifting. At the time the Warranty Letter to Norcope was signed, he said they knew the settlement was in the southwest area and that the lean mix had cracked.

[19] Mr. Gonder testified he believed if Norcope met the specifications of the tender, then anything else that damaged the work would not be Norcope's responsibility. He said he thought the Warranty Letter was good enough to protect Norcope: Reasons at paras. 8–10.

The Norcope/Tetra Tech Contracts

[20] By a contract dated February 14, 2014, Tetra Tech agreed with Norcope to provide the mix design for the PCC. In a contract dated May 9, 2014, Tetra Tech also agreed to provide Norcope with QC testing during the period of construction. Tetra Tech's maximum liability to Norcope arising out of these contracts was $216,200 (the "Tetra Tech liability limit"): Reasons at para. 11.

Overview of the Project and Events During and Following the Warranty Period

The Yukon/Tetra Tech Contract

[21] By a contract dated April 13, 2014, Tetra Tech agreed with Yukon to provide project inspection, material testing and quantity calculation services for the Project, which was collectively referred to as QA. The judge observed that the QA contract was amended throughout the next year to include additional work because of the problems that arose with the Project: Reasons at para. 12.

The Indemnity Agreement between Norcope and Intact

[22] The Bond provided that Intact shall pay the amount provided in the Bond in the event that Norcope defaulted on the Contract. Norcope and Intact had an indemnity agreement whereby Norcope agreed to indemnify Intact from any claim made against it in an action. In other words, if Intact had to pay under the Bond, then Norcope had to indemnify it: Reasons at para. 13.

The Judge's Overview of the Project

[23] It is convenient to set out the judge's overview:

> [29] Tenders for the project were closed in January 2014. As the lowest bidder, Norcope had a tender review meeting with Yukon, after which the contract was executed. In March, there were emails regarding the potential for a conflict of interest by Tetra Tech if they took on both the mix design and QA responsibilities for Norcope and the QC role for Yukon. Notwithstanding the concerns, the contracts identified above were concluded. Work on the project began with the removal of the old apron, levelling and pouring of the lean mix. In early June, the lean mix began to sink. As a result, Norcope and its subcontractors stopped work until a solution was found because of a concern they would be liable if the settlement of the lean mix contributed to other problems on the project. On June 6, a meeting was held to address the lean mix settlement and on June 11, the Warranty letter was issued.
>
> [30] Pouring of the lanes began a few days later and continued into July. Mr. Gonder testified that as early as June 21, he had concerns about the way testing was done but did not say whether that was the QC or QA testing. No issue was raised about the quality of testing until late August and September 2014 in emails between Mr. Gonder and both Mr. McFarlane [the Tetra Tech employee who prepared site observation reports (SOR) and Mr. Petzold [Tetra Tech's project engineer for the Project]. In late July, Dr. Czarnecki emailed Mr. Petzold to indicate the cores tested showed the concrete was not freeze-thaw durable. All the concrete was poured by August 24, 2014. The contractual warranty period was one year so that Yukon needed to give notice to Norcope about deficiencies by August 24, 2015.
>
> [31] On August 23, Norcope submitted a claim for a progress payment. Mr. Petzold advised that payment would be withheld for 13 panels. Mr. Gonder told Mr. Petzold if one dollar was deducted from the invoice, he would start digging up the apron. On September 5, 2014, Mr. Gonder raised the conflict-of-interest issue regarding Tetra Tech making fair decisions. In an email exchange between Tetra Tech employees on this topic, Mr. Petzold referred to Mr. Gonder as a 'hot-headed contractor'. On September 11, 2014, Mr. Bidniak [engineer of record for Yukon on the Project until his retirement in April 2015] directed the replacement of 13 panels and said they would continue to investigate to determine if the cracking was due to sub-surface settlement. Mr. Gonder suggested drilling some core hole and asked to be

> present when the cores were drilled. Yukon did drill the holes, but Norcope was not present. Mr. Gonder testified the process was therefore unfair. Mr. Gonder said he offered to repair the cracks and did so. Yukon's position at this time was set out in an email from Mr. Bidniak dated September 15, 2014, which said in part:
>
> > Government of Yukon acknowledge that there is still disagreement between us as to the cause of the cracking. Further deliberations will ensue in order to settle that matter. As stated previously, our position remains that the cracked panels must be replaced. In the interim, we have no objection to your sealing the cracks at your own risk and cost. …
>
> [32] Mr. Gonder testified he thought the repair work Norcope did solved [*sic*] the problem.
>
> [33] Discussions continued into the fall and winter of 2014-2015 about the possibility of a joint Yukon/Norcope expert reviewing the project to provide an opinion about the causes for the failures. Ultimately, there was no such review. Norcope wanted to use the expert it previously had investigate and Yukon wanted someone newly appointed by both. Through this time there were also emails discussing the failures between Yukon and Tetra Tech. On November 5, 2014, Mr. Bidniak wrote to Mr. Petzold about the new geotechnical data. In that email, he said in part:
>
> > The main thing I am hoping we can project is that we have considered all possibilities for cracking before drawing our conclusion. We will certainly be perceived (perhaps even by a Judge) as being fixed on late cutting, etc without adequately considering the contractor's position (of settlement) if we don't present both sides of the case. …
>
> [34] When Mr. Hauff [an experienced surveyor who worked with Challenger Geomatics Ltd. which was retained to perform survey work on the apron for Tetra Tech sent the draft of the survey comparison between September, 2014 and April, 2015, Mr. Petzold replied that Mr. Hauff should not provide any interpretation about the cause of cracking because the matter may go to arbitration. Mr. Crist [who worked for the Yukon Transportation and Engineering branch (TEB) as of late April 2015] asked Mr. Petzold for comment on his draft letter to Norcope that was sent on July 29, 2014. Mr. Petzold's opinion then, and as it has remained, was that full replacement of the panels was 'the way to go'.
>
> [35] On December 16, 2014, Mr. Bidniak sent the December Report to Mr. Gonder. Mr. Gonder challenged the results of that report. He said the concrete from the plant continually tested inaccurately, and nothing was done by Yukon or Tetra Tech.

[24] In addition to having identified some of the individuals referred to in the judge's overview, I would add that:

- August 23, 2014 was the effective date of the Certificate of Substantial Completion for the Project which resulted in August 22, 2015 being the date of the expiry of the Warranty period.

- on July 29, 2015, Yukon sent a demand letter to Norcope to replace 100% of the apron which was referred to in the attached Tetra Tech report of that date.

- on August 21, 2015 Yukon advised Norcope that it was in default under the Contract with Intact notified the same day.

Relevant Procedural Background

[25] In its statement of claim filed February 23, 2017, Yukon claimed damages against Norcope for breach of contract and against Intact under the Bond. Norcope's original statement of defence and counterclaim were filed on March 20, 2017. The counterclaim advanced several claims including defamation relating to statements made by Paul Murchison, the director of the Transportation Engineering Branch at the Department of Highways and Public Works, which were published in the December 4, 2015 edition of the Yukon News, and contributory negligence.

[26] Norcope also issued a third party notice against Tetra Tech on August 12, 2019, in which it sought contribution and indemnity in relation to claims for intentional interference with economic relations, and alleged that Tetra Tech breached its contract to provide the mix design to Norcope and its contract to provide QC services to Norcope. On August 18, 2021, the third party notice was amended to include an additional claim for contribution and indemnity on the basis of Tetra Tech's liability in negligence relating to its alleged negligence in performing its QA services to Yukon.

[27] On September 24, 2021, Yukon and Tetra Tech entered into a settlement agreement which was approved by the Court on October 6, 2021. The case management order included the following terms:

> 1. The Settlement Agreement entered into by the Plaintiff, Government of Yukon, ("Yukon"), and Tetra Tech EBA Inc., ("Tetra Tech"), attached to this Order as Schedule "A", is approved.
> 2. Yukon will amend its Statement of Claim to include the language set out in Schedule "B" and will not delete that language in any subsequent amendment without leave of the court.
> 3. With the exception of the claim for intentional interference with economic relations set out in paras. 16–33 of the Amended Third Party Notice, the claims in the Amended Third Party Notice by Norcope against Tetra Tech, (the "Third Party Notice"), are dismissed with prejudice and future claims against Tetra Tech regarding the allegations contained in the Third Party Notice are prohibited.
> 4. The claim for intentional interference with economic relations may be the subject of an application to strike or dismiss so long as the application is brought within two weeks of the conclusion of the examination of the Tetra Tech representative.
> 5. The amendment of the Statement of Claim and the dismissal of portions of the Third Party Notice in the within matter will not impact the arguments and claims that Norcope may make against Tetra Tech at trial. The Trial Judge shall consider the allegations as set out in the Amended Third Party Notice of Norcope as if no portion of the Amended Third Party Notice were dismissed, and make a ruling with respect to liability apportionments for all parties, including Tetra Tech, and shall make a ruling with respect to whether Tetra Tech should be apportioned liability as a result of breaching its duty of care, breaching the applicable standard of care, performing its services negligently or otherwise causing the Plaintiff's loss.

[28] In compliance with the case management order, Yukon filed a fresh amended statement of claim on May 4, 2022 which provided:

> **ABANDONMENT OF CLAIMS (PIERRINGER AGREEMENT)**
>
> 20. Yukon abandons any portion of its claim against Norcope that would, if not abandoned, entitle Norcope to recover damages, contribution, or indemnity, under the *Contributory Negligence Act* or otherwise, from Tetra Tech EBA Inc. or any of its successors, assigns, parents, subsidiaries, affiliates, and each of their employees, former employees, officers, directors, shareholders, members, representatives, insurers, and counsel.

[29] I shall refer to the Pierringer Agreement, the Case Management Order and Yukon's amendment in the fresh statement of claim, collectively as the "Pierringer Order". This type of order was explained by Justice Tysoe in *Henry v. British Columbia (Attorney General)*, 2017 BCCA 420:

> [11] … Mr. Henry settled his claims against the City and Canada pursuant to what are known in this province as "B.C. Ferries agreements" and in other jurisdictions as "Pierringer agreements" (named after the decisions in *British Columbia Ferry Corp. v. T&N plc* (1995), 1995 Can LII 1810 (BCCA), 16 B.C.L.R. (3d) 115 (C.A.) and *Pierringer v. Hoger*, 124 N.W.2d 106 (Wis. S.C. 1963)). Under such agreements, the plaintiff settles with some but not all of the defendants against whom the plaintiff was seeking joint and several liability. The plaintiff agrees to sever joint and several liability among the settling and non-settling defendants so that the plaintiff is entitled to recover against the non-settling defendants only the portion of damages attributable to the fault apportioned to those defendants by the trial judge.

[30] Tetra Tech remained a party to the litigation because Norcope did not abandon its third party claims against Tetra Tech for intentional interference with economic relations and in negligence for Tetra Tech's faulty performance of its contractual obligations to Yukon under the QA contract.

The Expert Evidence and Reports

[31] In addition to having Tetra Tech as its QA consultant, Yukon asked Tetra Tech to investigate the cause of cracking on the newly poured apron and provide a report in order for it to proceed with deficiency mitigation with Norcope and Intact.

[32] Tetra Tech produced a report, dated July 27, 2015 (the "Final Report"), which was ostensibly authored by Bozena Czarnecki, PhD, P.Eng. and reviewed by Geoff Petzold, P.Eng.

[33] In preparing the report requested by Yukon, it was accepted by both Yukon and Tetra Tech that Tetra Tech was in a conflict of interest in that it was directly involved in construction of the apron and had contractual obligations to both Yukon and Norcope.

[34] Over the course of the winter following the completion of the work performed by Norcope, the ground beneath the apron experienced significant and uneven frost heave, such that the apron lifted and fell as much as 10 cm in one location under its southwest quadrant.

[35] The Final Report, which was signed by Dr. Czarnecki, attributed the cracking of the apron entirely to poor construction by Norcope. Dr. Czarnecki was of the view that a properly constructed apron would have withstood the movement that occurred.

[36] Days before the expiry of Norcope's warranty period under the Contract, Yukon, based on the Final Report, demanded that Norcope remove and replace the entire apron.

[37] By August 21, 2015, Yukon declared Norcope in default of the Contract and notified Intact. Intact acknowledged the declaration of default and it retained Russ Riffell, P.Eng. of WSP Canada Inc. ("WSP") to conduct an investigation of what had occurred.

[38] On April 26, 2017, Intact and Norcope obtained a report from Mr. Riffell to assess and comment on the condition of the apron (the "Riffell Report"). Mr. Riffell retired prior to the trial and his report was eventually largely adopted and made a schedule to the report of Scott Cumming of WSP, dated October 30, 2021 (the "WSP Report"), which was entered as an exhibit at the trial.

[39] Mr. Riffell had attended the site of the Project in March 2016 to conduct a visual review and extract concrete core samples from the apron, which he put through laboratory testing.

[40] The Riffell Report included a map of the apron, dated April 16, 2016, showing all of the cracks identified by Mr. Riffell. Mr. Riffell identified 67 cracked panels. In his opinion, 48 of 67 cracked panels, or 72% of those cracked were primarily due to seasonal frost heave. The Riffell Report also included three colour diagrams showing the degree of elevation change across the apron from 2014 to 2015 to demonstrate the correlation of these changes with the cracking, especially in the southwest corner, which were taken from the Final Report.

[41] Mr. Riffell opined that seasonal frost heave would continue to create new cracks, and expand existing cracks for the life of the pavement. By the time of his

assessment 5 years after completion of the work, Mr. Cumming found that the seasonal frost heave was the primary cause of distress in 79 panels (previously 48), while poor construction was the primary cause of distress or defects in 22 panels.

[42] Yukon retained Gordon Leaman, P.Eng. and James Oswell, Ph.D., P.Eng. of Stantec Architecture ("Stantec") to review the apron and assess the deficiencies, as well as to review the Final Report and the Riffell Report. Mr. Leaman and Mr. Oswell prepared a report, dated May 3, 2019 (the "Stantec Report").

[43] Mr. Leaman was qualified at trial to give opinion evidence as described below. Mr. Oswell, a geotechnical engineer, did not give oral testimony.

[44] Mr. Leaman stated that some of the cracking of concrete could be attributed to frost heave and further opined it was possible that the cracking might have been reduced, though not entirely, if the apron had been constructed according to the specifications. His report also stated that a detailed investigation of certain issues relating to the PCC panels and overall compressive and flexural strength of the concrete would be required in order to provide such an opinion. Mr. Cumming agreed with Mr. Leaman on this point.

[45] On October 30, 2021, Intact and Norcope obtained the WSP Report, which provided expert opinion on the state of the apron at that time, and if any parts of the apron required replacement, the causes of and remedies for the problems affecting those panels. The WSP Report stated, in part, that seasonal ground movement was the primary cause of cracking in the concrete in the southwest portion of the apron.

[46] In November of 2021, Yukon obtained a report from Associated Engineering (the "AE Report"). It was prepared by David Anderson, P. Eng., and Steven Bartsch, P. Eng. contributed to its preparation. The AE Report was requested to provide a technical assessment of the apron rehabilitation work. Its objectives were to provide an assessment of the existing apron condition, determine the apron pavement rehabilitation project requirements, establish the rehabilitation scope of work and

provide a life cycle cost assessment for selected apron pavement rehabilitation options.

[47] On November 30, 2021, Mr. Leaman produced a second report in response to the WSP Report.

[48] On December 8, 2021, Intact obtained a second report from Mr. Cumming, (the "WSP Rebuttal Report"), in which Mr. Cumming reviewed the AE Report and provided his opinions regarding the efficacy of the proposed remedial options contained in it.

[49] On December 16, 2021, Norcope obtained an expert report from Jon Schmidt (the "Schmidt Report"), as a rebuttal report to the AE Report. An Addendum to the Schmidt Report clarifying the cost of removing and replacing a single panel, also provided in response to the AE Report, was produced on March 18, 2022.

[50] On April 11, 2022, Norcope obtained a report from Dr. Amgad Hussein, the Dean of Engineering at Memorial University in Newfoundland (the "Hussein Report"). It responded to and critiqued the Final Report. In Dr. Hussein's opinion the concrete failure analysis in the Final Report contained a statistical bias in relation to the small number of boreholes relied upon, lacked a rational explanation for certain physical observations, and did not follow good engineering practice.

[51] In advance of trial, Norcope and Intact gave notice to Yukon that they would object to the Final Report being tendered as an expert report in part due to Tetra Tech's conflict of interest.

[52] At trial, Yukon tendered the Final Report and notified counsel for Norcope and Intact that Yukon sought to have witnesses from Tetra Tech provide opinion evidence as participant experts.

III: Reasons for Judgment

[53] In light of the issues raised on the appeals and the cross appeal, it is necessary to review in some detail the manner in which the judge approached and considered the evidence.

[54] She first identified and reviewed significant portions of the lay and expert evidence, observing that all experts (with the exception of Mr. Riffell) testified in person and through their reports.

[55] The judge identified the various experts called by Yukon, which included:

- Gordan Leaman – Mr. Leaman was qualified to give opinion evidence on all aspects of the specification, construction, and testing of PCC pavements, including airport aprons.

- David Anderson – Mr. Anderson was qualified to give opinion evidence on all aspects of the design, costing, and construction of projects involving the rehabilitation of airport pavements, including the initial evaluation of pavement conditions. Mr. Anderson is employed by Associated Engineering.

- Steven Bartsch – Mr. Bartsch was qualified to give opinion evidence on all aspects of the design and construction of projects involving the rehabilitation of airport pavements, including the initial evaluation of pavement condition, as well as on the costing of concrete pavement projects in Yukon. Mr. Bartsch also gave evidence as to his role in the apron design. Mr. Bartsch is also employed by Associated Engineering.

- Dr. Bozena Czarnecki – Dr. Czarnecki earned a degree in engineering geology and hydrology in Poland before moving to Canada in 1981. She subsequently obtained her Masters and PhD degrees at the University of Calgary. The subject of her doctoral thesis was concrete. Dr. Czarnecki began her employment with EBA Consulting in 1992 which eventually

became part of Tetra Tech, where Dr. Czarnecki continued to be employed as at the time of the trial.

[56] Experts called by Norcope included:

- Dr. Amgad Hussein – Dr. Hussein was qualified to give expert evidence on good engineering practices in conducting investigations of failure analysis and preparing reports regarding investigations of failure analysis.

- Jon Schmidt – Mr. Schmidt was qualified to give expert evidence regarding construction cost estimation including estimating costs of construction using concrete materials and airport pavement construction.

[57] Intact called one expert witness and joined with Norcope in relation to all witnesses except Dr. Hussein:

- Scott Cumming – Mr. Cumming was qualified to give expert opinion evidence regarding concrete and concrete construction, materials engineering, including airport pavement construction, and quality control, quality assurance, concrete rehabilitation and troubleshooting for airport apron construction. Mr. Cumming adopted the Riffell Report in his evidence.

[58] Yukon called five additional witnesses:

- Geoffrey Petzold – Mr. Petzold is an engineer. He was Tetra Tech's project manager for the Project.

- Brian Crist – Mr. Crist is a civil engineer who works for the Yukon Transportation and Engineering Branch ("TEB").

- Kyle Jansson – Mr. Jansson has both a Bachelor of Engineering degree and Masters of Engineering degree. Mr. Jansson was Yukon's project engineer on the Norcope Contract.

- Michael McFarlane – Mr. McFarlane was employed by Tetra Tech and was assigned to do the QA on the Project and was the person who prepared the daily site observation reports ("SOR").

- Terry Bidniak – Mr. Bidniak is a civil engineer who retired in 2015. Until his retirement, he was the Engineer of Record for the Project.

[59] Norcope called additional witnesses, which included:

- Chadwyck Cowan – Mr. Cowan is a professional engineer. He was the manager of the Tetra Tech office in Whitehorse.

- Terry Hauff – Mr. Hauff, an experienced surveyor, worked with Challenger Geomatics Ltd. in Whitehorse.

- Douglas Gonder – Mr. Douglas Gonder was Norcope's principal. In 1985, he started Norcope. Since its inception, Norcope has been involved in earth excavation and had experience placing concrete, which included the Whitehorse Airport parking lot and the international extension to the airport building. Mr. Gonder testified that the Project was the only such project that Norcope had performed.

- John Beecher – Mr. Beecher is with General Enterprises, a concrete supply company. Mr. Gonder is his stepfather.

[60] Of note, the judge made specific adverse findings of credibility as against Mr. Gonder and Mr. Beecher, stating:

> Mr. Gonder was an unreliable witness. In many instances, things he said or wrote that were clearly untrue were not, in my view, cases of lying. Rather, he seemed to come to a view of what was happening, or ought to be happening, was clouded by his temperament and his desire to do the job quickly so Norcope could receive the early completion bonus. During his evidence, at times he seemed to have detailed complaints about Yukon and Tetra Tech but then when pushed on an issue, suggested that he only had a high-level knowledge about what was going on. His several threats to stop work or commence litigation belie any claim that Norcope was entirely an innocent victim of Yukon and Tetra Tech. Additionally, his hyperbolic description of how the project was doomed from the start again attests to his unreliability.

> Mr. Beecher exaggerated in the same fashion as Mr. Gonder. In one case, in terms of his dealings with Mr. Cowan, he lied. He was an unreliable witness.
>
> Reasons at para. 19.

[61] The judge identified five main areas in dispute with respect to how the apron was constructed.

The apron design

[62] The judge identified the main issue as whether the cracking in the southwest corner of the apron was caused by the design of the apron, by poor construction practices or materials, or by a combination of both. As designers of the apron, Mr. Anderson and Mr. Bartsch were "firm the design was good" as it had been used before in similar conditions, such that "any failure was because of changes in the specifications." Tetra Tech maintained that if the apron had been constructed in accordance with the original specifications as they were changed, it should have been able to withstand the frost heave and settlement. Accordingly, it was poor construction practices that were the cause of the problems which ensued. Norcope and Intact, for their part claimed the primary cause was frost heave and settlement: Reasons at paras. 96–97.

[63] The judge noted that "[n]o one challenged the fact that the design met minimum standards to protect the concrete from frost heave and settlement". The question the judge posed was having met the minimum standards, "whether something else should have been done": Reasons at paras. 98–99.

[64] Mr. Cumming testified that the root cause of the cracking was frost heave and settlement. This opinion was based on information provided in the surveys conducted by Mr. Hauff and the 2021 apron replacement tender documents which included an option requiring the removal of frost-susceptible material. The judge observed, however, that Mr. Cumming did not test panels or perform investigations to support his opinion, relying on his engineering judgment for his conclusion: Reasons at paras. 101–102.

[65] Considering the “reasonable opinions” of Mr. Cumming, Mr. Bartsch and Mr. Anderson, the judge found that it was not reasonable to conclude that Norcope’s work in the southwest corner of the apron met all required specifications and standards, given its poor construction practices elsewhere. The judge concluded that while frost heave and settlement contributed to the cracking in the southwest portion of the apron, it was “more likely than not” that poor construction practices were also a factor: Reasons at para. 103.

The mix design

[66] The concrete mix design was developed by Tetra Tech. The mixture consisted of coarse and fine aggregate. If it were too coarse due to an insufficiency of fine aggregate, it would then be less fluid. The same source of aggregate was used for both the lean mix and the PCC. The coarse aggregate met the standards of the Canadian Standards Association (CSA). The fine aggregate failed but was still considered usable. The mix also did not meet the air content requirements under the CSA. Mr. Petzold and Dr. Czarnecki indicated that the mix is normally adjusted on-site: Reasons at paras. 108–109.

[67] Mr. Gonder testified Mr. Beecher had advised that there had been problems with the mix design from the very beginning of the Project, and Norcope could not have requested a new mix design from Tetra Tech since the Project would have been delayed. Mr. Petzold testified Norcope submitted the proposed mix design to Yukon, and Tetra Tech, in its QA role, would have reviewed the design for Yukon. He did not recall anyone ever suggesting the mix design was faulty: Reasons at paras. 110–112.

[68] Dr. Czarnecki did not recall identifying any problems with the mix design. She found no issue with the flexural strength but agreed the air content was below what it needed to be; it could however, be adjusted on-site. Dr. Czarnecki further testified that there was evidence of “bleeding”, which is caused by excessive water in the mix: Reasons at paras. 113–114.

[69] Mr. Cowan assumed responsibility for the mix design and did not recall having discussions with Mr. Beecher about excessive bleeding. He denied telling Mr. Beecher it was too late to do anything about the mix design. The judge observed she needed to be careful in assessing Mr. Cowan's evidence because, like Dr. Czarnecki and Mr. Petzold, "it is tainted with the conflict-of-interest issue". The judge noted, however, that conversations between Mr. Cowan and Mr. Beecher "are facts, not opinions", and she preferred the evidence of Mr. Cowan on this issue: Reasons at para. 115.

[70] Mr. Cumming testified the mixture was "coarser than ideal" which would in turn impact the amount of water required to make the mix suitable. He said that the aggregate test could have been a sampling issue and therefore, there should have been rigorous QC and QA scrutiny. In addition, he commented that the water content was "up and down like a yo-yo during construction". He disagreed with Mr. Riffell as to the conclusion in the Final Report that the air content would negatively impact freeze-thaw durability. He testified that from his observations, there had been critical saturation which resulted in surface scaling: Reasons at paras. 116–118.

The pouring and consolidation of the concrete

[71] PCC is tested for consistency when it arrives on site and if not sufficiently fluid, plasticizer can be added. Once the concrete is poured, it is consolidated to remove entrapped air. Mr. Cumming testified that he would have expected "tighter control over the pour" and more frequent testing: Reasons at para. 119.

[72] Mr. Gonder stated "he advised Tetra Tech they were not performing their QA role properly". He acknowledged on several occasions in his testimony that "the concrete was failing specifications": Reasons at para. 121.

[73] Mr. Beecher testified that "bleed water was present on the first day of the pour", "the mix was so rocky it would not flow out of the trucks", and "they added some plasticizer to get it flowing". He denied that any water was added to the concrete: Reasons at para. 123.

[74] Dr. Czarnecki testified that ten core samples were taken from Lanes E and H of the apron on July 28, 2014, and all were tested for density, three for compressive strength and two for air void parameters. The samples demonstrated that the density of the cores was significantly lower than the design specifications, which was indicative of either a lack of consolidation of the concrete or water being added. Four subsequent core samples were taken from Lanes A, B, H, and J. All revealed large consolidation voids and "honeycombing" results. This is a phenomenon where agglomeration of coarse aggregate is present and vibration in the finishing process has been insufficient to fill the voids. Dr. Czarnecki referred in the Final Report to the fact that the equipment used by Norcope had not been approved. She acknowledged in her testimony that this observation was incorrect and that she first learned of this after the Final Report was written: Reasons at paras. 124–125.

[75] Mr. Cumming and Mr. Riffell did not identify poor consolidation as one of the construction defects. Mr. Cumming stated "the contractor should have been told by Tetra Tech to keep trying until they got the mix correct": Reasons at paras. 126, 129.

[76] Mr. Leaman testified that the air void spacing exceeded the specified standards, the core samples showed honeycombing and the consolidation equipment was undersized or underpowered. He also stated that there was evidence of bleeding caused by excessive water in the mix. He said that "the QC and QA were ineffective" as several loads of concrete did not meet the specifications and no corrective action was taken. He also said that in some instances, Norcope insisted that a load of concrete be used when "QA had recommended that a load be rejected". In his view, it was the contractor's responsibility to verify the air void parameters and what should have been tested when first pouring the concrete: Reasons at paras. 127–128.

[77] Mr. Leaman concluded that the variability in the concrete was due to the water content: Reasons at para. 129.

Finishing the concrete

[78] After consolidation, finishing of the concrete consists of “brooming”, texturing, curing and cutting the joints. The timing of these steps is critical. Mr. Leaman and Mr. Riffell stated that any delays before curing can affect the surface, since it would be exposed to air and could result in rapid evaporation, which in turn causes dry shrinkage and cracking: Reasons at para. 130.

[79] One issue that arose between the experts concerned where climactic condition information should be obtained. This related to the evaporation rate, which is determined by the climate in which the PCC is poured such that it does not dry too quickly: Reasons at para. 131.

[80] A second issue was when the joints were cut. The evidence was to the effect that it is important to cut the joints as soon as possible after curing to avoid cracking. All experts agreed there was a delay in curing and joint cutting which caused cracking. Mr. Gonder testified that he knew the specifications required saw cutters to be available on a 24-hour basis and that they were not: Reasons at para. 132.

[81] All the witnesses who testified on the issue agreed that there was excessive bleed water in the concrete. As noted above, Mr. Beecher stated “bleed water was present on the first day of the pour” and that he discussed changing the mix design with Mr. Cowan. Mr. Cowan testified he did not recall having conversations with Mr. Beecher about the bleed water or other issues. He testified that a change in the mix design would have required a filed assessment to be completed which they were not asked to do: Reasons at paras. 133–134.

[82] The judge made these observations about the cause of excessive bleed water:

> [135] Why there was excessive bleed water was a matter of debate. Everyone agreed the concrete mix was coarser than desirable. Everyone agreed the concrete was difficult to pour and there were unsatisfactory slumps. The solution was to add admixture onsite, but not add water. There is one comment in an SOR where water was added to solve a problem with the slump. The excessive water may have been added at the plant to solve the problem of a lack of fines in the mix design, or it may have been added on

> site to make the concrete easier to work with. Either should not have been done. I find that water was added so that the mixture could be poured and that is the responsibility of Norcope. If Norcope was struggling with the mixture, it ought to have gone to Tetra Tech who designed the mix. Norcope did not.

The bond breaker

[83] The purpose of bond breaker is to permit movement between the lean mix and the base. Norcope proposed that no bond breaker be used but Yukon insisted that it be applied. All the parties agreed that the PCC layer bonded to the lean mix, which created stress on the PCC which could lead to cracking. The bonding therefore made the saw cuts ineffective even if they had been made as soon as possible: Reasons at para. 136.

[84] The first issue with the bond breaker is the type of compound used. Fabrikem WB-Cure, which is a curing compound and not a bond breaker, was used. Mr. Gonder admitted that Norcope was given a choice of a bond breaker or Fabrikem, and that it chose Fabrikem: Reasons at paras. 137–138.

[85] The second issue is whether Norcope applied the bond breaker properly or at all. A photo in the Final Report showed PCC being directly poured on top of the lean mix. If the bond breaker had been applied correctly the surface of the lean mix would have been white. Mr. Beecher testified that Norcope never applied less than two coats of bond breaker but Mr. Mcfarlane observed he never saw this occurring. Mr. Cumming stated that if the lean mix and PCC bonded in a panel, it would crack but not all of the panels in the apron in fact cracked: Reasons at para. 139.

[86] After considering all of the evidence on the construction issues, the judge concluded:

> [179] No one on this job did their work competently and the fact Tetra Tech failed in its QA and QC roles and Yukon failed in its supervisory role does not take away from Norcope's responsibility.
>
> **Results on Liability**
>
> [180] In the result, liability for the apron defects is split. The lack of QA and QC and the problematic mix design fall on Tetra Tech. The failure of poor construction practices falls on Norcope. The failure to essentially pay

> attention to what was happening on the project falls on Yukon. Tetra Tech's involvement in the defects is the greatest and I assess it at 50% of the problems. Norcope takes 35% and Yukon the remaining 15%.

IV: On Appeal

[87] On the appeals and the cross appeal, the parties raise a number of challenges to the judge's findings and conclusions, which I would group as follows, being whether she erred in:

1. her causation analysis including failing to:
   (a) recognize that at law the burden of proof was on Yukon to establish that Norcope's breach of the Contract and not some other intervening factor caused the damage;
   (b) exercise her gatekeeping role in relation to Dr. Czarnecki's evidence to determine its admissibility and the weight to be given to it;
   (c) in making errors of fact or mixed fact and law in her causation analysis;
2. her apportionment of liability between the parties including the Norcope claim for contribution and indemnity from Tetra Tech;
3. the assessment of damages including betterment;
4. interpreting the Bond; and
5. her award of costs.

Standard of Review

[88] Given the nature of several of the grounds of appeal, the number of experts who testified, the technical nature of the evidence and the judge's findings of credibility, it is of assistance to set out the recent articulation of the applicable framework for review by the Court of Appeal for British Columbia in *Equustek Solutions v. Jack,* 2024 BCCA 104:

> [29] It is not open to this Court to reconsider credibility, re-weigh the evidence and engage in our own inference-drawing exercise. Yet this is what the appellants have asked us to do on this appeal. They have selected pieces of evidence, ignored contrary evidence, and asked this Court to find that the judge committed errors by not interpreting the evidence in their favour.

[30] This Court recently reiterated the standards of review on appeal in *Garcha v. 690174 B.C. Ltd.*, 2023 BCCA 376. The appellants' approach makes it necessary to emphasize these principles again. As stated in *Garcha*:

> [17] The issues raised on appeal involve questions of law, questions of fact, and questions of mixed law and fact. The governing standards of review are set out in *Housen v. Nikolaisen*, 2002 SCC 33.
>
> [18] Pure questions of law (including questions of jurisdiction and statutory interpretation), are reviewed for correctness: *Housen* at para. 8.
>
> [19] Findings of fact and factual inferences drawn from evidence cannot be reversed in the absence of palpable and overriding error: *Housen* at paras. 10, 19.
>
> [20] Questions of mixed fact and law from which a legal question is not readily extricable also attract a deferential standard of review: *Housen* at para. 36. If an appellant or cross-appellant can demonstrate that a conclusion of mixed fact and law was materially affected by the application of an incorrect legal standard, a failure to consider a required element of a legal test, or some other error in principle, it may amount to an error of law and be assessed on a correctness standard. Otherwise, the more stringent standard of palpable and overriding error applies: *Housen* at para. 36.
>
> [21] These standards of review are binding on us.
>
> [22] And, in their application, they limit our authority to engage with the evidence and to reach factual conclusions different from the judge. In the context of a lengthy and fact-intensive trial, the importance of adhering to the governing standards of review cannot be overstated. As made clear by the Supreme Court of Canada in *Housen*, it is not the role of an appellate court to retry cases and to "substitute its views for the views of the trial judge according to what the appellate court thinks the evidence establishes on its view of the balance of probabilities": at para. 3, citing *Ocean City Realty Ltd.* (1987), 12 B.C.L.R. (2d) 199 (C.A.) at 204.
>
> [23] Finality in the litigation process is important. For questions of fact and mixed fact and law in particular, this Court's responsibility on appeal is to "review the reasons in light of the arguments of the parties and the relevant evidence, and then to uphold the decision unless a palpable error leading to a wrong result has been made by the trial judge": *Housen* at para. 4, emphasis added.
>
> [24] These principles may seem trite to some. However, at the hearing of the appeal, the Court sometimes had to remind counsel of the role of an appellate court and the standards of review. Some of the submissions made to us were more appropriately submissions for a trial court and although couched in the language of appellate review, when distilled to their essence, they invited us to stand in the shoes of the judge and to reweigh the evidence. This, we cannot do.

> …
>
> [25] As emphasized by the Supreme Court of Canada in *R. v. G.F.,* 2021 SCC 20:
>
> > [69] … Appellate courts must not finely parse the trial judge's reasons in a search for error ... Their task is much narrower: they must assess whether the reasons, read in context and as a whole, in light of the live issues at trial, explain what the trial judge decided and why they decided that way in a manner that permits effective appellate review ...
>
> [Emphasis added in original.]

V: Discussion

Issue #1 – Causation

A: Burden of Proof

[89] The appellants submit that the judge reversed the onus of proving causation. Relying on *Sharp v. Royal Mutual Funds Inc.,* 2021 BCCA 307 they say "the burden is on the plaintiff alleging the breach to prove on a balance of probabilities that the loss was caused by the breach and not some intervening factor or factors": see *Sharp* at para. 122.

[90] I would add that *causation* and the *quantification* of loss are separate issues. The first must be proven by the plaintiff on a balance of probabilities. On appeal, the finding is framed as a question of fact and is subject to the deferential standard of review: *Sharp* at para. 123, quoting *Eastwalsh Homes Ltd. v. Anatal Developments Ltd.* (1993), 100 D.L.R. (4th) 469 (Ont. C.A.), leave to appeal ref'd [1993] S.C.C.A. No. 225.

[91] The appellants refer to the Reasons where the judge stated:

> [173] … I cannot conclude all the problems in the southwest portion were caused only by seasonal movement as there is nothing that would allow me to conclude poor construction practices employed elsewhere on the apron were not employed in the southwest corner… As I do not know whether the apron was designed to withstand seasonal elevation changes of the degree shown in the 2014 and 2015 surveys, but because I do know about the failures listed above, my apportionment of liability does not incorporate the seasonal elevation change. The elevation change exacerbated the cracking, but I cannot find that it alone caused it.

[92] Norcope and Intact argue that the Warranty Letter relieved it of its warranty obligations with respect to the cracking of the apron if it were shown that the cracking was caused by frost heave and settlement.

[93] In its factum, Norcope states:

> 161. There was no burden on the Defendants to prove that the apron was not designed to withstand the elevation changes to which it was exposed. The fact that the Judge could not conclude that the apron was designed to withstand the elevation changes it experienced was a failure on the part of the plaintiff, Yukon, to prove there was no intervening cause of the damage to the apron.
>
> 163. When the Judge used the absence of proof regarding whether the apron was designed to withstand the seasonal elevation changes to support her conclusion in the Reasons that the seasonal elevation changes were not the primary cause of the cracking, she disregarded or failed to take into account the evidence which had been entered in the testimony of Mr. Cumming — that the primary cause of cracking of the apron was frost heave and settlement. In so doing, the Judge effectively placed the onus on Norcope to prove that the apron was not designed to withstand the seasonal elevation changes to which it was exposed and denied Norcope the benefit of the Waiver because it did not prove it.
>
> 164. The logic exercised by the Judge in the Reasons amounted to an effective reversal of the onus with respect to causation of the damage and ignored the evidence of Mr. Cumming, whose evidence was that frost heave and settlement was the primary cause of cracking of the apron, and was a reversible error of law.
>
> [Emphasis added.]

[94] Yukon's position is that Norcope's and Intact's arguments regarding burden of proof amount to requiring Yukon to prove the negative proposition that seasonal movement did not cause the cracking of the panels. It says this mischaracterizes the nature of a claim for breach of contract as exists in this case.

[95] Yukon argues that once it had demonstrated, as it did, that:

(a) the concrete panels Norcope installed did not meet the Contract specifications; and

(b) Norcope had refused to replace them as the Contract specifications and warranty required;

then Yukon had fully discharged the legal and the evidentiary burden on it to prove Norcope's breach of contract. The burden then shifted to Norcope to establish its defences, which included seasonal change and the faulty design of the apron.

Discussion

[96] The framework which applies to contractual interpretation is not in dispute and was outlined by Justice Groberman in *Canaccord Genuity Corp. v. Reservoir Minerals Inc.*, 2019 BCCA 278:

> General Principles of Contractual Interpretation
>
> [19] The basic process for contractual interpretation was outlined by the Supreme Court of Canada in *Sattva Capital Corp. v. Creston Moly Corp.*, 2014 SCC 53:
>
> > [47] … The overriding concern is to determine "the intent of the parties and the scope of their understanding". To do so, a decision-maker must read the contract as a whole, giving the words used their ordinary and grammatical meaning, consistent with the surrounding circumstances known to the parties at the time of formation of the contract. Consideration of the surrounding circumstances recognizes that ascertaining contractual intention can be difficult when looking at words on their own, because words alone do not have an immutable or absolute meaning….
> >
> > [48] The meaning of words is often derived from a number of contextual factors, including the purpose of the agreement and the nature of the relationship created by the agreement.…
> >
> > …
> >
> > [57] While the surrounding circumstances will be considered in interpreting the terms of a contract, they must never be allowed to overwhelm the words of that agreement. The goal of examining such evidence is to deepen a decision-maker's understanding of the mutual and objective intentions of the parties as expressed in the words of the contract. The interpretation of a written contractual provision must always be grounded in the text and read in light of the entire contract. While the surrounding circumstances are relied upon in the interpretive process, courts cannot use them to deviate from the text such that the court effectively creates a new agreement.
> >
> > [Citations omitted.]
>
> [20] The chambers judge recognized the principles of contractual interpretation, quoting, at para. 37 of his judgment, from *RBC Dominion Securities Inc. v. Crew Gold Corporation*, 2016 ONSC 5529, aff'd 2017 ONCA 648 at para. 52:
>
> > (1) When interpreting a contract, the court aims to determine the intentions of the parties in accordance with the language used in the

> written document and presumes that the parties have intended what they have said.
>
> (2) The court construes the contract as a whole, in a manner that gives meaning to all of its terms, and avoids an interpretation that would render one or more of its terms ineffective.
>
> (3) In interpreting the contract, the court may have regard to the objective evidence of the "factual matrix" or context underlying the negotiation of the contract, but not the subjective evidence of the intention of the parties.
>
> (4) The court should interpret the contract so as to accord with sound commercial principles and good business sense, and avoid commercial absurdity.
>
> (5) If the court finds that the contract is ambiguous, it may then resort to extrinsic evidence to clear up the ambiguity.
>
> (6) While the factual matrix can be used to clarify the intention of the parties, it cannot be used to contradict that intention or create an ambiguity where one did not previously exist.
>
> [21] The interpretation of a contract (apart from contracts that use widely-employed standard language clauses) is a question of mixed fact and law, on which a trial judge is entitled to deference (*Sattva* at para. 50). Nonetheless, when a trial judge interprets a contract in a manner that cannot be supported on its plain language, the error will be corrected on appeal.

[97] Yukon points to the fact that the Contract specification for the PCC contains a non-exclusive list of attributes that constitute defects in the concrete and which include a lack of freeze-thaw durability (3.16.1.2), any full-depth crack that intercepts more than one joint (3.16.1.9), joint spalling, and "other surface defects" (3.16.1.1).

[98] It says it was this Contract specification that Mr. Gonder was taken to, in detail, during his testimony when he was asked if the concrete panels Norcope installed "met spec" and he acknowledged that they did not: Reasons at paras. 110–111.

[99] In this same specification, there is an obligation to "remove and replace defective concrete where directed by Engineer" (as the evidence established Norcope was directed to do in this case) and "replace with new concrete to this specification" (3.17.2).

[100] The general contractual warranty ("GC26 Warranty and Rectification of Defects in Work") also required Norcope, at its own expense, to "rectify and make good any defect or fault that appears in the work".

[101] Yukon argues that there were two bases for the trial judge's finding that all of the apron panels were defective and required repair or replacement:

> (a) Norcope admitted that not a single apron panel that it installed met the contractual specifications. By itself, that admission was conclusive as to Norcope's liability: Reasons at paras. 110–111; and
>
> (b) At least some defects were proven to be present, in some combination, in all parts of the apron.

[102] Yukon contends that all of these conditions are explicitly identified in the Contract as defects in the work, and Norcope was therefore contractually obliged to repair or replace all of the panels affected by them.

[103] Applying the principles of contractual interpretation, I would agree with Yukon that the breach of contract in this case was the installation of defective panels and the refusal to replace them. Yukon's damage was the cost of remedying the breach, that is, replacing the panels. The causal link between breach and damage is direct. As I explain below there were no "intervening factors" between the breach and the damages claimed.

[104] Citing *Sharp*, Norcope and Intact assert that Yukon has the burden of proving that its loss was caused by Norcope's breach of contract and not by some intervening factor or factors. I would agree with this general proposition.

[105] And yet, Norcope and Intact then submit that the apron design and seasonal upheaval are intervening factors which relate to proof of the breach, rather than to proof of a causal link between the breach and the damages claimed. I agree with Yukon that the appellants' description of the basic legal principles has the "intervening factors… in the wrong spot".

[106] Norcope's and Intact's version of "intervening factors" would oblige Yukon to prove the effectively illimitable negative that nothing but Norcope's faulty workmanship or materials caused the defects in the concrete.

[107] In my view, Yukon, at para. 95 above, correctly sets out its burden of proof and whether it was met in this case.

[108] In fact, as I have observed, Norcope acknowledges in its factum that it had the onus of establishing the existence of the defences which it raised, being seasonal movement and apron design.

[109] Contrary to the appellants' submissions I do not accept that the Warranty Letter assists them on this point; in fact, the opposite is true. The letter should be grounded in its actual wording and read in the context of the entire Contract. The Warranty Letter is to the effect that Norcope will not be responsible for cracking due to seasonal movement as opposed to poor construction practices. But once Yukon established the breach of the Contract as it did in relation to the panels not meeting the contractual specifications, as admitted by Mr. Gonder, it was entitled to require Norcope to remedy the defects. And it was for Norcope to then establish that it had established one or more of the defences it raised, that is, inadequate apron design and/or seasonal movement.

[110] It bears repeating that Mr. Gonder testified that he believed if Norcope met the specifications of the tender, then anything else that damaged the work would not be Norcope's responsibility (at para. 19 above). The problem from Norcope's perspective is that it was clear on all the evidence, which included Mr. Gonder's testimony, that Norcope did not meet the specifications of tender.

[111] In my view, it is evident from this ground of appeal that Norcope and Intact challenge the judge's analysis regarding seasonal movement and apron design rather than an alleged error regarding the burden of proof.

[112] That is why they specifically refer to alleged errors in the judge's causation analysis, that is, the treatment of the expert and lay evidence which includes the

Anderson and Bartsch evidence on the one hand and the Cumming/WSP evidence on the other.

[113] For these reasons, I would not accede to this ground of appeal and will turn below to what I consider is really at issue, being the judge's causation analysis itself. Before doing so, I will consider the appellants' challenges to the admissibility and scope of the evidence of Dr. Czarnecki.

B: Dr. Czarnecki

The Reasons

[114] The judge noted that Dr. Czarnecki was the principal drafter of the Final Report and was not, due to her impartiality, qualified as an expert, despite her expertise in concrete. The judge went on to determine the potential utility of Dr. Czarnecki's evidence given her involvement in the litigation and the appellants' attacks: Reasons at para. 21.

[115] The judge noted that the appellants did not dispute that Dr. Czarnecki could give opinion evidence in order to respond to the allegations made about her but that they challenged whether those opinions could be considered in deciding the underlying issues: Reasons at para. 23.

[116] The judge accepted the Final Report as a factual document and that Dr. Czarnecki was a litigant expert (as described below). She recognized the conflict of interest issue and decided she could weigh Dr. Czarnecki's opinions when considering the issues in dispute: Reasons at para. 27.

[117] She characterized Tetra Tech as "an enthusiastic advisor" and found that one particular editing of the Final Report signalled a level of advocacy that was not appropriate. She went on to say that "[i]t is what it is", and that she relied very little on the report itself: Reasons at paras. 158, 166.

Position of the Parties

[118] The appellants' challenges to the judge's conclusions relating to Dr. Czarnecki include erring:

(a) in failing to conduct a thorough "gatekeeping" analysis to assess Dr. Czarnecki's opinion evidence to determine its admissibility and whether it went beyond the scope of what could be proffered by a litigant expert; and

(b) in law in accepting and relying on the opinion evidence of Dr. Czarnecki to determine the issue of Norcope's and Intact's liability to Yukon without qualifying her as an expert witness.

[119] Yukon's position is that it is clear from the Reasons that the judge was well aware of her gatekeeping responsibilities in relation to the expert evidence generally and to Dr. Czarnecki, in particular, and conscientiously discharged her gatekeeping function.

Discussion

[120] The Court of Appeal for British Columbia has recently held that whether the preconditions of admissibility for an expert opinion are met is a question of mixed fact and law, to which, in accordance with *Housen v. Nikolaisen*, 2002 SCC 33, the standard of review is palpable and overriding error: see *Swanson v. MacKinnon*, 2024 BCCA 95 at para. 153.

[121] It is also the case that a judge's gatekeeping function requires an exercise of judicial discretion: see *R. v. R.G.S.*, 2023 BCCA 52 at para. 53; *R. v. Abbey,* 2009 ONCA 624 at para. 79.

[122] The gatekeeping step requires the balancing of potential risks and benefits of admitting the evidence: *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 2015 at para. 24. Particularly, the court retains its gatekeeper function in relation to opinion evidence from participant experts such that they do not exceed

their proper role: *Westerhof v. Gee Estate*, 2015 ONCA 206 at para. 64; *Imeson v. Maryvale (Maryvale Adolescent and Family Services)*, 2018 ONCA 888 at para. 63.

[123] It is generally accepted that there are three categories of witnesses who possess an expertise: (1) independent experts who are retained to provide opinions about issues arising in the litigation but who are not otherwise involved in the litigation itself; (2) witnesses with expertise who were involved in the events underlying the litigation but who are not one of the litigants; and (3) litigants who were involved in the events, but who also have expertise: *Kon Construction Ltd. v. Terranova Developments Ltd.*, 2015 ABCA 249 at para. 35. The first category can be described as those contemplated by *White Burgess*. The judge noted that Dr. Czarnecki would fall under the third category: Reasons at para. 22.

[124] The appellants argue that the judge did not consider the specific opinions being proffered by Dr. Czarnecki. By not conducting that analysis, they say she did not distinguish the opinion evidence tendered in Dr. Czarnecki's capacity as a litigant expert from those provided by her beyond that limited role. They submit that the judge failed to apply the first essential step of applying the admissibility criteria to the specific opinions proposed to be provided, as described in *Imeson* at paras. 83–84.

[125] The appellants submit this amounted to an error of law or one of mixed fact and law. Norcope argues in its factum that it was significantly prejudiced in that:

> The Judge considered and accepted the opinion evidence of Dr. Czarnecki of Tetra Tech on a number of critical points:
>
> > a. Whether the apron should be able to withstand frost heave and settlement if it had been constructed as specified;
> >
> > b. Whether the concrete used in constructing the apron met air content requirements;
> >
> > c. That "bleeding" is caused by excessive water in the mix;
> >
> > d. The likely causes of low density of core;
> >
> > e. Whether the interior of panels was freeze-thaw durable;
> >
> > f. Whether the concrete was consolidate;
> >
> > g. The cause of "honeycombing" and its impact on the strength of concrete;

> h. The location from where information should have been obtained regarding climactic conditions;
>
> i. The cause of a reflective crack in Lane B from panels 15 to 25; and
>
> j. Whether edge spalling and ravelling was a defect and whether the design of the joints was incorrect.

[126] In the Reasons, the judge outlined Dr. Czarnecki's professional qualifications to which I have referred. She was also cognizant as to when Dr. Czarnecki became involved in the Project and her role in preparing drafts of and the Final Report itself.

[127] The judge was well aware of the conflict of interest in which Tetra Tech found itself by having contractual duties to both Norcope for mix design and QC, and Yukon for QA.

[128] In the Reasons, the judge identified the appellants' concerns pertaining to Dr. Czarnecki generally and the preparation of the Final Report, and squarely addressed the ramifications of the conflict of interest:

> [21] Yukon proposed Dr. Czarnecki as a litigant expert. Dr. Czarnecki was the principal drafter of the report which Yukon relied upon to make a claim against Norcope. Yukon had planned to qualify Dr. Czarnecki as an expert witness but chose not to because of objections about her impartiality. No one disputes that Dr. Czarnecki has expertise in concrete, but the defendants argued that as an employee of Tetra Tech, she was not impartial as required by *White Burgess Langille Inman v Abbott and Haliburton Co*, 2015 SCC 23. Yukon said it would be difficult to meet the *White Burgess* test given the attacks upon Dr. Czarnecki by the defendants. As a result, Dr. Czarnecki gave evidence as a litigant expert. The question is what I can do with that expert evidence.
>
> …
>
> [23] No one disputes that Dr. Czarnecki could give opinion evidence to defend the allegations made about her. The issue is whether I can consider those opinions when deciding the underlying issues involving the work done on the apron.
>
> …
>
> [27] I accept that Dr. Czarnecki can be a litigant expert and that I can weigh her opinions when considering the issues in dispute. I do not accept the argument that accepting Dr. Czarnecki's argument circumvents the *Mohan* process. Whether there are untruths or exaggerations or whether her opinions lack scientific basis will be dealt with below. The real difficulty I have with Dr. Czarnecki's opinions is the conflict of issue [*sic*] that she and her colleagues at Tetra Tech were in. I have decided I must caution myself before accepting any evidence from Dr. Czarnecki because of the appearance of a

> conflict. Therefore, when I do accept what she has said, it is done after a healthy period of reflection about how that conflict may affect the testimony.

[129] As I shall outline below, the judge also addressed the Final Report when undertaking her causation analysis and the allegations by the appellants of deliberate attempts made by Tetra Tech to assign blame to Norcope.

[130] It was also not necessary for Dr. Czarnecki to have observed or participated in every facet of the construction of the apron to be permitted to testify as a litigant expert. The judge outlined the legal framework to be applied to participant or litigant expert witnesses, to which I have referred at paras. 120–123 above. Dr. Czarnecki was clearly involved "in the underlying facts": *Westerhof* at para. 61.

[131] In my view, the appellants have not identified any error of law made by the judge on this issue. The appellants have not identified any palpable and overriding error with respect to the judge's acceptance of Dr. Czarnecki as a participant or litigant expert or that she otherwise failed in her gatekeeping responsibilities.

[132] Accordingly, I would not accede to this ground of appeal.

C: Alleged Errors in the Causation Analysis

The Trial Reasons

[133] The judge first emphasized the scope of the Final Report:

> [152] It is important to remember who the report was intended for. It was written to form the basis of discussions with Norcope about the deficiencies. This was not a report like a public commission which is intended for wide distribution and use. Norcope knew how the use of the bond breaker came about. Norcope knew who did the mix design. Norcope knew it had a contract with Tetra Tech to do QC. Nobody was deceived by the failure to address these things in the report.

[134] She then addressed the appellants' allegations that the Final Report contains "falsehoods". She referred to the photograph in the Final Report showing PCC being poured over lean mix with no bond breaker on it. She considered other criticisms, including the times recorded in Mr. McFarlane's field notes which were not included in the SORs but were reported in drafts of the Final Report. She concluded the times

were likely reported as a result of verbal communications between Mr. McFarlane and others, and not "any sort of plan to insert false information into documents so as to assign blame to Norcope": Reasons at para. 153.

[135] The judge also commented on what she considered should have been removed from the Final Report:

> [156] The only edit that was made to the Final Report that causes me discomfort is taking out the phrase about Panel C6. Mr. Petzold testified he now agrees the crack in C6 could be evidence of cracking caused by seasonal elevation change. Dr. Czarnecki maintains the position that in her engineering judgment it was appropriate to remove. I find the phrase should have stayed in. It was taken out because of an error in judgment or a keenness to support a client in dealing with failed project. It was done by someone whose firm was in a conflict of interest. It points to a level of advocacy that is not appropriate.

[136] She went on to state that the removal in question was not "done maliciously, falsely, or with an intent to harm Norcope": Reasons at para. 158.

[137] As I have set out above in some detail, the judge reviewed the evidence of the expert and lay witnesses with respect to the cause of the cracking, following which she concluded:

> [169] The mix design was problematic. Dr. Czarnecki knew there would need to be adjustments on-site because of the lack of fine aggregate. That in itself did not create the problem because no one challenged the ability to adjust the mix on-site. The slump testing was inadequate and there were times when truckloads that did not meet specifications were poured. There was no consistent QC or QA to stop the work until Norcope got the mix right. Mr. Gonder and Mr. Beecher said there were problems pouring the concrete, but unlike with the settlement of the lean mix where they stopped work, they just continued to pour. On at least one occasion, they were caught adding water to the mixture. That leads me to conclude it was not the only time they added water to the concrete to make it pour more easily. The entire process from designing the mix, to making it, testing it, and pouring it were all flawed.
>
> [170] I accept that consolidation was poor, resulting in a concrete that had entrapped air that was not properly spaced, which resulted in it not being freeze-thaw durable. Although the equipment that Norcope used was approved, the equipment was not used in a workmanlike manner and that caused the failure of consolidation.
>
> [171] I accept the product used as a bond breaker did not function well. There is no adequate evidence to support a conclusion that Fabrikem was the right product to use. On the other hand, there is some evidence that

> Norcope was resistant to applying a bond breaker at all and in some cases it did not apply anything at all. However, that becomes irrelevant given Yukon has not proven Fabrikem was the correct product.
>
> [172] Everyone agrees there was late curing and joint cutting which caused cracking. Finally, the miscellaneous items listed above all show poor workmanship on the part of Norcope.

The Legal Framework

[138] The principles which apply to contractual damages and causation were recently summarized in *Sharp*. Those which are germane to the issues on appeal include:

- a causative link between the defendant's wrong and the plaintiff's loss is essential, such that a defendant cannot be held liable for losses not caused by their misconduct;
- damages are only recoverable where the breach of contract is the "effective" or "dominant" cause of that loss;
- causation issues that tend to arise likely concern intervening acts of either a third party or the claimant;
- issues of causation arise separate and prior to quantification of the loss; and
- the onus is on the plaintiff alleging the breach to prove on a balance of probabilities that the loss was caused by the breach and not some intervening factor or factors.

Sharp at paras. 113–122.

Position of the Parties

[139] Norcope and Intact challenge the judge's analysis and conclusions on causation on a number of grounds which include, that the judge:

- accepted and relied upon the opinion evidence of Associated Engineering regarding whether poor construction or frost heave and settlement was the underlying cause of cracking in the southwest portion of the apron when they were not qualified to provide that expert opinion evidence and they performed no engineering analysis on that issue;

- made an overriding and palpable error of fact when she attributed to Mr. Anderson and Mr. Bartsch the opinion that, "poor construction was the underlying cause";

- made an error in law when she failed to address and consider the statement produced by Mr. Leaman and Mr. Cumming, which was relevant and cogent evidence on issues which were central to the case;

- erred in fact and law by improperly inferring that Norcope added water to the concrete on more than one occasion when there was no evidence to support that inference and there was evidence to contradict it;

- erred in fact and law by improperly inferring that the concrete throughout the apron was poorly consolidated when there was no evidence to support that inference and there was evidence to contradict it; and

- erred in fact and law by improperly inferring that there was late curing and joint cutting which caused cracking throughout the apron when there was no evidence to support that inference and there was evidence to contradict it.

[140] Yukon's position is that the Reasons were extensive and causation was "thoroughly canvassed" by the judge. It submits that the judge considered all of the evidence offered by Norcope, including that of its expert Mr. Cumming.

[141] It also argues that the cause of the cracking is a "distraction" in that since Norcope admitted none of the panels it poured ever "met spec", this means that

"Yukon's case for Norcope's breach of contract would have been fully made out even if not a single panel had ever cracked".

Discussion

[142] I agree with Yukon's submission that its claim for breach of the Contract does not depend on establishing cracking in the apron or who and what caused it. That is because the claim against Norcope is that the concrete panels Norcope installed did not meet the Contract specifications, and Norcope refused to replace them as those specifications and the warranty required.

[143] The issues as to the causes of the cracking do arise, however, in the broader context of Norcope's counterclaim and what it submits remains to be considered, notwithstanding the Pierringer Order, arising from its third party claim for contribution and indemnity from Tetra Tech.

[144] Since several of the grounds of appeal relate to the judge's consideration of the expert evidence, I shall first outline the applicable framework.

[145] Recently, in *Thomas v. Rio Tinto Alcan Inc.*, 2024 BCCA 62 [*Saik'uz 2024*], the Court of Appeal for British Columbia observed:

> [113] Appellate courts are reluctant to interfere with a trial judge's assessment of expert opinion evidence and the weight given to an expert report; considerable deference is owed to the role of the judge below (*SCP 173 Realty Limited v. Costa Del Sol Holdings Ltd.*, 2023 BCCA 312 at para. 44). Absent manifest errors, an appellate court should not interfere with a trial judge's findings and conclusions about expert evidence (*Nelson v. British Columbia (Provincial Health Services Authority)*, 2017 BCCA 46 at para. 26). However, it may intervene where a trial judge has made a palpable and overriding error of fact, or an error of law (*Housen v. Nikolaisen*, 2002 SCC 33 at paras. 8, 10, 36, 39; *Barendregt v. Grebliunas*, 2022 SCC 22 at para. 104). Palpable "means the error is obvious" and overriding "means that it goes to the core of the outcome of the case" (*Naimi v. Yunusova,* 2023 BCCA 124 at para. 30).

[146] I see several significant difficulties with the appellants' challenges to the judge's causation analysis.

[147] First, as I have set out above, the judge referred in some detail to the expert and lay evidence in her analysis. This included the allegations regarding the apron design and the arguments advanced as to the causes of the cracking.

[148] Second, it is clear from their submissions that the appellants are attempting to re-litigate in this Court the arguments made to the trial judge.

[149] This is seen, for example, in many of the challenges to the judge's analysis and conclusions from Norcope's factum, as noted above at para. 139.

[150] In its factum, Norcope also sets out in some detail the differences in the various experts' opinions as they relate to certain of the alleged construction defects as outlined in the Reasons, and essentially argues that the judge should not have preferred some of the evidence over that of other witnesses.

[151] I shall briefly address the alleged error relating to the statement made by Messrs. Leaman and Cumming.

[152] Norcope frames the issue this way in its factum:

> [93] In advance of trial, Mr. Leaman met with Mr. Cumming of WSP, as required by Rule 34(18) of the Rules of Court. They produced a written statement, as required by that Rule. Yukon objected to the statement being entered at trial, and so counsel for Norcope read the statement in to the record and put it to Mr. Leaman. The statement was: Areas of pavement that are currently distressed as a result of frost heave and thaw settlement due to presence of frost-susceptible soils beneath the apron would have occurred regardless of whether concrete pavement panels were free from defects or not. However, the amount of distress that has occurred has likely been exacerbated at some areas by the presence of defects in the apron panels due to substandard workmanship (i.e., improperly timed saw cuts or contraction joints and lack of an effective bond breaker between the lean mix concrete and the concrete panels). Mr. Leaman said that when he signed it, he agreed with the statement. In cross examination during the trial, Mr. Leaman said he did not agree with the statement at that time.
>
> [94] When Mr. Cumming was being examined directly, counsel for Intact began to ask him to confirm the statement which he and Mr. Leaman had produced. The Judge stated, "I'm not sure why Mr. Beckmann is asking him. I have the evidence. I know what the question was or what the quote agreement was. I know Mr. Leaman's position on the - that agreement."

[153] This challenge is a cogent example of the appellants re-arguing their position at trial. It is evident from the Reasons that the judge considered all of the expert evidence including that of Mr. Leaman and Mr. Cumming.

[154] The judge found that Mr. Leaman gave solid, reliable evidence on the general issues about the construction of the apron; however, she noted that his evidence "suffered" due to the fact he had not examined the apron and only did a "paper-based review" of the issues: Reasons at para. 20.

[155] There are similar examples which can be seen in Intact's factum in its challenge to the judge's analysis:

> 42. While there is certainly evidence of poor construction practices and defects occurring in certain portions of the Apron, the vast majority of significant defects, manifested as cracking in the southwest third of the Apron, have not been shown to be caused by any particular error or issue, other than seasonal movement.
>
> …
>
> 80. As mentioned, Tetra Tech had analyzed core samples and used their findings from two samples to conclude in the TTEBA Report that 100% of the Apron was affected by issues of poor consolidation.
>
> 81. Leaman discussed freeze thaw durability in the Stantec Report in relation to air voids and concrete consolidation. Like Cumming, he also opined that two tests to compare in-situ air void characteristics, which is what Tetra Tech had done, was insufficient.
>
> 82. Even Hussein opined in his report that drawing conclusions based on two cores tested was dubious and he explained in his testimony how this leads to a statistical bias.
>
> 83. Despite the fact that three experts, including one for the Plaintiff, expressed these views, the Trial Judge appeared to accept the conclusions of the TTEBA Report and Czarnecki, in finding, "that consolidation was poor, resulting in concrete that had entrapped air that was not properly placed, which resulted in it not being freeze-thaw durable."

[156] These various challenges to the evidence lead the appellants to one of their principal arguments on causation, being that the judge erred in her consideration of the causes of the cracking, in particular, the role of seasonal movement. They say that the admitted deficiencies in other parts of the apron could and should not have been extrapolated by the judge to the significant cracking in the southwest corner, being where the seasonal movement was most prevalent.

[157] Norcope and Intact submit that the judge drew impermissible inferences and engaged in speculation regarding Norcope's poor construction practices when there were insufficient facts upon which to base these findings. The same argument is advanced with respect to the judge's conclusion that there was poor consolidation of the concrete throughout the apron.

[158] In *Saik'uz 2024*, the Court of Appeal for British Columbia summarized the legal framework this way:

> [115] While causation can be inferred, inferences must be "based on proven facts and cannot be simply guesswork or conjecture" (*Borgfjord v. Boizard*, 2016 BCCA 317 at para. 55, leave to appeal to SCC ref'd, 37210 (9 February 2017)). In *Graham v. Rogers,* 2001 BCCA 432 (at para. 53), this Court relied on how the House of Lords delineated the difference between inference and speculation or conjecture in *Caswell v. Powell Duffryn Associated Collieries, Ltd.* [1940] A.C. 152 at 169–170 (H.L.):
>
> > ... Inference must be carefully distinguished from conjecture or speculation. There can be no inference unless there are objective facts from which to infer the other facts which it is sought to establish. … But if there are no positive proved facts from which the inference can be made, the method of inference fails and what is left is mere speculation or conjecture.

[159] The difficulty with the appellants' submissions is that Norcope's poor construction practices and other challenges to the judge's causation analysis were thoroughly addressed in the Reasons and the evidentiary basis for the inferences was identified.

[160] In so far as the apron design is concerned, the only expert witness for Norcope or Intact who referred to the apron design was Mr. Cumming, who was not qualified as an expert with respect to the 2014 apron design.

[161] Mr. Bartsch and Mr. Anderson were called as experts pursuant to Rule 34 of the Supreme Court of Yukon Rules of Court, Y.O.I.C. 2022/168 [*Rules of Court*] to assess the damages claim.

[162] Because they were responsible for the 2014 apron design, and that design had been criticized by Norcope in its pleadings and in evidence, Mr. Bartsch and

Mr. Anderson were also qualified as participant experts and permitted to give evidence about the design and its ability to resist seasonal movement. They did, and the trial judge accepted their evidence: Reasons at paras. 14, 20, 96, 98, 103 and 185.

[163] As far as the concrete defects and potential causes of the cracking were concerned, the judge reviewed the evidence led by Norcope including Mr. Cumming.

[164] The relevant passages in the Reasons from which the judge could draw certain inferences and ground her findings included:

(a) excessive bleed water (at paras. 123, 128, 129, 133–135);

(b) poor consolidation / freeze-thaw durability (at paras. 109, 118, 124, 170);

(c) poor consolidation / honeycombing (at paras. 124, 127);

(d) delayed finishing (at paras. 123, 128, 130); and

(e) poor joint cutting / uncontrolled shrinkage cracking (at paras. 132, 172).

[165] Bearing in mind Mr. Gonder's admission that not one of the concrete panels "met spec" and the judge's consideration of the various causes of the cracking there was, in my view, a significant evidentiary record for her to state:

> [173] Given these conclusions, the question is how much of the damage to the apron was caused by inadequate construction and how much was caused by seasonal movement. I cannot conclude all the problems in the southwest portion were caused only by seasonal movement as there is nothing that would allow me to conclude poor construction practices employed elsewhere on the apron were not employed in the southwest corner. Likewise, there is no evidence the problems with the PCC mix were somehow non-existent in the southwest corner. The failure of adequate QC and QA was an apron-wide problem. Finally, Yukon did nothing to stop construction when problems, particularly with the mix, started to appear. As I do not know whether the apron was designed to withstand seasonal elevation changes of the degree shown in the 2014 and 2015 surveys, but because I do know about the failures listed above, my apportionment of liability does not incorporate the seasonal elevation change. The elevation change exacerbated the cracking, but I cannot find that it alone caused it.

[166] There was an ample evidentiary record from which the judge could conclude that she did not have sufficient evidence to attribute the cracking of any panels

solely to seasonal movement of the subsurface, although that seasonal movement likely exacerbated the cracking.

[167] In her causation analysis, the judge also addressed Tetra Tech's conflict of interest and the Warranty Letter.

[168] With respect to the former, she stated:

> [168] Tetra Tech was in a conflict of interest from the beginning of the project. Of that there is no doubt. The issue is finding a line from that conflict of interest to damage suffered by Norcope or Yukon. As found below, Tetra Tech did not do its QA and QC job properly or the project would have been stopped to sort out the problems that are identified as construction issues. The mix design on its own was problematic. It could have been adjusted through testing. Tetra Tech did not give the mix design and pouring the concrete the attention it deserved given the obvious issues about the content of the mix. However, those failures, while they lead to liability, are not, in the context of this action, made worse by the conflict of interest. This is not a regulatory proceeding to deal with the professional responsibility of anyone. This is only an action to determine liability for a badly constructed airport apron. Tetra Tech's conflict of interest does not add anything to the findings I have made.

[169] And, with respect to the latter:

> [174] I need to address the warranty letter and how it fits with these conclusions. Although no one was explicitly questioned, it is reasonable to conclude that Yukon gave that warranty on the understanding that the construction in the area of seasonal movement would be done properly. It cannot be an answer to the claim that even though the construction was poor, that letter is a defence. It is not.

[170] The judge's conclusion on this issue, however, is entirely in keeping with Mr. Gonder's evidence, as outlined at para. 110 above.

[171] In my view, it was open to the judge on the record to reach these conclusions and no reviewable error has been demonstrated.

[172] It is evident from the Reasons that the judge went to considerable lengths to review significant portions of the evidence, considered the many reports, identified the issues as raised by the parties, and carefully analysed the factual and legal issues that arose with respect to causation.

[173] In my view, the comments in *Equustek*, which I quoted at para. 88, apply here. This was a lengthy and fact-intensive trial and "the importance of adhering to the governing standards of review cannot be overstated". It is our role to "review the reasons in light of the arguments of the parties and the relevant evidence, and then to uphold the decision unless a palpable error leading to a wrong result has been made by the trial judge": *Equustek* at para. 30 (emphasis added).

[174] The judge's findings including those drawn from inferences flowed logically and reasonably from established facts.

[175] As in *Equustek*, many of the submissions made to us on causation "were more appropriately submissions for a trial court and although couched in the language of appellate review, when distilled to their essence, they invited us to stand in the shoes of the judge and to reweigh the evidence. This, we cannot do": *Equustek* at para. 30.

[176] Furthermore, in *Saik'uz 2024*, the Court of Appeal of British Columbia observed:

> [122] … Appellate courts "must not parse a trial judge's reasons in a search for error" (*R. v. G.F.,* 2021 SCC 20 at para. 69). As noted in *G.F.*, the Court "has repeatedly and consistently emphasized the importance of a functional and contextual reading of a trial judge's reasons when those reasons are alleged to be insufficient" (at para. 69).
>
> [123] When the trial judge's reasons regarding causation and the sockeye salmon are read contextually and as a whole, we conclude that RTA's submissions amount to little more than an attempt to finely parse the reasons in a search for error.
>
> [124] Respectfully, we consider RTA's submissions on its challenges to the judge's conclusions regarding the sockeye stocks to be no more than an attempt to "cherry pick" and divorce certain isolated pieces of evidence and argument from a functional and contextual reading of the extensive causation analysis.

[177] Respectfully, I would reach similar conclusions in this case.

[178] For these reasons I would conclude that the appellants have not identified any reviewable error in the judge's causation analysis including her assessment of the expert evidence. In so far as her consideration of this evidence is concerned she

exercised her discretion by applying relevant considerations and did not misunderstand the facts or the circumstances before her.

[179] I would not accede to these grounds of appeal.

Issue #2 – Apportionment of Liability and Norcope's Claim for Contribution and Indemnity from Tetra Tech

[180] For ease of reference, it is of assistance to repeat the judge's conclusions:

> [179] No one on this job did their work competently and the fact Tetra Tech failed in its QA and QC roles and Yukon failed in its supervisory role does not take away from Norcope's responsibility.
>
> **Results on Liability**
>
> [180] In the result, liability for the apron defects is split. The lack of QA and QC and the problematic mix design fall on Tetra Tech. The failure of poor construction practices falls on Norcope. The failure to essentially pay attention to what was happening on the project falls on Yukon. Tetra Tech's involvement in the defects is the greatest and I assess it at 50% of the problems. Norcope takes 35% and Yukon the remaining 15%.
>
> [Emphasis added.]

Positions of the Parties

[181] The parties all challenge this apportionment.

[182] Norcope and Intact challenge their and Tetra Tech's apportionment. They do so on the basis that the judge erred by not incorporating the poor apron design and seasonal change into her analysis.

[183] They also argue that Norcope's apportionment is greater than it should have been since the judge erred in not delineating Tetra Tech's QC and QA failures in its 50% apportionment of liability. This, they say, resulted in Norcope being partly responsible for Tetra Tech's breach of its QA responsibilities to Yukon.

[184] Yukon's position is that there was no duty to supervise and the finding of liability against it should be set aside. It also challenges the 50% apportionment of liability against Tetra Tech.

Discussion

[185] There is a clear overlap between the judge's causation analysis and her apportionment of liability.

[186] I would add that although the judge did not specifically refer to the comparative blameworthy approach as articulated in authorities such as *Waterway Houseboats Ltd. v. British Columbia*, 2020 BCCA 378 at para. 398, citing *Cempel v. Harrison Hot Springs Hotel Ltd.* (1997), 43 B.C.L.R. (3d) 219 (C.A.) at para. 19 and *Aberdeen v. Zanatta*, 2008 BCCA 420 at para. 38 (reversed on appeal but not on this point), it is apparent from the Reasons, in particular, paras. 179 and 180, that she did engage in this analysis.

[187] I will first turn to the issues raised by Yukon in its cross appeal.

[188] Yukon does not challenge the judge's finding that it did not pay sufficient attention to what was happening on the Project, in that "there was some evidence to support this finding", and no palpable and overriding error was made in reaching this conclusion.

[189] The thrust of Yukon's challenge to the 15% apportionment of liability against it is grounded in the Contract specifications.

[190] It says that the Contract does not create any explicit obligations on its part in favour of Norcope and that it specifically excludes any implied obligations.

[191] Norcope and Intact point to GC 14 "Performance of Work Under Direction of Engineer" and GC 25 "Interpretation of Contract by Engineer", in particular:

> **GC 14 Performance of Work Under Direction of Engineer**
>
> 14.1 The Contractor shall
>
> …
>
> .3 give the Engineer every possible assistance to enable the Engineer to carry out his/her duty to see that the work is performed in accordance with the contract and to carry out any other duties and exercise any powers specially imposed or conferred on the Engineer under the contract.

> **GC 25 Interpretation of Contract by Engineer**
>
> 25.1 If, at any time before the Engineer has issued a Certificate of Total Performance referred to in GC38.1, any question arises between the parties about whether anything has been done as required by the contract or about what the Contractor is required by the contract to do, and, in particular but without limiting the generality of the foregoing, about
>
> …
>
> .3 whether or not the quality or quantity of any material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the contract,
>
> …
>
> the question shall be decided by the Engineer whose decision shall be final and conclusive in respect of the work.

[192] In my view, these provisions provide an evidentiary basis, rooted in the Contract, for the judge's apportionment of liability against Yukon and I would not accede to this ground of the cross appeal.

[193] Yukon also argues that Tetra Tech's apportionment of liability cannot be greater than the $216,200 limit on liability provided for in its contracts with Norcope.

[194] I disagree. This submission conflates the distinction between liability for fault on the one hand with quantification of the recoverable damages (in this case as between Norcope and Tetra Tech) on the other.

[195] Tetra Tech's contractual limitation of liability simply restricts the amount that it would be required to pay in damages to Norcope. It does not increase or decrease Norcope and Tetra Tech's proportionate responsibility for the damage caused to the apron. In other words, as a result of the Pierringer Order, it does not affect the amount of damages that Norcope is responsible to pay Yukon based on the judge's findings as reflected in the terms of the order under appeal, being an issue I consider below.

[196] Nor has any reviewable error, on the evidence, been identified with respect to the apportionment against Norcope and Tetra Tech.

[197] I will first turn to Yukon's challenge to the judge's 50% apportionment as against Tetra Tech. This can be dealt with summarily since I am of the view that

there was ample evidence on the record upon which the judge, in applying the comparative blameworthiness approach, could have concluded that Tetra Tech's liability should be set at 50%. As is the case with Norcope and Intact, Yukon's arguments on this point are essentially a challenge in disguise to the judge's causation analysis.

[198] I will next consider Norcope's and Intact's challenges to the apportionment of liability.

[199] First of all, I would not accede to their submissions that the effects of seasonal movement were not taken into account by the judge. This is essentially a repetition of their arguments on causation and I would not accept them for the reasons I have outlined above. Furthermore, as was the case with Yukon's submissions on this issue, no reviewable error has been demonstrated in the judge's comparative blameworthiness reasoning which is grounded in the evidence.

[200] Second, their argument that the judge erred in failing to further apportion the 50% liability against Tetra Tech as between its mix design/QC obligations to Norcope on the one hand and QA to Yukon on the other is, respectfully, misconceived.

[201] Essentially Norcope's and Intact's argument comes down to this. As a result of the Pierringer Order, Yukon has abandoned any portion of its claim against Norcope that would, if not abandoned, entitle Norcope to recover damages, contribution or indemnity under the *Contributory Negligence Act*.

[202] What flows from this, according to the appellants, is that since Tetra Tech's liability encompasses its failures in both its mix design/QC and QA responsibilities, they have lost the benefit of any claim to contribution or indemnity that would arise from Tetra Tech's QA breach of its obligations to Yukon as raised in its Amended Third Party Notice. In other words, the judge's error in failing to delineate between Tetra Tech's mix design/QC and QA obligations results in Norcope paying Yukon

more than its proportionate share of the damages based on its 35% apportionment of liability.

[203] I would not accept this submission. In my view, there is no risk of Norcope and Intact paying to Yukon an amount in excess of that which relates to Norcope's 35% liability as found by the judge.

[204] It bears remembering that Norcope's liability of 35% is grounded in the trial judge's finding that "no one on this job did their work competently and the fact that Tetra Tech failed in its QA and QC roles and Yukon failed in its supervisory role does not take away from Norcope's responsibility": Reasons at para. 179 (emphasis added).

[205] The judge, furthermore, was clear as to the basis for the 35% apportionment of liability against Norcope. It was for "the failure of poor construction practices": Reasons at para. 180. It was not, according to para. 179, in relation to anything Norcope could have claimed as against Tetra Tech pursuant to either its mix design/QC contract with Norcope or its QA contract with Yukon.

[206] To put the matter in slightly different terms, the alleged failure by the judge to delineate between the mix design/QC and QA responsibilities in her 50% apportionment of liability against Tetra Tech was irrelevant to the 35% apportionment against Norcope and what flowed from that finding.

[207] This is because there was no claim for contribution or indemnity as against Tetra Tech that could impact the amount of damages Norcope was required to pay Yukon arising from its 35% apportionment of liability as found by the judge.

[208] This is evident from the trial order, which is the legal basis for the appeals and cross appeal, as opposed to the decision itself:

> THIS COURT ORDERS that:
>
> 3. Norcope Enterprises Ltd.'s counterclaim against the Government of Yukon for contributory negligence is allowed, with liability apportioned under the *Contributory Negligence Act* as set out in paragraph 6.

> …
>
> 5. All other claims, counterclaims, and third party claims are dismissed.
>
> 6. Pursuant to the *Contributory Negligence Act*, liability for the cost of remedying the defects in the airport apron is apportioned amongst the parties as follows:
>
> (a) Tetra Tech EBA Inc. is liable for 50%;
>
> (b) Norcope Enterprises Ltd. is liable for 35%; and
>
> (c) the Government of Yukon is liable for 15%.
>
> 7. Norcope Enterprises Ltd. is therefore ordered to pay the Government of Yukon $2,362,388 in damages for negligence and breach of contract.
>
> 8. Intact Insurance Company and Norcope Enterprises Ltd. are jointly and severally liable to pay the Government of Yukon $1,781,103.03 of the amount awarded against Norcope Enterprises Ltd.
>
> [Emphasis added.]

[209] The amount of $2,362,388 is 35% of $6,749,680 as explained at para. 227 below.

[210] It is thus clear from the trial order that the amounts Norcope and Intact are ordered or liable to pay are based on and limited to Norcope's 35% apportionment of liability and no more.

[211] For these reasons, I would conclude that no reviewable error has been identified in either the appeals or cross appeal on the question of apportionment of liability.

Issue #3 – Assessment of Damages

[212] As was recently stated in *McGuigan Estate v. Pevach*, 2024 BCCA 106:

> [87] The standard of review for damage awards is highly deferential: *Westbroek v. Brizuela*, 2014 BCCA 48 at para. 27. In *Woelk v. Halvorson*, [1980] 2 S.C.R. 430 at 435, the Court described it this way:
>
> > It is well settled that a Court of Appeal should not alter a damage award made at trial merely because, on its view of the evidence, it would have come to a different conclusion. It is only where a Court of Appeal comes to the conclusion that there was no evidence upon which a trial judge could have reached this conclusion, or where he proceeded upon a mistaken or wrong principle, or where the result reached at the trial was wholly erroneous, that a Court of Appeal is entitled to intervene.

A: Assessment of Damages as at the Date of Trial

The Trial Reasons

[213] The judge began this portion of the Reasons by reviewing the different damage calculations submitted by the parties.

[214] Mr. Cumming suggested that 101 of the 257 panels needed to be replaced, 22 due to improper construction or substandard workmanship and the remainder due to seasonal ground movement: Reasons at para. 196.

[215] Mr. Anderson provided calculations pursuant to three scenarios:

- Option 1 – The replacement of 67 panels, load transfer restoration for less significant cracks, and joint sealant removal and replacement which totals $11,902,500 broken down as $7,935,000 for the work, $1,587,000 for the construction contingency and $2,380,500 for contingency to address safety issues.

- Option 2 – Full replacement of the apron but without any removal of frost-susceptible materials which totals $11,911,200 broken down as $9,926,000 for the work and $1,985,200 for the construction contingency.

- Option 3 – Full replacement of the apron with removal of frost-susceptible materials in localized areas, installation of non-frost susceptible backfill, and installation of some drainage facilities which totals $13,460,400.

[216] In response, Mr. Cumming proposed the following hybrid approach:

- load transfer restoration on 20 panels where there is cracking in the north and east parts of the apron.

- lull removal and replacement at areas unaffected by seasonal movement–12 panels.

- full removal with subdrainage in areas affected by seasonal movements in the south and westerly areas of the apron.

[217] The judge considered the options before her and stated that the most extensive option (Option 3) was not appropriate, leaving Options 1 and 2 or the hybrid approach, noting that the latter approach included costs to treat the underlying soil which would not be appropriate: Reasons at paras. 201–202.

[218] The judge observed that none of the parties provided a specific rationale as to why a construction contingency should be applied thus this would also not be appropriate. Removing the construction contingency from Options 1 and 2 resulted in amounts of $10,315,500 and $9,926,000, respectively. The judge found that, although the end result was marginal, it was cheaper to replace the entire apron by following Option 2, which she determined would be the basis for calculating the damages: Reasons at para. 203.

Discussion

[219] Norcope's and Intact's position can be summarized as follows:

- the onus for proving any defects in the apron by the end of the warranty period was on Yukon;
- Yukon cannot claim for remediation costs for panels that cracked after the expiration of the warranty period, particularly since the condition of the apron significantly worsened due to further years of seasonal movement; and
- there was expert evidence to determine the extent and cause of cracking at the time of expiry of the warranty.

[220] Yukon's position is that after considering all the expert evidence, the trial judge found that 100% replacement of all panels was the most cost-effective remedial solution.

[221] It responds to the appellants' submission regarding panels cracking after the expiry of the warranty period by arguing that the cracks are not merely defects in and of themselves; they are also visible manifestations of other defects that were present in the panels from well before the expiration of the warranty period.

[222] The orthodox approach in a claim arising from a breach of contract is to assess damages as at the date of the breach, yet, there can be exceptions: *De Cotiis v. Viam Holdings Ltd.,* 2009 BCSC 692, at paras. 75–76, aff'd on appeal 2010 BCCA 368; *Dosanjh v. Liang*, 2015 BCCA 18 at para. 53.

[223] In my view, the appellants' submissions are problematic for a number of reasons.

[224] First of all, while the judge recognized that Yukon's notice of default did not explicitly seek the replacement of the entire apron, she went on to observe that "much more was known at the time of trial": Supplementary Reasons at para. 15.

[225] Second, the appellants' submissions on this issue amount to challenges to the judge's assessment of the expert evidence as it related to the various remedial measures the parties had proposed. I would reach the same conclusion regarding this challenge to the judge's findings regarding the expert evidence as I did in relation to causation.

[226] Finally, the Reasons do not demonstrate any reviewable error. It was entirely open to the judge, based on a consideration of the evidence as a whole, to find that none of the concrete that was poured "met spec", that defects were present in all panels at the end of construction, that is well before the expiration of the warranty period and to assess the damages as of the trial.

B: Betterment

[227] The judge noted that Yukon had use of the apron for eight years, or 32% of the 25-year lifetime on an apron. She reduced the total damages as set out above of

$9,926,300 by 32%, for “betterment” which amounts to $6,749,680: Reasons at para. 204.

Positions of the Parties

[228] Yukon invites this Court “to clarify the law” on betterment. It submits that while a reduction for betterment can be available in some circumstances, the legal framework has not been set out on a principled basis in Yukon, or elsewhere in Canada. Yukon submits that “useful life betterment” can be apportioned into past use and future use. It argues that making a reduction for betterment based on future use as the judge did in this case, and therefore the cost to replace rather than the cost to build, disproportionately burdens the injured party when the cost to replace is significantly higher than the cost to build.

[229] Yukon argues that if an allowance for useful life betterment is made, it is entitled to compensation for money spent early, considering that the replacement work was completed while the judgment was under reserve. It submits that an appropriate interest rate would be the post-judgment rate as of the date of judgment.

[230] It relies on *Laichkwiltach Enterprises Ltd. v. F/V Pacific Faith (Ship)*, 2009 BCCA 157 at para. 38 for the proposition that where money was expended out of pocket early “there is an interest component that cannot be calculated but must be considered in a general way.”

[231] Norcope and Intact submit that both past and future use types of betterment are applicable in this case, such that Yukon had the benefit of the apron for eight years and received a replaced apron that included replacement of the subgrade beneath it.

Discussion

[232] In my view, it is not necessary in these reasons to “clarify” the principles that relate to betterment, if indeed that is required at all.

[233] Betterment can be defined as “compensation greater than loss”: *Kent v. MacDonald*, 2021 ABCA 196 at para. 38.

[234] In the context of repairs, betterment includes the “cost of construction of a new building which will be a better building than the one left behind”: *Madison Holdings Ltd. v. Winnipeg (City of)*, 2021 MBCA 94 at para. 53.

[235] Betterment is a question of fact to be determined on the evidence and with regard to what is reasonable in a given case, the starting point being the cost of repair*: Laichkwiltach* at para. 36.

[236] The application of the principle of betterment is given deference on review: *Madison* at para. 50.

[237] In my view, it was open to the judge to reach the conclusions she did in making a reduction for betterment. I agree with the appellants that both types of betterment are applicable here, being that Yukon obtained the past use of the apron for 8 years and will have the benefit of the future use of the new apron for 25 years.

[238] The judge considered all of the relevant evidence, both expert and lay, in reaching her conclusion. No reviewable error has been demonstrated and deference should be given to her conclusion.

[239] Accordingly, I would not accede to this ground of Yukon’s cross appeal.

Issue #4 – Interpreting the Bond

Supplementary Reasons for Judgment

[240] In her Supplementary Reasons the judge considered whether Intact had any liability under the Bond.

[241] She first set out the relevant provision of the Bond, before noting that the obligation thereunder was modified by the Warranty Letter:

> [2] Intact’s bond provides that the Contractor shall:

> rectify and make good any defect or fault that appears in the work or comes to the attention of the Engineer with respect to those part of the work accepted in connections with the certificate of Substantial Performance referred to in GC38.2 within 12 months from the date of the Certificate of Substantial Performance.

[242] Yukon notified Intact that Norcope was in default on August 21, 2015, one day before the warranty period expired.

[243] The judge did not accede to Intact's submission that its liability should be limited to the panels in which cracking was proved to be arising from poor construction rather than frost heave, reiterating that "it is not possible to separate out the cause of the cracking. That means that both caused the cracking": Supplementary Reasons at para. 6.

[244] The judge then considered Intact's submission that it should not be liable at all under the Bond in that Yukon was found partially at fault to the extent of 15% of the overall damage. It had argued that Yukon did not meet its obligations under the Bond, which provides:

> Whenever the Principal shall be, and declared by the Obligee to be, in default under the Contract, the Obligee having performed the Obligee's obligations thereunder, the Surety shall promptly:
>
> 1) remedy the default, or;
>
> 2) complete the Contract in accordance with its terms and conditions or;
>
> 3) obtain a bid or bids for submission to the Obligee for completing the Contract in accordance with its terms and conditions… and make available as work progresses (even though there should be a default, or a succession of defaults, under the contract or contracts or completion, arranged under this paragraph) sufficient funds to pay to complete the Principal's obligations in accordance with the terms and conditions of the Contract and to pay those expenses incurred by the Obligee as a result of the Principal's default relating directly to the performance of the work under the Contract, less the balance of the Contract price; but not exceeding the Bond Amount. The balance of the Contract price is the total amount payable by the Obligee to the Principal under the Contract, less the amount properly paid by the Obligee to the Principal, or;
>
> 4) pay the Obligee the lesser of 1) the Bond Amount or 2) the Obligee's proposed cost of completion, less the balance of Contract price.
>
> [Emphasis added.]

[245] The judge found that since three parties shared liability, Intact was responsible to the extent that Norcope was at fault, that being 35%: Supplementary Reasons at para. 11.

Position of the Parties

[246] Intact appeals its liability, arguing that the judge's apportionment of 15% against Yukon should result in it being unable at law to recover any amount under the Bond.

[247] Yukon's position is that it would be contrary to the purpose of construction performance bonds if it were to be disentitled to any recovery due to its 15% apportionment of liability.

Discussion

[248] A surety bond is to be interpreted in accordance with the rules of contractual interpretation, as set out in *Sattva Capital Corp. v. Creston Moly Corp.*, 2014 SCC 53 (cited above at para. 96).

[249] Specifically, a surety bond is a freestanding contract and its wording cannot be interpreted in isolation, but rather in its context as a whole: *Procrane Inc. v. Intact Insurance Company*, 2018 BCSC 1477 at para. 33.

[250] This is not a case where one of the parties has breached the contract and is solely liable for the damages.

[251] Rather, Yukon was found contributorily negligent and liability was apportioned between the parties under the *Contributory Negligence Act* with the judgment amounts set out in the order under appeal.

[252] *Halton Region Conservation Authority v. Toronto Underground Contractors Ltd* (1985), 12 C.L.R. 139 (Ont. C.A.) is a case where a contract required the contractor to install a tunnel, for which the design and method of installation were provided by the obligee. Certain of the costs incurred were the obligee's

responsibility because of a design failure while certain other costs were incurred by reason of the failure of the contractor and were the surety's responsibility.

[253] *Halton*, at 143, is of assistance to this issue:

> If the extra costs were incurred by reason of the faulty plans the bonding company cannot be held liable; we agree with the trial Judge that if McCloy was not responsible, neither is its surety. On the other hand, if the extra costs claimed in these items or any part thereof are unrelated to the faulty method of construction inherent in the plans and were the result of remedial work necessitated by McCloy's improper performance or failure to perform its contractual obligations or otherwise by reason of McCloy's default, the bonding company is responsible and must indemnify the appellant.

[254] In my view, the judge's conclusion that Intact is liable to the extent of Norcope's liability (to the limit provided by the Bond) is consistent with the reasoning in *Halton,* the wording of the Bond itself and, in a general sense, the commercial purpose of construction performance bonds as described in *Halton*.

[255] It would be an unreasonable outcome in the circumstances of this case if Intact were relieved entirely from its Bond requirements when Norcope's liability under the trial order is $2,362,388 and the Bond limit is $1,781,103.03.

[256] For these reasons, I would not accede to this ground of appeal.

Issue #5 – Costs

Supplementary Reasons for Judgment

[257] The judge considered costs in her Supplementary Reasons.

[258] Costs are governed by Rule 60 of the Yukon *Rules of Court*, which provide:

> **How costs assessed generally**
>
> (1) Where costs are payable to a party under these rules or by order:
>
> (a) by another party;
>
> (b) out of a fund of other parties; or
>
> (c) out of a fund in which the party whose costs are being assessed has a common interest with other persons,

> they shall be assessed as party and party costs under Appendix B, unless the court orders that they be assessed as special costs, increased costs, or awards a lump sum.
>
> **Special costs**
>
> (1.1) The court may award special costs when a party's conduct is reprehensible, scandalous or outrageous and the circumstances call for a rebuke.
>
> **Increased costs**
>
> (1.2) Where the court is of the view that, as a result of unusual circumstances, an award of costs on a given scale would be inadequate or unjust, the court may order increased costs in accordance with sections 2(e) and (f) of Appendix B.

[259] Yukon was seeking one set of costs under "Tariff Scale C" for matters of more than ordinary difficulty and second counsel costs for trial. Tetra Tech was seeking special costs, due to the unsuccessful allegations of defamation, together with fraud and dishonesty in relation to the preparation of the Final report: Supplementary Reasons at para. 18.

[260] The judge found that special costs did not automatically follow from a failed allegation of fraud or dishonesty. She noted that Tetra Tech was not without fault due to its conflict of interest and failure to perform its contractual obligations. She then observed that those failings did not completely offset the unnecessary time required to respond to the allegations of fraud and deceit. She therefore assessed Tetra Tech's costs at $200,000 which was calculated on the basis of Tetra Tech's counsel's fee: Supplementary Reasons at paras. 18–20.

[261] The judge then considered Yukon's submissions, finding them to be reasonable in that the trial was 5 weeks in duration and included complex engineering evidence with over 700 exhibits. She concluded that costs at "Tariff Scale C" were appropriate as well as having two counsel at trial: Supplementary Reasons at para. 21.

Position of the Parties

[262] Norcope argues that the judge erred in assessing costs without accounting for the relative apportionment of liability and for allowing a second set of costs when the Yukon *Rules of Court* make no provision for second counsel costs.

[263] Yukon's position is that it was successful at trial as against Norcope in its claim for breach of contract, subject to a reduction for contributory negligence, and should be awarded costs on that basis. It points to the fact that Norcope's counterclaim against Yukon was dismissed. It also submits that although Rule 60 of the Yukon *Rules of Court* does not explicitly provide for the costs of more than one counsel at trial, nor does it limit the number of counsel whose attendance may reasonably be required.

Discussion

[264] The purpose of an award of costs is to ensure that the justice system works fairly and efficiently. Although a successful party may expect a costs award, a court has "absolute and unfettered discretion", subject to the applicable rules of court, to make a costs award: *Stewart v. Lloyd's Underwriters*, 2022 BCCA 84 at para. 69.

[265] It follows that costs awards are highly discretionary and should only be set aside on appeal if the judge made an error in principle or if the award is plainly wrong: *Wood v. Yukon (Occupational Health and Safety Branch)*, 2018 YKCA 16 at para. 40.

[266] I do not agree with the submission that the judge failed to take the apportionment of liability into account when exercising her discretion as to costs. She made specific reference to the fault of the various parties and it is illogical to conclude that the apportionment played no role in the assessment: Supplementary Reasons at para. 20.

[267] It is also clear from a contextual reading of the Supplementary Reasons that the judge took a number of factors into account when exercising her discretion regarding costs including:

- the complexity of the case and that Tetra Tech, Norcope and Yukon were all at fault to various degrees;

- the focus for the award of costs to Tetra Tech appeared to be largely grounded in the unfounded allegations of fraud and deceit that were advanced to the very end of the trial;

- Norcope's claim against Tetra Tech for intentional interference with its contractual relations with Yukon was dismissed;

- the allegations of bad faith and defamation advanced by Norcope against Yukon were dismissed; and

- Yukon's claim for punitive damages was dismissed.

[268] The Yukon *Rules of Court* are silent on the issue of whether an award can be made for the attendance of two counsel at the trial. In light of the overall objective which underlies a costs award there is no principled basis, in my view, to conclude that a trial judge does not have the discretion, absent a specific prohibition from doing so in the *Rules*, to award a tariff item for the attendance of two counsel at the trial of a proceeding if it is reasonable to do so.

[269] Bearing in mind the highly deferential standard of review, deference should be given to the judge's decision on costs in this case, particularly in light of a lengthy and complex trial which involved the many issues to which I have referred in these reasons.

[270] Accordingly, I would not accede to this ground of appeal.

VI: Disposition

[271] In conclusion, I would dismiss the appeals and the cross appeal.

"The Honourable Mr. Justice Abrioux"

I AGREE:

"The Honourable Madam Justice Shaner"

I AGREE:

"The Honourable Mr. Justice Willcock "